

Ask Better QUESTIONS
Give Better ANSWERS
Expand County CAPACITY

COURSE MATERIALS

Economic Development in California Counties

CI 314



www.csacinstitute.org

IN ASSOCIATION WITH



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A Foundation of Leadership



Hallmarks of effective county elected officials and senior executives

LEADERSHIP COMPETENCIES

Personal Literacy

- Trustworthiness
- Respect
- Responsibility
- Fairness
- Compassion

Strategy

- Strategic planning
- Adaptive change
- Shared vision
- Appreciate possibilities
- Future generations

Relationship Dexterity

- Coalition building
- Facilitate dialogue
- Appreciate differences
- Manage conflict

Advocacy

- Service to community
- Value to county
- Community needs

KNOWLEDGE COMPETENCIES

Governance

- State and local relations
- County roles and powers
- Finances
- Decision-making

Policy

- Social and human services
- Public safety
- Land use
- Environmental protection

Administration

- Personnel and employee relations
- Performance assessment
- Customer service
- Accountability

Stewardship

- Financial and human resources
- Meeting management
- Communication
- Media relations
- Crisis management

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ABOUT THE CSAC INSTITUTE

The **California State Association of Counties (CSAC)** is the voice of California's 58 counties at the state and federal level. The Association's long-term objective is to significantly improve the fiscal health of all California counties – from Alpine County with a little more than 1,200 people to Los Angeles County with more than 10 million – so they can adequately meet the demand for vital public programs and services. CSAC also places a strong emphasis on educating the public about the value and need for county programs and services.

The **CSAC Institute for Excellence in County Government** is a professional, practical continuing education program for county officials. The experience is designed to expand the capacity and capability of county elected officials and senior executives to provide extraordinary services to their communities. The Institute is a program of CSAC and was established in 2008 with the first courses offered in early 2009.

For more information please visit www.csacinstitute.org.



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Economic Development & Opportunities for Counties (Course #314)



Presented by:

The California Association for Local Economic Development in Partnership with our Members

Agenda

10:00 AM – 10:30 AM **Setting the Stage**

- Gurbax Sahota, President & CEO, CALED
- Bill Chiat, Program Manager, CSAC Institute

10:30 AM – 12:00 PM **Programs & Players: Leveraging Partnerships**

- Jay Salyer, Economic Development Manager, Kings County EDC
- John Lambeth, President, Civitas
- George Carter, Business Services Representative
& Rapid Response, Workforce Development Board of Contra Costa County
- Gurbax Sahota, President & CEO, CALED *Moderator*

12:00 PM – 12:30 PM **Networking Lunch**

12:30 PM – 2:00 PM **Customizing Your Strategy & Group Activity**

- Jim Simon, Principal, Rosenow Spevacek Group, Inc.
- Gurbax Sahota, President & CEO, CALED

2:00 PM – 2:15 PM **Break**

2:15 PM – 2:45 PM **Implementing**

- Vicki Doll, Principal, Chabin Concepts
- Greg O'Sullivan, Consultant, CALED

2:45 PM – 3:15 PM **Measuring & Communicating Your Success**

- Vicki Doll, Principal, Chabin Concepts
- Greg O'Sullivan, Consultant, CALED

3:15 PM – 3:00 PM **Wrap Up & Q&A**

- Gurbax Sahota, President & CEO, CALED
- Bill Chiat, Program Manager, CSAC Institute

WHAT IS ECONOMIC DEVELOPMENT?

ECONOMIC DEVELOPMENT MEANS DIFFERENT THINGS TO DIFFERENT PEOPLE.

On a broad scale, anything a community does to foster and create a healthy economy can fall under the auspice of economic development. Today's economic development professionals are trying harder than ever to define their field in terms that are more concrete and salient to policymakers, the public, and other professionals.

There are probably as many definitions for economic development as there are people who practice it. Below is CALED's definition as published in the Economic Development Handbook:

"From a public perspective, local economic development involves the allocation of limited resources - land, labor, capital and entrepreneurship in a way that has a positive effect on the level of business activity, employment, income distribution patterns, and fiscal solvency."

It is a process of deliberate intervention in the normal economic growth cycle to speed up the process and optimize impact. Economic development is a concerted effort in cities and counties to influence the direction of private sector investment toward opportunities that can lead to sustained economic growth. Types of "sustained" growth developers are typically looking for include businesses and industries that provide living wages for the workforce as well as profitable entrepreneurial opportunities that provide tax revenues in industries with projected future growth.

Simply defined, economic development is the creation of wealth in which community benefits are created.

YOUR ROLE IN ECONOMIC DEVELOPMENT

ELECTED OFFICIALS

As an elected official, the most important thing you can do to support economic development in your community is show leadership by championing the cause. You have the power to influence business investment and business location decisions through the policies you set and the direction you give city and county staff.

Actions you can take:

- + Explain to the community why economic development is important.
- + Create and implement a strategy that meets the needs of your community so you can help to create the desired future.
- + Adopt a "Jobs and Economic Development First Resolution" showing employers that you value them.
- + Have a long-term mindset, with a short-term action plan that allows for measurable, reasonable achievements.
- + Commit to long-term investment. As communities grow and the need for services and staff increases, you need to continue to invest in economic development to generate revenue to meet those needs.
- + Place a high priority on customer service.
- + Invest in infrastructure to create more shovel-ready sites for business development.



RESOURCES TO HELP YOU

CALIFORNIA ASSOCIATION FOR LOCAL ECONOMIC DEVELOPMENT

The California Association for Local Economic Development (CALED) is the premier statewide professional economic development organization dedicated to advancing its members' ability to achieve excellence in delivering economic development services to their communities and business clients. CALED's membership consists of public and private organizations and individuals involved in economic development: the business of creating and retaining jobs.

CALED supports its members through information, technical assistance, training, education, and research. Begun in 1980, CALED has grown to over 800 members, representing cities, counties, state and federal agencies, economic development corporations, and the private sector. CALED, through its own programs and management of the California Academy for Economic Development, provides professional training to economic developers. Supportive research includes data development and analysis, modeling, and policy analysis. Specific projects focus on sustainable development, regional competition, financing, and technological support for economic development.

By emphasizing innovation as well as tested methods, we strive to educate economic developers and communities on the best ways to grow healthy, vibrant communities.

WWW.CALED.ORG AND WWW.EDACADEMY.ORG

CALIFORNIA SMALL BUSINESS DEVELOPMENT CENTERS

WWW.CALIFORNIASBDC.ORG
WWW.FACEBOOK.COM/CALIFORNIASBDC

ECONOMIC DEVELOPMENT

AN INVESTMENT IN OUR FUTURE



5 TIPS

To Jump Start Your Economic Development Program

1 HAVE A VISION FOR YOUR COMMUNITY

Realistically understand what you have to offer a business and look for your competitive advantages – unique characteristics that make your community attractive for businesses.

2 COMMUNITY PREPAREDNESS

Know your assets. Inventory and assess your community services, programs, and processes. This includes knowing your resource agencies, arts organizations, school districts, publicly-owned real estate, buildings, infrastructure, research facilities, etc.

3 CONSENSUS

Identify key stakeholders and champions to build consensus and awareness of the community's economic development vision and goals.

4 STRATEGIC ACTION

Create a strategy and specific action plan with measurable objectives, timelines and authority/responsibility assignments.

5 HEALTHY BUSINESS CLIMATE

Work on ways to show businesses you care about their success through good customer service, permit streamlining and a business-friendly attitude.

RESOURCES of ECONOMIC DEVELOPMENT

THESE ARE SOME COMMON TOOLS & RESOURCES TO HELP BUSINESSES THRIVE



RESOURCES INCLUDE:

- + Workforce Investment Boards
- + Banks
- + Utilities
- + Education
- + Private Business Consultants
- + Small Business Development Centers
- + Community Colleges
- + Chambers of Commerce
- + Universities – Public and Private
- + Incubators
- + Venture Capitalists and Angel Investors
- + Federal Agencies
- + Research Labs – Federal and Private
- + Brokers
- + Accountants

ACTIONS & BENEFITS

ACTIONS

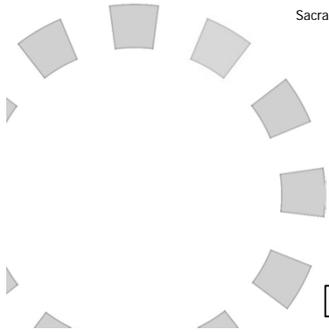
- Business Retention & Expansion
- Business Attraction
- Business Creation

BENEFITS

- + Maintain and increase the tax base
- + Revenues increase faster than the cost of municipal services
- + A labor force with marketable employment skills
- + Economic vitality for commercial and industrial areas
- + Economic environment that supports creation of new businesses and expansion of existing businesses
- + Create and retain jobs, increase per capita income and improve community image
- + Reduce physical and economic blight
- + Provide more community services like police, fire, libraries, parks, etc.
- + Appreciate and retain businesses and diversify the economic base
- + Be self-sufficient
- + Maximize value of property through highest and best use and raise the overall standard of living of residents
- + Consume locally produced products in the local market, keeping money in the community

CIVITAS

Partnerships. Progress. Prosperity.
Sacramento • Los Angeles • San Francisco

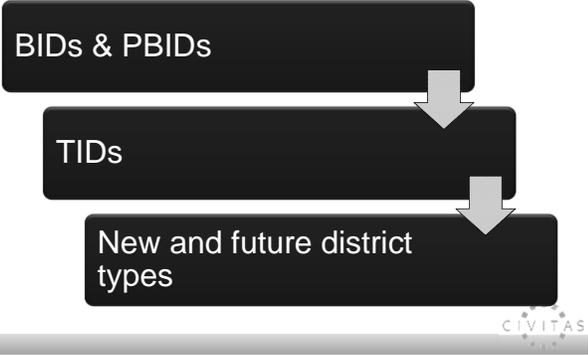


Special District Financing
for Economic Development

CSAC & CALED
Economic Development
Workshop

Sacramento, California
May 9, 2013

Overview

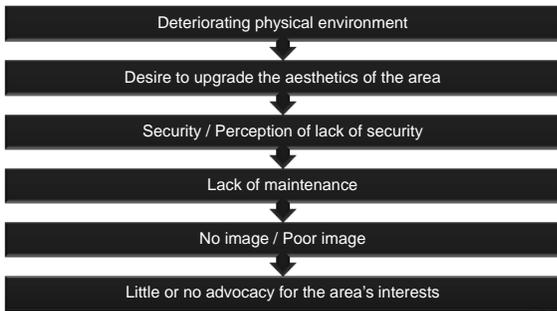


BIDs & PBIDS

Classic Improvement Districts



**Common Issues for Commercial
Areas**



CIVITAS

Services BIDs & PBIDs Provide

Safety guides or goodwill ambassadors
Security patrols
Maintenance programs
Marketing & promotion
Advocacy of property owner business interests
"Activities that benefit properties and businesses"

CIVITAS



CIVITAS

PBID/BID Characteristics

- Formed at payors request
- Managed by payors –usually a private-non-profit corporation
- Term with sunset date
- Defined activities only to benefit payors
- Oversight by local government
- Special benefit assessment - compulsory

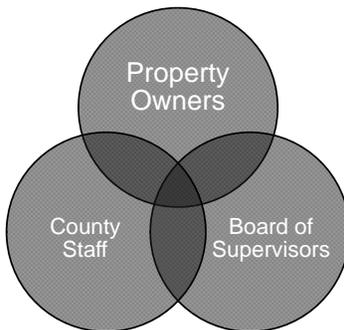


PBIDs vs. BIDs

	Business-Based	Property-Based
Assessment Basis	Business activity	Property
Pass-Through	May be passed on to patrons	May be passed on to tenants, per lease
Formula	Varies – flat fee or percentage of sales	Property characteristics – lot size, frontage, building size
Collection	<ul style="list-style-type: none"> • Business license • Hand billing 	Property tax bill
Ease of Collection	<ul style="list-style-type: none"> • May be difficult • Depends on system 	<ul style="list-style-type: none"> • Simple • Must be formed by July



Key players



California has two BID laws...

1989 Law	1994 Law
<ul style="list-style-type: none"> • No petition • 1 year term • Annual renewal • Business only • Appointed advisory board • City can disestablish 	<ul style="list-style-type: none"> • 50% + 1 petition • 5 or 10 year term • Business or property • Non-profit management • Annual report • Payors can disestablish



Fulton Avenue PBID

- Formed in 1998
- Renewed in 2003 & 2008
- Annual budget: \$380,000
- Assessment: \$.02 per square foot plus \$8.50 per linear foot of street frontage



Fulton Avenue Accomplishments



- Signage improvements
- Median landscaping
- Decorative street lighting
- Security and clean up services
- Leveraged budget into \$5.1M to successfully underground power lines and move water lines to the center of the street



Tourism Improvement Districts

Specialized BIDs



Characteristics of TIDs

Assessment Mechanism

- % of room rental revenue or
- Fixed \$ per occupied room per night

Stability

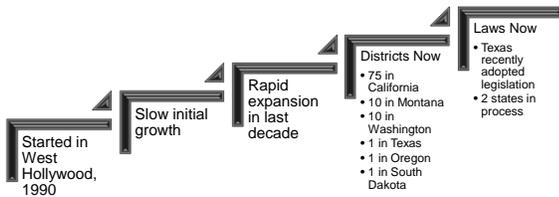
- Cannot be diverted
- Varying terms – 1-40 years

Governance

- New or existing nonprofit
- DMO or hotel organization
- Local Government oversight



The TID Revolution



Other County TIDs

- Mendocino County
- Madera County
- Humboldt County
- Marin County
- San Luis Obispo County
- Sonoma County
- Santa Cruz County

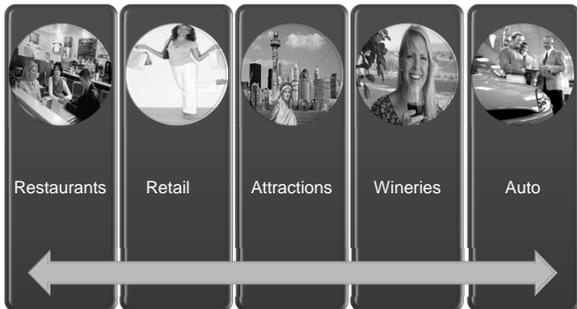


Revolutionary Special Districts

on the Horizon



If hotels can do it, why not others?



Economic Development Opportunities for Counties SPECIAL DISTRICT FINANCING



Questions and Comments

John Lambeth, Civitas
www.civitasadvisors.com
(800)999-7781

For more information on TIDs
www.tourismimprovementdistrict.com

Thank you!!





B.E.S.T.

BUSINESS ENHANCEMENT SUPPORT TEAM

OVERVIEW

The Workforce Development Board of Contra Costa County has formed the Business Enhancement Support Team (BESTeam) to develop and implement strategies that support economic vitality and business growth. The BESTeam consists of a group of handpicked service providers that are prepared to deliver quality services to meet the needs of the small business community. Through coordinated efforts, the team delivers regional solutions to local challenges.

The process involves the BESTeam Manager conducting an initial assessment of the businesses needs. After initial evaluation, the appropriate partners are contacted to participate in a resource sharing meeting that is designed to connect business owners to resources that can help sustain and grow their businesses. Included in most meetings are representatives from City Economic Development, EASTBAY Works, the Employment Development Department, the Contra Costa Small Business Development Center, and the Workforce Development Board of Contra Costa County.

OUTCOMES

The BESTeam expands and enhances the relationship between the Workforce Development Board, Economic Development, and the Business Community throughout Contra Costa County.

Benefits include:

- Business management information
- Small Business Development Center (SBDC) training, consulting and resources
- Employer Tax Credit information
- Human Resources information and assistance
- Business analysis and management, business planning, market research, marketing , finance, selling to the government, and technology
- Obtain contracting opportunities within various departments of Contra Costa County
- Job placement and recruitment assistance
- Online business-to-business referrals for recruiting qualified workers
- Assistance identifying resources for specific business operations
- Customized training to meet current and future workforce needs
- Access to educational resources (State and Private Universities, Community College, Adult Education, ROP, Apprenticeship and K-12)
- Access to a qualified workforce

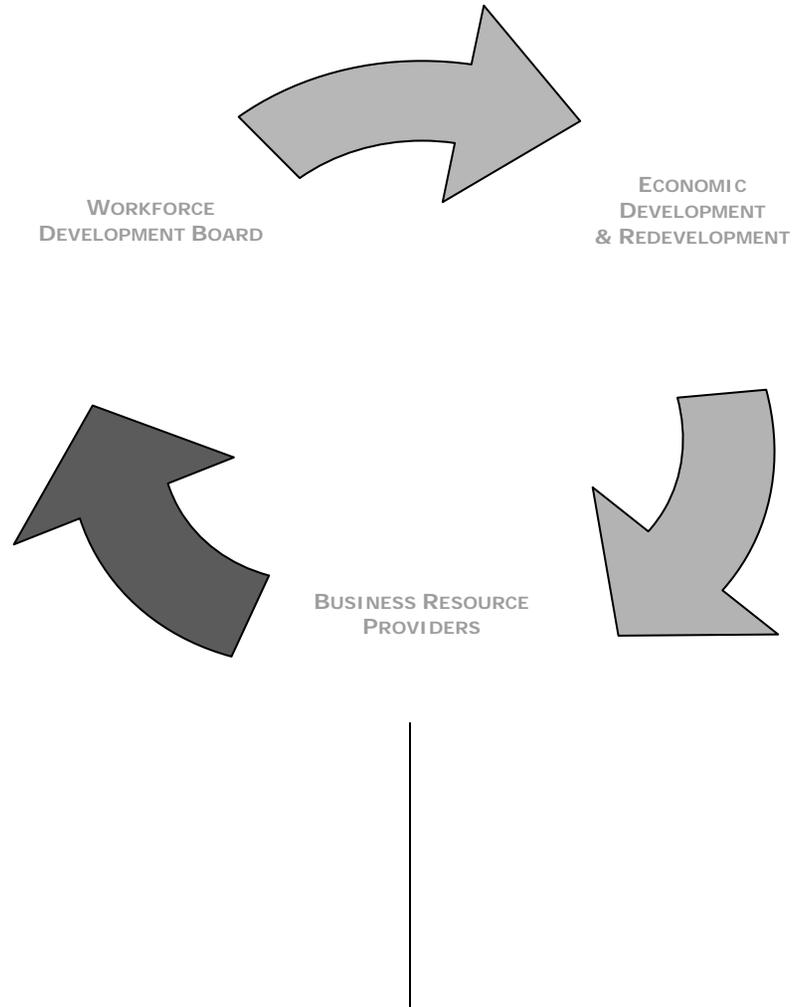
PARTNERS

- EASTBAY Works One-Stop Career Center
- City Economic Development
- Employment Development Department (EDD)
- Private & Public Education and Training
- U.S. Department of Labor
- OBDC – Small Business Finance
- Bay Area Green Business Program
- Contra Costa Small Business Development Center (SBDC)
- U.S. Small Business Administration
- Chambers of Commerce
- Contra Costa County Redevelopment
- Contra Costa Library
- California Employers Association

Learn more about BESTeam benefits to your community: George E. Carter III, BESTeam Manager, (925) 602-6801

A customized business service of the Workforce Development Board of Contra Costa County

BUSINESS ENHANCEMENT SUPPORT TEAM (BESTeam)



Bay Area Green Business Program

www.greenbiz.ca.gov

Why be certified as a Green Business?

- Respond to a growing customer interest
- Improve employee morale
- Save money by conserving both material waste, water, & energy
- Reduce greenhouse emissions

Program Description

We have certified almost 300 businesses of all types in Contra Costa who have met our standards for conserving energy, water, and other materials, and preventing pollution. These businesses are listed on our website; recognized before the County Board of Supervisors; and given a plaque, a window decal, and other assistance to help promote themselves as Green Businesses.

Claudia Pingatore (925) 335-3220
cpingatore@hsd.cccounty.us

Contra Costa County Contracting Programs

www.co.contra-costa.ca.us

Outreach program: small business enterprise contracting programs, purchasing

David Gould (925) 313-2120
dgould@gsd.cccounty.us

Contra Costa Library

www.ccclib.org

Specialized Databases for Business

- Business & Company Resource Center
- Directory Library
 - Encyclopedia of Associations
 - National Directory of Nonprofit Organizations
- ReferenceUSA
 - U.S. Businesses
 - U.S. New Businesses
 - U.S. Residential
 - International Businesses
- Small Business Resource Center
 - sample business plans

E-Books – Audio books and more

- Downloadable Media Collection
- Safari technical books

All available 24/7 at ccclib.org
Apply for an e-Card for easy access 24/7

Valerie Zito
(925) 927-3233
vzito@ccclib.org

Contra Costa County
Department of Conservation and Development
www.ccreach.org

Micro Business Loans

The MicroLoan Program provides very small loans to start-up, newly established, or growing small business concerns. Under this program, SBA makes funds available to nonprofit community based lenders (intermediaries) which, in turn, make loans to eligible borrowers in amounts up to a maximum of \$35,000. The average Loan size is about \$10,500. Applications are submitted to the local intermediary and all credit decisions are made on the local level.

CDBG Small Business/Microenterprise Loan Program

Contra Costa County's Small Business/Microenterprise Loan Program helps owner-operated small businesses that need financial assistance. The program focuses on start-up businesses and expansion of existing businesses in the Urban County with five or fewer employees (including the owner).

Gabriel Lemus (925) 335-7229
gabriel.lemus@dcd.cccounty.us

Contra Costa Small Business Development Center (SBDC) **www.contracostameansbusiness.com**

The Contra Costa Small Business Development Center (SBDC) offers professional business management consulting, training and business information to new and existing business owners throughout Contra Costa County. Most of the services are at no cost to the business owner. Professional business management consulting includes a team of consultants with various expertises, for example, specialists in business analysis, business planning, marketing strategies, sales techniques, financial management,

financing, technology, and selling to the government. The 1:1 consulting is free. Business management training includes the SBDC's 12-week entrepreneurial training class, **New Venture Training**. There is a modest fee for this class. Various short-term training sessions are co-sponsored with the County Library, these classes are free. The Contra Costa SBDC hosts a comprehensive web portal: **www.contracostameansbusiness.com**.

The SBDC can be reached at (925) 602-6840 or online at www.ContraCostaSBDC.com.

Jeff Hall (925) 602-6840
jhall@ehsd.cccounty.us

OBDC SMALL BUSINESS FINANCE **www.obdc.com**

OBDC Small Business Finance is a 30 year-old alternative lender that provides loans to small businesses in the San Francisco Bay Area. Our organization provides term loans to startup and existing businesses who do not qualify for conventional financing. OBDC Finance continues to promote entrepreneurship and economic development in local Bay Area communities with a focus on Alameda, Contra Costa, San Francisco, and Solano Counties.

Alton W. Do (510) 763-4297 Ext. 108
alton@obdc.com

EASTBAY Works Career Centers

www.eastbayworks.org

EASTBAY Works One Stop Career Centers offer services to employers in 14 locations throughout Contra Costa and Alameda Counties. Employers can post job orders and connect with qualified employees through customized on-site recruitments. Information is also available on regional and specialized job fairs, tax credits and other hiring incentives, as well as on-the-job training opportunities.

Services are at no cost to the employer or employees.

Benjamin Mosley (925) 671-4514
bmosley@ehsd.cccounty.us

Employment Development Department (EDD)

www.edd.ca.gov

ON-LINE INFORMATION OF PROGRAMS AND SERVICES

CalJOBS: **www.CalJOBS.ca.gov**

Overview: An Internet service where EDD can list your job openings or you can place those orders directly anytime, day or night.

Benefits: Employers can review resumes and locate qualified applicants. No fees to use CalJOBS and list more information than you normally would in a standard classified advertisement.

Employer Tax Credits: Welfare-to-Work (WtW) and Work Opportunity Tax Credits (WOTC)

Overview: Two Employer-friendly tax credits for hiring Job Seekers most in need of employment. Hire from among the list of nine groups of Job Seekers to qualify. Employers make the hiring decision. There is no limit on the number of new hires who can qualify an employer for the tax savings. Minimal paperwork is needed to claim the tax credits.

Benefits: The Welfare-to-Work Tax Credit for hiring long-term welfare recipients is as much as \$9,000 per new hire. The Work Opportunity Tax Credit for hiring all WOTC target groups is up to \$2,400 for each new hire.

Tax Branch:

Overview: Administers California's payroll tax programs, including: Unemployment Insurance, Employment Training Tax, State Disability Insurance and Personal Income Tax Withholding. The EDD's Tax Branch works with employers to ensure that necessary payroll taxes and information are reported promptly and accurately. It also verifies the reporting of wages and enforces the timely payment of taxes, offers Electronic Funds Program, and the Tax Telefile Program (telephone filing for employers with six or less employees).

Benefits: Helps California employers stay competitive by ensuring that all employers participate in the payroll tax system. It provides services to educate and assist employers in meeting their payroll tax obligations (such as One-on-One payroll tax services through the Employment Tax Offices conveniently located throughout California, on-line access to payroll tax information, forms and publications, no cost tax workshops and seminars, the Employment Tax Call Center toll-free # 888-745-3886 and the Small Business Employer Advisory Committee.

EDD Bonding Program:

Overview: Many employers carry insurance to protect themselves against employee theft or dishonesty. Employees who handle money, valuable tools, or goods are usually covered. The EDD Job Service Offices throughout California may secure fidelity bonding for employees who are denied coverage by regular commercial carriers. Coverage is available at no cost to the employer or the employee. The EDD Bonding Program bonds are \$5,000 each (no more and no less) and are issued for only on six-month period (not renewable nor extendable).

Benefits: When the EDD bond coverage has expired, the McLaughlin Company may make the bond available for the employer to purchase through the Travelers Property Casualty Company at a regular commercial rate if no claim has been made during the six-month EDD bonded period.

Work Sharing Program:

Overview: This program allows for the payment of Work Sharing Unemployment Insurance benefits to individuals whose wages and hours have been reduced. A minimum of two employees comprising at least 10 percent of the employer's regular work force or a unit of the work force must be affected by a reduction in wages and hours worked. The reduction in wages and hours worked also must be at least 10 percent. The program is considered a temporary and practical alternative to layoffs.

Benefits: The employer retains all trained staff and when business improves, the employees resume their regular work schedule. To help employers and employees avoid some of the burdens that accompany a layoff situation. Employers are spared the expense of recruiting, hiring and training new

employees and employees are spared the hardship of total unemployment.

Employer Advisory Councils:

Overview: Employer Advisory Councils (EACs) are formed in local Job Service Offices to develop stronger partnerships between the EDD and the business community. EAC members are a cross section of local employer volunteers who join EDD to assist the employer community to do business more effectively and efficiently.

Benefits: The EACs help educate employers about relevant employment issues and laws, increase employer knowledge of EDD programs and services, increase cooperation and communication between EDD and the private sector, and identify ways to improve EDD services. EAC members receive assistance on a wide variety of employer-employee relationship topics through access to a management hotline.

Experience Unlimited A Professional Job Club

Overview: Experienced Unlimited (EU) is an EDD sponsored job club for professionals. EU is a self-directed organization managed and operated by job seekers from the professional, managerial, technical business communities.

Benefits: EU can provide job-ready professionals from many fields. It meets the employer's requirement to have people who are motivated, energetic and highly qualified to improve their competitive edge. No fee to employers or job seekers, no time consuming paperwork, and no need to spend money on advertising.

Rapid Response:

This section describes the elements of Rapid Response (RR) activities provided to individuals facing job layoffs or dislocation.

Rapid Response encompasses the activities necessary to plan and deliver services to enable dislocated workers to transition to new employment as quickly as possible, following either a permanent plant closure or mass layoff, or a natural or other disaster resulting in a mass job dislocation. Rapid Response activities are carried out through the collaboration of the State, Local Workforce Investment Boards, One-Stop partners, other applicable entities, and teams comprising Local Workforce Investment Areas (LWIA) and JS staff.

Trade Adjustment Assistance:

Trade Adjustment Assistance was established under the Trade Act of 1974 to help American workers who have lost work as a result of increased imports. It is a federal program administered by the U. S. Department of Labor and cooperating state employment security agencies.

Eligible workers receive Trade Readjustment Allowances (TRA) during periods of unemployment. The program also assists workers to regain satisfactory employment through the use of a full range of employment services and, if needed, provides classroom and/or on-the-job training, job search assistance, and relocation.

Carol August (925) 602-5023
Carol.August@EDD.ca.gov

Contra Costa College - Contract Education Division
www.contracosta.edu

The Contract Education Division will partner with your business or organization to custom design educational and training classes, seminars, and workshops to address training and developmental goals for personnel at all levels. We utilize flexibility in the manner in which we develop and deliver education and training and we are willing to work at your job site or off-site locations convenient to you during or after work hours.

We have recently developed 4 one hour modules in Microsoft Access, Excel, PowerPoint, and Word. These classes were designed for participants to review needed applications for day-to-day uses. Classes can be lengthened depending on results of pre-class needs assessments.

We are certified to teach over 100 employee and management courses developed by Achieve Global (Zenger-Miller), Inc. Organizations have identified the importance of people skills and the impact they have on operational performance and profitability. Contra Costa College is equipped to meet these demands and will meet with you to assemble individual or bundled course offerings to meet your needs. Most of these courses offerings last 4 hours.

We are also certified by the California Community College District to teach a series of ten Customer Service Academy courses designed to improve skills in:

- Overall Customer Service
- Communicating with Peers and Supervisors
- Team Building
- Attitude in the Workplace
- Values and Ethics
- Stress Management
- Time Management
- Conflict Management
- Decision Making and Problem Solving

- Managing Organizational Change

These course offerings can be designed to last from 4 to 8 hours depending on pre-class needs assessments and can also be offered individually or bundled to your preference.

Fred Jackson (510) 235-7800

U.S. Department of Labor Office of Apprenticeship

www.doleta.gov/atels_bat

Registered Apprenticeship is a proven strategy that combines on-the-job learning with classroom instruction. It is an excellent training model for quickly getting new employees up to speed and maximizing the skills of your current workforce.

More than 31,000 sponsors have implemented apprenticeship programs to meet their specific training needs. They employ some 40,000 apprentices committed to advancing the ideals and goals of their employers.

Sponsors include employers, associations, labor organizations and labor-management organizations. Programs serve a diverse population that includes minorities, women, youth, persons with disabilities, and people who have been laid off from their jobs. (U.S. Dept of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer & Labor Services, Registered Apprenticeship brochure)

Michael Longeuay (415) 625-2231
longeuay.michael@dol.gov

U.S. Small Business Administration (SBA)

www.sba.gov

The U.S. Small Business Administration (SBA) offers a variety of programs in finance, business counseling and training, and federal government contracting to assist small business owners. Our programs are designed to help small businesses succeed. Through our loan guaranty and equity-investment programs, entrepreneurs can obtain money to start or expand their businesses. At the same time, they can take advantage of SBA's business counseling and training programs to manage their growing businesses. In the event of natural disasters, SBA assists small businesses and homeowners with special disaster loans.

Cynthia Marymee (415) 744-6807
cynthia.marymee@sba.gov
Michele DeVito (415) 744-7810
michele.devito@sba.gov

Contra Costa Adult Schools

Acalanes Adult Center

www.acalanes.k12.ca.us/adulted

(925) 280-3980

Antioch Adult School

www.antioch.k12.ca.us

(925) 706-5310

Liberty Adult Education

www.libertyadulted.org

(925) 634-2565

Martinez Adult Education

www.martinez-ed.org

(925) 228-3276

Mt. Diablo Adult Education

www.mdusd.k12.ca.us/adulted

(925) 685-7340

Pittsburg Adult Education

www.pittsburg.k12.ca.us/paec

(925) 473-4460

West Contra Costa Adult Education

www.wccae.info

(510) 215-4666

Each Adult Education program provides an array of basic education and career training programs in response to local workforce development needs. Offerings include all levels of English as a Second Language, Basic Math, Basic English, Computer Software Applications, and a range of other Career Technical Education programs.

Classes are held during the business day, evenings and Saturdays. Specific course offerings are provided on each Adult School's website and published catalog (call for a copy.)

Training can also be provided on a contract basis with businesses and other organizations to address specific employee professional development needs, such as computer operation and software applications, business office practices,

CPR, green office practices, customer service, English language training, and more.

Your neighborhood Adult School also provides a range of courses in parent education, anger management, lifelong education, specialized programs for adults with various disabilities, citizenship, and other special interest areas.

Come learn with us!

Workforce Development Board of Contra Costa County

www.wdbccc.com

The Workforce Development Board supports the growth of the local economy. Utilizing a variety of strategies, the Board helps "grow" small businesses, supports larger, existing businesses in increasing productivity and improving their bottom line, and assists economic development in attracting new businesses to the county. The Board hosts and supports the Contra Costa Small Business Development Center (SBDC); brokers resources for business; and engages economic development through the BESTeam.

George E. Carter III (925) 602-6801

gcarter@ehsd.cccounty.us

Today's Topics – Making the Case

✓ The Value of Economic Development

- What It Means to Your County

✓ Economic Development Activities

- County Programs and Projects

✓ Your Leadership Role in the County's Economic Development Agenda

The California Association for Local Economic Development



“From a public perspective, local economic development involves the allocation of limited resources – land, labor, capital and entrepreneurship in a way that has positive effect on the level of business activity, employment, income distribution patterns, and fiscal solvency.”

The California Association for Local Economic Development



Distinctions

- COMMUNITY DEVELOPMENT is a capacity building process for making a community a better place to live and work.
- ECONOMIC DEVELOPMENT is purely and simply the creation of wealth in which community benefits are created.

The California Association for Local Economic Development



Public Profit Motive

- Maintain, increase & diversify tax base
- Increase revenues faster than cost of municipal services increase
- Economic vitality for commercial and industrial areas
- Maximize property through highest & best use
- Create and retain jobs, increase per capita income

The California Association for Local Economic Development



3 Forms of Economic Development

1. Retain & Expand Existing Business
2. Create Business
3. Attract New Business

The California Association for Local Economic Development



Programs

- ✓ Economic Gardening or Incubation
- ✓ Network Existing Business
- ✓ Business Visitation
- ✓ Revolving Loan
- ✓ Government Purchasing
- ✓ Business Assistance
- ✓ One-stop Permitting vs. Fast Track
- ✓ Market County's Business Environment
- ✓ Trade Show Participation

The California Association for Local Economic Development



Projects

- ✓ Revitalizing the downtown – BIDs
- ✓ Providing infrastructure to a new area
- ✓ Working with private partners to complete commercial or residential projects
- ✓ Developing a buildings, retail, etc.

The California Association for Local Economic Development



People

It takes people to manage and implement these programs.

- ✓ TRAINED County Staff
- ✓ Invest in EDCs
- ✓ Create other Non-profits
- ✓ Partner with other Jurisdictions
- ✓ Partner with others - WIBS
- ✓ Consultants

The California Association for Local Economic Development



Look Beyond a One-Year Horizon and Include Revenue Generation in Your Planning/Thought Process.

You Play a Key Leadership Role in Growing Your Local Economy and Creating Long-term Fiscal Sustainability for Your County.

The California Association for Local Economic Development



Leadership & Long-term Vision

- ✓ Take the lead on a long term view for sustainable budgets
- ✓ Understand your county’s economic development strategy or primary objectives
- ✓ Know which programs/projects are revenue generators
- ✓ Ask “what is the economic development impact of cutting or funding programs?”

The California Association for Local Economic Development 

Leadership & Long-term Vision

- ✓ Monitor the metrics of your economic development programs – tracking your investment
- ✓ Understand you may need to take measured risks to invest in programs and projects to increase revenue – you cannot cut your way to prosperity

The California Association for Local Economic Development 

Gurbax Sahota,
President/CEO
The California Association
For Local Economic Development
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The California Association for Local Economic Development 

You have a strategy...



... but do you have an implementation plan?

- Be Realistic
- Commit Resources
- Acquire the Right Tools
- Share
- Know Where to Start
- Review and Revise

Be Realistic

- About priorities
- About what you/group can achieve
- And can achieve in the timeline, with the resources
- Identify a catalyst project to “kick start”

Find & Allocate Resources

Rule of Thumb / Rural Communities

- Total E.D. Budget = \$5 per capita
- Marketing Budget = \$3.50 per capita

Urban Area EDO's budgets range:

- \$1.43-\$57/person (nonprofit EDO)
- \$2.24-\$15/person (city-led e.d.)
- \$6/person (one example county-led e.d.)

Funding Sources

- State / Federal grants
- General fund
- Pledged tax revenues (sales tax, property, license plate fees)
- Special districts
- Program fees (applications, facility rent, loan repayments, events)
- Foundation / Private donations
- Fees for Service
- Utility fund

The Right Tool for the Right Job

Website is your most important tool

- Good navigation & functionality -- 3 click rule
- Data rich / Report Builder
- Build your business case
- Links
- Multiple audiences – keep them in mind
- Mobile version

Other Tools, Materials

- Customer Management System – Attraction and BRE
- Data – Data – Data
- Maps – Maps – Maps
- Business Case
- Case Studies
- Site Plans, Design Concepts
- Development Timeline & Fee Structure
- Response piece, brochure – electronic, quality

Share

- Roles & Responsibilities
- Accountability
- Credit

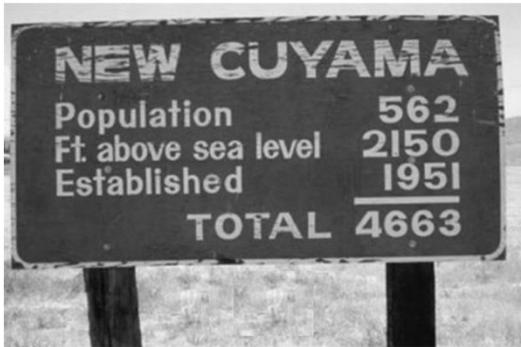
“What makes a plan capable of producing results is the commitment of key people to work on specific tasks.” — Peter F. Drucker

Know Where To Start

- Prioritize Strategies and Initiatives
- Catalyst Project
- Then get started...
- 30 - 60 – 90 – 20 day launch

“The way to get started is to quit talking and begin doing.”
—Walt Disney

Measure right things the right way



Different people want different results

- Economists – economic growth
- Business – competitiveness, new markets, profits, workers
- Labor Leaders – better wages, benefits, training
- Elected Officials – revenue sources
- Environmentalists – sustainability, social justice
- Community – jobs, services, improved quality of life and standard of living

What are your goals?

- Jobs
- Capital Investment
- Wages
- Businesses Attracted – Retained – Expanded
- Retail Sales Tax Revenue
- Tourism
- Other?

How do you measure success?

- Jobs created, retained, lost
- Capital investment
- Vacancy Rate
- Number of leads
- Number of site visits
- Ads placed
- Website hits
- What else?

“Don’t confuse activity with achievement.”

— Unknown author

Misleading Metrics

Inquiries are the biggest (easiest) measurable

- Up to 90% of leads are never followed-up on
- 80% do not follow-up on tradeshow leads
- 59% of inquirers receive wrong information
- 43% receive the information too late
- 18% don’t receive any information

Challenges to Performance Metric

Data Collection

- getting info from clients or partner agencies
- accurate data
- lack of staff or lack of budget to purchase data

What to Measure

- Identifying measures that relate to performance or achievement, quality, impact
- Demonstrating value & ROI w/out taking inappropriate credit

Influence by Stakeholders

- Challenged to direct metric to personal agendas

Performance Metrix

Public Investment	Capital Improvements - \$, Dollars/Acre, Total Acres Shovel-Ready sites – Acres Days saved in permitting process
Business Outreach	Businesses visited, Referrals made, NEW businesses visited Average wages Capital investment Economic Impact Report
Downtown	Vacancies - % and SF, Lease rates, New retail sectors
Client Activity	What's in the pipeline Conversion Rate – Leads – Qualified – Site Visits – New Jobs

COMMUNICATE SUCCESS

Rutgers University

Inputs
Outputs
Outcome



Los Angeles County Strategic Plan for Economic Development
**IMPLEMENTATION YEAR TWO
PROGRESS REPORT**

2011



LACountyStrategicPlan.com

Prepared by:



LOS ANGELES COUNTY
ECONOMIC DEVELOPMENT CORPORATION

MESSAGE FROM THE PRESIDENT AND CEO

I am truly pleased to present you with the Implementation Year Two, which ended on December 31, 2011, Progress Report for the Los Angeles County Strategic Plan for Economic Development.

Just to recap, the five-year L.A. County Strategic Plan for Economic Development was developed during late 2008 and 2009 and unanimously adopted by the Los Angeles County Board of Supervisors on December 22, 2009. It has been adopted by 84 out of the 88 cities within the county either individually or through their respective Councils of Government. The plan was produced through a very public, year-long, inclusive process that brought together over 1,080 stakeholders from business, government, labor, education, environmental, and other community-based organizations to identify and build consensus around a set of economic development priorities to achieve a stronger economy, an improved environment, and broader prosperity across all of our communities. The result of this public, consensus-building process was a community-developed plan that identified 12 objectives and 52 strategies to achieve the following five core aspirational goals :

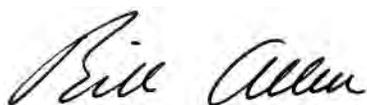
1. Prepare an Educated Workforce
2. Create a Business-Friendly Environment
3. Enhance our Quality of Life
4. implement Smart Land use
5. Build 21st Century infrastructure

This past year, we have witnessed public, private, education, non-profit, and many other community-based leaders step up to take greater responsibility for the health, vibrancy, and prosperity in their communities by advancing programs and policies in accordance with the strategic plan.

The report before you catalogs actions taken throughout the region to advance the L.A. County Strategic Plan for Economic Development forward. This past year, we have witnessed our universities, community colleges, and K-12 schools receive positive state, national, and worldwide attention, such as City of Pasadena-based Caltech being dubbed the world's best research university, and we continue to boost our reputation as a research and development hub for innovation and creativity. With positive policy changes like the creation of the City of Los Angeles Development Services Case Management Office to streamline development projects, we continue moving forward in both becoming and being known as a business friendly locale. We saw a continued effort to reinvigorate our communities and improve the overall quality of life for businesses, residents, and visitors of Los Angeles County with projects like the County of Los Angeles 2012 Bikeway Master Plan, which contains 832 miles of new bikeways. We also witnessed the completion of projects like the City of Burbank Water and Power's Sustainable Campus—marking yet another step forward in implementing smart land use in the county. Finally, we saw several critical infrastructure projects throughout the region move forward under traditional as well as alternative delivery methods, such as the \$18.6 million I-210 Gold Line Bridge which began construction in 2011 using a design-build approach and is already 50% completed.

Needless to say, much has happened throughout the region, and we look forward to seeing what unfolds in 2012 to meet our shared vision of ensuring a strong, diverse and sustainable economy for L.A. County's residents and communities. With the third-year implementation of the L.A. County Strategic Plan for Economic Development already underway, we remain steadfast in our commitment to prepare an educated workforce, create a business friendly environment, enhance our quality of life, implement smart land use policies, and build a 21st century infrastructure. The success of the first two years of implementation could not have been possible without the generous support of the Morgan Family Foundation; the dedication, commitment, and support of our elected officials who are operationalizing many of the plan's recommendations; the plan's Implementation Champions who continue to carry the flag for the plan and promote its message to their stakeholders, the broader business community for recognizing the need for such a plan in the community, and to each of you for your unwavering support, commitment and participation in creating a better and more prosperous L.A. County.

Sincerely,



Bill Allen, President and CEO
Los Angeles County Economic Development Corporation

Aspirational Goals & Objectives

1 PAGE 4

PREPARE AN EDUCATED WORKFORCE

1. Ensure successful education outcomes at every level, i.e., all students should, at a minimum, achieve grade-level proficiency and graduate.
2. Ensure that businesses have enough workers with the right skill sets to meet their needs.
3. Prepare job seekers and incumbent workers to enter sectors with high value jobs – as measured by wages, benefits and additional income attracted into the County – and built-in career ladders.

2 PAGE 31

CREATE A BUSINESS-FRIENDLY ENVIRONMENT

1. Establish and promote a business-friendly environment to create and retain good quality jobs.
2. Retain and expand the existing job base while pro-actively attracting new businesses, industries, jobs and investment.
3. Leverage the County’s research and development facilities for the commercialization of research, technology and similar opportunities.

3 PAGE 45

ENHANCE OUR QUALITY OF LIFE

1. Make our communities more desirable places to live.
2. Use all available resources and adopt new approaches to revitalize low income communities.

4 PAGE 56

IMPLEMENT SMART LAND USE

1. Maintain an adequate supply of jobs-creating land.
2. Develop and rehabilitate land to meet strategic economic development objectives.

5 PAGE 62

BUILD 21ST CENTURY INFRASTRUCTURE

1. Fix the broken infrastructure development process.
2. Build and maintain critical infrastructure for Los Angeles County.



**GOAL 1:
PREPARE AN EDUCATED WORKFORCE**

Implementation Champion:



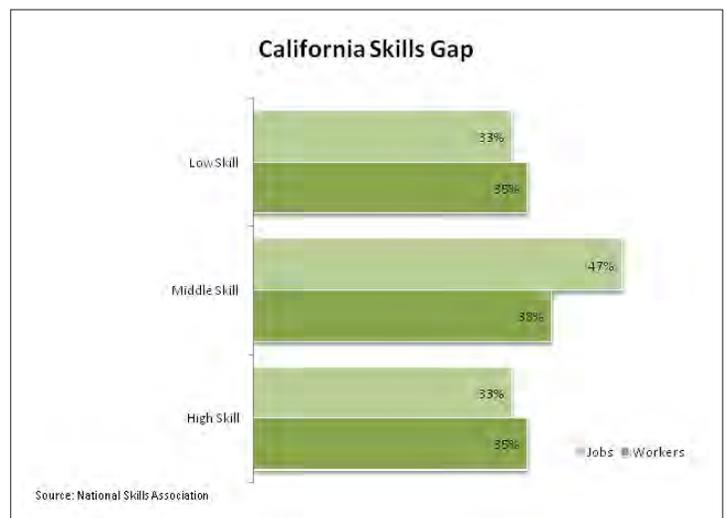
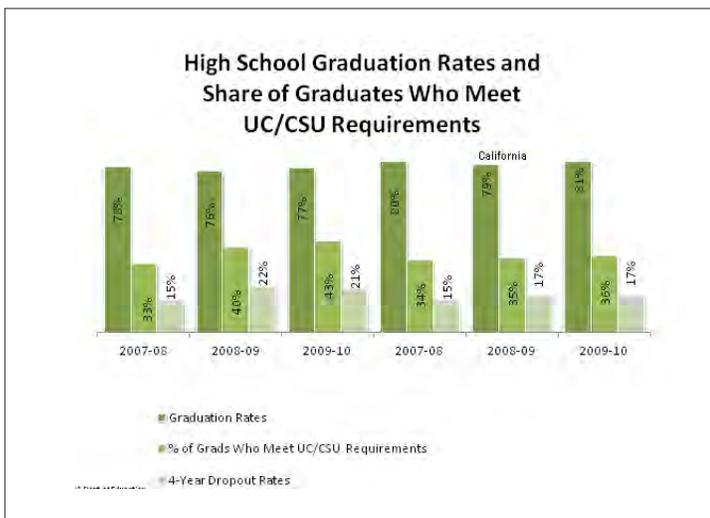
Los Angeles County is home to approximately 120 accredited institutions offering associate, bachelor and graduate degrees. They range from the nation’s largest community college district (Los Angeles Community College District) to three world-class research universities: California Institute of Technology (Caltech), University of California-Los Angeles (UCLA), and University of Southern California (USC). Despite these advantages, L.A. County has been faced with a seemingly widening skills gap and an unemployment rate continuing to linger near 12%.

We all know that our schools educate, train, and prepare students figures prominently in our youth’s future success. Unfortunately, we continue to see in L.A. County that the percentage of students at or above the proficient level is not better than 50 percent in any of the subjects tested and is as low as 33 percent in some school districts. In addition, area students on average do not perform as well as others in the state. It goes without saying that improvement in our ability to provide basic education is critical to ensuring our longstanding economic growth within the County of Los Angeles.

In today’s global, knowledge-based, innovative, and creative economy, we need to ensure that we prepare our incumbent and future workers to meet the demands of the 21st century economy, which include the need for highly-technical skills and critical thinking. In 2011, we saw specific instances throughout the region depicting marked progression toward meeting the education demand for the 21st Century economy, including dozens of efforts dedicated to improving science, technology, engineering, and math (STEM) preparation; an increase in the number of project-based learning programs; the establishment of linked learning programs to ensure college and career-readiness; and the creation and expansion of sector-specific programs in high-demand and emerging sectors.

While much progress has been made over the two-year implementation of the L.A. County Strategic Plan for Economic Development and we are moving in the right direction in a number of areas, additional work still certainly needs to be done.

The successes on the following pages reflect the commitment of our region’s public, private, non-profit educational institutions, workforce development centers, nonprofit organizations, and private companies to Prepare an Educated Workforce for the County of Los Angeles by improving educational outcomes, aligning education and training programs with business needs, and ensuring that all potential workers are prepared to participate in the dynamic L.A. County economy.



OBJECTIVE 1

Ensure successful education outcomes at every level, i.e., all students should, at a minimum, achieve grade-level proficiency and graduate.



1.1 • Make schools better by tracking, assessing and reporting student performance outcomes; increasing the number of charter schools and small schools/learning communities in schools; increasing the use of technology at all levels; increasing arts, language, STEM education and preparation for employment opportunities in key industries; improving teacher quality and accountability through enhanced training, recruitment and incentives; implementing multiple pathway approaches which prepare students from diverse backgrounds for college, careers and entrepreneurship and creating and strengthening linkages among K-12 schools, community colleges and universities.

In April 2011, a partnership between L.A. County Office of Education, the L.A. County Probation Department, and the Young Nak Outreach & Transformation Foundation resulted in two brand-new library facilities at two of L.A. County's juvenile halls. <http://www.lacoe.edu/>

In April 2011, Cerritos College kicked off its new Early Success Program (ESP). Under this program, eligible first-time students would receive earlier priority enrollment for fall classes. <http://www.cerritos.edu/ESP>

In May 2011, the Beverly Hills Unified School District Board of Education voted unanimously to open one transitional kindergarten class at the Beverly Vista School site. <http://www.beverlyhills.k12.ca.us/>

In October 2011, the Loyola Marymount University School of Education brought together more than 150 charter school leaders, administrators, teachers, faculty and students for a collaborative symposium on change within L.A. Unified and the future success of Los Angeles schools around three areas: human capital, performance management and quality choice. <http://www.lmu.edu>

In 2011, as an 8th grade science teacher at PUC Cals Charter Middle School, Teach For America corps member Corey Harkey created a strategy for his class that led to noteworthy academic gains. By the end of the academic year, 95% of his students were proficient or better on the California Standards Test, which is nearly double LAUSD's average of 51%. <http://www.teachforamerica.org/>

During the 2010-11 school year, Teach For America corps member and Kindergarten teacher Justin Myles led his Kindergartners at KIPP Empower Academy to finish the school year reading (on average) at the second grade level, demonstrating more than two years of growth in just 10 months. This past school year, with an API score of 917, KIPP L.A. Prep became the highest performing middle school in all of LAUSD. <http://www.teachforamerica.org/>

In early 2011, the Los Nietos School District's students gained enough in test scores over the past two years to be removed from Program Improvement status. The district was in Program Improvement since 2003 for failing to meet annual federal testing targets. <http://www.losnietosms.losnietos.k12.ca.us/>

In April 2011, the Glendale Unified School District, the City of Glendale, and Glendale Community College signed a five-year agreement with the Mayor of Korea's GyeongGi Province to promote student, educator, and curriculum exchange programs. <http://www.englishvillage.or.kr>

In March 2011, several community colleges in Los Angeles (including: Pierce College, Los Angeles City College, Los Angeles Harbor College, East Los Angeles College, Los Angeles Mission College, Los Angeles Trade Technical College, Los Angeles Valley College, and West Los Angeles College) were selected for the Achieving the Dream 2011 Cohort, which requires them to develop and implement research-based policies and practices based on quantitative and qualitative analyses of the school's strengths, problem areas, and achievement gaps. <http://www.achievingthedream.org>

In the 2010-2011 school year, Los Angeles Unified School District students achieved a 19-point Academic Performance Index gain, which was the highest gain among urban school districts in California. <http://www.lausd.net>

HONORING EDUCATION

In November 2011, three teachers in L.A. County (from the Los Angeles County office of Education, Whittier Union High School District and Burbank Unified School District) were named among the state's best K-12 educators. In total, only five teachers received the award throughout the state this year. <http://www.cde.ca.gov>

In September 2011, 16 winners were announced for Los Angeles County's 30th Annual Teacher of the Year

program. The county competition, presented by the Los Angeles County Office of Education, is the largest competition of its kind in the state and nation. <http://www.lacoe.edu/>

In February 2011, UCLA's Institute for Democracy, Education and Access (IDA) brought together 31 local high school students and held a community hearing at UCLA's Downtown Labor Center to provide recommendations on how to improve urban public education. <http://www.ucla.edu>

In March 2011, the Glendale Unified School District adopted its Strategic Plan, which is focused on student achievement goals by 2015 (rather than the district's past plans, which have focused on what the district is committed to achieving). <http://www.gusd.net/StrategicPlan2015>

In April 2011, 20 schools in the Los Angeles Unified School District received State Title I Academic Achievement Awards by the California Department of Education—an award given to schools that have exceeded Adequate Yearly Progress for two or more years and/or are making significant progress toward proficiency on state standards for all students and subgroups. <http://www.lausd.net>

In February 2011, Eagle Rock High School in the Los Angeles Unified School District was recognized as one of the top schools in the nation with the largest increase of Latino and African American students succeeding on Advanced Placement exams. <http://www.lausd.net>

In August 2011, the Los Angeles Unified School District announced that the number of 10th grade students passing the California High School Exit Exam on their first try was at the district's all-time high. Since the 2003-2004 school year, the district increased its mathematics pass rates by 17%--from 58% to 75% of 10th grade students passing the test on their first try. <http://www.lausd.net>

INCREASING THE NUMBER OF CHARTER SCHOOLS AND SMALL SCHOOLS/LEARNING COMMUNITIES IN SCHOOLS

In March 2011, Celerity Educational Group was approved by the L.A. County Board of Education to open a kindergarten through fifth-grade charter school in Compton. The approval from the L.A. County Board of Education came after a rejection from the Compton School Board. Celerity also operates

four other schools throughout the area. http://www.celerityschools.org/celerity_sirius/index.html

In 2011, Teach For America alumna-founded Endeavor College Prep, a charter middle school in East Los Angeles, received an API score of 845 in its second year of operation. In comparison, LAUSD's API for 2010-2011 was 728. <http://www.teachforamerica.org/>

In Fall 2011, nine new school sites opened for students in the Los Angeles Unified School District as part of the district's \$19.5 billion New School Construction and Modernization Program. <http://www.lausd.net>

In January 2011, the Los Angeles Unified School District announced the reorganization of Belmont High School to include a curriculum of multilingual instruction and project-based learning. <http://www.lausd.net>

In December 2011, USC's Hybrid High, which is affiliated with the USC Rossier School of Education, was granted a five-year charter by the Los Angeles Unified School District. When the school opens in Fall 2012, it will serve students who are seen as at risk of dropping out due to job or family responsibilities. <http://www.usc.edu>

INCREASING THE USE OF TECHNOLOGY AT ALL LEVELS

In November 2011, Cerritos College received the annual 2011 Student Success Award from the California Community Colleges Chancellor's Office for its federal grant-supported iFalcon program, an innovative, technology-based effort that aims to increase student success and close the achievement gap for underrepresented populations. <http://www.cerritos.edu/>

In May 2011, the Tecnificate Conference was held at College of the Canyons. Tecnificate is designed to encourage greater adoption and understanding of technology for Spanish-speaking residents. <http://www.canyons.edu/>

In March 2011, roughly 50 students from College of the Canyons Mathematics, Engineering, Science, Achievement (MESA) program received new laptops as a result of California Connects—a program designed to increase digital literacy and broadband access in the state's underserved areas. The laptops were given to students who agreed to serve as future

community trainers to ensure that more people in the community learn how to use technology for essential tasks, such as exploring higher education opportunities. <http://www.canyons.edu/>

In October 2011, CSU L.A. announced its new courses in Legal Technology as part of its Paralegal Studies Program. Curriculum was recently approved by the American Bar Association, and the track was developed to address the skills gap challenge posed by the increased use of technology in legal practice. <http://www.calstatela.edu/extension>

In June 2011, CSU L.A. announced a new program in Bioinformatics and Computational Biology. The program will allow students to gain computer skills that will assist in solving complex programs in the growing area of biological science. <http://www.calstatela.edu>

In December 2011, parents from Don Julian Elementary School in the Bassett Unified School District participated in a graduation ceremony as part of the One Million New Internet Users Initiative. The New Internet Users Initiative consisted of an eight week engagement effort where parents of students were able to learn technology skills. <http://www.bassett.k12.ca.us/>

In 2011, Pepperdine University's Graduate School of Education and Psychology implemented Summer Institutes designed for pre-K-12 teachers and administrators interested in serving in their home institutions by integrating cutting-edge research, technology, and approaches that are gaining attention and interest from internationally renowned educators. Teachers from a number of county school districts as well as various charter and private schools were provided software and training that allowed them to create digital video and animated explanations of mathematics concepts that align student needs with instructor strengths. <http://www.colleague.pepperdine.edu/2011/10/second-annual-summer-institutes-empowered-teachers/>

In 2011, Los Angeles Trade-Technical College was selected to participate in the League for Innovation in the Community College and the University of Arizona's Center for the Study of Higher Education project titled: "Getting Connected: Harnessing the Power of Social Media Technology to Enhance Community College Student Success." Over the course of three years, the project is intended to increase understanding of how social media technology can connect students to college-based information and resources to increase retention and



successful educational outcomes. <http://www.college.lattc.edu/>

In August 2011, the Leuzinger High School in the Centinela Valley Union High School District completed construction on its new Center for Arts & Sciences, which includes 36 classrooms and 8 state-of-the-art science labs. http://www.centinela.k12.ca.us/measure_cv/leuzinger_hs.jsp

In 2011, L.A. Valley College's Institute for Developing Entertainment Arts & Studies (IDEAS) trained both incumbent workers and new workers through workshops in areas like software and training for camera operators. The school also expanded its relationship with Interactive Internet Mobile Applications for Business (IIMA4BIZ), which has resulted in the school's first web-oriented workshop featuring hands-on training in utilizing mobile and social media. <http://www.lavc.edu/ideas/>

In March 2011, the Los Angeles Unified School District's Education Foundation received a \$1.05 million donation of computer software from Microsoft to equip more than 500 parent centers, which encourage parents and guardians to be more active in their child's learning. <http://www.lausd.net>

INCREASING ARTS, LANGUAGE, STEM EDUCATION AND PREPARATION FOR EMPLOYMENT OPPORTUNITIES IN KEY INDUSTRIES

In December 2011, the Los Angeles County Office of Education's Family Literacy Support Network celebrated its 10-year anniversary in teaching across L.A. County about the enjoyment of books and reading. <http://www.lacoe.edu/>

In September 2011, two murals were unveiled at the Nidorf Juvenile Hall probation facility in Sylmar. Over 160 students contributed to four murals at the center—an effort made possible by a partnership of Los Angeles County Office of Education, the L.A. County Probation Department and Theatre of Hearts/Youth First Artist-In-Residence Program. <http://www.lacoe.edu/>

In October 2011, CSU Northridge received a \$5.5 million grant from the U.S. Department of Education to increase the number of underrepresented and low-income students who transfer to the school from a community college and graduate with degrees in engineering or computer science. <http://www.csun.edu/>

In June 2011, the South Bay Workforce Investment Board hosted a Generation STEM Symposium at CSU Dominguez Hills where over 35 businesses and nearly 900 high school students attended. The event provided South Bay STEM Academy students one-on-one time with key businesses (such as Boeing and Northrop Grumman). <http://www.sbwib.org/>

In 2011, Los Angeles County's Arts for All program added five new school districts to its collaborative. There are now 49 Arts for All school districts reaching 560,465 students. <http://www.lacountyartsforall.org/>

In June 2011, the Los Angeles County Office of Education and the L.A. County Arts Commission kicked off a special school administrator training series to better integrate arts education in the classroom. The workshops will be held on a quarterly basis beginning in June 2011. <http://www.lacoe.edu/>

In November 2011, Cal Poly Pomona's biology and geology departments were awarded a \$1.4 million grant to improve pathways for Pasadena City College students who are interested in continuing their environmental science studies at Cal Poly Pomona. <http://www.csupomona.edu>

In May 2011, the Los Angeles County Office of Education's Annual Digital Voice Awards celebration was held "virtually" for the first time. The awards are presented to student projects that use a variety of technology tools, e.g., digital video productions, podcasts, print design, etc. <http://www.lacoe.edu/>

In February 2011, the South Bay Workforce Investment Board hosted a STEM Career Symposium at the Los Angeles Air Force Base. <http://www.sbwib.org/>

In September 2011, Citrus College received a \$4.3 million STEM grant from the U.S. Department of Education, Hispanic-Service Institute. This grant will allow the college to build upon its STEM programs while also creating a new program: RACE to STEM. <http://www.citruscollege.edu>

In 2011, Lancaster School District announced that it will offer STEM electives as an educational choice for students interested in science, technology, engineering, and mathematics. The STEM Academy for 6th, 7th and 8th grade students is housed within the Discovery School and Endeavour Middle School and is designed to engage students in a project-based, technology-rich learning environment. http://www.lancaster.k12.ca.us/apps/news/show_news.jsp?REC_ID=233540&id=0

In April 2011, more than 700 students from throughout the County of Los Angeles participated in Los Angeles County Office of Education's annual History Day L.A. History Day L.A. is part of a national competition for (public and private school) students to engage youth in history and the social sciences. <http://www.lacoe.edu/>

In January 2011, an automobile academy was launched for young men detained at Camp Gonzales in Calabasas as a way to provide incarcerated youth with employable skills. The academy is the result of a partnership between the Los Angeles County Office of Education and Los Angeles Trade-Technical College. <http://www.lacoe.edu/>

In September 2011, Antelope Valley College and its higher education partners became the recipients of \$2 million in grant funding to encourage young people to pursue science, math and engineering careers. These grants were awarded by the Department of Education and are eligible for annual renewal until 2016. <http://www.avc.edu/>

In October 2011, Citrus College and the University of La Verne announced the award of a \$3.8 million cooperative grant from the U.S. Department of Education, Hispanic-Serving Institute to improve completion and graduation rates of students who aspire to enter the teaching profession. <http://www.laverne.edu> & <http://www.citruscollege.edu>

In October 2011, Cerritos College unveiled its new Physical Science and Technology Building. The facility features five general classrooms for architecture, astronomy, earth science, engineering, engineering design technology, mathematics and physics, and seven large laboratories, faculty offices and division offices. <http://www.cerritos.edu/>

In October 2011, Compton Unified School District's McNair Elementary School held its "Science on the Scene" challenge which provided students an opportunity to explore chemistry and physics. Students from grades K-5 experimented with making invisible ink, homemade butter, and balloon-powered race cars. <http://web.compton.k12.ca.us/index.aspx>

In September 2011, Cerritos College became the recipient of \$3.8 million in STEM grants from the U.S. Department of Education. The goal of this grant is to increase the number of Hispanic and other low-income students attaining degrees in STEM fields. <http://www.cerritos.edu/>

In November 2011, the College of the Canyons held information sessions for its new Skills for Healthy Aging Resources and Program (SHARP) Certificate Program. SHARP consists of a 12-unit program, designed for students to complete in just one semester and offers students the opportunity to learn evidence-based health promotion strategies for older adults. The program is the first of its kind anywhere in the nation. <http://www.canyons.edu/>

In October 2011, Mount St. Mary's College in Los Angeles was awarded a five-year, \$6-million dollar Title III federal grant to enhance curricula and support for Hispanic, female, and low-income students in the areas of science, technology, engineering, and mathematics. <http://www.msmc.la.edu>

In October 2011, the College of the Canyons held information sessions for its Medical Laboratory Technology program, which is one of only eight programs in the state. The program prepares students for employment in a variety of clinical laboratory and biotechnology careers. <http://www.canyons.edu/>

In August 2011, the College of the Canyons Canyon Country campus unveiled its new Applied Technology Education Center with 15,600 square feet of workshop and laboratory space. <http://www.canyons.edu/>

In January 2011, Caltech announced the creation of the Ronald and Maxine Linde Institute of Economic and Management Sciences, which seeks to bring together the best scientific minds and the best quantitative business practices. The new institute will be funded from an \$8.2 million endowment established by Ronald and Maxine Linde and a \$4.1 million addition to the endowment from the Gordon and Betty Moore matching program. <http://www.caltech.edu/>

In August 2011, the College of the Canyons' Santa Clarita Performing Arts Center received a grant from the California Arts Council to bring back the LuL.A. Washington Dance Theatre's Educational Residencies Program. During the residency, students will learn about various modern dances, terms and historical dance artists. <http://www.canyons.edu/>

In August 2011, the Annenberg Foundation awarded CSU Dominguez Hills \$1 million for its first endowed professorship: the Wallis Annenberg Endowed Professorship for Innovation in STEM Education. The professorship focuses on increasing the number of teachers in the STEM fields and also oversees the Center for Innovation in STEM Education—an incubator for new STEM initiatives in the region. <http://www.csudh.edu>

In 2011, Los Angeles Valley College was awarded a five-year, \$4.35 million Title III Accelerated Pathways to STEM and Articulation Program Grant from the U.S. Department of Education to increase the number of Hispanic and other low-income students attaining degrees in math-related subjects. <http://www.lavc.edu/>

In September 2011, CSU Long Beach broke ground on its \$2.5 million Bob Cole Conservatory of Music Pavilion and Plaza. The project was funded through private donations and will offer new music practice rooms, exhibits, renovations, and more. <http://www.csulb.edu/>

In fall 2011, CSU Long Beach launched two engineering degree programs in Lancaster. This offers students an opportunity to transfer from nearby Antelope Valley schools and take the upper-division engineering courses at the Lancaster center. <http://www.csulb.edu/>

In December 2011, CSU L.A. together with the U.S. Navy received the Governor's Historic Preservation Award for the San Nicolas Island Archaeological Field School Program. <http://ohp.parks.ca.gov>

In 2011, Santa Monica College and UCLA were awarded a \$5.8 million federal grant to recruit STEM-focused students, educate them, and give them guidance and support. California received a total of \$37 million statewide from the U.S. Department of Education for this effort. <http://www.smc.edu> & <http://www.ucla.edu/>

L.A. COUNTY COLLEGES & UNIVERSITIES RECOGNIZED FOR GRADUATION & RETENTION

HIGHEST 4-YEAR GRADUATION RATES

- Pomona College – 91%
- Claremont McKenna College – 84%
- California Institute of Technology (Caltech) – 81%
- Harvey Mudd College – 80%
- Occidental College – 80%
- Scripps College – 80%

HIGHEST FRESHMAN RETENTION RATES

- California Institute of Technology (Caltech) – 98%
- University of California, Los Angeles (UCLA) – 97%
- University of Southern California (USC) – 97%
- Biola University – 85%
- Azusa Pacific University – 83%
- Harvey Mudd College – 98%
- Pomona College – 98%
- Claremont McKenna College – 96%
- Scripps College – 94%
- Pitzer College – 92%
- American Jewish University – 86%
- Loyola Marymount University – 88%
- CSU Long Beach – 86%
- California State Polytechnic University, Pomona – 85%
- Mount St. Mary's College – 79%
- Woodbury University – 79%
- CSU Los Angeles – 76%
- CSU Northridge – 74%

Source: <http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings>.



In November 2011, the CSU system achieved its goal of doubling the production of math and science teachers through its systemwide initiative. In 2003, the total number of math and science teachers systemwide was 750 per year; in 2010, this number amounted to 1,502 per year. <http://www.calstate.edu/teachered/msti/>.

In August 2011, CSU L.A. hosted the 2011 IMPACT L.A. Summer Camp with more than 80 6th-8th grade students from throughout Los Angeles. The two-day camp is designed to generate interest in engineering, science, technology, and math fields through innovative design challenges, activities, and games. <http://www.impactla.calstatela.edu>

In 2011, Los Angeles Mission College was awarded a five-year, \$4.3 million from the Department of Education's Hispanic-Serving Institution to establish a comprehensive STEM Center, combining academic and student support services. <http://www.lamission.edu/>

In June 2011, CSU L.A. announced a new program in Bioinformatics and Computational Biology. The program will allow students to gain computer skills that will assist in solving complex programs in the biological sciences. <http://www.calstatela.edu>

In April 2011, CSU L.A. and the Korean Education Center in Los Angeles signed into a Memorandum of Understanding to develop Korean language programs. In 2012, CSU L.A. will launch a minor in Korean language; a major in Korean language will be offered by 2015; and a Korean language teaching credential program is expected to be offered by 2016. <http://www.calstatela.edu>

In March 2011, CSU Long Beach received a \$16,000 grant from the IEEE Control Systems Society to implement a unique program to encourage elementary school girls to explore engineering careers. The grant is part of the "My Daughter" program and is open to 20 fifth-grade girls who will be selected on a competitive basis from six different schools in the Long Beach Unified School District. <http://www.csulb.edu/>

In October 2011, Antioch University Los Angeles added a new specialization to its Master of Fine Arts in Creative Writing Program (Writing for Young People). The Writing for Young People specialization will prepare to students in the craft of writing for a younger audience as well as the art of creative collaboration. <http://www.AntiochLA.edu>

In October 2011, CSU Long Beach received a five-year, \$4.4 million grant to promote Latino success in STEM fields. <http://www.csulb.edu/>

In September 2011, Antioch University Los Angeles announced another specialization for its Master of Arts in Psychology Program: the Psychology of Conflict-Related and Other Trauma. The specialization will prepare students to both identify as well as treat emotional trauma sprung on from catastrophes or conflicts. <http://www.AntiochLA.edu>

In October 2011, the Art Center College of Design announced its new Graduate Media Design Matters track, which focuses on new communication technologies and design research. A major component of the program is a project around one large issue and will include field research in partnership with an international development agency, non-governmental organization, national non-profit or local community partnership. UNICEF is the program's initial partner. <http://www.artcenter.edu>

In January 2011, the L.A. County High School for the Arts hosted the 30th Annual Arts Schools Network conference to bring together artists and educators from across the country to provide leadership and resources to inspire and maintain excellence in arts education. <http://www.artsschoolsnetwork.org/>

In February 2011, Town Hall Los Angeles began a conference series titled "Full STEAM Ahead," which focuses on best practices in STEAM (science, technology, engineering, arts and mathematics) education. The second part of the conference consisted of workshops with hands-on, project-based learning lessons across disciplines. <http://www.townhall-L.A..org/>

In December 2011, CSU Long Beach & CSU Fullerton received a \$525,000 grant from the National Science Foundation for a research collaboration project, focusing on increasing women's interest in computer science and engineering fields and careers. <http://www.csulb.edu/>

In 2011, the Los Angeles Math Initiative, a community partnership, received a \$500,000 gift from the Whitman-Harsh Foundation—enabling the partnership to serve over 18,000 students in the effort to elevate math achievement. http://www.mindresearch.net/cont/giving/gi_wc_mif.php

In October 2011, “Create the State,” an inter-agency and broad-based coalition of statewide partners, held its first meeting in Los Angeles. “Create the State” is part of a larger education reform effort which features arts education as part of the solution to the crisis in California schools. <http://www.cac.ca.gov/artsinfo/create.php>

In October 2011, the National Institutes of Health awarded a five-year, \$1.75 million grant to the National Council of La Raza/CSU Long Beach Center for Latino Community Health, Evaluation and Leadership Training. The funding supports a project aimed at increasing the number of highly qualified Latino graduates who plan to pursue graduate degrees in both biomedical and health-science related disciplines. <http://www.csulb.edu/>

In October 2011, Antelope Valley College celebrated the grand opening of its Performing Arts Theatre. This \$25.5 million, 406-seat theatre provides a state-of-the-art venue for students of the college's dance, music, and art programs, as well as local arts and music groups such as the Antelope Valley Symphony Orchestra & Master Chorale. <http://www.avc.edu/>

In October 2011, Pasadena Unified School District--in partnership with Pasadena's Armory Center for the Arts, the Pasadena Educational Foundation (PEF), and UCLA—was awarded a three-year, \$1 million U.S. Department of Education grant to fund a program that connects arts education with math. The grant is one of only 13 federal Professional Development for Arts Educators grants awarded across the country. The federal grant will fund Artful Connections with Math, a project that was co-designed by PUSD's math coach and Arts Education Department, with the Armory Center for the Arts. <http://www.pusd.us/>

In June 2011, Pasadena Unified School District's (PUSD) middle school students competed in the

district's second annual robotics competition. Students worked in teams building and programming LEGO robots, which required the use of engineering, computer programming and mathematics. <http://www.pusd.us/>

In October 2011, CSU Dominguez Hills received a \$20,000 grant from the Alcoa Foundation to provide scholarships to undergraduate students majoring in STEM-related degree programs. Recipients of the STEM scholarships will receive up to \$5,000 each. <http://www.csudh.edu/>

In October 2011, CSU Dominguez Hills was awarded its first-year allotment of a five year, \$5.09 million Transition to Teaching grant to create the university's online credentialing program for math and science teachers in Southern and Central California. The goal of the program is to recruit individuals with strengths in STEM fields and place them in schools that have a high need for qualified math, science, engineering, and technology teachers. <http://www.csudh.edu/>

In February 2011, Los Angeles Department of Water and Power held its 19th annual Science Bowl Competition, where students' reflexes, teamwork skills, and knowledge are tested in a television game show format. <http://www.lausd.net>

In May 2011, forty high school teams participated in Metropolitan Water District's 9th Annual Solar Cup™, which is a solar-powered boat competition and environmental education program. <http://www.mwdh2o.com>

In November 2011, USC's Neighborhood Academic Initiative received a \$600,000 grant from Toyota



L.A. COUNTY COMMUNITY COLLEGES NATIONALLY RECOGNIZED

COMMUNITY COLLEGE WEEK RANKINGS

TOP 100 ASSOCIATE DEGREE PRODUCERS FOR 2011

- #44-- FIDM/Fashion Institute of Design & Merchandising-Los Angeles
- #47—Mt. San Antonio College
- #73—Pasadena City College
- #91—Santa Monica College

TOP 100 ASSOCIATE DEGREE PRODUCERS FOR MINORITY STUDENTS IN 2011

- #20—Mt. San Antonio College
- #22—Pasadena City College
- #35-- FIDM/Fashion Institute of Design & Merchandising-Los Angeles
- #36—East Los Angeles College
- #47—El Camino Community College District
- #64—Santa Monica College
- #68—Rio Hondo College
- #71—Long Beach City College
- #96—Los Angeles Harbor College
- #100—Los Angeles Valley College

Source: <http://www.ccweek.com/news/templates/template.aspx?articleid=2579&zoneid=5>

Corp. to increase science literacy among students in grades 6-12 and to aid the professional development of science teachers. <http://www.usc.edu>

In July 2011, Siemens awarded an in-kind grant of 1,200 software licenses to UCLA's Henry Samueli School of Engineering and Applied Sciences, UCLA Division of Physical Sciences, California NanoSystems institute at UCLA, and UCLA's Smart Grid Energy Research Center to increase the number and quality of engineering and product-design graduates. <http://www.ucla.edu>

In November 2011, USC launched its STEM Education and Research Consortium to begin increase research and development in STEM fields and to expand interdisciplinary opportunities. <http://www.usc.edu>

In May 2011, the Ostin Family Foundation donated \$10 million to UCLA for a state-of-the-art campus music facility. <http://www.ucla.edu>

IMPROVING TEACHER QUALITY AND ACCOUNTABILITY THROUGH ENHANCED TRAINING, RECRUITMENT AND INCENTIVES

In October 2011, the Los Angeles County Office of Education launched Teacher 2 Teacher: a web-based initiative to connect the area's top K-12 educators with other teachers in the region, providing the opportunity to share and learn from best practices and techniques toward achieving academic success for their students. <http://www.lacoe.edu/>

In March and April 2011, Los Angeles County Office of Education's International Polytechnic (iPoly) High School hosted workshops to train teachers and administrators on project-based learning. Attendees learned the fundamentals of project-based learning, techniques to engage students, and how to integrate project-based learning into the classroom. <http://www.lacoe.edu/>

In November 2011, CSU Long Beach and Arizona State University received a \$3 million National Science Foundation grant to develop professionals to assist people with disabilities. The funding will support a fellowship program that can bring together experts at both universities in research, education and practice. <http://www.csulb.edu/>

In 2011, the Los Angeles County Office of Education launched the Integrating Technology for English Learners website, which includes information to

support English learner students. The new site houses media, products, best practices and more. <http://www.lacoe.edu/>

In October 2011, CSU Long Beach received a \$249,752 from the California Postsecondary Education Commission (CPEC) Grant to prepare teachers for new Common Core state standards. <http://www.csulb.edu/>

In 2011, Pepperdine University's Graduate School of Education and Psychology created The Urban Fellows program to better prepare teachers to work effectively in urban communities by exposing teachers to urban environments and the impacts of poverty while training them to validate the humanity of urban students and instill in those students the confidence needed to realize their aspirations. <http://www.gsep.pepperdine.edu/urban-initiative>

In October 2011, CSU Northridge was awarded a \$250,000 grant from the California Postsecondary Education Commission to help teachers prepare for the state's new Common Core Standards. <http://www.csun.edu/>

In January 2011, Claremont Colleges held a collaborative workshop titled "Feminism and Science: Building Bridges for Teaching and Research Innovation," which brought together faculty from 23 colleges across the nation who were interested in developing teaching and research projects that bring together science, gender studies, and/or feminist science studies. <http://www.claremont.edu/>

In April 2011, Cal Poly Pomona hosted the 15th annual CSU Symposium on University Teaching, which includes information on how to teach students in large classroom settings as well as the role of technology in a university setting. <http://www.csupomona.edu/>

In December 2011, CSU Long Beach received a 2-year, \$234,000 grant from the James Irvine Foundation to better prepare teachers for secondary school student success, especially for linked learning. <http://www.csulb.edu/>

In 2011, UNITE-LA launched LA Learns21, which is a partnership of local and national organizations to build and deliver shared, quality training for project-based learning instruction in Los Angeles. Partners include Los Angeles Unified School District, Local District 4, Los Angeles Small Schools Center, Buck Institute for Education, Big Picture Learning, New Tech Network, Envision Learning Partners, and ConnectEd. In the

summer of 2011, 350 teachers and administrators were trained on project-based learning through the program. <http://www.unitela.com>

In June 2011, the National Council on Teacher Quality presented its Teacher Quality Roadmap, which analyzed the Los Angeles Unified School District's current policies to determine where the district placed on a variety of teacher quality issues. <http://www.lausd.net>

IMPLEMENTING MULTIPLE PATHWAY APPROACHES WHICH PREPARE STUDENTS FROM DIVERSE BACKGROUNDS FOR COLLEGE, CAREERS AND ENTREPRENEURSHIP

In March 2011, International Polytechnic High School broke ground on its new facility on the Cal Poly Pomona campus. The high school (dubbed iPoly) offers a program that combines academics with real-world applications through project-based approaches to learning. <http://www.lacoe.edu/>

In February 2011, Los Angeles County High School for the Arts broke ground on their new \$25 million facility, which will feature 21 classrooms, a "black box" theatre, and an outdoor stage area. The facility is located on the Cal State L.A. campus. <http://www.lacoe.edu/>

In April 2011, Cerritos College received a \$750,000 grant from Next Generation Learning Challenges for a "multi-institutional, open educational resource project." The grant focuses on improving college readiness and completion, especially for low-income young adults. <http://www.cerritos.edu/>

In January 2011, Cerritos College announced the creation of its Intensive English Program where F-1 students can develop English skills required to continue studying in their major field of study. <http://www.cerritos.edu/>

In January 2011, College of the Canyons Fast Track Institute hosted a Job Information Express orientation designed to familiarize job seekers and get them on a "Fast Track" for careers. The orientation served as a starting point for community members who wanted to work in a key "fast track" industry, but lacked the skills to secure jobs in that area. <http://www.canyons.edu/fasttrack>

In October 2011, CSU Dominguez Hills hosted its 3rd Annual La Feria Es El Momento: Edúcalos, an education

fair for Spanish-speaking families. The fair promotes a college and career-oriented culture and encourages Spanish-speaking parents to be more involved in their children's educational successes. In 2010, the fair attracted 27,000 people. <http://www.csudh.edu>

In June 2011, CSU Dominguez Hills hosted Journey to Success: Pacific Islander College Fair as part of its Asian American and Pacific Islander Initiative, which has a goal of improving access and graduation rates in the Asian American and Pacific Islander community. <http://www.csudh.edu>

In September 2011, College of the Canyons hosted a Young Entrepreneurship program offered at the Small Business Development Center which targeted young people between 14 and 27 year old. The program offers business consulting and training programs to encourage young people to pursue careers in small business ownership and self-employment. <http://www.cocsbdc.org>

In October 2011, CSU Long Beach received a \$50,000 gift from George L. Graziadio to support the university's annual Frank J. De Santis Lecture Series in Italian American Studies. <http://www.csulb.edu/>

In October 2011, CSU Long Beach hosted Journey to Success College Fair for Cambodian and other Southeastern Asian communities as part of the university's Asian American and Pacific Islander Initiative. <http://www.csulb.edu/>

In September 2011, CSU L.A. welcomed its first cohort of freshmen into the university's new Honors College. The

Honors College includes core learning goals which focus on knowledge creation, social innovation and global citizenship. <http://www.calstatela.edu>

In August 2011, the Sheriff's Leadership Academy received a \$5,000 grant for film and lighting equipment from the Barona Tribal Indians Education Fund. The Sheriff's Leadership Academy is a fully accredited school for "second-chance students." <http://www.la-sheriff.org/divisions/leadership-training-div/bureaus/pdb/videoproductionunit.html>

In December 2011, the White House announced that California is one of nine states to receive grant awards from the \$500 million Race to the Top Early Learning Challenge Fund—a program administered jointly by the U.S. Department of Education and Health and Human Services. The program required states to create plans that would lead to increased access to high-quality programs for children from low-income families in an effort to close the "school readiness gap." <http://www2.ed.gov/programs/racetothetop-earlylearningchallenge>

In November 2011, Loyola Marymount University's College of Business Administration's Entrepreneurial Studies Program supported the students of St. Bernard High School in creating and operating a student-run campus store and café. <http://www.lmu.edu>

In the fall of 2011, Hawthorne School District announced its plans to bring theme-based education to all three of the district's middle schools. Prairie Vista School will focus on fine arts; Bud Carson Middle School will focus on science, technology, engineering, and math; and Hawthorne Middle School will focus on business. The goal of this effort is to put more students on the path to college." <http://www.hawthorne.k12.ca.us>

In 2011, the Montebello Unified School District was awarded a \$125,000 grant from ConnectEd to plan out the school's multiple pathways program for high school students. <http://www.montebello.k12.ca.us/> In November 2011, Cal Poly Pomona's biology and geology departments were awarded a \$1.4 million grant to improve pathways for Pasadena City College students who are interested in continuing their environmental science studies at Cal Poly Pomona. <http://www.csupomona.edu>

In August 2011, CSU Long Beach received a \$97,000 grant to the Center for Community Engagement for the El Monte Community Building Initiative Project, which will provide training and coaching to more than 60 emerging community leaders from three specific neighborhoods of El Monte. <http://www.csulb.edu/>



In 2011, West Los Angeles College received a four-year, \$1.2 million grant from the U.S. Department of Education to operate an Educational Opportunity Center, which will provide academic advice and admission information for adults who want to enter college. Additionally, West Los Angeles College received a four-year, \$1.3 million grant from the U.S. Department of Education to operate an Educational Talent Search which targets students from middle schools who are college-bound but may lack resources and guidance. <http://www.wlac.edu/>

In 2011, West Los Angeles College received a four-year, \$2.4 million grant from the U.S. Department of Education to increase the number of African American college graduates. <http://www.wlac.edu/>

In the summer of 2011, UCLA hosted the First Star UCLA Bruin Guardian Scholars Summer Academy—a five-week residential immersion program intended to increase interest among and prepare foster youth for college. <http://www.ucla.edu>

CREATING AND STRENGTHENING LINKAGES AMONG K-12 SCHOOLS, COMMUNITY COLLEGES AND UNIVERSITIES

In June 2011, Antelope Valley College announced that it will offer two specially designated, transfer-ready, associate degree programs in Communication Studies and Mathematics. These two new programs offer a clear pathway for graduates of the college to transfer to CSU campuses. <http://www.avc.edu/>

In September 2011, Cerritos College announced two associate degree programs for transfer in Sociology and Communications. In compliance with a recent state law, graduates of these programs receive guaranteed admission to CSU campuses. <http://www.cerritos.edu/>

In March 2011, it was reported that the Long Beach College Promise initiative, a partnership between CSU Long Beach, Long Beach Unified School District, and Long Beach City College, provided more than 500 students Long Beach College Promise scholarships. <http://www.longbeachcollegepromise.org>

In October 2011, Governor Brown signed into law SB 650 (Lowenthal), which enacted the College Promise Partnership Act to ensure the intent of the Long Beach College Promise by providing a more cohesive framework for concurrent enrollment and priority enrollment. To ensure the success of this



bill, the LAEDC—through its Workforce Development Committee—worked with Long Beach City College to communicate the merits of the program to key members of the Legislature; engaged in a multi-pronged policy and strategic communications effort, and leveraged multi-media resources. <http://www.longbeachcollegepromise.org>.

In November 2011, MBA students from USC's Marshall School of Business joined 46 classrooms of K-5 children at Charles Barrett Elementary School in South Los Angeles to teach them financial literacy in an event called Junior Achievement in a Day. <http://www.marshall.usc.edu/>

1.2 Connect schools and communities by linking local community organizations, non-profits, businesses and corporate leaders with schools through formal partnerships, and implementing family education programs and after-school programs.

In October 2011, Cerritos College dental hygiene students offered free dental cleanings to those in need at the CareNow L.A. event. The event provided free dental, medical and vision services to those uninsured, underinsured and underserved. Over 250 patients were served from Cerritos College students in one day. <http://www.cerritos.edu/>

In April 2011, Cerritos College held its 15th Annual Mega Mixer, bringing together over 300 local business leaders for networking opportunities with the college. <http://www.cerritos.edu/>

In May 2011, CSU Dominguez Hills announced a partnership with The Home Depot Center and L.A. Galaxy for a new internship program in Spring

2011 for students to work in sales, marketing and event presentation with the L.A. Galaxy while simultaneously earning a stipend and credits toward graduation. The program will become an annual opportunity for students. <http://www.csudh.edu>

In February 2011, CSU Dominguez Hills, held its 6th Annual Student Research Day to showcase the work of its undergraduate and graduate students. More than 100 students participated in the event. http://www.csudh.edu/rf/student_research_day.htm

In October 2011, the Art Center College of Design announced its new Graduate Media Design Matters track, which focuses on new communication technologies and design research. A major component of the program is a project around one large issue and will include field research in partnership with an international development agency, non-governmental organization, national non-profit or local community partnership. <http://www.artcenter.edu>

In August 2011, Art Center College of Design unveiled a large-scale, interactive installation Teen Art Park to foster safe, artistic expression for Pasadena's at-risk youth. <http://www.artcenter.edu>

In 2011, Pepperdine University's Seaver College established a Guardian Scholars Program to provide college support for emancipated foster youth. The program offers academic, financial, social, and emotional support.

In January 2011, Santa Monica College launched a new, one-year "Promo Pathway" program along with the South Bay Center for Counseling and PromaxBDA. The program's first year offered full scholarships (including fees, equipment, transportation, child care, and more) to 25 at-risk students. At the end of the program, graduates will earn a promotion writer/producer/editor certificate. <http://www.smc.edu>

In January 2011, Santa Monica College, in collaboration with the California Works Alliance, launched its new recycling and resource management job-training program, which is dubbed "Jobs Through Recycling." The program provides job training in the high-growth, high-demand field of resource management. The program is funded by a \$4.87 million Community-Based Job Training Grant awarded by the U.S. Department of Labor. <http://www.smc.edu>

In September 2011, the City of Inglewood and UCLA's Luskin School of Public Affairs kicked off a partnership on a community engagement project

which will focus on the role of social workers in emergency preparedness and disaster response. <http://www.cityofinglewood.org/> & <http://www.publicaffairs.ucla.edu/>

In the 2011 fiscal year, the LA Conservation Corps announced it had trained 1,170 14-17 year olds through its Clean & Green program and provided 11,830 middle school students with after school programs. The organization also recycled 300 tons of beverage containers; developed 9,415 square feet of new gardens; and abated over two million square feet of graffiti on city streets. <http://www.lacorps.org>

In March 2011, Metro began its Student Field Trip Pilot Program for grades 1-5. The program will allow L.A. Unified students, teachers, and chaperones to travel to a set of 10 field trip destinations for free on Metro trains and bus routes during non-peak hours. <http://www.metro.net/>

In 2011, Alston & Bird joined Fox Group Legal for the second year in hosting a Summer Diversity Fellowship Program. Candidates are eligible if they are currently enrolled as first year students at an accredited law school, with a focus on candidates from Southern California law schools. This program advances the selected candidates' professional development by enabling the formation of collegial and mentoring relationships and allowing the Fellows an early view into work in-house at an entertainment company and as outside counsel at a major law firm. <http://www.alston.com>

In 2011, Los Angeles County's Department of Children and Family Services (DCFS) co-located eight Los Angeles County Office of Education Counselors in the DCFS regional offices to provide direct assistance to the Children's Social Workers on addressing education issues for foster youth. In addition, DCFS, in partnership with school districts including Los Angeles Unified School District, Paramount Unified School District and Green Dot Charter School, and community-based agencies including United Friends of the Children and Children Uniting Nations, are working together to identify DCFS youth who are eligible for school-based after school programs and academic services. Through a coordinated outreach effort, this partnership has increased the number of youth participating in these support services. <http://dcfs.co.la.ca.us/>

In July 2011, DCFS, First Star and UCLA launched the First Star UCLA Bruin Guardian Scholars Summer Academy: a five-week residential summer academy for youth entering the 9th grade. Thirty foster youth

participated in this college enrichment camp at UCLA, which provided each youth with an introduction to the college experience. First Star and UCLA will continue to mentor each of these students throughout high school. <http://dcfs.co.la.ca.us/>

In November 2011, business and community leaders assisted high school students in learning how to network and hone their presentation skills at a Connections to the Future Luncheon event, which was organized and facilitated by senior students in the Career Certification Program at Nogales and Rowland High Schools within the Rowland Unified School District. <http://www.RowlandSchools.org>

In June 2011, the South Bay Workforce Investment Board hosted a Generation STEM Symposium at CSU Dominguez Hills where nearly 900 high school students received one-on-one time with 35 local business leaders (such as Boeing and Northrop Grumman). <http://www.sbwib.org/>

In 2011, West Los Angeles College, in partnership with Northrop-Grumman, trained and placed 45 composite and structures mechanics at Northrop-Grumman and other aerospace industry employers. <http://www.wlac.edu/>

In 2011, Alston & Bird's partnership with After-School All-Stars, Los Angeles resulted in the firm's sponsorship of major events to raise money for the All-Stars and provide needed supplies for youth. <http://www.alston.com>

In 2011, the LA Compact—a collaboration of 18 institutions in L.A., committed to positive change in L.A. schools—received an endorsement by Los Angeles Unified School District Superintendent John Deasy and was joined by a new partner: First5 LA. This makes the Compact a partnership along the entire education pipeline P-20 and spans “cradle to career.” <http://www.lacompact.org/>

In 2011, UNITE-LA launched a new national partnership with the American Chamber of Commerce Executives and the L.A. Chamber. The partnership will cultivate business involvement in education in communities across the country. <http://www.unitela.com>

In 2011, UNITE-LA's partnership with the L.A. Chamber Foundation resulted in a \$1,000,000 grant from the Walmart Foundation to provide subsidized

L.A. COUNTY COLLEGES & UNIVERSITIES RECOGNIZED FOR DIVERSITY

NATIONAL UNIVERSITIES

- California Institute of Technology (Caltech) – 12%
- University of Southern California (USC) – 11%
- University of California, Los Angeles (UCLA) – 6%
- Biola University – 1%

LIBERAL ARTS COLLEGES

- Claremont McKenna College – 7%
- Pomona College – 4%
- Harvey Mudd College – 4%
- Whittier College – 2%

REGIONAL UNIVERSITIES

- Woodbury University – 13%
- CSU Northridge – 6%
- CSU Los Angeles – 5%
- CSU Long Beach – 5%
- California State Polytechnic University, Pomona—4%
- CSU Dominguez Hills – 2%

Source: <http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings>.

youth employment opportunities through the HIRE-LA's Youth campaign. Approximately 478 youth were placed in subsidized employment through this grant. <http://www.unitela.com>

In 2011, the LA Chamber's World Trade Week Education Committee partnered with Los Angeles World Airports to develop a program for high school counselors to learn about career pathways and opportunities in International Trade. Nearly 60 counselors attended the program - speakers included LAWA, local ports, Valley Economic Alliance, and companies that are key players in the trade/logistics arena. <http://www.unitela.com>

In 2011, staff from Pillar—a partnership between the Los Angeles Unified School District and Los Angeles Area Chamber of Commerce-- developed an online Clearinghouse along with the Hospital Association of Southern California to connect the L.A. City Workforce Investment Board with information on students who available for hire and who have completed training programs. The Clearinghouse allows healthcare organizations to identify candidates fit for their hiring needs. <http://www.pillarla.com>

In 2011, LA Youth at Work hosted its first Work Ready Now! event, which served over 160 youth and provided the work readiness certification process on a large scale. <http://www.unitela.com>

In July 2011, Siemens awarded an in-kind grant of 1,200 software licenses to UCLA's Henry Samueli School of Engineering and Applied Sciences, UCLA Division of Physical Sciences, California NanoSystems institute at UCLA, and UCLA's Smart Grid Energy Research Center to increase the number and quality of engineering and product-design graduates as well as to help society address future technological challenges. <http://www.ucla.edu>

In 2011, West Los Angeles College trained 286 Northrop Grumman employees in leadership and communication skills as part of the college's partnership with three Dale Carnegie Training Franchises. <http://www.wlac.edu/>

1.3 Increase student access and engagement by teaching and motivating parents to be meaningfully engaged in their children's educational success; educating parents and students on career opportunities and readiness requirements; and increasing access to scholarships, loans and grants for education.

In October 2011, El Camino College announced its completion of an endowment campaign, totaling \$2.5 million—or enough to fund 122 scholarships at \$1,000 each. <http://www.elcamino.edu/>

In August 2011, Art Center College of Design completed its "80 for 80" scholarship initiative with more than \$3 million raised. The "80 for 80" initiative goal was the equivalent of 80, \$25,000 scholarships; the school was able to raise the equivalent of 124, \$25,000 scholarships by the initiative's completion. <http://www.artcenter.edu>

In December 2011, parents from Don Julian Elementary School in the Bassett Unified School District participated in a graduation ceremony as part of the One Million New Internet Users Initiative, an eight week engagement effort where parents of students were able to learn technology skills to become then showcase them to other parents and serve as models to their children. <http://www.bassett.k12.ca.us/>

In December 2011, Azusa Pacific University received its second consecutive \$7,500 grant from the Hollywood Foreign Press Association. Last year's grant helped fund eight senior capstone film projects. <http://www.apu.edu/>

In June 2011, Los Angeles Unified School District unveiled its \$20 million initiative to upgrade or add parent centers across the district to increase parent involvement. <http://www.lausd.net>

In August 2011, Cal Poly Pomona was awarded a \$230,000 grant for its program called Talent Search, which will help 500 low-income high school students prepare for college. <http://www.csupomona.edu>

In September 2011, U.S. Department of Education awarded \$3.6 million to the Education Talent Search Program at CSU Long Beach. The program specifically targets 18 high schools and six middle schools to promote higher-education enrollment and career possibilities. <http://www.csulb.edu/>

In 2011, the city of Carson partnered with CSU Dominguez Hills to support the university by finding internships for students, hosting international delegations (six Chinese delegations in the last year), and by providing practitioners in a variety of fields. <http://www.ci.carson.ca.us/> & <http://www.csudh.edu/>

In December 2011, thousands of students and their families from the Los Angeles Unified School District attended the 2011 Cash for College Expo at the Los Angeles Convention Center. The event provided information on scholarships and grants and also hosted college representatives and college workshops. <http://www.lacashforcollege.org>

In October 2011, Occidental College, in partnership with the Los Angeles Unified School District, was awarded a seven-year, \$21-million GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) federal grant to increase the number of low-income students enrolling in college. This award will allow Occidental to expand its ongoing college preparation activities to middle and high school students in the Pico-Union and Mid-Wilshire communities of Los Angeles. <http://www.oxy.edu/>

In October 2011, CSU Northridge received a \$5.5 million grant from the U.S. Department of Education to increase the number of underrepresented and low-income students who transfer to the school from a community college and graduate with degrees in engineering or computer science. <http://www.csun.edu/>

In 2011, UNITE-LA served an estimated 20,000 students and families through L.A. Cash for College. Workshop participants leveraged an estimated \$37 million in state and federal financial aid. <http://www.unitela.com>

In March 2011, the Los Angeles Unified School District's Education Foundation received a \$1.05 million donation of computer software from Microsoft to equip more than 500 parent centers, which encourage parents and guardians to be more active in their child's learning. <http://www.lausd.net>

In April 2011, the UCLA Anderson School of Management received a gift of \$25 million from John E. and Marion Anderson. Funds will be used to bolster innovative academic programs, student support, and faculty research. <http://www.ucla.edu>

In 2011, UCLA received \$200 million gift from the Lincy Foundation to create the Dream Fund, a community-based fund dedicated to the support of medical research and academic programs at UCLA as well as off-campus charitable causes addressing societal concerns. Beginning in Fall 2011, a portion will be made into scholarships to entering high-achieving students with demonstrated financial need. <http://www.ucla.edu>

In October 2011, Muriel K. and Robert B. Allen left their estate, valued at \$2.6 million, to UCLA's Henry Samueli School of Engineering and Applied Science. A large portion of the gift will go toward undergraduate engineering scholarships and recruiting and retaining key faculty. <http://www.ucla.edu>



2.1 • Conduct and publish research on workforce shortages, skill gaps and required proficiencies; and evaluate existing education, training and placement programs for continuous improvement.

OBJECTIVE 2

Ensure that businesses have enough workers with the right skill sets to meet their needs.



In January 2011, Los Angeles County's Arts for All program released a new survey, which measures the quality and access for arts education throughout the County of Los Angeles. <http://www.lacountyarts.org/>

In November 2011, the LABC Institute, UCLA Luskin Center, and USC Program for Environment and Regional Equity released a report titled "Empowering LA's Solar Workforce: New Policies That Deliver Investments and Jobs." The report estimated the number of people who are trained for clean energy solar jobs and the potential Los Angeles has for growing this sector if policies were developed to expand the use of solar. <http://www.labcinstitute.org>

In 2011, the LAEDC Economic & Policy Analysis Group released a report titled The Next Decade: Industries and Occupations for the Los Angeles Workforce, which provides an overview of regional industries that are promising to target for job retention and expansion efforts. http://www.laedc.org/reports/consulting/2011_TheNextDecade.pdf

In June 2011, the LAEDC released The Greening of the Los Angeles Economy, which examines the challenges and opportunities faced by "greening" L.A. County's 15 traded and nine local serving industry clusters. The focus on Los Angeles County includes an analysis of the region's overall greening potential to determine those areas where job creation is most promising and where a leadership position by the county business community is immediately visible. <http://www.laedc.org/reports/GreenEconomy.pdf>

2.2 • Fund workforce intermediaries to bring together stakeholders in targeted industry sectors to address existing and projected future workforce gaps by facilitating more opportunities for public-private collaboration between individual businesses, community colleges and universities, and promoting industry-driven curricula and technical education based on employer-recognized certification.

In August 2011, Cerritos College announced a partnership with EHS-International, Inc. to serve the needs of business and industry in the area of environmental, health and safety, OSHA compliance training, manufacturing skills training, and business management training. Courses were designed for incumbent workers. <http://www.cerritos.edu/>

In January 2011, Cerritos College received its second, \$100,000 installment of Edison International's Green Jobs Initiative Grant to provide scholarship support for students pursuing green job programs. The grant is part of Edison International's \$1 million Green Jobs Education Initiative for sustainable/green education and job training at 10 community colleges in California. <http://www.cerritos.edu/>

In February 2011, Los Angeles Trade-Technical College and Pierce College (in partnership with the City of Los Angeles and local dealerships) launched a new auto technology internship program. <http://www.college.lattc.edu/>

In 2011, staff from the City of Carson visited with 279 businesses to learn about challenges companies are facing. A visit with the General Mills Yoplait factory resulted in a relationship with the city and El Camino College to develop a training program for skilled line operators. <http://www.ci.carson.ca.us/>

In October 2011, L.A. Valley College held its "Meet the Pros" event which allows students in the community college district to interact directly with entertainment industry professions. At the event, 48 industry professionals gave their time to over one hundred students. <http://www.lavc.edu/ideas/>

2.3 • Integrate workforce training activities and higher education (from entry to college/university-based to enhanced professional education) to create seamless career pathways leading to high-value jobs in target industries (e.g., aerospace engineers).

In February 2011, Antelope Valley College began offering mediation courses on Saturdays as a way to introduce students to arbitration/mediation careers. <http://www.avc.edu/>

In August 2011, CSU L.A. technology students activated a new photovoltaic system of 77 solar panels on the the campus. The project was funded by the U.S. Department of Energy, Southern California Edison, CSU L.A. Center for Energy and Sustainability, Honda, and the CSU L.A. College of Engineering, Computer Science and Technology. http://www.calstatela.edu/academic/ecst/programs_and_facilities/pet_lab.php

In April 2011, CSU L.A.'s College of Engineering, Computer Science, and Technology was selected to build a zero-emissions vehicle for the U.S. Department of Energy international competition titled EcoCAR 2 Plugging In to the Future. <http://www.calstatela.edu>

In March 2011, CSU L.A.'s Hydrogen and Fuel Cell Education project received first place designation among 13 educational programs funded by the U.S. Department of Education. <http://www.calstatela.edu>

In 2011, the Los Angeles Valley College Continuing Education Program received grant funds through the California Community College, Division of Economic and Workforce Development, to create and implement a program providing career pathways in nursing beginning with entry level healthcare positions. In addition, the program offered short term training activities, clinical work experiences, and job skills training leading to certificates and employment as Registered Nurses and Respiratory Therapists. <http://www.lavc.edu/continuinged/>

In September 2011, the City of Inglewood and UCLA's Luskin School of Public Affairs kicked off a partnership on a community engagement project which will focus on the role of social workers in emergency preparedness and disaster response. The project's 26 students will address budgetary obstacles that cities like Inglewood face and recommendations on how the city's budget can be leveraged to ensure full community preparedness in these areas. <http://www.cityofinglewood.org/>

2.4 • Expand customized, sector-based programs to train larger numbers of people and market them better to job seekers.

In 2011, Antelope Valley College held several math skills workshops for those interested in becoming pharmacy technicians—a program at the school which requires a pre-screening math assessment. The four-hour workshop covered basic math skills and techniques. <http://www.avc.edu/>

In February 2011, Antelope Valley College began offering a course for campus security officers—a course specifically designed to meet state requirements. <http://www.avc.edu/>

In July 2011, the College of the Canyons hosted an information session on the college's new solar and alternative energy courses. The first course to be offered is Introduction to Energy Technology, which will serve as a prerequisite for future degrees and certificate options in the college's solar and energy programs. The college will also offer a solar energy technician certificate program for students. <http://www.canyons.edu/solar>

In June 2011, the College of the Canyons announced two new courses in Environmental Studies and Environmental Science. Both courses were designed to provide students with the background needed to pursue careers in bio-fuel technology, environmental surveying, and solar technology. <http://www.canyons.edu/>

In fall 2011, CSU Long Beach launched two engineering degree programs in Lancaster. This offers students an opportunity to transfer from nearby Antelope Valley schools and take the upper-division engineering courses at the Lancaster center. <http://www.csulb.edu/>

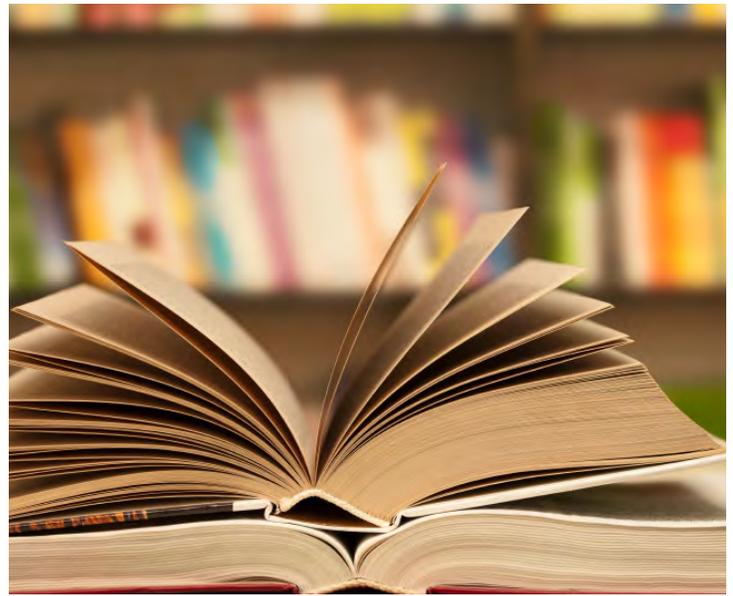
In October 2011, CSU L.A. announced its new courses in Legal Technology as part of its Paralegal Studies Program. Curriculum was recently approved by the American Bar Association. <http://www.calstatela.edu/extension>

In June 2011, CSU L.A. announced a new program in Bioinformatics and Computational Biology. The program will allow students to gain computer skills that will assist in solving complex programs in the biological sciences. <http://www.calstatela.edu>

In 2011, the Los Angeles Valley College Job Training Office, along with partners at the City of Los Angeles, Employment Development Department (EDD), and Community Career Development, Inc. continued its sixth year of providing customized training for Metro Bus Operators. This has resulted in over 600 people (80%) being hired by Metro over this period of time. This satisfied not only the employer's hiring needs, but also resulted in an estimated \$9 million of savings to the organization. <http://www.lavc.edu/jobtraining/>

In January 2011, Santa Monica College launched a new, one-year "Promo Pathway" program along with the South Bay Center for Counseling and PromaxBDA. The program's first year offered full scholarships (including fees, equipment, transportation, child care, and more) to 25 at-risk students. At the end of the program, graduates will earn a promotion writer/producer/editor certificate. <http://www.smc.edu>

In January 2011, Santa Monica College, in collaboration with the California Works Alliance, launched its new recycling and resource management job-training program, which is dubbed "Jobs Through Recycling." The program provides job training in the high-growth, high-demand field of resource management. The program is funded by a \$4.87 million Community-Based Job Training Grant awarded by the U.S. Department of Labor. <http://www.smc.edu>



In January 2011, the University of La Verne hosted a Water Technology Conference around promoting the growth of the water industry in Southern California. The university announced the creation of a water research and technology center to apply its academic and resources in coordination with the Metropolitan Water District of Southern California. <http://www.laverne.edu/>

In the 2011 fiscal year, the LA Conservation Corps announced it had trained 1,170 14-17 year olds through its Clean & Green program and provided 11,830 middle school students with after school programs. The organization also recycled 300 tons of beverage containers; developed 9,415 square feet of new gardens; and abated over two million square feet of graffiti on city streets. <http://www.lacorps.org>

In June 2011, the Wilshire-Metro WorkSource Center offered free training as a process/manufacturing technician. <http://college.lattc.edu/chemtech/files/2011/07/BioTech-Flyer-LATTC-JUNE-2011.pdf>

In September 2011, the LA Conservation Corps—through a grant from Boeing—developed a training program with the American Rainwater Catchment Systems Association to train youth in water conservation strategies. The program included hands-on training such as a recently installed rain catchment system in the City of Long Beach. <http://www.lacorps.org>

In August 2011, the Pacific Gateway Workforce Investment Network offered free Construction Skills Training classes. The training program spanned 11 weeks and provided hands-on training coupled with job placement assistance for graduates. <http://www.pacificgatewayworkforce.com>

In 2011, the Gardena One-Stop worked with HITCO to address their deficiency in employing entry level laminators by tutoring youth, providing soft skills training, and developing a curriculum to meet HITCO's needs. <http://www.gardenacondev.com>

In 2011, West Los Angeles College launched a medical assistant training program with the Los Angeles County Department of Health and the Worker Education & Resource Center, which combines classroom and on-the-job learning to enable 25 incumbent workers to retrain for medical assistant professions. <http://www.wlac.edu/>

In 2011, West Los Angeles College, in partnership with MCS Hollywood WorkSource Center and EmpowerNet of California, trained 49 low-income individuals as computer technicians through the college's Computer Technology Industry Association A+ Certification program. <http://www.wlac.edu/>

In 2011, West Los Angeles College and Los Angeles City College entered into a partnership for a five-year, \$3.75 million project funded by the US Department of Education to grow the college's online program and develop new degree programs in animation, alternative energy, and digital media. <http://www.wlac.edu/> & <http://www.lacitycollege.edu/>

In 2011, West Los Angeles College and CSU Dominguez Hills entered into a partnership for a five-year, \$3.75 million project funded by the US Department of Education to increase the number of students who transfer from West Los Angeles College to CSU Dominguez Hills in business, computer science, criminal justice, and digital media. <http://www.wlac.edu/> & <http://www.csudh.edu/>

In May 2011, the Ostin Family Foundation donated \$10 million to UCLA for a state-of-the-art campus music facility. The facility will be known as the Evelyn and Mo Ostin Music Center and include facilities such as a high-tech recording studio, spaces for rehearsal and teaching, and an Internet-based music production center. <http://www.ucla.edu>

2.5 • Retain and attract highly-skilled workers and develop the next generation of managerial talent.

In September 2011, the University of Antelope Valley launched its Smart Hire Program to incentivize businesses to hire recent graduates. The program provides up to \$2,000 in reimbursement costs for a UAV graduate's first month's salary. <http://www.uav.edu/>

In 2011, L.A. Valley College's Institute for Developing Entertainment Arts & Studies (IDEAS) trained both incumbent workers and incoming workers through workshops in areas like software and training for camera operators. The school also expanded its relationship with Interactive Internet Mobile Applications for Business (IIMA4BIZ) which has resulted in the school's first web-oriented workshop featuring four small businesses receiving hands-on training in utilizing mobile and social media. <http://www.lavc.edu/ideas/>

In October 2011, Idelab, the Pasadena-based technology incubator, hosted a job fair for those interested in working for some of L.A.'s startups at the incubator's offices. http://www.idealab.com/about_idealab/careers_search.html

In February 2011, the South Bay Workforce Investment Board received a nearly \$1 million grant from the state Employment Development Department to help at least 181 unemployed aerospace/aviation workers upgrade their skills to move into new careers in growing industries such as health care and information technology. <http://www.sbwib.org/>

2.6 • Co-locate public services such as WorkSource/OneSource centers on college campuses.

In July 2011, the Santa Monica College Small Business Development Center won an excellence and innovation award from the U.S. Small Business Administration and was cited for improving performance, increasing efficiency and for being the only green business advisor in the Los Angeles area SBDC network. <http://www.smc.edu/sbdc>. WorkSource Centers on campus/associated with a college:

- Antelope Valley College
- LA City College – Hollywood North WorkSource Center
- College of the Canyons – Santa Clarita WorkSource Center
- LA Mission College – Northeast SFV WorkSource Center
- El Camino College, Compton Center

OneSource Centers:

- UCLA (centers off-campus, in West LA and by downtown)
- Los Angeles Harbor College

OBJECTIVE 3

Prepare job seekers and incumbent workers to enter sectors with high-value jobs - as measured by wages, benefits and additional income attracted into the County - and built-in career ladders.



In August 2011, Pepperdine University's School of Public Policy became an educational partner with the L.A.-based Millennium Momentum Foundation, Inc. (MMF) to act as an academic resource for its state-of-the-art Leadership Development Institute. The program provides practical leadership development and employment skills training, mentoring, and professional development support services for students pursuing higher education and careers in public policy. <http://www.pepperdine.edu/pr/releases/2011/august/spp-partners-with-millennium-momentum-foundation.htm>

In February 2011, Chrysalis—a nonprofit organization dedicated to ensuring self-sufficiency for low-income and homeless individuals—was chosen as a sub-grantee of the Social Innovation Fund, enabling the organization to expand its current transitional jobs program. <http://www.changelives.org>

In November 2011, the South Valley WorkSource Center hosted a “Not Forgotten” Resource fair to open doors to employment for formerly incarcerated job seekers. The fair provided a variety of resources (e.g., career counseling and interview assistance) to prepare job seekers for the transition. <http://www.cityofpalmdale.org/business/svwc>.

In March 2011, the South Bay Workforce Investment Board received a \$500,000 grant from the Employment Development Department and the California Governor's Office of Gang and Youth Violence Policy to expand education, job training, and placement programs for 900 at-risk youth as part of the California Gang Reduction Intervention and Prevention Initiative (CalGRIP). <http://www.sbwib.org/>

In 2011, West Los Angeles College upgraded its aviation lab equipment with a \$600,000 grant from the U.S. Department of Education. <http://www.wlac.edu/>

3.1 • Create programs that expand the workforce by reconnecting high school dropouts to educational and training opportunities.

In December 2011, USC's Hybrid High, which is affiliated with the USC Rossier School of Education, was granted a five-year charter by the Los Angeles Unified School District. When the school opens in Fall 2012, it will serve students who are seen as at risk of dropping out due to job responsibilities or to care for family members.



In March 2011, the City of Los Angeles Community Development Department kicked off a citywide “Back on Track” initiative to improve high school dropout recovery through collaborations with the community, local government agencies, and public and private educational agencies. <http://www.backontrack.us/>

In September 2011, Magic Johnson and EdisonLearning entered into a partnership to improve high school dropout rates of African-American and Latino students in Los Angeles County by opening Bridgescape Learning Centers in urban communities throughout the county. The first learning center is expected to open in 2012. <http://www.magicedisonassist.com/dropoutrecovery>

3.2 • Develop, expand and upgrade the skills of the existing workforce.

In November 2011, El Camino College held its grand opening for its new Veteran’s Center. The Veteran’s Center offers access to computers, computer assistance, workshops, referrals, and study areas. <http://www.elcamino.edu/>

In August 2011, El Camino College launched its new Career Advancement Academy, which is funded by a \$662,700 grant from the California Community Colleges Chancellor’s Office. The academy offers workshops on resume writing, interviewing, job retention, interpersonal skills, etc. <http://www.elcamino.edu/academics/indtech/career-advancement-academy/index.asp>

In 2011, the City of Duarte and Duarte Chamber of Commerce partnered with Best Jobs Magazine to

host “Get Back to Work,” an event designed to help professionals connect with employers. In addition to meeting with employers, job seekers were able to network with employment resources such as Goodwill Industries and the Workforce Investment Board, meet with job search assistants, apply for jobs by proxy, and attend a workshop to sharpen their job searching skills and focus. <http://www.accessduarte.com/>

In 2011, the Los Angeles College Job Training Office worked extensively with Baxter Pharmaceuticals to provide leadership training in biomedical to increase the “soft skills” of their existing workforce in Los Angeles and Ventura Counties. To-date, the college has trained 1,500 Baxter employees in these areas. <http://www.lavc.edu/jobtraining/>

In 2011, Pepperdine University’s Graduate School of Education and Psychology implemented Summer Institutes designed for preK-12 teachers and administrators interested in integrating cutting-edge research, technology, and approaches that are best management practices from internationally renowned educators. <http://www.colleague.pepperdine.edu/2011/10/second-annual-summer-institutes-empowered-teachers/>

In 2011, Pepperdine University’s Graziadio School reignited its executive education and certificate programs. Offerings included: Certificate in Private Capital Markets; Certified Merger & Acquisition Advisor Credentialing Program; Online Executive Certificate in Financial Planning, designed to fulfill the education requirement for the CFP Certification. <http://www.bschool.pepperdine.edu/programs/executive-education/>

In 2011, L.A. Valley College’s Institute for Developing Entertainment Arts & Studies (IDEAS) trained both incumbent workers and incoming workers through workshops in areas such as software and training camera operations. The school also expanded its relationship with Interactive Internet Mobile Applications for Business (IIMA4BIZ) which has resulted in the school’s first web-oriented workshop featuring four small businesses receiving hands-on training in utilizing mobile and social media. <http://www.lavc.edu/ideas/>

In September 2011, CSU Northridge received a \$2 million, five-year grant from the U.S. Department of Education to help students with an Asian-language background become bilingual teachers. <http://www.csun.edu/>

L.A. COUNTY UNIVERSITIES

NATIONALLY & INTERNATIONALLY RANKED

NEWSWEEK COLLEGE RANKINGS 2011

Future CEO's

#13 - University of Southern California (USC)

Most Artistic

#1 - California Institute of the Arts
#8 - University of Southern California (USC)
#11 - Occidental College

Best Return on Investment

#9 - Harvey Mudd College
#10 - California Institute of Technology (Caltech)

Best Weather Schools

#7 - University of Southern California (USC)
#11 - Biola University
#12 - Harvey Mudd College
#13 - Pepperdine University
#15 - California Institute of Technology (Caltech)
#16 - Whittier College

Source: *Newsweek.com*. "College Rankings 2011."
Newsweek. Available from <http://www.thedailybeast.com/newsweek/features/college-rankings/2011.html>

U.S. NEWS & WORLD REPORT RANKINGS 2011

National University Rankings

#5 - California Institute of Technology (Caltech)
#23 - University of Southern California (USC)
#25 - University of California, Los Angeles (UCLA)
#55 - Pepperdine University
#152 - University of La Verne
#170 - Azusa Pacific University
#170 - Biola University

National Liberal Arts College Rankings

#4 - Pomona College
#9 - Claremont McKenna College
#18 - Harvey Mudd College
#29 - Scripps College
#37 - Occidental College
#42 - Pitzer College
#133 - Whittier College

Regional University Rankings

#4 - Loyola Marymount University
#26 - CSU Long Beach
#28 - Mount St. Mary's College
#33 - California State Polytechnic University, Pomona
#63 - Woodbury University

Up and Coming Schools

#8 - University of Southern California (USC)
#16 - Azusa Pacific University
#16 - Biola University

Top Public Schools

National Universities
#2 - University of California, Los Angeles (UCLA)
Regional Universities
#4 - CSU Long Beach
#6 - California State Polytechnic University, Pomona
#32 - CSU Northridge

Best Value Schools

National Universities
#8 - California Institute of Technology (Caltech)
#21 - Pepperdine University
Liberal Arts Colleges
#3 - Pomona College
#36 - Claremont McKenna University
#37 - Scripps College

World's Best Universities - Top 100

#12 - California Institute of Technology (Caltech)
#34 - University of California, Los Angeles (UCLA)

Source: *U.S. News & World Report*. "College Rankings."
U.S. News & World Report. Available from <http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings>.

In February 2011, the South Bay Workforce Investment Board received a nearly \$1 million grant from the state Employment Development Department to help at least 181 unemployed aerospace/aviation workers upgrade their skills to move into new careers in growing industries such as health care and information technology. <http://www.sbwib.org/>

In June 2011, UCLA Extension and Encore Career Institute partnered to create a new, comprehensive online education company that will offer professional certificates and career counseling. The aim of the company is to assist baby boomers transitioning into new careers or seeking to remain competitive in today's competitive job market. <http://www.ucla.edu>

In 2011, West Los Angeles College trained 286 Northrop Grumman employees in leadership and communication skills as part of the college's partnership with three Dale Carnegie Training Franchises. <http://www.wlac.edu/>

3.3 • Begin career awareness programs in middle school. Offer student internships, job shadowing, apprenticeships, concurrent enrollment programs, soft skills training, improved career counseling, youth employment and more parent education on careers to provide students with career awareness and work experience.

In August 2011, Antelope Valley College hosted a half-day event titled "I'm Going to College" for 4th and 5th graders and their parents. The event held a series of workshops covering topics like paying for college, subject areas to study, preparing for college and more. <http://www.avc.edu/>

In August 2011, Cerritos College's Pathway Program hosted middle and high school students in summer workshops to introduce them to careers in STEM fields. <http://www.cerritos.edu/>

In June 2011, Cerritos College hosted 48 middle school students from the Norwalk-L.A. Mirada Unified School District in a Summer Math/Science Academy. <http://www.cerritos.edu/>

In August 2011, CSU L.A. hosted the 2011 IMPACT L.A. Summer Camp with more than 80 6th-8th grade students from throughout Los Angeles. The two-day camp is designed to generate interest in engineering, science, technology, and math fields through innovative design challenges, activities, and games. <http://impactla.calstatela.edu>

In August 2011, El Camino College Compton Center opened a Saturday class to area high school students to explore science, math, and engineering through the college's Basic Robotics class. Students who pass the class will receive both high school credit and college credit. <http://www.compton.edu/>

In December 2011, approximately 70 students participated in the first AT&T/Junior Achievement Job Shadow Day held at the AT&T headquarters in Cerritos. Students had the opportunity to learn about different careers at AT&T and the skills that are needed to excel in those careers. <http://www.att.com/>

In October 2011, over 120 participants attended the third annual Step Up Women's Network College Connections Conference on Pepperdine University's Malibu campus. The day was filled with college access programming and mentorship between professional women mentors and high school girls from underserved, under-resourced communities in Los Angeles. <http://www.pepperdine.edu/pr/releases/2011/october/step-up-conference.htm>

In December 2011, Scripps College, Mills College, and Mount St. Mary's College joined several other colleges throughout the country in "The Women in Public Service Project," which is an initiative that identifies and educates a new generation of women committed to public service. <http://www.womeninpublicservice.org/>

In 2011, the city of Carson partnered with CSU Dominguez Hills to find internships for students, hosting international delegations (six Chinese delegations in the last year), and by providing practitioners in a variety of fields. <http://www.ci.carson.ca.us/>

In March 2011, the University of La Verne's "Got College?" event provided a tour to six middle schools to offer 7th and 8th graders a firsthand view of the college experience. <http://www.laverne.edu/>

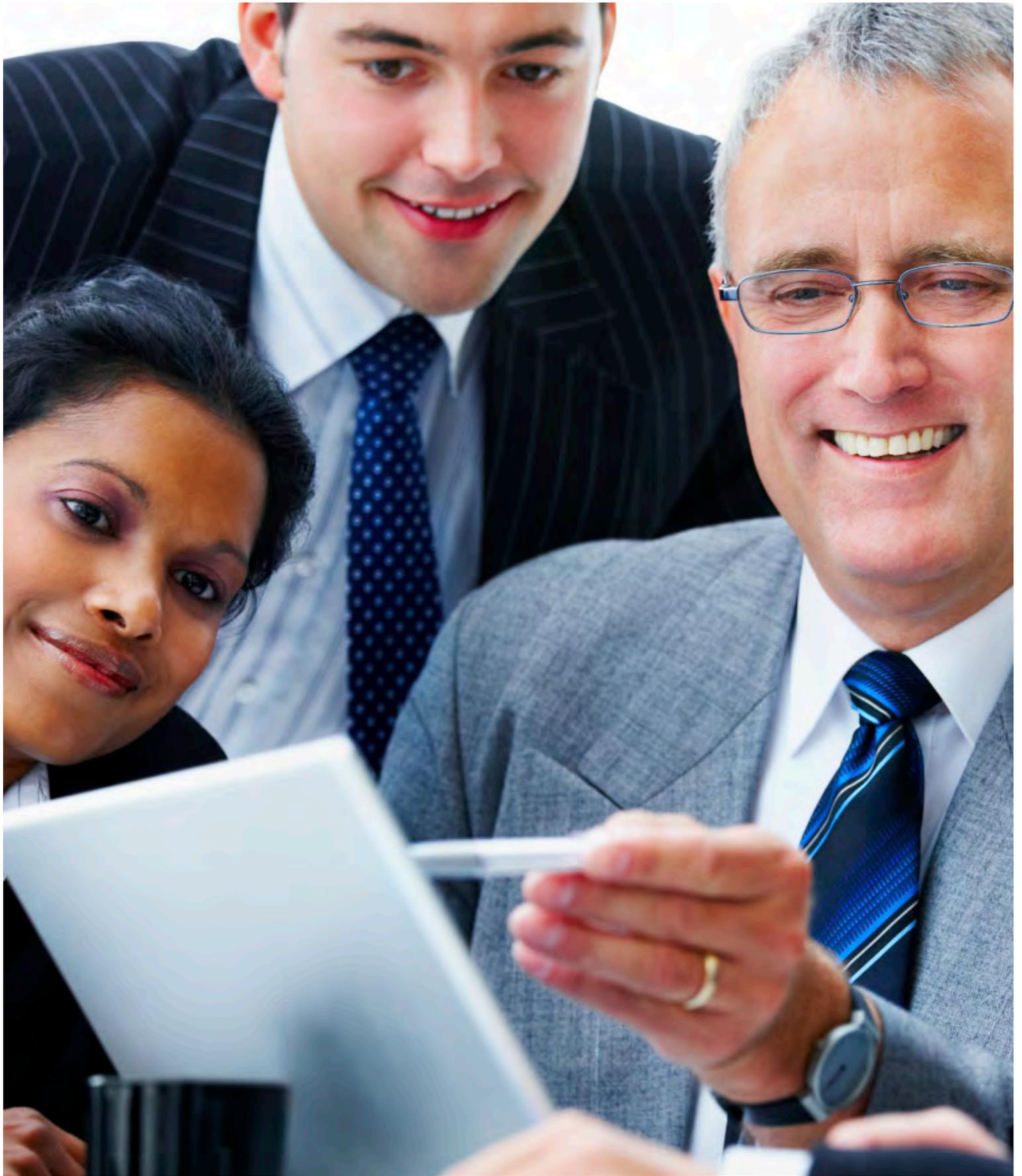
In November 2011, MBA students from USC's Marshall School of Business joined 46 classrooms of K-5 children at Charles Barrett Elementary School in South Los Angeles to teach them financial literacy in an event called Junior Achievement in a Day. <http://www.marshall.usc.edu/>

In August 2011, International Trade Education Programs (ITEP) and the Port of Los Angeles celebrated the completion of their 2011 Summer Internship Program. The internship program offered 54 high school students a paid opportunity over the summer to learn

more about the maritime industry. <http://itepinc.org/>
In May 2011, the International Trade Education Programs (ITEP) Gardena Global Leadership Academy partnered with Los Angeles World Airports (LAWA) to offer students a day of job shadowing with 15 LAWA employees from varying sectors, including: information technology, public relations, environmental services, and financial reporting. <http://www.glacharter.org/>

In 2011, Alston & Bird joined Fox Group Legal for the second year in hosting a Summer Diversity Fellowship Program. Candidates are eligible if they are currently enrolled as first year students at an accredited law school, with a focus on candidates from Southern California law schools. This program advances the selected candidates' professional development by enabling the formation of collegial and mentoring relationships and allowing the Fellows an early view into work in-house at an entertainment company and as outside counsel at a major law firm. <http://www.alston.com>

In 2011, staff from Pillar—a partnership between the Los Angeles Unified School District and Los Angeles Area Chamber of Commerce-- developed an online Clearinghouse along with the Hospital Association of Southern California to connect the L.A. City Workforce Investment Board with information on students who available for hire and who have completed training programs. The Clearinghouse allows healthcare organizations to identify candidates fit for their hiring needs. <http://www.pillarla.com>



**GOAL 2:
CREATE A BUSINESS-FRIENDLY ENVIRONMENT**

Implementation Champion:



Strengthening the Voice of Business

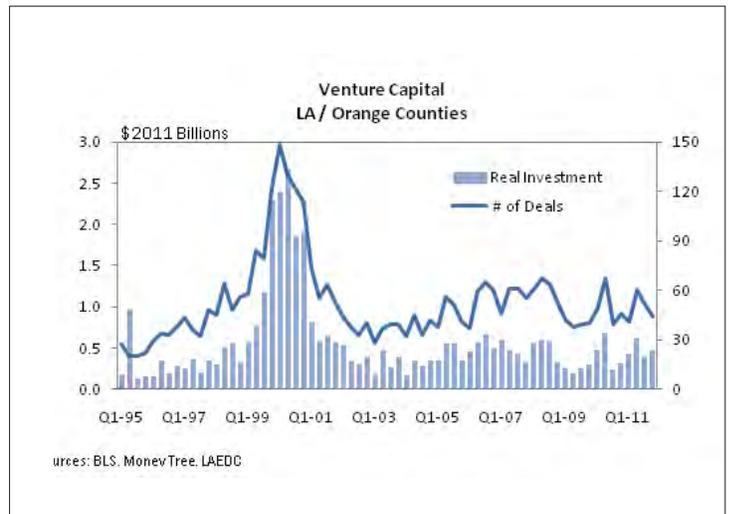
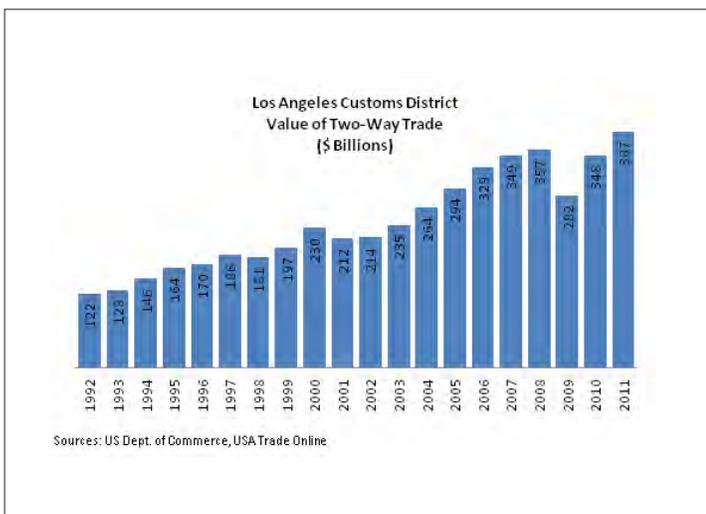
Los Angeles County is home to one of the world’s largest (\$544 billion) and most diverse economies in the world with nearly 10 million people and nearly four million employees. We also remain the nation’s #1 manufacturing, international trade, and entertainment capital with 14 well-established traded industry clusters and five locally serving industry clusters.

Despite our significant strengths and built-in assets, we cannot continue with “business as usual” in today’s globally competitive environment. While we need to continue attracting businesses in existing and emerging sectors, we also cannot lose track of the needs of current businesses—who are sometimes lured by other states; who often struggle to gain adequate access to capital; and who continue to put up with duplicative, contradictory, inconsistent, costly, and/or excessively onerous regulations that prevent them from staying or expanding here.

It is imperative that we continue to undo the perception that California and Los Angeles County are unwelcoming places for businesses. Over the past year, California and L.A. County have instituted several programs and policies to reverse this “business unfriendly” reputation and to become—and be known as—a customer friendly place for those businesses interested in staying, expanding, and coming here. For example, we saw a slew of regulatory reform efforts, including expedited permitting, simplified processes, and the requirement of conducting standardized economic impact analyses for significant regulations. We witnessed proactive efforts to help businesses through the creation of online databases of industrial and commercial property, one-on-one site visits with key staff from cities and the county, and the facilitation of partnerships to ensure education and training needs are met. Finally, we saw a variety of cities develop strategic plans for economic development to align with the L.A. County Strategic Plan for Economic Development and ensure they were becoming much more strategic in their efforts and business-oriented overall.

Over the past two-year implementation of the L.A. County Strategic Plan for Economic Development, we have witnessed a number of initiatives to ensure a more business friendly environment here in California, L.A. County, and in many of the County’s 88 cities. However, more work needs to be done.

The successes on the following pages reflect the commitment of our region’s public, private, and non-profit entities to Create a Business Friendly Environment through the facilitation of private sector job creation, proactive efforts to attract and retain businesses, and efforts to grow and commercialize the products conceived through our research and development efforts.



OBJECTIVE 1

Establish and promote a business-friendly environment to create and retain good quality jobs.



In September 2011, College of the Canyons hosted a Young Entrepreneurship program offered at the Small Business Development Center which targeted young people ages 14 to 27. The program offers business consulting and training programs to encourage young people to pursue careers in small business ownership and self-employment. <http://www.cocsbdc.org>

In July 2011, the Small Business Development Center (hosted by College of the Canyons) partnered with Citi Community Development to offer a series of free seminars to help entrepreneurs launch and grow small businesses. <http://www.canyons.edu/>

In May 2011, the Small Business Development Center at College of the Canyons held a Dream and Discover Conference, which provided tips for business owners and entrepreneurs as well as an overview of all of the SBDC's services and programs. <http://www.cocsbdc.org>

In March 2011, CSU Dominguez Hills hosted the 2011 Connecting Women to Power Business Conference. The conference offered seminars, workshops and discussions with leading business women on issues of importance to current and future business owners. <http://www.csudh.edu>

In May 2011, the City of Los Angeles began posting all new contracting opportunities with the city on the Los Angeles Business Assistance Virtual Network. In August 2011, vendors also were able to upload documents required for bidding on contracts rather than submitting hard copies. <http://www.labavn.org>

In July 2011, the U.S. Department of Transportation, the Surety and Fidelity Association of America, and the Los Angeles Mayor's Office partnered to conduct a Bonding Education Program where small businesses learn how to compete for transportation contracts by learning how to obtain bonding capacity. <http://www.dot.gov/>

1.1 • Educate local and statewide stakeholders on the value of private sector businesses as generators of jobs, tax revenue and regional prosperity, and encourage government officials to evaluate the economic impact of regulations and policies that affect overall competitiveness and to play a more active role in courting private sector employers.

In October 2011, the Los Angeles Regional Export Council was launched to coordinate and streamline export-related services to ensure L.A. businesses gear up their international exports. This public-private partnership consists of the following entities: The Los Angeles Mayor's Office, the Los Angeles Area Chamber of Commerce, the Centers for International Trade Development, the USC Center for International Business Education and Research, the UCLA Center for International Business Education and Research, the Port of Los Angeles, and Los Angeles World Airports. <http://www.mayor.lacity.org>

In September 2011, Film Works L.A. began the second phase of its public education and marketing campaign with a public service announcement that highlights the economic impact of a single day of local film production. <http://www.filmworksla.com>

In October 2011, Governor Brown signed into law SB 617 (Calderon/Pavley), which is a vehicle to analyze, rationalize, and more thoughtfully promulgate regulations and enhance regulatory processes moving forward. The LAEDC has been a vocal and active supporter of these regulatory improvements and has been instrumental in organizing statewide support of regulatory reform efforts to address unnecessary duplication, undue burden, and unwarranted contradiction without undermining important environmental objectives, worker protections, and other important safeguards. <http://www.gov.ca.gov>

In July 2011, the City of Los Angeles approved a panel of 13 research firms and organizations to provide the city with research to guide job creation and economic development initiatives. Then Council President Eric Garcetti offered to fund the panel through his office during its inaugural year. <http://www.lacity.org>

In 2011, the City of Burbank received a federally funded grant provided by the Workforce Investment Board to conduct Labor Market Research Analysis geared toward the entertainment, healthcare, green technology and retail sectors. Results of the Labor Market Research Analysis were utilized to create additional Team Business curriculum. Team Business is a collaborative program among the City of Burbank, Woodbury University, Burbank Chamber of Commerce, and local economic development organizations to provide free networking, education, and one-on-one professional consulting services. <http://www.ci.burbank.ca.us/>

In 2011, the City of Burbank added 20 new businesses to its Shop Burbank Program, which encourages the city's 104,000 residents and 100,000 employees to

spend their dollars in Burbank to help preserve city services and to support Burbank-based businesses. <http://www.shopburbank.org/>

1.2 • Create a sample template and encourage cities to include an economic development element in their general plans; then, encourage L.A. County and our 88 cities to update their economic development elements regularly.

In 2011, the City of Pasadena released its Draft Economic Development Strategic Plan, which includes nine major goals that will drive economic development within the city. <http://www.cityofpasadena.net/>

In July 2011, the City of Duarte adopted an Economic Development Strategy for the city, which was LAEDC helped prepare. The strategy provides an overview of the city's demographic conditions and sets out objectives and tasks under five major goals to bolster Duarte's economic future. <http://www.accessduarte.com>

In October 2011, the Irwindale City Council adopted the city's Economic Strategic Plan for fiscal years 2012-2016. The Strategic Plan is the result of a 10-month effort and analyzes market trends, assesses financial capacity, identifies development opportunities, and includes a business action plan that carves a path for economic growth and business expansion in Irwindale. <http://www.ci.irwindale.ca.us>

In September 2011, the City of El Segundo adopted its 2012 Economic Development Strategy, which contains six major components, including: committed city leadership; business climate; permitting and licensing assistance and process improvements; business retention; new business attraction; and strategic planning. http://www.elsegundo.org/depts/planningsafety/economic_development/default.asp

1.3 • Facilitate private sector job creation by helping the state of California, L.A. County, and our 88 cities develop for their business-facing activities more efficient processes, more affordable pricing and a stronger customer service ethic.

In August 2011, the City of Los Angeles welcomed Farmers Insurance to their new Woodland Hills facility—a project housing over 1,200 employees that benefitted from the city's 2011 development reforms, including expedited permitting. The Mayor recently initiated a Development Services Cabinet to manage and implement the city's development reform efforts.



The City also has a new Case Management Office with staff from five separate permitting agencies within the City of Los Angeles to ensure an easier process for businesses looking to operate within the city's boundaries. <http://www.mayor.lacity.org>

In October 2011, the City of Los Angeles unveiled LocateLA, a commercial and industrial property search and analysis site that provides information on real estate property listings, key demographics, business information, incentives, and interactive maps. <http://www.locatela.org/>

In 2011, the City of Lancaster launched "Business-Friendly Lancaster," a key component of its strategic plan for economic development. This multi-pronged initiative encompasses streamlining development, a new fast-tracking program, customer service training, and a one-stop merchants' window to ensure that businesses driving economic growth receive speedy, first-rate service. <http://www.cityoflancasterca.org>

In 2011, the City of Carson's Business Development Department launched carsonsites.com, which connects people looking for commercial properties with available sites. The site also gives consumer spending, demographics and business data. <http://www.carsonsites.com/>

In March 2011, the City of Cerritos launched a web-based mapping tool called "Cerritos GIS." The tool was developed by the City's GIS (Geographic Information System) staff and offers 24-hour access to the City's land use and property information. <http://www.cerritosgis.com/>

In October 2011, Governor Brown signed into law AB 29 (Perez), which became the vehicle for making the Governor's Office of Economic Development (now named the Governor's Office of Business and Economic Development, or Go-BIZ) permanent. Throughout late-2010 and early-2011, the LAEDC helped organize, coordinate, and mobilize a coalition of 27 regional leadership organizations up and down the state in vocal support of the Office's codification. <http://www.business.ca.gov/>

In November 2011, the City of Carson produced a new brochure titled "Things every business should know," which provides a quick reference guide to new and existing businesses. <http://www.ci.carson.ca.us/>

In October 2011, the City of Covina unveiled "Xit" polls--a new portable, electronic tool designed to allow for customer feedback on a variety of programs and services. The tool was specifically used at Thunderfest to see how many people are return attendees, how many live in the city, how many shop in downtown Covina, and how people liked the event. The city purchased five devices and they are being programmed to serve other city needs and improve customer experience when interfacing with the city. <http://www.covinaca.gov/>

In July 2011, the City of Monrovia launched its Online Business Resource Center, which is designed to guide existing and future business owners through the entitlement process. The website has sections explaining why you should move a business to Monrovia as well as incentives and policies of the city. <http://www.ci.monrovia.ca.us/red-home>

In April 2011, the City of Monrovia adopted its Economic Development Action Plan to identify specific strategies for business attraction and retention and to improve coordination, communication, and collaboration among city staff and departments. <http://www.ci.monrovia.ca.us/economic%20development%20action%20plan.pdf>

In August 2011, the City of Palmdale held its "Doing Business with the City of Palmdale" workshop to discuss how businesses can register as prospective vendors with the city through its Vendor Self-Service online registration program. <http://www.cityofpalmdale.org>

In February 2011, the City of Santa Monica launched its Government on the Go app for Android™. The smart phone app allows users to tell the city about potholes, maintenance, graffiti, and more. <http://www.smgov.net/>

In August 2011, the County of Los Angeles Treasurer and Tax Collector enhanced its website to process business license applications online. The online system also allows the applicant to determine the status of his/her application. <http://www.ttc.lacounty.gov/>

1.4 • Adopt clear, reasonable and predictable processes for the development of land to facilitate job creation and implement policies, plans and procedures to streamline review and approval processes.

In November 2011, the City of Santa Clarita unanimously approved a Movie Ranch Overlay Zone to simplify rules and permitting for productions on movie ranches. Through this, the city also allowed property owners to host shoots and build facilities (e.g., soundstages) without the need to obtain permission from the city. <http://www.santa-clarita.com/>

In October 2011, SB 618 (Wolk) was signed into law by Governor Brown, which will enable developers to locate large-scale solar projects on certain agricultural lands that have limited agricultural value (subject to approval). SB 618 authorizes cities or counties and landowners to rescind Williamson Act contracts and enter into a solar-use easement. <http://www.gov.ca.gov>

In July 2011, the City of Los Angeles unveiled the Development Reform Strategic Plan, which is the result of a six-month effort to streamline the development process and improve overall customer service. http://www.losangelesworks.org/resources/uploads/Dev_Reform_Strategic_Plan_Vol_1.pdf

In July 2011, the City of Los Angeles opened its new Development Services Case Management Office. Co-located at the office are expert staff from five key departments that oversee development—Planning, Building and Safety, Bureau of Engineering, Department of Water and Power, and Transportation. Each project going through the office is assigned a case manager who provides support from “conception to completion” of the project. <http://www.lacity.org>

In 2011, the City of Lancaster launched “Business-Friendly Lancaster,” a key component of its strategic plan for economic development. This multi-pronged initiative encompasses streamlining development, a new fast-tracking program, customer service training, and a one-stop merchants’ window to ensure that businesses driving economic growth receive speedy, first-rate service. <http://www.cityoflanasterca.org>



In 2011, the City of Santa Clarita saw 1,000,000 square feet of office and industrial transactions assisted by the city’s one-stop permit center, on-line plan submittal, and no business license requirement. <http://www.santa-clarita.com/>

In 2011, the Los Angeles County Department of Public Works and Department of Regional Planning launched a pilot program to assist in addressing the Land Development Coordinating Committee (LDCC), Land Divisions, Zoning Permit and Advance planning issues with customers. The program allows for improved communication between the two departments by having the Department of Public Works report on a weekly basis to the Department of Regional Planning. <http://www.lacounty.gov>

In 2011, the City of Gardena adopted a resolution that modified the number of required parking spaces on the square footage of retail and commercial sites to promote the expansion of existing business and to attract new business within the city. <http://www.gardenacondev.com>

OBJECTIVE 2

Retain and expand the existing job base while proactively attracting new businesses, industries, jobs and investment.



In January 2011, the Port of Los Angeles approved a Very Small Business Enterprise component as part of the port's overall Small Business Enterprise Program. Under the program, at least 5% of professional service and construction contracts from the port will be awarded to businesses that average less than \$3.5 million in gross revenue or are a manufacturing company with fewer than 25 employees. <http://www.portoflosangeles.org/business/sbp.asp>

In March 2011, the Pacific Coast Regional Small Business Development Center opened its Pasadena/San Gabriel Valley Office, which is hosted by the Foothill Workforce Investment Board. <http://www.pccorp.org/>

In November 2011, the South Bay Workforce Investment Board opened its new South Bay One-Stop Business & Career Center in Redondo Beach. <http://www.southbay1stop.org>

2.1 • Develop and promote a compelling, consistent value proposition and brand for L.A. County, incorporating existing and aspirational strengths (e.g., size, diversity, creativity, climate, culture and commitment to green).

In October 2011, the City of Los Angeles launched the L.A. Commercial Build Performance Partnership—a program in collaboration with the Clinton Climate Initiative and the Cities Climate Leadership Group (C40)—which will help commercial property owners improve energy and water efficiencies. Through the program, building owners are able to secure free energy assessments and competitive financing to cover up to 100% of the costs associated with energy upgrades. <http://www.LACommercialBPP.com>

In September 2011, Port Tech Los Angeles held its PortTechExpo 2011, which showcases new “clean and green” technology to meet the needs of port customers. <http://www.porttechla.org/>

In August 2011, the 6th Annual Alt Car Expo brought together more than 35 retailers—allowing attendees to ride, drive, and purchase alternative transportation vehicles. In 2010, the event—deemed best of its kind—attracted more than 12,000 attendees. <http://www.altcarexpo.com>

In 2011, the City of Artesia purchased its second hybrid vehicle and is looking to replace the city's entire fleet of vehicles with “green” cars. <http://www.cityofartesia.us/>

In 2011, the City of Santa Clarita Film Office issued more permits and saw more film days in the city than any other year since the office's inception in 2002. The Film Office recorded 901 film days and 359 film permits in calendar year 2011. <http://www.filmsantaclarita.com/>

In June 2011, Otis College of Art and Design received a \$75,000 grant from the National Endowment for the Arts to support digital initiatives and events that could increase awareness and support for the creative economy. Since 2007, Otis has commissioned an annual report from the LAEDC that focuses on the arts, design, and entertainment industries as a creative force in Southern California. In 2010, the creative economy in L.A. County supported 572,000 jobs, \$115 billion in sales, and \$2.8 billion in state and local tax revenue. <http://www.laedc.org/reports/2011OtisReport.pdf> & <http://www.otis.edu/>

In April 2011, the City of Santa Monica, the Santa Monica Chamber of Commerce, and Sustainable Works held its 16th Annual Sustainable Quality Awards, which recognizes organizations and businesses within the city for promoting sustainability in their business activities. <http://www.sustainableworks.org> & <http://www.smsqa.com>

In January 2011, the City of Pasadena unveiled a new marketing concept for Northwest Pasadena to promote the area's unique characteristics. <http://www.ci.pasadena.ca.us/>

In 2011, the City of Burbank entered into a partnership with the hotel industry to form a Tourism Business Improvement District formally known as The Burbank Hospitality Association. The BHA and the City of Burbank work collaboratively to leverage public/private partnerships and help synergize the tourism industry in Burbank. <http://www.ci.burbank.ca.us/>

In 2011, the LAEDC Kyser Center for Economic Research released a report titled Manufacturing: Still a Force in Southern California, which found that 389,300 manufacturing workers were employed in Los Angeles County in 2009, which still places L.A. County as the #1 manufacturing center in the country. http://www.laedc.org/reports/Manufacturing_2011.pdf

In June 2011, the UCLA Luskin Center released a report titled Clean Technology Company Case Studies in the Los Angeles Region, which features examples of Los Angeles-based clean technology firms and how policies and incentives have helped to drive the industry. <http://www.luskin.ucla.edu/>

In May 2011, the UCLA Luskin Center for Innovation released a report titled Realizing the Potential of the Los Angeles Electric Vehicle Market, which forecasts that the City of Los Angeles will be a leader in the U.S. market for electric vehicles. The research predicts that in 2015, electric vehicles will comprise 9% of new vehicle purchases by Los Angeles residents. <http://www.luskin.ucla.edu/ev>

In September 2011, the San Gabriel Valley Economic Partnership's Marketing Committee released "Funny San Gabriel Valley Music Video Getting Nerdy," which is the first of a series of videos on YouTube to promote the area's higher education institutions and research facilities. <http://www.valleyconnect.com>

In November 2011, at the annual Eddy Awards®, the LAEDC recognized the cities of West Covina and Monrovia as Los Angeles County's Most "Business-Friendly" Cities. The Most "Business Friendly" award is given to cities within the county that are proactively promoting business-friendly programs and services in the interest of attracting and retaining good quality jobs for their residents. <http://www.laedc.org>

2.2 • Increase proactive outreach to help retain and expand businesses of all sizes, with emphasis on those that are at risk of closing, leaving or being wooed away.

In June 2011, the Mayor's Office of Economic and Business Policy started issuing its Los Angeles Works Newsletter, which highlights new resources and developments throughout the city. <http://www.losangelesworks.org>

In 2011, the City of Cerritos continued its Business Recognition program by highlighting 11 businesses in the Cerritos Business Spotlight on the city's website. The Business Recognition program assists City staff in business outreach efforts by enabling the City to establish relationships with businesses to promote retention and expansion. <http://www.cerritos.us/>

In May 2011, the Port of Los Angeles launched Latitude, which is a new newsletter focused on business, specifically targeting cargo owners and logistics decision makers. The newsletter will provide business news and trends at the Port of Los Angeles in both video and print format. <http://www.portoflosangeles.org/latitude/>

In July 2011, the City of Monrovia launched its Online Business Resource Center, which is designed to guide

existing and future business owners through the entitlement process. <http://www.ci.monrovia.ca.us/red-home>

In December 2011, the City of Long Beach hosted a free workshop for local manufacturers to spread the word about free business development programs, tools, and incentives. The workshop also provided information on marketing strategies and new technologies that manufacturers can utilize to grow their business.

<http://www.lbds.info/>

In December 2011, the City of Long Beach Redevelopment Agency and Long Beach City College opened a Downtown Small Business Center, which will offer training, advice, and resources to small business owners. The Downtown Small Business Center will also house the Long Beach International Trade Office, the 10,000 Small Business Goldman Sachs Program, and the Long Beach City College Small Business Development Center. <http://www.lbds.info/>

In 2011, the County of Los Angeles Internal Services Department outreached to nearly 4,000 businesses at 65 events/training courses. The department also recorded over \$100 million contract awards to small business. <http://www.lacounty.gov>

In 2011, the LAEDC's Economic & Policy Analysis Group quantified the Los Angeles City Workforce Investment Board's Layoff Aversion Program, which has been implemented by the LAEDC and its partners. The program resulted in the retention of 3,503 jobs for at-risk businesses in the City WIB Service Delivery Area with a total economic impact of \$1.3 billion. http://www.laedc.org/reports/consulting/City%20WIB_Analysis_FINAL.pdf

In 2011, the City of Gardena department of economic development partnered with the California Manufacturing and Technology Small Manufacturers Advantage to conduct site visits and provide site assistance to eleven manufacturing companies, resulting in the retention of over 100 jobs. Additionally, the City of Gardena economic development team conducted site visits and provided assistance to nine local retail companies, resulting in the retention of 30 jobs. <http://www.gardenaecondev.com>

In 2011, the City of Cerritos successfully secured the location and expansion of a high-tech manufacturing company that had previously left the City of Cerritos. The relocation and expansion represents the return of approximately 200 jobs to the City of Cerritos. <http://www.cerritos.us/>



In 2011, the Gardena One-Stop worked with HITCO to address their deficiency in employing entry level laminators by tutoring youth, providing soft skills training, and developing a curriculum to meet HITCO's needs. <http://www.gardenaecondev.com>

2.3 • Align local and statewide tax incentive policies with local and regional economic development priorities.

In November 2011, the City of Los Angeles voted to exempt mutual fund firms from the City's gross receipts business tax. The tax on mutual funds will be phased out in three years, beginning in 2012. Currently, Los Angeles is the only jurisdiction in the state that taxes mutual funds. <http://www.finance.lacity.org/>

In November 2011, the City of Los Angeles also approved a new three-year extension to the city business "tax holiday" for new businesses. <http://www.finance.lacity.org/>

In December 2011, the Los Angeles City Council voted unanimously to ask the City Attorney's office to draft an ordinance exempting new car dealerships from the city's gross receipts business tax. <http://www.finance.lacity.org/>

In September 2011, the City of Los Angeles Business Tax Advisory Committee completed its final report culminating in their recommendation to phase out the city's gross receipts business tax. <http://www.finance.lacity.org>

In 2011, the City of Los Angeles increase of the tax cap for film, TV and commercial productions went into effect, enabling more productions to pay the \$145 flat tax rather than a sliding scale which could reach \$12,495 under the previous code. The cap was increased for productions from \$2.5 million to \$5 million. <http://www.lacity.org>

In 2011, the LAEDC Economic & Policy Analysis Group quantified the economic impact of the California Film and Television Tax Credit, which was enacted in 2009. In the two years that it has been in effect, it generated more than \$3.8 billion in economic output and is supporting more than 20,000 jobs in California. This activity returns to state and local governments an estimated \$201 million or at least at least \$1.13 in tax revenue for every \$1 spent. <http://www.laedc.org/reports/CAFilm.pdf>

In June 2011, the UCLA Luskin Center released a report titled Clean Technology Company Case Studies in the Los Angeles Region, which features examples of Los Angeles-based clean technology firms and how policies and incentives have helped to drive the industry. <http://www.luskin.ucla.edu/>

2.4 • Develop sector-specific value propositions and strategies to attract firms including incentives for businesses seeking to capitalize on opportunities created by the greening of the local, state and world economies.

In October 2011, BYD Company Limited opened its U.S. headquarters and solar system and electric vehicle assembly plants in Los Angeles County. <http://www.laedc.org>

In November 2011, CODA (a clean tech company specializing in electric vehicles and energy storage) opened its 100,000-square-foot Global Headquarters in Los Angeles. <http://www.codaautomotive.com/about-coda-automotive/>

2.5 • Create employment and business opportunities for local firms by supporting the development of international trade, tourism, and by promoting Los Angeles County as a destination for foreign direct investment.

In September 2011, the County of Los Angeles increased its bid preference for certified, local small businesses from 5% to 8%. The bid preference became effective on November 1, 2011. <http://www.laosb.org>

In October 2011, the City of Los Angeles created its Local Preference Ordinance, which assigns an 8% competitive advantage for local businesses when they bid on city contracts. The ordinance also provide up to a 5% bid preference when a non-local business subcontracts with a qualified local business. <http://www.lacity.org>

In 2011, the City of Lancaster launched the Global Lancaster Program to garner interest in investing in the area. Efforts have included delegations to various regions of China and Taiwan as well as a January 2012 delegation to Abu Dhabi. <http://www.cityoflanasterca.org>

In 2011, the City of Lancaster worked with private partners to establish the California Green Regional Center, which will serve as an opportunity for foreign investment through the use of the federal EB-5 program. <http://www.cagreenrc.com>

In 2011, the LAEDC Kyser Center for Economic Research released a report titled Growing Together: Japan & Los Angeles County, which found that Japan is the #1 source of foreign direct investment into L.A. County and the #2 trading partner of the Los Angeles Customs District. http://www.laedc.org/reports/GrowingTogether_Japan_2011.pdf

In 2011, the LAEDC Kyser Center for Economic Research released a report titled Growing Together: China & Los Angeles County which found that China was the Los Angeles Customs District largest trading partner. http://www.laedc.org/reports/GrowingTogether_China_and_LA_Report_2011.pdf

2.6 • Ensure access to capital by expanding outreach and marketing efforts to capital sources and attracting capital investors and lenders for all stages of development; exploring creative new sources of capital such as the EB-5 Immigrant Investor Program; and creating and augmenting channels/networks to connect capital to entrepreneurs, with emphasis on small, minority or women owned businesses.

In March 2011, NASA's Jet Propulsion Laboratory (JPL) in Pasadena hosted its 23rd Annual High-Tech Conference for Small Business. The conference provides technology-oriented minority, women, veteran, and service-disabled business owners the opportunity to learn how to subcontract with major corporations, federal agencies, local government agencies and JPL's purchasing and technical communities. <http://www.jpl.nasa.gov/>

In 2011, USC and the Los Angeles Mayor's Office were awarded \$1.8 million from the U.S. Department of Commerce to boost job creation and foster economic growth through its Minority Business Development Agency Business Center-Los Angeles (MBC-L.A.). In 2010, the office secured \$79 million in contracts and \$21 million in financing. <http://www.losangelesworks.org/smallBusinessServices/MBDA-business-center.cfm>

In 2011, the Los Angeles Mayor's Office and U.S. Small Business Administration signed a Strategic Alliance Memorandum to develop a collaborative effort toward strengthening and expanding small business development. <http://www.mayor.lacity.org>

In August 2011, the Los Angeles Mayor's Office of Economic and Business Policy expanded its Los Angeles Works Resource Finder, which is an online tool to provide support to L.A. Businesses. <http://www.losangelesworks.org/smallBusinessServices/small-business-resource-finder2.cfm>

In 2011, the City of Lancaster worked with private partners to establish the California Green Regional Center, which will serve as an opportunity for foreign investment through the use of the federal EB-5 program. <http://www.cagreenrc.com>

In 2011, Pepperdine's Graziadio School formed a partnership with the Los Angeles Regional Small Business Development Center (SBDC). Since October 2011, SBDC authored a series of guest blog posts providing tips for small business leaders. Articles have included "Understanding and Monitoring Your Business's Cash Flow," "10 Tips for Finding Angel Capital," and "How Can Lean Principles Help Your Business?" <http://www.bschool.pepperdine.edu/studentblog/author/lars-bdcn/>

In 2011, the County of Los Angeles Internal Services Department outreached to nearly 4,000 businesses at 65 events/training courses. The department also recorded over \$100 million contract awards to small business. <http://www.lacounty.gov>

OBJECTIVE 3

Leverage the County's research and development facilities for the commercialization of research, technology and similar opportunities.



In June 2011, Caltech and City of Hope each received \$3 million from an anonymous donor to strengthen scientific collaborations between the two leading research institutions. <http://www.caltech.edu/>

In September 2011, MediSens Wireless became the first company to “graduate” from the UCLA on-campus technology incubator at the California NanoSystems Institute as a result of funding from an investor in Los Angeles County. MediSens focuses on the development and manufacturing of personal body monitoring systems and moved into the incubator in 2009. <http://www1.cnsi.ucla.edu/index>

3.1 • Aggressively seek more research funding and activity for L.A. County-based institutions.

In August 2011, UCLA's School of Law received a \$10 million gift from Lowell Milken, which enabled the establishment of the Lowell Milken Institute for Business Law and Policy, which will help develop initiatives in business and law to serve students, faculty and the community in innovative research, hands-on skills training and problem-solving. <http://www.law.ucla.edu>

In June 2011, Cal Poly Pomona's Aerospace engineering Professor Subodh Bhandari was awarded a \$360,000 grant from the National Science Foundation to continue research on the development of robust controllers for unmanned aerial vehicles. <http://www.csupomona.edu/>

In November 2011, researchers at UCLA's Henry Samueli School of Engineering and Applied Science received a four-year, \$4.5 million grant by the U.S. Department of Defense to strengthen nanotube materials, which are seen as a way to advance satellite technology. <http://www.engineer.ucla.edu>

In January 2011, the Caltech announced the creation of the Ronald and Maxine Linde Institute of Economic and Management Sciences, which seeks to bring together the best scientific minds and the best quantitative business practices. The new institute will be funded from an \$8.2 million endowment established by Ronald and Maxine Linde and a \$4.1 million addition to the endowment from the Gordon and Betty Moore matching program. <http://www.caltech.edu/>

In November 2011, Cal Poly Pomona, Mt. San Antonio College, and CSU Dominguez Hills (along with CSU

San Bernardino and Whatcom Community College outside of Los Angeles County) received a \$3 million grant from the National Science Foundation to create a West Coast cybersecurity league. <http://www.csupomona.edu>, <http://www.mtsac.edu/> & <http://www.csudh.edu/>

In October 2011, Charles Drew University of Medicine and Science was awarded a \$25 million grant from the National Institute on Minority Health and Health Disparities, a unit of the National Institutes of Health, to expand its research faculty and enhance academic programs. <http://www.cdrewu.edu/>

In August 2011, Occidental College was awarded a \$50,000 exploratory grant from the Henry Luce Foundation to support a year of planning to develop a new Occidental-China Environment Program—affording students and faculty an opportunity to work with Chinese institutions on environmental issues. <http://www.oxy.edu/>

In 2011, Cal Poly Pomona's College of Environmental Design was awarded a \$100,000 grant to address social and environmental sustainability issues through the school's newly created California Center for Land and Water Stewardship. <http://www.csupomona.edu>

In September 2011, CSU Long Beach received a \$50,000 equipment grant for a state-of-the-art 3-D printer for its engineering department. <http://www.csulb.edu/>

In April 2011, the U.S. Department of Agriculture awarded a \$3.75 million grant to the National Council of La Raza-Cal State Long Beach Center for Latino Community Health, Evaluation and Leadership Training for a project designed to address Latino nutrition with the goal of reducing childhood obesity. <http://www.csulb.edu/>

In December 2011, Biola University was awarded a \$3.03 million research grant to the university's Center for Christian Thought, which is a new initiative to bring world-renowned Christian scholars together for research, collaboration, and thought leadership in Christianity. <http://www.cct.biola.edu>

In October 2011, CSU Long Beach's Engineering faculty received a \$1.8 million grant to reduce pollution at the Port of Los Angeles. CSULB is partnering with the CSULB Foundation, the Port of Los Angeles, Horizon Shipping Lines and Rolls Royce Marine. This project plans to use a seawater scrubber vessel system to substantially reduce ship exhaust emissions. <http://www.csulb.edu/>



In September 2011, CSU Long Beach's Center for Commercial Deployment of Transportation Technologies received \$250,000 to support 14 interdisciplinary projects that emphasize the unique maritime research environment at the San Pedro Bay ports. <http://www.csulb.edu/>

In June 2011, U.S. Department of Defense awarded \$5 million to support CSU Long Beach's Center for Commercial Deployment of Transportation Technologies. <http://www.csulb.edu/>

In 2011, the UC Center for Health Quality awarded \$3 million to six UCLA healthcare experts to better understand and alleviate common obstacles to health quality, such as frequent falls and excess radiation from scans. <http://www.ucla.edu>

In September 2011, UCLA and Rutgers were awarded a \$1.94 million collaborative grant from the National Science Foundation to develop intelligent metropolitan traffic management technology to reduce urban traffic congestion and air pollution. <http://www.ucla.edu>

In July 2011, the National Institutes of Health awarded a five-year grant to researchers at the UCLA AIDS Institute to develop strategies to rid the body of HIV. <http://www.ucla.edu>

In May 2011, six scientists with the UCLA Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research received grants totaling about \$8 million from California's state stem cell agency to investigate basic mechanisms that underlie stem cell biology and

differentiation in order to help future translational and clinical advances. <http://www.ucla.edu>

3.2 • Create a more supportive infrastructure and stronger networks to facilitate the commercialization of local research and provide needed services to entrepreneurs (venture capital, research parks, entrepreneurial management teams and mentors, etc.), focusing in particular on industries where L.A. County holds a competitive advantage (e.g., port tech, digital media, entertainment technology, etc.).

In February 2011, the Charles Stewart Mott Foundation made a \$995,000 grant to launch the American Association of Community Colleges Virtual Incubation Network pilot project. Ten colleges received funding to lead this effort, including Long Beach City College. <http://www.lbcc.edu/>

In November 2011, the Los Angeles Area Chamber of Commerce received a \$320,000 California State Trade and Export Promotion (STEP) Grant from the Small Business Administration. The STEP Program is a three-year pilot trade and export initiative to help increase the number of small business exporting and increase the value of those exports. <http://www.lachamber.com>

In October 2011, the City of Los Angeles unveiled the Los Angeles CleanTech Incubator at its temporary location. The interim office will house the incubator's operations and tenants while the permanent facility is being developed. <http://www.laincubator.org/>

In December 2011, UCLA's Henry Samueli School of Engineering and Applied Science entered into a 10-year partnership with the Korea Institute of Energy Research in South Korea to collaborate on smart-grid research and technology development with the ultimate goal of creating an international, robust smart grid. <http://www.engineer.ucla.edu>

In October 2011, Governor Brown signed SB 550 (Padilla) into law, which gave specialized law enforcement agents more authority to identify CD plants responsible for manufacturing fraudulent discs—a critical piece toward addressing piracy issues within the state. <http://www.gov.ca.gov>

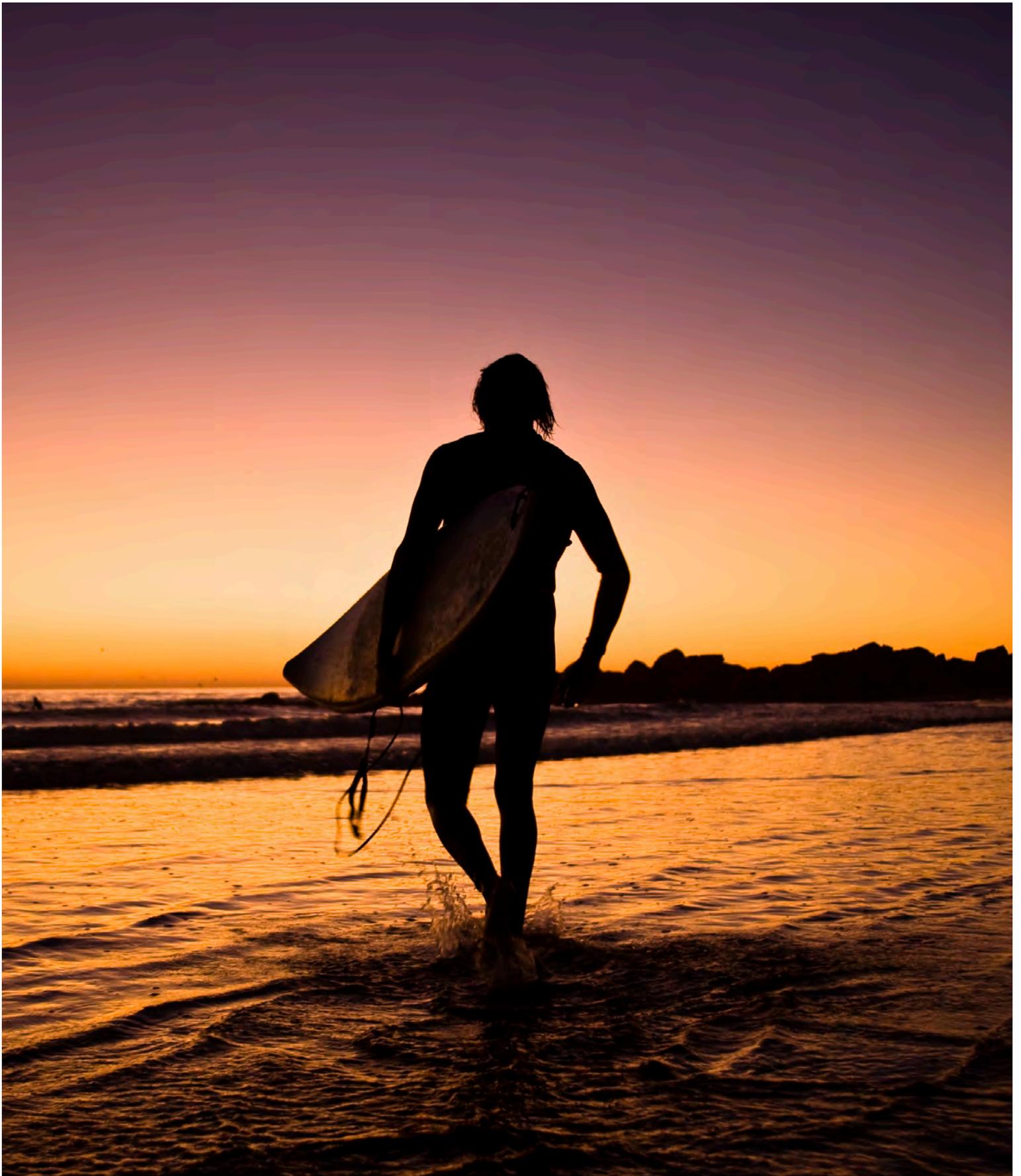
In 2011, Pepperdine University's Graziadio School of Business and Management launched the Graziadio 15X Project, which is a creative process designed to discover new commercial opportunities within existing Intellectual Property/Patents or pre-patent research projects. <http://www.pepperdine.edu>

In October 2011, the Dow Chemical Company and Caltech established a \$10 million partnership to strengthen science and technology and foster advances in renewable energy. <http://www.dow.com/innovation/partnership>

In September 2011, USC held its first Startup Weekend—a three-day event that brings together software developers, graphic designers and business people to build web or mobile applications and respective business strategies to ensure their success. The winning idea at the event came from a team of USC and Cal Poly Pomona students for a mobile application that can generate self-guided walking tours for tourists. <http://www.usc.startupweekend.org/>

In September 2011, PortTechLA will host its second annual PortTechExpo, which brings together innovators in technology with entrepreneurs and investors. PortTechLA is a technology commercialization center and incubator operated by the City of Los Angeles, the Port of Los Angeles, the San Pedro Chamber of Commerce, and the Wilmington Chamber of Commerce. Last year's event attracted more than 50 exhibitors. <http://www.porttechla.org>

In July 2011, the American Association of Port Authorities and the U.S. Department of Commerce International Trade Administration signed a Memorandum of Intent to implement the "Partnership with America's Seaports to Further the National Export Initiative." Both entities will provide coordinate to provide services that will assist U.S. businesses in exporting. <http://www.aapa-ports.org/>



**GOAL 3:
ENHANCE OUR QUALITY OF LIFE**

Implementation Champion:

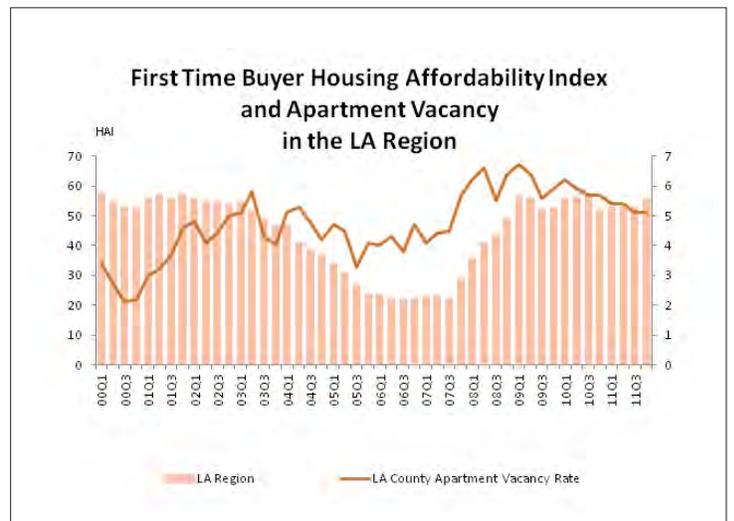
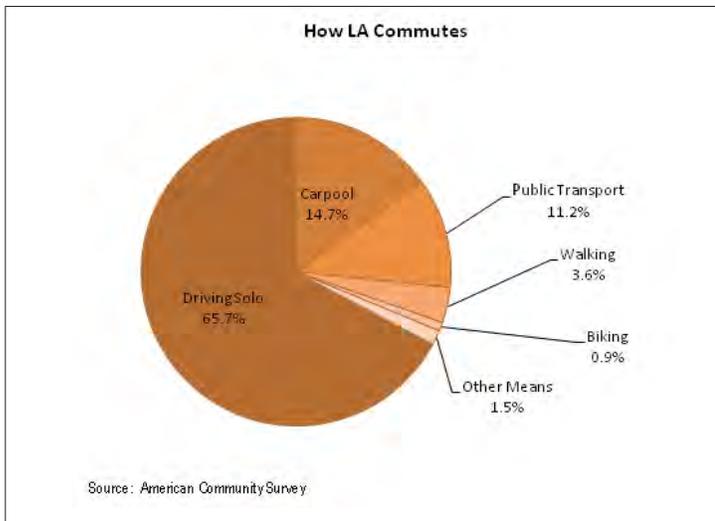


Los Angeles County residents enjoy a high quality of life with amenities that are hard to match elsewhere, including: major cultural centers; unparalleled recreational facilities—from beaches to mountains; an extensive, ever-growing transportation network; unbeatable weather; and a growing commitment not only to clean-tech, but to clean living.

Over the past two years, we have seen efforts to improve our mobility and reduce overall traffic congestion with significant investments made into our transit system; a renewed commitment to bicycling with an influx of bicycle master plans; and a variety of demand management techniques to reduce demand and optimize our transportation system. We also saw a variety of new parks and expanded recreational programs as well as significant funding directed to our cultural institutions. And finally, we continued to see a commitment to “cleaner” living with critical investments made in clean-tech, including: electric vehicle infrastructure, cleaner public and private fleets, and enhanced waste-to-energy efforts.

While much progress has been made to enhance our quality of life, work still needs to be done, especially with the demise of redevelopment agencies, in the area of affordable housing, in traffic congestion and increased mobility, and the most important quality of life program of all: job creation.

The successes on the following pages reflect the commitment of our region’s public, private, and non-profit entities to Enhance Quality of Life for the County of Los Angeles through making our communities healthier, more desirable, prosperous places to live and productively work and through deploying efforts to reduce blight and revitalize low-income communities.



OBJECTIVE 1

Make our communities more desirable places to live.



In February 2011, San Gabriel Valley held its 2nd Annual Youth Summit for 6th-12th grade students to teach youth how to “speak up and stand up” for themselves and the causes they believe in, to stay healthy in all areas of life and to make a difference in the community. <https://www.facebook.com/sgvyouthsummit>

In October 2011, the Los Angeles County Office of Education’s Friday Night Live partnership built upon its successes in steering teens away from alcohol, tobacco and drugs by adding a new component that would discourage dice, cards, sports betting and other forms of gambling. About 120 students produced videos for this additional project, which serve as anti-gambling public service ads. Last year, the Friday Night Live program received a Betting on Our Future grant from the California State Office of Problem Gambling to conduct this project. <http://www.lacoe.edu/>

In August 2011, the Los Angeles County Office of Education held its 2nd Annual Safe Schools Conference, which garnered nearly 200 educators in attendance from around Southern California. The event provided updates and trends on a variety of critical issues, including cyber bullying, dropout prevention and teen suicide threat assessments. <http://www.lacoe.edu/>

In September 2011, CSU Long Beach broke ground on its \$2.5 million Bob Cole Conservatory of Music Pavilion and Plaza. The project was funded through private donations and will offer new music practice rooms, exhibits, renovations, and more. <http://www.csulb.edu/>

In 2011, the County of Los Angeles expanded its healthcare coverage to the uninsured with the hope of registering up to 550,000 patients. Making these changes allows the County to further strengthen our healthcare safety net. In July, the County’s Healthy Way L.A. program began enrollment, offering eligible patients free primary and specialty care, medication, emergency treatment, and more within Los Angeles County. <http://www.ladhs.org>

In August 2011, Air Force officials unveiled a plan to establish the Los Angeles Air Force Base as the first federal facility to replace all of its general purpose fleet with plug-in electric vehicles. It is anticipated that vehicles could be in place in early 2012. <http://www.af.mil>

In April 2011, LADWP launched its Charge Up LA program, which offers rebates of up to \$2,000 for LADWP customers who install home chargers. To qualify for the rebate, LADWP customers need a Residential Time of Use meter, which allows customers to take advantage of reduced rates for charging during off-peak hours. <http://www.ladwp.com/>

In March 2011, Southern California Edison announced its new webpage dedicated to plug-in electric vehicles. The website offers information regarding rate plans as well as a plug-in readiness checklist. <http://www.sce.com/pev>

In 2011, several projects were completed that used the city's new form-based code, which is an integral part of the city's Downtown Specific Plan. Construction on these projects began in 2010, and the code has allowed for increased flexibility, better design, and overall improved building as the downtown area continues to grow. <http://www.cityoflancastrerca.org/>

In October 2011, over 1,500 Compton Unified School District students, staff, families, and members of the nonprofit The Compton Initiative worked together to pick up trash, landscape, and paint Roosevelt Middle School and Compton High School. <http://web.compton.k12.ca.us/index.aspx>

In July 2011, the City of Santa Clarita's public library system opened. The City now owns and operates its three public libraries and has increased hours of operation, upgraded facilities and technology, and has spent \$900,000 on new books and media. Additionally, the City is currently building a new 30,000 square foot library in Old Town Newhall to open summer of 2012. <http://www.santaclaritalibrary.com/>

In March 2011, the Automobile Club of Southern California—part of AAA—leased 20 smart fortwo electric vehicles. The electric vehicles will be used for staff commutes, club business, and roadside assistance. <http://www.aaa-calif.com/>

In November 2011, the City of Glendale and Burbank announced a local homeless solutions project to provide enhanced resources for the chronic homeless within both cities. The effort will be operated by Urban Initiatives and will help chronic homeless individuals and families obtain and maintain permanent housing. http://www.ci.glendale.ca.us/parks/homeless_services.asp



In July 2011, Chrysalis—a nonprofit organization dedicated to ensuring self-sufficiency for low-income and homeless individuals—unveiled a new design and renovation plan to meet the center's growing needs over the next 10 years. <http://www.changelives.org>

In March 2011, L.A. County Metro approved a pilot program to obtain and operate 30 low or zero emission buses. The action allows the purchase of buses using a “best value” criterion rather than a low-bid approach. <http://www.metro.net/>

In August 2011, L.A. County Metro adopted a Green Construction Policy, which requires the identification and mitigation of emission impacts for on-road, off-road construction and equipment on Metro projects. <http://www.metro.net/>

In January 2011, the Santa Monica Public Library launched a series of Green Living Workshops. Each workshop is six-weeks long and is provided by Sustainable Works and offers information on different topics at each session, including: chemicals, transportation, shopping, water, and energy. <http://www.smpl.org>

In September 2011, the South Coast Air Quality Management District, Bay Area Quality Management District, and the California Plug-in Electric Vehicle Collaborative were awarded a \$1 million federal grant to help prepare California for plug-in electric vehicles. <http://www.aqmd.gov/>

In December 2011, the South Coast Air Quality Management District approved three grant programs to reduce air pollution from cleaners and paints in

Boyle Heights and the City of San Bernardino. <http://www.aqmd.gov/>

In May 2011, the Los Angeles Unified School District Transportation Services Division received a \$2 million grant from the South Coast Air Quality Management District for the purchase of 18 new propane school buses to further protect children's health and ensure environmental preservation. <http://www.lausd.net>

In 2011, the City of Burbank had installed 11 electrical vehicle charging stations in public locations throughout the city. <http://www.ci.burbank.ca.us/>

1.1 • Ensure public safety by supporting programs that reduce crime (such as Business Watch, Neighborhood Watch, volunteer patrols, anti-gang programs and rapid response to “broken window” problems).

In February 2011, nearly 200 educators attended the Los Angeles County office of Education Symposium on Street Gangs and School Safety. The event provided details on campus threat assessments, anti-gang policies, and best practices in gang prevention and intervention. <http://www.lacoe.edu/>

In 2011, the City of Lancaster saw a dramatic decline in the city's crime rate. Crime within the city fell by 40% over the past four years. <http://www.cityoflancasterca.org>

In 2011, the City of Alhambra saw a 14% drop in crime. While the city already has Neighborhood Watch groups, a Community Liaison Officer Program will also be implemented in 2012 to help increase police visibility throughout the community. <http://www.cityofalhambra.org/>

In 2011, the Glendale Police Department released its crime statistics showing that violent and property crime had declined 7% from 2010—ensuring that the City of Glendale is once again in the top 10 safest cities in California with populations of 100,000 or more. <http://www.ci.glendale.ca.us/police/Reports.asp>

In 2011, the City of Gardena Police Department and Public Works Department created an Adopt-A Block program, which assigns local businesses and residents to tour their block area and identify issues like graffiti, illegal dumping, outside storage, etc. <http://www.gardenaconddev.com>



1.2 • Improve mobility and reduce traffic congestion and its environmental impacts by employing technology and traffic management strategies to reduce demand and optimize system efficiency; making transit easier and more desirable to use; improving walkability and bicycling; encouraging transit-oriented development and densification where appropriate; offering incentives for carpooling and transit; and improving the jobs/housing balance.

In August 2011, CSU Long Beach announced the continuation of the university's popular U-PASS program in partnership with Long Beach Transit. U-PASS gives all CSU Long Beach students, faculty and staff access to any Long Beach Transit bus or passport for free rides throughout the campus and city. <http://www.lbtransit.com/>

In 2011, we saw several Measure R Projects moving forward, including: the Orange Line Bus Rapid Transit Extension (expected in the Summer/Fall 2012); the Foothill Gold Line Light Rail (expected in July 2015); Exposition Light Rail Phase 1 from Downtown to Culver City (expected Spring 2012); Exposition Light Rail Phase 2 to Santa Monica (expected 2015); Crenshaw Light Rail (expected 2018); the Westside Subway Extension (expected in 2022); and the Regional Connector. <http://www.metro.net/>

In October 2011, UCLA's Luskin Center for Innovation and the Los Angeles County Department of Public Health's RENEW L.A. County program unveiled its "Model Design Manual for Living Streets" as a way to expand opportunities for biking and walking on city streets. <http://www.modelstreetdesignmanual.com>

In October 2011, the City of Santa Clarita held a groundbreaking on two new projects: a half acre passive recreation area and the addition of 95 parking spaces to the Newhall Metrolink Station (which helps the city meet the demands of area transportation users). <http://www.santa-clarita.com/>

In November 2011, the U.S. Department of Transportation awarded Metro \$2 million to improve transportation for veterans and others by providing more current and easier to use traffic and travel information. <http://www.metro.net/>

In July 2011, the City of Downey held a groundbreaking ceremony for its Nance Street Improvement Project, which includes a new water main, 100 additional public parking spaces, and the integration of MTA transit systems and DowneyLink. <http://www.downeyca.org/>

In 2011, the County of Los Angeles Department of Public Works implemented a new fixed-route community shuttle services in Athens, Florence-Firestone, Lennox, and Walnut Park to provide unincorporated area residents improved access to major destinations and connectivity to municipal transit operators like Metro, Foothill Transit, and major destinations such as employment locations, shopping centers, community centers, schools, public parks and recreation areas, and public libraries. <http://dpw.lacounty.gov/>

In 2011, the County of Los Angeles Department of Public Works completed the development of a new 2012 County Bikeway Master Plan consisting of 832 miles of new bikeways throughout the County along with bicycle-related programs for education,

encouragement, enforcement, and evaluation. <http://dpw.lacounty.gov/>

In 2011, the City of Burbank secured funds for its BikeStop Project, which is a fully enclosed bicycle parking facility with a capacity of 40-bicycles and a small space for bicycle safety classes or a bicycle repair facility. <http://www.ci.burbank.ca.us/>

In 2011, the LAEDC and Environmental Defense Fund released Vision Los Angeles: a report that proposes fifteen action-oriented strategies that will transform transportation in Los Angeles County. <http://www.visionlosangeles.org/>

In 2011, the City of Pico Rivera completed both the Paramount Boulevard and Rosemead Boulevard Rehabilitation Projects, which included roadway pavement, ADA upgrades, median repairs, and traffic signal modifications. <http://www.pico-rivera.org/>

In 2011, the City of Pico Rivera completed its Pico Park Transit Hub project, which added 78 parking stalls, refurbished an existing street and parking lots, and provided security lighting. <http://www.pico-rivera.org/>

In 2011, construction began on the Passons Boulevard underpass in the City of Pico Rivera, which includes construction of a railroad bridge, connector roads, a cul-de-sac, landscaping, and more. <http://www.pico-rivera.org/>

1.3 • Remove obstacles and create incentives to encourage the construction of a large quantity and wide range of housing of all types (i.e., condos, apartments, townhouses, single-family homes, etc.), with a particular emphasis on adding affordable and workforce housing units.

In September 2011, demolition began on the City of Bellflower's \$7 million mixed-use project known as Belmont Court. The project will feature several amenities for the city, including: 6,000 square feet of commercial space, a public plaza, and affordable housing units. <http://www.bellflower.org>

In November 2011, the City of Gardena was awarded a \$5.3 million grant from the U.S. Department of Housing and Urban Development to construct 32 units of senior housing. <http://www.gardenaconddev.com>



In 2011, New Carver Apartments in Los Angeles received the U.S. Department of Housing and Urban Development Housing and Community Design Award as “models for a new generation of affordable housing.” <http://www.hud.gov>

In 2011, a 34-unit, senior affordable housing unit was completed in Rancho Palos Verdes. <http://www.mirandelaseniorapartments.com/>

In November 2011, Mercy Housing California broke ground on Caroline Severance Manor, which is an affordable housing complex in Mid-Wilshire/Koreatown. The property will have more than half of its 85-units dedicated to providing supportive housing. <https://www.mercyhousing.org/>

1.4 • Promote healthy living by building more parks and expanding recreational activities, and encouraging healthy living through active lifestyles, wellness programs and locally-sourced nutritious food supplies (e.g., community gardens and farmers markets).

In February 2011, CSU Dominguez Hills, held its 6th Annual Student Research Day to showcase the work of its undergraduate and graduate students. More than 100 students participated in the event—sharing oral and poster presentations on topics such as HIV prevention, virtual education activities, and more. http://www.csudh.edu/rf/student_research_day.htm

In April 2011, CSU Long Beach received Gold and Silver awards from the League of American Bicyclists for being a Bicycle Friendly Business and a Bicycle Friendly University. <http://www.csulb.edu/>

In October 2011, the San Pedro Service Center was rededicated following \$2.5 million in upgrades (from the Fourth Supervisorial District Capital Improvement funds), including a new multi-purpose room, an area for daycare classrooms, and a kitchenette. The center provides health, educational, social and recreational activities for the area. <http://www.lacounty.gov>

In November 2011, the City of Los Angeles unveiled its first green-colored bike line—an effort to reduce collisions and promote bicycle safety. The lane is part of the City of Los Angeles master bicycle plan for a 1,680 mile lane network. <http://www.lacity.org>

In 2011, the City of Lancaster partnered with non-profit organizations and private-sector entities to offer



neighborhood clinics (dubbed “Wellness Homes”) to provide residents with a variety of health-related services. The five “Wellness Homes” are located in several neighborhoods throughout Lancaster and offer reference materials, workshops, health experts and support staff to assist patients. <http://www.cityoflancasterca.org/>

In December 2011, Antelope Valley Partners for Health, Kaiser Permanente, UCLA and Wal-Mart, and the City of Lancaster launched “Project Get Fit” in the city’s Wellness Homes. The program targets childhood obesity problems by educating participants regarding proper fitness and nutrition while engaging them in a six-week regimen toward better health and well-being. <http://www.avph.org/>

In 2011, the City of Lancaster launched a Walk with the Mayor, which encourages citizens to enhance their fitness regimens by walking with the Mayor and City officials each week. <http://www.cityoflancasterca.org>

In 2011, Los Angeles Valley College (LAVC) opened a new home for the Family Resource Center (FRC), which serves students, families, and the community, from pre-natal through adulthood with a large variety of support services and programs. The FRC faculty and staff have been trained by the Brazelton Touchpoints Center at Harvard University and have integrated their strength-based approach as a foundation for working with families. <http://www.lavc-frc.tumblr.com>

In August 2011, Loyola Marymount University, in partnership with the Friends of Ballona Wetlands and Playa Vista Development, opened the Ballona Discovery Park, which is an open-air science and cultural center. The university contributed \$700,000

toward the park's construction, and funding was also provided through a grant from the National Science Foundation (NSF). <http://www.lmu.edu/Page78369.aspx>

In September 2011, Pomona College opened its new Outdoor Education Center. The school received a \$600,000 gift from Lucila Arango '88 and the Aramont Foundation to help fund the initial startup costs of the center and provide annual support. The center will provide information about outdoor recreation through staff, books, workshops and mapping resources. <http://www.pomona.edu/>

In 2011, KaBoom honored 5 cities in Los Angeles County with the designation of "Playful City," including: Baldwin Park, Cerritos, Glendora, Lakewood and Pico Rivera. Playful cities are cities that employ innovative techniques and programs to ensure children are active, playing, and healthy. http://www.kaboom.org/take_action/playful_city_usa

In the summer of 2011, the City of Glendora released its Parks & Trails Master Plan, which outlines a vision and goals for the city's parks and facilities over a 10-year period. <http://www.ci.glendora.ca.us/>

In November 2011, the City of Santa Monica and Metro opened a \$2 million, full-service "Bike Center," which is the largest facility of its kind in the United States. The bike center is directly connected to major transit stops for Metro and the Santa Monica Big Blue Bus. <http://www.bikesantamonica.org>

In May 2011, the City of Beverly Hills hosted a bicycle workshop where residents could learn about safety, night riding, helmets, and changing a flat tire—among other things. <http://www.beverlyhills.org/bicycle>

In September 2011, the City of Covina approved the 2011 Bicycle Master Plan and the 2011 Downtown Covina Pedestrian and Bicycle Planning Study, which hope to provide a sustainable and active community within the city. <http://www.covina.ca.gov/>

In July 2011, the City of El Monte launched a Healthy El Monte Bike Program, which consisted of a series of events centered around bike safety, community events, and bike maintenance. <http://www.ci.el-monte.ca.us>

In 2011, the County of Los Angeles Department of Parks and Recreation launched its Leap to Fitness Program: a partnership with CSU Northridge to provide a free community exercise program at El Cariso Park. The program utilizes principles of Kinesiology and affords

a well-rounded exercise program utilizing the outdoor equipment at the parks. <http://parks.lacounty.gov/>

In November 2011, the Long Beach Health Department unveiled a new "Fresh Air Dining LB" program, which is designed to provide smoke-free outdoor dining options in the City of Long Beach. The program encourages and helps promote restaurants who are interested in creating 100% smoke-free outdoor dining areas. <http://www.longbeach.gov/health>

In December 2011, the City of Rancho Palos Verdes was awarded a \$310,830 grant for its Abalone Cove Shoreline Park Improvement Project, which will add landscaping, signage, shade structures, trails, play areas, and more to nearly 4 acres of the city's 80 acre park. <http://www.palosverdes.com/rpv/>

In August 2011, the Pat Brown Institute of Public Affairs at CSU L.A. received a \$249,000 grant to support the Youth Civic Engagement and Community Health Leadership Training program and its Building a Healthy Boyle Heights community collaborative. The initiative brings together a select group of students to educate them on becoming champions for healthier communities. In July, the Institute also received a \$10,000 Verizon Foundation grant to expand the program. <http://www.calstatela.edu>

In 2011, the City of Pico Rivera completed its Pico Park project, which included a refurbished restroom building, a newly constructed picnic shelter, sport lights, and more. The city also completed an overall Pico Park Grant application to expand the playground, install a new jogging track, add exercise stations, and provide other amenities. <http://pico-rivera.org/>



In 2011, the City of Pico Rivera began construction on Rivera Park, which includes five new ball fields, lights, playground, picnic amenities, horseshoe pits, landscaping, and a concession/restroom building. <http://pico-rivera.org/>

In 2011, the City of Pico Rivera completed a swing set, accessible amenities, and surrounding landscape improvements thanks to a KaBOOM! Playful City USA grant worth \$50,000. <http://pico-rivera.org/>
In 2011, the City of Gardena began construction on a 7,000 Sq. ft. Skateboard Park, which is scheduled for completion in Spring 2012. <http://www.ci.gardena.ca.us>

In July 2011, the Los Angeles Unified School District was awarded nearly \$500,000 from the School-Based Health Center Capital Program to enhance and expand school-based health centers. <http://www.lausd.net>

1.5 • Encourage and expand cultural and artistic amenities that celebrate our diversity and attract local and global patrons.

In 2011, the University of Antelope Valley opened its 1,680-seat Pioneer Event Center, which will provide a new venue for concerts, special events, and other performances. The center will also enable the university to build upon its existing baseball and softball teams to create a full-scale collegiate athletic program. <http://www.uav.edu/>

In October 2011, Antelope Valley College celebrated the grand opening of its Performing Arts Theatre. This \$25.5 million, 406-seat theatre provides a state-of-the-art venue for students of the college's dance, music, and art programs, as well as local arts and music groups such as the Antelope Valley Symphony Orchestra & Master Chorale. <http://www.avc.edu/>

In 2011, construction began on the City of Lancaster Museum of Art and History. The three-story museum, located in the heart of newly-revitalized downtown Lancaster, will feature 19,250 square feet of exhibition space as well as a rooftop terrace for special events. Construction is expected to be completed in May 2012. <http://www.cityoflancasterca.org/>

In 2011, the Ford Amphitheatre Summer Season featured shows reflecting the arts of Argentina, Brazil, China, Cuba, France, Hawaii, India, Ireland, Korea, Mexico, the Philippines, Senegal, Spain, and Vietnam. American art forms such as bluegrass, Cajun music, jazz, alt rock and hip hop and a variety of made-in-America hybrids, including Chicano and Korean-

American, also enlivened the season. <http://www.lacountyarts.org/>

In 2011, the 52-year old L.A. County Holiday Celebration at the Dorothy Chandler Pavilion of the Music Center had 24 groups with 580 performers. Holiday Celebration is one of 70 events in the County's Free Concerts in Public Sites series held in parks and community centers throughout the region. Over 31,000 people attended County-sponsored free concerts in 2011. <http://www.lacountyarts.org/>

In May 2011, the Ostin Family Foundation donated \$10 million to UCLA for a state-of-the-art campus music facility. The facility will be known as the Evelyn and Mo Ostin Music Center and include facilities such as a high-tech recording studio, spaces for rehearsal and teaching, and an Internet-based music production center. <http://www.ucla.edu>

In December 2011, the Port of Los Angeles and the creators of Bergamot Station Arts Center entered into an agreement to transform two 1940s era warehouses into "Crafted at the Port of Los Angeles," a crafts center showcasing handmade items from local artisans. <http://www.portoflosangeles.org/>

1.6 • Create healthy, vibrant and strong communities by balancing land use, transportation, economic development, housing and environmental improvement objectives.

In 2011, the City of Lancaster updated its General Plan by applying new Mixed Use Zones. This change removes distinct use types--which previously required automobile trips to reach each separate destination--allowing for integrated neighborhoods with the potential to provide a variety of services (i.e. jobs, retail, schools, and recreation) within a walkable area. <http://www.cityoflancasterca.org>

In May 2011, the Port of Los Angeles began construction of its Ghost Fish Waterfront Project, which is part of the L.A. Waterfront Revitalization effort. <http://www.portoflosangeles.org/>

In March 2011, the City of Long Beach was awarded \$300,000 through SCAG's Compass Blueprint Program and the California Endowment's Building Healthy Communities initiatives. The grants will allow the city to create active transportation and land use policies to improve overall health in Long Beach. <http://www.lbds.info/>

OBJECTIVE 2

Use all available resources (i.e., Hope VI funding, etc.) and adopt new approaches to revitalize low-income communities.



In June 2011, the County of Los Angeles approved a summer jobs program, which was expected to create at least 2,200 jobs for economically disadvantaged youth in Los Angeles County. Youth in foster care, on probation, or whose families receive welfare or other government assistance were considered priorities for the program. <http://www.lacounty.gov>

In 2011, The Boeing Company supported work by The Advancement Project, Families in Schools, and Teach for America to increase access to quality early learning. For example, Boeing awarded a \$50,000 grant to Families in Schools with a matching grant of \$50,000 from First 5 LA to bring Abriendo Puertas/Opening Doors program to 1,000 LAUSD parents in 2012. Abriendo Puertas/Opening Doors is the nation's first evidence-based leadership program for Latino parents with children 0-5 years of age. <http://www.boeing.com/>

2.1 • Increase community participation in the planning and jobs creation process.

In 2011, the City of Alhambra began a process to formulate a vision for the city's future through its "Envision Alhambra 2035" program. To help formulate this vision, the city has been gathering community input and suggestions from residents as well as community leaders through the help of a planning firm contracted to produce an updated Community Profile and Visioning document that will also be used to update the City's General Plan. <http://www.cityofalhambra.org/>

In December 2011, SCAG kicked off the public review and comment period for the 2012-2035 Draft Regional Transportation Plan/Sustainable Communities Strategy. The plan calls for over \$500 billion in investment to improve the region's transportation, health and quality of life. <http://www.scag.ca.gov/rtp2012>

In May 2011, the Southern California Association of Governments (SCAG) held its Regional Conference & General Assembly to unveil its draft Southern California Economic Recovery and Job Creation Strategy. The strategy examined the region's existing strengths, emerging opportunities, and provided recommendations to improve our economy and fast-track our recovery. <http://www.scag.ca.gov/ga2011>

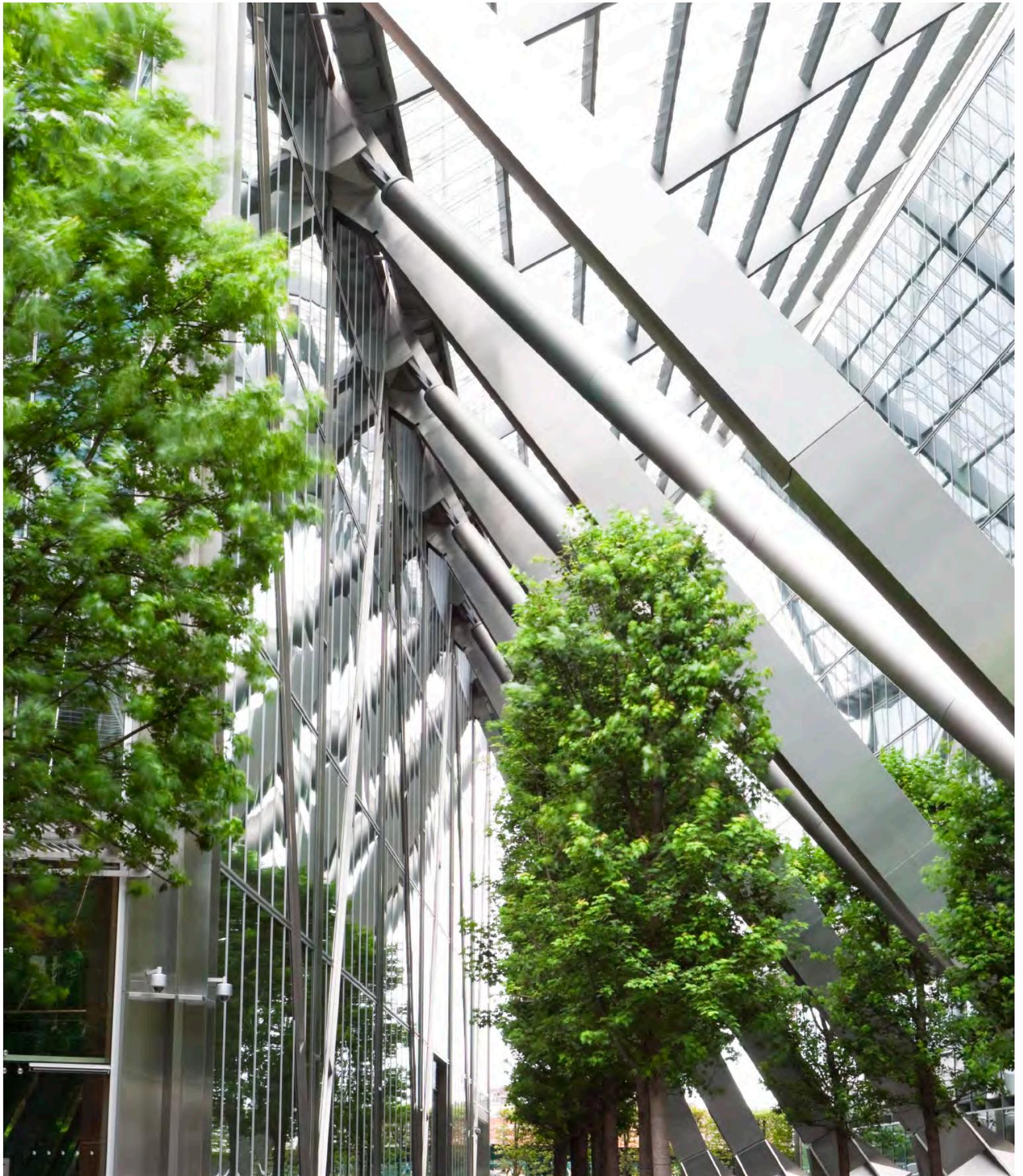
2.2 • Use smart growth principles to economically integrate communities, maximize the creation of new affordable and workforce housing units, and create more open space for residents.

In October 2011, UCLA's Luskin Center for Innovation and the Los Angeles County Department of Public Health's RENEW L.A. County program unveiled its "Model Design Manual for Living Streets" as a way to expand opportunities for biking and walking on city streets. <http://www.modelstreetdesignmanual.com>

In December 2011, SCAG kicked off the public review and comment period for the 2012-2035 Draft Regional Transportation Plan/Sustainable Communities Strategy. The plan calls for over \$500 billion in investment to improve the region's transportation, health and quality of life. <http://www.scag.ca.gov/rtp2012>

In 2011, the L.A. County Arts Commission's Civic Art Program, with a \$100,000 grant from the National Endowment for the Arts' new Our Town program, began conducting cultural asset mapping and planning in the unincorporated L.A. County area of Willowbrook. Project Willowbrook: Cultivating a Healthy Community through Arts and Culture will capitalize on the county's more than \$600 million investment in health and infrastructure improvements in Willowbrook. <http://www.lacountyarts.org/>

In 2011, the City of Burbank began its North San Fernando Plan effort for the North San Fernando Boulevard corridor. The land use policies and zoning incorporate a number of smart growth concepts including mixed-use development, transit amenities, bike lanes, walkable and accessible streets, pedestrian amenities, and enhanced streetscape with additional trees. <http://www.ci.burbank.ca.us/>



**GOAL 4:
IMPLEMENT SMART LAND USE**

Implementation Champion:

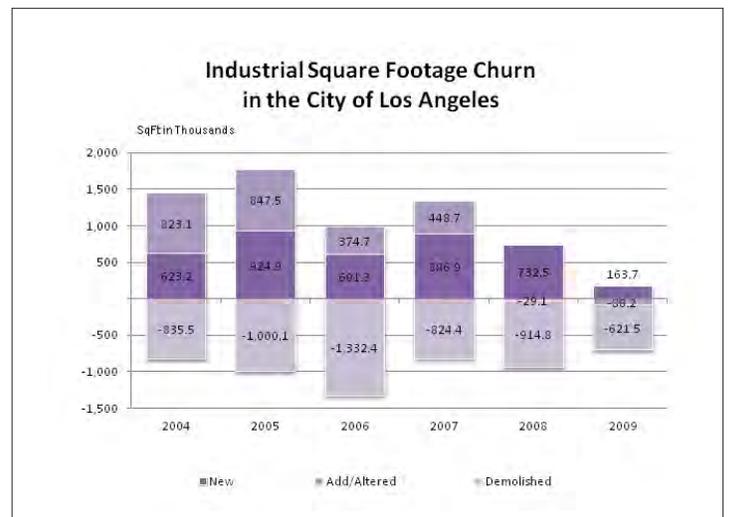
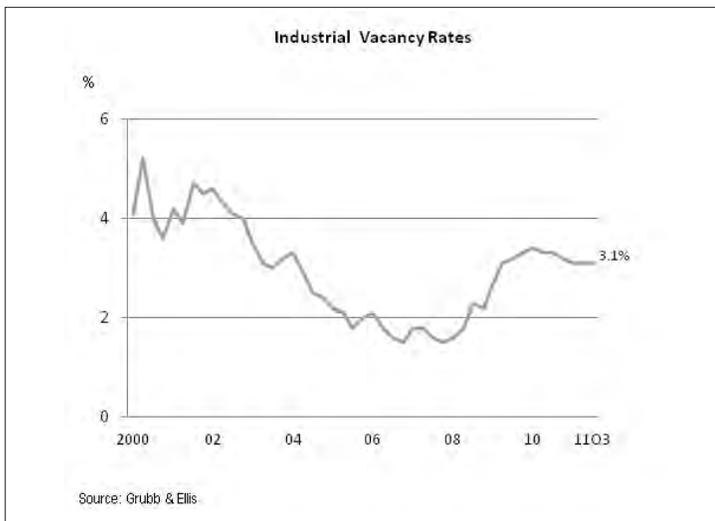


Los Angeles County still holds claim to its title as the #1 Manufacturing Center in the United States. The County also has one of the tightest industrial vacancy rates in the nation with just 3.1% in 2011. Over the years, we have seen the face of employment land change. Companies in need of industrial land in Los Angeles County no longer require the same design, square footage, or output of the spaces of yesteryear; instead, we are seeing growing needs for high-tech, bio-tech, and clean-tech manufacturing and distribution—whose needs may be able to be housed in commercially-zoned spaces and in much closer proximity to residential. Simply put, we cannot have the economy of the future without the requisite land base on which to support the business and industries driving that future economy.

It is imperative that Los Angeles County preserve, revitalize, and expand its existing jobs-producing land to ensure that current residents and their future children will have a place to work and earn a decent living. We have consistently seen prime, jobs-producing land converted into population-accommodating uses, such as retail centers and luxury condominiums. We cannot allow this pattern to persevere, especially in today’s increasingly competitive global economy.

Over the past two years, we have seen some progress made in this area with the opening of incubators; online databases of industrial and commercial sites; and efforts to provide more certainty in clarity in development, including by-right development and CEQA reform. However, much more work is needed in this area, especially reforming out-dated zoning codes to reflect the innovative, creative, knowledge-based economy of the future.

The successes on the following pages reflect the commitment of our region’s public, private, and non-profit entities to Implement Smart Land Use in the County of Los Angeles through maintaining an adequate supply of employment land and through developing and rehabilitating land to meet economic development goals.



OBJECTIVE 1

Maintain an adequate supply of jobs-creating land.



1.1 • Create and maintain a database of County-wide, jobs-creating land to facilitate the retention and expansion of local companies as well as the attraction of new companies to the County.

In October 2011, the City of Los Angeles unveiled LocateLA, a commercial and industrial property search and analysis site that provides information on real estate property listings, key demographics, business information, incentives, and interactive maps. <http://www.locatela.org/>

In 2011, the City of Carson's Business Development Department launched [carsonsites.com](http://www.carsonsites.com/), which connects people looking for commercial properties with available sites. The site also gives consumer spending, demographics and business data. <http://www.carsonsites.com/>

In March 2011, the City of Cerritos launched a web-based mapping tool called "Cerritos GIS." The tool was developed by the City's GIS (Geographic Information System) staff and offers 24-hour access to the City's land use and property information. <http://www.cerritogis.com/>

In 2011, the City of Palmdale launched the Palmdale Prospector, which is an internet-based tool for business attraction and site selection. <http://www.cityofpalmdale.org/palmdaleprospector>

In addition to those mentioned above, several other cities have online sites or databases dedicated to local land availability for businesses, including:

- Azusa
- Baldwin Park
- Beverly Hills
- Burbank
- Claremont
- Culver City
- Diamond Bar
- Downey
- Gardena
- Hawthorne
- City of Industry
- La Canada Flintridge
- La Habra
- Lancaster
- Monrovia
- Monterey Park
- Norwalk
- Pasadena
- San Gabriel
- San Marino
- Santa Clarita
- Santa Monica
- Walnut
- West Covina
- West Hollywood
- Whittier

1.2 • Implement an employment land preservation policy that restricts rezoning of industrially-zoned land to other uses without formal consideration

and recognition of: the need for adequate buffering between industrial land and incompatible uses; how and where that industrial land will be replaced elsewhere in the County; whether the proposed change-of-use development will increase land values of surrounding industrial land and/or encroach on nearby viable industries; and whether the new use will produce more highvalue jobs than alternative industrial uses.

In November 2011, the County of Los Angeles held an Industrial Policy Workshop where the community could attend and learn about the County's new General Plan strategy to encourage economic development through the preservation of employment land. <http://www.planning.lacounty.gov/generalplan>

1.3 • Make better use of the public sector's real estate portfolio to facilitate jobs-producing projects.

In 2011, much of the construction for the Burbank Water and Power Sustainable Campus was completed. The Sustainable Campus features improvements to capture and percolate stormwater, a Community Pocket Park, multiple buildings with LEED Platinum certification, Green Roofs covered with native plants, and more. <http://www.burbankwaterandpower.com>

In October 2011, BYD Company Limited opened its U.S. headquarters and solar system and electric vehicle assembly plants in Los Angeles County. L.A. County Supervisor Michael D. Antonovich and LAEDC President and CEO Bill Allen were instrumental in attracting BYD to L.A. County. Supervisor Antonovich and Bill Allen met with BYD's leadership in the U.S. and in China in 2009 to discuss the details of choosing Los Angeles County as their gateway to the North American market. LAEDC's subsidiary corporation, the World Trade Center Association, Los Angeles-Long Beach, also led a delegation of local experts to visit BYD's China headquarters as part of their attraction efforts. <http://www.laedc.org>

In November 2011, the U.S. Army Corps of Engineers and the Port of Long Beach reached an agreement on a dredging project in Marina del Rey, allowing the reduction of the project's carbon footprint through the elimination of truck trips and alternative disposal methods. The dredging project is part of the Long Beach Port's Middle Harbor Redevelopment Project, which will combine two aging shipping terminals to improve efficiency and environmental benefits in goods movement. <http://www.polb.com/>

1.4 • Reserve employment land (existing and vacant) for research and development uses, especially land located near research institutions and universities, using strategies such as creating community land trusts, land banking, and/or through the creation of business, industrial, manufacturing or research and development zones.

In October 2011, the City of Los Angeles unveiled the Los Angeles CleanTech Incubator at its temporary location. The interim office will house the incubator's operations and tenants while the permanent facility is being developed. <http://www.laincubator.org/>

In June 2011, SCI-Arc released a new publication titled Cleantech Corridor, an Open Ideas Competition, which documents the school's latest competition which centered on the newly established Cleantech Corridor in Los Angeles. For the competition, architects, landscape architects, designers, engineers, urban planners, students and environmental professionals set out to create vision for the Cleantech Corridor. <http://www.sciarc.edu/>



OBJECTIVE 2

Develop and rehabilitate land to meet strategic economic development objectives.



2.1 • Update general, community and specific plans to enable by-right development and rectify weaknesses in the existing zoning classifications and remedy the reactive, case-by-case, spot zoning approach focused on individual parcels.

In December 2011, the Hollywood Community Plan update moved forward to the City of Los Angeles Planning Commission. If adopted by the city with its accompanying implementation tools (e.g., zoning and ordinances), enabling by-right development, this would represent a giant step forward in implementing consistent land use policies that mitigate uncertainty and land use incompatibility by allowing development projects that are authorized under and consistent with adopted zones to move forward without legislative (Council) action. <http://www.cityplanning.lacity.org/>

2.2 • Develop, adopt and implement an incentive program to retain commercial and industrial activities and revitalize obsolete industrial land.

2.3 • Create and promote public/private collaboration programs to facilitate infill development and redevelopment of brownfield sites, underutilized industrial and commercial properties and functionally obsolete buildings.

In December 2011, construction was completed on Reflection Park in the City of Carson. Reflection Park was built over a former brownfield that had been a vacant eyesore to the community. The park opened to the public in January 2012. <http://www.ci.carson.ca.us/>

In July 2011, FedEx and developer Trammell Crow broke ground on a \$140 million, 236,000 square foot distribution facility on a 33-acre site that was formerly a landfill. The site went through several remediation phases. The site will also house FedEx's first LEED-certified building. <http://www.fedex.com>

2.4 • Collaborate on securing state and federal grants, other public financing vehicles, and tax incentive programs such as the establishment, renewal, implementation, management and/or expansion of Enterprise Zones, Recycling Market Development Zones, Business Improvement Zones, Redevelopment Agencies, as well as other innovative programs that facilitate community development and rehabilitation.

In 2011, the Santa Clarita Enterprise Zone continued to show growth with 323 businesses benefitting

from the Zone and 4,764 jobs hired. <http://www.scenterprizezone.com>

In 2011, the City of Burbank entered into a partnership with the hotel industry to form a Tourism Business Improvement District formally known as The Burbank Hospitality Association. The BHA and the City of Burbank work collaboratively to leverage public/private partnerships and help synergize the tourism industry in Burbank. <http://www.ci.burbank.ca.us/>

In 2011, the City of Los Angeles established a Tourism Marketing District founded in 2011, which is expected to bring in approximately \$11 million per year for tourism promotion. <http://www.lacity.org/>

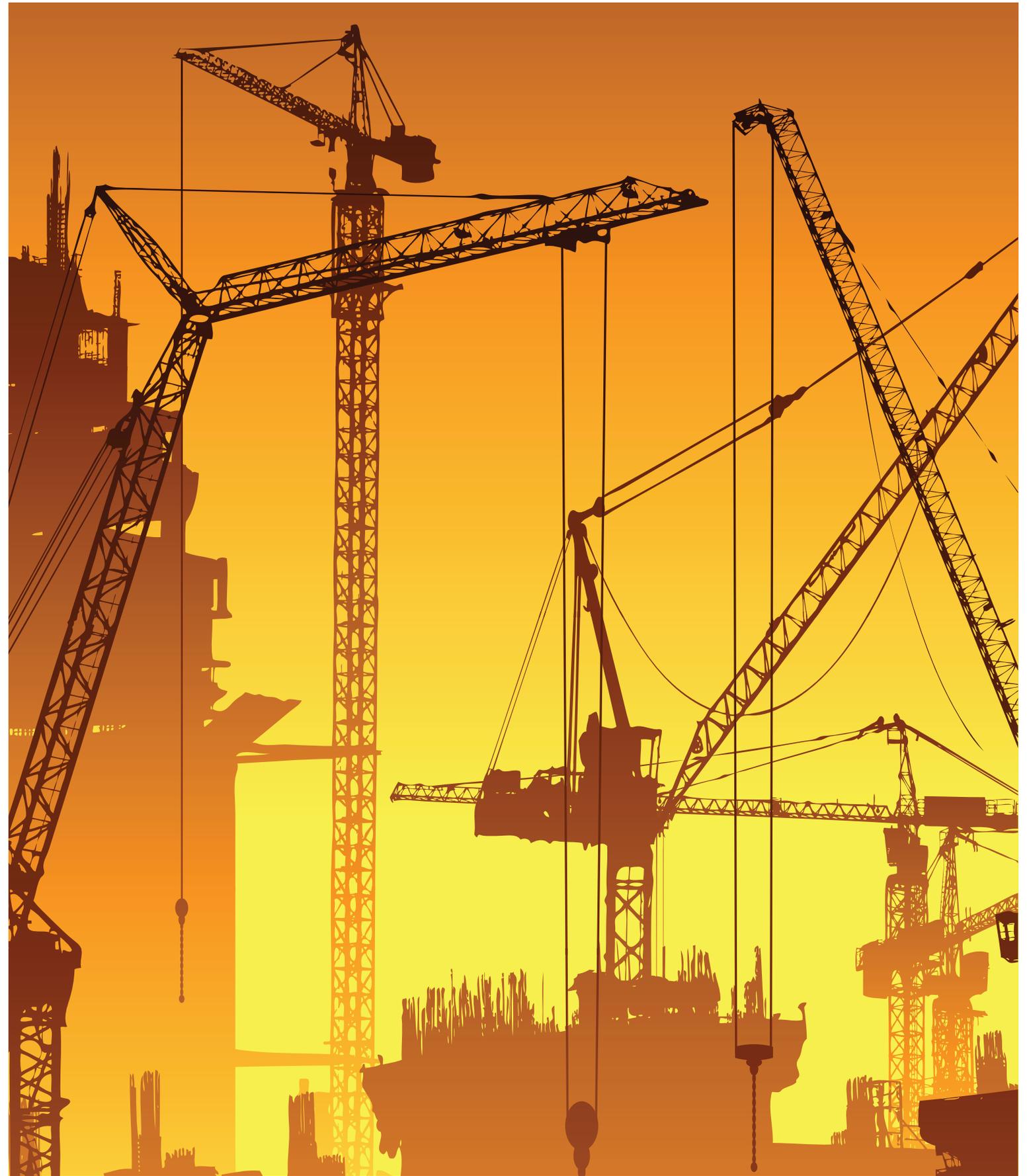
In 2011, the City of Pasadena's Property-based Business Improvement District for the Playhouse District was extended until 2016. <http://www.playhousedistrict.org/>

2.5 • Reform the California Environmental Quality Act (CEQA) to eliminate abusive uses of the statute for non-environmental purposes, such as an existing business seeking to block competitors.

In September 2011, Governor Brown signed AB 900 (Buchanan and Steinberg) and SB 292 (Padilla) into law, streamlining the environmental review process for specified construction projects—deemed “leadership projects.” These projects would not be exempted from the California Environmental Quality Act but would instead go through a fast-tracked judicial review process. SB 292 sets forth requirements for the proposed Farmers Field football stadium project—requiring the project to be carbon neutral and to mitigate certain negative impacts while also allowing for a speedier review process. <http://gov.ca.gov/>

In October 2011, Governor Brown signed into law SB 226 (Simitian), which called for a simplified CEQA approval process for infill projects and CEQA exemptions for solar on existing rooftops and parking lots. <http://gov.ca.gov/>

In 2011, Alston & Bird secured a Court of Appeals decision, ruling that exempted groundwater storage from CEQA, enabling storage programs in two groundwater basins that could provide nearly \$1 billion in regional value. <http://www.alston.com>



**GOAL 5:
BUILD A 21ST CENTURY INFRASTRUCTURE**

Implementation Champion:



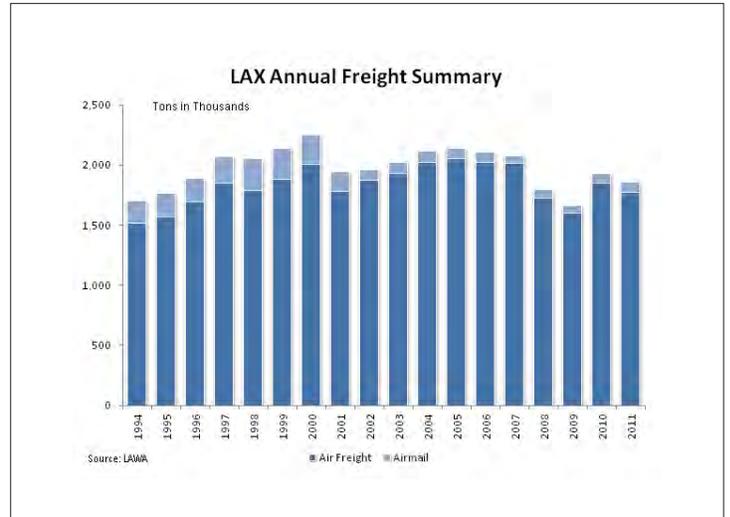
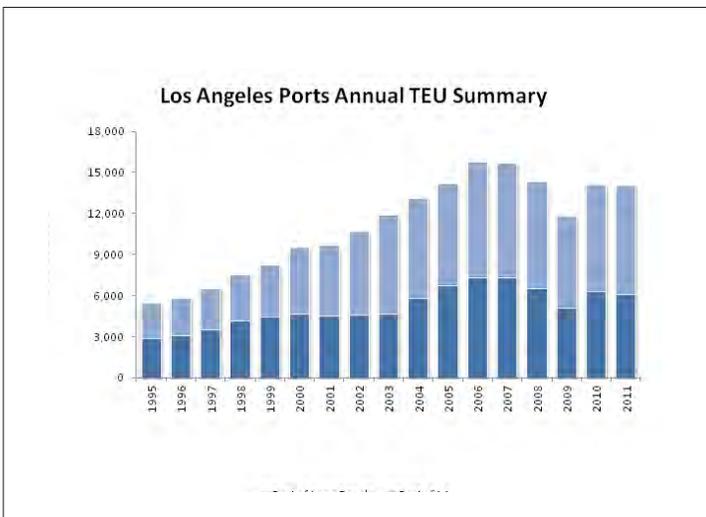
LOS ANGELES COUNTY
ECONOMIC DEVELOPMENT CORPORATION

In Los Angeles County, we have a world--class infrastructure system with the nation’s largest port complex, the nation’s busiest origin and destination airport, and an intricate and highly-sophisticated multi-modal distribution system to deliver goods and people. However, key infrastructure investments that helped grow the Los Angeles economy were made a generation or more ago. So it is critical that we fix the infrastructure development process and upgrade our critical infrastructure if we are to deliver the people, goods, information, energy and water that will be necessary to remain competitive in the 21st Century economy.

In the two-year implementation of the Los Angeles County Strategic Plan for Economic Development, significant developments have been made in our transit, goods movement, and building infrastructure and a number of projects were delivered under alternative methods, such as design-build. A variety of milestones were reached in 2011 in the area of renewable energy, and we saw several projects move forward to expand recycling efforts and waste-handling capabilities.

While we have seen many long-standing infrastructure projects move forward this past year, work still needs to be done to fix the broken infrastructure development process, especially in the areas of public-private partnerships and refocusing CEQA on improving environmental outcomes while eliminating its non-environmental uses, as well as ensuring we continue to address our infrastructure maintenance deficit here in L.A. County.

The successes on the following pages reflect the commitment of our region’s public, private, and non-profit entities to Build a 21st Century Infrastructure in the County of Los Angeles, which is so critical to ensuring we move people, goods, and information efficiently, provide safe and affordable access to energy and water, and maintain our competitive edge in the global economy.



OBJECTIVE 1

Fix the broken infrastructure development process.



In the summer of 2011, Urban Land Institute Los Angeles (ULI L.A.) held four Technical Assistance Panels focusing on the design, development, financing and governance of the region's future transit system and transit-oriented development. The panels provided recommendations for station area development and planning in the cities of Baldwin Park, Compton, Inglewood and Santa Monica. <http://www.la.uli.org/>

In July 2011, ULI L.A. held an Infrastructure Summit to explore issues facing our regional infrastructure in the areas of Green Infrastructure, Transportation Infrastructure, Financing of Infrastructure and Social Infrastructure. <http://www.la.uli.org/>

In 2011, the LAEDC Economic & Policy Analysis Group released a report examining the delays in the approval of permits in the oil and gas production industry in California. Delays are holding up an estimated \$1 billion in capital investment in oil and gas field redevelopment for an average of approximately one year. This led to the Governor's action to reorganize the state's Natural Resources Department to undo these permit delays. http://www.laedc.org/reports/consulting/2011_OilFieldInvestmentDelays.pdf

In 2011, the LAEDC brought together a coalition of leaders up and down the state in strong and active support of AB 700 (Blumenfeld), a bill to strengthen and reorganize the state's Infrastructure and Economic Development Bank (I-Bank), issuing several letters, meeting with a number of relevant state officials, and instituting a traditional and new/social media campaign to encourage this bill's passage by informing relevant stakeholders of its merits. While AB 700 was ultimately vetoed by Governor Brown, the Governor noted in his veto message that he was committed to seeing the I-Bank reorganized in a way to make it more effective at carrying out its mission. In early 2012, it was announced that the I-Bank would be reorganized under the GO-Biz. <http://www.gov.ca.gov>

In September 2011, Mobility 21's Annual Transportation Summit drew a record turnout with over 1,000 transportation leaders and professionals. The summit included sessions such as "Maintaining Our Global Competitiveness: How Transportation Helps Retain Business and Employees." <http://www.mobility21.com/>

1.1 • Restore the balance between local and regional interests in considering approval of infrastructure projects.

No successes in 2011.

1.2 • Promote enabling legislation allowing for best practices (e.g., design/build, public-private partnerships, and performance contracting) to expedite infrastructure development.

In 2011, the \$18.6 million I-210 Gold Line Bridge began construction and is already 50% completed. The bridge used a design-build approach and which helped the project move forward faster than using traditional methods. <http://www.foothillextension.org>

In 2011, the City of Lancaster engaged in a public-private partnership with SolarCity to install 2.5 megawatts of solar electric power at six city sites. The project is expected to offset an estimated 92 percent of the sites' total energy use and save the City more than \$7 million over the next 15 years. <http://www.cityoflanasterca.org>

In 2011, SB 475 (Wright) was introduced to clear up ambiguities and inconsistencies in the current statute for public-private partnerships on fee-producing infrastructure. Although the bill failed to make it through the entire legislative process, it passed with little dissent in the Senate and will possibly be taken up again in 2012. <http://www.leginfo.ca.gov>

In July 2011, the second design build contract was awarded for the Pasadena to Azusa alignment of the Metro Gold Line Foothill Extension. Construction is anticipated to begin in Fall 2012. http://www.foothillextension.org/construction_phases/pasadena_to_azusa/

In October 2011, the USC Keston Institute for Public Finance and Infrastructure Policy (now housed under the USC Sol Price School of Public Policy) hosted an event titled "Asset Monetization: Fad or the Future of Infrastructure?" The event analyzed different forms of public-private partnerships that the public sector can utilize on infrastructure projects. <http://www.usc.edu/schools/price/>

In 2011, Los Angeles World Airports executed a design/build contract with for the design and construction of the new Central Utility Plant at LAX. It is estimated that through the use of the design/build



delivery method, there will be a roughly 12 month reduction in time to complete the project. <http://www.lawa.org>

1.3 • Advocate for our fair share of public infrastructure dollars and support programs that create opportunities for local contractors from under-served communities.

In December 2011, the Port of Long Beach was awarded \$17 million from the U.S. Department of Transportation (as part of its TIGER program) for the Port's rail realignment project. The total cost of the project is \$64.5 million and the project would improve the lead tracks to two Port of Long Beach rail yards—improving efficiency and reducing the environmental impact of goods movement. <http://www.polb.com/>

In October 2011, the California Transportation Commission allocated \$336 million of state funds to the Alameda Corridor-East Project to relieve traffic congestion and enhance goods movement. <http://www.catc.ca.gov/>

In February 2011, the City of La Mirada received a \$170,000 planning grant from the Southern California Association of Governments to complete the I-5 Freeway Corridor Specific Plan, which will study the freeway corridor's potential to become a regional commercial hub. <http://www.cityoflamirada.org/>

In September 2011, more than 1,000 transportation, business, and elected leaders came together for the 10th annual Mobility 21 Summit, which was focused on securing U.S. dollars for Southern California transportation investment. <http://www.mobility21.com/>

In October 2011, \$448 million in state bond money was awarded to eight transportation projects in L.A. County. Of these projects, Alameda Corridor East received \$336.6 million; the second phase Expo Line light rail received \$35.3 million; the four-mile extension of the Orange Line busway received \$13.5 million; traffic signal synchronization projects; the Pier F Support Yard Project at the Port of Long Beach; and the Ocean Boulevard Track Realignment at the Port of Long Beach. <http://www.metro.net/>

In November 2011, the U.S. Department of Transportation awarded Metro \$2 million to improve transportation for veterans and others by providing more current and easier to use traffic and travel information. <http://www.metro.net/>

In June 2011, the California Transportation Commission allocated approximately \$55 million to construct four miles of truck climbing lanes and \$1.4 million to replace 4.8 miles of metal beam guardrails on the I-5. Two other notable design-build projects received \$526 million in allocations: the Gerald Desmond Bridge (\$470 million) and the I-10/I-605 Direct Connector (\$56 million). <http://www.catc.ca.gov/>

In October 2011, the California Transportation Commission allocated \$784 million in new funding for 61 projects, including \$35.3 million to extend the Exposition Light Rail; \$19.8 million to widen the Santa Ana Freeway (I-5); \$323.6 million to lower a section of UPRR track and construct bridges at four major intersections; and \$13.5 million to extend the Bus Rapid Transit Metro Orange Line route. <http://www.catc.ca.gov/>

In August 2011, the California Transportation Commission allocated nearly \$300 million for a 37-mile lane rehabilitation along the Long Beach Freeway (I-710) and \$100.8 million to rehabilitate 48 lane miles of the Pomona Freeway (SR-60). <http://www.catc.ca.gov/>

In January 2011, the California Transportation Commission allocated nearly \$50 million to install rail collision avoidance technology along the Metrolink system, Pacific Surfliner Intercity Rail Corridor, and the Burlington Northern Santa Fe Railroad tracks from Los Angeles to Fullerton. Two other notable allocations included \$20 million to convert high occupancy vehicle lanes to high occupancy toll lanes along the I-10 and I-110 corridors and \$40 million for the acquisition of 100 compressed natural gas buses by Metro. <http://www.catc.ca.gov/>

OBJECTIVE 2

Build and maintain critical infrastructure for L.A. County.



In May and June 2011, CSU Long's Beach's Center for International Trade, Transportation hosted a three-part webinar series titled "Cargo and Jobs: Still Ours to Lose?" The event brought scholars together with industry experts and leaders to campus to review issues surrounding the Panama Canal expansion and its implications for ports on the West Coast, cargo volume and jobs. <http://www.ccpe.csulb.edu/citt/> & <http://www.metrans.org/pointcounterpoint/index.html>

In November 2011, the Los Angeles Board of Harbor Commissioners approved a \$13.5 million construction contract for the "water cut" project on the San Pedro waterfront—a part of the revitalization effort of the L.A. waterfront. In January 2012, there will be a ceremony to mark the start of demolition and construction activities for the project. <http://www.portoflosangeles.org/>

In October 2011, the 126-year-old Good Samaritan Hospital broke ground on its Medical Plaza—part of an \$80 million expansion effort. The hospital has been able to add additional outpatient services as a result of the expansion. <http://goodsamaritan.chsli.org>

In early 2011, the LAEDC and its partners urged the Governor and state legislature to address the \$24 billion construction backlog at the Office of Statewide Health Planning & Development (OSHPD); part of this multi-billion dollar backlog was due to and exasperated by furloughs and staff hiring freezes. By June 2011, OSHPD was authorized to begin filling 26 vacant positions and furloughs were reduced by 2/3. <http://www.oshpd.ca.gov/>

In February 2011, Loyola Marymount University's 20-year Master Plan was approved by the Los Angeles City Council. From this Master Plan, the university will add more than 15,000 jobs to the Los Angeles area and an estimated \$1.6 billion in economic activity. <http://www.newsroom.lmu.edu/>

In August 2011, the Leuzinger High School in the Centinela Valley Union High School District completed construction on its new Center for Arts & Sciences. The Leuzinger High School Center for Arts & Sciences is a two-story building which includes 36 classrooms and 8 state-of-the-art science labs. http://www.centinela.k12.ca.us/measure_cv/leuzinger_hs.jsp

In February 2011, the City of La Mirada received a \$170,000 planning grant from the Southern California

Association of Governments to complete the I-5 Freeway Corridor Specific Plan, which will study the freeway corridor's potential to become a regional commercial hub. <http://www.cityoflamirada.org/>

In December 2011, the City of Long Beach released its Corridor Investment Projects publication, which includes the various public investments (worth more than \$1 billion) that have been made along the city's commercial corridors over the past 15 years. <http://www.lbds.info/>

In 2011, the City of Alhambra completed a series of street improvement projects, including its Main Street Rehabilitation Project, New Avenue Street Improvement Project, Valley Boulevard Median and Street Improvement Project, and more. Several projects received funding from the federal stimulus program. http://www.cityofalhambra.org/government/public_works/capital_improvements.html

In October 2011, there was a grand opening for the new Martin Luther King, Jr. Center for Public Health, which will provide services related to disease prevention and health promotion. <http://www.ladhs.org>

In 2011, the City of Lomita completed an estimated \$5 million in capital improvement projects for streets, water lines, and sidewalks. <http://www.lomita.com>

2.1 • Expedite green growth at the Ports of L.A. and Long Beach by speeding implementation of the Clean Air Action Plan, developing and deploying locally sourced and driven green technology solutions, and adding infrastructure to shift container traffic from road to rail or other cleaner modes.

In November 2011, the U.S. Army Corps of Engineers and the Port of Long Beach reached an agreement on a dredging project in Marina del Rey, allowing the reduction of the project's carbon footprint through the elimination of truck trips and alternative disposal methods. The dredging project is part of the Long Beach Port's Middle Harbor Redevelopment Project, which will combine two aging shipping terminals to improve efficiency and environmental benefits in goods movement. <http://www.polb.com/>

In October 2011, the \$40 million Port of Long Beach and U.S. Army Corps of Engineers Main Channel dredging project was completed. The project has allowed for a deeper, wider channel and basis for additional and safer access for large container ships. <http://www.polb.com/>



In September 2011, the Port of Long Beach released the draft Environmental Impact Statement and Supplemental Environmental Impact Report for Pier S: a \$650 million proposed container shipping terminal on a vacant 160-acre parcel of land. Pier S would utilize shore power, an on-dock rail yard, and a "green lease" to ensure low-polluting equipment is used onsite. http://www.polb.com/about/projects/pier_s.asp

In September 2011, Caltrans and the Port of Long Beach released a request for proposals to four pre-qualified teams of construction and engineering firms for the Gerald Desmond Bridge Replacement Project. Proposals are due in early 2012, and it is anticipated that construction will begin in late 2012. The total cost of the project is expected to be \$950 million and will utilize the design-build process. <http://www.polb.com/about/projects/gdb.asp>

In November 2011, the Port of Long Beach's Pier C container shipping facility, which is operated by Matson Navigation Co. and SSA Terminals Inc., became the fourth terminal to be equipped with shore power. Shore power allows ships to shut down diesel engines and plug into electricity at berth, which reduces air pollution. <http://www.polb.com/>

In November 2011, the Port of Long Beach launched a \$5 million "Greenhouse Gas Grant" program to fund local projects (e.g., renewable energy, energy efficiency, clean transportation, etc.) that will cut greenhouse gas emissions. <http://www.polb.com/>

In December 2011, the Port of Long Beach was awarded \$17 million from the U.S. Department of Transportation (as part of its TIGER program) for the Port's rail realignment project. The total cost of the

project is \$64.5 million and the project would improve the lead tracks to two Port of Long Beach rail yards—improving efficiency and reducing the environmental impact of goods movement. <http://www.polb.com/>

In August 2011, Governor Brown signed AB 1128 (Furutani) into law, which allows for an expanded freight-truck corridor along designated routes to better accommodate the movement of cargo by permitting trucks that exceed traditional weight limits into the City of Carson. <http://www.gov.ca.gov>

In 2011, the Port of Long Beach added its Pier G building to the list LEED certified buildings. Pier G recently received a LEED Gold certification, which surpassed the initial plans for a LEED Silver facility. <http://www.polb.com/environment/leed/pierg/operations.asp>

In December 2011, the Port of Los Angeles was awarded three engineering and design awards for the Wilmington Waterfront Park, which opened in June. The Port received the 2011 Project of the Year Award by the Southern California Chapter of the American Works Association, the 2011 Best Project Award in the Landscaping/Urban Planning category by Engineering News-Record California Magazine, and the 2012 Merit Award in Engineering Excellence from the American Council of Engineering Companies. <http://www.portoflosangeles.org/recreation/wwpark.asp>

In November 2011, the Port of Los Angeles approved a \$13.5 million construction contract for the Downtown Harbor, which will create the land and infrastructure needed for the development of a new town square and promenade. <http://www.lawaterfront.org/>

In September 2011, Pacific Harbor Line upgrades to new and less polluting locomotives at the ports of Los Angeles and Long Beach, aiding efforts to cut air pollution. Compared to the previously used models, the new locomotive engines emit 85% less diesel particulate matter and 38% less nitrogen oxide. <http://www.cleanairactionplan.org/>

In July 2011, Vision Industries Corp. delivered the world's first zero-emission hydrogen fuel cell-electric Class 8 truck to Total Transportation Services Inc., which will deploy the vehicle at the ports of Los Angeles and Long Beach as part of the ports' Technology Advancement Program. <http://www.cleanairactionplan.org/>

In February 2011, the Port of Los Angeles became the first port to provide Alternative Maritime Power™ (AMP™) to three separate cruise lines—Disney Cruise

Line, Princess Cruises, and Norwegian Cruise Line—at the port's World Cruise Center. AMP™ allows idling cruise lines to eliminate significant greenhouse gas emissions when at berth. <http://www.portoflosangeles.org/>

In May 2011, the South Coast Air Quality Management District awarded \$58 million for shore-side power projects to reduce diesel emissions from ships at the Port of Long Beach, Los Angeles, and Hueneme. <http://www.aqmd.gov/>

In November 2011, the South Coast Air Quality Management District approved two hybrid-electric heavy-duty truck demonstration projects in an effort to develop zero-emission transportation systems for shipping cargo containers. <http://www.aqmd.gov/>

In September 2011, the Draft Environmental Impact Report was released on the Burlington Northern Santa Fe Railway's proposed Southern California International Gateway (SCIG) project. The SCIG project is a "near-dock" intermodal facility that would allow containers to be loaded closer to the docks. <http://www.bnsf.com/>

2.2 • Modernize Los Angeles International Airport by improving domestic and international terminals, airfield safety and efficiency, passenger experience and accessibility into and out of LAX, while also encouraging the further development and improvement of other airports throughout Southern California.

In November 2011, a new 15,663 square-foot cold-storage unit opened near LAX, which increases the airport's ability to store and ship refrigerated goods as well as reduces delivery costs and times. It is anticipated that the unit will handle approximately 100 tons of produce daily. <http://www.lawa.org/welcomelax.aspx>

In 2011, the first phase of the \$175 million Taxilane S Project at LAX was completed, paving the way for reduced tarmac wait times for arriving flights. <http://www.lawa.org>

In 2011, construction began on the \$1.545 billion Great Hall project in the Tom Bradley International Terminal at LAX. When completed, the Great Hall will encompass 140,000 square feet of dining, retail, airline lounges, and other customer amenities. <http://www.lawa.org>

In 2011, Los Angeles World Airports released LA-NEXT.com, which provides information on the ongoing \$4.1 billion Capital Improvement Program at LAX. <http://www.la-next.com>

In 2011, construction began on the replacement of the Central Utility Plant. The current structure will be replaced by a \$438 million facility which will provide greater efficiency and capability to meet the demands of LAX. <http://www.lawa.org>

In July 2011, the Long Beach Airport Parking Structure opened, which includes over 2,000 parking spaces. The parking structure came in \$2 million under budget. <http://www.lgb.org/>

In October 2011, the Long Beach Airport received two United State Department of Transportation grants totaling \$6.1 million. The funding will support two key airport improvements and an Airfield Geometry Study. <http://www.lgb.org/>

In 2011 Los Angeles World Airports completed construction of a new LEED Gold-certified Airfield Rescue and Fire Fighting (ARFF) Station, which was created to accommodate the size and number of emergency vehicles required to respond to emergencies involving a new large aircraft. <http://www.lawa.org>

2.3 • Ensure a reliable supply of clean and affordable energy by encouraging green energy production from public and private sources, building necessary transmission lines to access clean energy, improving network efficiency and reducing demand (e.g., through energy efficiency programs).

In July 2011, CSU Long Beach received the Best Practice Award for Lighting Design and Retrofit from the California Higher Education Energy Efficiency



Partnership. The university's "Campus-wide Lighting Retrofit" project was implemented over a period of two years and provided energy efficiency measures in 24 buildings—saving the campus more than 600,000 kilowatt hours of electricity use per year. <http://www.csulb.edu/>

In October 2011, SB 618 (Wolk) was signed into law by Governor Brown, which will enable developers to locate large-scale solar projects on certain agricultural lands that have limited agricultural value (subject to approval). <http://www.gov.ca.gov>

In December 2011, President Obama announced a \$4 billion investment to make buildings more energy efficient across the country as part of the "We Can't Wait" campaign. All federal agencies have been directed to make at least \$2 billion worth of energy efficiency upgrades over the next two months and 60 private companies, cities, hospitals, universities, and others have committed to another \$2 billion in energy efficiency to retrofit about 1.6 billion square feet of space. <http://www.whitehouse.gov>

In December 2011, UCLA Engineering entered into a 10-year partnership with the Korea Institute of Energy Research to collaborate on smart-grid research in an effort to create a smart grid on an international level. Currently, UCLA's Henry Samueli School of Engineering and Applied Science is working with the U.S. Department of Energy and the Los Angeles Department of Water & Power to build and test smart-grid technologies. <http://www.engineer.ucla.edu>

In October 2011, the City of Los Angeles launched the L.A. Commercial Build Performance Partnership—a program in collaboration with the Clinton Climate Initiative and the Cities Climate Leadership Group (C40)—which will help commercial property owners improve energy and water efficiencies. Through the program, building owners are able to secure free energy assessments and competitive financing to cover up to 100% of the costs associated with energy upgrades. <http://www.LACommercialBPP.com>

In 2011, the City of Lancaster engaged in a public-private partnership with SolarCity to install 2.5 megawatts of solar electric power at six city sites. The project is expected to offset an estimated 92 percent of the sites' total energy use and save the City more than \$7 million over the next 15 years. <http://www.cityoflancasterca.org>

In 2011, the City of Lancaster and SolarCity partnered to implement Solar Lancaster, which offers Antelope

Valley residents and businesses an affordable option to adopt solar power. Through SolarLease, a residential financing option, those interested in solar power can install the system with no up-front cost and pay only for the solar electricity produced each month through a power purchase agreement. <http://www.solarlanaster.org/>

In 2011, the City of Lancaster entered into a partnership with SolarCity and the Lancaster School District to install solar power at district and school sites throughout the area. <http://www.cityoflanasterca.org>

In 2011, the City of Lancaster established the Lancaster Power Authority, which provides a venue to maximize Lancaster's alternative energy potential and further the City's goal of becoming a "net-zero city." <http://www.cityoflanasterca.org>

In September 2011, LA County increased the rebate amount for residents to take advantage of energy upgrades. These rebates increase the Southern California Edison/ Southern California Gas Companies tiered rebate structure at both the Basic and Advanced levels and brings the total maximum combined utility and County rebate amount to \$8,000. <https://www.energyupgradeca.org>

In November 2011, non-residential commercial buildings in Los Angeles County gained access to a source of funding for energy upgrades through Energy Upgrade California. Under the program, buildings are able to use Property Assessed Clean Energy (or PACE) to finance (as part of their property tax bill) up to 100% of the installed cost of many building performance upgrades. https://www.commercial-pace.energyupgradeca.org/county/los_angeles/overview

In July 2011, the County of Los Angeles launched an Energy Champions program for community-based organizations to raise money through the promotion of residential energy upgrades to homeowners within the County of Los Angeles. An enrolled Energy Champion can earn up to \$500 for each homeowner they contact who completes an energy upgrade. https://energyupgradeca.org/county/los_angeles/energy_champions_home

In June 2011, Pasadena Water & Power piloted a new program randomly selecting about 25,000 residential electric customers to receive a personalized home energy report. The report offers personalized tips for increasing efficiency and shows how their energy



use compares to others in the area. <http://www.cityofpasadena.net/waterandpower/myenergy>

In 2011, construction for the Burbank Water and Power Sustainable Campus was nearing completion. The Sustainable Campus features improvements to capture and percolate stormwater, a Community Pocket Park, multiple buildings with LEED Platinum certification, Green Roofs covered with native plants, and more. <http://www.burbankwaterandpower.com>

In January 2011, LADWP announced that the City of Los Angeles reached its goal of providing 20% of the city's power from renewable energy sources in 2010. <http://www.ladwp.com/>

In September 2011, the Los Angeles Department of Water and Power (LADWP) reopened its popular Solar Incentive Rebate Program with a new, customer-friendly online application and information system. LADWP is planning to fund the program for a total of \$60 million in rebates for the fiscal year. <http://www.ladwp.com/solar>

In September 2011, LADWP released the draft environmental documents for a transmission line in the Tehachapi Mountain and Mojave Desert. Referred to as the Barren Ridge Renewable Transmission Project, the project would provide about 1,100 megawatts of additional capacity to access wind and solar resources, helping LADWP meet its 33% renewable portfolio standard by 2020. <http://www.ladwp.com/barrenridge>

In February 2011, Governor Brown signed into law SB X1 2 (Simitian) which requires that 33% of the state's electricity (provided by both public and investor-

owned utilities) must come from renewable sources by December 31, 2020. <http://www.gov.ca.gov>
In May 2011, Pasadena's largest city-owned solar photovoltaic project (a 564-kilowatt rooftop solar system at Windsor Reservoir) was connected to the city's electric grid. <http://www.cityofpasadena.net/waterandpower/>

2.4 • Ensure a reliable supply of clean and affordable water by implementing strategies such as urban water conservation, local stormwater capture, water recycling, and groundwater storage while also pursuing an environmentally-sound solution for the Sacramento Delta that protects Southern California water supplies.

In 2011, the Termino Avenue Storm Drain Project reached completion. The \$22.6 million project, begun in 2009, includes 12,190 feet of underground storm drain that will alleviate flooding in South East Long Beach. <http://lacounty.gov>

In January 2011, the University of La Verne announced the creation of a water research and technology center to promote Southern California's water industry and to apply its academic and resources in coordination with the Metropolitan Water District of Southern California. <http://laverne.edu/>

In 2011, the City of Malibu received several awards for Legacy Park—a \$35 million stormwater and urban runoff project completed in 2010, which captures up to 2.6 million gallons per day of stormwater and urban runoff for treatment and disinfection, which is then reused to water the park. The awards included: the 2011 award for Outstanding Stormwater Best Management Practice Implementation presented by the California Stormwater Quality Association; two 2011 Outstanding Sustainability Project Awards by the American Society of Civil Engineers; and the 2011 Project of the Year Award by the American Public Works Association's Southern California Chapter. <http://www.malibucity.org/>

In November 2011, the Los Angeles Gateway Authority—a collaboration of cities in the Gateway area—completed a \$10 million, federal stimulus-funded storm drain retrofit effort, which will prevent approximately 840,000 pounds of trash each year from entering the Los Angeles River. <http://www.gatewayirwmp.org/>

In August 2011, the City of Long Beach unveiled its "Laundry to Landscape" pilot program for residents to use water from their washing machines in backyard

irrigation efforts—i.e., watering trees, shrubs, and gardens. Four people in each city council district were eligible for free installations. <http://www.sustainablelb.com>

In January 2011, the City of Santa Monica Streets Division began installing pervious concrete on 15 gutters as part of the city's annual Alley Renewal Program. Pervious concrete allows rain water to percolate into the ground—thus reducing stormwater runoff and pollutants. <http://www.smgov.net/streets/alleyprogram>

In April 2011, LADWP broke ground on the construction of a new ultraviolet water treatment facility at the Los Angeles Aqueduct Filtration Plant, which will allow LADWP to meet new regulations for water quality. The new facility is expected to begin operating in early 2014. <http://www.ladwp.com/>

2.5 • Create a world-class ground transportation network by expanding and improving the quality and user appeal of mass transit and alternative modes (such as bike paths/lanes and community/company buses), improving highway and road capacity, and investing in goods movement infrastructure (such as truck lanes, near-dock intermodal rail yards, and grade-separated rail corridors).

In November 2011, the U.S. Department of Transportation awarded Metro \$2 million to improve transportation for veterans and others by providing more current and easier to use traffic and travel information. <http://www.metro.net/>

In July 2011, the City of Downey held a groundbreaking ceremony for its Nance Street Improvement Project, which includes a new water main, 100 additional public parking spaces, and the integration of MTA transit systems and DowneyLink. <http://www.downeyca.org/>

In 2011, the County of Los Angeles Department of Public Works implemented a new fixed-route community shuttle services in Athens, Florence-Firestone, Lennox, and Walnut Park to provide unincorporated area residents improved access to major destinations and connectivity to municipal transit operators like Metro, Foothill Transit, and major destinations such as employment locations, shopping centers, community centers, schools, public parks and recreation areas, and public libraries. <http://www.dpw.lacounty.gov/>

In April 2011, CSU Long Beach received Gold and Silver awards from the League of American Bicyclists for being a Bicycle Friendly Business and a Bicycle Friendly

University. <http://www.csulb.edu/>

In November 2011, the City of Los Angeles unveiled its first green-colored bike line—an effort to reduce collisions and promote bicycle safety. The lane is part of the City of Los Angeles master bicycle plan for a 1,680 mile lane network. <http://www.lacity.org/>

In December 2011, the Port of Long Beach was awarded \$17 million from the U.S. Department of Transportation (as part of its TIGER program) for the Port's rail realignment project. The total cost of the project is \$64.5 million and the project would improve the lead tracks to two Port of Long Beach rail yards—improving efficiency and reducing the environmental impact of goods movement. <http://www.polb.com/>

In November 2011, the City of Santa Monica and Metro opened a \$2 million, full-service “Bike Center,” which is the largest facility of its kind in the United States. The bike center is directly connected to major transit stops for Metro and the Santa Monica Big Blue Bus. <http://www.bikesantamonica.org>

In September 2011, the City of Covina approved the 2011 Bicycle Master Plan and the 2011 Downtown Covina Pedestrian and Bicycle Planning Study, which hope to provide a sustainable and active community within the city. <http://www.covina.ca.gov/>

In July 2011, the City of El Monte launched a Healthy El Monte Bike Program, which consisted of a series of events centered around bike safety, community events, and bike maintenance. <http://www.ci.el-monte.ca.us>

In November 2011, the U.S. Army Corps of Engineers and the Port of Long Beach reached an agreement on a dredging project in Marina del Rey, allowing the reduction of the project's carbon footprint through the elimination of truck trips and alternative disposal methods. The dredging project is part of the Long Beach Port's Middle Harbor Redevelopment Project, which will combine two aging shipping terminals to improve efficiency and environmental benefits in goods movement. <http://www.polb.com/>

In February 2011, the Burlington Northern Santa Fe Railway Company released its \$3.5 billion capital commitment program for 2011, which includes funding for positive train control, freight car and locomotive acquisitions, terminal improvements, and more. <http://www.bnsf.com/>

In 2011, construction began on the Passons Boulevard

underpass in the City of Pico Rivera, which includes construction of a railroad bridge, connector roads, a cul-de-sac, landscaping, and more. <http://www.pico-rivera.org/>

In 2011, the City of Pico Rivera completed its Pico Park Transit Hub project, which added 78 parking stalls, refurbished an existing street and parking lots, and provided security lighting. <http://www.pico-rivera.org/>

In 2011, the City of Pico Rivera completed both the Paramount Boulevard and Rosemead Boulevard Rehabilitation Projects, which included roadway pavement, ADA upgrades, median repairs, and traffic signal modifications. <http://www.pico-rivera.org/>

2.6 • Improve waste-handling capabilities by expanding recycling efforts, finding environmentally-friendly means of disposal for non-recyclables, and upgrading the region's sewage treatment system while reducing the waste stream to landfills by encouraging the use of locally-manufactured products that are recyclable, have long life cycles and use less packaging.

In April 2011, CSU Dominguez Hills partnered with All Green Electronic Recycling to bring an e-waste recycling roundup to the campus. <http://www.allgreenrecycling.com/upcoming-events/carson-ewaste-event>

In 2011, Grades of Green and the Sanitation Districts of Los Angeles County launched a Trash Free Lunch Challenge, which encourages students to reduce lunch-time trash and create better habits of reducing, reusing and recycling. The challenge's \$1,000 grand prize winner will be announced in mid-2012. Past challenges have already produced significant results; for example, in Manhattan Beach, five elementary schools reduced lunch trash by 84.2% and saved more than \$10,000 per year as a result. <http://www.gradesofgreen.org/trashchallenge>

In February 2011, CR&R Incorporated was awarded \$4.5 million from the California Energy Commission for its Municipal Solid Waste to Biomethane project which will process mixed waste from the City of Los Angeles to produce biogas, which will then be injected into the Sempra natural gas pipeline for use as a transportation fuel. <http://www.energy.ca.gov/drive/projects/ARV-10-052.html>

In June 2011, the state's electronic waste recycling

program reached one billion pounds of recycled electronics—or approximately 20 million televisions and computers that have not been put in landfills. The program has been in operation for six years. <http://www.calrecycle.ca.gov/>

In 2011, the City of Alhambra held its first “Eco Fest” event, which offers exhibits on green living, including: energy efficiency, green building design, and composting. In 2011, the city also implemented the nationwide Recyclebank program which enables residents to receive rewards for recycling. <http://www.cityofalhambra.org/>

In June 2011, the City of Santa Monica and Heal the Bay partnered on the creation of 500 new trash cans for the Santa Monica State Beach. The trash cans are wrapped in colorful artwork and also include tips on how to keep the beach clean. <http://www.sustainablem.org>

2.7 • Support public and private efforts to continuously improve wired and wireless communications networks in the County to match or exceed the highest global standards for speed and reliability.

In 2011, ONE Burbank was launched to the business community, with is a suite of Burbank water and Power fiber optic services to provide Burbank businesses with fast and reliable bandwidth. <http://www.burbankwaterandpower.com>

In December 2011, the California Public Utilities Commission approved \$770,000 of California Advanced Services Fund grants for the Los Angeles County Regional Broadband Consortium. Grant funds will enable the consortia program to reach more residents in promoting broadband access, adoption, and deployment. <http://www.cpuc.ca.gov/puc/>

LOS ANGELES COUNTY ECONOMIC DEVELOPMENT CORPORATION
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The LAEDC, the region's premier business leadership organization, is a private, non-profit organization established in 1981 under section 501(C) (3). our mission is to attract, retain, and grow business and jobs in Los Angeles County. Since 1996, the LAEDC has helped retain or create more than 175,000 jobs, providing \$8.5 billion in direct economic impact from salaries and \$145 million in annual tax revenue benefit to Los Angeles County. For more information, please visit www.laedc.org or call (888) 4-LAEDC-1.

The LAEDC would like to acknowledge and thank the Morgan Family Foundation, a private, family foundation focused on youth, education, the environment, and stewardship, for their generous support to develop and implement the L.A. County Strategic Plan for Economic Development.



Economic Development Strategy and Jobs Plan

Nov. 2011
SONOMA
COUNTY



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Introduction

The unemployment rate in Sonoma County is currently 9.4% and has exceeded 9% for over 35 months. Currently 23,900 people are jobless and many more are underemployed. Those seeking jobs are competing with a global workforce and automation for work, and the businesses that could and want to create those needed jobs face severe challenges, including a sometimes costly and uncertain regulatory process, an inability to secure needed financing, a shortage of appropriately trained workers, and reduced demand for local goods and services. These challenges continue to plague businesses and the county's residents as they seek gainful employment locally.

Economic vitality is key to the sustainability of a community and the County and its residents benefit from a greater quality of life when economic success and sustainability are achieved, resulting in less reliance on community, social and government services and less environmental strain. The Board of Supervisors, recognizing this and the imminent need to take action, identified Economic and Environmental Stewardship as one of the four focus areas in the November 2010 Strategic Plan and as part of the Board of Supervisors' 2011 Workplan, the creation and implementation of an economic development strategy for job creation/business retention, sustainability, and improvement of government perception within the business community, was identified as a main priority. As such, Supervisors Efren Carrillo and Mike McGuire were appointed to serve on an Economic Development Ad Hoc Committee to guide this effort. Through the Board's Ad Hoc Committee the Sonoma County Economic Development Board (EDB) was tasked with developing a comprehensive plan to provide direct assistance and services to the local business community.

Through the Innovation Action Council, executives and owners from the five key economic clusters (Professional Services, Manufacturing, Construction/Green Business, Sonoma Specialties (including wine, dairy, agriculture and tourism), and Health Care) were assembled in focus group sessions to identify their opportunities for economic and employment growth locally, and what would be needed to help achieve those opportunities. Three common themes emerged from the cluster sessions: the need to simplify the permit and regulatory environment; to improve the workforce for a changing economy; and to build more demand for Sonoma County products by coordinating and strengthening our strategic assets and branding efforts. The report from this process is contained in Appendix "A" to this document.

The cluster reports were presented at the EDB's Economic Summit in June 2011. Nearly 400 people from business, government, education and community-based organizations attended the event. The attendees were asked to provide their ideas to improve climate for jobs and the economy. Interestingly, the principal themes that emerged from the attendees at this event were very similar to those resulting from the cluster focus group sessions, including the need to improve regulatory processes, improve education and workforce training, and to encourage collaboration among entities in the county. The report from this conference is attached as Appendix "B" to this document.

With guidance from the Ad Hoc Committee, and based on a data-driven approach incorporating input from multiple community outreach events as well as meetings with business, community, and government leaders, the EDB proposes an enhancement of services and resources within the County organization designed to specifically foster economic development.

This Plan focuses on increasing capacity, building demand and driving innovation. It is not the government's role to create jobs; this is the role of the private sector. However, the EDB is uniquely situated to support our local business community and thus contribute to the creation of jobs in Sonoma County and a sustainable economic environment. The EDB can help create this environment by working with, and providing support services to, those people on the front line of job creation, by helping remove impediments to business growth, and by working to create an economic climate where businesses can prosper and individuals can find and retain jobs.

The Plan laid out here can only be accomplished through a collaborative approach. The proposed initiatives will require partnership among many entities, ranging from business to government to education and other stakeholders, and those already performing related efforts within the county. The Plan, designed as a five-year action plan, also includes metrics for progress and evaluation of program impact, as well as a proposed implementation schedule. Some of the specifics contained within are coordinated with the current efforts of the development of a county-wide Comprehensive Economic Development Strategy (CEDS), to allow for grant applications to the Economic Development Administration. As such, this Plan should be reviewed annually to ensure relevance with current efforts and the near future needs of the County. The Plan should be comprehensively updated every five years to ensure its continued coordination with the CEDS.

Finally, many thanks are due to all who gave generously of their time and expertise, and who collaborated in various ways to produce this plan. These include the appointees to the Innovation Action Council, the Economic Development Board appointees, the 100 or more executives and owners who participated in the cluster focus groups, the 400 attendees at the June Economic Summit, staffs from chambers, cities, the County, and many other entities, as well as the team from the California Association for Local Economic Development (CALED). Additionally, the Morgan Family Foundation provided seed funding to the cluster focus group effort, and the Board of Supervisors provided support for the entire plan development.

Summary of Strategic Objectives and Action Steps

1	Improve Regulatory Compliance Assistance	<ul style="list-style-type: none"> • Appoint a Business Development and Regulatory Assistance Liaison within the EDB to assist businesses through the regulatory processes and resolve obstacles to business development • Staff a Customer Service Ombudsman position within PRMD dedicated solely to resolving permitting issues for both homeowners and business customers • Form a multi-agency task force to look for opportunities to simplify and streamline regulatory processes across jurisdictions
2	Deliver Business Development & Outreach Services	<ul style="list-style-type: none"> • Staff a Business Retention and Expansion Program • Develop a county-wide working group of public and non-profit agencies to organize county-wide efforts in retaining businesses
3	Create a Workforce Development Strategy	<ul style="list-style-type: none"> • Develop an employer-driven, agency-inclusive workforce development plan focused on the current and future needs of county employers
4	Encourage Business Cluster Development	<ul style="list-style-type: none"> • Staff a Cluster Development Program to facilitate expansion of targeted industry sectors
5	Develop Financial Resources Program	<ul style="list-style-type: none"> • Develop a financial resources “toolbox” for local businesses, including development incentives and greater access to capital, and explore new funding options • Identify and apply for state and federal financial incentives in support of the local business community
6	Facilitate Broadband Deployment in Rural Parts of the County	<ul style="list-style-type: none"> • Develop a strategic plan for broadband deployment in rural parts of the county, and encourage new efforts around “middle mile” and “last mile” deployment
7	Engage in Strategic Asset Development and Branding	<ul style="list-style-type: none"> • Take inventory of strategic assets and their producers, develop strategies to maximize value and image, and help coordinate marketing activities of the major industries and employers to provide a unified image of Sonoma County
8	Enhance Coordinated Economic Development Resources within the County	<ul style="list-style-type: none"> • Form an Inter-Departmental Economic Development Strategy Committee to coordinate services and leverage resources among key departments involved in economic development activities • Partner with and help coordinate county-wide economic development activities including local cities, chambers, BEST, and other organizations, to reduce redundancy and increase efficiency of related services

Current County Government Services to Business

The County currently works to serve the business community in a variety of ways, but with nearly 10% of our residents seeking work, more can, and must, be done. As part of the previously described engagement process, it was identified that a number of other County departments provide services to the business community, in addition to those provided by the EDB, and these current functions are important tools to leverage as we embark on a more aggressive assistance plan. Examples of current programs include the General Services Department, with the Local Preferences Policy and Sonoma County Energy Independence Program, the Transportation and Public Works Department with the Airport expansion project, the Agricultural Commissioner and Farm Advisors with agricultural impacts and food systems programs, just to name a few. A few departments were identified as providing more active and frequent services to the business community and are valuable partners to the EDB and discussed in a number of areas of this Plan. Included here is a summary of a few of the County departments' roles and impacts related to economic development.

Redevelopment/Community Development Commission:

The Sonoma County Community Development Commission's (CDC) mission is to promote decent and affordable housing, revitalize communities, and support services that increase economic stability for County residents. In working towards these goals, the CDC's Community Development Division, Housing Authority, and Redevelopment Agency provide direct financial assistance for a broad range of activities that impact the development of a vibrant local economy, both through direct economic development activities, as well as capital development activities that help to provide a foundation and incentive for private investment.

Direct economic development programs provided by the Redevelopment Agency and Community Development Division include:

- Below-market rate loans to businesses to make improvements to commercial properties in the three Redevelopment Projects Areas of Russian River, Roseland, and Sonoma Valley Springs, with total available funding of over 3 million dollars
- Grant funding for public entities to develop conference and other meeting facilities in most areas of the County
- Tourism and destination branding and marketing initiatives in the Redevelopment Project Areas
- Small business technical assistance in the Russian River and Roseland areas, serving total of 24 business with 65 individual sessions, and providing 7 group business seminars, in this current fiscal year alone
- Funding of a full-time Economic Development Coordinator position in EDB to serve the Russian River Area, and funding similar staffing in the Springs Project Area, where the Sonoma Valley Economic Development Partnership, comprised of the Redevelopment Agency, City of Sonoma, and Sonoma Valley Chamber of Commerce, provides business counseling services for region.

The Redevelopment Agency also directly assists in economic development by acquiring underutilized properties in the three Project Areas and preparing them for commercial or mixed-use development by private entities, thereby partnering with and leveraging private investment from such businesses, by completing needed environmental clean-up work, as well as on-site infrastructure and public improvements.

The CDC also provides below-market rate loans to private entities, and grant funding for public entities, to complete projects that indirectly support development of the local economy by providing the infrastructure upon which businesses can build. Such projects include improvements to roads and construction of sidewalks in commercial corridors, constructing and upgrading water and sewer lines, and affordable housing development and preservation to expand the quantity and quality of the housing stock that is available for the local workforce. Business establishment, development and expansion are dependent on these prerequisites.

Workforce Investment Board:

The Sonoma County Workforce Investment Board (WIB), administered by the Sonoma County Human Services Department, is a group of business and community leaders, appointed by the Board of Supervisors, working to ensure two things: that the residents of Sonoma County have the skills, training, and education to achieve their career goals, and that Sonoma County employers are able to hire, develop, and retain outstanding employees.

In regard to business services and economic development, the WIB oversees Job Link, Sonoma County's one-stop career center, including the following free business services:

- A Business Representative as a direct liaison with the business community, who identifies current job opportunities and matches these openings with active job seekers, makes referrals, and other specific hiring efforts;
- Information and access the Job Link's Virtual One Stop (VOS) system which is an internet-based system for employers to post job openings, search for job candidates, rate candidates for qualifications, and obtain local labor market information;
- Hiring events and job fairs at the Job Link office, including a computer lab for on-line applications and interview space;
- Workforce Reduction Services for employers and their employees during a layoff or business closure. The workforce reduction team provides immediate presentations on-site at impacted businesses to provide information about services at Job Link, in order to transition employees into subsequent employment opportunities;
- Referrals to business services and information, such as the Sonoma County Employer Advisory Council, who provide information on topics such as labor law, personnel issues, payroll tax, unemployment and disability insurance, tax incentives and more.

Permit and Resource Management Department:

Facilitating economic development through superior customer service and one-stop permitting was the main reason that Permit and Resources Management Department (PRMD) was created in 1995. At the time, PRMD's one-stop permit center was relatively unique, especially in the

comparatively fragmented regulatory environment of a California county. While customers clearly believe that today's permit center is a substantial improvement over the pre-PRMD days, the permitting process continues to be challenging for homeowners and business alike.

This comes as no surprise since virtually any discussion of economic development issues (regardless of locale) notes that businesses face real challenges in navigating a complex regulatory and permitting environment. However, the major drivers in the regulatory environment are largely outside of County government's control. These include state and federal requirements (e.g., water and energy conservation, handicap accessibility, environmental review requirements, endangered species protection, storm water management, etc.) and a local community here in Sonoma County that is very engaged with development issues and often expects highly regulated development as a result.

PRMD's role, then, is to simultaneously respond to these regulatory drivers (particularly as expressed through Board policy) while helping guide property owners and businesses to a successful outcome. This is a challenging mission and the department must constantly look for ways to improve services and meet the needs of customers and community more effectively and efficiently.

Department of Health Services:

In recognition of the connection between the health of a community and economic vitality, the Department of Health Services is a strong supporter of local business and economic opportunity. This support is provided through partnerships and programs throughout the county and benefits all sectors of business.

This connection is exemplified in Health Action, the Department convened council with representation from all sectors, including business. Among the council's many successes, Health Action is responsible, through a partnership with the Sonoma County Economic Development Board, for the *iWORKwell Healthy Business Recognition Program*. *iWORKwell* is a voluntary certification program that recognizes employers for developing and implementing exceptional employee wellness programs, and is aimed at helping establish a culture of wellness in the workplace throughout Sonoma County. Employers are awarded Bronze, Silver or Gold classification based on the breadth and depth of their employee wellness initiatives – 11 businesses have been recognized to date. In addition, the Department, through Health Action, has launched a *Food System Alliance*. The *Food System Alliance* is a local coalition working together to create a sustainable local food system where local growers are economically viable and consumers have access to healthy food.

The Department also supports local food facilities through the Recognition of Excellence in Food Safety Seal program that highlights and recognizes restaurants which achieve quality through high safety standards. In addition, the Department works continually with the local dairy industry through the Milk and Dairy program – one of the few counties in the State with a local program – which enables a streamlined process for grading and inspection services.

EDB's Current Role:

The EDB develops programs designed to support local job creation and the local economy in the following ways:

- Promote Sonoma County as an attractive place to do business
- Foster job growth
- Provide local businesses with tools to help them prosper
- Promote sound environmental business practices
- Maintain dialogue with the business community to anticipate and resolve emerging issues
- Identify and support those business clusters that are critical to maintaining a sound economy
- Develop pilot programs in emerging areas, and if successful, spin-off the programs to others for ongoing implementation

Through the website and various EDB-related events, the EDB reaches many people both inside and outside of Sonoma County. Around 50% of visitors to the EDB website are from outside the county, making the website an online resource for investors, companies, and individuals looking to relocate to Sonoma County. More than 5,000 people attend various EDB events throughout the year. A few of these events include State of the County, Spirit of Sonoma County, Economic Briefing Breakfasts, Business Environmental Alliance Best Practice Awards, and Business Hall of Fame.

Specific programs the EDB staffs include:

- Innovation Action Council, which takes a long-range view of ways to improve the climate for business and jobs
- Business Appreciation Week, which will launch in the Spring of 2012 and is designed to bring business, government, and education together
- Visitor Centers Contracts
- Film Program
- Green Business Program
- Restaurant Week
- Educational Events to Bring the Business Community Together

Objective 1 – Provide Regulatory Compliance & Sustainability Assistance

Introduction:

Compliance with environmental regulations and the overall cost and uncertainty of the permitting process have been identified as a major obstacle to economic vitality. The multiplicity of jurisdictions adds to the difficulty of determining where streamlining can take place to avoid costly delays in the approval process.

Action Steps:

- Establish a Business Development and Regulatory Assistance Liaison position as a pilot project in the EDB, to provide services to new and existing business customers related to navigating the multi-agency regulatory environment, identifying needs and trouble-shooting obstacles to business establishment and growth.
- Enhance guidance and education to businesses regarding permits and regulatory compliance, possibly employing “permit process workshops” to help community groups and businesses understand the role of permitting and regulatory processes.
- Provide education and information on various government and utility incentives and programs related to “green” business construction, retrofit and related sustainable efforts prior to the initiation of building. For instance, the Sonoma County Energy Independence Program (SCEIP) reports they have served 41 local commercial properties, with a total disbursement of \$7.3 million, which has had the effect of helping create/retain jobs locally while helping companies be more “green”. Similarly, the Water Agency’s sanitation districts have provided \$40,767 in rebates and \$641,645 in installations through the High Efficiency Direct Install Program (HEFDIP) to commercial properties and these and similar programs could be marketed and expanded.
- Explore the feasibility and usefulness of developing a building site inventory with “shovel-ready” status and pending needs, potentially county-wide.
- Staff a Customer Service Ombudsman position within PRMD to provide service to both residential and business customers, with the sole purpose of aiding customers through the permit process, answering questions, and resolving issues. 2,215 customers are serviced, on average, each month at PRMD’s front counter. Providing a dedicated customer service trouble-shooting utility will provide a great benefit to a large number of customers who may seek enhanced assistance.
- The Innovation Action Council, along with the new Business Development and Regulatory Assistance Liaison, will form a short-term, multi-agency task force during the first six months of 2012 to examine current cross-jurisdictional regulatory processes, identify problems, inventory best practices, and develop an action plan to improve processes and reduce duplication where possible.
- The task force will be comprised of the local cities as well as business group leaders. The group will also be asked to develop a recommended action plan to simplify and enhance coordination of “green” incentive programs and services provided by utilities and public agencies to encourage increased utilization of these programs.

- Explore the benefit and cost of an updated permit tracking and workload management software to improve accuracy, use of county resources, and customer expectations and experience.
- Develop metrics to measure the successful of the increased staffing, including the number of customer concerns resolved, process improvements resulting from troubleshooting obstacles, and other outcomes of increased business and regulatory assistance services.

Objective 2 – Deliver Business Development & Outreach Services

Introduction:

Helping local companies stay and grow in Sonoma County is of paramount importance in this challenging economic climate. Many businesses do not know who to turn to for help in maintaining their operations, ways to work with local governments to address problems, ways to upgrade their skills, and other issues hindering growth and development. The EDB proposes to embark on an active outreach program, in partnership with other groups, to engage major employers, commercial real estate firms, business park owners, small businesses, ag and artisanal food firms, and others in an effort to determine what obstacles exist to business' ability to remain and grow in Sonoma County, and what may be within the powers of local government to assist in retention and expansion. The EDB will focus its efforts in the unincorporated areas, and perform business outreach and retention services by employing a Business Retention and Development Specialist. By pursuing this new active role and program, the EDB hopes to identify hindrances in growth and development to then be addressed where possible, with the result of improving the business climate, retaining current businesses, and helping these businesses to grow and making the county more attractive for outside businesses, resulting in job creation and a sustainable economy.

Action Steps:

- Staff a Business Retention and Development Specialist position, to perform an estimated 200 business visits a year in the unincorporated area as well as coordinating related functions with other local partners.
- Collaborate with the CDC in their efforts targeted at the specific Redevelopment Areas within the unincorporated county, which includes business growth and retention and development services, to ensure consistency and identify ways to work together to provide even greater services with pooled resources. The CDC currently performs similar functions in the Russian River and Roseland areas, serving a total of 24 businesses with 65 individual sessions, and providing 7 group business seminars, in this current fiscal year alone. The CDC has spent approximately \$136,000 in a variety of services to small businesses, including assessments, workshops and consultations.
- Help coordinate efforts among the local cities, chambers, Redevelopment Agency, and the BEST program, currently performing similar functions, to create a business development and retention strategy and monitoring capabilities, including scheduling and tracking visits to reduce duplication and ensure businesses are receiving outreach efforts.
- Develop metrics to measure trends and issues for businesses, including visit reporting requirements and business surveys, to identify obstacles and common themes, and explore how to address these issues in a consistent manner county-wide.

Objective 3 – Develop an Employer-Driven, Coordinated Workforce Development Strategy

Introduction:

The competition for work has gone global, with 400 million new workers entering the workforce around the world in the last five years. These workers are increasingly able to compete with Sonoma County workers, yet the county currently has no unified, employer-driven, agency-inclusive strategy to align workforce development programs with emerging employer needs and opportunities. The EDB will facilitate the development of such a strategy with the Workforce Investment Board (WIB) and the BEST program, in partnership with other major allies and stakeholders including the Sonoma County Office of Education, Santa Rosa Junior College, Sonoma State University, Empire College, other community-based organizations, as well as representatives from the five key business clusters.

Action Steps:

- Coordinate inclusion of the business cluster groups into a coordinating committee (of the WIB) on workforce development to identify employer needs, match identified needs with current programs and determine gaps, and identify best practices and new programs for implementation.
- Develop an employer-driven, agency-inclusive workforce development plan focused on the current and future needs of Sonoma County businesses, by bringing all stakeholders and providers together to share current efforts and future plans, to create a cohesive, efficient plan, including developing roles and responsibilities for each partner involved in the plan.
- Develop metrics for ongoing measurement and assessment of the plan outcomes, including hiring success of local job seekers to local businesses, and business feedback on workforce availability.
- Investigate the development of a county-wide “Business Education Roundtable” with pods in each city/chamber, to encourage communication and collaboration between local businesses and educators.
- Deliver the workforce and development plan strategy at the EDB’s June 2012 Economic Summit.

Objective 4 – Encourage Business Cluster Development

Introduction:

While this Plan embraces implementation of the top three recommendations of the five clusters – workforce development, regulatory assistance, and coordinated marketing and branding – the EDB also proposes to further investigate opportunities to develop programs designed to strengthen the individual clusters, as these clusters have the greatest identified potential to continue and advance the county’s economy and create job and economic growth. These clusters are: Professional Services, Manufacturing, Construction/Green Business, Sonoma Specialties (including wine, dairy, food, agriculture and tourism), and Health Care.

Action Steps:

- Staff a Cluster Development Program with an Economic Development Specialist position to perform these Action Steps.
- Explore endeavors to increase awareness and benefit of purchasing locally produced foods and other products, and forge cooperative relationships with Go Local, the Regional Food Systems Network, and others promoting import substitution programs.
- Work in partnership with local educational institutions, the WIB, trade groups, and the BEST program to provide educational programs and workforce development specific to the needs in each of the clusters.
- Explore development of a business networking group for small technology-based firms, and for other clusters where deemed effective.
- Continue promotion of the local tourism industry with support of the Sonoma County Tourism Bureau, local visitor centers and community events, and target promotion and marketing of the clusters.
- Provide clusters with key information on emerging trends, best practices pursued by similar clusters in other areas, identify emerging market opportunities and provide information and assistance on developing these new markets.
- Facilitate the acquisition of federal funding for local infrastructure projects and improvements through the US Economic Development Administration’s CEDS program in relation to the clusters.
- Coordinate the CEDS effort with the CDC, which has spent \$12,625,956 on infrastructure projects in the Redevelopment Areas.
- Develop metrics to measure success in cluster development, including increased consumerism in each cluster area, new markets entered, increased tourism, better developed workforce, and increased local markets.

Objective 5 – Develop a Financial Resources Program

Introduction:

Access to capital is essential for business growth and job creation. Currently, many businesses report poor access to loans and a lack of other possible financing as an obstacle to success and expansion. The EDB will assemble information from existing programs and sources, while searching for innovative new tools to improve funding resources and work with various financial services providers to better communicate available options to businesses. Programs to encourage microloans will be explored, in partnership with other community-based organizations. Business incentives that facilitate job creation and business relocation will also be explored, in partnership with commercial real estate brokers, the BEST program, cities, chambers and other stakeholders.

Action Steps:

- Review current programs and resources, identify gaps and obstacles in resources to local businesses, and explore ways to expand financial opportunities and develop new programs and resources.
- Review local, state, and federal financial incentives in support of the local business community and explore potential for additional incentives and resources.
- Coordinate with the CDC regarding available development funding, including façade improvement and low interest commercial rehabilitation loan programs in which the CDC has provided a total of \$3,087,500 in loan funds.
- Research additional funding opportunities available through CDC-specific programs, including increased use of the CDC’s Community Development Block Grant (CDBG) program for microenterprise assistance and development.
- Investigate the feasibility and, if appropriate, of establishing Sonoma County as an Enterprise Zone.
- Develop and maintain a database of local, state and federal financial incentives and funding options via an upgrade to the EDB website, and maintain communications with local business development/assistance partners regarding current and emerging funding and incentive opportunities.

Objective 6 – Facilitate Broadband Development in Rural Parts of the County

Introduction:

Access to broadband is becoming increasingly important to rural areas of the county, particularly for businesses such as hospitality, wine, agriculture, food processing and professional services. State funding has become available for consortia to participate in consortiums to develop three-year plans for broadband deployment (training, promotion, and adoption) and there soon may be funds available for “middle mile” and “last mile” deployment. The County has joined with the Upstate California Connect Consortium (UCCC) in their planning efforts, and should position itself to seek funds for a three-year plan for last mile broadband deployment locally, as well as be prepared for funds that may arise for further service. Extending broadband services into underserved areas would greatly benefit the current population of tourist destination wineries, creative professionals, and others, and provide opportunities as infrastructure needed for economic development is made available.

Action Steps:

- Create a countywide broadband planning and deployment committee to help with grant application development and project review, outreach, and preparedness regardless if funds are awarded to the UCCC.
- Support and facilitate the preparation of data and partnerships for grant application and success, as further partnerships and funding opportunities are made available.

Objective 7 – Facilitate Strategic Asset and Branding Coordination

Introduction:

One of the strongest recommendations arising from the Innovation Action Council’s investigations was the need for building demand for local products and services by better coordinating the various branding and identity programs throughout the county and various industry groups. Cluster members from all five clusters felt the need to enhance the collective image and branding for Sonoma County. Building increased awareness and demand for Sonoma County products and services will require identification of our key strategic assets, new coordination among sectors and clusters, the provision of information and education to businesses on current tools and outlets, and enhancing the ability to introduce products and services to new markets. The Innovation Action Council will form an action group in a collaborative effort to develop an effective identity for the County, while maintaining and further developing the “sub” brands specific to niche regions and industries in the county which have already been established.

Action Steps:

- Form an action group to inventory of the county’s strategic assets, current branding, marketing and outreach efforts and tools, study model programs/best practices in other locations, and examine current success, and areas for improvement. The action group should include public relations managers and marketing and communications professionals from Sonoma County’s leading firms and outreach organizations, representatives from each of the major business clusters, and other partners.
- Coordinate with the County Redevelopment Areas, tourism programs, cities, and trade groups to build upon current “sub” and “niche” branding and marketing efforts. For example, the CDC has spent \$463,305 in marketing assessment and various tourism marketing efforts in the three County Redevelopment Areas to date.
- Explore the feasibility and interest in “conjunctive labeling” and other ways to communicate “Sonoma County” to larger audiences and new markets.
- Facilitate more focused direction in marketing and branding of the clusters and current “sub” brands and niches within the county, including coordinating effected groups, and providing information on current resources, established partners and tools, such as the Sonoma County Tourism Bureau, the chambers, the Sonoma County Connections website, and others.
- Develop metrics to measure effectiveness of current processes and new endeavors including statistical analysis of advertising effectiveness, demographic changes, market changes, and tourism trends.
- If need and interest is determined, form an ongoing group of interested stakeholders to continually monitor, review and improve upon marketing and coordination efforts.

Objective 8 – Enhance Coordinated Economic Development Resources within the County

Introduction:

Almost every County department serves the business community in some capacity. The following are among the most active and frequently engaged with business: PRMD, WIB, Environmental Health, Redevelopment, Agricultural Commissioner, University of California Cooperative Extension (UCCE), and the EDB. Presently, there is no coordinating mechanism among these departments to share expertise, efforts, address common issues, and coordinate efforts efficiently. It would be beneficial to bring these departments together to enhance services provided to businesses, share information, and disseminate information to the business community as well. Additionally, these efforts should be actively coordinated with other leaders in economic development, such as the local cities, chambers, and the BEST program. For example, the CDC has spent approximately \$207,560 in economic development coordination services in the Redevelopment Areas.

Action Steps:

- Form an Inter-Departmental Economic Development Strategy Committee of departments with a frequent and active relationship with the business community and arrange regular committee meetings to review issues, understand trends, anticipate problems, coordinate similar efforts, and build upon cross-agency impact efforts.
- Develop a communications program newsletter to the business community to update on County services as well as pertinent trend data, such as hiring and demographics data from the WIB. Space will also be provided for local cities and key utilities to provide updates as well.
- The EDB will also help coordinate regular meetings among the local city economic development leaders, educational institutions, workforce development agencies, and the BEST program to encourage engagement, coordination, alignment of goals, roles and responsibilities, and efficient processes.

Measuring Performance

There are a number of indicators that can be used to measure the County's progress in achieving its economic development objectives. Tracking these indicators quarterly or annually would provide insight into the efficacy of programs and identify areas for concentration of efforts. The following are a few of the indicators that will be used to measure success of the County's efforts:

- Employment by cluster and major sector
- Number of lodging rooms, lodging occupancy rates and transient occupancy tax revenue
- Number of fictitious business name certificates filed and associated revenue as an indicator of new businesses formed
- Number and value of commercial and industrial building permits
- Office, retail and industrial vacancy and lease rates
- Overall County revenues to include property tax
- Business Report Card – An annual business survey that provides feedback on how County operations and other factors are affecting the business climate
- Distribution of Income

Using these and other indicators, the County will re-evaluate its priorities in light of changing conditions and opportunities. Over the next three to five years, economic conditions will change and new opportunities may and will arise. While the overall objectives of the economic development strategy may not change substantially in the coming years, the priorities probably will.

Implementation Schedule

1. Immediate/Short Term—January 2012 through June 2012

- Finalize plan and obtain Board approval
- Begin recruitment of the pilot program Business Development and Regulatory Assistance Liaison
- Recruit/hire Business Retention and Development Specialist and Economic Development Specialist (Cluster Development Program)
- Finalize CEDS strategy and gain approval from the US Dept of Commerce
- Launch three task forces (permits, workforces strategy, and strategic asset branding coordination through Innovation Action Council)
- Continue support of local preference programs
- Coordinate/engage County government services to business; launch communications program to business community
- Prepare and hold economic summit in June 2012 with updates and action plans from the Innovation Action Council task forces, as well as other programs mentioned herein (the business financing program, the business retention program, cluster development program, broadband strategic plan development, and regulatory assistance).

2. July 2012-June 2013

- Implement task force action plans with partners
- Review/ update CEDS document
- Progress reports and new approaches related to:
 - business retention program
 - local preference
 - County services outreach to business
 - Cluster development program
 - Local financing resources/options
 - Business retention program and efforts
 - Broadband development
- Hold June 2013 Economic Summit with progress reports/new directions/community feedback.

3. Years 3-5

- Continue with progress reports/course corrections/continuous improvement
- Develop new programs to meet emerging needs in response to various feedback mechanisms
- Begin major review/update of CEDS economic strategy, during year four, for completion and adoption during year five.

San Luis Obispo County

CLUSTERS OF OPPORTUNITY ECONOMIC STRATEGY

Economic Vitality Corporation of
San Luis Obispo County

November 2010



Version 1.0

This summary document prepared by:



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EXECUTIVE SUMMARY

For the first time, more than 100 of San Luis Obispo County’s business leaders have agreed to work together—and with partners in government, education, and community sectors—to implement a shared agenda for economic vitality and community well-being. This document marks the launch of the San Luis Obispo Clusters of Opportunity Economic Strategy.

Clusters of opportunity provide the logical starting point for an Economic Strategy for the County. Five industry clusters have been responsible for most of the County's new economic vitality since the 1990s. They are: Building Design and Construction, Health Services, Knowledge and Innovation Services, Specialized Manufacturing, and "Uniquely SLO County" (a combination of agriculture, wine, recreation, accommodation, restaurants, and other specialty products and experiences).

Clusters of opportunity, if innovative, competitive, and healthy, will drive the "vital cycle" needed for economic prosperity and community quality of life that benefits residents across San Luis Obispo County. They generate jobs and wages for residents and buy products and services from local suppliers that have a positive ripple effect to create benefits for every community in the County. They generate tax revenues that fuel local public services and support the outstanding quality of life enjoyed by local residents.

Business leaders convened in cluster groups to identify the most promising opportunities for their industries to prosper in San Luis Obispo County. They identified a wide range of opportunities—even in the face of a global recession—that could drive their prosperity in the years ahead, including emerging markets for their products and services, new innovations that will enable them to stay competitive, and changes in public policy that could spur new vitality in their industries.

To capitalize on these opportunities, business leaders created cluster action plans, including specific strategies and measurable outcomes, as well as specific actions to take immediately. Virtually all of these leaders have signed on to be "champions" of the action plans, which together constitute the Clusters of Opportunity Economic Strategy for San Luis Obispo County.

The Action Plans launch teams and lay out specific steps for implementing a total of twenty strategies—the top three to five priorities per cluster. The specific Cluster Action Plans are included at the end of this document. The San Luis Obispo Economic Vitality Corporation and its partners will provide the implementation support to the teams.



Economic Vitality Corporation
of San Luis Obispo County

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501(c)(3) Non-profit

November 1, 2010

Re: Economic Strategy for San Luis Obispo County

The Economic Vitality Corporation (EVC) is pleased to announce the completion of an Economic Strategy for San Luis Obispo County which provides an assessment of, and strategy for, our local economy for long-term economic prosperity

Formed over one year ago, this project represents the first-ever public/private partnership in San Luis Obispo County to provide a road map for greater economic vitality in our region. A comprehensive strategy has been created by COLLABORATIVE ECONOMICS, Inc. by analyzing the results of an industry cluster assessment with input from more than 100 local business leaders. As a regional economic development organization, the EVC is managing this project and it is made possible through public and private project sponsors. Now we must all implement the strategy.

The goal of the project is to create long-term prosperity and job growth throughout the county while improving the well-being of our communities through a strategy that addresses social, environmental and economic considerations. The project cluster assessment identifies the strengths and weaknesses of our local economy. As a result, five industry clusters have been targeted as the source for nearly 90 percent of local jobs since 1995. The strategy frames opportunities and requirements for more prosperity.

Call to Action – Your help is needed. The next phase of this effort is to move from planning to implementation, and your time and resources are needed to help implement the strategy. We will unleash the same enthusiasm, creativity and ingenuity that have formed this strategy into actionable items for policy makers and private sector entrepreneurs. Please learn more about the project from the EVC website (<http://sloevc.org/strategy.php>) and contact us as to how your talents can be integrated. One thing is clear – every business leader can contribute and every county resident and company will benefit, from the increased activity in these vibrant clusters within our county. If you have questions or suggestions, please contact Mike Manchak at 805-788-2013 or mmanchak@sloevc.org.

Our special thanks to the project sponsors, committee members, business leader volunteers as well as the EVC sponsors and Board of Directors for making this project a reality.

Sincerely,

Michael E. Manchak
President & CEO
Economic Vitality Corporation

Sincerely,

Candace L. Markwith
Board Chair, Economic Vitality Corporation
CEO, Sierra Vista Regional Medical Center

**PROJECT
STEERING
COMMITTEE**

- Frank Mechem, Chairman
Board of Supervisors
- Adam Hill, Vice-Chairman
Board of Supervisors
- Candy Markwith
EVC Board Chair
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- Dave Juhnke
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- Dana Lilley

Keeping SLO County Business Vital

Economic Strategy Project

A special thanks to the following project sponsors



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LETTERS OF SUPPORT

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California State Senate

SENATOR
SAM BLAKESLEE, PH.D.
FIFTEENTH SENATE DISTRICT



Dear Members of the Economic Strategy Committee,

President John F Kennedy once said "a rising tide lifts all boats." Likewise, a growing and vibrant economy helps everyone. I am excited that local leaders from business and government of many different political persuasions have come together to unite behind the creation of a report describing an integrated economic strategy for San Luis Obispo County. The Economic Strategy Report will offer ways to create more head-of-household jobs, foster more businesses that are compatible to our county, and create ways to develop more tax rolls for our local government to pay for vital infrastructure and services.

I believe it is good that government and businesses are collaborating in such a positive way on a project to increase jobs and grow the local economy. The project goes beyond only helping the economy and businesses grow; it also looks at ways to improve the wellbeing of our local communities. The project will benefit all county residents and communities.

I am encouraged by the prospects for the use of the information gathered for the creation of this strategy. This project is the first step in learning about our local economy and determining how we should move forward as a community. I congratulate the more than 100 participants who contributed their time and money to bring this idea to fruition.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sam Blakeslee".

Senator Sam Blakeslee

KEVIN McCARTHY
22ND DISTRICT, CALIFORNIA

CHIEF DEPUTY
REPUBLICAN WHIP

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www.kevinmccarthy.house.gov

November 3, 2010

The Honorable Frank Mecham
Chairman
Economic Strategy Project of San Luis Obispo County
1055 Monterey Street, Suite D430
San Luis Obispo, California 93408

Dear Chairman Mecham:

I write to commend the residents, local entrepreneurs, government officials, the Economic Vitality Corporation of San Luis Obispo (EVC), and other stakeholders for laying out a vision for the future of San Luis Obispo County's economic prosperity in the "San Luis Obispo Clusters of Opportunity Economic Strategy."

As you know, our state and county are facing record unemployment, massive debt, and many businesses either closing up shop or leaving California for more business-friendly environments. New innovative ideas are needed to ensure the economic vitality of San Luis Obispo and job creation. Our communities along the central coast are home to some of the most promising, innovative and leading companies in the region and state. It is important that we draw on their expertise and business acumen to help ensure a bright future for San Luis Obispo County, which is why I am glad over 100 local business leaders contributed to developing the Strategy. The five clusters laid out in the Strategy play an important role in our county and it is important that these areas continue to thrive to benefit our local communities.

I look forward to continuing to work with you, other government officials, local business leaders, the EVC, and residents of San Luis Obispo County on these important issues and creating jobs, and wish all parties the best of luck with the "San Luis Obispo Clusters of Opportunity Economic Strategy."

Sincerely,

KEVIN McCARTHY
Member of Congress

cc: Mr. Michael Manchak
President and CEO
Economic Vitality Corporation of San Luis Obispo
P.O. Box 5257
San Luis Obispo, CA 93403

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COMMITTEE ON
ENERGY AND COMMERCE

COMMITTEE ON
NATURAL RESOURCES



Congress of the United States
House of Representatives

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2675 NORTH VENTURA ROAD, SUITE 105
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November 3, 2010

Mr. Michael Manchak
President/CEO
Economic Vitality Corporation of San Luis Obispo County
P.O. Box 5257
San Luis Obispo, CA 93403

Dear Mr. Manchak:

Congratulations on the completion of the San Luis Obispo County Economic Strategy.

This first-ever public-private partnership, managed by the Economic Vitality Corporation (EVC), and chaired by Chairman of the Board of Supervisors Frank Mecham and Supervisor Adam Hill, will go a long way toward helping San Luis Obispo County build a vibrant and competitive economy for years to come.

During these tough economic times, creating a comprehensive economic strategy for San Luis Obispo County could not come at a better time. As the report demonstrates, San Luis Obispo County is rich in resources, talent and ingenuity, factors that will lead to long term prosperity and job growth throughout the County. In particular, I am excited to see the emphasis on green, sustainable businesses that are critical to both economic growth and protecting our planet for future generations.

I commend you and all who worked on this project for your hard work and dedication to our community, and look forward to continuing to work with EVC and local businesses to create jobs and move our economy forward.

Sincerely

LOIS CAPPS
Member of Congress

BOARD OF SUPERVISORS

1055 MONTEREY, ROOM D430 • SAN LUIS OBISPO, CALIFORNIA 93408-1003 • 805.781.5450



November 5, 2010

FRANK R. MECHAM
SUPERVISOR DISTRICT ONE

Dear San Luis Obispo County,

In real estate, the three most important ingredients are location, location and location. In today's economic climate the three biggest concerns are jobs, jobs and jobs. We are proud to join together, with the support of our colleagues, to assist with the first ever Economic Strategy for San Luis Obispo County.

With the participation of more than 100 top business executives, educators and innovative thinkers, and in partnership with the Economic Vitality Corporation, the establishment of a County-wide economic strategy is now becoming a reality. This comprehensive effort will become the roadmap of economic development for many years to come.

The five "economic clusters" have provided the implementation and action plan necessary to address the requirements for opportunity. Clearly, the three-pronged participation of businesses, education and government will be critical as we move down the road to economic recovery.

This overall strategy is meant to establish a County-wide effort that can better assist the job growth of our key industries. As revenues shrink, and as public sector jobs shrink too, it is ever more important that government partner with education and business to put an increased focus on head-of-household jobs. It's critical that we all work together so that our companies can grow here and stay here, and thus in doing so help to underwrite our County's superb quality of life.

We are honored to have been a part of this strategy and support the Economic Vitality Corporation and the sponsors who made this possible. San Luis Obispo County has much to offer and we believe an exciting future lies ahead.

Sincerely,

Frank R. Mecham, First District Supervisor

Adam Hill, Third District Supervisor

INTRODUCTION BY AUTHOR



November 5, 2010

Mr. Michael E. Manchak
 President & CEO
 Economic Vitality Corporation
 P.O. Box 5257
 San Luis Obispo, CA 93403

Re: **Economic Strategy for San Luis Obispo County**

Dear Mike:

We offer our congratulations on the completion of your clusters of opportunity economic strategy. The San Luis Obispo County business community has come forward, and identified promising opportunities and requirements for industry cluster prosperity, then set measurable outcomes and designed priority strategies for action. Now, more than 100 business champions, with the support of the EVC and other public and private partners, are poised to begin implementation. It has been a privilege working with you and your champions to help develop these cluster action plans.

As you know, ours is a nationally-recognized organization (www.coecon.com) has been involved with many regions across California and the nation, helping develop economic strategies. We have worked in Sonoma County, the Redwood Coast, San Diego, Sacramento, Fresno, the Inland Empire, Solano County, Los Angeles, Silicon Valley, and Northern Sacramento Valley—in all, more than 50 communities across 25 states over the past 17 years.

We have also worked with national foundations and groups like the Pew Charitable Trusts, Rockefeller Brothers, foundations such as Irvine, Hewlett, Packard, the National Governors' Association, and others on economic development, workforce development, energy, and other policies and linkages. In two books, we have documented the leadership of "civic entrepreneurs" in communities across the country, individuals who bring the creativity and persistence to form teams that drive specific actions to improve the economic vitality and quality of life of their regions.

In all these efforts, the big question always is: are business leaders really willing to champion ideas that they put forward? The business leaders in your region have answered this question with a resounding "yes! Virtually every individual who participated in the planning and design process has volunteered to a champion in implementation. This is a tremendous achievement, and is without a doubt one of the highest levels of civic entrepreneurship we have seen in our work. We wish you the best as you begin implementation.

Sincerely,

John Melville

John Melville
 President

DEVELOPING THE COUNTY'S CLUSTERS OF OPPORTUNITY STRATEGY

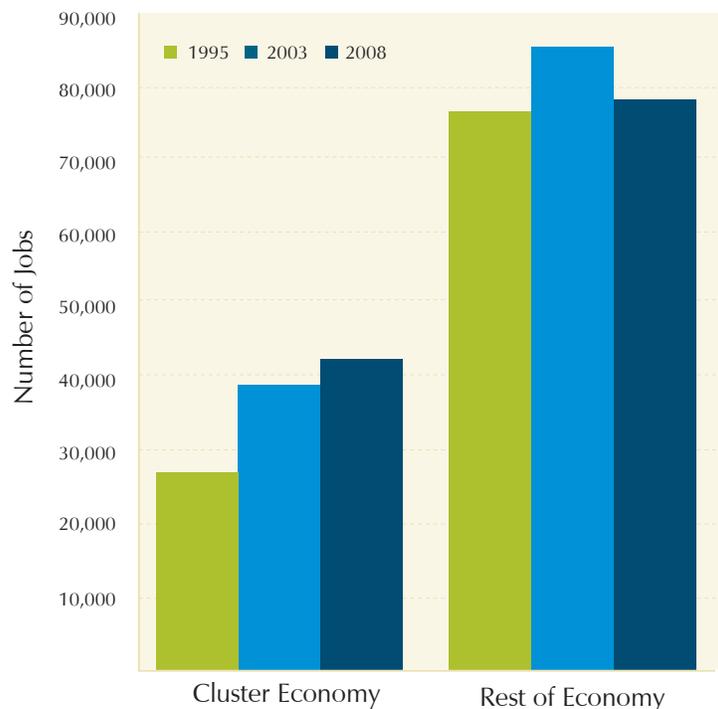
For the first time, more than 100 of San Luis Obispo County's business leaders have agreed to work together—and with partners in government, education, and community sectors—to implement a shared agenda for economic vitality and community well-being.

This Strategy is the product of a series of work sessions convened by the Economic Vitality Corporation of San Luis Obispo County (EVC) with sponsorship from both County government and local companies. The foundation of the Strategy is new economic information that identified five key industry “clusters of opportunity.” These clusters have been responsible for most of the County's new economic vitality since the 1990s—and will

continue to be critical to the County's future well-being (see chart below).

The clusters drive economic vitality, generating jobs and wages for residents and expanding purchases of products and services from local suppliers, all resulting in a positive ripple effect to create benefits for every community in the County. The clusters also generate tax revenues that fuel local public services and support the outstanding quality of life enjoyed by local residents. The clusters, if innovative, competitive, and healthy, will drive the “vital cycle” needed for economic prosperity and community quality of life that benefits residents across San Luis Obispo County.

TOTAL EMPLOYMENT
San Luis Obispo County

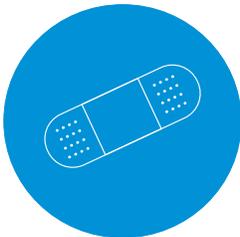


Data Source: National Establishment Time-Series Database
Analysis: Collaborative Economics

For these reasons, clusters of opportunity provide the logical starting point for an Economic Strategy for the region. The five clusters are: Building Design and Construction, Health Services, Knowledge and Innovation Services, Specialized Manufacturing, and “Uniquely SLO County” (a combination of agriculture, wine, recreation, accommodation, restaurants, and other specialty products and experiences). A more detailed research report on the clusters is available from the EVC website. Briefly, the industries included in each cluster are as follows:



The **Building Design and Construction Cluster** is comprised of architectural & engineering services, building construction, building equipment and finishing, foundation, structure, & building exterior contractors, heavy & civil engineering construction, land subdivision, utility system construction, green energy implementation, and roadway & bridge construction.



The **Health Services Cluster** includes home health care services, elderly community care facilities, medical & diagnostic laboratories, outpatient care centers, acute care hospitals, doctor’s offices, dentist’s offices, ambulatory services, and biosciences and medical products.



The **Knowledge & Innovation Services Cluster** is made up of a range of businesses including computer systems design, software publishers, colleges, universities & professional schools, advertising services, and printing services, as well as general professional, scientific, management and technical services.



The **Specialized Manufacturing Cluster** contains aerospace product manufacturing, basic & agricultural chemical manufacturing, electrical equipment manufacturing, medical equipment & supply manufacturing, pharmaceutical manufacturing, transportation & navigation equipment manufacturing, agricultural & construction machinery manufacturing, plastics & rubber manufacturing, motor vehicle & parts manufacturing, metalwork manufacturing, and cement & concrete manufacturing.



Wine & Agriculture includes aquaculture, floriculture production, vegetable farming, cattle ranching, fruit & nut farming, olives and olive oil, walnut oil, animal processing, and beverage manufacturing.

Recreation & Accommodation includes higher-value food and drink establishments, traveler accommodations, and amusement & recreation industries. High-value food and drink establishments reflect revenues per employee above the statewide average.

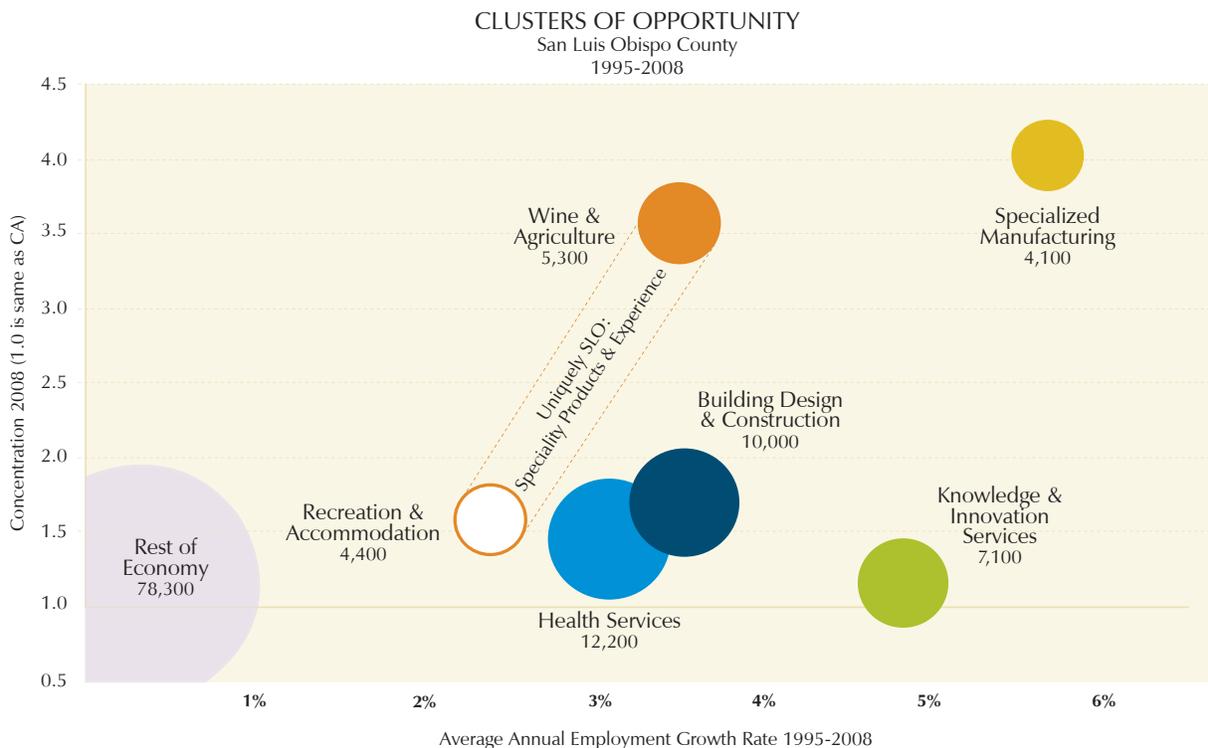
Wine, Agriculture, Recreation, Accommodation, and other regional specialty products and services combine into a cluster that can be called “Uniquely SLO County.”

As of 2008, the five clusters accounted for 36% of the County’s jobs, but have been responsible for 89% of the County’s job growth since the mid-1990s. From 1995 to 2008, the number of jobs in San Luis Obispo County’s cluster-based economy grew 59 percent, while the number of jobs in the rest of the region’s economy increased by less than one percent. More recently, while the number of jobs in non-cluster industries actually decreased eight percent from 2003 to 2008, those in the cluster-based economy grew nine percent.

As the chart below shows, the five clusters all experienced average annual growth rates ranging from about two to six percent between 1995 and 2008. Every one of the clusters is more concentrated in San Luis Obispo County, compared to the California average. For example, Specialized Manufacturing is four times more concentrated in terms of employment in San Luis Obispo County when compared to California as a whole. While the current global recession has adversely affected virtually all sectors of the local economy, the long-term record of these five clusters has not been erased: they remain as key drivers of the County’s economic vitality and community well-being. Once the clusters of opportunity were identified,

business leaders were convened into five cluster groups. In May 2010, more than 100 senior business executives gathered to discuss the most promising opportunities for their industries to prosper in San Luis Obispo County. They identified a wide range of opportunities—even in the face of a global recession—that could drive their prosperity in the years ahead, including growing markets for their products and services, new innovations that will enable them to stay competitive, and changes in public policy that could spur new vitality in their industries. They also identified the critical requirements to capitalize on these opportunities in San Luis Obispo County.

Between May and October 2010, these business leaders focused on how best to capitalize on the most promising opportunities for their clusters. They developed action plans that include specific strategies and measurable outcomes, as well as specific actions to take immediately. Virtually all of these leaders have signed on to be “champions” of the action plans, which together constitute the Clusters of Opportunity Economic Strategy for San Luis Obispo County. The following sections summarize the opportunities, requirements, and key strategies for action for each cluster.



Data Source: National Establishment Time-Series Database
Analysis: Collaborative Economics



BUILDING DESIGN AND CONSTRUCTION

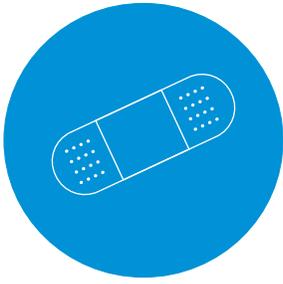
Business leaders in the Building Design and Construction cluster identified opportunities to serve growing markets in energy efficiency (including retrofits), renewable energy production and applications, and innovative design and building. They identified retirement housing, especially opportunities linked to active lifestyle, health, and related services, and opportunities to serve the need for workforce housing, infill development, and community infrastructure.

To enable the cluster to serve new and growing markets, improvements to the permitting process that would provide flexibility, increase speed, reduce fees, improve predictability, and prioritize high-quality development projects is required. Better promotion of innovative design and building projects, both locally and globally, as well as leveraging the world-class strengths of Cal Poly's architectural and engineering schools in particular, are also critical to revitalizing the cluster.

In addition, business leaders also focused on the need to identify and help connect companies to existing incentive funding (e.g., energy efficiency upgrades), and strengthen policies that encourage production and use of renewable energy (including procurement policies of government and other large purchasers in the County).

After discussing the options, business leaders decided to develop three distinct action plans:

- **Quality Development Coalition:** Create a business-led group that would develop criteria for high quality development in the County, support projects that meet those criteria at public meetings, educate the public on the connection between quality development and economic vitality, advise the local jurisdictions on infrastructure planning and financing, promote zoning changes to enable additional housing, and encourage analysis of economic impacts for local projects and policies.
- **Innovative Design and Building Partnership:** Create a partnership that would spotlight and promote innovative projects designed and built by local companies (located both inside and outside the County), as a way to grow local and global business for the County's design and building companies. In addition, the partnership would broker stronger ties between local companies, Cal Poly, and Cuesta College to promote innovation.
- **Green Energy Team:** Create a Team to promote the County as a center for green energy production, expedite resolution of issues affecting approval of local projects, help develop, package, and publicize incentives for energy efficiency upgrades, and work with local educational institutions to prepare local talent for design, installation, maintenance, and other jobs.



HEALTH SERVICES

Leaders in the Health Services cluster identified opportunities to serve growing markets in destination health care, wellness, medical specialties, health information technology, telemedicine, and medical and social support for a growing elderly population. In addition, leaders identified opportunities to have more residents make use of local specialties rather than looking outside the County for these services. The implementation of national healthcare reform was also viewed as a potential driver, with the expansion of health insurance to those previously lacking coverage.

To capitalize on these opportunities in San Luis Obispo County, leaders focused on an integrated approach to becoming a recognized center of excellence in wellness. This approach would include a well-connected and well-publicized continuum of medical specialties, wellness services, social support, and other services, as well as an infrastructure of electronic health records and specialized retirement housing and communities. This approach would reduce residents' use of outside health services, while addressing growing demand for a broader array of services that would make the County a desirable destination for active baby boomer retirees.

The cluster would need to work together to develop the wellness strategy, including educating the community on existing specialties, connecting all segments of the service continuum, working with the building design and construction industry on specialty housing and communities, and collaborating with local institutions to ensure there is sufficient talent

for the wide variety of occupations required to staff the growing demand for services across the continuum.

As a result, the cluster's action plan focused on the following three strategies:

- **Launch a community education initiative** that would (1) compile a comprehensive database describing the range of services and specialties that currently exist in the County, (2) inform the general public about the quality and accessibility of local specialties, (3) educate key individuals that can influence the choice of using local or outside specialties (e.g., employers, primary care/referring doctors), (4) create and host a widely accessible referral network of local specialties.
- **Create a wellness network**, linking partners in a unified approach to (1) develop materials and market the County as a wellness destination, including hosting wellness related conferences, (2) coordinate the use of health information technology to link services into a wellness continuum, (3) encourage integration of wellness into existing services and promote the development of additional components necessary to becoming a wellness destination (e.g., housing, social support, active lifestyle services).
- **Create an advocacy coalition** to change the County's reimbursement rate from a rural to an urban classification, working with other clusters in San Luis Obispo County and other California counties in similar situations.



KNOWLEDGE AND INNOVATION SERVICES

Business leaders in the Knowledge and Innovation Services cluster identified opportunities to serve growing global markets for knowledge, engineering, and other technical services, enabled by rapid innovation in mobile technologies and platforms. Because of this enabling technology, firms can deliver their services in education, healthcare, and other technical fields to a far-reaching global market without having to be located in a major metropolitan area. In this vein, business leaders identified the County as a good location for incubating and launching new services and entrepreneurial start-up companies.

To capitalize on these opportunities in San Luis Obispo County, business leaders focused on expanding the enabling infrastructure, including “test beds” (e.g., electronic government records, a smart grid as utilized in Boulder Colorado, electronic/paperless permitting, digital modeling) and better access to global networks (e.g., leveraging the region’s unique fiber optic “beachhead” to Asia).

In addition, better recognition and promotion of the cluster (i.e., creating a “buzz” about the County as a tech hub) inside and outside the region is vital to retain local college graduates, help residents learn about existing opportunities, and attract key technical and entrepreneurial talent (as well as providing opportunities for “trailing spouses”). This would involve marketing and positioning the County as a technology, design, knowledge worker destination, leading to a stronger relationship with Cal Poly to inform students and alumni about opportunities in the County.

There also must be more opportunities to bring cluster businesses together in the tech sectors to

explore business partnerships, more forums for access to capital and support for entrepreneurial ventures, and other joint efforts.

To address these needs, business leaders decided to form a Knowledge and Innovation Cluster Network to serve as a focal point for the cluster to come together to implement the following five strategies:

- **Build awareness of the cluster** through a new website that includes profiles of local business leaders and companies, products, and services; a news feed about local companies; an online job board; and an external marketing package to reach and inform companies and talent outside the County.
- **Develop an agreement with Cal Poly** to hold a first-ever knowledge and innovation cluster forum to define and launch specific partnerships among companies, faculty, and students, establish a clear access point at the University for cluster companies, and commit to annual summits to sustain and grow partnerships.
- **Develop an agreement with Cuesta College** to make greater use of the College’s Entrepreneurship Center for new/small cluster companies.
- **Expand access to global networks** through expansion of fiber optic “beachhead” access, building from current efforts focused on existing facilities.
- **Launch an innovation test bed initiative**, matching local governments, agencies, and companies with local teams of cluster companies to identify and establish test beds for specific applications.



SPECIALIZED MANUFACTURING

Business leaders in the Specialized Manufacturing cluster identified opportunities to serve growing markets for customized, specialty equipment in such areas as sub-systems manufacturing, design, and support; aerospace and defense; energy efficiency and exploration; health technology; commercial applications of defense-originated technologies; and others. This cluster has the greatest concentration and highest growth rate of all the clusters, but since cluster companies typically provide products or services outside the County, specialized manufacturing is one of the least visible of the clusters. However, the benefits to the region are significant, with the potential to expand further.

To capitalize on these opportunities in San Luis Obispo County, business leaders focused on the critical need for skilled technical talent, and for flexibility and speed in the permitting process to enable them to make changes in their facilities in a fast-moving, competitive global marketplace. There are needs for a variety of skilled people—from software developers, IT professionals, and system engineers, to skilled manufacturing personnel (e.g., machinists, equipment maintenance, highly skilled technicians or assemblers). Meeting these needs will require better retention of local graduates, ensuring that residents know about opportunities in the cluster, and attracting key personnel. This could include creating a countywide, web-based platform to describe cluster companies, their products and workforce, and opportunities for jobs.

Firms also need to be able to make periodic, rapid facility changes to meet changing market conditions, and would benefit from permitting processes that are more responsive to these business realities. This could include fast-track approval for changes of certain kinds or in specific locations (e.g., smaller additions/adaptations to existing facilities, designated pre-approved zones or tech parks).

Business leaders decided they would launch a

new Specialized Manufacturing Forum, a group that would provide the platform for launching the following specific strategies:

- **Host regular company-to-company exchanges** to share experiences, effective business strategies, lessons learned, and common issues; identify business assistance resources (funding, exports, communications, human resources) and quality suppliers; and forge mutually-beneficial business partnerships.
- **Launch a funder education strategy** to raise awareness of investment opportunities with local firms and help establish the County's identity as an attractive specialized manufacturing location (e.g., working with angel investors, venture capital firms, investment banks, local banks, and others).
- **Educate the broader community** (including city and county officials, and the general public) about specialized manufacturing and its value to the County's economic vitality (e.g., tax revenues, customer visitors, employee spending on goods and services, well-paying jobs, etc.).
- **Accelerate permitting for facility modifications and new facilities** by (1) sharing expertise in manufacturing techniques to help assess possible process improvements, (2) developing a faster permitting option for facility modifications when they meet pre-defined criteria, and (3) encouraging the creation of technology parks or zones that are pre-approved for development.
- **Improve the local talent pipeline** for the cluster by (1) using the Forum to promote job opportunities, (2) working with Cal Poly to link students/graduates with local job opportunities (e.g., first day is local employer day at career fairs), (3) visiting local high schools to make students aware of career options in the cluster, and (4) collaborating with Cuesta College and Cal Poly to develop offerings in "lean manufacturing" useful to the diversity of firms in the cluster.



UNIQUELY SAN LUIS OBISPO COUNTY

Business leaders in the Uniquely SLO County cluster identified opportunities to serve growing markets for unique regional products and experiences. In particular, growing interest in unique blends of wine, agricultural, educational, and culinary tourism could be drivers of prosperity for the industries in this cluster.

The cluster would benefit from expansion of: tours that involve multiple destinations (including those outside County), new and diverse attractions, meet the farmer opportunities and on-site sales (beyond wine), winery events, growing specialties (e.g., abalone, olives, olive oil, and walnut oil), and showcasing of agricultural innovation. Business leaders also noted that by connecting these elements and making them more visible to County residents would create better understanding and support for maintaining the future prosperity of this cluster.

To capitalize on these opportunities in San Luis Obispo County, business leaders focused on taking a countywide approach to branding and promoting the Uniquely SLO cluster, not only for tourism, but to increase local spending on local products and experiences as well as develop higher visibility in domestic and global markets for SLO County grown products of all kinds. This could take the form of marketing materials and a unified campaign, showcasing and connecting the diverse elements of the cluster brand.

In addition, to enable more people to experience these unique products and experiences, some changes in local policies would be beneficial, such as creating less restrictive rules for events and sales to encourage ag-tourism, working with wineries proactively on facility and other changes that will improve competitiveness and enrich the experience of visitors and residents alike, and

improving regulatory processes which currently challenge agricultural production and processing to adopt innovations.

As a result, business leaders chose to continue working together as a combined cluster group to implement four specific strategies:

- **Expand Countywide funding** to promote the Uniquely SLO County cluster. This sustainable funding mechanism or arrangement could involve: consistent and expanded countywide tourism funding through annual contributions from community BIDs, greater participation of all lodging entities into BIDs or VCB, or other models.
- **Launch a unified, Countywide branding and marketing campaign** that (1) inventories the full range of cluster specialties, (2) promotes the concept of the “SLO County Experience” by describing and connecting diverse assets, and (3) supports collaborative events (e.g., Savor) that showcase the County’s assets.
- **Launch a parallel community awareness campaign** that educates five groups (general public, policymakers, other clusters, potential opponents, our own employees) about the value of the cluster to the County’s economic vitality and quality of life.
- **Promote local policy changes that support individual specialties and combinations of specialties**, including (1) less restrictive rules on events, complementary visitor-serving uses, and local sales to promote agricultural tourism, and (2) more flexibility for value-added improvements including agricultural processing and winery development.

IMPLEMENTING THE COUNTY'S CLUSTERS OF OPPORTUNITY STRATEGY

Economic vitality is critical to sustaining a vital community and high quality of life—driving a vital cycle that produces revenues for public services and amenities, jobs for residents, and products and services for the local population.

The County has the opportunity to build on its economic strengths to ensure long-term vitality and quality of life. There are five major industry clusters of opportunity that have been responsible for almost 90% of the County's private sector job growth since the mid-1990s. It is these five clusters which are the focus of the Economic Strategy for San Luis Obispo County.

To capitalize on this opportunity requires specific action plans to promote the vitality of each of the five clusters. It requires champions—leaders from business, government, and the broader community willing to work together to set priorities and implement strategies that deliver results. It requires implementation support, an

organization that will assist each of the clusters in carrying out their action plans, monitor progress, hold them accountable, and report back to the community.

The Economic Vitality Corporation is stepping forward to also become the implementation support organization for the cluster action teams. The successful implementation of action plans increases the economic vitality of each of the five clusters of opportunity in terms of jobs, wages, new and expanding businesses, and public revenues generated to support the County's quality of life.

To carry out this responsibility means:

- **Supporting** the implementation of all the cluster action plans, including assistance with funding, logistics, and recruitment of additional champions and implementation partners, including business leaders outside the clusters.
- **Providing** the venue for discussion of common issues and sharing of best practices across the clusters, and the catalyst for development of specific cross-cluster initiatives as needed.
- **Monitoring** progress and publishing milestones for each of the cluster action plans and holding teams accountable to their proposed outcomes.
- **Enhancing** cluster success and local support by communicating results of the cluster plans to the community and the broader message of the cluster-driven vital cycle that produces benefits for County residents on a regular basis through publications, events, and other means.
- **Communicating** information about the clusters to companies and individuals outside the County, and working with interested parties to connect them to cluster teams and/or assist them in relocating or expanding in the County.
- **Providing** the platform for the formation and launch of new action teams in the future in response to changing economic conditions and new opportunities to promote economic vitality and quality of life of San Luis Obispo County.

To carry out these responsibilities will require collaboration and support from both the public and private sectors. It is critical that the implementation of the clusters of opportunity strategy continue to be a public-private partnership, just like the development of the strategy and cluster action plans. While cluster employers will play a crucial role in the implementation of the action plans, government, education, and community leaders will also be needed to play important roles. There will be needs for specialized expertise, investment resources, and leadership in terms of policy and programs that will be critical to the successful

implementation of the cluster action plans, and thus the overall success of San Luis Obispo County's cluster of opportunity economic strategy.

In implementation, it is important to remain opportunistic and adaptable, as conditions change, strategies are tried, and new resources become available. It will also be important to continue to welcome new "champions" to the team—individuals who are willing to invest their time and resources in helping their cluster and their County prosper.

CLUSTER ACTION PLANS AND CHAMPIONS

Specific cluster action plans follow for Health Services, Knowledge and Innovation Services, Specialized manufacturing, and Uniquely SLO County. The Building Design and Construction Cluster created three distinct action plans—one for the creation of a Quality Development Coalition, one for an Innovative Design and Building Partnership, and one for a Green Energy Team.

Each action plan has three components: priority outcomes, priority strategies, and implementation actions. These are the outcomes, strategies, and actions that cluster leaders deemed most important in order to capitalize on the most promising opportunities for cluster prosperity. Under implementation actions, each plan identifies first steps/early wins to be accomplished during the next few months. For each cluster, a list of champions who have signed on to help drive implementation is included.



BUILDING DESIGN AND CONSTRUCTION

CLUSTER CHAMPIONS

KATHRYN ARBEIT

First Solar

RUDY BACHMANN

Specialty Construction

GREG BLUE

SunPower

CURT BOUTWELL

KCI Environmental

BRAD BRECHWALD

Wallace Group

MATT BROWNE

Liberty Coatings

JERRY BUNIN

Home Builders Association

MICHAEL CANNON

Cannon

KEVIN HAUBER

SLO Green Build

JEANNE HELPHENSTINE

South County Realty

MARTY INDVIK

Lee & Associates

ERIK JUSTESEN

RRM Design Group

TREVOR KEITH

County of San Luis Obispo

ANGIOLO LAVIZIANO

REC Solar

TIM MAHONEY

Southern CA Gas Company

DAVID MARCHELL

Omni Design Group

HAMISH MARSHALL

Westpac Investments

DON MARUSKA

Don Maruska & Co.

STEVE MCCARTY

Stafford- McCarty

VIC MONTGOMERY

RRM Design Group

GREG NESTER

Greg Nester Homes

SUZANNE PARKER

Chevron

MATT QUAGLINO

Quaglino Properties

CHARLIE RICHARDSON

Richardson Properties

JOHN RICKENBACH

Planning & Environ Consult.

TURKO SEMMES

Semmes Builders & Co.

BILL THOMA

Thoma Electric

CHUCK TREATCH

JRW Group

KRIS VARDAS

Pacific Gas & Electric

PATRICK WELLER

Pacific West Energy Solutions

DICK WILLHOIT

Estrella Associates

TIM WOODLE

Pults & Associates

JERRY WILLIAMS

J. W. Design & Construction

Please contact EVC about joining this group.

QUALITY DEVELOPMENT COALITION ACTION PLAN

PRIORITY OUTCOMES

DEVELOPMENT PROCESS IMPROVEMENT

Shorter and more certain time frame to get from permit application to decision

Permitting process balances economic vitality and environmental well-being, and results in more approvals of high-quality projects.

Land use ordinances allow flexibility for high-quality projects (e.g., through a County Planned Development Ordinance)

Rezoning of land and construction of workforce housing, particularly for the five clusters critical to the County's economic vitality

Priority is given to commercial building modifications that enable companies in the five key clusters to remain competitive and contribute to the economic vitality and quality of life of the County

PRIORITY STRATEGIES

DEVELOPMENT PROCESS IMPROVEMENT

Create a business-led Quality Development Coalition of leaders and employees of cluster and other businesses, and other community partners. Coalition would:

1. Develop criteria for high quality development.
2. Support projects that meet these criteria at public meetings.
3. Conduct a campaign to educate general public on the connection between quality development and economic vitality.
4. Create an infrastructure planning and financing team to identify needs and strategies to fund infrastructure improvements, including a standing advisory committee to the County Board of Supervisors.
5. Promote rezoning of land in the County for housing as part of the Land Use Element Update that is currently in progress.
6. Encourage analysis of economic impacts of projects and policies in the County, and consistency with the Economic Element of the General Plan.

Coalition would also provide individuals to participate and work with the County's Process Improvement Committee, which will examine public processes and develop specific changes to improve process efficiency.

IMPLEMENTATION ACTIONS

FIRST STEPS/EARLY WINS

Quality Development Coalition

1. Build the coalition, recruiting members from all the County's leading industry clusters
2. Establish criteria for supporting quality development projects
3. Choose first projects to support and deliver supporters to public meetings
4. Create a team on infrastructure planning and finance to work with County Board to establish advisory committee
5. Assign individuals to join or work with the County's process improvement Committee
6. Assign individuals to join with other partners to work with County on rezoning of land for housing as part of Land Use Element Update.

INNOVATION DESIGN AND BUILDING PARTNERSHIP ACTION PLAN

PRIORITY OUTCOMES

INNOVATIVE DESIGN AND BUILDING

Growing volume of California, U.S., and global design and building work for local companies

Innovative local design and building becomes a growing share of total design and building in the County

Increasing resource savings and efficiency in County due to innovative design and building

Growing collaboration between local companies, Cal Poly, and Cuesta College (projects, consulting, graduates, students) promotes innovation among local firms

PRIORITY STRATEGIES

INNOVATIVE DESIGN AND BUILDING

Form partnership to spotlight and promote innovative locally-designed projects being built in County and by local companies in other locations to encourage expansion of innovative design and building locally and as a way to promote exports of our expertise globally.

Develop partnership agreements between the local design and building industry and Cal Poly and Cuesta College, outlining specific commitments to collaborate and drive innovation.

IMPLEMENTATION ACTIONS

FIRST STEPS/EARLY WINS

Innovative Design and Building Partnership

Assemble partnership to focus on:

1. Spotlighting examples of innovative design and building by local companies
2. Promoting SLO County's innovative design and building capabilities globally
3. Building the partnership with Cal Poly and Cuesta College to deliver mutual benefits to the industry and the institutions and their students. Particular attention will be paid to connecting Cal Poly strengths in Engineering and Architecture with the local design and building industry.

GREEN ENERGY TEAM ACTION PLAN

PRIORITY OUTCOMES

GREEN ENERGY & ENERGY EFFICIENCY

IMPROVING CLIMATE FOR GREEN ENERGY & ENERGY EFFICIENCY

Increasing County and city support for green energy production and use

Improvements in permitting processes for green energy production

New and expanded green energy production facilities in County

GROWING POSITIVE IMPACTS OF GREEN ENERGY & ENERGY EFFICIENCY

Increases in production, use, and exports of green energy

Increases in companies providing green energy products and services

Increases in jobs in green energy companies

Growth of green energy use as a share of total energy use

Become recognized leader in green energy in a way that attracts national and international attention, investment, and other benefits (e.g., ecotourism)

Increasing use of local incentives for energy efficiency improvements (e.g., utility, Homestar, Pace loans, energy efficient mortgages)

Growing pool of contractors and workforce certified to do energy efficiency retrofits

PRIORITY STRATEGIES

GREEN ENERGY & ENERGY EFFICIENCY

Create a “Green Energy Team” to expedite resolution of issues affecting approval of green energy production projects, beginning with two solar projects currently in process

Green Energy Team promotes the County as a center of green energy production, developing local and attracting outside investors, companies, and talent.

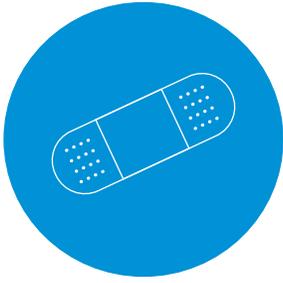
Green Energy Team encourages green financing to develop, package, and publicize incentives for energy efficiency upgrades (e.g., floating of bonds, local bank support/packages, utility incentives, public procurement, etc.)

Green Energy Team works with local institutions to expand local education and training that prepares local talent for green energy employment in installations and maintenance.

IMPLEMENTATION ACTIONS

FIRST STEPS/EARLY WINS

1. Assemble team and focus on expediting resolution of issues affecting approval of current green energy projects
2. Interview green energy companies to profile them, understand their reasons for locating in SLO County, and identify common needs to be addressed
3. Develop clear statement of SLO County as a green energy center, with value to local residents and outside world.
4. Take first steps in promoting/showcasing County as a green leader (e.g., a package of materials, media placements, spotlighting green projects)
5. Develop framework and letters of intent between Green Energy Team employers and Cal Poly and Cuesta College focused on specific education and training for key positions
6. Increase by 10-20 the number of local contractors certified to participate in energy efficiency retrofits
7. Launch a green financing initiative that documents existing incentives/programs and markets them to residential and commercial sectors.



HEALTH SERVICES

CLUSTER CHAMPIONS

DR. AHMAD AMIR, M.D.
Pacific Eye Surgeons

JILL BOLSTER-WHITE
Transitions Mental Health

DR. RENE BRAVO, M.D.
Bravo Pediatrics

**DR. CRAIG CANFIELD,
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RICK CASTRO
Arroyo Grande Community
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JASON CHANG
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JOLIE DITMORE
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MARK WOLPERT
Compass Health

KRISTEN YETTER
Promega Biosciences

Please contact EVC about joining this group.



HEALTH SERVICES ACTION PLAN

PRIORITY OUTCOMES

INCREASE USE OF LOCAL HEALTH CARE SERVICES AND SPECIALTIES

Increase in local residents' use of local health care services (e.g., possible measures include: annual number of cancer diagnoses countywide compared to annual number of patients receiving treatment within County; annual number of procedures completed locally that have traditionally been done at outside region).

Increase in reimbursement rate (from rural to urban classification), which helps attract more specialists and expand local health service cluster.

COUNTY BECOMES LEADING WELLNESS DESTINATION

Increase in the volume and diversity of wellness services in the County

Increase in the connectivity across different levels and elements of the local health care system, as well as related social support, active senior housing, and other elements supporting the vision of the County as a leading wellness destination.

Growing recognition outside the County that the area is a prime wellness destination, especially among active baby boomer retirees.

Improving health outcomes among local population due to County's commitment to be a wellness destination and meet the diverse needs of its population with a strong network of health and other services.

PRIORITY STRATEGIES

Launch a community education initiative that would (1) compile a comprehensive database describing the range of services and specialties that currently exist in the County, (2) inform the general public about the quality and accessibility of local specialties, (3) educate key individuals that can influence the choice of using local or outside specialties (e.g., employers, primary care/referring doctors), (4) create and host a widely accessible referral network of local specialties.

Create a wellness network, linking partners in a unified approach to (1) develop materials and market the County as a wellness destination, including hosting wellness related conferences, (2) coordinate the use of health information technology to link services into a wellness continuum, (3) encourage integration of wellness into existing services and promote the development of additional components necessary to becoming a wellness destination (e.g., housing, social support, active lifestyle services).

Create an advocacy coalition to change the County's reimbursement rate from a rural to an urban classification, working with other clusters in San Luis Obispo County and other California counties in similar situations.



HEALTH SERVICES ACTION PLAN

IMPLEMENTATION ACTIONS

FIRST STEPS/EARLY WINS

Community Education Initiative

1. Define usage measures for local health care services, establishing baseline for local residents and identifying level and type of services sought outside County.
2. Establish database of current physician and facility credentials and qualifications, including information on diagnoses and treatments done locally
3. Package and disseminate information widely to local residents and referring professionals (i.e., create website/clearinghouse, highlight health care segment regularly in media, launch collaborative community education campaign to promote local services.

Wellness Network

1. Define “wellness/prevention/active lifestyle” vision and potential for San Luis Obispo County (a concise, “elevator speech” to share widely).
2. Create a broad-based coalition of wellness service providers and supporters (including health services, social support, housing developers, etc.), compiling an inventory of diverse services and support currently available.
3. Develop brand and messaging for wellness, and initial set of promotional materials for use inside and outside the County (e.g., identify wellness “ambassadors” who promote/educate, drive wellness message in schools)
4. Explore potential partnership on electronic medical records to support connections among elements of system.

Advocacy Coalition on Reimbursement Rates

1. Organize a local coalition and develop a concise case for changing reimbursement rates, including why the change will benefit other clusters in the County (e.g., reduce shortage of primary care doctors, etc.).
2. Host a session with the other clusters to secure support for rate change and work with local elected officials to advocate a solution.
3. Reach out to other counties in a similar reimbursement rate situation to develop cross-county advocacy initiative.



KNOWLEDGE AND INNOVATION SERVICES

CLUSTER CHAMPIONS

LIZ ALFLEN
IQMS

BILL BORGS MILLER
Aviation Consultants, Inc.

MAC BRINTON
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RICK STOLLMEYER
Mind Body

GIL STORK
Cuesta College

CURT VAN INWEGEN
Level Studios

KYLE WIENS
iFixit

TIM WILLIAMS
Digital West Networks

Please contact EVC about joining this group.



KNOWLEDGE AND INNOVATION SERVICES ACTION PLAN

PRIORITY OUTCOMES

AWARENESS OF KNOWLEDGE AND INNOVATION SERVICES CLUSTER

Increase in awareness of cluster employment opportunities among local residents, Cal Poly students and graduates, “trailing spouses”, and outside talent

Increase in brand awareness of the knowledge and innovation cluster, including the range of expertise, companies, products and services located in San Luis Obispo County

Creation of a convener of cluster companies, enabling greater collaboration among companies to pursue business opportunities, address shared challenges, and collaborate with community partners to address challenges (e.g., workforce, access to global markets, access to capital, awareness-building)

ACCESS TO GLOBAL COMMUNICATIONS NETWORKS TO PROMOTE EXPORTS

Full inventory and description of the County’s broadband infrastructure is completed

Increase in cluster company access to the County’s unique fiber optic “beach head” to Asia

Increase in the number of wired buildings (100 mbps or greater) that house cluster companies

Increase in global exports of knowledge and innovation services due to improved connectivity to outside markets

COLLABORATION WITH THE COMMUNITY

Growing involvement of the academic community in helping cluster companies as measured by (1) amount of assistance to start-ups, (2) number of students working collaboratively on projects for cluster companies, (3) number of faculty engaged in projects with local companies, (4) growing cluster company presence in Cal Poly Tech Park, (5) expansion of degree and certificate programs, contract education, and transfer agreements to prepare local residents for jobs and career advancement with cluster companies.

Growing number of public sector sponsored “test beds” that provide an opportunity for local companies to demonstrate new products and services (e.g., electronic government records, electronic permitting process, mobile electronic building inspection, smart grid, health information exchange), resulting in both productivity improvements and other positive impacts for government sponsors and new business opportunities for cluster companies.



KNOWLEDGE AND INNOVATION SERVICES ACTION PLAN

PRIORITY STRATEGIES

CREATE A KNOWLEDGE AND INNOVATION CLUSTER NETWORK TO ACT AS A FOCAL POINT FOR CLUSTER COMPANIES TO COME TOGETHER TO:

Build awareness of the cluster through a new website that includes profiles of local business leaders and companies, products, and services; a news feed about local companies; an online job board; and an external marketing package to reach and inform companies and talent outside the County.

Develop an agreement with Cal Poly to hold a first-ever knowledge and innovation cluster forum to define and launch specific partnerships among companies, faculty, and students, establish a clear access point at the University for cluster companies, and commit to annual summits to sustain and grow partnerships.

Develop an agreement with Cuesta College to make greater use of the College's Entrepreneurship Center for new/small cluster companies.

Expand access to global networks through a fiber optic "beachhead" access project, building off current efforts focused on three facilities.

Launch an innovation test bed initiative, matching local governments/agencies/companies with local teams of cluster companies to identify and establish test beds for specific applications.



KNOWLEDGE AND INNOVATION SERVICES ACTION PLAN

IMPLEMENTATION ACTIONS

FIRST STEPS/EARLY WINS

Build Cluster Awareness

1. Create a network of local cluster companies, defining a role that complements existing CEO roundtables.
2. Develop a website to profile local businesses, products, and services, and employment opportunities, leveraging and linking from existing sites.
3. Use network to drive website content and support; identify common needs (e.g., key skill sets); organize marketing (including local media articles); seek out alumni (Cal Poly, local high schools) who want to stay or return to County; and reach out to current high school students about careers in the cluster.

Negotiate Agreements with Cal Poly and Cuesta College

1. Create team to establish framework and organize specific partnerships with Cal Poly, securing a key point of contact and collaboration at the University. Explore interest of Specialized Manufacturing Cluster to join the team.
2. Negotiate agreement to hold Innovation Conference to showcase local companies and University capabilities, including a Local Company Job Fair.
3. Form and launch intern/work experience/mentor program with Cal Poly, and work with engineering and business faculty to identify student projects with cluster companies.
4. Create team to work with Cuesta College Entrepreneurship Center, with at least 3 cluster companies referred to the Center to improve operations, products, etc.

Fiber Optic Beach Head Access

1. Complete broadband identification project
2. Determine next steps, and organize cluster companies with community partners to take action.

Innovation Test Bed Initiative

1. Create team to explore potential test bed opportunities (e.g., a health information exchange project with the health services cluster, mobile electronic building inspection, wireless lab at Cal Poly Tech Park, local web/access control companies and TSA improve airport access for out of town pilots, County electronic permitting processes, and County electronic recording)
2. Launch one or more test bed projects in 2011.



SPECIALIZED MANUFACTURING

CLUSTER CHAMPIONS

THOMAS AKERS
AeroMech Engineering

RON ALERS
Sonic Sensors

RODNEY BABCOCK
Next Intent

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BILL DENZEL
Xcelaero

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CAMERON TAPP
Clear Water Tech

JEFF WADE
Fleet Management Solutions

GUY WELLS
Hot Chillys

JAMES WHITE
APT Water

KAREN WOODLING
The Spice Hunter

Please contact EVC about joining this group.



SPECIALIZED MANUFACTURING ACTION PLAN

PRIORITY OUTCOMES

BETTER ATTRACTION AND RETENTION OF TALENT

Increase in understanding of employment opportunities in specialized manufacturing, and appreciation for what cluster contributes to the economic vitality in the County

Increase in retention of Cal Poly graduates, employing them at local specialized manufacturing companies

Reduction of relocation expenses, with the need to import less talent from outside County

Increase in relocations to the County without extra compensation

Decrease in the time to fill job openings

Improving competitiveness on affordability compared to similar regions

BETTER CLIMATE FOR FACILITY IMPROVEMENTS

Increase speed for making facility changes to meet shifting market conditions (e.g., decrease number of days from application to approval of permits)

Increase pre-approved and close-to-approved acreage, development parks, or special zones for new buildings

BETTER CLUSTER RESULTS

Increase income, jobs, and exports of the County's specialized manufacturing cluster

Increase base of local suppliers, retain existing firms, and grow new entrepreneurial companies in the cluster



SPECIALIZED MANUFACTURING ACTION PLAN

PRIORITY STRATEGIES

LAUNCH SPECIALIZED MANUFACTURING FORUM, focusing on the following priorities:

Host regular company-to-company exchanges to share experiences, effective business strategies, lessons learned, and common issues; identify business assistance resources (funding, exports, communications, human resources) and quality suppliers; and forge mutually-beneficial business partnerships

Launch funder education strategy to raise awareness of investment opportunities with local firms and help establish the County's identity as an attractive specialized manufacturing location (work with local banks, educate outside lenders about the cluster).

Educate the broader community (including city and county officials, and the general public) about specialized manufacturing and its value to the County's economic vitality (e.g., tax revenues, customer visitors, employee spending on goods and services, well-paying jobs, etc.).

Accelerate permitting for facility modifications and new facilities by (1) sharing expertise in manufacturing techniques to help assess possible process improvements, (2) developing a faster permitting option for facility modifications when they meet pre-defined criteria, and (3) encouraging the creation of technology parks or zones that are pre-approved for development.

Improve the local talent pipeline for the cluster by (1) using the Exchange to promote job opportunities, (2) working with Cal Poly to link students/graduates with local job opportunities (e.g., first day is local employer day at career fairs), (3) visiting local high schools to make students aware of career options in the cluster, and (4) collaborating with Cuesta College and Cal Poly to develop offerings in lean manufacturing useful to the diversity of firms in the cluster.

IMPLEMENTATION ACTIONS

FIRST STEPS/EARLY WINS

Forum for Company-to-Company Exchange

1. Determine structure of Forum (e.g., membership criteria, meeting frequency, schedule, etc.)
2. Establish Forum with website including meeting schedule, online topic discussion, job posting links, profiles/links of local specialized manufacturers
3. Establish a presentation format to share experiences, business strategies, and common issues (e.g., Guy Kawasaki model of 10 slides/20 minutes/30 point font)
4. Launch first company-to-company exchange sessions

Funder Education Strategy

1. Create cluster-focused presentation package for investment funding community, highlighting businesses, markets served, innovations, growth histories, and “networked” capabilities
2. Distribute presentation package widely to cluster employers and local financial institutions, and conduct briefings for local funders and explore hosting meeting for potential outside funders

Community Education Strategy

1. Publicize existing information about cluster (e.g., EVC analysis of cluster growth, jobs)
2. Collect additional information from cluster companies about economic impacts, including payrolls, local purchasing, local taxes, and the like
3. Develop overall cluster message and promotional package
4. Begin first phase of long-term education strategy, with inserts into local papers showcasing companies, products, and to the community

Facility Permitting Team

1. Create team to support County’s Process Improvement Committee, providing focused input on cluster priorities and offering process improvement expertise.
2. Team also works with public sector to focus on longer-term options such as a technology park or zone.

Talent Pipeline Strategy

1. Establish working group with Cal Poly and Cuesta College focused on retaining graduates and impacting education and training
2. Get approval for Cal Poly local company career fair by 12/31/10. Explore partnership with Knowledge and Innovation cluster on career fair with Cal Poly.
3. Hold local company career fair in early 2011
4. Working group also works with Cal Poly and Cuesta College to identify specific changes in curriculum and programming helpful to specialized manufacturing.



UNIQUELY SAN LUIS OBISPO COUNTY

CLUSTER CHAMPIONS

JUSTIN BALDWIN

Justin Vineyards & Winery

HUNTER FRANCIS

Cal Poly State University

DANA MERRILL

Mesa Vineyard Management,
Pomar Junction Vineyard

MELANIE BLAKENSHIP

Nature's Touch Nursery &
Harvest

NICK FRANC

State Parks, Hearst Castle

CHARLIE MEYERS

Big Sky Cafe

JIM BRABECK

Farm Supply Company

RICHARD GONZALES

Gonzales Ranch

KRIS O'CONNOR

Central Coast Vineyard Team

DON BRADY

Robert Hall Winery

MIKE HANCHETT

Best Western Cavalier

BRUCE RAY

The Tribune

ALISON RUSH CARSCADEN

15 Degrees C

STEVEN HARDING

Rabobank, N.A.

GALEN RICARD

Cal Poly CAFES Center for
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MIKE CASOLA

Boutique Hotel Collection

PAUL HOOVER

Still Waters Vineyards

VIVIAN ROBERTSON

Paso Robles Event Center

PAUL CLARK

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TOM IKEDA

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CHARLENE ROSALES

United Way of SLO

JACKIE CRABB

SLO County Farm Bureau

JOHN KANEY

Kaney Foods

MARK SHAFFER

Fun Ride

CHERYL CUMING

County Tourism B.I.D.

JOHN KING

Boutique Hotel Collection

JOHN SORGENFREI

TJA Advertising

CHRIS DARWAY

Darway Family Farms

DEE LACEY

Ag Liaison Advisory Board

JOHN SUMMER

SLO County Visitors Bureau

STEVE DAVIS

Stafford- McCarty
Commercial Real Estate

PATRICK MAHAN

Fun Ride

RICK TOYOTA

Niner Wine Estates

RAY FIELDS

The Abalone Farm

NOREEN MARTIN

Martin Resorts

NIELS UDSEN

Castoro Cellars

SUSAN MCDONALD

Hearst Ranch

Please contact EVC about joining this group.



UNIQUELY SAN LUIS OBISPO COUNTY ACTION PLAN

PRIORITY OUTCOMES

INCREASING AWARENESS AND SUPPORT OF CLUSTER

Increase in awareness of the full range of cluster assets within County among residents, governments, businesses, as well as among potential tourists outside the County

Increase in support for the cluster among local residents and public officials due to better understanding of the cluster's multiple benefits (e.g., quality of life amenities for residents and talent for other industry clusters, tourist spending that helps fund local jurisdictions, job creation)

Increase in supportive policies in local jurisdictions and alignment across government agencies (e.g., water resource planning for agriculture, permitting that enables value-added wine industry investment, ordinances that enable ag-tourism and local sales, and land use planning to promote value-added agriculture such as olive oil, you-pick farms, cheese, etc.)

INCREASING DIVERSITY AND CONNECTION OF SPECIALTIES

Increase in unique agricultural products, ag-tourism offerings, and other specialties

Increase in packaging of multiple specialties into unique SLO County experiences (e.g., connecting wine, food, entertainment, cultural, educational, environmental, recreational assets in different combinations)

Increase in events with local interest marketed outside the area, resulting in more people traveling to the County and more local residents venturing outside their immediate community to participate.

INCREASING CLUSTER VITALITY AND COMMUNITY CONTRIBUTIONS

Increase in occupancy rates, deplanements, entrance into state parks

Increase in visitor length of stay

Increase in average spending per visitor

Increase in sales of local products in local restaurants, retail outlets, schools, hospitals, etc.

Increase in tourism driven revenues for local jurisdictions



UNIQUELY SAN LUIS OBISPO COUNTY ACTION PLAN

PRIORITY STRATEGIES

Expand Countywide funding to promote the Uniquely SLO County cluster. This sustainable funding mechanism or arrangement could involve: consistent and expanded countywide tourism funding through annual contributions from community BIDs, greater participation of all lodging entities into BIDs or VCB, or other models.

Launch a unified, Countywide branding and marketing campaign that (1) inventories the full range of cluster specialties, (2) promotes the concept of the “SLO County Experience” by describing and connecting diverse assets, and (3) supports collaborative events (e.g., Savor) that showcase the County’s assets.

Launch a parallel community awareness campaign that educates five groups (general public, policymakers, other clusters, potential opponents, our own employees) about the value of the cluster to the County’s economic vitality and quality of life.

Promote local policy changes that support individual specialties and combinations of specialties, including (1) less restrictive rules on events and local sales to promote ag-tourism, and (2) more flexibility for value-added improvements including ag processing and winery development.

IMPLEMENTATION ACTIONS

FIRST STEPS/EARLY WINS

Collaborative Countywide Funding Strategy

1. Create collaborative and sustainable funding structure under Visitors and Convention Bureau (VCB) umbrella, building on the Savor San Luis Obispo County model and the emerging BID co-op program
2. Develop broad base of initial funding commitments from government, business, labor, and other parties
3. Use initial funding commitments to launch unified countywide marketing campaign (see below)

Unified Countywide Marketing Campaign

1. Incorporate County brand into local marketing efforts/materials, working with BID Alliance, to begin to promote connections
2. Inventory/identify the full range of regional specialties, and share information widely, facilitating connections and packaging of specialties
3. Develop a “sustainable” Savor San Luis Obispo County model: from event to strategy of connecting and showcasing local specialties. Involve local marketing firms in development of an overall strategy
4. Launch first stage of campaign in 2011

IMPLEMENTATION ACTIONS

FIRST STEPS/EARLY WINS

Community Awareness Initiative

1. Summarize and package data on economic impacts of Savor San Luis Obispo County as a specific example of the multiple benefits of the cluster to the community
2. Build team to carry message about value of the cluster to all parts of the County, including the VCB, cluster businesses, labor, employers in other clusters, chambers, BIDs, etc.

Promote Local Policy Changes

1. Advocate for package of amendments to agricultural tourism ordinances
2. Identify other policies that could help promote and connect regional specialties (e.g., improved permitting process for value-added agricultural processing, funding or tax incentives to reward packaging of specialties, signage)



SAN JOAQUIN VALLEY

REGIONAL INDUSTRY CLUSTER ANALYSIS AND ACTION PLAN

SEPTEMBER 2012

Prepared for:

Office of Community and
Economic Development
California State University, Fresno

On Behalf of

California Partnership
for the San Joaquin Valley

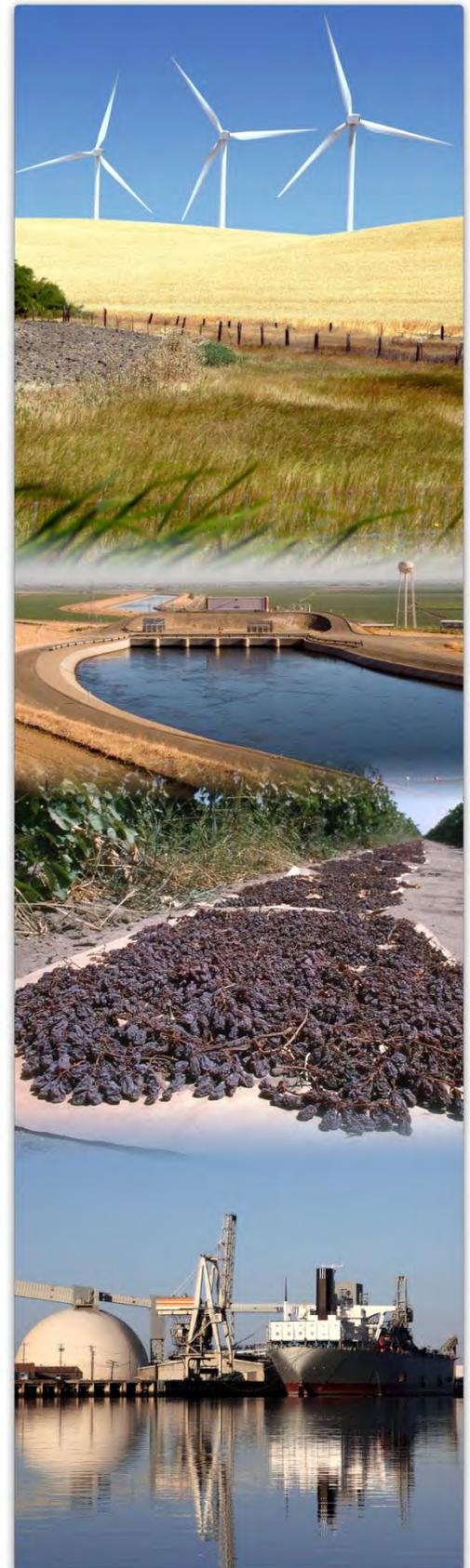
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Development
California Central Valley Economic Development
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California Emerging Technology Fund
California State University, Bakersfield
California Strategic Growth Council
California Water Institute
California Workforce Investment Board
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Central California Center of Excellence (Modesto
Junior College)
Central California Community Colleges
Committed to Change (C6)
Central California Obesity Prevention Program
(CROPP)
Central Region Consortium (California
Community Colleges)
Central Valley Business Incubator (CVBI)
Central Valley Health Network
Central California Workforce Collaborative
(CCWC)
City of Fresno
Clinica Sierra Vista
Council on Adult and Experiential Learning
Economic Development Corporation serving
Fresno County
Employers’ Training Resource (Kern County)
Federal Reserve Bank of California, Community
Development
Fresno Business Council
Fresno City College*

*Greater Stockton Chamber of
Commerce/REACON
Health Sciences Research Institute, UC Merced
Kern County Economic Development
Corporation
Kings County Economic Development
Corporation
Fresno Workforce Investment Board (Workforce
Connection)
Hospital Council of Northern and Central
California
Kaiser Permanente Central Valley
Kern Community College District
Great Valley Center
Local Government Commission
Lyles Center for Innovation and
Entrepreneurship
Manufacturers Council of the Central Valley
Merced College Business, Industry and
Community Services
Pacific Gas and Electric
Regional Policy Council/Councils of Government
Regional Jobs Initiative Implementation Team
San Joaquin Partnership
San Joaquin Valley Air Pollution Control District
San Joaquin Valley Clean Energy Organization
San Joaquin Valley College
San Joaquin Valley Rural Development Center
Stanislaus Alliance WorkNet
TeamCalifornia
The California Endowment
The Maddy Institute
UC Davis Center for Regional Change
UC Advanced Solar Technologies Institute
UC Merced SBDC Regional Network
University Center to Advance Manufacturing
(UCAM)
USDA Rural Development, California
Water, Energy and Technology (WET) Center
West Hills Community College District
Workforce Investment Board of Tulare County*

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CHAPTER 5

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EXECUTIVE SUMMARY

“CHARTING THE COURSE FOR THE SAN JOAQUIN VALLEY’S ECONOMIC FUTURE”

PROJECT OVERVIEW

In August 2011, the Office of Community and Economic Development (OCED), California State University, Fresno received an Economic Adjustment grant from the Economic Development Administration (EDA), U.S. Department of Commerce, to prepare a valley-wide industry cluster analysis and a regional strategy – Action Plan – to catalyze the growth of priority clusters. They have been prepared for OCED on behalf of the California Partnership for the San Joaquin Valley (Partnership). The Project’s goal is to support improved regional economic performance, sustainability, and shared opportunity for Valley residents, businesses and communities.

The Partnership is an unprecedented public-private sector partnership between the Valley and the state of California. It was created in 2005 to address the Valley’s persistent economic, environmental and social challenges and disparities compared to other regions in the state and nationally, while acknowledging the statewide and national significance of the Valley, and changing the pathway for its economic future and overall well-being.

As part of its charge, in 2006 Partnership leaders prepared a Strategic Action Proposal (SAP), *The San Joaquin Valley, California’s 21st Century Opportunity*. OCED serves as the Secretariat for the Partnership and manages the SAP through the “New Valley” program, through which ten Work Groups were created to develop and implement the New Valley’s first five year action plans (2006-2011). Most of the Work Groups are led by OCED partner organizations at the regional level. OCED also manages or supports many other synergistic programs, aligning university resources with Valley initiatives and leveraging state, federal, philanthropic and other resources on behalf of regional and local initiatives.

The Cluster Action Plan provides recommendations for the New Valley’s next stage. According to Corwin Harper, Partnership Deputy Chair, Senior Vice President, Kaiser Permanente Central Valley, and co-convenor for one of the project’s Health and Wellness Cluster meetings, “This is an opportunity to achieve big outcomes for the Valley, focusing on the key few “big things” the Partnership can do, where the Valley has a regional competitive advantage.”

THE NEED FOR A REGIONAL CLUSTER UPDATE

Clusters are geographic concentrations of firms and industries that do business with each other and have common needs for talent, technology, and infrastructure. According to EDA, Regional Innovation Clusters (RIC) are a proven way to create jobs and grow the economy. They benefit from a well-developed regional strategy that leverages core regional strengths.¹

The Valley has been a leader in cluster-based strategies, starting with *The Economic Future of the San Joaquin Valley* report in 2000 and the Fresno Regional Jobs Initiative (RJI) in 2003. The RJI resulted in the creation of 12 clusters. Building upon these efforts, the SAP identified five regional clusters of opportunity for focused action: agribusiness, health and medical, manufacturing, renewable energy, and supply chain management and logistics. These clusters reflected shared priorities across the Valley and sectors where the region's comparative advantage was considered to be strong or emerging.

The clusters have been a touchstone for the work of the New Valley, in particular for the economic development, education and workforce development partners who serve as champions for several of the New Valley Work Groups. Much progress has been made in terms of regional collaboration around demand-driven cluster and sector strategies. However, a valley-wide regional cluster analysis had not been prepared since 2004, and updated "market intelligence" was needed to help guide the next stage of the New Valley cluster implementation.

This Project addresses a number of concerns and issues:

- The Valley has been more severely impacted by the "Great Recession" than most other California regions and needs to reposition itself for economic recovery.
- The global economy is experiencing structural changes and new opportunities are emerging which demand new responses at the regional level.
- Local budget challenges constrain the ability of many jurisdictions, partners and business champions to manage, implement and support county and regional cluster initiatives.
- There are emerging areas of opportunity that can best be leveraged through collaboration at the regional level, bringing efforts to scale for increased competitiveness. These areas include renewable energy and water technology innovations, and regional food systems.

The planning process involved economic analysis; research; documentation of cluster-related initiatives and resources; cluster stakeholder meetings which were co-convened with many partners throughout the Valley; meetings and ongoing consultation with partners, cluster leaders, subject area experts, state and federal agencies, and Partnership Board members; and review of cluster innovation models.

¹ <http://www.eda.gov/AboutEDA/RIC/>

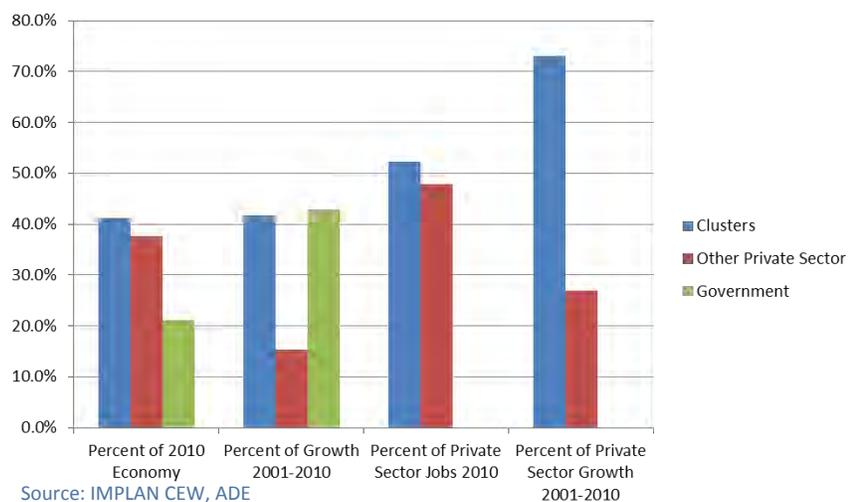
IMPORTANCE OF THE CLUSTERS

The San Joaquin Valley is an economic powerhouse. Recent estimates place the Gross Domestic Product (GDP) of the Valley at \$140 billion, and total industry production including intermediate and final goods at \$228.6 billion in 2010.²

ADE analyzed the Valley’s major economic sectors and validated that the five original New Valley clusters continue to be the shared priorities across the region, although they have been adapted or expanded upon through the value chain concept. Each cluster contains several “components,” each with sets of industries that comprise the value chain. For example, the Agriculture Cluster includes production, processing and packaging, distribution and diverse support activities. The Health Cluster now incorporates dimensions of wellness. Two clusters have been added – water technology and public sector infrastructure, based on their current and emerging importance and potential for the Valley. The 2012 Action Plan priority clusters are:

- Agriculture
- Energy
- Health and Wellness
- Logistics
- Manufacturing (which is connected to all of the clusters)
- Water Technology
- Public Sector Infrastructure (Construction)

The analysis indicates that as of 2010, these clusters (with the exception of public sector infrastructure, for which information was provided in a separate analysis sponsored by the Central California Workforce Collaborative) represent about 41 percent of total employment in the region, but during the 2001-2010 period were responsible for 73 percent of private sector job growth, as shown below.



² GDP obtained from Center for Continuing Study of the California Economy, Numbers in the News, September 2012. Industry output calculated by ADE from the IMPLAN3 input-output model used for the cluster analysis.

CAPTURING THE “VALUE CHAIN”

Even in clusters where the Valley has comparative advantage, such as agriculture and logistics, the Valley is not capturing the “value chain” – where value is added along the continuum of economic activity within the components of a cluster. Instead, goods flow out of the Valley where value is added later, and businesses and industries that buy goods and services from other businesses are buying a significant share of those goods and services outside the Valley, representing a leakage of economic potential.

This report documents other kinds of leakage that occur as well, including skilled workers who commute to jobs located outside of the Valley; jobs within the Valley going to workers who live outside of the Valley; and loss of innovation. This loss of innovation is related to intellectual capital (inventions, patents, etc.) leaving the Valley in pursuit of investment capital or a more supportive entrepreneurial environment, including for specialized research and development, legal and business services.

CAPTURING THE “VALUE CHAIN” FOR THE SAN JOAQUIN VALLEY ECONOMY



Source: ADE

The cluster analysis identified areas of potential growth across the Valley and for the eight counties based on trends in size of the clusters; rates of employment growth, especially in specific cluster “components” or industry groupings; concentration in the Valley compared to the state; and rate of growth compared to the state’s rate. This information provides insight into the region’s areas of comparative advantage. The analysis also identified trade flows indicators – output of goods and services produced by each cluster, and leakage outside of the Valley based on business-to-business supplier inputs of goods and services in 2010. Regional demand for each cluster’s goods and services by non-cluster-related consumers (households, institutions and other businesses) also was estimated.

The leakage analysis was conducted for individual clusters, resulting in a potential list of economic development targets for business expansion, start-ups and attraction to meet these gaps. The findings were reviewed at several industry cluster meetings convened by OCED and ADE along with partners across the Valley, and have been validated as a high priority for implementation action. ADE also aggregated these estimates of leakage by commodity type across the clusters to identify those with high levels of leakage, further screening them for business types that realistically could be developed in the region. The table below summarizes the potential economic development targets by type of commodity supplied from outside the region and the estimated level of “leakage” – and therefore market support – for new or expanded businesses. The gaps are very large in some commodity areas.

AGGREGATED ECONOMIC DEVELOPMENT LEAKAGE TARGETS	
Description	Market Support
Lessors of nonfinancial intangible assets	\$712,685,000
Scientific research and development services	\$699,203,000
Paper mills	\$611,657,000
Oilseed farming	\$457,940,000
Other basic organic chemical manufacturing	\$395,251,000
Petrochemical manufacturing	\$388,308,000
Artificial and synthetic fibers and filaments manufacturing	\$385,175,000
Software publishers	\$375,381,000
Plastics material and resin manufacturing	\$363,584,000
Automotive equipment rental and leasing	\$336,797,000
Plastics bottle manufacturing	\$336,107,000
Management, scientific, and technical consulting services	\$323,597,000
Aluminum product manufacturing from purchased aluminum	\$303,463,000
Advertising and related services	\$284,775,000
Paperboard Mills	\$257,934,000
Other plastics product manufacturing	\$244,702,000
Semiconductor and related device manufacturing	\$241,775,000
Metal can, box, and other metal container (light gauge) manufacturing	\$222,663,000
Plastics packaging materials and unlaminated film and sheet manufacturing	\$220,031,000
Motor vehicle parts manufacturing	\$212,772,000
All other chemical product and preparation manufacturing	\$169,215,000
All other basic inorganic chemical manufacturing	\$166,139,000
Architectural, engineering, and related services	\$165,780,000

Source: IMPLAN 3 I-O Model, ADE

“Lessors of nonfinancial intangible assets” was the largest category shown. Activities in this industry include brand name licensing; franchising agreements, leasing, selling or licensing; oil royalty companies; oil royalty leasing; industrial design licensing; patent buying and licensing; patent leasing; and trademark licensing. This industry represents specialization of business services, including legal expertise, which is sought outside of the Valley.

“Scientific research and development services” was the next largest market gap. Combined with management, scientific and consulting services, these industries provide another professional services target for developing specialized expertise within the Valley. Research and scientific consulting services are a growth opportunity in both the Energy and Health and Wellness Clusters. Oilseed farming was the fourth largest gap and relates to the Agriculture and Energy Clusters, including as an input for biofuels. Most of the other potential targets are in manufacturing industries. The architectural, engineering, and related services industry is another potential growth area, especially with opportunities related to planned public sector infrastructure construction (estimated at more than \$36 billion from 2010-2020 across several infrastructure categories).

CLUSTER ACTION PLAN PRIORITIES

The economic and cluster analyses and partner/stakeholder engagement process provide: 1) a platform for the evolution of the Valley’s cluster initiatives; 2) a framework to align initiatives and resources to capture value chain opportunities; and 3) articulation of the role for the Partnership and OCED for the next phase of the New Valley, including the organization of the Work Groups to lead or support the clusters.

The Valley has significant assets. There are an almost overwhelming number of initiatives underway across the Valley and related to the clusters, as well as efforts that are increasingly a convergence across the clusters, such as with Agriculture, Energy and Water Technology. A great deal of leadership and expertise resides with the partners involved in these initiatives, but they are dealing with diminished resources, the very large scale of the Valley, a diversity of issues facing the clusters, and the inherent challenges of collaboration such as capacity and dedication of time. However, partners increasingly are developing the capacity to regionalize their networks and ways to engage in specific initiatives on behalf of their networks. This network-to-network process is proving to be very beneficial. The Partnership and OCED’s goal should be to connect, support and optimize these assets and initiatives.

The Project planning process led to the identification of many cluster-related issues, opportunities and recommendations. The highlights are discussed in Chapter 5 and are summarized on the following page. They constitute the basis for development or refinement of cluster-specific implementation plans by the New Valley Work Groups and associated cluster leaders and partners. They are a starting point for focusing on a “few big things” in 2013 – a core set of tangible initiatives with targeted outcomes and metrics that are the platform for engagement. There is an especially strong emphasis on education and workforce initiatives, around which the Valley has been mobilizing for several years to meet critical skills gaps and provide a pathway from poverty to prosperity for workers.

KEY CLUSTER ACTION PLAN PRIORITIES

Cluster	Issues/Opportunities	Recommended Actions
Agriculture	<ul style="list-style-type: none"> All 5 issue areas addressed in Regional Economic Summit 	<ul style="list-style-type: none"> All actions have designated champions and recommended actions; Partnership & OCED are tracking progress. See www.sjvpartnership.org
Energy	<ul style="list-style-type: none"> Regional focus on cluster development & coordination needed; opportunity to develop biofuels; better define cluster components Conditional Use permits vary by county – frustrating for international companies willing to invest in the Valley; results in project delays or cancellations Increase entrepreneurial climate; need to create culture of early stage investment, create dialogue with entrepreneurs, & encourage students to create the next generation of solar technology Leakage of energy use 	<ul style="list-style-type: none"> SJV Clean Energy Organization should be lead for cluster development action plan; expand networking to connect more stakeholders Advocate for funding for SJV Regional Energy Plan Roadmap Coordinate with County Planners (CSAC) working on simpler expedited solar permitting process throughout the state; coordinate locally Coordinate with UC Solar Research Institute, CVBI, Lyles Center for Innovation and Entrepreneurship, Central Valley Fund, Business and Entrepreneurship Center, UC Merced SBDC Regional Network, CalFOR & others to accelerate technology commercialization & entrepreneurship Provide input to PUC on energy facilities sitings See Regional Economic Summit Strategy recommendations
Health and Wellness	<ul style="list-style-type: none"> Difficult to coordinate with so many initiatives across the Valley Need for consistent and regionalized standards and curriculum for same occupations/certificates, & for transferability of credits from Community Colleges to CSUs Need to standardize residency requirements for nurses Address gaps in workforce skills – need for better information, programs to increase skill levels Need to prepare for health information technologies; expand broadband infrastructure Need improved access to jobs and health care services in rural areas Wellness/prevention focus will increase demand for services and workers 	<ul style="list-style-type: none"> Partnership health leaders should convene high level cluster meetings Advocate for transfers within regional network of accredited courses (C6 project is opportunity to standardize curriculum), including for nursing Collaborate with hospitals to unify employee competencies, translate to college curriculum Expand nursing residencies across the Valley; coordinate with hospitals, community colleges, universities Advocate for Regional Industry Clusters of Opportunity (RICO) funding Expand mentoring programs Coordinate with SJV Regional Broadband Consortium, employer networks like Central Valley Health Network, WIBs, etc. for e-health Collaborate with Councils of Government, employers, transit agencies to develop more regional, coordinated transportation systems Expand Patient Navigator, Promotora and other model programs Coordinate with UC Merced Health Sciences Research Institute, CVBI, and entrepreneurship centers
Logistics	<ul style="list-style-type: none"> Additional options for goods movement needed (non-truck) Foreign Trade Zones underutilized Emissions impact air quality and health Issues identified at Regional Economic Summit 	<ul style="list-style-type: none"> Ensure coordination between Regional Policy Council/COGs (stakeholder planning process underway), SJV Air Pollution Control District, CCVEDC, Caltrans, Partnership Sustainable Communities Work Group, railroad companies on planning/projects See Regional Economic Summit Strategy recommendations
Manufacturing	<ul style="list-style-type: none"> Main issue for employers is workforce development Lack of high-level engineering jobs in the Valley, so many students leave the region Need cross-pollination of engineering workplace skills with existing workforce Need appropriate infrastructure to create new products out of recycled products; waste commodities being shipped overseas 	<ul style="list-style-type: none"> Identify lead cluster partners Coordinate with C6 and California Center for Applied Competitive Technologies for increased training; including in skilled trades Match resources of the universities to the manufacturers; connect internships with employers; support UCAM Develop a strategy to close supplier gaps Do policy advocacy (coordinated by REACON) on increase markets for recycling in California (Recycling BIN – Build Infrastructure Now)
Water Technology	<ul style="list-style-type: none"> Demand for clean water, sustainable water resources & infrastructure is creating new business opportunities beyond agriculture Issues identified at Regional Economic Summit 	<ul style="list-style-type: none"> Broaden focus of R&D to address diverse water supply and quality issues across an increased range of industries; coordinate with WET Center, Lyles College of Engineering, CVBI & other partners Focus on growth of specific technologies (BlueTech Valley) See Regional Economic Summit Strategy recommendations
Public Sector Infrastructure - (CCWC Project)	<ul style="list-style-type: none"> RJI Construction Cluster not active Lack of awareness regarding aggregated impact of public sector investments Updated inventory of projects & schedules needed on ongoing basis Coordination needed with economic development and planning to secure project funding 	<ul style="list-style-type: none"> Implement CCWC Regional Plan as Cluster Strategy for workforce Coordinate with Partnership to advocate for public sector investment/local hiring Identify lead to update project inventory and schedule Coordinate with Regional Policy Council and SJV Economic Development District to link project priorities with possible funding sources

LEVERAGING COLLECTIVE IMPACT

The recent conference *Meeting of the Minds in Monterey*, sponsored by the California Workforce Association, was framed around the concept of “Collective Impact.” Research and practice have documented early successes based on this concept, finding “that large-scale social change comes from better cross-sector coordination rather than from isolated intervention of individual organizations.”³

The California Partnership for the San Joaquin Valley and many of the regional collaboration initiatives underway across the Valley are in and of themselves innovation models. They exemplify many of the characteristics of successful collective impact initiatives: a common agenda, shared measurement systems, mutually reinforcing activities, continuous communication, and backbone support organizations. They provide a strong foundation for advancing the Cluster Action Plan priorities and charting the pathway for the Valley’s future, especially if their knowledge and expertise can be leveraged and brought to scale. They are referenced throughout the report.

Concurrently, there are major new initiatives, especially at the state, federal and philanthropic levels, that are aligning with regional cluster-based economic strategies, including linking economic and workforce development from the ground up. These are catalytic initiatives and the Valley is well-positioned to contribute to and benefit from these initiatives. They also are referenced in the report and a few of the key ones are summarized as follows:

“Doing What Matters for Jobs and the Economy” – an initiative of the California Community Colleges, Division of Workforce and Economic Development. Goals are to supply in-demand skills for employers, create relevant career pathways and stackable credentials, promote student success and get Californians into open jobs. The focus is on spurring job creation and bridging skills gaps in priority/emergent sectors and clusters; taking effective practices to scale; integrating and leveraging programming between funding streams; promoting metrics for students success; and removing structural barriers. This initiative is a collaboration with the California Workforce Investment Board, which is preparing the State Strategic Workforce Plan; a priority is supporting regional economies and Regional Industry Clusters of Opportunity (RICO). The Central Region Consortium and the Central California Community Colleges Committed to Change Initiative (C6) include the Valley’s Community Colleges which are partners in the development of the Cluster Action Plan. The C6 Initiative is supported by a major federal grant, focused on systemic changes for academic success and skills building in the areas of agriculture, energy, health and manufacturing. The California Workforce Investment Board’s investment in the Valley’s RICO project is seen as a foundation for health-related cluster efforts.

California Financial Opportunities Roundtable (CalFOR) – is part of a statewide initiative supporting regional industry clusters to provide jobs, entrepreneurial opportunities, business growth, and public and private sector investment in value-chain infrastructure and sustainable communities. CalFOR has developed the “Access to Capital” guide to support innovation in capital markets and provide new

³ Kania, John and Mark Kramer, “Collective Impact,” *Stanford Social Innovation Review*, 48, Winter 2011, p. 3.

sources of investment; expansion of regional food systems; growth of biomass utilization, biofuels and renewable energies; and improved Rural-Urban collaboration. USDA Rural California is a core partner and one of the lead federal agencies in the Fresno area's Strong Cities Strong Communities Initiative as well in many other Valley initiatives, including the San Joaquin Valley Broadband Consortium managed by OCED, development of the Valley's "Ag Tech Cluster," and support for "buy local/invest local" efforts.

California Stewardship Network – a network of regional collaboratives throughout the State, including the California Partnership for the San Joaquin Valley, participating in the development of the California Economic Action Plan, based on priorities identified through regional economic summits and the statewide Economic Summit held in May 2012. The Action Plan is moving forward.

With consideration of opportunities to leverage collective impact through the implementation of the Cluster Action Plan, the following section addresses the roles of the Partnership, OCED and the New Valley Work Groups in driving the progress and success of the Valley's Regional Innovation Clusters for the next five years of the New Valley initiative.

ROLE OF THE PARTNERSHIP

Given its mission and role, how and where can the Partnership best add value at the regional level for successful on-the-ground implementation and long-term impact on the Valley's key measures of economic, environmental and community progress? Participants in the Project planning process identified the following desired roles for the Partnership in advancing an agenda for regional prosperity:

Network – Help connect the many efforts across the region that are cluster-based or support the clusters (cluster foundations such as infrastructure – including broadband, sustainable communities, financing, environmental quality, and education and workforce).

Convene – Play a convening role for the bigger valley-wide issues that are not being addressed in other forums, to drive the agenda for the growth and vitality of the clusters.

Integrate – Provide synergy across the region, helping to knit together the clusters, the issues and the initiatives to pursue shared priorities.

Advocate – Promote and advocate regarding cluster priorities on behalf of the Valley, including the removal of barriers, elevation of regional issues and opportunities, resource needs, and networking with partners and investors outside of the region.

Catalyze – Be a catalyst for collaboration and the diffusion of innovation, including through the elevation of models.

The Partnership plays many of these roles already. The next step is for more intentional engagement around cluster-based economic strategy. Cluster processes are by their nature vehicles for engagement of champions, businesses, stakeholders and partners in regional strategies. During the course of the project, ADE found that awareness of the Partnership was varied. Proactive engagement of the Partnership in the implementation of the Action Plan will increase this awareness and expand its impact.

This process can be guided by the Executive Committee of the Partnership. At the Partnership's September 2012 Board meeting, Executive Committee members indicated they would convene specifically to discuss the next steps for Action Plan implementation, including the identification of a set of tangible strategic initiatives for 2013, and its role in overall implementation. Participation of individual Partnership Board members in the New Valley Work Groups, especially as OCED coordinates with the Work Groups to identify their priorities for 2013 implementation initiatives, will be most valuable, building on their expertise and leadership role provided during the Project planning process.

ROLE OF OCED/NEW VALLEY WORK GROUPS

One of the key elements for successful collective impact efforts is the presence of backbone support organizations. Successful collaboration requires a supporting infrastructure. This requirement is extremely important for effective cluster initiatives. As Secretariat for the Partnership, OCED plays a critical backbone role. Implementation of the Cluster Action Plan will require an increase in or realignment of existing OCED capacity to support or lead the New Valley Work Groups; continue OCED's outreach, networking, coordination and consultation process around the cluster opportunities; and engage new partners, stakeholders and leaders in Work Group and Action Plan initiatives.

The Work Groups are at varying levels of capacity and operational status; some need to be revitalized or refocused. Several of the Work Groups have updated their work plans within the past year, while others are in process of updating them. The Health and Human Services Work Group has not been active and is being reorganized by OCED as the Health and Wellness Work Group, to align with Action Plan recommendations. It will be managed by OCED during this process. OCED will continue as the lead for the San Joaquin Valley Regional Broadband Consortium (Advanced Communications Work Group) and the Housing Work Group, and will continue in its support of the other Work Groups.

OCED has been discussing with partner organizations, including those which currently lead or support the Work Groups, the role they can and would like to play in Action Plan implementation. Staff will be following up with the Work Group leads and key partners to discuss specific Action Plan findings and recommendations, to see how they fit with Work Group goals and activities, and determine how OCED can support the Work Groups to integrate Action Plan recommendations into their existing scopes of work. A key OCED role will be to help connect and coordinate partners and initiatives across the Work Groups and with other major initiatives, and to be a liaison with the Partnership Executive Committee. OCED will designate a lead staff for this role.

NEXT STEPS

OCED has been working on implementation next steps since the summer of 2012, based on the emerging findings of the Cluster Analysis; the results of the Cluster stakeholder meetings; ongoing consultation and meetings with partners – especially economic and workforce development networks (CCVEDC, CCWC, Central Region Consortium, and C6); and connecting with new initiatives such as

“Doing What Matters for Jobs and the Economy.” As noted, the Partnership’s Executive Committee will play an important role in the Project’s implementation, along with individual Board members engaged with specific clusters. OCED is working with the Committee and the Board on this process. The following is a list of recommended next steps for the Partnership and OCED to carry forward the Action Plan.

1.	Work Group Leads/Work Plans. OCED staff will meet with Work Group leads and partners to review Project findings and recommendations and alignment with existing work plans; confirm lead partners and expanded/refined roles; identify 2013 priority cluster initiatives; and support work plan updates and expanded engagement of stakeholders. OCED should convene the stakeholders from the June meeting of the Manufacturing/Energy/Logistics Clusters to identify cross-cluster priorities and actions. This process will be coordinated with the Partnership’s Executive Committee. OCED should coordinate with USDA Rural Development and other champions on the implementation of the Ag Value Chain Regional Economic Summit action priorities.
2.	Health and Wellness Cluster Work Group. OCED should work with Partnership board members to convene the Cluster stakeholders to identify priorities, develop the work plan around Action Plan recommendations, and drive the implementation of the work plan.
3.	Economic Development Targets. OCED is working with CCVEDC and other partners on the process to develop a strategy for the Economic Development Targets (aggregated and cluster-specific), and identify a lead for implementation of the strategy. Partners should coordinate with TeamCalifornia to enhance marketing and outreach opportunities on the Valley’s cluster priorities.
4.	Economic Development/Education/Workforce Coordination. OCED should develop a process for increased, systemic linkages between economic development, education, and workforce development partners (CCVEDC, CCWC, Central Region Consortium, C6, universities) around regionalized cluster-focused issues. The partners should collaborate to seek funding support for: research to identify priority workforce gaps and occupational demand; designated staff to facilitate the coordination process across the clusters and the systems; expanding the reach of innovative training programs. OCED should facilitate integrated connections with state partners such as the California Workforce Investment Board, California Labor and Workforce Development Agency, Chancellor’s Office, the Employment Training Panel, and the U.S. Dept. of Labor.
5.	Public Sector Infrastructure/Logistics. OCED should convene the CCWC, the SJV Regional Policy Council, CCVEDC, Caltrans, labor, and other partners to link the interregional goods movement planning process and CCWC’s Public Sector Infrastructure Workforce Plan, including for identification of project funding priorities, funding sources for construction projects, and workforce development needs. Leverage the new Economic Development District.
6.	Work Group Coordination. OCED should convene the leadership of the New Valley Work Groups quarterly for updates on their work plans, and facilitate coordination across Work Groups and initiatives on an ongoing basis.
7.	Regional/State Economic Summits. The Partnership and OCED will continue coordination with the statewide economic summit process, and align the annual outcomes of the Work Group work plans for the Valley’s next regional economic summit (fall of 2013) and state-wide summit (late 2013). OCED and the Work Groups should report on the progress of the 2013 cluster initiatives at the next Regional Economic Summit.
8.	Reporting Process. OCED should develop a process to report on Cluster Action Plan activities, metrics and progress to the Partnership’s Executive Committee on an ongoing basis. The growth of the clusters should be tracked as an annual metric.
9.	Communications. OCED should create a dedicated location on the Partnership’s website for the Cluster Action Plan and resource materials, building upon the Regional Economic Summit materials. It should use the Cluster Action Plan implementation as a vehicle for communications about the Partnership, and as a portal to partner initiatives and resources.

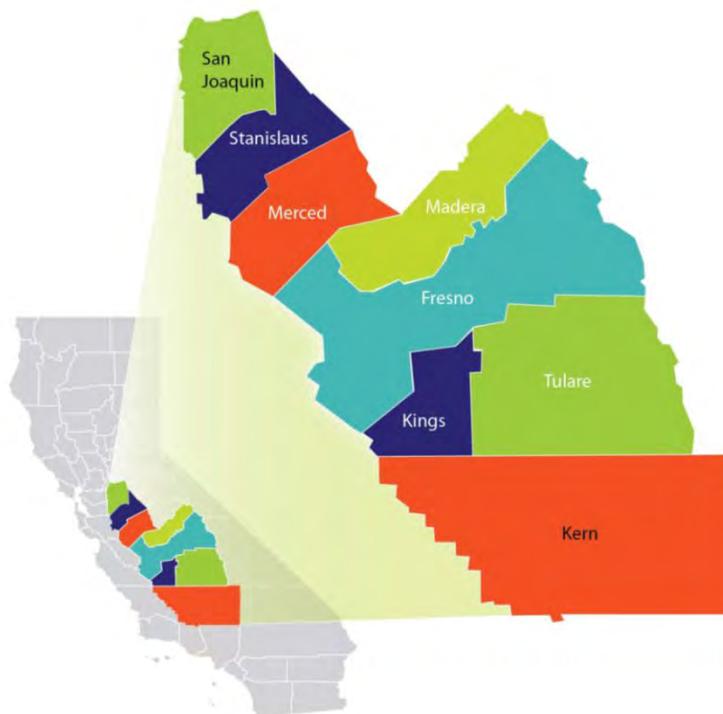
CHAPTER 1

PROJECT OVERVIEW, FRAMEWORK AND REGIONAL CLUSTER PRIORITIES

1.1 PROJECT OVERVIEW

This report presents an analysis of the San Joaquin Valley economy and the San Joaquin Valley Regional Industry Cluster Action Plan, prepared for the Office of Community and Economic Development (OCED), California State University, Fresno on behalf of the California Partnership of the San Joaquin Valley. The Cluster Action Plan identifies emerging opportunities for the region’s comparative advantage industry clusters – the foundation for innovation, competitiveness, and future well-being – within the context of global, national, state and regional drivers and conditions. Among these drivers is the increasing imperative for improved health, sustainability, energy self-sufficiency, and shared prosperity.

The Partnership is an unprecedented public-private sector partnership between the Valley and the state of California, involving the Valley’s eight counties and 62 cities, home to more than four million Californians in 2012. It was created in 2005 with Governor Schwarzenegger’s Executive Order S-05-05. The creation of the Partnership was designed to address the region’s persistent economic, environmental and social challenges and disparities compared to other regions in the state and nationally, while changing the pathway for the Valley’s economic future and overall well-being. Its creation also acknowledged the critical importance of the Valley to the state and national economy.



Since the formation of the Partnership, the San Joaquin Valley has been particularly hard hit by the Great Recession, the implosion of the housing and financial markets, and state and local budget deficits. Unemployment and poverty rates are among the highest in the State. The region is a federal non-attainment area for air quality, and has other significant challenges including the availability and quality of water and energy resources, aging infrastructure, and continuing conversion of important farmlands.

At the same time, the Valley is a region of statewide and national significance. It is one of the fastest growing and increasingly diverse regions in the State. Its agricultural industry is a global economic powerhouse. The Valley holds great potential as a center for renewable energies, and clusters such as the Water Technology Cluster are increasingly recognized as industry leaders in technology innovation, providing solutions for water quality, energy efficiency and resource scarcity issues that communities worldwide are facing. It is a major goods movement corridor. The Sacramento-San Joaquin Delta on the western edge of the Valley provides water for a large percentage of Californians, the Central Valley Water Project is one of the state's major infrastructure systems, and the eastern side of the Valley is the gateway to the majestic Sierra.

The California economy has begun to recover and signs of this recovery are beginning to emerge in the Valley, which will have a lower trajectory due to the nature of its regional economy. However, some sectors have shown resiliency during the recession. State and federal agencies and philanthropic partners are investing in the San Joaquin Valley in a concerted investment and capacity building effort to shift the future of the Valley from one of poverty and stagnation to one of prosperity and opportunity. These major efforts, most of which are being managed by OCED or in which it is a core partner, are intended to catalyze and accelerate the Valley's economic recovery and revitalization. The Valley is poised for a new stage of renewal.

THE NEXT STAGE FOR THE “NEW VALLEY”

As part of the Governor's Executive Order, in 2006 Partnership leaders prepared a Strategic Action Proposal (SAP), *The San Joaquin Valley, California's 21st Century Opportunity*. The SAP developed three overarching goals for the Valley: to develop a prosperous economy, create a quality environment, and achieve social equity. The Partnership implements the SAP through the “New Valley,” with ten work groups facilitating the Valley's improvement in ten core inter-related areas, supported by OCED in its role as Secretariat for the Partnership in serving the region. OCED manages or supports several initiatives in this mission, including alignment of university resources with Valley initiatives and leveraging of resources such as state and federal funding.

In August 2011, OCED received an Economic Adjustment grant from the Economic Development Administration (EDA), U.S. Department of Commerce, for several activities, including the preparation of a regional industry cluster analysis. The grant recognizes the vital organizing, convening, and resource role that OCED plays in San Joaquin Valley economic development efforts, and the unique leadership role that the Partnership serves in elevating and advancing regional priorities, giving a voice to the

Valley, and fostering a culture of collaboration and innovation. The Plan is intended to be the implementation strategy for the next stage – the second five years – of the Partnership’s “New Valley” initiative (2011-2016).

According to EDA:

“Regional Innovation Clusters (RICs) are a proven way to create jobs and grow the economy. They are geographic concentrations of firms and industries that do business with each other and have common needs for talent, technology, and infrastructure. This is a new framework for economic development, and investing in RICs is critical to our nation's future economic competitiveness. Whether the investment comes from the federal or state government, or the private sector, or – ideally – all of the above, those dollars would be best put to use if they serve a well-developed regional strategy that leverages core regional strengths.” (<http://www.eda.gov/AboutEDA/RIC/>)

The success of regional clusters is well documented and has become the standard of practice across California, as well as national and international regions. The Valley has been a leader in cluster-based strategies, starting with *The Economic Future of the San Joaquin Valley* report in 2000, the Fresno Regional Jobs Initiative (RJI) in 2003-4, the California Regional Economies Project in 2004, and the *Central San Joaquin Valley Innovation Economy Agenda* in 2006. The practice of economic development in the Valley has evolved from a focus on industry targets to strategic clusters, led by county economic development organizations. Many of the Valley EDCs and counties are leading their economic strategies through a very proactive, analytically-driven cluster-based approach.

Building upon these and other efforts, the SAP identified five key regional clusters of opportunity for focused action: agribusiness, health and medical, manufacturing, renewable energy, and supply chain management and logistics. These clusters reflected shared priorities across the Valley and represented sectors where the region’s comparative advantage was considered to be strong or emerging. The clusters have been a touchstone for the work of the New Valley Work Groups and partners, in particular for the economic development, education and workforce development partners who serve as champions for several of these Work Groups.

It is customary for cluster initiatives to periodically review their progress, adjust to changing conditions and opportunities, update the baseline economic data, and renew leadership and stakeholder. OCED has referenced that the clusters can help drive regional solutions to the Valley’s sustainability and livability challenges, stimulate the creation of new businesses and jobs, and provide opportunities to raise the skills levels and standard of living for the Valley’s workforce.

The major impetus for this project was the need to better understand the competitiveness position of the SAP clusters given the current economic climate and structural shifts. While an update on the five year progress of the RJI towards its job creation goals was prepared in 2009 it was not a full industry cluster analysis. Likewise there have been several county and valley-wide sector-specific analyses conducted over the past few years, but it has been many years since a comprehensive economic analysis has been conducted of innovation clusters in the Valley.

In addition, even with the economic recovery slowly beginning to take root in the Valley, several recent innovation indicators make the case for a concerted effort to reposition the Valley:

- *The 2012 California Green Innovation Index* shows venture capital investment in clean technology for California by region, with \$14.5 billion invested in 2011; the Valley does not have enough investment to be included in the breakout.⁴
- According to the Cluster Mapping Project sponsored by EDA, the Fresno-Madera Economic Area had 1.91 patents per 10,000 employees in 2009, versus 6.96 for the U.S. The number of establishments in traded industries grew slightly less than the US (1.36% vs. 1.47%, ranking the area 84 out of 179). Patenting growth per year from 1998-2009 was 0.81% vs. 0.05% for the US (ranking 84 out of 179).⁵
- The Next 10 reports on the regional distribution of jobs in the core green economy shows that the Valley's rate of job growth has slipped from 55% (from 1995-2009) to 22% from 1995-2010 (January), even while some other regions such as Sacramento, the North Sacramento Valley, Orange County and San Diego improved.⁶

The California Central Valley Economic Development Corporation (CCVEDC – representing the county economic development organizations) also identified persistent outsourcing of revenues from the clusters as businesses purchase needed inputs/supplies of goods and services for their output (goods and services) from outside the Valley, or as products are exported outside of the Valley where additional “value” is added. This analysis documents estimated levels of this “leakage” in outsourcing of commodities and opportunities to “recapture the value chain.” The report also documents the leakage of talent (workers), jobs (Valley jobs going to residents from outside of the Valley), and innovation/intellectual capital outside of the region – and opportunities to close these gaps through job creation, investing in education and workforce skills, and fostering an entrepreneurial climate that promoting increased innovation and access to capital.

Given these imperatives, the focus of this project was to:

- Identify key structural changes, emerging market opportunities, the “greening” of the economy, shifting policy priorities, and convergence across the clusters such as agriculture, energy and water;
- Inventory the many county and valley-wide cluster priorities and initiatives;
- Review various cluster methodologies and data sources to improve consistency;

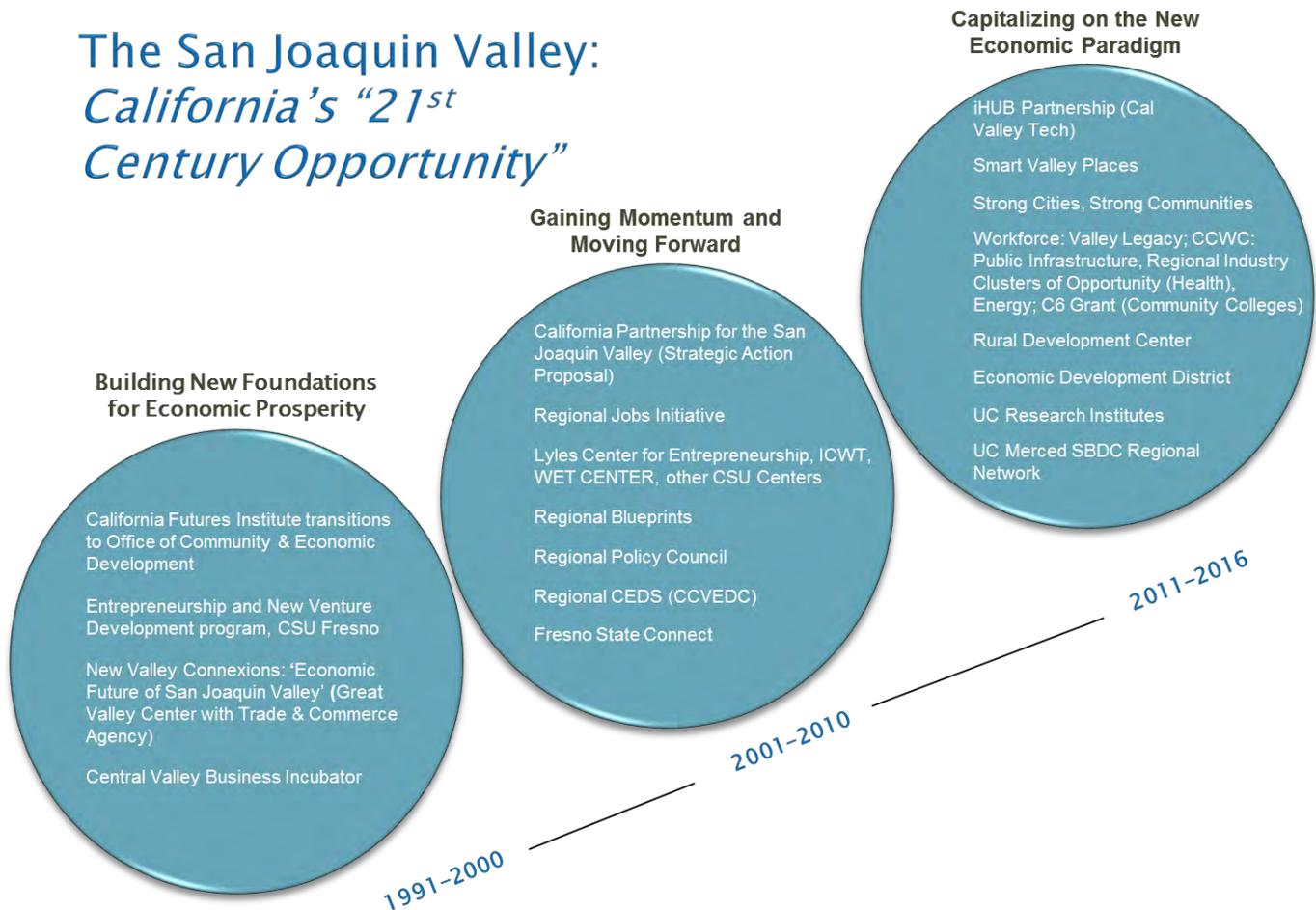
⁴ *2012 California Green Innovation Index*, Next 10, pp-15-17, 2012.

⁵ Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School, sponsored by EDA, 2012.

⁶ *Many Shades of Green*, 2011, Next 10, p. 13, and *Many Shades of Green*, 2012, Next 10, p. 21.

- Assess the capacity and effectiveness of existing cluster efforts, including leadership and resources;
- Incorporate new policy drivers such as AB 32 and state and federal partnerships that emphasize regional innovation clusters;
- Identify the high-growth innovation clusters and value chains which offer comparative advantage strengths across the Valley and sub-regionally, and that are responsive to business and community needs;
- Identify opportunities to align and leverage business and organizational capacity to support effective cluster implementation; and,
- Engage the participation of cluster champions, leaders and partners in the development and implementation of the Regional Cluster Action Plan.

The San Joaquin Valley: *California's "21st Century Opportunity"*



1.2 PROJECT FRAMEWORK

This project is a cluster-based approach for synergistic regional economic strategy and Action Plan implementation. Clusters are both an analytical tool for understanding the regional economy and seeing the linkages between industries, and an organizing and engagement tool. The process allows firms to identify common competitiveness issues, develop a demand-driven action plan, and collaborate jointly to address those issues. Because the Valley has experience with clusters, there are many networks of partner organizations supporting sector-based strategies and initiatives. A strong need identified through this project is to better connect and leverage these networks and scale up models that are working on the local and sub-regional levels. This is an important role for the Partnership and OCED. More detail is provided in Chapter 5, in the recommendations for the Action Plan focus and organizational approach.

The Cluster Action Plan focuses on “capturing the value chain” across the Valley’s core set of clusters for the next phase of the New Valley. The conceptual approach and analytic methodology used for the project are described in Chapter 4. This section provides an overview of the framework used as the basis for the development and implementation of the Action Plan. These are the Building Blocks of Comparative Advantage shown below. In 2005, state administration under the leadership of the Business, Transportation and Housing Agency, in partnership with the other state agencies, convened 17 regional Economic Vitality Conversations (12 regional and five statewide). The resulting vision for state economic prosperity produced a construct of “building blocks” to generate comparative economic advantage for California and its regions.

BUILDING BLOCKS OF ECONOMIC COMPARATIVE ADVANTAGE



Source: CA Business Transportation and Housing Agency
“Framework for California Prosperity,” 2005

As shown in the Building Blocks, industry (economic) clusters are the drivers of economic growth, springing from the research excellence and knowledge base of educational institutions, business innovators, investors and entrepreneurs. Infrastructure and smart growth/sustainability are key pillars for the clusters, along with efficient governmental processes and regulatory environment. Effective governance within the regions and civic leadership are the catalysts for success across the clusters. In the Valley, this capacity is characterized by the Partnership, OCED/Fresno State, and the rich array of regional partner networks, business and cluster leaders, and state and federal agency partners, among others.

The Building Blocks provided the framework for the first Joaquin Valley Economic Summit, sponsored by the Partnership in late March 2012. More than 300 leaders came together to select a series of state and regional actions as a platform for work within the region and to elevate as the region's input for the first State Economic Summit, held in May 2012, convened by the California Stewardship Network and California Forward. Valley leaders selected the Agriculture Value Chain Cluster (described in Chapter 4.1) as the cluster of opportunity for the Summit. The Valley will convene its next regional economic summit in the Fall of 2013, leading to the next state economic summit in late 2013. The San Joaquin Valley Cluster Action Plan will help guide the selection of action priorities for the Valley's core clusters which will constitute the basis for the 2013 Summit.

1.3 REGIONAL CLUSTER PRIORITIES

The study process and findings (described in Chapter 2) validated that the five original New Valley clusters continue to be the shared priorities across the region, although they have been adapted or expanded upon through the value chain concept. Each cluster contains several "components," each with sets of industries that comprise the value chain. For example, the Agriculture Cluster includes production, processing and packaging, distribution and diverse support activities. The Health Cluster now incorporates dimensions of wellness. Two clusters have been added – water technology and public sector infrastructure, based on their current and emerging importance and potential for the Valley. Therefore, the Action Plan priority clusters are:

- Agriculture
- Energy
- Health and Wellness
- Logistics
- Manufacturing (which is connected to all of the clusters)
- Water Technology
- Public Sector Infrastructure (Construction)

An analysis of each cluster is presented in Chapter 4, including a reference to many of the initiatives and networks that are involved in these clusters. They are too numerous to list individually but they are listed illustratively as leaders and partners in the Action Plan implementation recommendations, and also in the list of partners at the beginning of the report. They include both core economic initiatives and those that provide core support foundations for the clusters (such as infrastructure and sustainability).

The next stage of Action Plan implementation will need to continue the outreach and engagement activities of the cluster planning process initiated by the Partnership and OCED. While the Partnership and OCED have many strong existing partnerships, including through the New Valley Work Groups, there are additional initiatives and networks active in the cluster areas, especially at the sub-regional level, that need to be engaged in the cluster work. There also are new roles for existing partners that need to be explored to take the clusters to the next level of productivity and beneficial outcomes.

As part of this outreach and engagement process, there are new cluster-related initiatives sponsored by state, federal and other partners that will benefit the region. They include the “Doing What Matters for Jobs and the Economy” initiative of the Chancellor’s Office of the California Community Colleges, Workforce and Economic Development Division, and the California Financial Opportunities Roundtable (CalFor).

The Cluster Inventory Analysis presented in Chapter 2.3 and the consultation process with key partners identified the resource and capacity challenges of supporting cluster initiatives, especially across a wide geographic region and diverse but interconnected clusters. While increasing use of and access to information technologies can help to bridge this gap, there is still the “glue” of face to face interaction to establish the foundations of effective regional collaboration, including trust building, networking and information sharing. A clearly identified role for the Partnership and OCED is to help connect and convene these assets at a higher level in order to identify those shared regional priorities and opportunities that will be garnered most effectively from a regional collaborative strategy and voice.

The California Partnership for the San Joaquin Valley *Connect 2012 Annual Report* has a valuable discussion and overview of many of the regional partners and initiatives that will be an important part of the San Joaquin Valley Cluster Action Plan. Additional description of initiatives is available in cluster meeting presentation materials that will be posted on the Partnership website, and through Appendix C, Reference and Resource Materials. Other information generated through the cluster action planning process will be provided by ADE to OCED for use by the New Valley Work Groups/Cluster Action Teams.

CHAPTER 2

PLAN PROCESS AND METHODOLOGY

This chapter describes the planning process used to engage regional, local and other partners and stakeholders; conduct analyses; and develop the recommendations for the Cluster Action Plan. It includes an overview of the methodology used for the technical aspects of the analyses and presents the results of an inventory of cluster initiatives and priorities at the county and regional level. The inventory provided a base for validating the selection of the project's priority clusters for more detailed economic analysis, reviewing analytic findings, and assessing existing and potential implementation capacity.

2.1 PROJECT PLANNING PROCESS

The project planning process began in October 2011. The first activities were to conduct the inventory and assessment of existing cluster initiatives and priorities; identify partner network contacts and leads across the various systems and initiatives (economic development, education, workforce development, industry associations, and so forth); and conduct research to prepare the project's demographic and socio-economic overview and overview of the regional economy.

OCED's priority was to engage these partners and stakeholders proactively throughout the planning process - many of whom already are leads and/or partners for several of the Partnership's New Valley Work Groups - and identify and bring into the process new partners, as the foundation for development and implementation of the Cluster Action Plan. Starting with the California Central Valley EDC (CCVEDC), consultation began immediately with partner network leaders and representatives to discuss their cluster priorities, activities and capacity; gain their perspective on cluster drivers and challenges; learn about new initiatives and upcoming activities; and coordinate on cluster stakeholder meetings.

The consultation was framed to identify the desired role for the Partnership and OCED and the actions that would advance a regional industry cluster strategy, based on shared regional priorities intended to result in more overall opportunities for the Valley. This strategy in turn would be strengthened through regional collaboration and resource leveraging, and provide support for the partners in their on-the-ground implementation efforts. Core partners included the CCVEDC, the Central California Workforce Collaborative (CCWC), the Central Region Consortium (California Community Colleges), the C6 Project (Central California Community Colleges Committed to Change) and the Central Valley Business Incubator (CVBI). As the project proceeded, many additional partners were an integral part of the process.

The Cluster Inventory (see Section 2.3) validated that the Partnership's five core clusters, with some adjustments, were shared priorities across the Valley. ADE added two additional cluster areas – the Water Technology Cluster, which was the Valley's first cluster, and Public Sector Infrastructure, for which a workforce plan was being developed for CCWC. An analysis was conducted for each cluster except Infrastructure (see Section 2.2 for discussion of methodology).

Working closely with OCED, ADE coordinated with concurrent cluster-related planning activities, which are integrated into the Cluster Action Plan. These included the C6 Project, a major new cluster-based education and workforce project funded by the U.S. Department of Labor, led by West Hills Community College District. Project cluster meetings provided a venue to assist the C6 project with its rollout through presentations on the project and information dissemination.

Another was the San Joaquin Valley Regional Economic Summit held in late March 2012, hosted by the Partnership, organized to provide recommended regional and state-level actions for a state economic summit (held in May, 2012). Valley leaders focused on one cluster – the Agriculture Value Chain – due to the size and importance of the cluster to the Valley and state economy. ADE participated in the Summit Planning Committee, provided additional cluster analysis information, and coordinated the session on workforce needs. The Summit resulted in recommendations across five areas: infrastructure, workforce needs, innovation, regulations and sustainability, and access to capital, that constitute the action plan for this cluster. The Partnership is coordinating the follow-up with designated champions in each of the action areas. These areas were used to help develop recommendations for the other clusters.

ADE participated as an advisor to the planning process for the Public Sector Infrastructure Regional Workforce Plan, prepared for CCWC by the Council on Adult and Experiential Learning (CAEL). This plan provides a basis for revitalizing the construction sector in the Valley. ADE also coordinated with the San Joaquin Valley Regional Planning Council and its consultants Cambridge Systematics (and team) preparing the San Joaquin Valley Interregional Goods Movement Plan.

Once the cluster analyses were completed, the ADE project team along with OCED organized four cluster meetings between May and June of 2012 and a wide range of convening partners to review cluster findings, learn about related initiatives, and highlight issues and recommendations for the Action Plan. The partners conducted additional outreach to their networks. Approximately 150 partner and stakeholder organizations and employers participated (see Appendix A for list of participants).

Three meetings were held for the Health and Wellness Cluster, due to the size of the cluster (the second largest after Agriculture) and high level of focus on healthcare issues, with many initiatives underway, especially related to education and workforce development. One cluster meeting was held combining the Manufacturing, Energy and Logistics clusters, given the intersection between these areas and the fact that manufacturing is a part of all the clusters (including Agriculture and Health and Wellness); the Water Technology Cluster, currently defined with manufacturing-related components, is also highly interconnected, especially with the Agriculture and Energy clusters.

The Health and Wellness Cluster meetings were hosted by and held May 24th at Fresno State, June 6th in Modesto at the Great Valley Center, and June 21st at the Weill Center, Bakersfield College. Additional convening partners included: CCVEDC, CCWC, C6, Building Healthy Communities South Kern, Central Valley Health Network, Clinica Sierra Vista, CSU Bakersfield, Employers' Training Resource, Career Services Center, Hospital Council of Northern and Central California, Kaiser Permanent Central California, Kern Community College District, Kern Economic Development Corporation, and Stanislaus Alliance/Worknet.

The Manufacturing, Energy and Logistics Cluster meeting was held June 11th at the San Joaquin Valley Air Pollution Control District, Fresno (host). Additional convening partners included: CCVEDC, CCWC, C6, Center for Applied Competitive Technologies, International Center for Water Technology, San Joaquin Valley Clean Energy Organization, San Joaquin Valley Regional Policy Council, the Water, Energy and Technology Center, and Valley REACON (Recycling, Energy, Air, Conservation).

In addition to cluster findings, the presentations included an overview of key regional initiatives and sub-regional projects, especially sector initiatives that are potential models for scaling to the regional level, and updates by convening partners and participants on projects, issues, opportunities and priorities. The materials for the meetings, including meeting summaries, will be available on the Partnership website.

The Water Technology Cluster convenes on a regular basis. The ADE team lead for this cluster has been involved with the cluster since its inception, and for this project, conducted interviews by phone and met with numerous cluster leaders; conducted research on recent innovations and trends; and participated in two cluster meetings, in late 2011 and on June 20th 2012, the latter to review results of ADE's cluster analysis and discuss recommendations for expanding the impact of the cluster.

As part of its outreach and information gathering process, the ADE project team also attended several conferences and meetings that addressed the clusters, and presented updates and/or findings to the Partnership Board, the CCVEDC, the CCWC, the RJI Implementation Team, Kings County Economic Development Corporation, and the President and Provost of Fresno State. This included a discussion of implementation next steps and interests in terms of roles and capacities.

ADE also conducted extensive research on issues and trends related to the project cluster areas; conditions and initiatives in the Valley; overall economic and workforce reports related to the California economy, including emerging trends in the green economy; cluster methodologies; national analyses which included the Valley from a comparative standpoint; and cluster innovation models. Appendix C contains a listing of references and resource documents.

The next section describes the analytic methods for conducting the cluster analyses. The discussion of each cluster in Chapter 4 provides additional information on cluster-specific analytic approaches and resources.

2.2 CLUSTER METHODOLOGY

The quantitative analysis of the clusters relied on several data sources and analytical models. ADE defined each cluster as a group of industries at the six-digit NAICS (North American Industrial Classification System) level of detail. NAICS is a system used by government and business to classify business establishments by type of economic activity. The definitions were based in part on past cluster analysis work in the region; a review of the relevant literature on emerging cluster components, including around the "green economy" but also for existing clusters that are evolving based on the

“value chain” concept; and discussions with cluster stakeholders, including economic development professional in each county who work with these clusters.

In order to refine the cluster definitions, ADE conducted selected input-output studies to determine the portion of supplier inputs needed by the core industries in each cluster. For example, this approach helped to define how much of the wholesale industry is engaged by the Agriculture Cluster in the region. In some cases, this analysis led to assigning portions of the NAICS industries to clusters rather than the whole employment amount.

The next step was an analysis of employment change for each cluster using the Census of Employment and Wages (CEW) obtained from IMPLAN, (Impact Analysis for PLANning), which provides a consistent data set of employment wages and establishments annually by county. Using this data, ADE calculated not only employment growth rates for each industry in each cluster, but also location quotients and industry shift-share rates using the State of California as the point of reference. The industries in each cluster were organized into groupings – key components – reflecting different types of activities within the cluster (such as manufacturing, wholesale and distribution, services, retail). This way, the performance within the cluster can be differentiated and growth areas better identified.

The last major step in the analysis was to use the IMPLAN3 Input-Output (I-O) model to calculate the trade flow data for each cluster for the region as a whole. Using the cluster NAICS definitions to create parallel industry aggregations in the I-O model, ADE estimated the dollar value of total output for each cluster as well as several other production and market factors. For example, the model can be used to estimate the production input requirements for each aggregated cluster. Using the regional purchase coefficients in the model, ADE estimated the portion of these inputs (commodities) that are acquired from within the region and the portion purchased (outsourced) outside of the region (leakage). ADE then evaluated the outsourced dollar amounts using the 2007 Economic Census to determine whether the leakage is sufficient to support full establishments in the supplier industries.

ADE also used the I-O model to evaluate the San Joaquin valley as a consumer region, calculating the amount of goods and services produced by the clusters that are actually needed by the population, businesses and institutions in the region. These calculations and related analysis of export trade flows for each cluster led to indicators regarding the destination of intermediate and final products for the clusters in the analysis.

A listing of the NAICS codes used to define each cluster is attached in Appendix B. More detailed county employment data for each cluster component may be found in Appendix D.

2.3 CLUSTER INVENTORY

This section of the Report documents the primary industry cluster targets and initiatives in the Valley. As noted in the Introduction to this report, the San Joaquin Valley has been a leader in cluster-based strategies for more than a decade. Therefore, one of the first activities of Industry Cluster Action Plan project was to identify and inventory the existing cluster initiatives in the Valley, including the RJI clusters, the Partnership clusters, and individual county clusters; key leaders, participants and resources; types of cluster-based activities; and implementation status of the clusters.

This inventory provided a core base for validating the selection of the project's priority clusters for more detailed economic analysis; engaging partners and stakeholders in review of the cluster analytic findings; and assessing existing and potential implementation capacity. This information also provided a foundation for developing the Industry Cluster Action Plan, including recommendations for the role of OCED, the Partnership and the New Valley Work Groups and their alignment with and support of local and regional priorities and capacities. Emerging cluster initiatives and activities also were incorporated into this inventory and subsequent planning and engagement activities of the project.

The economics of clusters are dynamic and ever-changing, as well as the resources and capacity present locally and regionally to engage businesses, partner organizations and stakeholders in developing, leading and supporting cluster initiatives. Cluster analyses, initiatives and activities require periodic updating, renewal and alignment of resources to reflect these important realities, which were a key impetus for this project.

The inventory was prepared based on the following activities by ADE and OCED:

- **Ongoing consultation with California Central Valley Economic Development Corporation (CCVEDC) and its members (county economic development organizations).** This process led off with participation in CCVEDC's November 2011 meeting to discuss the purpose of the inventory and to obtain information about local cluster networks or cluster targets; each EDC/agency was asked to review a draft matrix of industry targets or cluster networks prepared by ADE. As a starting point, ADE utilized each EDC's website to obtain information on targets and initiatives, as well as cluster reports and research to ascertain the most recent analyses and the analytic techniques and methodologies used to prepare the reports and select the targets. ADE subsequently followed up with each EDC to discuss cluster targets/initiatives, activities, research and data bases, capacity issues, and and planned changes. ADE continued to consult with CCVEDC and individual county EDC's throughout the project to refine the inventory, including most recently at the CCVEDC July 2012 meeting.
- **Ongoing coordination with OCED.** As noted, OCED provides leadership and staff support to several cluster efforts and partners, and has been in ongoing consultation with cluster leaders and partners about the status and capacity of existing and emerging cluster initiatives and next steps. The Partnership's 2010-2011 Annual Report was also a resource on the status of the Work

Group, as well as the website which contains quarterly updates on most of the Work Groups' implementation plans.

- **Research, and Interviews and Meetings.** ADE conducted several interviews with regional partnership organizations leading or supporting cluster initiatives, including representatives of Central California Workforce Collaborative (CCWC – the Workforce Investment Boards) and the Valley's Community Colleges (Central California Regional Consortium and the California Community Colleges Committed to Change – C6). ADE also conducted extensive research on local and regional cluster analyses, including county Comprehensive Economic Development Strategies (CEDS) and the Valley-wide CEDS prepared by ADE. ADE participated in several sector-specific meetings and conferences, especially related to the Health and Wellness Cluster. ADE also was a member of the CCWC Advisory Team working on the development of the Public Sector Infrastructure Strategy as a possible Valley-wide cluster initiative.

SUMMARY OF CURRENT CLUSTER ACTIVITIES

Table 2.3-1 identifies the clusters that have been selected by each County economic development organization as sectors that are competitive or have the potential to be successful in that county. The Table also identifies the key Valley-wide clusters. To recap, the Partnership's five core New Valley clusters were: agribusiness, including food processing, agricultural technology and ag-biotechnology; manufacturing; supply chain management and logistics; health and medical care; and renewable energy.

The key points of the Cluster Inventory can be summarized as follows:

- Every county has a set of target clusters which guide business retention, expansion and attraction activities; only a few support more formalized cluster initiatives or networks.
- The Partnership's New Valley clusters continue to be the most commonly shared cluster priorities across the region.
- Ongoing organizational support of cluster initiatives or networks is a challenge, especially given the impacts of the recession and local budget cuts.

All told, there are approximately fifteen clusters that are targets across the eight counties. The county Economic Development Corporations and county-led economic development agencies are the leads for business retention, expansion and attraction activities regarding these clusters. Fresno County has the most clusters (twelve). Almost every county includes all five of the five New Valley clusters as targeted clusters although there are some local variations within the cluster groups. For example, renewable/clean energy is a priority cluster for almost all of the counties but in Kern County the cluster also includes chemical energy and natural resources, such as oil. In San Joaquin County logistics includes air freight transportation and aircraft maintenance.

Several counties have other clusters of focus that could provide an opportunity for future attention across the Valley, including the water technology cluster (primarily centered in Fresno and Tulare Counties), renewables and recyclables which present an opportunity to expand the potential for manufacturing (San Joaquin County), and entrepreneurship (Stanislaus County).

Overall, the types of cluster initiatives vary significantly throughout the Valley, especially with regard to the degree of organizational support; networking of stakeholders and partners; and engagement of employers, especially as “cluster champions” within the context of a cluster strategy implementation plan. While every county has identified a set of target industries for the purpose of focusing business expansion and recruitment activities, only a few have the capacity to support on-going cluster initiatives or networks through staffing and other resources.

The most formally organized cluster efforts are in Fresno and Kern Counties. The Regional Jobs Initiative (RJI) has designated private and public sector cluster chairs, and cluster managers, the latter of which are provided by several partner organizations, including the Economic Development Corporation serving Fresno County, OCED, the City of Fresno, Workforce Connection and Fresno State. The RJI clusters are under review as some clusters have been more active than others due to capacity leadership and other issues. Kern County’s clusters are managed by Kern Economic Development Corporation, in a partnership with Kern County and Employers Training Resource.

Most counties/EDCs have incorporated cluster analysis as a tool for economic development planning and as a means of selecting target industries, which also are driving education and workforce sector initiatives. Kern County has the most recently updated cluster strategy (2010). Some of the EDCs such as the San Joaquin Partnership have been refining the targets identified in earlier cluster and target industry analyses to reflect changing market opportunities and to better focus efforts. The level and timing of cluster-related research also varies across the Valley, a challenge that this Project is intended to help address by providing updated, consistent cluster analyses and industry detail for each county.

In terms of a Valley-wide focus for ongoing cluster initiatives, the CCVEDC, which also serves as the Partnership’s Economic Development Work Group, has the following cluster priorities in its current role in marketing and business attraction for the Valley: manufacturing, logistics, food processing, and renewable energy. The Partnership’s New Valley regional clusters also have been used to catalyze state and federal investments in the region, especially for innovative approaches to workforce and economic development supporting the region’s cluster priorities. One example is the Partnership’s Valley Legacy project which received discretionary funding from the State to support economy recovery strategies at a series of demonstration sites throughout the Valley, including skills building in emerging areas of opportunity such as the green economy (completed earlier in 2012).

TABLE 2.3-1

INVENTORY OF EXISTING TARGETED INDUSTRY CLUSTERS BY COUNTY AND VALLEY-WIDE

COUNTY	Ag, Food Processing, Biotech	Clean Energy	Health Care/ Medical Equip.	Logistics, Distribution	Manu- facturing	Water Tech	Construction	Info Tech	Software	Tourism, Arts & Culture ¹	Other
FRESNO	√	√	√	√	√	√	√	√	√	√	Public Sector
KERN	√	√ ²	√	√						√	Aerospace
KINGS	√	√	√	√	√					√	
MADERA	√		√	√	√					√	
MERCED	√	√	√	√	√						
SAN JOAQUIN	√	√	√	√ ⁴	√			√ ³			Manufacturing includes Renewables & Recyclables
STANISLAUS	√	√	√	√	√					√	Entrepreneurship
TULARE	√	√		√	√						

Source: California Central Valley EDC (CCVEDC), County Economic Development Organizations, Central California Workforce Collaborative (CCWC), ADE.

Valley-Wide Clusters:

- Manufacturing, Logistics, Food Processing, Renewable Energy (California Central Valley EDC – CCVEDC; C6 – Central California Community Colleges Committed to Change – C6).
- Energy, Recyclables/Renewables (State Energy Sector Partnership Grant, Central California Workforce Collaborative - CCWC)
- Public Sector Infrastructure (CCWC)
- Health (Regional Industry Clusters of Opportunity – RICO, CCWC; C6)

Notes:

1. Arts and Culture and Tourism clusters are sometimes separate
2. Includes Chemical Energy, and Natural Resources
3. Includes Back Office Activities
4. Includes Air Freight Transportation and Aircraft Maintenance

Regional partners such as the CCWC, which serves as co-partner for the Partnership’s Higher Education and Workforce Development Work Group, and the California Community Colleges, are leveraging cluster-focused planning and implementation resources for the region for systems change. Two major valley-wide cluster initiatives led by members of the CCWC that are engaging employers and a wide range of network partners are focused on health and public sector infrastructure. They include the Regional Industry Clusters of Opportunity project for the health cluster, managed by the Workforce Connection (Fresno Regional Workforce Investment Board) (for which the CCWC is seeking additional funding), and the Public Sector Infrastructure Strategy managed by the Workforce Investment Board of Tulare County.

Other recently-funded Valley-wide education and workforce sector projects are focusing on the agriculture, health, manufacturing, and renewable energy clusters, including the State Sector Energy Grant managed by the Stanislaus Workforce Alliance, and the California Community Colleges Committed to Change (C-6) project, a collaboration of several of the Valley’s Community Colleges, led by the West Hills Community College District. These projects are building institutional capacity to operationalize cluster strategies and will be an important resource for the implementation of the Cluster Action Plan.

The cluster inventory documentation process highlighted the difficulty in sustaining cluster-based networking initiatives either at the county or the regional levels, primarily due to resource and capacity issues, also because cluster strategies are collaboration-based and it takes time, effort and trust to build cluster networks, especially across such a large and diverse region as the Valley. Participants in the Cluster Strategy Project planning process articulated that the Partnership has a vital role to play in helping to knit together and support the various cluster opportunities, partners and resources within the framework of shared regional cluster priorities.

OCED plays an important leadership and supporting role for implementation of several on-the-ground cluster activities, especially those of the RJJ, as well as the overall management of the Partnership’s New Valley Work Groups which, in addition to specific cluster-focused economic, workforce development and higher education activities, address cross-cutting issues that support the overall vitality of the Valley economy. Through the findings of the cluster inventory, partner engagement and consultation, cluster meetings and development of Cluster Action Plan, the Action Plan will provide recommendations for alignment of organizational capacity and resources, especially for OCED and the New Valley Work Groups to advance the Valley’s regionally competitive advantage clusters and support local efforts.

Chapter 3 provides a demographic and socioeconomic overview and an overview of the regional economy of the Valley, including overall industry sector jobs trends, and cluster versus non-cluster job growth for the priority regional/local industry clusters. This analysis provides the context for the more in-depth analysis of the region’s priority clusters in Chapter 4.

CHAPTER 3

REGIONAL OVERVIEW

The San Joaquin Valley was one of the state’s fastest growing regions during the last decade and this growth is projected to continue in the coming decades. The dimensions and nature of this growth are shaping the landscape of challenge as well as opportunity for the Valley’s future. The Valley’s challenges have been well documented, and have catalyzed unprecedented regional collaboration in response, as exemplified by the mission and endeavors of the California Partnership for the San Joaquin Valley.

Reflecting the ongoing dynamics of change in the Valley and conditions as the Valley begins to emerge from the “Great Recession,” this chapter recaps key trends and patterns across the Valley as context for the analysis of key comparative advantage clusters in Chapter 6, and recommendations for the Cluster Action Plan presented in Chapter 7. It includes the following sections:

- Overview of demographic/socioeconomic conditions and trends as reflected by key indices, including those tracked by the Partnership and the CCVEDC, and interregional workforce flows (commute patterns) based on estimates from the Local Employment Dynamics data. The commute patterns illustrate the “leakage” of San Joaquin Valley workers to jobs outside the region, and the workers that commute into the Valley from other regions for jobs located in the Valley.
- Overview of the regional economy from 2001 through 2011, including jobs in the Valley, “supersector” employment trends, and cluster performance compared to other sectors of the economy.

3.1 DEMOGRAPHIC/SOCIOECONOMIC OVERVIEW

In 2005, the Congressional Research Office prepared an analysis documenting the fact that the San Joaquin Valley receives significantly less Federal Direct Spending than the national or state average, even lower than comparable regions such as the Appalachian Regional Commission area, despite exhibiting many socioeconomic indicators of concern. Among those indicators were high poverty rates, lower median incomes, and high levels of immigrant workers with generally low education levels and limited English language skills.

With the formation of the California Partnership for the San Joaquin Valley, the level of state and federal attention to the Valley has increased since 2005. However, economic improvements, particularly in the face of the severe national recession, have been slow to materialize. As shown in Table 5.2-1, the Valley continues to suffer high unemployment rates compared to the state average and per capita and median household incomes are well below state levels.

Along with the Sacramento region, the San Joaquin Valley was the the state’s fast growing region between 2000 and 2010, except for the Inland Empire, adding more than 700,000 new residents over the decade - a growth rate of more than 20 percent, compared to 14 percent for California.⁷ Growing racial, ethnic and cultural diversity characterizes California and the Valley is leading the way. Most of the Valley’s population increase was due to growing communities of color, particularly Latinos who in 2010 comprised 48.6 percent of the Valley’s population, compared to 37.6 percent of California’s population and 16.3 percent of the U.S. population.⁸

The Valley’s population continued to grow between 2011 and 2012, reaching an estimated population of 4,025,476 in January, 2012, or 10.7 percent of California’s population. All counties except for Kings County experienced growth. If the Valley were ranked as a state, it would be the country’s 27th largest state (based on the 2010 U.S. Census). Population growth will continue to be an economic driver for the region. According to a new estimates prepared for the eight San Joaquin Valley Metropolitan Planning Agencies (MPOs), the region is projected to grow to more than 6 million people by 2040, increasing by more than 50 percent.⁹ This will increase demand for “employment, production, distribution, and consumption of consumer products, and housing, and logistics and warehousing of consumer products”¹⁰

While unemployment rates have dropped in all counties since 2011, in May of 2012 they still ranged from 13.5 percent in Kern County - which has the strongest economy of the Valley’s eight counties – to 17.3 percent in Merced County, compared to 10.4 percent for the State. More than 270,000 residents were unemployed.¹¹ The number of persons living in poverty was estimated at 19 percent in 2008, compared to 14.5 percent for California.¹² The region’s poverty rates continue to be among the highest in the nation, and are present in both urban and rural areas. These conditions reflects lower levels of educational attainment and skills of the Valley’s workforce compared to many other regions, especially when matched to the demands of an increasingly complex and technology-driven global economy and compounding the impacts of the recession, with the implosion of housing, construction and financial sectors hitting the Valley particularly hard.

⁷ *2010 California Regional Progress Report*, California Department of Transportation and California Strategic Growth Council, p. 8.

⁸ *Toward 2050 in California, A Roundtable Report on Economic Inclusion and Political Participation in the San Joaquin Valley*, Center for American Progress, Julie Ajinkya, March 2012, p. 3.

⁹ *San Joaquin Valley Interregional Goods Movement Plan, Task 5, Commodity Growth*, Cambridge Systematics, June 2012, p. 1-3

¹⁰ *San Joaquin Valley Interregional Goods Movement Plan, Task 1. Existing Conditions Technical Memorandum*, Cambridge Systematics, January 2012, p. 3-1.

¹¹ EDD, Labor Market Information Division, Current Economic Statistics Group, June 2012, p. 12 (not seasonally adjusted).

¹² *2010 California Regional Progress Report*, p. 10.

TABLE 3.1-1**VALLEY DEMOGRAPHIC AND SOCIOECONOMIC INDICATORS**

2012	Fresno	Kern	Kings	Madera	Merced	San Joaquin	Stanislaus	Tulare	Region	California	% of State
Pop. Jan 2012 DOF	945,711	850,006	152,419	152,074	258,736	695,750	519,940	450,840	4,025,476	37,678,563	10.7%
Labor Force 2011 Annual Ave.	442,100	382,000	61,000	66,400	110,200	297,600	236,600	208,100	1,804,000	18,384,900	9.8%
Unemployment Rate 2011 Annual Avg.	16.5	14.9	16.1	15.3	18.3	16.8	16.8	16.6	16.4	11.7	140%
Private Sector Jobs 2011 Annual Avg	214,200	171,500	21,100	21,500	40,000	149,100	118,100	74,300	809,800	11,661,800	6.9%
Manufacturing Jobs 2011 Annual Avg.	23,900	13,400	4,100	3,000	8,100	17,500	19,900	11,000	100,900	1,245,800	8.1%
Per Capita Income (\$) 2011 CRS	\$31,049	\$30,041	\$26,856	\$26,326	\$27,156	\$31,467	\$31,629	\$28,058	\$29,072	\$42,907	67.75%
Median Household Income (\$) Most current-2010	\$45,221	\$45,524	\$44,609	\$48,268	\$42,449	\$50,011	\$48,044	\$43,397	\$45,940	\$57,708	80%
K-12 Enrollment 2011-2012	195,980	175,627	29,328	30,525	55,035	137,161	105,455	99,115	828,226	6,217,883	13.3%
SAT Scores (Avg.)DOE 2010	1,412	1,439	1,369	1,424	1,383	1,355	1,495	1,397	1,409	1,513	93%
Taxable Sales (\$ 000s) (2010) DOF	10,154,265	11,057,910	1,188,331	1,201,908	2,134,070	7,602,090	6,098,614	4,496,880	43,934,068	477,347,986	9.20%
Median Home Price (\$) 2011 Annual Avg. CRA	\$145,000	\$125,000	\$135,000	\$130,000	\$112,000	\$157,000	\$130,000	\$124,500	\$132,312	\$258,275	51.2%

Source: California Department of Finance, DOE, US Bureau of Labor Statistics, edd.ca.gov updated 5-16-12 by California Central Valley EDC 661-366-0756

In spite of lower levels of average median income in the Valley than in the state as a whole, over the last decade median household income grew throughout the Valley, increasing by over 30 percent, generally consistent with statewide trends. According to the *San Joaquin Valley Interregional Goods Movement Plan*, they are projected to nearly double by 2040. “Continued increases in household income will increase demand for consumer products, food, waste and other commodities exported from and imported to the Valley.”¹³ Combined with population and labor force growth, the Report also noted that “these trends will create pressure on the transportation system, as well as contribute to increasing congestion, emissions, and air quality concerns.”

Measures of personal, community, and environmental health and well-being in the Valley related to these and other trends and conditions, including lack of access to clean air and water, healthy foods, and recreation and health services for many communities, are well documented. For example, residents in the San Joaquin Valley have less access to primary health care, and have higher levels of diagnosed asthma and pollution-related hospitalizations and higher percentages of overweight and obese population than the state as a whole. (See the *California Partnership for the San Joaquin Valley 2010-2011 Report* and the *2010 California Regional Progress Report*.) Research by the Central Valley Health Policy Institute, the UCSF-Fresno School of Medicine, the Center for Race, Poverty and the Environment, the Center for Regional Change (U.C. Davis) and others have also documented the disparities in health outcomes for within the Valley, especially for communities of color.

While highly challenging, the Partnership and many leadership, business and community partners throughout the Valley are endeavoring to address these trends and conditions through innovative and inclusive regional collaboration initiatives across many inter-related areas. As will be described in the Section 4 of the report on Cluster Findings, these circumstances also present significant economic and job creation opportunities through meeting these challenges by strategies and actions to advance the Valley’s key competitive advantage clusters. Examples include increasing access to healthy foods by expanding regional and local food systems (Agriculture Cluster); expanding wellness and prevention activities and services (Health and Wellness Cluster); and improving the sustainability and quality of water resources (Water Technology Cluster).

WORKFORCE COMMUTE PATTERNS

According to the California Employment Development Department, the Valley had approximately 1.2 million jobs in 2011 and 1.5 million employed workers (whether their jobs are in or outside of the Valley). The new Local Employment Dynamics (LED) Partnership between the states, the U.S. Bureau of Labor Statistics and the U.S. Census Bureau integrates several sources of information on jobs, workers and local economics. One data set relates to labor flows (commute patterns) for the 2010 workforce, depicted in Tables 3.1-2 and 3.1-3. From a workforce perspective, the San Joaquin Valley economy has a

¹³ *San Joaquin Valley Interregional Goods Movement Plan*, p. 2-1.

very mobile workforce of both in and out-commuters. Viewing available LED data for a substantial sample of the jobs and workers, it is clear that the Valley is exporting labor to adjacent metropolitan areas – Sacramento to the north, the San Francisco Bay Area to the west and the Los Angeles metropolitan area to the south.

This has been a significant trend over the past two decades based on both the Valley's housing affordability compared to the Bay Area and other metropolitan areas, and the lack of adequate jobs in the Valley for the growing workforce. Table 3.1-2 shows the residential location of workers who held approximately 1.2 million jobs in the San Joaquin Valley in 2010.

As an example starting with Fresno County at the upper left of the table, 234,356 workers who lived in Fresno County also worked in the County. Further down the column, 11,527 Fresno jobs were occupied by workers coming from the north in Madera County and 13,659 by commuters from the south in Tulare County. Below the eight San Joaquin counties, the major areas of workers commuting in for San Joaquin Valley for jobs starts with the Central Coast. Workers commuting in from the Bay Area and from Los Angeles were about equally split at about 13,000 and 12,000, respectively.

In Kern County, the commute in by workers in the south from the Greater Los Angeles area was much larger, at 29,155 workers. Fresno and Kern also had substantial number of workers commuting in from the Central Coast, at 5,078 and 4,557, respectively. For counties to the north end of the Valley, such as San Joaquin and Stanislaus, the in-commute was predominantly from the Bay Area, with Sacramento a close second. All told, an estimated 18 percent of the jobs in the Valley (almost 216,000 jobs) were held by workers living outside the Valley.

TABLE 3.1-2**IN-COMMUTE CENTRAL VALLEY JOBS - LOCATION OF WORKER RESIDENCE**

Place of Residence	Jobs Location								
	Fresno	Kern	Kings	Madera	Merced	San Joaquin	Stanislaus	Tulare	Total
Fresno	234,356	4,015	5,229	8,307	2,724	2,411	3,338	12,779	273,159
Kern	4,626	185,787	827	282	383	292	593	6,279	199,069
Kings	6,719	1,960	21,755	206	193	231	368	4,168	35,600
Madera	11,527	373	388	20,143	1,848	720	922	692	36,613
Merced	4,067	500	184	1,787	39,489	2,670	11,621	683	61,001
San Joaquin	2,502	436	243	307	974	118,599	12,483	737	136,281
Stanislaus	3,129	699	232	545	7,041	15,520	100,777	871	128,814
Tulare	13,659	8,802	5,252	600	534	700	1,081	92,705	123,333
Central Coast	5,078	4,557	702	660	1,087	2,262	2,330	1,895	18,571
Greater Los Angeles	12,048	29,155	1,499	1,082	1,855	6,554	2,791	9,587	64,571
Sacramento MSA	5,864	1,161	312	517	1,298	17,280	5,480	1,375	33,287
SF Bay Area	13,092	3,237	912	1,244	3,113	23,268	12,441	3,627	60,934
Other	7,901	6,528	798	1,553	2,591	9,591	6,154	3,320	38,436
Total	324,568	247,210	38,333	37,233	63,130	200,098	160,379	138,718	1,209,669

Source: Local Employment Dynamics, U.S. Census Bureau, Applied Development Economics

Table 3.1-3 shows the commute pattern for the LED data's estimated 1.3 million workers in the San Joaquin Valley in 2010. Based on the sampling process, the LED estimate is less than EDD's data on the number of employed workers residing in the Valley but is illustrative of the commute patterns. Twenty-four percent of employed persons in the Valley commuted to jobs outside the region (almost 322,000 workers). In Fresno County, the out-commute to the Bay Area and Los Angeles was larger than the in-commute from those areas. This was true for nearly all the commute patterns described above. The San Joaquin Valley is a net exporter of labor, due to the lack of well-paying jobs for the size of its labor force. The net jobs gap based on the estimated LED data was at least eight percent in 2010 (106,000 jobs) and was likely larger.

TABLE 3.1-3**OUT-COMMUTE CENTRAL VALLEY LABOR FORCE - LOCATION OF JOBS**

Place of Job	Labor Force								
	Fresno	Kern	Kings	Madera	Merced	San Joaquin	Stanislaus	Tulare	Total
Fresno	234,356	4,626	6,719	11,527	4,067	2,502	3,129	13,659	280,585
Kern	4,015	185,787	1,960	373	500	436	699	8,802	202,572
Kings	5,229	827	21,755	388	184	243	232	5,252	34,110
Madera	8,307	282	206	20,143	1,787	307	545	600	32,177
Merced	2,724	383	193	1,848	39,489	974	7,041	534	53,186
San Joaquin	2,411	292	231	720	2,670	118,599	15,520	700	141,143
Stanislaus	3,338	593	368	922	11,621	12,483	100,777	1,081	131,183
Tulare	12,779	6,279	4,168	692	683	737	871	92,705	118,914
Central Coast	5,574	4,665	955	1,002	2,763	2,986	2,495	2,755	23,195
Greater Los Angeles	16,969	51,192	3,929	1,342	2,333	8,407	4,276	10,875	99,323
Sacramento MSA	6,917	1,701	895	1,173	2,468	17,582	7,247	2,513	40,496
SF Bay Area	16,040	2,924	1,351	3,049	10,505	61,106	30,342	3,812	129,129
Other	5,215	6,735	799	1,342	1,851	6,846	4,465	2,333	29,586
Total	323,874	266,286	43,529	44,521	80,921	233,208	177,639	145,621	1,315,599

Source: Local Employment Dynamics, U.S. Census Bureau, Applied Development Economics

3.2 OVERVIEW OF REGIONAL ECONOMY 2001-2011

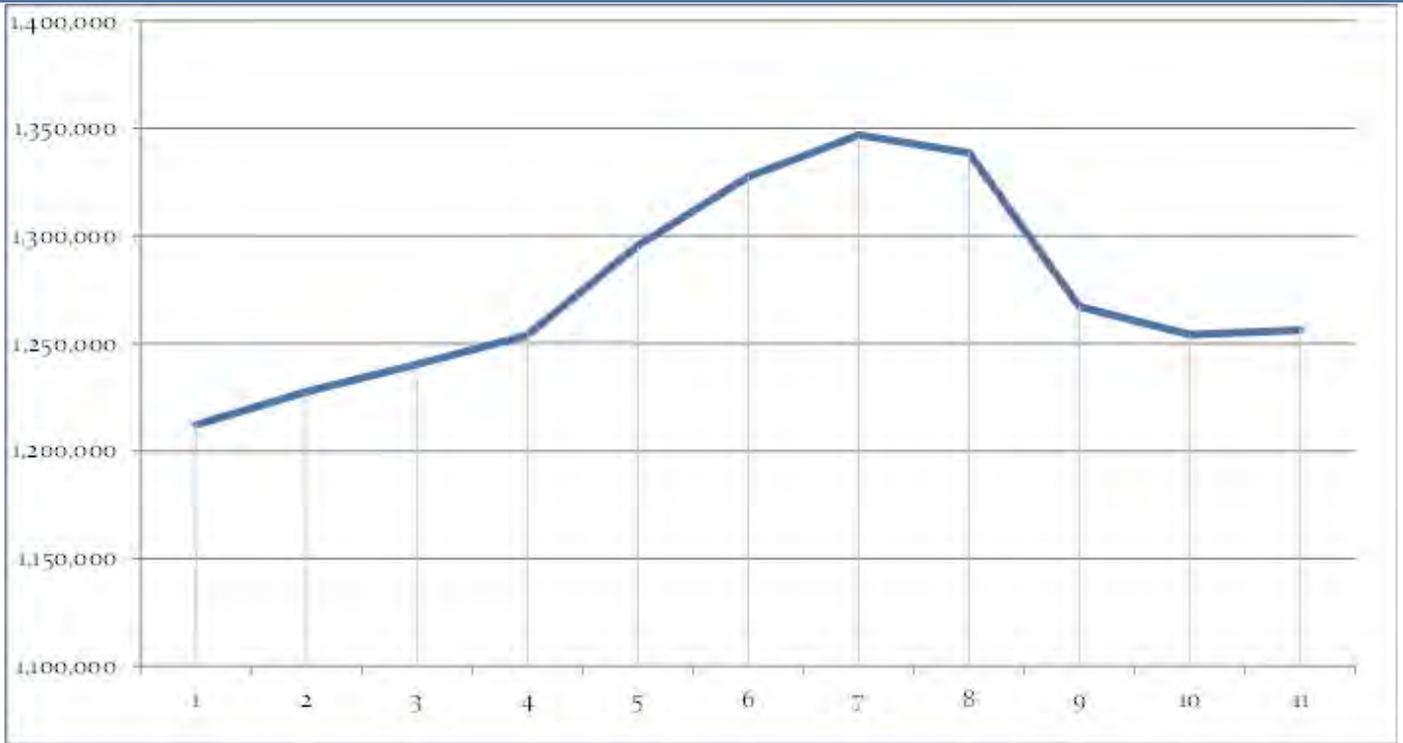
The San Joaquin Valley began the decade in 2001 with about 1.2 million jobs in both the public and private sectors, excluding self-employment. As shown in Figure 3.2-1, employment grew steadily but slowly until 2005 when the region gained more than 40,000 jobs in the one year, compared to a growth of 13,500 in 2004. Job growth continued at an accelerated rate through 2007 when it reached a peak of more than 1.35 million jobs. During the recession between 2008 and 2010, the Valley lost 92,000 jobs and the total job level fell to 2004 levels. In 2011, the Valley added 1,100 jobs overall to begin what is anticipated to be a slow recovery. This pattern is unlike some other regions such as the Bay Area which have posted strong job gains over the past year and are leading the State's economic recovery.¹⁴

¹⁴ "July Jobs Report," Steve Levy, Center for the Continuing Study of the California Economy, August 17, 2012.

FIGURE 3.2-1

SAN JOAQUIN VALLEY EMPLOYMENT TRENDS, 2001- 2011

San Joaquin Valley Region	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total All Industries	1,212,200	1,227,600	1,240,300	1,253,800	1,295,500	1,327,500	1,346,900	1,338,700	1,267,100	1,254,100	1,256,200



Source: California Employment Development Department, Quarterly Census of Employment and Wages (CEW)

All told, net job growth over the last decade was approximately 44,000 jobs, for a 3.6 percent rate of growth. Non-farm private sector jobs increased by 25,700 over this period, while public sector jobs increased by 11,700; the balance of job growth (6,700 jobs) was in farm industries which are counted separately. From 2010 to 2011, private sector jobs (farm and non-farm) both increased while public sector jobs decreased, a trend that has occurred since 2008, primarily in local government jobs. Over this period, more than 13,000 public sector jobs have been lost, reflecting the severity of the state and local budget crises. As noted in Section 3.1, there are more employed workers residing in the Valley than jobs available, leading to significant levels of out-commuting.

Figure 3.2-2 illustrates how the major sectors in the economy performed during this period (detailed data may be found in Table 3.3-1). They are considered “Supersectors” as they include groupings of industry sectors. For example, “Trade, Transportation and Utilities” includes Retail Trade, Wholesale Trade, Transportation and Warehousing, and Utilities. Professional and Businesses Services includes Professional, Scientific and Technical Services, Administrative Services (including Waste Management and Remediation Services), and Management of Companies and Enterprises.

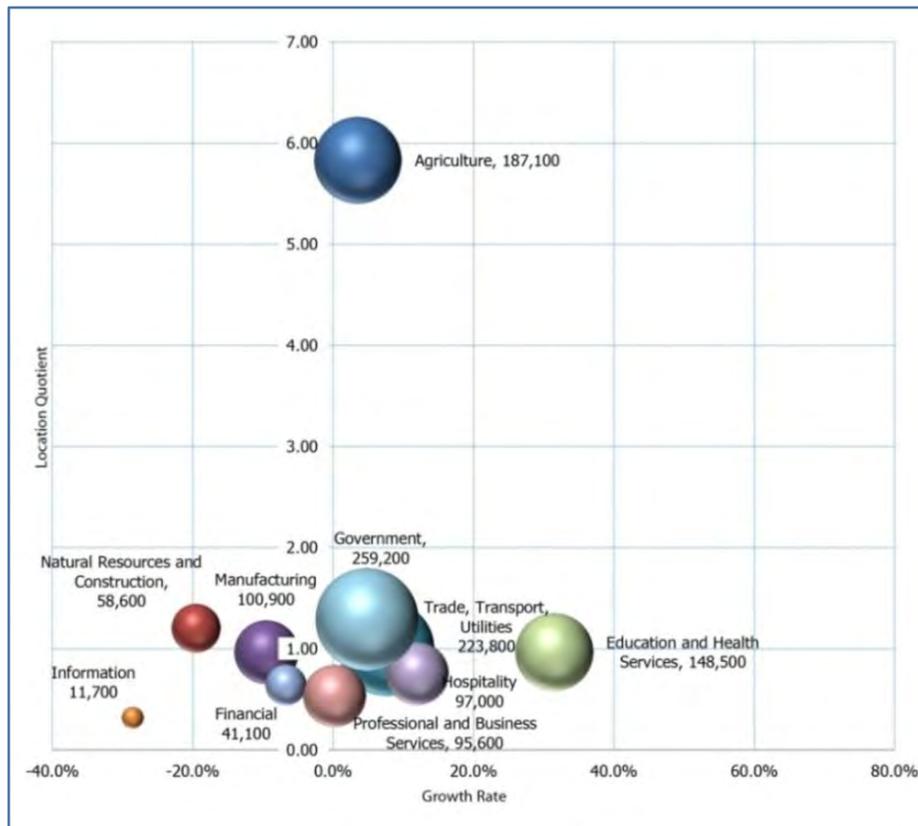
The figure uses “bubbles” to show:

- The size of the sector by number of jobs - the bigger the bubble the larger the sector
- The growth of the sector – the vertical axis at zero (0) percent is the starting point; a bubble to the left of this axis displays negative growth or less jobs, while a bubble to the right of the axis displays positive growth during 2001-2011 period
- The concentration of the cluster or Location Quotient – the Location Quotient (LQ) is a measure calculated as a ratio that regional economists use as a way to compare industrial activity levels across different areas. In this case, the LQ compares the concentration of employment in the Valley to the state, in order to identify specialization in the regional economy. The horizontal axis at 1.0 (100 percent) represents parity with state levels. Above 1.0 represents the increased degree of specialization in the Valley. It also helps to identify the export orientation of an industry, emerging export industries that could bring more money into the region, or industries facing decline that could erode the region’s economic base (sources: U.S. Bureau of Labor Statistics, EMSI – Economic Modeling Specialists Int.).

Not surprisingly, the Agriculture sector, at the top of the chart, is six times more concentrated in the San Joaquin Valley than it is statewide, although it had little net growth from 2001 to 2011. Agriculture actually entered the past decade on a down note, dropping from 202,400 jobs in 2000 to 172,100 in 2004. From there it began to grow again and reached 191,700 in 2008. It had only one down year in the recession, losing 11,300 jobs in 2009, but then has added jobs again in both 2010 and 2011. The performance of the Agriculture sector has been very strong from an economic standpoint, especially in terms of exports. Employment is affected by technology, immigration and other issues. The dynamics within the components of the sector are discussed in greater detail in Chapter 4.1 Agriculture Cluster.

FIGURE 3.2-2

SAN JOAQUIN VALLEY EMPLOYMENT TRENDS BY SUPERSECTOR, 2001-2011



Source: California Employment Development Department, Quarterly Census of Employment and Wages

Most of the other sectors were close or slightly below the state levels of employment concentration. The sectors which are comparable to state levels including trade, goods movement and logistics, food processing (manufacturing), energy, education and health and education services. Government employment was slightly more concentrated.

The sectors that had the most rapid net growth during the 2001-2011 period were Education and Health Services, with health as the largest component; Hospitality; and Trade, Transport and Utilities. Most of these sectors had a pattern similar to the overall job base, with growth through 2007 and then a leveling off with a small job gain between 2010 and 2011.

Trade, Transportation, and Utilities was the second fastest growing supersector. While retail trade comprised almost 60 percent of the sector in 2011, the fastest rates of growth were in wholesale trade and transportation, warehousing and utilities. This is due to the fact that more than 44 percent of jobs in the Valley are associated with goods-movement dependent industries. In addition to transportation and utilities, and wholesale and retail trade, these industries include agriculture, manufacturing (especially food manufacturing and processing), mining and construction.¹⁵

¹⁵ San Joaquin Valley Interregional Goods Movement Plan, Task 1: Existing Conditions Assessment Technical

Leisure and Hospitality was the next fastest growing sector, followed by Professional and Business Services sector. Additional employment data detail from the IMPLAN analysis shows that within this latter sector, Professional, Scientific and Technical Services represented 36 percent of the sector's employment in 2011 and was the fastest growing subsector, growing approximately 30 percent over the decade. This may reflect an increase in the diversification of the regional economy and the ability to provide more of these types of services within the Valley than in the past.

Government, which is the single largest employment sector, continued to lose jobs between 2010 and 2011 but still ended up at a job level similar to where it was in 2006. Manufacturing, consistent with national trends, had an overall decline but there has been growth within some subsectors which is discussed in Chapter 4 regarding the various clusters. Natural Resources and Construction, of which construction was more than 75 percent of the cluster in 2011, lost 40,000 jobs between peak employment in 2006, and 2011. Losses in construction and financial services were tied to the implosion of the housing market and financial market crises.

SAN JOAQUIN VALLEY'S CLUSTER-BASED ECONOMY

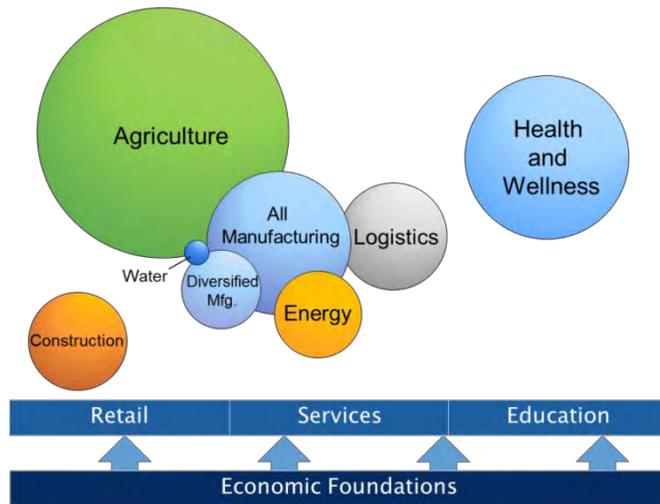
Industry clusters provide a more functional and comprehensive way of viewing the regional economy. The main industry clusters in the San Joaquin Valley are depicted conceptually in Figure 3.2-3 and are described in detail in the next Chapter 4 of the report. Unlike Figure 3.2-2 above, this conceptual portrait of the economy conveys the relative size of the clusters in 2011 and their interrelationships but does not indicate growth or change dynamics. From a functional standpoint, the clusters in the upper part of the chart are generally the export industries that draw income and wealth into the regional economy, which in turn supports the local serving sectors shown underneath the cluster, including retail, services and local education. All of these industry clusters in turn are supported by the economic foundations including infrastructure, workforce, capital, the regulatory framework, research universities, quality environment, vibrant communities and all the factors that contribute to the region's quality of life.

TABLE 3.2-1

SAN JOAQUIN VALLEY EMPLOYMENT TRENDS, 2001- 2011

Industrial Supersectors	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total Farm	180,900	176,500	178,300	172,100	180,700	182,800	186,900	191,700	180,400	184,500	187,100
Mining, Logging, and Construction	72,900	73,900	78,700	85,200	94,100	98,400	89,100	77,500	60,500	56,200	58,600
Manufacturing	111,600	110,300	112,300	113,100	112,900	113,200	115,100	114,200	105,400	101,700	100,900
Trade, Transport & Utilities	208,200	212,300	216,300	219,500	227,700	235,000	239,600	234,400	221,400	221,100	223,800
Information	16,400	15,800	15,300	16,100	15,500	15,100	15,100	15,500	13,500	12,300	11,700
Financial Activities	44,100	45,300	46,200	46,200	47,700	49,200	48,800	47,300	44,200	41,800	41,100
Professional & Business Services	95,500	95,400	94,900	97,900	101,500	106,100	107,100	105,500	97,300	95,000	95,600
Educational & Health Services	113,000	118,200	122,500	124,800	128,000	131,500	138,100	142,400	143,200	145,600	148,500
Leisure & Hospitality	86,700	88,500	89,000	91,900	95,900	100,200	102,400	101,900	97,900	96,600	97,000
Other Services	36,100	37,200	36,300	36,100	36,500	36,200	37,500	36,800	34,800	33,900	33,100
Government	247,500	254,100	251,000	251,200	255,600	260,300	267,500	272,400	268,800	265,500	259,200
Total All Industries	1,212,900	1,227,500	1,240,800	1,254,100	1,296,100	1,328,000	1,347,200	1,339,600	1,267,400	1,254,200	1,256,600

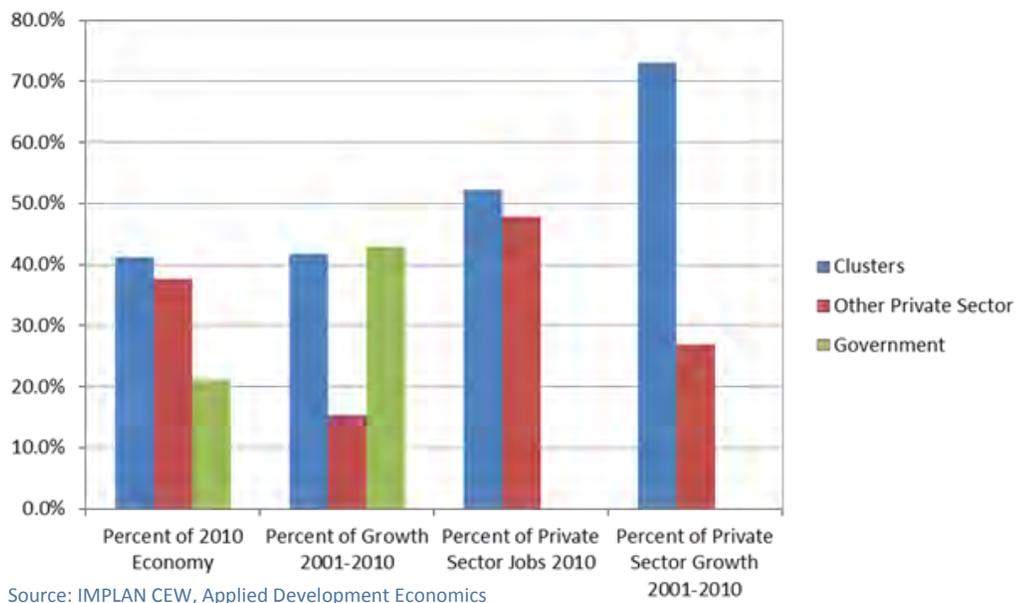
FIGURE 3.2-3
SAN JOAQUIN VALLEY REGIONAL ECONOMY, 2010



Source: IMPLAN CEW, Applied Development Economics

Clusters are important because they are the economic drivers that propel the economy forward and are the source of innovation and regional competitiveness needed to enhance economic prosperity. As shown in Figure 3.2-4, the six major clusters in the regional economy (combining manufacturing and excluding construction) constituted 41 percent of the jobs in the region and also supplied a similar amount of job growth during the 2001-2010 period.¹⁶

FIGURE 3.2-4
CLUSTER VS NON-CLUSTER EMPLOYMENT GROWTH, 2001-2010



Source: IMPLAN CEW, Applied Development Economics

¹⁶ Detailed data needed to analyze the clusters is not yet available for 2011. Also, construction is excluded from these figures due to the circumstances of the recession that decimated this industry in the past several years.

In contrast, the other industry sectors shown in the middle of Figure 3.2-3 comprise about 38 percent of the jobs in 2011 but only supported 15 percent of the job growth during the decade. Since government was actually a growth sector in the Valley during this period, the figures are even more pronounced if we look just at the private sector economy. In that view, shown in the right hand side of Figure 3.2-4, the clusters represented 52 percent of the employment but produced 73 percent of the private sector job growth.

Table 3.2-2 shows the detailed growth and decline within the various components of the clusters. Among the clusters, Health and Wellness provided most of the job growth followed by Agriculture and then Logistics. Manufacturing, Water Technology, and Energy all showed net cluster job losses, although energy-related research was a growth area in the Valley during the last decade. Manufacturing has components within all the other clusters, with the balance being “diversified manufacturing.” As noted, there has been growth in food processing, a subcomponent of overall manufacturing.

TABLE 3.2-2
CLUSTER EMPLOYMENT GROWTH COMPARED TO NON-CLUSTER GROWTH, 2001-2010

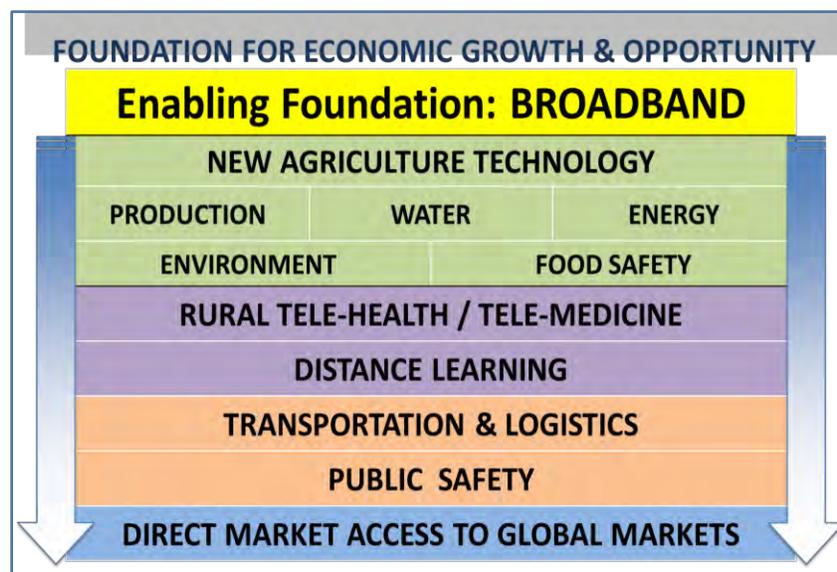
Cluster Components and Other Economic Sectors	Regional Employment-- 2001	Regional Employment-- 2010	Change in Regional Employment 2001 to 2010
Agriculture Cluster Total	280,905	289,014	8,109
Support	116,076	119,394	3,318
Production	87,532	81,795	-5,737
Processing and Packaging	57,499	62,579	5,080
Distribution	19,798	25,246	5,448
Health and Wellness Cluster Total	105,497	128,178	22,681
Services Delivery	93,477	114,585	21,108
Medical Device Manufacturing	1,675	1,269	-406
Pharmaceutical	127	311	184
Supplies and Support Services	1,347	2,434	1,087
Wellness and Fitness	8,871	9,579	708
Logistics	28,803	31,429	-12,474
Diversified Manufacturing	43,903	29,503	-14,400
All Manufacturing	111,786	101,382	-10,404
Water Technology	3,651	2,668	-983
Energy Cluster Total	35,823	33,353	-2,470
Energy Core	33,837	30,846	-2,991
Energy Related - Services	82	78	-4
Energy Related - Research	1,904	2,429	525
All Clusters Subtotal	498,582	516,035	17,453
Other Private Sector	466,118	472,565	6,447
Government	247,500	265,500	18,000
Total Employment	1,212,200	1,254,100	41,900

Source: ADE

BROADBAND: THE ENABLING INFRASTRUCTURE FOUNDATION

The previous section referenced the economic foundations that support all of the Valley’s clusters. The definition of 21st century infrastructure includes broadband as a critical platform for regional growth and competitiveness. USDA Rural Development, California is one of the lead federal partners for the Strong Cities, Strong Communities “SC2” Pilot Project for Fresno. The federal project team works with local government, the private sector and other institutions such as the Partnership and OCED to leverage federal resources and encourage economic growth and community development, drawing upon regional economic underpinnings. This includes advanced communications services supported by broadband infrastructure and deployment.

The Valley has many unserved and underserved areas in terms of broadband infrastructure, especially in rural areas, and lags in access to and adoption of broadband technologies (digital literacy). OCED received funding from the California Public Utilities Commission to develop and implement a regional broadband strategy to address these gaps. This effort is led by OCED through the San Joaquin Valley Regional Broadband Consortium, which serves as the Partnership’s Advanced Communications Services Work Group. USDA Rural Development, California is collaborating with the Consortium and the California Emerging Technology Fund on the strategy. Special Projects Lead Robert Tse provided the Partnership with an illustration of how broadband is the enabling foundation for both the clusters and the cluster foundations. Widespread broadband infrastructure and deployment will enable the adoption and use of innovative technologies for new Ag Technology, as shown below, for production, food safety, sustainable use of energy and water resources, and reduced impact on the environment. It will enable innovation in other clusters such as Health and Wellness and Logistics, and support improved access to education and other services, direct market access to global markets, and improved public safety.



Source: Robert Tse, USDA Rural Development, California, Special Projects Lead

CHAPTER 4

KEY CLUSTER AND OVERALL CLUSTER LEAKAGE FINDINGS

Chapter 4 provides a detailed analysis of the six Regional Industry Clusters of innovation summarized above in Table 3.2-2:

- Agriculture
- Health and Wellness
- Logistics
- Manufacturing
- Water Technology

Each section includes:

- The definition of the cluster (as grouped by NAICS codes), and subcomponents for most of the clusters.
- Number of jobs (size of the cluster), rate of employment growth, and concentration compared to the state (location quotient), and geographic concentration by County.
- Trade flow information which describes the output for each cluster (commodity value), supplier purchases/inputs required to support the output for each cluster (business to business), and total regional demand from consumers (households, governments, non-cluster businesses).
- “Leakage” outside the region of supplier purchases/production inputs required for cluster output. This leakage represents an important economic development opportunity for these leakage gaps to be filled through retention, expansion and start-ups of local firms or attraction of new firms. ADE has identified the commodity areas that offer potential priority targets, based on further analysis.
- Aggregation of supplier purchases/production inputs across the clusters which provides additional economic development potential, when brought to higher levels of scale.

There is also discussion of the potential for public sector infrastructure investments to support a Valley-wide construction cluster, based on the economic and workforce analysis and regional workforce strategy prepared in 2011-2012 on behalf of the Central California Workforce Collaborative (CCWC).

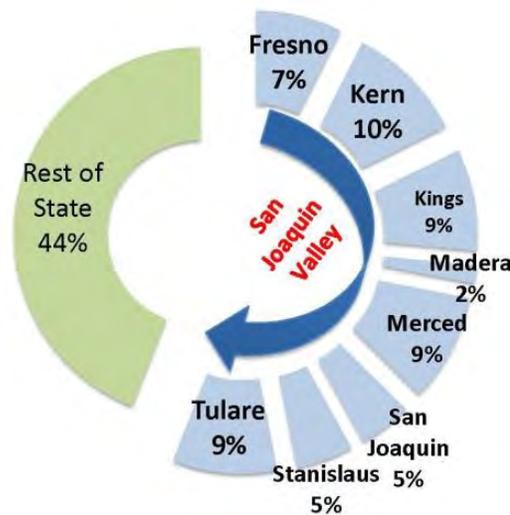
4.1 AGRICULTURE CLUSTER

Agriculture is the heart of the economy in the San Joaquin Valley and a major contributor to the California economy, including through the rich diversity of its products, continuing innovation, and the strengths of the Valley’s global exports. According to an analysis by the Central California Region Center of Excellence (California Community Colleges), the statewide economic impact of the agriculture “value chain” (discussed in detail below) - calculated on both employment and industry output - reached more than \$300 billion in 2008.¹⁷ California’s agricultural industry leads the United States in both production and exports. In 2010, California had an agricultural farmgate value of more than \$37.5 billion, and exports valued at \$12.8 billion, 14 percent of U.S. total agricultural exports.¹⁸

Recently published research provided by USDA Rural Development California using data from the National Agricultural Statistics Service (NASS) shows the San Joaquin Valley dominates California crop production, with Fresno County leading the way. The Valley produced 56 percent of all crops grown in California in 2010, including 56 percent of field crops, 61 percent of state fruit and nut production, and 87 percent of livestock products (see Figure 4.1-1).¹⁹ The Centers of Excellence estimated in another report that the Valley also garnered 28.7 percent of food processing employment in the state in 2011, highest among all the state’s regions.²⁰

FIGURE 4.1-1

SAN JOAQUIN VALLEY SHARE OF CALIFORNIA CROP PRODUCTION, 2010



Source: USDA, National Agricultural Statistics Service.

¹⁷ *Agriculture Value Chain, Environmental Scan*, Center of Excellence (Modesto Junior College) June 2011, p. 10.

¹⁸ *San Joaquin Valley Regional Economic Summit, Issues, Opportunities and Recommendations*, USDA ERS Estimate, p. 1 Background, California Partnership for the San Joaquin Valley, March 29, 2012.

¹⁹ 2010 USDA National Agricultural Statistics Service (NASS), provided at SJV Regional Economic Summit, March 29, 2012.

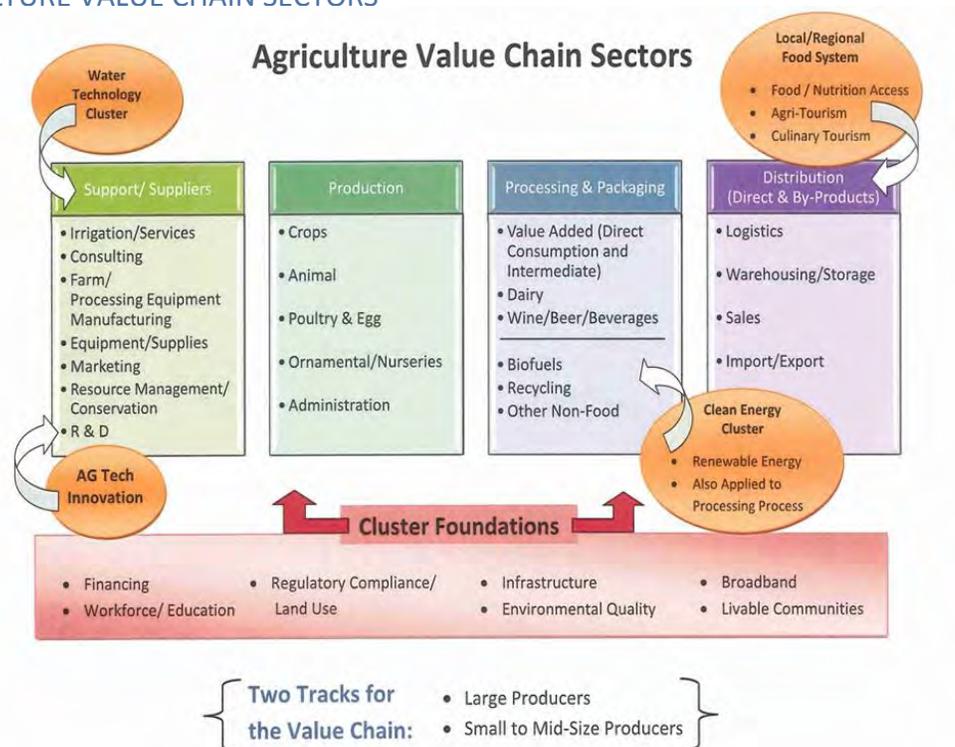
²⁰ *Food Manufacturing in California*, California Community Colleges Centers of Excellence, 2010, p. 9.

Acknowledging the importance of the Agriculture Cluster to the Valley (and California) economy, the Partnership focused on the Agriculture Value Chain at the first San Joaquin Valley Regional Economic Summit in March of 2012. The report prepared for the *Summit Issues, Opportunities and Recommendations* is used to provide the recommendations for the Cluster Action Plan in Chapter 5. This chapter provides more in-depth economic information on the Valley’s Agriculture Cluster to support Action Plan implementation at both the Valley-wide and county levels.

AGRICULTURE CLUSTER COMPONENTS

The Valley’s Agriculture Cluster is a complex mix of both agricultural commodity producers and food processors, and also a wide variety of related support industries, logistics and transportation systems, and related research and business activities in water technology, energy and other related manufacturing. Raw commodities and resources pass through a series of systems that add value at each stage and result in not only food products but energy feedstocks, bio-medical products, fiber materials and other outputs. This value-added process constitutes the conceptual basis for the Agriculture Value Chain, illustrated in Figure 4.1-2. It also illustrates the “Cluster Foundations” such as a trained workforce, transportation and broadband infrastructure, availability of financing, and a productive regulatory process that are critical elements in supporting the success of the cluster (and all Valley clusters).

FIGURE 4.1-2
AGRICULTURE VALUE CHAIN SECTORS



Source: Applied Development Economics

For purposes of this analysis, the Agriculture Cluster is comprised of the following four industry components:

CLUSTER COMPONENTS	INDUSTRY TYPES
Support	Agricultural services, farm contract labor, farm equipment and other manufacturing, utilities, professional services, repair services, marketing, research and development, and resource conservation and management
Production	Crop and livestock production, poultry and egg production, ornamental/nurseries, forestry, fishing, and hunting
Processing and Packaging	Food product and packaging, manufacturing, dairy, wine, beer and other beverages, and non-food commodities such as cotton
Distribution	Wholesale trade, retail trade, transportation, warehousing, and sales, including imports/exports

The specific industries that are included in each cluster component as defined by their NAICS codes for the cluster economic analysis are included in Appendix B. The economic analysis does not capture all of the inter-related elements shown in Figure 4.2-1. The Value Chain graphic is a broader conceptual representation of the evolving dynamics of agriculture and its interconnectedness to multiple facets of the Valley’s economy and quality of life, including its potential to address multiple issues and challenges such as health and nutrition, food insecurity, water supply and quality, air quality and conservation and management of important resources. The figure does illustrate that the cluster has existing or potential connections to other clusters such as Health, Water Technology, Clean Energy and Tourism. The other cluster analyses capture some but not all of this related employment and economic out-put.

Other important activities such as research and development conducted through the public university system and supported by state and federal agencies also are not captured in the cluster analysis and merit additional exploration. Broadband will further support the opportunity for development of a Valley “Ag Tech Cluster.” The Action Plan should capitalize on the potential for the Agriculture Cluster to be an even more catalytic economic driver for innovation and new business and job creation in the Valley, which in turn will improve the region’s environmental and health outcomes and help it comply with environmental requirements such as meeting federal air quality standards.

As described in the Regional Economic Summit report, “In addition to its role as an agriculture powerhouse in the international arena, the Valley is a potentially burgeoning market for locavores, or those interested in buying locally grown foods. Whether the incentive is freshness, economic development, food safety, food resilience, healthy ecosystems, minimization of carbon footprint, or simply the desire for stronger community, the demand for regional foods is booming.”²¹

²¹ *San Joaquin Valley Regional Economic Summit*, *ibid.*, p. 1 Background.

The Value Chain figure notes two tracks of cluster foundations may be needed – one for large producers and one for small to mid-sized producers – since currently, as documented in the Regional Economic Summit Report, the increase in local and regional demand not being met in California through existing production and distribution channels. “Bringing much of that value chain activity back to California will help produce jobs for both our urban and rural communities.”²² The Valley is well-positioned to “capture the value chain.” Next sections of this chapter describe the employment, output and input indicators and the economic development opportunities for the Valley’s Agriculture Value Chain Cluster.

EMPLOYMENT INDICATORS

As described in Chapter 3, Agriculture is the largest cluster in the Valley. It is challenging to account for all of the agricultural-related employment in the Valley across the four cluster components, for several reasons. These include: the seasonal nature of employment, especially in production; the fact that many workers are undocumented and are not included in the job counts; and the categorization of contract labor as being in the “Support” cluster component rather than in the “Production” component, even though many in this workforce are actually working on production activities – this is due to the federal classification of contract labor as a support service.

Table 4.1-1 presents Agriculture Cluster Employment trends across the four Cluster components from 2001 through 2010, including employment changes and rate of growth, concentration (compared to the state), and shift-share (a ratio derived from the region’s rate of growth compared to that of the state). The table is followed by a summary of key trends in the Cluster:

TABLE 4.1-1
AGRICULTURE CLUSTER EMPLOYMENT INDICATORS, 2001-2010

Cluster Component	Employment 2001	Employment 2010	Employment Change 2001 to 2010	Percentage Change 2001 to 2010	Location Quotient 2010	Shift-share
Support	116,076	119,394	3,318	2.9%	5.50	-0.53%
Production	87,532	81,795	-5,737	-6.6%	4.93	2.61%
Processing and Packaging	57,499	62,579	5,080	8.8%	3.26	19.00%
Distribution	19,798	25,246	5,448	27.5%	1.98	12.13%
Agriculture Cluster Total	280,905	289,014	8,109	2.9%	4.12	4.87%

Source: Source: ADE; data from IMPLAN CEW/ES202 County Employment Database

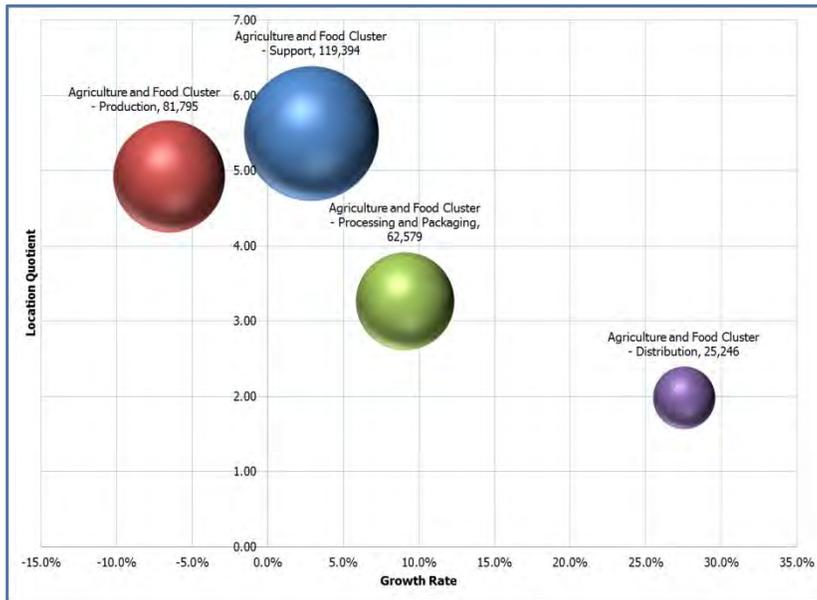
²² Ibid, p. 2 of Background.

- The Agriculture Cluster accounted for over 289,000 jobs in the San Joaquin Valley in 2010 - 23.1 percent of overall regional employment.
- The Cluster accounted for 19.7 percent of the overall regional job growth that occurred between 2001 and 2010.
- As a whole, the Cluster grew by 2.9 percent between 2001 and 2010, faster than across the rest of California. During this period, the Cluster added more than 8,100 jobs.
- All cluster components except for production grew during this period. The processing and packaging and distribution components outperformed the State's growth in these two components, in terms of relative rate of growth (shift-share).
- Related to the issue regarding categorization of production versus support-related employment, the Valley's production component included 61,400 farm labor jobs in 2010, down from 70,600 in 2001, while the support component included 73,200 jobs classified under the NAICS code for "Farm Labor Contractors and Crew Leaders," up from 67,000 in 2001. All of these support jobs are engaged in farm production, so on a combined basis the net loss of farm production employment was about 3,000 jobs rather than the 5,700 indicated in Table 4.1-1.
- The concentration of employment in the overall Agriculture Cluster was four times the statewide average. The concentration for all of the cluster components was significantly greater than the statewide average (Figure 4.1-4). As indicated in Chapter 3, Figure 3.2-2, "Agriculture" sector employment as defined by EDD was nearly six times more concentrated in the Valley than the state; however, this does not account for the distribution and processing systems that are part of the Cluster and are more widely distributed in other parts of the state – indicating that some value-added aspects of the Cluster are occurring outside of the region.

Figure 4-1.-3 illustrates the size, concentration and growth rate for the four Agriculture Cluster components from 2001 through 2010.

FIGURE 4.1-3

SIZE, CONCENTRATION AND GROWTH RATE FOR AGRICULTURE CLUSTER COMPONENTS, 2001-2010



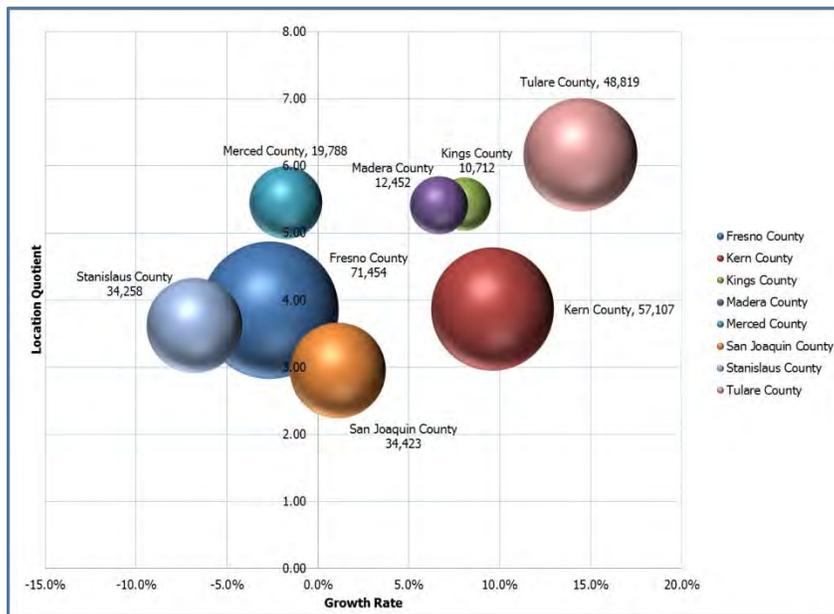
Source: ADE, Inc.; data from IMPLAN CEW/ES202 County Employment Database

GEOGRAPHIC CONSIDERATIONS

Figure 4.1-4 illustrates the growth trends geographically of the overall Agriculture Cluster by each county in the Valley, Figures 4.1-5 through 4.1-8 show the detail by each Component for each county.

FIGURE 4.1-4

AGRICULTURE CLUSTER SIZE, CONCENTRATION AND GROWTH RATE BY COUNTY, 2001-2010

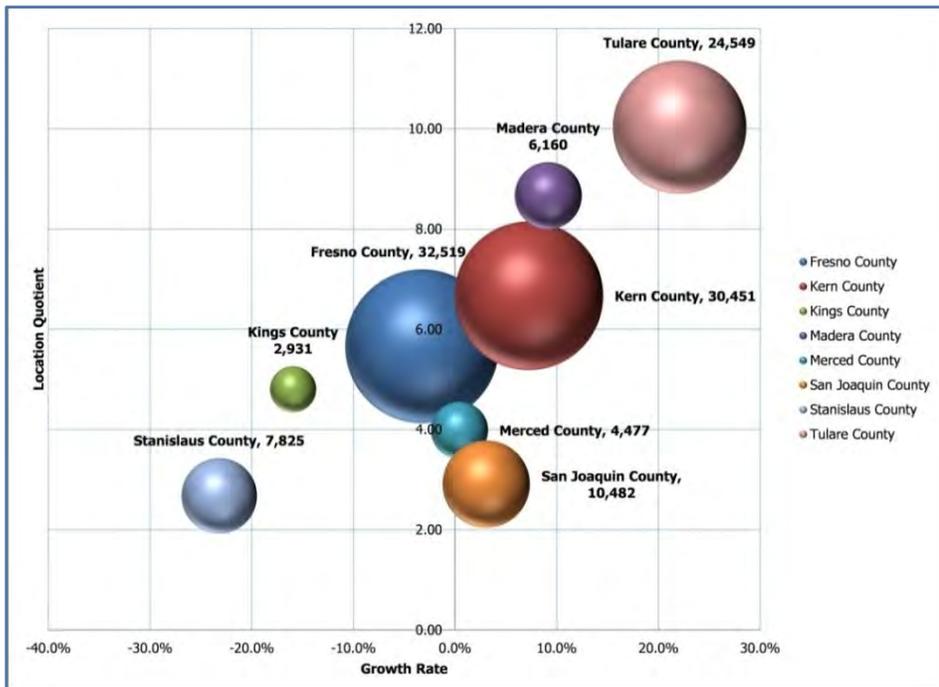


Source: ADE, Inc.; data from IMPLAN CEW/ES202 County Employment Database

- The Agriculture Cluster had the largest employment groupings in Fresno, Kern, San Joaquin, Stanislaus, and Tulare counties, with each county accounting for more than 34,000 jobs. Fresno County has the largest employment, followed by Kern County and then Tulare County.
- Tulare County had the fastest rate of growth, followed by Kern County, Kings County and Madera County. Fresno, Merced and Stanislaus counties all experienced job loss within the Cluster, while San Joaquin County had a small level of growth.
- The job concentration compared to the state was highest in Tulare County; however, the concentration factors are well above the statewide average in all of the Valley's counties.
- The following summarizes key trends and characteristics for the eight counties for each of the four cluster components, followed by four figures (Figures 4.1-5 through 4.1-8) with graphical illustration.
- Support industries were highly concentrated in Tulare, Madera and Kern counties, followed by Fresno and Kings counties, as shown in Figure 4.1-5. All counties were above the state level. These three counties also had the fastest rates of growth. Fresno, Kings and Stanislaus counties saw a loss of employment, with Stanislaus County having the largest rate of loss.
- A number of the counties were highly concentrated in production activity, which includes crop production. However, only Madera and Kings County showed positive relative growth rates (Figure 4.1-6). San Joaquin County had the largest loss of employment, followed by Fresno County. As noted earlier in this chapter, production activity was understated due to the way contract labor is categorized.
- The processing component was most concentrated in Stanislaus, Merced and Kings Counties (Figure 4.1-7). Along with Kings County, Tulare and Kern counties showed the highest relative growth in processing activity. Employment growth was minimal or small in Stanislaus, Fresno and San Joaquin counties, while Merced and Madera counties both lost some employment in this component.
- Distribution activity was most concentrated in San Joaquin and Merced counties, while Kern Madera, San Joaquin and Kern counties showed the fastest relative growth rates in this cluster component (Figure 4.1-8). This cluster component, while the smallest, had the fastest rates of growth overall. Only Kings County has a loss of employment in this component.

FIGURE 4.1-5

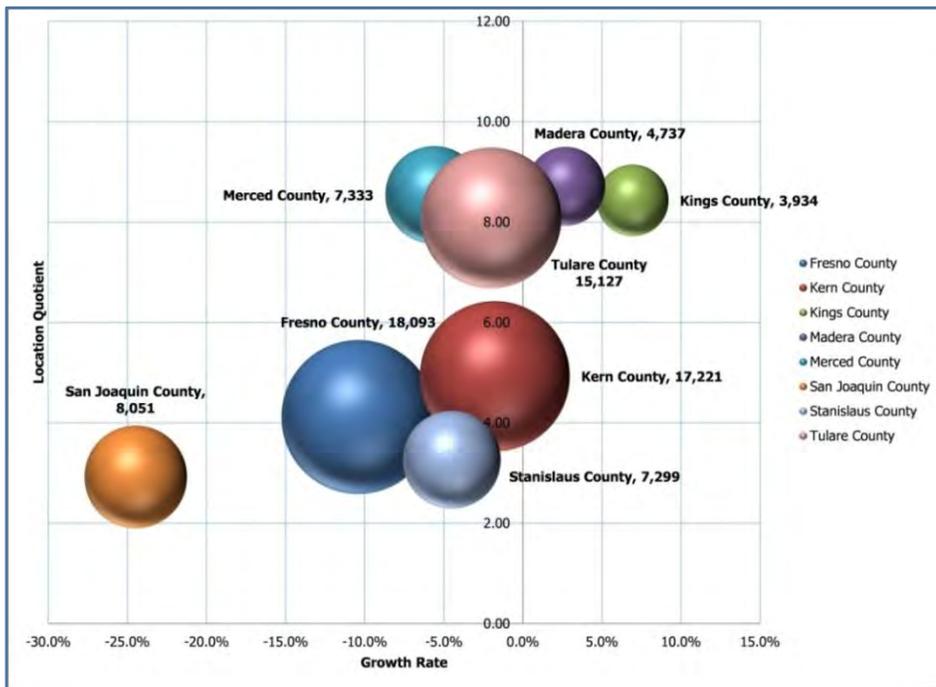
AGRICULTURE CLUSTER SUPPORT COMPONENT BY COUNTY, 2001-2010



Source: ADE, Inc.; data from IMPLAN CEW/ES202 County Employment Database

FIGURE 4.1-6

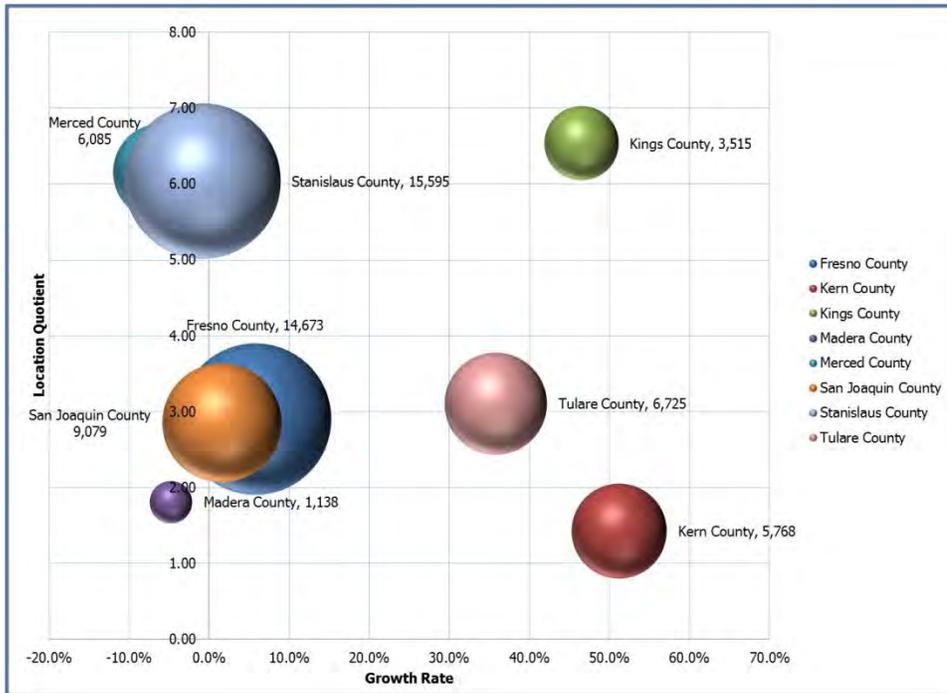
AGRICULTURE CLUSTER PRODUCTION COMPONENT BY COUNTY



Source: ADE.; data from IMPLAN CEW/ES202 County Employment Database

FIGURE 4.1-7

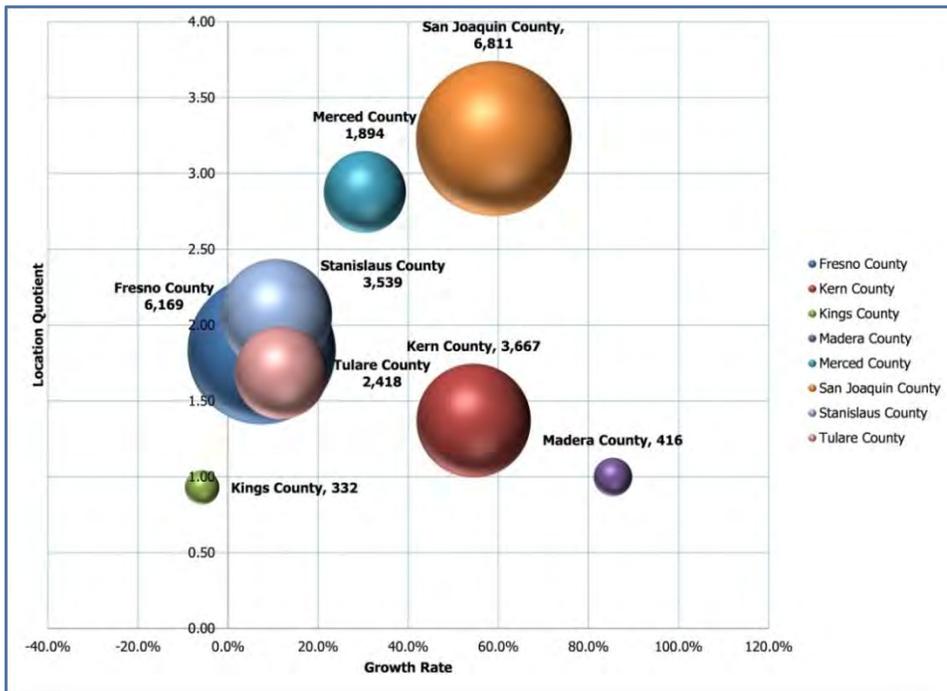
AGRICULTURE CLUSTER PROCESSING COMPONENT BY COUNTY, 2001-2010



Source: ADE, Inc.; data from IMPLAN CEW/ES202 County Employment Database

FIGURE 4.1-8

AGRICULTURE CLUSTER DISTRIBUTION COMPONENT BY COUNTY, 2010



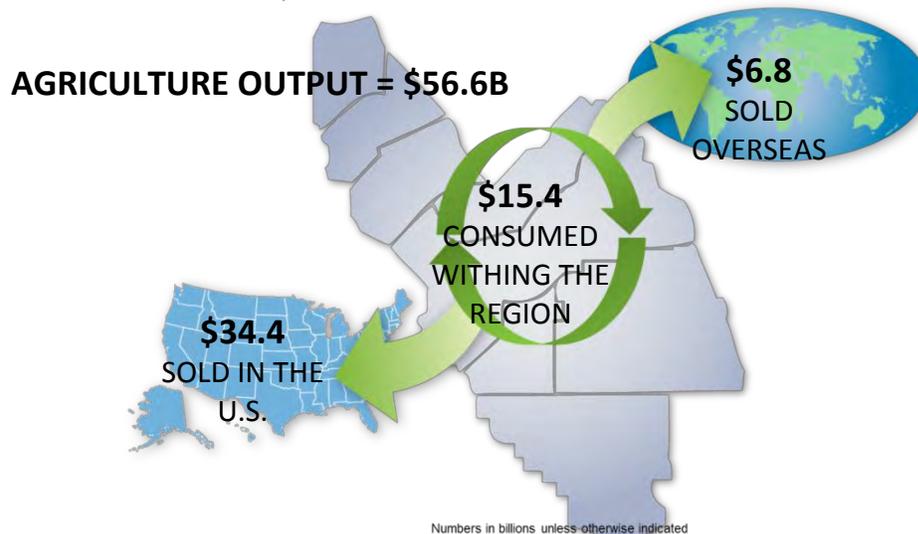
Source: ADE, Inc.; data from IMPLAN CEW/ES202 County Employment Database

TRADE FLOW INDICATORS

This section presents information on the regional trade flows – outputs, supplier inputs required to produce the Agriculture Cluster’s outputs, and the gaps in regional supplier purchasing that represent potential economic development opportunities in terms of filling the sales leakage out of the region. This information is based on an analysis of the IMPLAN data for 2010, the most recent year available. As shown in Figure 6.1-9, the total commodity value of the Valley’s Agriculture Cluster (inclusive of core production and processing and selected distribution and support sectors) was \$56.6 billion in 2010. The Cluster’s foreign export value was \$6.8 billion, while another \$34.4 billion in cluster commodities was sold domestically elsewhere in the US. About \$15.4 billion of the Cluster’s “output” was consumed within the region, some as intermediate inputs for value-added food products (food processing/manufacturing) and some as final food products to consumers (more on this below).

FIGURE 4.1-9

AGRICULTURE OUTPUT, 2010

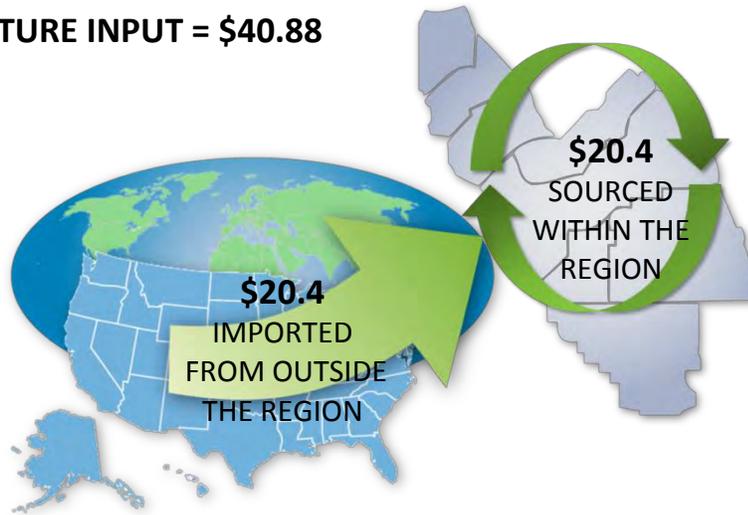


Source: ADE, Inc.; data from IMPLAN3 input-output model

The supplier purchases required for production inputs for the Agriculture Cluster had a total value of \$40.8 billion in 2010, of which \$20.5 billion came from within the region (Figure 4.1-10). That is, in order to produce the \$56.6 billion in output, the Cluster required commodities, supplies and services totaling \$40.8 billion. The IMPLAN input-output model estimated that the Cluster businesses obtained half of this production input requirement from other businesses within the Valley. An additional \$20.3 billion in commodity demand (leakage) was provided from businesses located outside the region.

FIGURE 4.1-10
AGRICULTURE INPUT, 2010

AGRICULTURE INPUT = \$40.88



Numbers in billions unless otherwise indicated

Source: ADE, Inc.; data IMPLAN3 input-output model

For an additional perspective, an analysis conducted for the Regional Economic Summit by Dr. Antonio Avalos, Chair of the Department of Economics at Fresno State University, further identified regional and county level leakages by cluster component. Using the NAICS-based definition of Agriculture Cluster components compatible with the Center of Excellence report on California’s Agriculture Value Chain (similar to ADE’s subsequent cluster component definitions), Dr. Avalos analyzed the Valley regional purchase coefficients (RPCs) using 2010 IMPLAN data. The RPC is an indicator of regional food systems integration. The RPC for the Valley is “the proportion of total demand by consumers in the Valley that is supplied by producers located within the Valley. A large RPC means the Valley experiences less leakages (a sign of stronger regional integration) and thus implies larger employment and income multipliers (since more dollars stay and circulate within the Valley).”²³

According to Dr. Avalos’ analysis, the RPCs for the Valley’s Agriculture Cluster components showed the greatest level of integration for the Support component, and the least for the Processing and Packaging component, signaling an important opportunity for filling the gaps:

- Support – 55%
- Production – 51%
- Distribution – 49%
- Processing and Packaging – 15%

²³ Ibid., p 3 Background, provided by Dr. Antonio Avalos, March 2012.

RPCs were above 40 percent for all the counties for Support industries, but below 30 percent for Processing and Packaging industries. Across the entire Cluster, San Joaquin and Stanislaus counties had the highest RPCs (48 and 44 percent respectively), while all others except Madera ranged from 32 to 28 percent. Madera, as the smallest county, had an overall RPC of 27 percent.²⁴ Table 4.1-2 identifies some of the top leakage industries that could serve as targets for economic development in the region, based on ADE’s analysis.

TABLE 4.1-2

CLUSTER SUPPLIER PURCHASES – TOTAL DEMAND AND LEAKAGE FOR SELECTED INDUSTRIES

DESCRIPTION	GROSS COMMODITY DEMAND	REGIONAL PURCHASE PERCENTAGE	REGIONAL COMMODITY INPUTS	COMMODITY LEAKAGE
Total Commodity Demand	\$40,810,930,000	N/A	\$20,497,000,000	\$20,313,930,000
Other agriculture and food cluster establishments	\$19,874,814,000	53.2%	\$10,581,557,000	\$9,293,250,000
Wholesale trade businesses	\$3,391,348,000	65.4%	\$2,217,394,000	\$1,173,954,000
Management of companies and enterprises	\$1,640,922,000	47.4%	\$777,257,000	\$863,665,000
Petroleum refineries	\$878,273,000	15.1%	\$132,191,000	\$746,082,000
Paper mills	\$625,130,000	2.2%	\$13,473,000	\$611,657,000
Artificial and synthetic fibers and filaments manufacturing	\$385,200,000	0.0%	\$25,000	\$385,177,000
Plastics bottle manufacturing	\$372,030,000	9.7%	\$35,923,000	\$336,107,000
Real estate establishments	\$1,091,755,000	70.8%	\$772,679,000	\$319,076,000
Aluminum product manufacturing from purchased aluminum	\$319,417,000	6.7%	\$21,487,000	\$297,929,0900
Other basic organic chemical manufacturing	\$286,332,000	2.3%	\$6,519,000	\$279,813,000
Paperboard Mills	\$299,983,000	14.0%	\$42,049,000	\$257,934,000
Metal can, box, and other metal container (light gauge) manufacturing	\$473,344,000	53.6%	\$253,766,000	\$219,578,000
Plastics packaging materials and unlaminated film and sheet manufacturing	\$237,198,000	14.4%	\$34,202,000	\$202,996,000
Other basic organic chemical manufacturing	\$286,332,000	2.3%	\$6,519,000	\$279,813,000
Paperboard Mills	\$299,983,000	14.0%	\$42,049,000	\$257,934,000
Metal can, box, and other metal container (light gauge) manufacturing	\$473,344,000	53.6%	\$253,766,000	\$219,578,000
Plastics packaging materials and unlaminated film and sheet manufacturing	\$237,198,000	14.4%	\$34,202,000	\$202,996,000
Semiconductor and related device manufacturing	\$196,066,000	0.2%	\$297,000	\$195,768,000
Other basic organic chemical manufacturing	\$286,332,000	2.3%	\$6,519,000	\$279,813,000
Paperboard Mills	\$299,983,000	14.0%	\$42,049,000	\$257,934,000
Metal can, box, and other metal container (light gauge) manufacturing	\$473,344,000	53.6%	\$253,766,000	\$219,578,000

24 Memo from Dr. Antonio Avalos, California State University, Fresno, Department of Economics, January 28, 2012.

DESCRIPTION	GROSS COMMODITY DEMAND	REGIONAL PURCHASE PERCENTAGE	REGIONAL COMMODITY INPUTS	COMMODITY LEAKAGE
Plastics packaging materials and unlaminated film and sheet manufacturing	\$237,198,000	14.4%	\$34,202,000	\$202,996,000
Semiconductor and related device manufacturing	\$196,066,000	0.2%	\$297,000	\$195,768,000
Other plastics product manufacturing	\$204,092,000	6.2%	\$12,686,000	\$191,406,000
Other basic organic chemical manufacturing	\$286,333,000	2.3%	\$6,519,000	\$279,813,000
Paperboard Mills	\$299,983,000	14.0%	\$42,049,000	\$257,934,000
Metal can, box, and other metal container (light gauge) manufacturing	\$473,344,000	53.6%	\$253,766,000	\$219,578,000
Plastics packaging materials and unlaminated film and sheet manufacturing	\$237,198,000	14.4%	\$34,202,000	\$202,996,000
Semiconductor and related device manufacturing	\$196,066,000	0.2%	\$297,000	\$195,768,000
Other plastics product manufacturing	\$204,092,000	6.2%	\$12,686,000	\$191,406,000
Plastics material and resin manufacturing	\$184,228,000	0.9%	\$1,617,000	\$182,611,000
Transport by rail	\$433,086,000	58.9%	\$255,253,000	\$177,834,000
Lessors of nonfinancial intangible assets	\$200,922,000	16.5%	\$33,132,000	\$167,790,000
Scientific research and development services	\$191,362,000	19.2%	\$36,712,000	\$154,649,000
Other agriculture and food cluster establishments	\$19,874,814,000	53.2%	\$10,581,557,000	\$9,293,258,000

Source: ADE, based on 2007 Census of Agriculture and USDA Economic Research Service, Direct and Intermediated Marketing of Local Foods in the United States, November 2011.

“LOCAL FOOD” DEMAND

Consumer and institutional demand for food and agricultural products in the San Joaquin Valley region is estimated at \$7.4 billion annually.²⁵ Based on the availability of food produced in the Valley, the IMPLAN input-output model suggests that more than half of this demand could be sourced from within the Valley. However, modern food distribution and retailing systems are much more centralized and it is likely that less than 5% of food consumed within the region is produced there.

USDA studies have calculated that about \$4.8 billion in food products are sourced locally throughout the nation (2007), amounting to about 3% of national agricultural production. Local food sales occur both through direct farm-to-consumer sales and also when farmers sell products through intermediated channels that focus on retailing the products in a local region. This latter approach accounts for three times the sales as direct-to-consumer marketing.

The U.S. Census of Agriculture tracks direct farm-to-consumer sales, which are shown for the San Joaquin Valley counties in Table 4.1-3. If the relationship of intermediated sales to direct sales holds true in the Valley, then total sales of Valley agricultural products to local consumers totaled about \$269 million in 2007, equivalent to about \$275 million in 2010 dollars. This would be equal to 4.2 % of estimated food demand in the Valley.

²⁵ Commodity demand estimate from IMPLAN Input-Output Model aggregated for the San Joaquin Valley region.

TABLE 4.1-3

LOCALLY CONSUMED FOOD IN THE SAN JOAQUIN VALLEY, 2007 (\$ MILLIONS)

County	Direct-to-Consumer	Intermediated	Total
Fresno	\$17.17	\$51.51	\$68.68
Kern	\$5.82	\$17.45	\$23.26
Kings	\$0.47	\$1.42	\$1.89
Madera	\$1.73	\$5.20	\$6.94
Merced	\$14.25	\$42.74	\$56.98
San Joaquin	\$11.84	\$35.51	\$47.35
Stanislaus	\$4.23	\$12.69	\$16.92
Tulare	\$11.68	\$35.03	\$46.71
Total	\$67.18	\$201.54	\$268.72
Adjusted to 2010			\$275.33

Source: ADE, based on 2007 Census of Agriculture and USDA Economic Research Service, Direct and Intermediated Marketing of Local Foods in the United States, November 2011.

It is reasonable to believe that this percentage might be higher in the San Joaquin Valley than for the nation as a whole, given the substantial concentration of agricultural production in the region. In addition, the type of commodities grown, such as fruits, nuts and fresh vegetables, are particularly conducive to direct-to-consumer sales, compared to the grain products that are predominant in the mid-western states. Even if the percentage were somewhat higher, there is still a large gap between demand for and supply of local grown and sourced food in the Valley, representing a strong market opportunity to develop local and regional food systems, not to mention numerous other benefits such as improved access to healthy foods for underserved communities, job creation, community building, and keeping more dollars in the regional economy.

4.2 ENERGY CLUSTER

According to the Partnership’s Energy Action Plan, the San Joaquin Valley’s growing population and expanding economy will require increased supplies of reliable, diverse, clean energy, which is defined as “increasing the energy use efficiency of our homes and businesses and other resources; and producing more electricity and fuel in the Valley from renewable energy resources such as solar, wind and biomass.”²⁶ With the growth of the Valley’s population and economy over the past decade, the use of and demand for energy has been steadily increasing. Between 2000 and 2010, while California’s total electricity consumption (residential, commercial and industrial) grew by 3.5 percent, the Valley’s consumption increased by more than 20 percent.²⁷ The transport of water across state, regional and local water systems also is a major source of energy use.

Compared to other regions, both non-residential electricity and natural gas per capita consumption are particularly high in the Valley, partially due to the strong concentration of agriculture and food processing in the region.²⁸ At the same time, higher electricity rates have been documented for some parts of the region compared to other California regions and states, constraining business expansion and attraction and putting agricultural value-added activities among others at a competitive disadvantage.²⁹

The demand for energy is increasing globally, along with increasing price and supply volatility and increasing concerns about the impacts of climate change and air and water pollution related to the use of fossil fuels. There is an increasing imperative toward development of a low-carbon economy. California is leading the way in the development and transmission (through the “Smart Grid”) of renewable energies; fostering adoption of energy and water efficiency technologies; and creating a clean energy future to address these challenges. In addition to market forces, drivers include legislative requirements and policy and funding incentives in the areas of energy, air quality, transportation, land use and health, among other areas. As the state continues to move in this direction, jobs are projected to increase in the energy and utilities sectors throughout the State (Centers of Excellence and other sources).

The San Joaquin Valley has been an important source of oil and natural gas production for the nation for many years; has an abundance of renewable energy resources and assets; and is an important part of this future. In 2010, Dr. Shawn Kantor of UC Merced estimated that clean energy projects in the Valley could bring more than 100,000 jobs to the area and “fundamentally change the trajectory of economic development and job creation in the region.” A significant portion of these jobs would be due

to construction of renewable energy facilities and the High Speed Rail system, a “clean transportation”

²⁶ *California Partnership for the San Joaquin Valley Energy Action Plan*, www.sjvpartnership.org.

²⁷ *California Regional Energy Profile, 2010*. U.S. Energy Administration, Annual Energy Review, 2011, with data from the California Energy Commission, Energy Consumption Data Management System.

²⁸ *2010 California Regional Progress Report*, *Ibid.*, p. 67-69.

²⁹ *San Joaquin Valley Regional Economic Summit*, p. 7, Infrastructure Section.

project. Research focusing on clean energy and environmental sustainability through the universities and other organizations could lead to additional jobs in the future.³⁰

The Energy Cluster, especially the development of innovative renewable and clean energies and energy efficiency technologies for use and transmission of water and in the built environment, is a high priority for the Partnership and the San Joaquin Valley (SJV) Clean Energy Organization (established through the Partnership in 2007). It is also a high priority for the San Joaquin Valley Regional Policy Council, which is seeking to develop a “Regional Energy and Economy Development Roadmap” for the San Joaquin Valley. Other partners include the CCVEDC, the San Joaquin Valley Air Pollution Control District, utilities, education and workforce development partners, the Water, Energy and Technology Center (WET), Central Valley Business Incubator, UC Advanced Solar Technologies Institute (UC Solar), California Wind Energy Association, and many other partners across the Valley including state and federal partners.

The Partnership’s annual 2010 report indicated that more than \$100 million in federal funding for clean energy investments was brought into the Valley during the 2009-2010 time period, including significant levels of ARRA funding. Additional investments from state and federal agencies and utilities have supported workforce training, energy efficiency improvements, local government programs, and development of renewable energies, as described in the Partnership’s 2010-2011 annual report related to the accomplishments of the SJV Clean Energy Organization and other Partnership Work Groups.³¹

ENERGY CLUSTER COMPONENTS

Despite the high level of focus on energy, it is challenging to find both a consistent definition of the Energy Cluster “value chain” in terms of component groups of industries, and to identify the NAICS codes that comprise the Cluster. This is in part because Energy is a rapidly evolving cluster and there are not yet specific NAICS codes for some of the industries, especially in the production of renewable energies. In some cases such as the solar industry, activities cover many NAICS codes and are difficult to classify. In other cases, activities fall under categories that can involve non-energy-related functions.³² For example, installation of solar panels on roofs of buildings is classified under a NAICS code for roofing contractors, which is a more encompassing area than solar panel installation. The development of biofuels is sometimes categorized within the agriculture value chain.

To identify the components of the Energy Cluster for this report, ADE conducted a review of diverse reports, research and methodologies related to defining the “green” components of the Energy Cluster in California and nationally, building on our database of previous cluster analyses. Key resources included California’s Labor Market Information thorough review and sorting of draft “green industries”

³⁰ *The Economic Opportunity from Clean Energy Jobs in California’s San Joaquin Valley*, Dr. Shawn Kantor, UC Merced, October 2010.

³¹ *California Partnership for the San Joaquin Valley 2010-2011 Report*, p. 37.

³² Draft “Green Industries” sorted by NAICS, California Employment Development Department, Labor Market Information Division, p. 30.

sorted by NAICS; reports on the green economy and green innovation prepared for Next 10 (*Many Shades of Green 2012* and *2012 Green Innovation Index*) and the California Economic Strategy Panel; research by the Brookings Institution with the Battelle Technology Partnership Alliance (*Sizing up the Green Economy: A National and Regional Green Jobs Assessment, 2011*); and several cluster studies in California and other states and regions.

As defined for this project, the Energy Cluster is comprised of nine sector components, listed below with a reference to some of the key industries. The specific industries included in each cluster component are included in Appendix B by their NAICS code. They include core and energy-related activities:

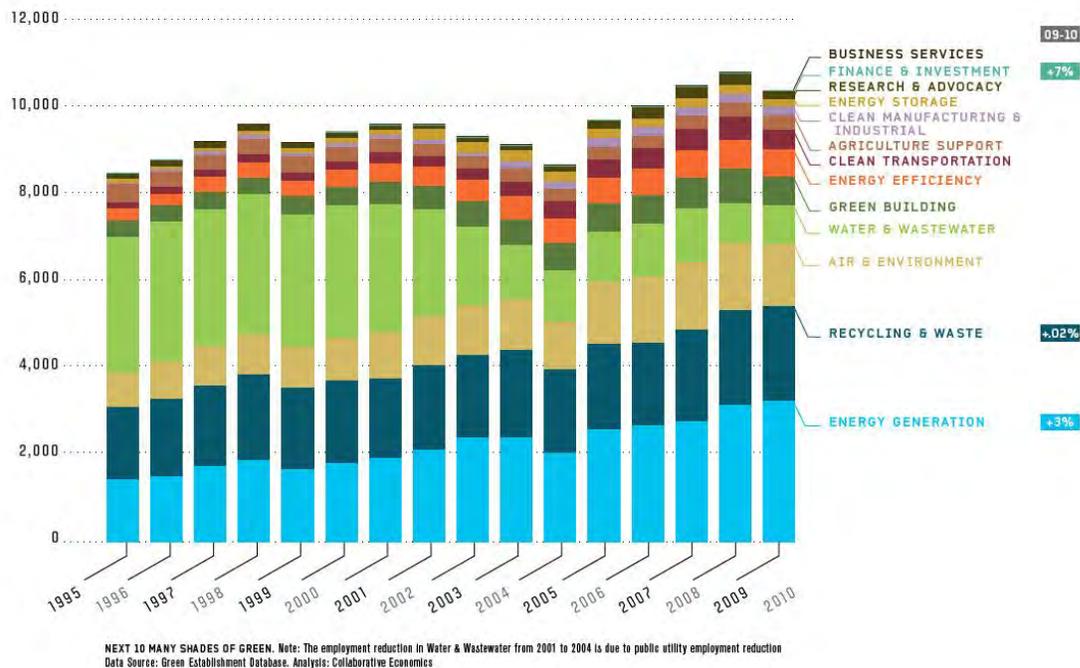
CLUSTER COMPONENTS	INDUSTRY TYPES
Alternative energy distribution	Electrical apparatus and equipment, wiring supplies, other electronics parts and equipment merchant retailers, plumbing and heating equipment and supplies
Alternative energy generation (production)	Ethyl alcohol manufacturing, water and sewer line and related structures construction, roofing contractors
Energy efficiency	Electrical contractors and other wiring installation contractors, plumbing, heating and air-conditioning contractors, and drywall and insulation contractors
Equipment Manufacturing	Oil and gas field machinery and equipment manufacturing, turbine manufacturing, heating equipment manufacturing, automatic environmental control manufacturing, power, distribution and specialty transformer manufacturing
Petroleum Production	Crude petroleum and natural gas extraction, natural liquid gas extraction, drilling oil and gas wells, support activities
Petroleum Distribution	Bulk stations and terminals, merchant wholesalers, and pipeline transportation of crude oil, natural gas and refined petroleum products
Power generation and transmission	Hydroelectric power generation, fossil fuel electric power generation, nuclear electric power generation, electric bulk power transmission and control, electric power and natural gas distribution, and other electric power generation
Research, Energy-Related	Professional, scientific and technical services
Services, Energy-Related	Financial and equipment repair services

The southern San Joaquin Valley historically has been a center of substantial petroleum production and

processing, with Kern County being the leading energy provider for California. More recently, this area has seen significant development of wind power resources; Kern County is California’s largest single wind energy source, with further expansions planned. Efforts to develop solar power facilities along with biomass (ag-based and other sources such as biogas), power generation plants, geothermal facilities and transmission capabilities have occurred throughout the Valley, with many facilities planned and coming on-line over the next few years. As documented in the CCWC Public Sector Infrastructure analysis, the largest employment impact in the development and transmission of renewable energy resources is during the construction phase (see section 4.8.)

Next 10’s new green economy report *Many Shades of Green 2012* provides a profile of the San Joaquin Valley “Green Economy.” Alternative energy generation was the largest segment of the Valley’s employment in the “core green economy” in 2010. This segment has increased by 126 percent since 1995. Solar and wind generation accounted for the majority of the jobs. Even with a contraction of jobs by four percent in 2010 reflecting the trends in the overall regional economy, employment by energy generation increased by three percent from 2009 to 2010, adding almost 100 new jobs.³³ Figure 4.2-1 shows trends in employment by green segment for the Valley between 1995 and 2010. While the methodologies and data bases used to determine these employment estimates differ in part from this the analysis in this report, the trends are consistent.

FIGURE 4.2-1
EMPLOYMENT BY GREEN SEGMENT/SAN JOAQUIN VALLEY



³³ Many Shades of Green, 2012, Next 10, prepared by Collaborative Economics, 2012, pp. 34-35.

EMPLOYMENT INDICATORS

This section presents a summary of key employment trends in the Cluster. Table 4.2-1 below presents Energy Cluster employment across the seven core cluster components and energy-related research from 2001-2010, including employment changes and rate of growth, concentration (compared to the state), and shift-share (a ratio derived from the region's rate of growth compared to that of the state). Figure 4.2-2 is a graphic illustration of these trends.

- The Energy Cluster accounted for about 33,350 jobs in the San Joaquin Valley in 2010; total jobs declined by nearly 2,500 between 2001 and 2010, almost seven percent.
- Cluster employment accounted for 2.7 percent of total regional employment.
- Almost all of the Cluster's loss was in the energy efficiency component, the Cluster's largest, in part related to the downturn in construction. These losses were offset partially by strong growth in equipment manufacturing, power generation, research and petroleum distribution.
- Although the Cluster lost some ground over the decade, the region fared relatively better than the state, with a lower rate of loss compared to the state's rate, showing resiliency during the recession. Overall, the region outperformed the state, with several components growing faster relative to the state.
- The concentration of employment in the Cluster compared to the state was about average.

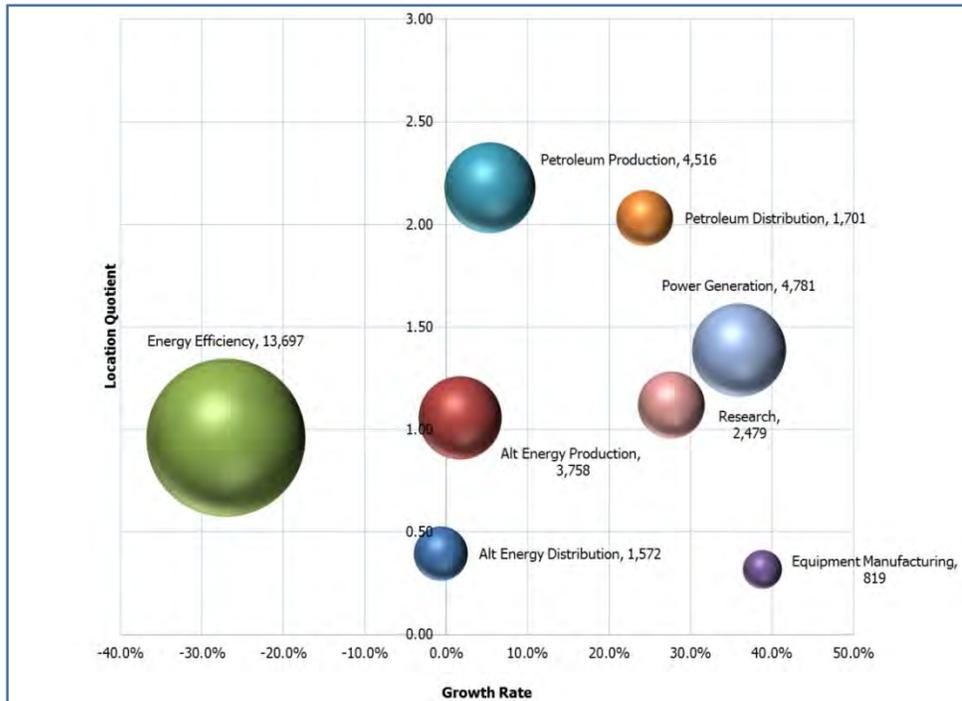
TABLE 4.2-1
ENERGY CLUSTER EMPLOYMENT INDICATORS

Cluster component	Employment 2001	Employment 2010	Employment Change 2001 to 2010	Percentage Change 2001 to 2010	Location Quotient 2010	Shift-share
Alternative Energy Distribution	1,584	1,572	-12	-0.7%	0.40	20.55%
Alternative Energy Production	3,696	3,758	62	1.7%	1.06	-5.55%
Energy Efficiency	18,789	13,697	-5,092	-27.1%	0.96	-0.33%
Equipment Manufacturing	593	820	227	38.8%	0.32	80.76%
Petroleum Production	4,289	4,516	227	5.3%	2.18	2.80%
Petroleum Distribution	1,368	1,701	333	24.3%	2.03	21.39%
Power Generation	3,518	4,781	1,263	35.9%	1.39	50.89%
Energy Related - Services	82	78	-4	-4.5%	0.82	5.09%
Energy Related - Research	1,904	2,429	525	27.6%	1.12	22.52%
Energy Cluster Total	35,823	33,353	-2,470	-6.9%	1.01	13.32%

Source: ADE, Inc. IMPLAN CWS, ES 202 County Employment Database

FIGURE 4.2-2

SIZE, CONCENTRATION AND GROWTH RATE FOR ENERGY CLUSTER COMPONENTS, 2001-2010



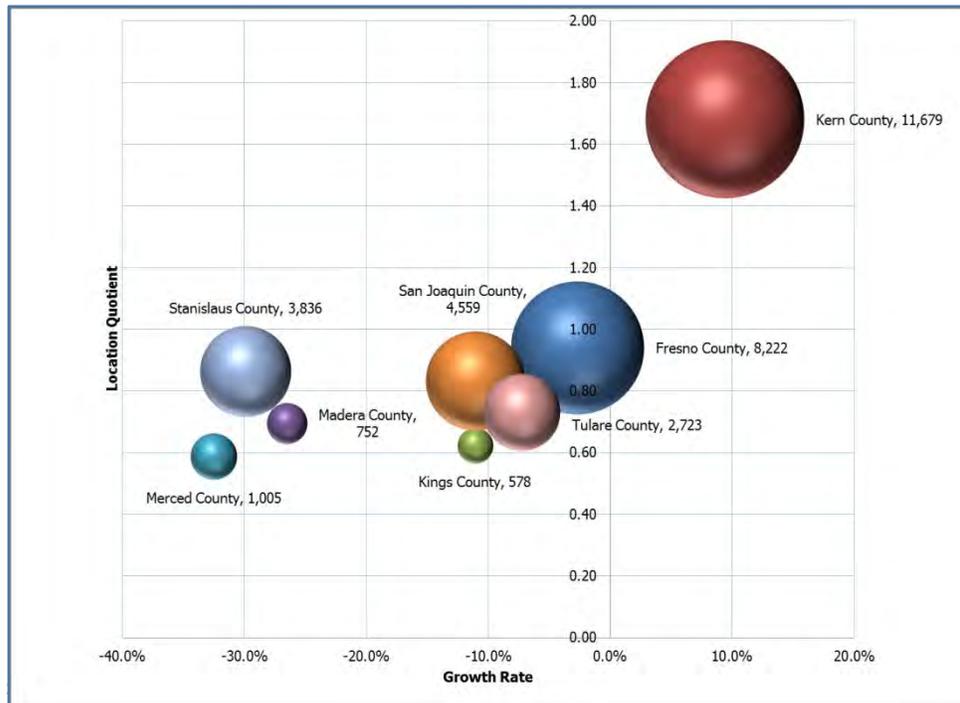
Source: ADE, Inc., Data from IMPLAN CEW/ES 202 County Employment Database.
Note Energy-related services not included due to its small size.

GEOGRAPHIC CONSIDERATIONS

Figure 6.2-3 illustrates employment growth trends and geographic concentration of the Energy Cluster by each county in the Valley:

- The Energy Cluster is highly concentrated in Kern County, with almost 11,700 jobs in 2010 and an employment concentration nearly twice the state average, which was an increase from 2001. Kern County has most of the petroleum production and processing in the region but also has seen substantial investments in wind energy.
- Another large grouping existed in Fresno with 8,200 jobs; San Joaquin and Stanislaus counties were next with 4,600 and 3,800 jobs, respectively.
- Only Kern County had job growth between 2001 and 2010, adding 1,000 jobs during this time. Stanislaus County lost more than 1,600 jobs.
- All counties but Kern had a lower employment concentration than that of the State, but Fresno County was almost the same as the State in 2010, a slight increase from 2001.

FIGURE 4.2-3
ENERGY CLUSTER EMPLOYMENT BY COUNTY, 2001-2010



The Brookings Institution report on the green economy and regional green jobs provides some additional insights on some challenges and emerging strengths in energy-related activities for the Valley’s four largest metropolitan areas, part of an assessment that included the nation’s 100 largest metropolitan areas. Table 4.2-2 provides information on Energy Cluster-related indicators. Overall, these areas ranked toward the bottom of the list nationally, except for Fresno. The fastest growing segments were in energy-saving building materials and solar photovoltaic, the latter for which job numbers are currently small. The share of traded sector establishments for all segments of the green economy that are clustered are not present, except for Fresno; clustering was shown to improve economic performance.

The *2012 Green Innovation Index* reported that Fresno was ranked fourth among California’s top solar cities by generation capacity and ranked fifth by number of installations (through August 2011), which is an indication of growing significance.³⁴

³⁴ *2012 Green Innovation Index*, Next 10, 2012, p. 58.

TABLE 4.2-2

CLEAN ECONOMY ENERGY-RELATED INDICATORS FOR SAN JOAQUIN VALLEY METRO AREAS, 2003-2010

Valley Metro Area	Ranking of top 100 U.S. Metro Areas (All Clean Jobs)	Fastest Growing Energy-Related Segments	Share of Traded Sector Establishments that are Clustered, 2010 (All Segments)
Bakersfield-Delano	89	Energy-Saving Building Materials, Solar Photovoltaic	0.0
Fresno	57	Solar Photovoltaic (; (Energy-Saving Building Materials had growth)	51.1
Modesto	93	Energy-Saving Building Materials	0.0
Stockton	82	Energy-Saving Building Materials, Photovoltaic	0.0

Source: Sizing the Green Economy: A National and Regional Green Jobs Assessment, Mark Muro, Jonathan Rothwell and Sevashree Saha, Brookings Institution with Battelle Technology Partnership Alliance, 2011, Appendix A, pp. 52-54 and interactive mapping tool: www.brookings.edu/metro/clean-Economy/map.aspx

TRADE FLOW INDICATORS

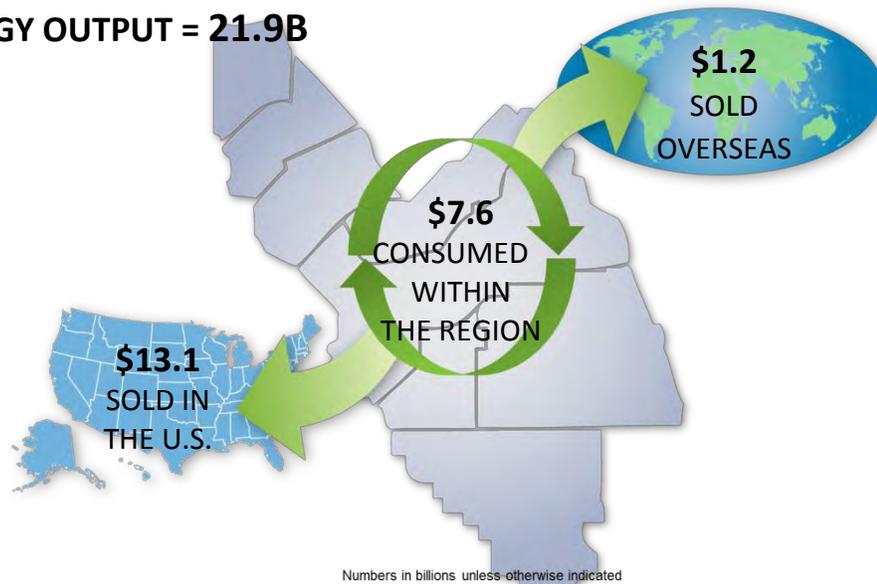
This section presents information on the regional trade flows – outputs, inputs required to produce the Energy Cluster’s outputs, and the gaps, or leakage – that represent potential economic development opportunities in terms of filling the leakage. This information is based on an analysis of the IMPLAN data for 2010, the most recent year available.

- The Energy Cluster produced \$21.9 billion in output in 2010, of which \$7.6 billion was sold within the Valley. The Cluster exported \$1.2 billion overseas and sold another \$13.1 billion elsewhere in the U.S. (Figure 4.2-4).
- Of the amount sold within the Valley, \$2.6 billion was in business-to-business transactions and \$1.9 billion was to serve institutional or consumer demand, totaling \$4.5 billion (Figure 4.2-5).
- The SJV economy consumed \$13.1 billion in energy-related commodities, outside of internal demand from the energy cluster itself³⁵ (Figure 4.2-4). As noted above, approximately \$4.5 billion of this need was obtained from regional energy firms, with the remaining \$8.6 billion in demand met by imports. Of this amount, businesses imported \$4.9 billion, while \$3.7 billion represents direct consumer demand that was met by imports.
- The Energy Cluster required \$14.7 billion in supplier inputs to produce its output, and obtained just over one-third of that from within the region. It imported the remainder – 63 percent – from outside the region (Figure 4.2-6).

³⁵ The difference between the \$7.6 billion in Figure 6.2-2 and this \$4.5 billion is the internal demand from the energy cluster itself.

FIGURE 4.2-4
ENERGY CLUSTER TOTAL PRODUCTION VALUE AND MARKETS

ENERGY OUTPUT = 21.9B

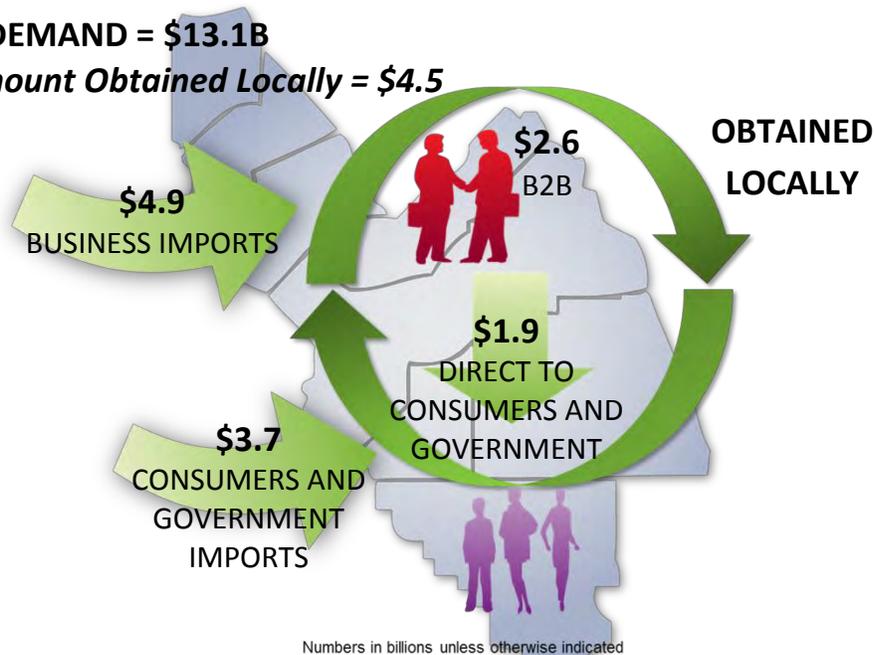


Source: ADE, Inc.; data IMPLAN3 input-output model

FIGURE 4.2-5
DEMAND FOR ENERGY AND SOURCES OF SUPPLY IN THE SAN JOAQUIN VALLEY

ENERGY DEMAND = \$13.1B

Amount Obtained Locally = \$4.5

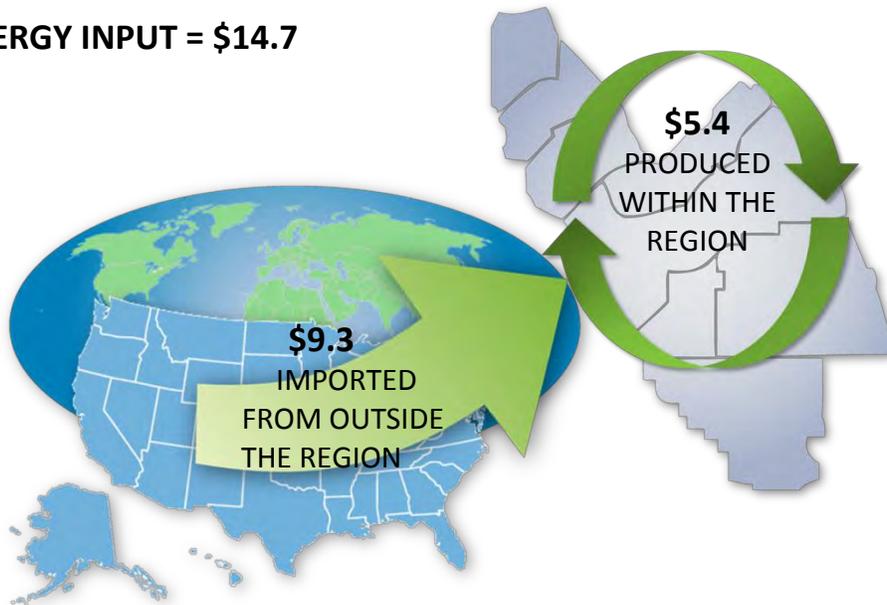


Source: ADE, Inc.; data IMPLAN3 input-output model

FIGURE 4.2-6

REQUIRED PRODUCTION INPUTS FOR THE ENERGY CLUSTER

ENERGY INPUT = \$14.7



Numbers in billions unless otherwise indicated

Source: ADE, Inc.; data IMPLAN3 input-output model

Table 4.2-3 shows some of the industries where the largest amounts of imports occurred. This represents an economic development and jobs growth opportunity to replace some of this “leakage,” which reached more than \$9 billion, with new or expanded companies and services. Oilseed farming, the third largest category, is an input for renewable energy production (biofuels).

TABLE 4.2-3**CLUSTER SUPPLIER PURCHASES – TOTAL DEMAND AND LEAKAGE (SELECTED INDUSTRIES)**

Description	Gross Commodity Demand	Regional Purchase Percentage	Regional Commodity Inputs	Commodity Leakage
Total Commodity Demand	\$14,693,901,000	NA	\$5,389,322,000	\$9,304,579,000
Other energy cluster industries	\$8,884,664,000	34.46%	\$3,061,185,000	\$5,823,479,000
Petrochemical manufacturing	\$372,367,000	1.64%	\$6,123,000	\$366,244,000
Oilseed farming	\$259,196,000	3.97%	\$10,293,000	\$248,902,000
Lessors of nonfinancial intangible assets	\$291,933,000	16.50%	\$48,156,000	\$243,777,000
Wholesale trade businesses	\$617,067,000	64.51%	\$398,072,000	\$218,995,000
Professional and technical services	\$346,621,000	49.87%	\$172,857,000	\$173,764,000
Iron and steel mills and ferroalloy manufacturing	\$158,163,000	7.07%	\$11,174,000	\$146,989,000
Management of companies and enterprises	\$303,278,000	51.58%	\$156,419,000	\$146,859,000
Mining coal	\$144,083,000	0.00%	\$0	\$144,084,000
Legal services	\$141,180,000	46.64%	\$65,850,000	\$75,330,000
Transport by rail	\$208,620,000	66.73%	\$139,206,000	\$69,414,000
Valve and fittings other than plumbing manufacturing	\$66,505,000	3.44%	\$2,289,000	\$64,216,000
All other basic inorganic chemical manufacturing	\$57,725,000	3.09%	\$1,782,000	\$55,943,000
Petroleum lubricating oil and grease manufacturing	\$52,575,000	3.27%	\$1,719,000	\$50,855,000
Monetary authorities and depository credit intermediation	\$149,974,000	67.95%	\$101,909,000	\$48,065,000
Coating, engraving, heat treating and allied activities	\$49,534,000	3.94%	\$1,953,000	\$47,581,000
Semiconductor and related device manufacturing	\$46,083,000	0.17%	\$76,000	\$46,007,000

Source: Applied Development Economics, Inc.; data from IMPLAN3, Input-Output Model

4.3 HEALTH AND WELLNESS CLUSTER

Healthcare has been one of the most resilient sectors of the national economy over the past decade and continues to show strong positive growth and career opportunities. Many of the fastest growing careers in the country and California are in health care sector. As the International Council for Economic Development noted, “The impressive expansion of the nation’s healthcare sector has proven resistant to economic downturns. Over the last two business cycles, health care employment has grown by more than 30 percent nationally. Total non-farm employment, on the other hand, has increased by just 3 percent. Optimistic growth prospects are well supported by demographic trends.”

According to the California Community Colleges Centers of Excellence (COE) *2012 Healthcare Sector Profile*, “The Healthcare sector plays a critical role in maintaining the health and well-being of a population as well as contributing to the economic development of communities in California.”³⁶ To reflect new trends and opportunities in this sector, ADE has expanded the definition of the cluster to include wellness-related activities. The Health and Wellness Cluster is the second largest cluster in the Valley and was the source of most of the region’s net job growth over the past decade (see Table 5.4-2).

In the Profile, COE listed some of the major drivers affecting the Cluster’s future growth:

- The implementation of the Affordable Care Act (ACA), which will “create more demand for health care services and change the way services are delivered. This will expand the need for primary care workers – nurses and medical assistants as well as medical doctors and nurse practitioners.”
- Technology innovations in health information, e-health and telemedicine, which are changing the delivery of health care services and requiring new skills in the allied health occupations.
- An aging healthcare workforce that may cause severe shortages upon retirement of this large cohort. For example, more than one-third of California’s nursing workforce is older than 50 and over half are expected to retire in the next decade.³⁷

Other major trends are shaping the future of the health care sector that will provide economic and employment opportunities for the Valley, as well as improved health outcomes for Valley residents and communities. With escalating health care costs and a health crisis related to an expanding population of those who are obese/overweight and unhealthy, there is a major healthcare sector focus at all levels on a food and disease prevention approach (especially chronic disease), as well as an increased interest in promoting healthy eating/lifestyles.³⁸ There is a growing policy intersect between health and food, - including development of local and regional food systems, and health and land use, community design and sustainability - to support active transportation (e.g., biking and walking) and better access to parks, safe neighborhoods, recreation, and cleaner air and water.

³⁶ *2012 Healthcare Sector Profile*, Doing What Matters for Jobs and the Economy, California Community Colleges, 2012

³⁷ Ibid

³⁸ “California Agriculture Economic Cluster,” Presentation by USDA Rural Development California, January, 2012

The health care challenges of the Valley have been well documented over the years, including the poor health status of Valley residents and communities and limited access to health care services, especially in rural areas. Each of the Valley's counties has Medically Underserved Areas and Populations (MUA/P). Strong health disparities exist across racial and ethnic groups, and the Valley lags behind the state in many health indicators, including those related to obesity/overweight, poor air quality, and other conditions.³⁹ Many residents suffer from food insecurity and inadequate nutrition. There has been a chronic healthcare workforce shortage, and gaps in the scope and timeliness of information related to these gaps from an employer demand perspective, making it an ongoing challenge to meet these needs.

Improving the health status of the Valley has been high priority for local, regional, state and federal leaders including the Partnership; economic development, education and workforce development partners; employers; non-profits and community-based organizations; health care foundations; and the public. The Valley has tremendous assets and leadership dedicated to meeting the Valley's healthcare challenges and opportunities, including the presence on the Partnership's Board of public and private sector health leaders and participation of health partners on Partnership Work Groups.

Over the past several years, major efforts have focused on developing a "home-grown health-care workforce" for this medically underserved region, meeting critical workforce gaps such as for nursing professions and medical assistants, and developing institutional capacity at UC Merced, CSUs and the community colleges along with employers to educate and train a wide range of health professionals. This work includes both development and delivery of relevant education and training programs, and identification of "market intelligence" on employer needs to inform curriculum development and training in the classroom and workplace.

Two major regional demand-driven workforce initiatives are a platform for the Health and Wellness Cluster workforce development strategy. One is the Regional Industry Clusters of Opportunity Project (RICO), managed by the Fresno Regional Workforce Investment Board and sponsored by the Central California Workforce Collaborative (CCWC), the Partnership's co-lead for the Higher Education and Workforce Development Work Group. This project is a collaboration of the Valley's major health industry employers, WIBs, CCVEDC, and Central Valley Higher Education Consortium. The other is the C6 Project, which is focused on catalyzing education system change, improving student outcomes, partnering with employers, and meeting critical skills and occupational gaps in the health care sector.

The Health and Wellness Cluster is dynamic and interconnected with other clusters, which will also drive opportunity within this cluster. Hospitals, clinics and other healthcare institutions have been developing new facilities to serve the Valley's fast-growing growing and diverse population, which is having a positive impact on the construction sector. From an infrastructure standpoint, the San Joaquin Valley Broadband Consortium (a Partnership initiative managed by OCED) is developing a regional broadband strategy to improve regional broadband infrastructure. This infrastructure is an enabling technology for

³⁹ *California Partnership for the San Joaquin Valley 2010-2011 Report.*

the adoption and deployment of electronic health information technologies and e-health and telemedicine and will expand broadband access and improved health services, especially to rural and other underserved communities throughout the Valley. Health care systems are making major investments in this infrastructure and technology, which will generate many new jobs and require development of new workforce skills.

As an innovation asset, UC Merced's new Health Sciences Research Institute (HSRI) was created help provide education and research to advance the understanding of health, health promotion, and disease prevention and support community partners in policy, practice and outcomes. HSRI is developing a public health program and a biomedical sciences research program to support new and emerging faculty to conduct world-class research.

Within the context of the trends described above, and the economic analysis generated for this project, partners and participants in the project's three Health and Wellness Cluster meetings provided a great depth of information, expertise and recommended actions to develop and advance the Health and Wellness Cluster action plan. This information is provided in a companion resource document but some key assets and next steps are described for moving forward.

The Partnership's Health and Human Services Work Group has not been fully active for more than two years due to the lack of available funding. The Cluster Action Plan provides an opportunity to revitalize the Work Group based on new cluster opportunities and leveraging the assets described above and in the project's resource materials. Recommendations are provided in Chapter 7.

The next section describes the components of the Health and Wellness Cluster; key employment indicators by cluster component and by geographic distribution; and trade flow indicators showing output of the cluster, inputs required for this output, regional demand for health and wellness products and services, and gaps in meeting regional demand that are an economic development target opportunity. Additional information is provided on employment indicators by county by cluster component, due to the size and importance of the cluster.

HEALTH AND WELLNESS CLUSTER COMPONENTS

The Health and Wellness Cluster has five key components. As noted at the beginning of this section, the cluster definition has been expanded to include wellness. The wellness-related component represents a start in defining the NAICS codes related to the cluster and further research is needed, because NAICS for certain health-related activities such as fitness are included in the NAICS codes for fitness and recreational sports centers (under the leisure and hospitality sector) and are difficult to capture.

Accordingly, this cluster component is undercounted. See Appendix B for a listing of the cluster industries by NAICS codes. The five cluster components are:

Cluster Components	Industry Types
Health Care Delivery	Health practitioners (doctors, dentists, other health practitioners), hospitals, home health care providers, outpatient centers, nursing care facilities, and residential care facilities, including for continuing care retirement, mental health and substance abuse and residential rehabilitation services
Medical Device Manufacturing	Surgical and medical instrument, surgical appliance and supplies, dental equipment and supplies, dental laboratories, and ophthalmic goods
Pharmaceutical Manufacturing	Medicinal and botanical, pharmaceutical preparation, biological product
Supplies and Services	Medical, dental and hospital equipment and supplies merchant wholesalers, other professional equipment and supplies merchant wholesalers, drugs and druggists' sundries merchant wholesalers, and voluntary health organizations
Wellness and Fitness	Retail trade such as pharmacies and drug stores, optical good stores, food (health) supplement stores, home health equipment rental, offices of all other miscellaneous health practitioners, all other miscellaneous ambulatory health care services, and diet and weight reducing centers

Source: Applied Development Economics

EMPLOYMENT INDICATORS

This section presents a summary of key employment trends in the Health and Wellness Cluster. While most industry clusters are export-oriented, producing products for a larger market outside the local or regional area, many aspects of this cluster are inherently local. Services are generally provided to the local population, except in cases where highly specialized expertise is available, in which case patients may be attracted from outside the region. The component that is most export-oriented relates to medical devices manufacturing.

The Health and Wellness Cluster is a growth cluster across almost all cluster components. Cluster employment accounted for approximately 10 percent of the total regional employment, but 54 percent of the job growth that occurred between 2001 and 2010. Also, as described earlier in this section, the cluster has a role in other clusters such as agriculture and public sector construction and those jobs and economic output are captured in these other clusters to the degree possible.

Table 4.3-1 shows employment across the cluster's four components from 2001-2010, including employment changes and rate of growth, concentration (compared to the state), and shift-share (a ratio derived from the region's rate of growth compared to the state). Figure 4.3-1 is a graphical illustration of these trends. The following summarizes key findings:

The Health and Wellness cluster accounted for over 128,000 jobs in the Central Valley region. The vast majority of these jobs were in the health care delivery sectors, with over 114,500 jobs.

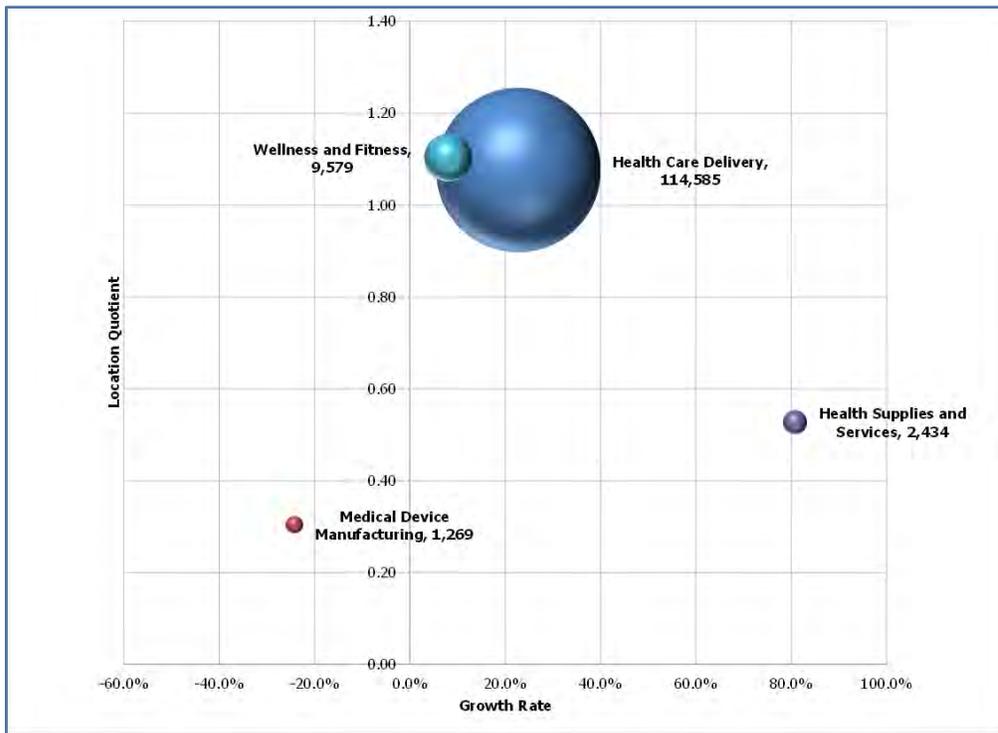
- During this period, the total job growth was nearly 22,700, with health care delivery accounting for about 21,100 of those jobs.
- As a whole, the cluster grew by 21.5 percent between 2001 and 2010, and grew slightly faster than the cluster did across the rest of California.
- The faster growing cluster components were pharmaceutical manufacturing (also the smallest component), and supplies and services. These two sectors also had a stronger rate of growth compared to the state, demonstrating comparative advantage.
- Consistent with general manufacturing trends, jobs were lost in the medical manufacturing component.
- The concentration of employment in the cluster was about average. The health care delivery, and wellness and fitness groups had employment concentrations that were slightly higher than the statewide average, while all of the other groups were significantly lower. This indicates gaps to be filled.

TABLE 4.3-1
CLUSTER EMPLOYMENT INDICATORS

Cluster Component	Employment 2001	Employment 2010	Employment Change 2001 to 2010	Percentage Change 2001 to 2010	Location Quotient 2010	Shift-share
Health Care - Delivery	93,477	114,585	21,108	22.6%	1.08	1.50%
Medical Device Manufacturing	1,675	1,269	-406	-24.3%	0.30	-22.26%
Pharmaceutical	127	311	184	145.1%	0.09	134.86%
Supplies and Services	1,347	2,434	1,087	80.7%	0.53	68.58%
Wellness and Fitness	8,871	9,579	708	8.0%	1.10	5.93%
Health and Wellness Cluster Total	105,497	128,178	22,681	21.5%	1.01	3.49%

Source: Applied Development Economics

FIGURE 4.3-1
EMPLOYMENT BY CLUSTER COMPONENT



Source: ADE, Inc., Data from IMPLAN/ES 202 County Employment Database

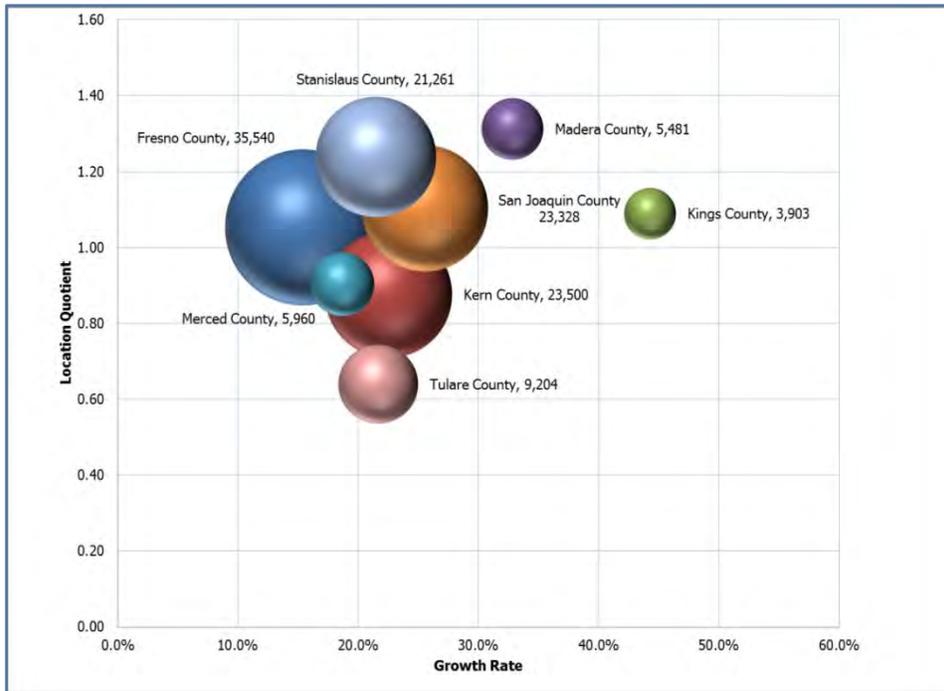
GEOGRAPHIC CONSIDERATIONS

Figure 4.3-2 illustrates employment growth trends and geographic concentration for each county in the Valley for the overall cluster. Figures 4.3-3 through 4.3-7 show these trends and the concentration for each county, for each cluster component. The key findings are summarized as follows:

- Fresno County had the largest employment in the cluster, at about 35,500 jobs, followed by San Joaquin and Kern Counties at about 23,000 jobs. However, viewing the location quotients, Kern County is actually underrepresented in comparison to its overall employment base, as are Merced and Tulare Counties.
- The health care delivery figures were similar to the overall cluster since that component comprises 90 percent of the cluster (Figure 4.3-2). Kings County had the fastest rate of growth due to the opening of new medical facilities by Adventist Health, a major employer in the region.
- Medical device manufacturing was concentrated in Fresno and Kern counties but actually lost employment in both those areas between 2001 and 2010. Employment in this cluster component grew in Stanislaus and Merced Counties.
- Pharmaceutical employment was concentrated in Stanislaus County, which also experienced significant growth during the decade, along with Tulare, Merced and Fresno Counties.

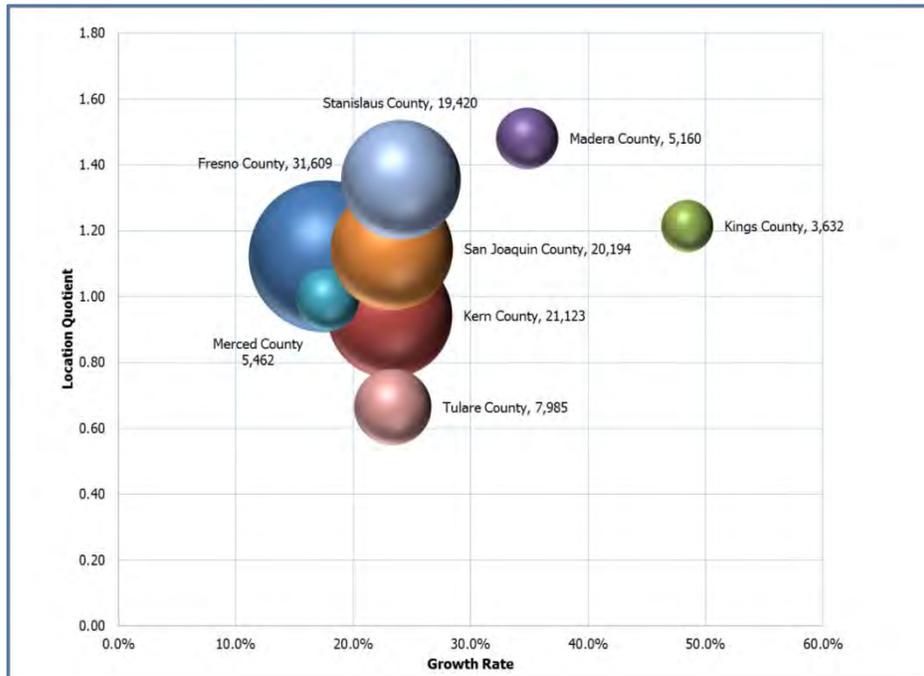
- Health care supplies and services experienced strong growth in San Joaquin County but almost none in the other counties (Figure 6.3-4). This likely reflects the County’s advantage for wholesaler and distribution location and proximity to the Bay Area and Sacramento regions.
- Finally, wellness and fitness employment is more evenly spread among the counties and nearly all are at or above statewide concentration levels (Figure 6.3-5). All of the counties except San Joaquin and Stanislaus saw growth in this cluster component.

FIGURE 4.3-2
CLUSTER EMPLOYMENT BY COUNTY



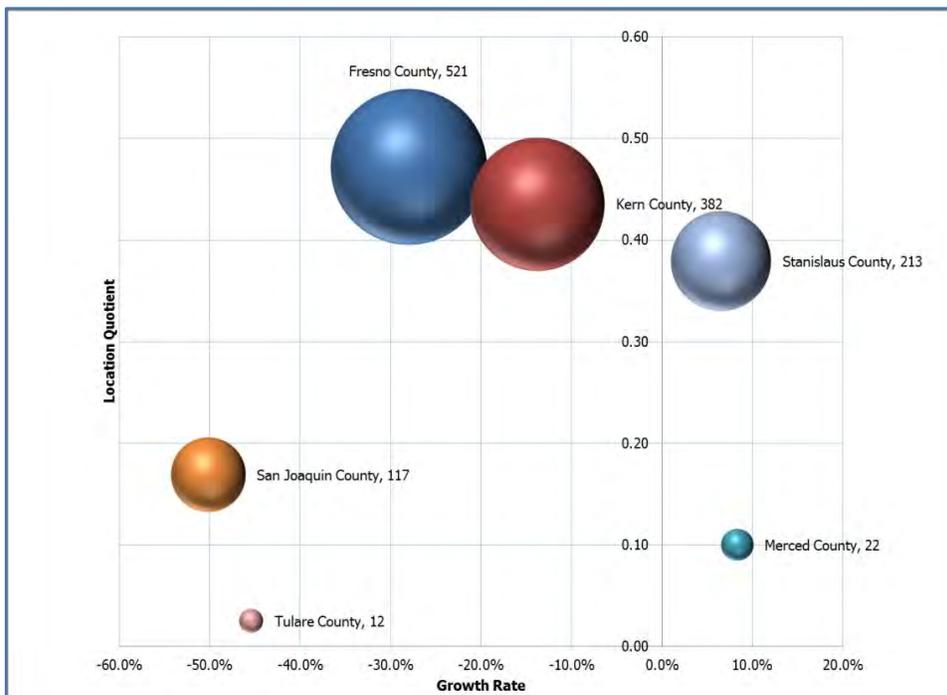
Source: ADE, Inc., Data from IMPLAN/ES 202 County Employment Database

FIGURE 4.3-3
HEALTH CARE DELIVERY EMPLOYMENT BY COUNTY



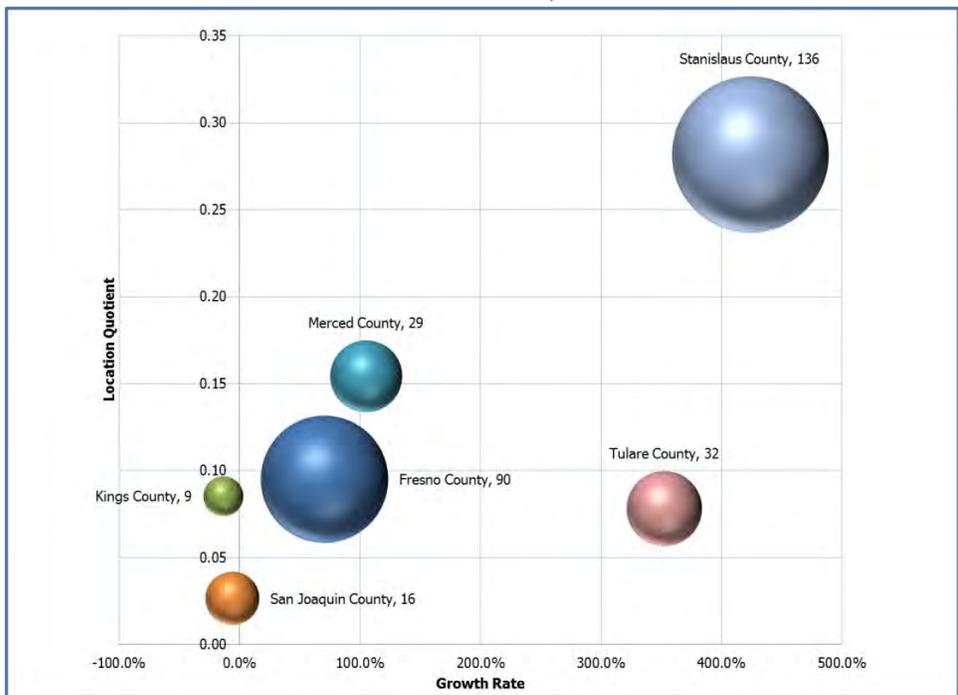
Source: ADE, Inc., Data from IMPLAN/ES 202 County Employment Database

FIGURE 4.3-4
MEDICAL DEVICE MANUFACTURING EMPLOYMENT BY COUNTY, 2001-2010



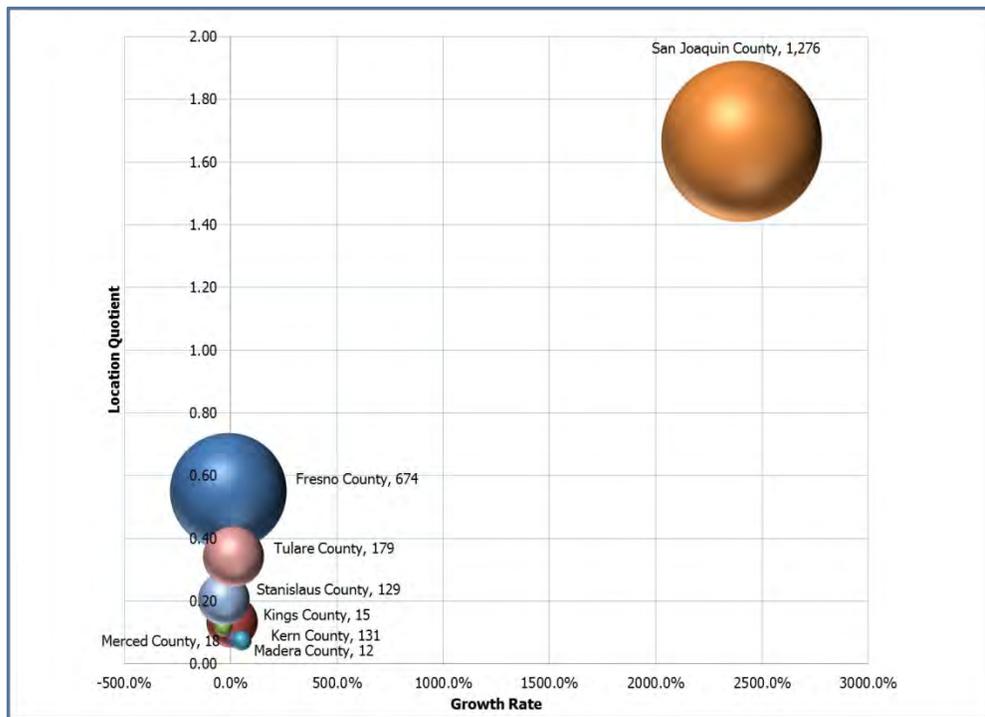
Source: ADE, Inc., Data from IMPLAN/ES 202 County Employment Database

FIGURE 4.3-5
 PHARMACEUTICALS EMPLOYMENT BY COUNTY, 2001-2010



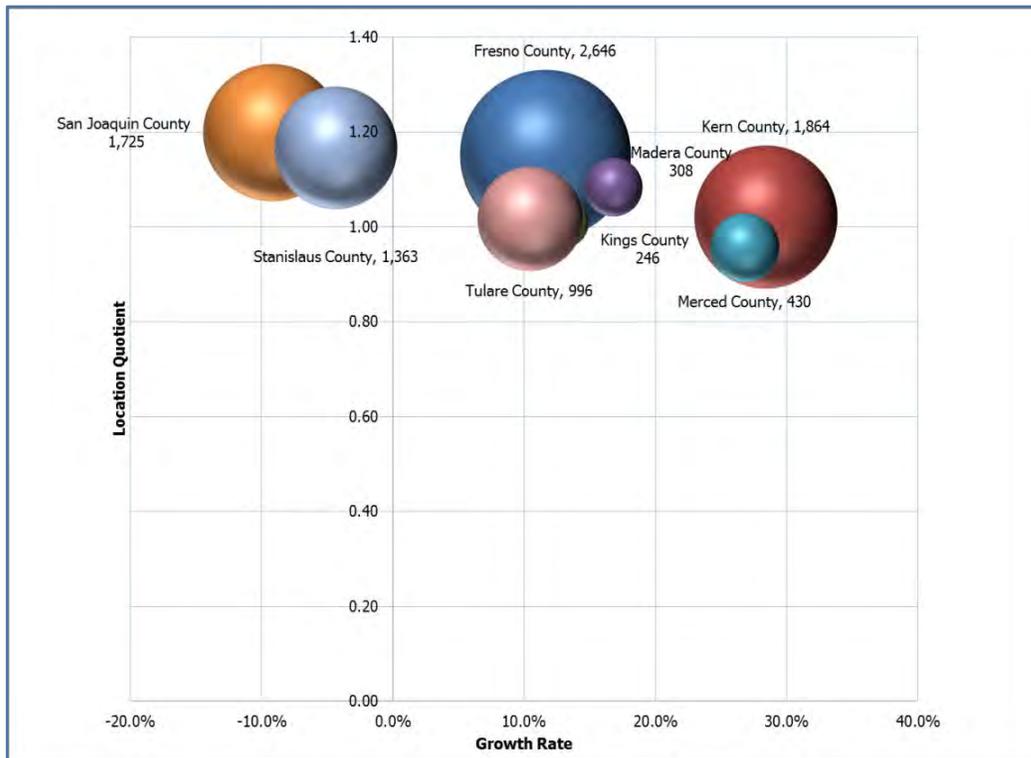
SOURCE: ADE, INC., DATA FROM IMPLAN/ES 202 COUNTY EMPLOYMENT DATABASE

FIGURE 4.3-6
 HEALTH SUPPLIES AND SERVICES EMPLOYMENT BY COUNTY, 2001-2010



Source: ADE, Inc., Data from IMPLAN/ES 202 County Employment Database

FIGURE 4.3-7
WELLNESS AND FITNESS EMPLOYMENT BY COUNTY



Source: ADE, Inc., Data from IMPLAN/ES 202 County Employment Database

TRADE FLOW INDICATORS

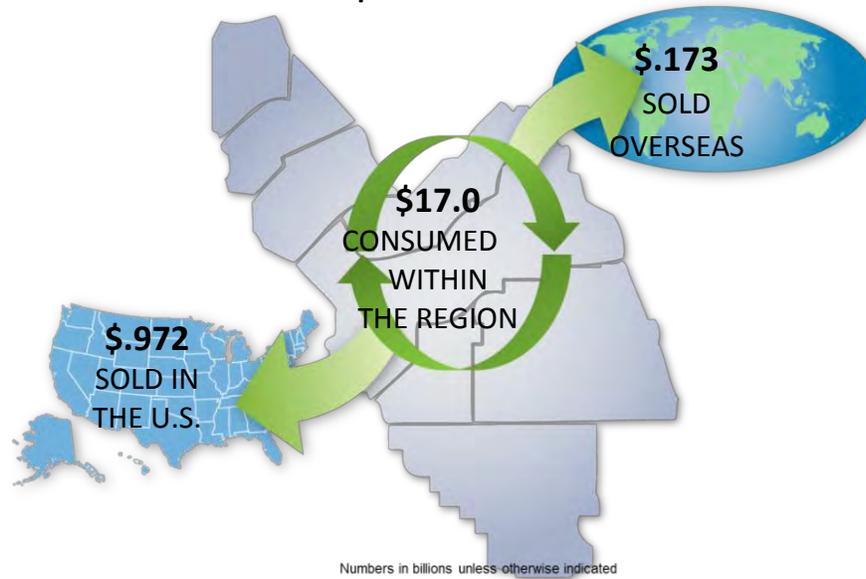
This section presents information on regional trade flows – cluster outputs, inputs required to produce the Health and Wellness Cluster’s outputs, and the gaps, or leakage – that represent potential economic development opportunities for filling the leakage. This information is based on analysis of the IMPLAN data for 2010, the most recent year data is available.

- The Valley’s cluster output in terms of services and related supplier sectors totaled \$18.1 billion in 2010 (Figure 4.3-8). About \$1 billion in services was estimated to be provided to customers outside the Valley and a small amount (\$173 million) was sold to foreign markets. Over 90 percent of health care services were consumed locally.
- Total regional demand for health care services by non-cluster businesses, institutions including government, and households was estimated at \$23.7 billion, however, so about 25 percent of this demand was satisfied by providers outside the Valley (Figure 4.3-9).
- The Health and Wellness Cluster needed \$6.8 billion in supplier inputs and obtained about \$4.0 billion from local providers (Figure 4.3-10). The remaining \$2.8 billion, which includes medical equipment and supplies, was purchased from outside the region. A partial list of these outside imports is shown in Table 4.3-2.

FIGURE 4.3-8

VALUE OF HEALTH AND WELLNESS SERVICES PRODUCED IN THE SAN JOAQUIN VALLEY

HEALTH & WELLNESS OUTPUT = \$18.1B

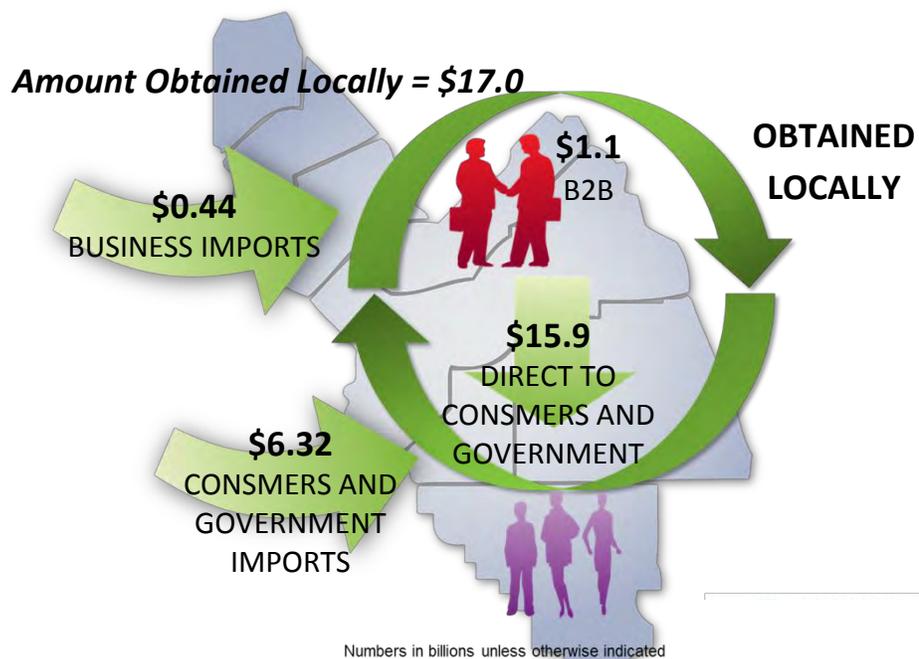


Source: ADE, Inc.; data IMPLAN3 input-output model

FIGURE 4.3-9

MARKET FOR HEALTH AND WELLNESS SERVICES IN THE SAN JOAQUIN VALLEY

HEALTH & WELLNESS DEMAND = \$23.7B

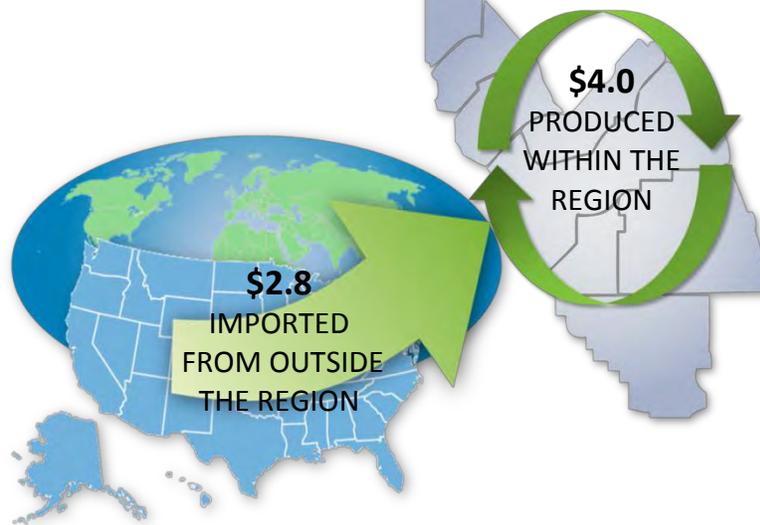


Source: ADE, Inc.; data IMPLAN3 input-output model

FIGURE 4.3-10

PRODUCTION INPUTS REQUIRED FOR HEALTH AND WELLNESS CLUSTER

HEALTH & WELLNESS OUTPUT = \$6.8B



Numbers in billions unless otherwise indicated

Source: ADE, Inc.; data IMPLAN3 input-output model

Table 4.3-2 shows total commodity leakage (demand for goods and services) outside the Valley from business-to-business transactions for Health and Wellness Cluster inputs and selected commodities that could be targets for economic development. Potential targets could include additional health and wellness-related services, manufacturing, and research, legal and professional services. Two specific areas for additional focus were identified during the project cluster meetings. Hospitals often go outside the Valley for specialized lab services, and are an opportunity to develop this specialized expertise in the Valley if a shared need can be identified. Economic development professionals noted that they have been constrained in expanding and attracting new firms in the pharmaceutical area, due to significant workforce skills gaps. Increased collaboration between employers, EDCs, WIBs and education partners will help to identify and address these gaps and would be a good focus for the cluster action plan.

TABLE 4.3-2**CLUSTER SUPPLIER PURCHASES – HEALTH AND WELLNESS GROWTH OPPORTUNITIES**

Description	Gross Commodity Demand	Regional Purchase Percentage	Regional Commodity Inputs	Commodity Leakage
Total Cluster Commodity Demand	\$6,770,149,000	NA	\$3,976,902,000	\$2,793,247,000
Other health and wellness establishments	\$1,230,145,000	71.6%	\$880,196,000	\$349,949,000
Real estate establishments	\$968,477,000	72.8%	\$705,102,000	\$263,375,000
Management of companies and enterprises	\$470,963,000	49.1%	\$231,230,000	\$239,733,000
Wholesale trade businesses	\$483,527,000	63.8%	\$308,315,000	\$175,213,000
Insurance carriers	\$294,672,000	48.8%	\$143,852,000	\$150,821,000
Management, scientific, and technical consulting services	\$214,261,000	34.1%	\$72,992,920	\$141,268,000
Other basic organic chemical manufacturing	\$118,753,000	2.8%	\$3,315,000	\$115,438,000
Scientific research and development services	\$119,152,000	19.2%	\$22,900,000	\$96,252,000
Other plastics product manufacturing	\$69,605,000	6.4%	\$4,474,000	\$65,131,000
Legal services	\$106,629,000	46.9%	\$50,002,000	\$56,623,600
Advertising and related services	\$156,349,000	65.2%	\$101,921,000	\$54,428,000
* Not an industry (Used and secondhand goods)	\$54,025,000	0.0%	\$0	\$54,025,000
Plastics material and resin manufacturing	\$52,437,000	1.0%	\$516,000	\$51,921,000
Automotive equipment rental and leasing	\$64,326,000	35.6%	\$22,922,000	\$41,404,000
Telecommunications	\$144,876,000	73.2%	\$106,054,733	\$38,821,000
Petroleum refineries	\$45,154,000	14.6%	\$6,600,000	\$38,554,000
Industrial gas manufacturing	\$37,963,000	1.5%	\$562,000	\$37,400,000
Animal (except poultry) slaughtering, rendering, and processing	\$50,964,000	32.9%	\$16,759,000	\$34,205,000
Electric power generation, transmission, and distribution	\$128,938,000	75.9%	\$97,814,000	\$31,124,000

Source: ADE, Inc.; data from IMPLAN3 input-output model.

4.4 LOGISTICS CLUSTER

Logistics services and facilities – including transportation, warehousing and distribution to support effective goods movement into, out of, and within the San Joaquin Valley - are a critical foundation to key industries in the region, particularly the agriculture value chain, and comprise an industry cluster in their own right. Logistics is a targeted cluster for all counties in the region and for the CCVEDC.

In 2006, *Go California*, California’s goods movement plan, identified the San Joaquin Valley as part of the state’s four “Port to Border” regional corridors.⁴⁰ Key goods movement corridors form the backbone of the region’s economy, including North-South and East-West highway corridors, Class 1 rail facilities, air cargo facilities and the Port of Stockton.⁴¹ Congested and deteriorating infrastructure is a major challenge across the Valley.

The Valley’s Logistics Cluster is impacted by wide-reaching trends. According to an analysis prepared for the development of the *San Joaquin Valley Interregional Goods Movement Plan*: “The Valley is experiencing the demands of the modern global logistics system across a range of goods, from raw agricultural materials to consumer products. The critical role that the San Joaquin Valley plays in California and the nation’s food supply will continue to require an effective goods movement system to distribute and export products quickly and efficiently. The growing regional population...will require increased attention to safe and reliable movement of goods consistent with competing needs for infrastructure and greater sensitivity to emissions and congestion.”⁴²

Transportation planning in the Valley is led by the region’s eight Regional Transportation Planning Agencies (RTPAs – federally designated Metropolitan Planning Organizations – MPOs). They created the San Joaquin Valley Policy Council in 2006 to establish a system for regional coordination of plans, programs, traffic and emissions modeling, transportation planning, air quality planning and consistency in analysis and forecasting. The Regional Policy Council works closely in these efforts with the San Joaquin Valley Air Pollution Control District, Caltrans, the California Air Resources Board, the Federal Highway Administration (FHA) and other partners. Planning efforts guide the investment of billions of dollars in transportation infrastructure investments over multiple years. A new aspect of this coordination effort is preparation of integrated Regional Transportation Plans (RTPs) to meet regional greenhouse gas emissions reduction targets.

The Regional Policy Council has several efforts underway to enhance regional transportation planning, mobility, goods movement and air quality. These include: coordination with Caltrans on development of a Corridor Enhancement Master Plan, Business Plan and project funding for the Highway 99 Corridor, leveraging 2006 State Infrastructure Bonds and other funds for much needed transportation and safety

⁴⁰ *Route 99 Corridor Business Plan, Enhancement Master Plan*, Caltrans District 6 and 10, 2009, p. v.

⁴¹ “*The Importance of the San Joaquin Valley to California, the Nation, and the World*,” Cambridge Systematics, 2012.

⁴² *San Joaquin Valley Goods Movement Plan; Task 1 Report: Existing Conditions Assessment Technical Memorandum*, Cambridge Systematics, Inc. et al, January 2012, p. 4-16.

improvements; participation in several of the Partnership's New Valley Work Groups and advocacy for the funding of the California High Speed Rail; and Sustainable Communities planning and Regional Blueprint planning integration in large and small communities across the Valley.

A major two-year collaborative planning effort is the preparation of the *San Joaquin Valley Interregional Goods Movement Plan* referenced on the previous page, initiated by the Regional Policy Council in May, 2011, which in addition to the partners cited above includes stakeholders such as the private trucking industry, ports, railroads and major goods-movement industries. This project is the focal point for regional planning and action on transportation infrastructure and goods movement. It has provided several analyses of economic and demographics trends and projections related to goods movement, truck commodity flows and industry profiles, commodity growth, and impacts of freight movement (see <http://www.sjvcogs.org/goods.html> for additional information).

Some key highlights on issues and drivers identified by the planning process that affect the Logistics Cluster are summarized below. These analyses also were the basis of the goods movement issues, challenges and opportunities presented at the Regional Economic Summit, for which recommended state and regional actions were developed.

- In 2010, more than 44 percent of the region's jobs (564,000 jobs) were associated with goods-movement dependent industries; more than one third were related to farming/agriculture, while wholesale and retail trade accounted for nearly as many workers. Manufacturing, including food manufacturing and processing, comprised nearly 20 percent, and transportation/utilities and construction were about 8 percent each.⁴³
- The transportation sector, tied largely to the region's growth in international trade and agricultural production, is expected to have a job increase of more than 90 percent by 2040.⁴⁴ There will be shifts in commodities and exports which need to be taken into account.
- The Valley's projected population growth also will result in increased activity in certain goods movement-dependent industries, such as construction, retail and wholesale trade.⁴⁵
- It is estimated that nearly 500 million tons of goods moved within the San Joaquin Valley in 2007. This volume is projected to grow 76 percent by 2040.⁴⁶
- Truck traffic accounts for more than 90 percent of goods movement in the Valley and this proportion is anticipated to increase further in the future. Rail service provides most of the rest of good movement in the region, with air and water cargo at less than one percent combined.⁴⁷

⁴³ Ibid., p. 4.5.

⁴⁴ *San Joaquin Valley Interregional Goods Movement Plan; Task 5 Report: Commodity Growth*, Cambridge Systematics, Inc. et al, June 2012, p 1-4.

⁴⁵ Task I Report, p. 2-1.

⁴⁶ Task 5 Report, p 1-1.

⁴⁷ *San Joaquin Valley Interregional Goods Movement Plan, Task 4 Report: Commodity Flow Profile*, Cambridge Systematics, Inc. et al, March 2012, p. 1-1.

- Goods movement activities contribute to the Valley’s air quality concerns, and other community and environmental issues such as health, safety and noise are exacerbated by the movement of freight. Community and environmental impacts are projected to grow along with growing freight volumes, unless measures are taken.⁴⁸

The analyses note that within the Valley, there will need to be a continual fine-tuning of logistics chains and transportation practices, among other strategies, for the cluster to remain competitive in the global economy. Also of note is the opportunity to support the mobility needs of the Logistics Cluster through planned public sector infrastructure investments in the region. An analysis prepared for the Central California Workforce Collaborative documented an estimated \$16 billion in planned transportation-related investments for the Valley and the Central/Eastern Sierra from 2010-2020 (see discussion in section 4.8.)

LOGISTICS CLUSTER COMPONENTS

The Valley’s Logistic Cluster is closely integrated with other clusters and is composed of the following cluster components and industry types; (see Appendix B for a listing of the industries by NAICS codes). It should be noted that a large segment of logistics employment is associated with the agriculture value chain and was included in the chapter earlier as part of the distribution component of agriculture.

CLUSTER COMPONENTS	INDUSTRY TYPES
Air, Rail and Water Transportation	Passenger and freight air, rail and water transportation
Truck Transportation	General and specialized freight trucking, local and long-haul
Transit	Mixed mode transit, commuter rail systems, interurban and rural bus transportation, school and employee bus transportation, taxi service, charter bus and other urban transit
Freight and Warehousing	Packing and crating, courier and express delivery services, general and refrigerated warehousing and storage, freight transportation arrangement, farm and othe product warehousing and storage
Other Transportation Services	Motor vehicle towing, support activities, packaging and labeling
Related Manufacturing Industries	Heavy duty truck, railcar, and boat building and repair

⁴⁸ *San Joaquin Valley Interregional Goods Movement Plan, Task 6, The Community, Environmental and Economic Impacts of Frieght Movement*, Cambridge Systematics, Inc. et al, March 2012, p. 1-1.

EMPLOYMENT INDICATORS

This section presents a summary of key employment trends in the portion of the Logistics Cluster not associated with other clusters. This cluster is a growth cluster for the Valley, showing strong growth across some of the cluster components. Table 4.4-1 below shows employment across the cluster's seven components from 2001-2010, including employment changes and rate of growth, concentration (compared to the state), and shift-share (a ratio derived from the region's rate of growth compared to that of the state). Figure 4.4-1 is a graphic illustration of these trends:

- The Logistics Cluster had nearly 33,200 jobs in 2010; total jobs grew by nearly 4,400 between 2001 and 2010 – 15.2 percent.
- Cluster employment was 2.6 percent of total regional jobs, but accounted for 10.5 percent of the job growth that occurred between 2001 and 2010.
- The cluster growth rate of 15.2 percent was faster than the statewide average (shift-share: +24.9%) for the time period. The concentration of employment in the cluster was slightly above state average (location quotient: 1.04).
- The largest cluster component was truck transport, which added a small number of jobs. Transit added less than 50 jobs, likely reflecting the decrease in funding for transit operations due to the economic downturn. The air, rail and water transport showed small levels of employment related to rail. There is a focus on trying to develop more short-haul rail capacity in the Valley, which could increase employment over time.
- The cluster components with the highest levels of job growth were freight and warehousing and other transportation services. Consistent with overall manufacturing, employment in logistics-related manufacturing declined, although this component was not very large.

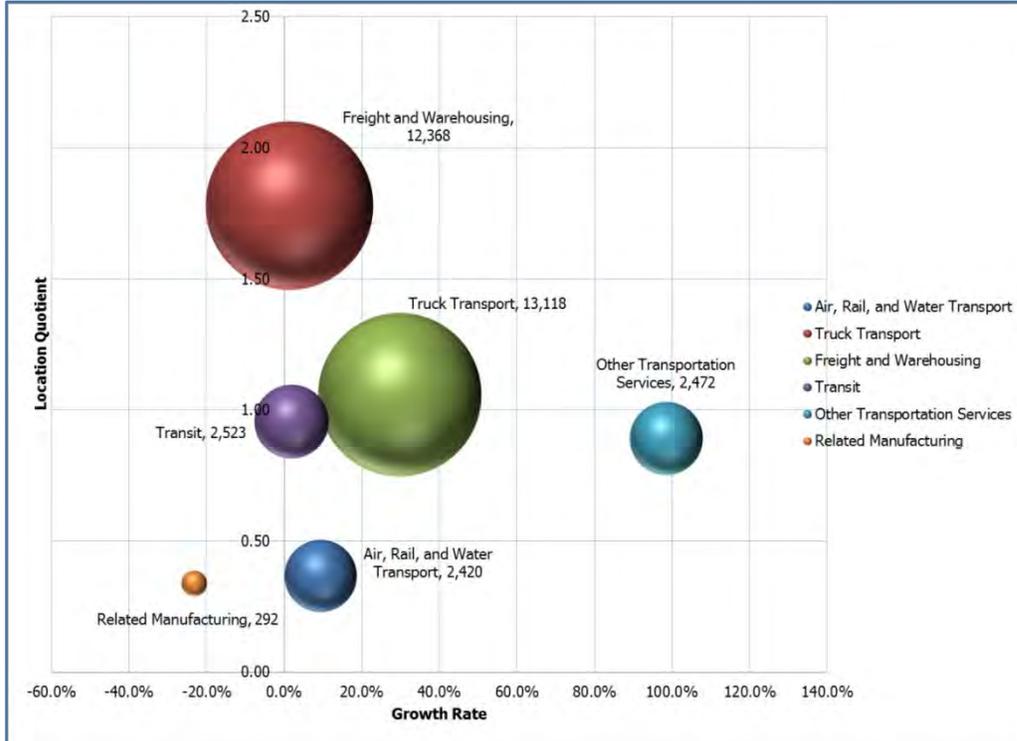
TABLE 4.4-1

LOGISTICS CLUSTER EMPLOYMENT INDICATORS, SAN JOAQUIN VALLEY

Cluster Component	Employment 2001	Employment 2010	Employment Change 2001 to 2010	Percentage Change 2001 to 2010	Location Quotient 2010	Shift-share
Air, Rail, and Water Transport	2,214	2,420	207	9.3%	0.37	32.60%
Truck Transport	12,952	13,118	166	1.3%	1.78	13.64%
Freight and Warehousing	9,535	12,368	2,833	29.7%	1.06	39.26%
Transit	2,477	2,523	46	1.8%	0.96	-2.62%
Other Transportation Services	1,246	2,472	1,226	98.4%	0.89	62.76%
Related Manufacturing	380	292	-88	-23.3%	0.34	-24.06%
Logistics Cluster Total	28,803	33,192	4,389	15.2%	1.04	24.92%

Source: Applied Development Economics

FIGURE 4.4-1
LOGISTICS BY COMPONENT



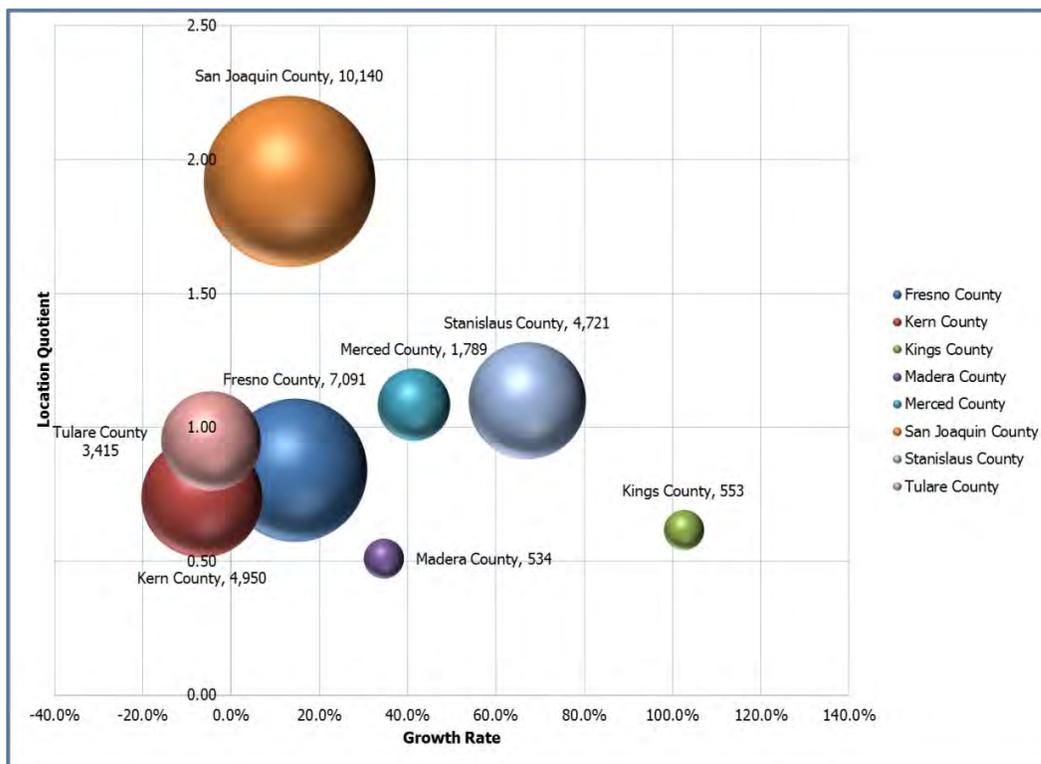
Source: ADE, Inc.; data from IMPLAN CEW/ES202 county employment database

GEOGRAPHIC CONSIDERATIONS

Figure 4.4-2 illustrates employment growth trends and geographic concentration of the Logistics Cluster for each county in the Valley; highlights are summarized as follows:

- The Logistics Cluster was highly concentrated in San Joaquin County, with over 10,000 jobs – 30 percent of total cluster employment and an employment concentration nearly twice the state average (location quotient: 1.92). Other large groupings exist in Fresno (21 percent), Kern (15 percent), Stanislaus (14 percent) and Tulare (10 percent) counties, each of which had more than 3,400 jobs.
- All counties, except for Kern and Tulare, had job growth between 2001 and 2010. Although Kings County had one of the smallest levels of employment, its rate of job growth was the highest. Stanislaus County also had a strong rate of growth.
- Merced and Stanislaus counties are the only other counties in the region with an above average employment concentration in the Logistics cluster.

FIGURE 4.4-2
LOGISTICS CLUSTER EMPLOYMENT BY COUNTY

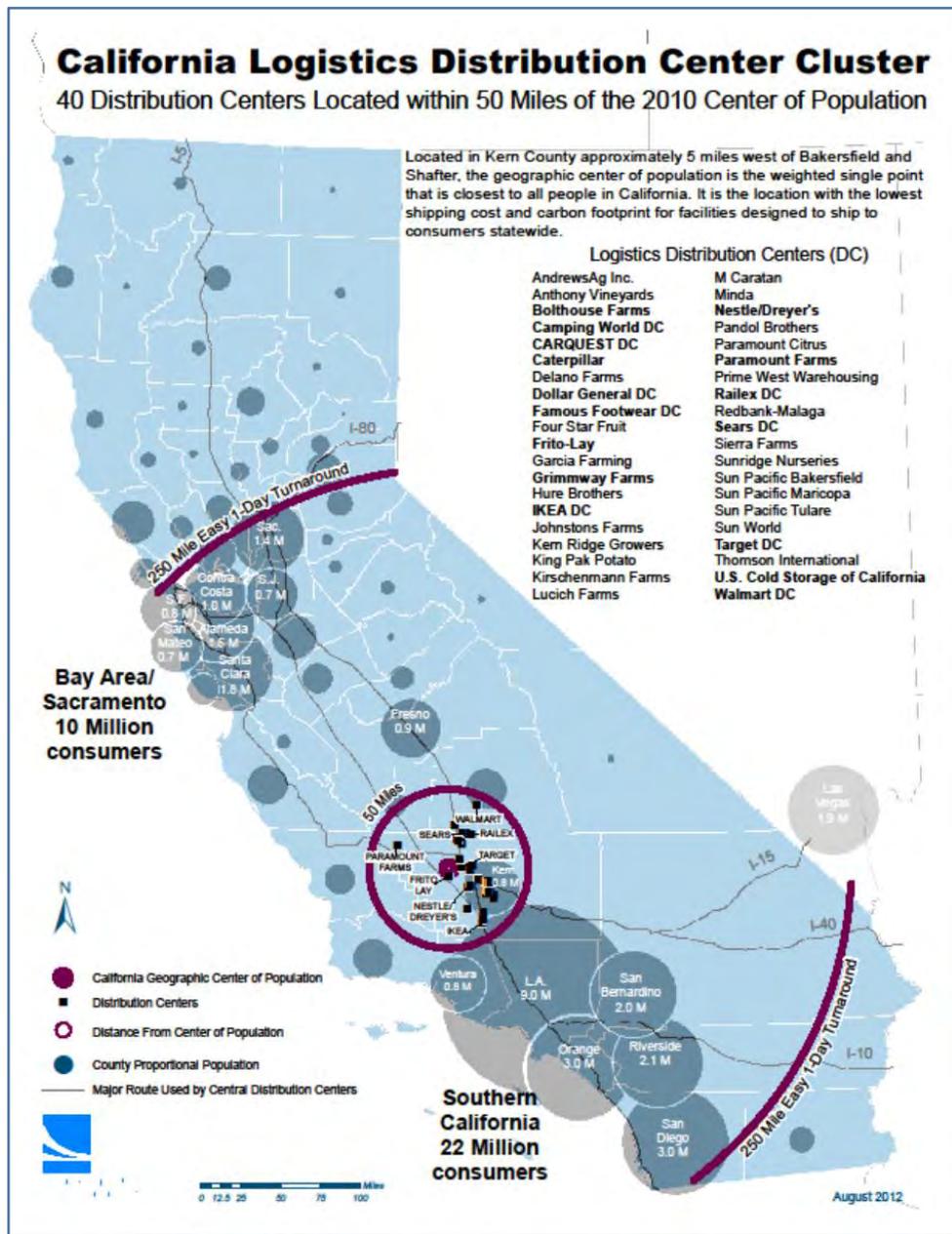


Source: ADE, Inc.; data from IMPLAN CEW/ES202 county employment database

As noted earlier in this section, efficient freight transportation is critical to the economic health of the Valley, for agriculture, oil and other minerals, manufacturing, and all other industries using and shipping supplies and commodities. The Valley also is becoming a prominent location for regional distribution centers of consumer products, providing services to coastal population centers as well as a growing internal population. Most freight transportation is by trucking.

The map on the following page shows the locational advantages of the Valley in terms of proximity to growing consumer markets throughout California. The Kern Council of Governments (Kern COG) prepared the map as part of its analysis of needed future transportation improvements. It shows the location of 40 logistics distribution centers located in Kern County, including farming and food processing establishments that have shipping and distribution operations, and facilities for major national and international retailers. Every ten years, the U.S. Census Bureau calculates California's geographic center of population; it is a weighted center of population that represents the location closest to everyone in the state. For 2010, the center is located in Kern County, approximately five miles west of Bakersfield and Shafter.

From this geographic center, logistics distribution facilities in the southern end of the Valley have access to 22 million Southern California consumers, and to 10 million Bay Area/Sacramento consumers. As shown in Figure 4.2-2, the logistics cluster also is strong in San Joaquin County and reaches additional Northern California and Nevada consumers (as well as other regions and countries). The Kern COG and the Kern EDC have identified the benefit of increasing rail service by moving more truckloads to rail service, and the goods most suited for transfer to rail. These and other analyses are being integrated with the San Joaquin Valley Interregional Goods Movement Plan.



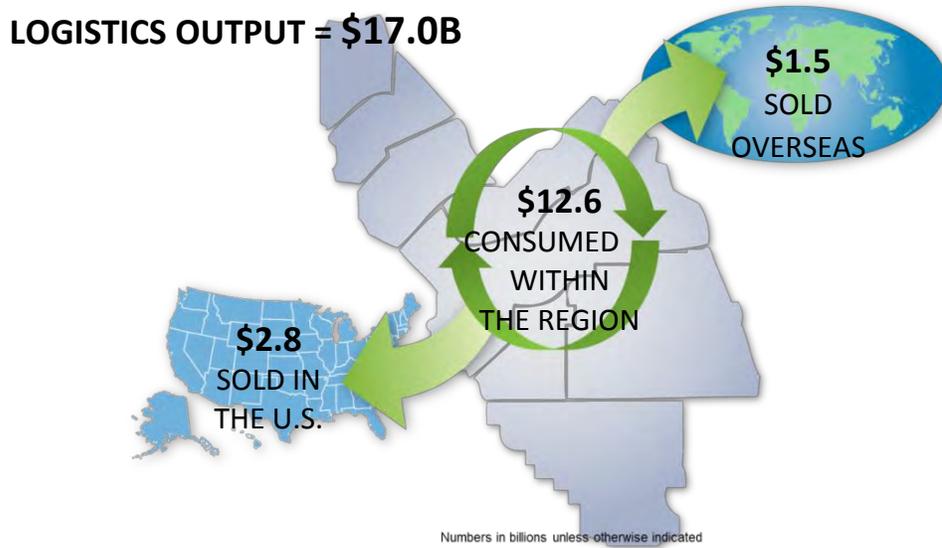
TRADE FLOW INDICATORS

This section presents information on regional trade flows – outputs, inputs required to produce the Logistics Cluster’s outputs, and the gaps, or leakage – that represent potential economic development opportunities for filling the leakage. This information is based on an analysis of the IMPLAN data for 2010, the most recent year data is available.

- Logistics companies in the Valley sold \$17.0 billion in services in 2010, of which \$12.6 billion was sold within the Valley (see Figure 4.4-3). In addition, the cluster businesses provided \$1.5 billion in services to overseas customers and sold another \$2.8 billion to customers elsewhere in the U.S. Of the amount sold within the Valley, \$7.8 billion was in business-to-business transactions and \$4.8 represented institutional or consumer demand.
- The Logistics Cluster needed \$7.0 billion in supplier inputs; it obtained about half of that from within the region and imported the other half (Figure 4.4-4).
- The Valley economy needed \$16.8 million in logistics services, outside of internal demand from the Logistics Cluster itself⁴⁹ (Figure 4.4-5). The Valley obtained \$11.5 billion from regional logistics firms and used outside firms for the remaining \$5.3 billion. Of this amount, businesses imported \$3.1 billion while \$2.2 billion represented direct consumer demand that was imported. Since outside logistics services will often be used to transport goods into the region, it is normal to expect that regional demand will not be completely served by local firms.

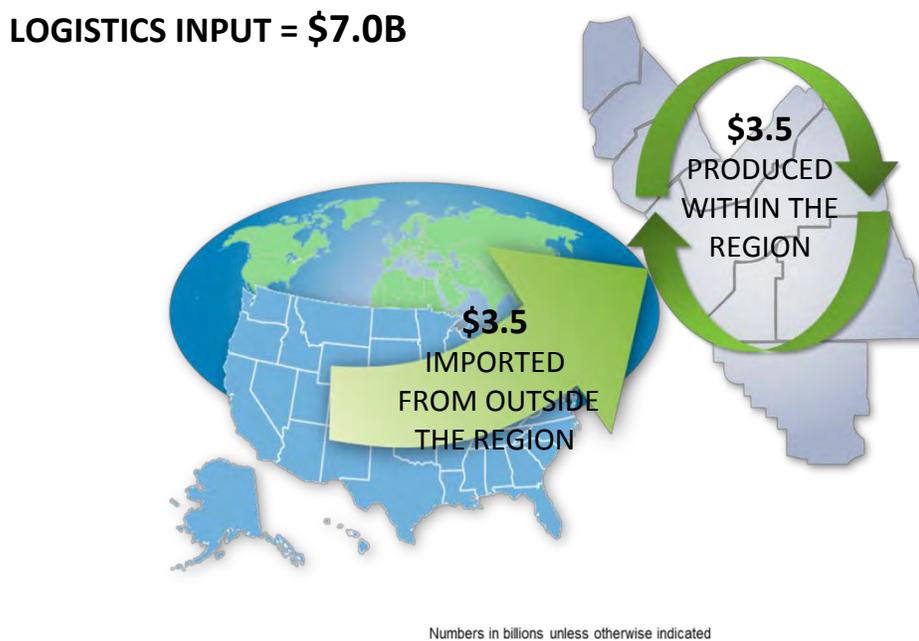
⁴⁹ The difference between the \$12.6 billion in Figure 6.4-2 and this \$11.5 billion is the internal demand from the logistics cluster itself.

FIGURE 4.4-3
 VALUE OF LOGISTICS SERVICES AND MARKETS



Source: ADE, Inc.; data IMPLAN3 input-output model

FIGURE 4.4-4
 REQUIRED INPUTS FOR LOGISTIC SERVICES AND SOURCES OF SUPPLIERS

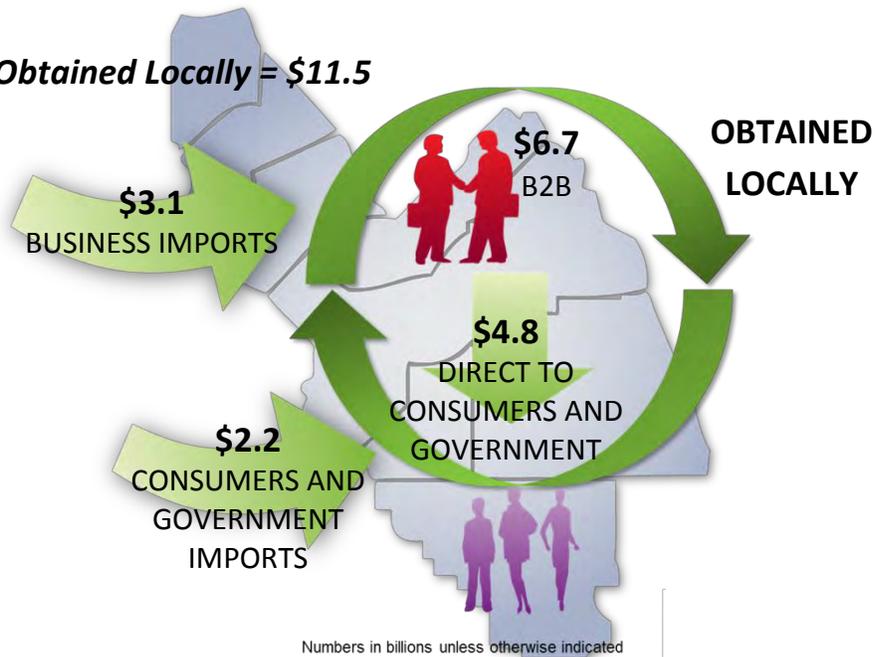


Source: ADE, Inc.; data IMPLAN3 input-output model

FIGURE 4.4-5

REGIONAL LOGISTICS DEMAND = \$16.8B

Amount Obtained Locally = \$11.5



Numbers in billions unless otherwise indicated

Source: ADE, Inc.; data IMPLAN3 input-output model

Table 4.4-2 shows some of the industries where the largest amounts of imports occurred. This represents an economic development and jobs growth opportunity to replace some of this “leakage,” which reached more than \$3.5 billion. Potential targets include selected manufacturing and services.

TABLE 4.4-2
CLUSTER SUPPLIER PURCHASES – TOTAL DEMAND AND LEAKAGE (SELECTED INDUSTRIES)

Description	Gross Commodity Demand	Regional Purchase Percentage	Regional Commodity Inputs	Commodity Leakage
Total Commodity Demand	\$7,025,827,000	N/A	\$3,474,307,000	\$3,551,521,000
Petroleum refineries	\$771,080,000	15.0%	\$115,340,000	\$655,740,000
Other logistics establishments	\$1,627,522,000	68.5%	\$1,114,067,000	\$513,455,000
Motor vehicle parts manufacturing	\$170,648,000	7.6%	\$13,018,000	\$157,630,000
Management of companies and enterprises	\$299,246,000	51.6%	\$154,262,000	\$144,984,000
Insurance carriers	\$265,956,000	48.6%	\$129,155,000	\$136,801,000
Advertising and related services	\$294,437,000	64.7%	\$190,356,000	\$104,081,000
Real estate establishments	\$347,574,000	70.8%	\$245,966,000	\$101,608,000
Other aircraft parts and auxiliary equipment manufacturing	\$99,793,000	0.2%	\$188,000	\$99,605,000
Management, scientific, and technical consulting services	\$136,592,000	32.9%	\$44,947,000	\$91,645,000
Aircraft manufacturing	\$72,535,000	1.6%	\$1,180,000	\$71,354,000
Semiconductor and related device manufacturing	\$67,717,000	0.2%	\$114,000	\$67,603,000
Nondepository credit intermediation and related activities	\$111,477,000	40.6%	\$45,267,000	\$66,220,000
Other engine equipment manufacturing	\$60,974,000	0.1%	\$47,000	\$60,927,000
Lessors of nonfinancial intangible assets	\$70,855,000	17.1%	\$12,100,000	\$58,755,000
Telecommunications	\$164,541,000	72.4%	\$119,133,000	\$45,409,000
Legal services	\$83,174,000	46.5%	\$38,654,000Z	\$44,520,000
Business support services	\$85,218,000	54.7%	\$46,594,000	\$38,624,000

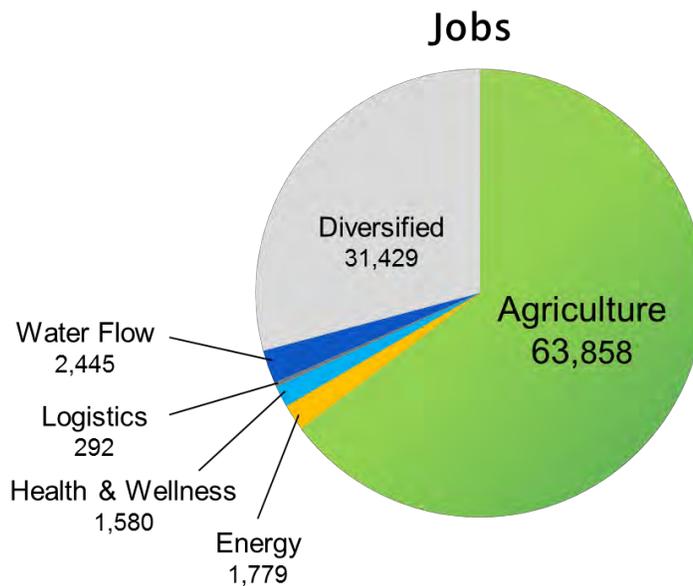
Source: ADE, Inc.; data from IMPLAN3 input-output model.

4.5 MANUFACTURING CLUSTER

Manufacturing is a lynchpin cluster in that it is a component of virtually all of the other regional clusters in addition to other “diversified” manufacturing companies. As shown in Figure 4.5-1, more than 70 percent of manufacturing jobs are associated with one of the five other clusters. Most of this employment is in food processing and is part of the agriculture value chain. However, as manufacturing processes have a number of commonalities across product lines, this analysis addresses all manufacturing industries in the Valley together. As the analysis shows, manufacturing has generally lost employment during the past decade, although this loss occurred more slowly in the Valley than it did statewide. It is worth noting, though, that nearly 60 percent of the losses were in non-cluster related diversified manufacturing industries.

FIGURE 4.5-1

MANUFACTURING EMPLOYMENT DISTRIBUTION AMONG CLUSTERS



Source: ADE, data from IMPLAN CEW/ES202 county employment database.

EMPLOYMENT INDICATORS

- Manufacturing supported about 101,400 jobs in the San Joaquin Valley and accounted for 8.1 percent of total regional jobs in 2010.
- Manufacturing declined by 9.3 percent between 2001 and 2010. However, the regional job loss occurred at a slower rate than the statewide average (shift-share: +21.3%). During this period, the total jobs declined by over 10,400 (Table 4.5-1).

- The concentration of employment in manufacturing is about on par with the statewide average (location quotient: 0.99). The Valley is highly concentrated in food processing and water technology manufacturing (location quotient of 3.29 and 2.47, respectively).
- There was variation in growth within the component areas. While most declined, agricultural-related processing employment grew by almost 5,900 jobs, or 10.7%, from 2001 to 2010, although with variation across the counties (see Appendix D).

TABLE 4.5-1
MANUFACTURING EMPLOYMENT INDICATORS, SAN JOAQUIN VALLEY

Industry Description	Employment 2001	Employment 2010	Employment Change 2001 to 2010	Percentage Change 2001 to 2010	Location Quotient 2010	Shift-share
Food Processing and Ag. Support	61,141	63,858	2,717	4.4%	3.29	17.25%
Medical Device Mfg. & Pharmaceuticals	1,802	1,580	-222	-12.3%	0.20	-15.6%
Logistics	380	292	-88	-23.3%	0.34	-24.1%
Energy Equipment & Petroleum Prod.	1,121	1,779	658	58.7%	0.47	108.6%
Water Flow Technolgy	3,439	2,445	-994	-28.9%	2.47	1.9%
Diversified Manufacturing	43,903	31,429	-12,474	-28.4%	0.46	4.6%
Manufacturing Total	111,786	101,382	-10,404	-9.3%	0.99	21.3%

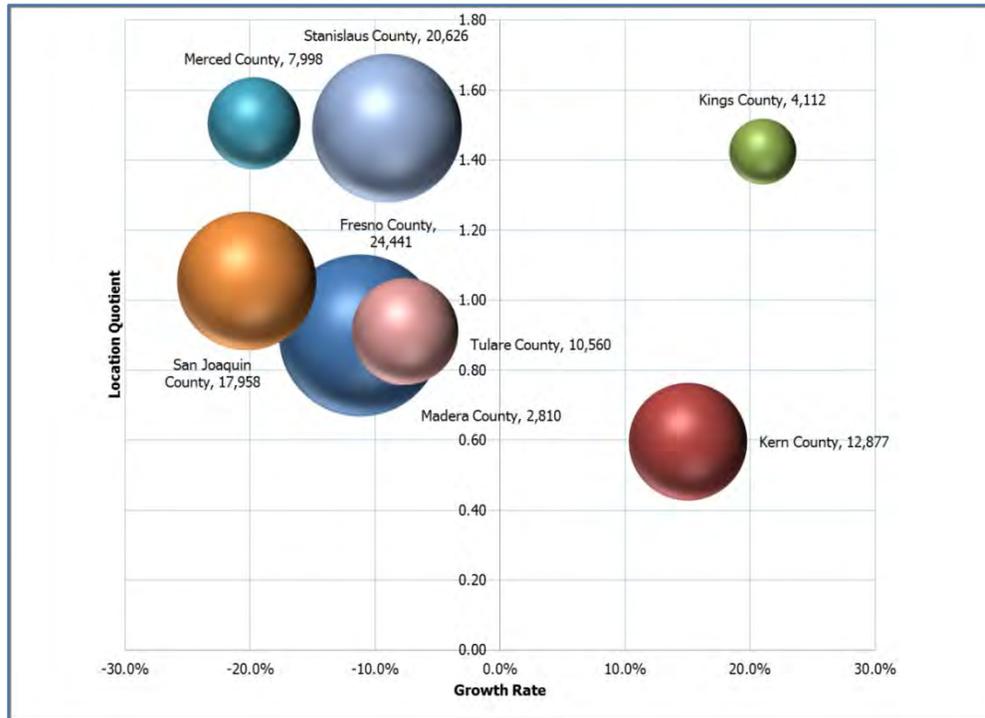
Source: ADE, Inc.; data from IMPLAN CEW/ES202 county employment database.

Note: Location quotients and shift share factors are based on comparisons with statewide private sector employment.

GEOGRAPHIC CONSIDERATIONS

- Manufacturing had the largest job counts in Fresno and Stanislaus Counties, with more than 24,400 and 20,600 manufacturing jobs, respectively (Figure 4.5-2).
- San Joaquin County was next with almost 18,000 jobs, followed by Kern County with almost 12,900 jobs.
- Most counties had an employment concentration that was above or close to the State average, with the highest concentration in Stanislaus County (location quotient: 1.51) and the lowest concentration in Kern County (location quotient: 0.60).
- All counties lost manufacturing jobs between 2001 and 2010, except for Kings and Kern Counties. Food processing and packaging were major contributors to this growth.

FIGURE 4.5-2
MANUFACTURING CLUSTER EMPLOYMENT BY COUNTY



Source: ADE, Inc.; data from IMPLAN CEW/ES202 county employment database

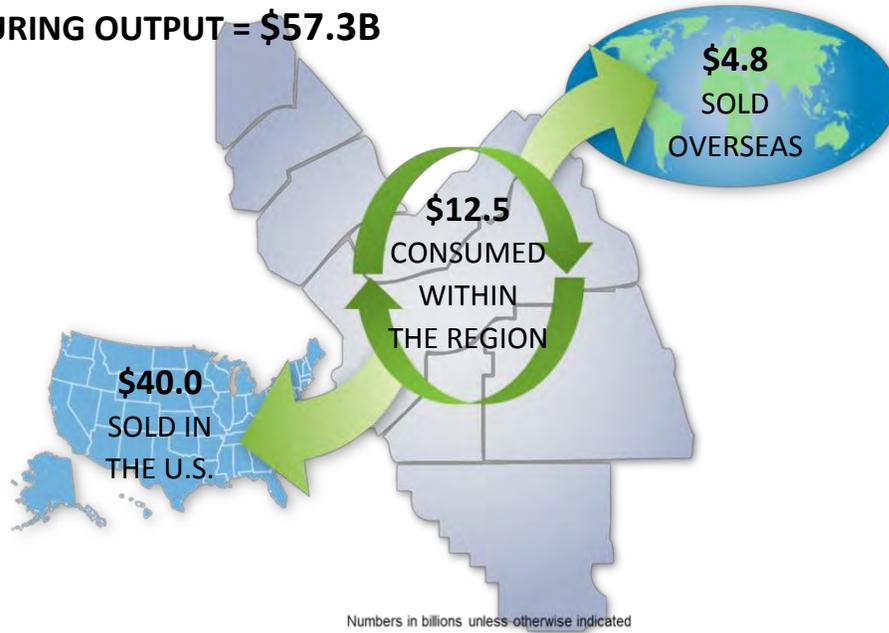
TRADE INDICATORS

This section presents information on the regional trade flows – outputs, inputs required to produce the Manufacturing Cluster’s outputs, and the gaps, or leakage, that represent potential economic development opportunities in terms of filling the leakage. This information is based on an analysis of the IMPLAN data for 2010, the most recent year available.

- Regional manufacturers produced \$57.3 billion in 2010, selling \$4.8 billion overseas and \$40.0 billion to other domestic markets. Approximately \$12.5 billion of regional manufacturing production was consumed in the San Joaquin Valley (Figure 4.5-3).
- The manufacturers required \$44.6 billion in supplier inputs to produce the \$57.3 billion in goods. They obtained \$15.0 billion of that from within the region and \$29.6 billion from outside the San Joaquin Valley (Figure 4.5-4).
- The San Joaquin Valley economy had a demand for \$38.7 billion in manufactured goods but obtained only \$12.5 billion of that demand from regional manufacturers (Figure 4.5-5). Of this \$12.5 billion, \$8.0 billion was consumed by other businesses and \$4.5 billion by consumers (households) and government entities. To meet the remaining demand, businesses in the Valley imported \$7.8 billion in manufactured goods from outside the region awhile another \$18.4 billion was imported directly to (purchased by) consumers and government entities.

FIGURE 4.5-3
 MANUFACTURING PRODUCTION VALUES AND MARKETS

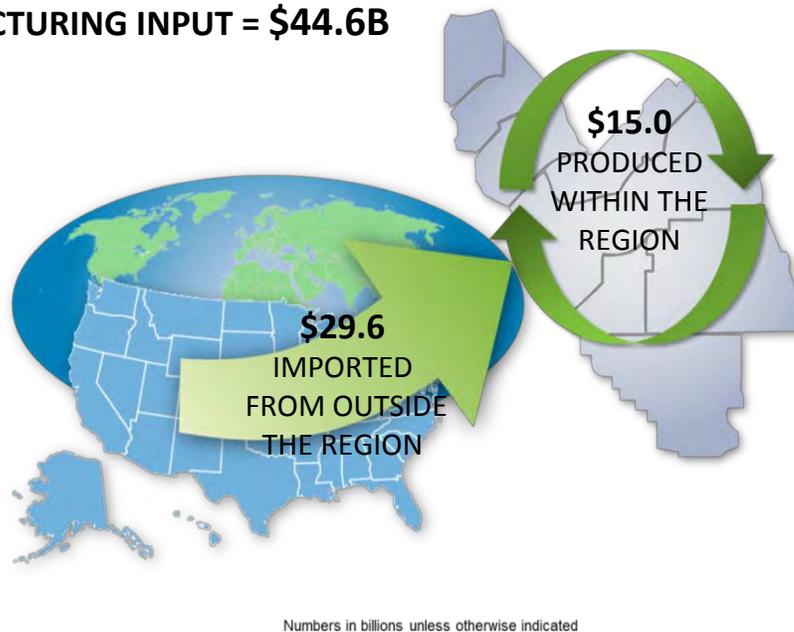
MANUFACTURING OUTPUT = \$57.3B



Source: ADE, Inc.; data IMPLAN3 input-output model

FIGURE 4.5-4
 PRODUCTION INPUTS NEEDED FOR REGIONAL MANUFACTURING

MANUFACTURING INPUT = \$44.6B



Source: ADE, Inc.; data IMPLAN3 input-output model

Table 4.5-2 shows the total inputs (goods and services) purchased by manufacturers regionally versus imported from outside the region, by type of commodity. Import substitution to address “leakage” of commodity purchases from outside the region (\$29.6 billion) is a potential economic development opportunity.

TABLE 4.5-2

TOTAL INPUT (PURCHASES) AND LEAKAGE (SELECTED INDUSTRIES), 2010

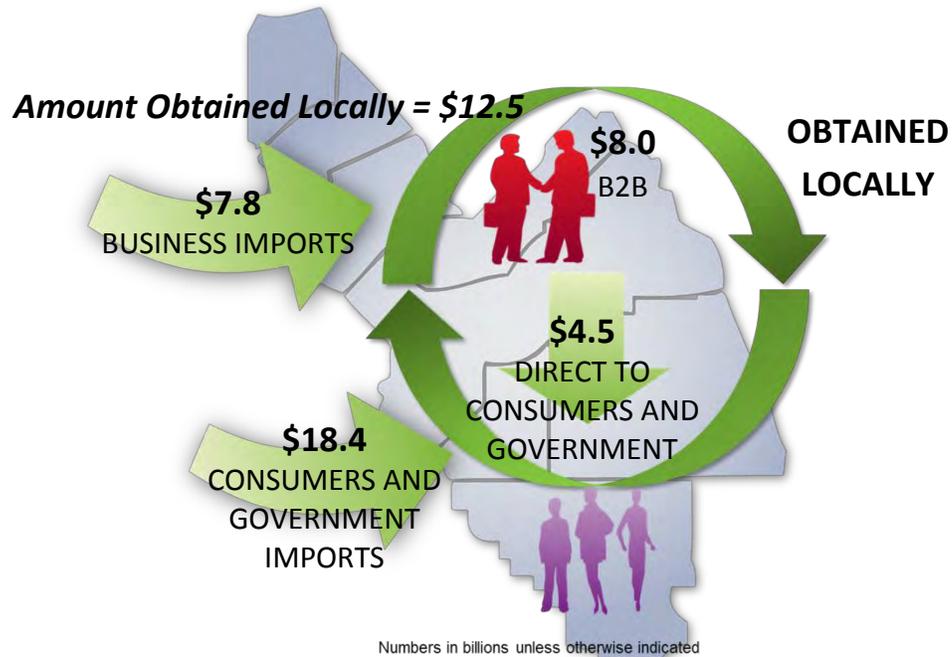
Description	Gross Commodity Demand	Regional Purchase Percentage	Regional Commodity Inputs	Commodity Leakage (Imports)
Total Commodity Demand	\$44,649,857,000	NA	\$14,996,335,000	\$29,653,523,000
Other manufacturing industries	\$24,771,029,000	19.8%	\$4,894,751,000	\$19,876,278,000
Extraction of oil and natural gas	\$3,159,514,000	3.2%	\$102,098,000	\$3,057,415,000
Wholesale trade businesses	\$3,486,386,000	66.3%	\$2,310,351,000	\$1,176,036,000
Management of companies and enterprises	\$2,032,848,000	48.7%	\$990,814,000	\$1,042,035,000
Scientific research and development services	\$530,748,000	15.9%	\$84,148,000	\$446,601,000
Software publishers	\$345,937,000	0.5%	\$1,640,000	\$344,297,000
Lessors of nonfinancial intangible assets	\$355,978,000	15.4%	\$54,860,000	\$301,118,000
Grain farming	\$308,740,000	19.0%	\$58,570,000	\$250,170,000
Oilseed farming	\$219,813,000	4.9%	\$10,775,000	\$209,037,000
Electric power generation, transmission, and distribution	\$719,075,000	75.3%	\$541,482,000	\$177,593,000
Advertising and related services	\$387,957,000	64.5%	\$250,138,000	\$137,819,000
Mining gold, silver, and other metal ore	\$128,911,000	0.1%	\$115,000	\$128,796,000
Automotive equipment rental and leasing	\$197,848,000	37.0%	\$73,111,000	\$124,738,000
Management, scientific, and technical consulting services	\$175,727,000	30.9%	\$54,259,000	\$121,468,000
Animal production, except cattle and poultry and eggs	\$154,709,000	23.8%	\$36,811,000	\$117,897,000
Legal services	\$192,108,000	45.6%	\$87,562,000	\$104,546,000

Source: ADE, Inc.; data from IMPLAN3 input-output model.

FIGURE 4.5-5

DEMAND FOR MANUFACTURED PRODUCTS AND SOURCES OF SUPPLY IN THE SAN JOAQUIN VALLEY

MANUFACTURING DEMAND = \$38.7B



Source: ADE, Inc.; data IMPLAN3 input-output model

4.6 WATER TECHNOLOGY CLUSTER

As noted in the Partnership's *2010-2011 Annual Report*, "Water is scarce in most parts of California, creating tremendous pressure to redistribute the state's water resources and to find new sources and ways to store and deliver water more efficiently."⁵⁰ At the San Joaquin Valley Regional Economic Summit in March, 2012, water supply was identified as the top priority for economic prosperity in the Valley.

The Water Technology Cluster's strategic plan states that "Access to usable water is developing into the greatest challenge of this century. The world's ability to find, use, clean, recycle, transport, distribute, sell, tax, and conserve water will determine in large measure whether the world will progress or digress over the next 100 years. The technology to properly use and manage this precious resource is the critical tool to providing sufficient water supplies for the world's major uses, such as agricultural, municipal, and commercial applications."⁵¹

Numerous reports have documented the challenges to the Valley's water resources and infrastructure and the critical importance of these resources to the region and the state. Among these challenges are the health and viability of the San Joaquin Valley Aquifer (which includes the Tulare Basin in the southern part of the Valley), the Sacramento-San Joaquin Delta which provides water to 25 million Californians, the California Water Project, and the watershed systems supporting the Valley's communities, economy and natural systems. Water table depth as a measure of sustainable water use is one of the key indicators being tracked by the Partnership. According to a recent study, the current depletion rate of the Aquifer is not sustainable, especially with the threat of future droughts.⁵² Changing climate patterns will exacerbate these challenges.

Valley leaders have long recognized water availability, quality and infrastructure as a critical issue for the agriculturally-based regional economy and overall regional economic growth. Fresno State has a state leadership role directing the CSU system's Water Resources and Policy Initiative (WRPI), and provides water technology research, testing, policy development, public-private sector collaboration and sustainability innovation. Among its programs, the Center for Irrigation Technology (CIT), created in 1980, was an early leader in establishing a regional expertise in water and agriculture. The California Water Institute was created subsequently to provide education, research and analysis of water policy issues; it was the lead for preparing the *San Joaquin Valley Regional Water Plan Framework*, which was adopted by the Partnership.

The Water Technology Cluster was formed in 2001 as part of a collaborative effort between the Fresno Business Council and OCED. Seed funding was provided by the Great Valley Center as a means to implement the cluster-networking recommendations of its report, *The Economic Future of the San*

⁵⁰ *Partnership 2010-2011 Annual Report*, *Ibid.*, p. 85.

⁵¹ Zoldoske, D., CIT, OCED, CVBI, ICWT *Regional Strategic Plan*, August, 2010

⁵² "Warning Issued on Groundwater," Edward Ortiz, Sacramento Bee, July 22, 2012.

Joaquin Valley. The Water Technology Cluster was the first cluster in the region and served as a model for subsequent clusters initiated by OCED and the Regional Jobs Initiative. The initial goals for the cluster were to: increase investment in research and development; increase sales through joint marketing efforts and foreign trade missions; and improve workforce development and internship programs geared to the types of jobs available at member firms.

The cluster adopted the name International Center for Water Technology (ICWT) to reflect the goal of being recognized as a globally-recognized center of water innovation and technology. This goal was made more real when Fresno State and the Central Valley Business Incubator (CVBI) collaborated to build the WET (Water and Energy Technology) Center to incubate new businesses and to provide testing facilities for new products.

The CVBI manages the WET Center Incubator program, focusing on commercialization of high-potential start-ups within water, energy, clean air, and ag technology. CIT manages the testing lab. The Fresno Workforce Investment Board provides a large share of the funding for the WET Center and for ICWT.

While the Water Technology Cluster was initially centered in the area between Fresno and Bakersfield, firms in the region have developed a special expertise in water efficiency systems that is now exported worldwide. “BlueTech Valley” is an initiative of the CVBI to brand the region as a global water technology hub and a catalyst for innovation in water, energy and related sectors.

To reflect the importance of innovation in water technologies to the future of the Valley, this project’s cluster analysis was expanded beyond the five core Partnership clusters to include the Water Technology Cluster, to assess the performance and scope of the cluster and to identify possible Partnership actions that could support the cluster’s regional efforts. As with the manufacturing sector in general, recent economic conditions have led to employment declines in the cluster. Still, the concentration of water technology employment in the Valley remains nearly three times the level in California. Water sustainability and infrastructure challenges at all levels, and regional comparative advantage and expertise, set the stage to advance the vision of the “BlueTechValley.”

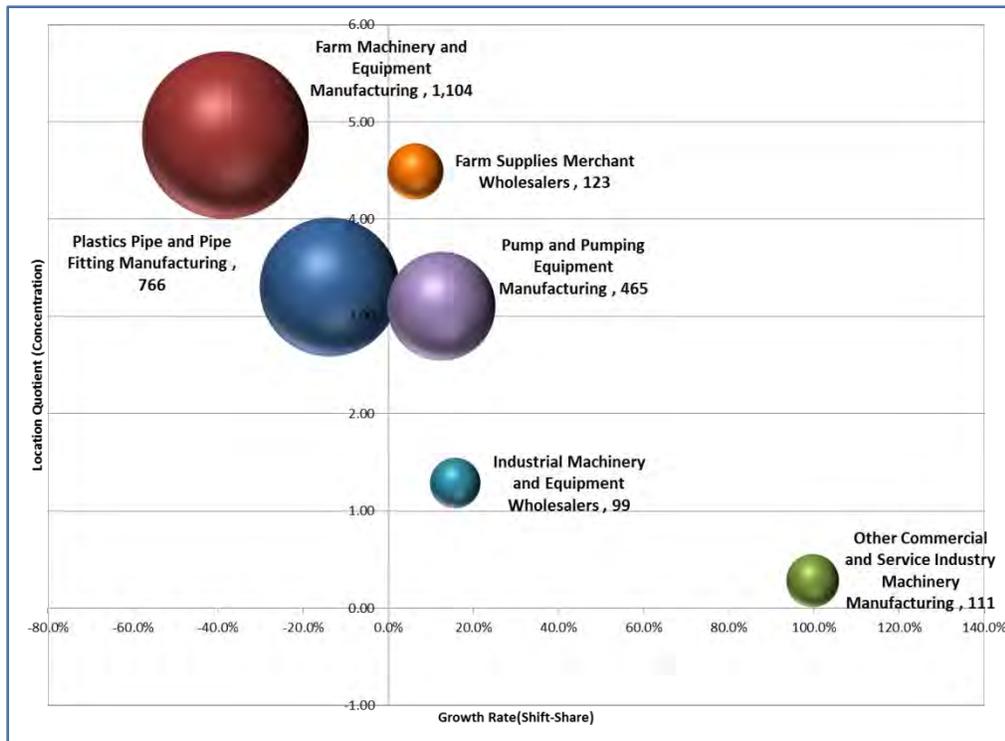
CLUSTER COMPONENTS

The Water Technology Cluster is comprised of the following components; the specific industries that are included in each cluster component as defined by their NAICS codes as included in Appendix B.

- Pump and pumping equipment manufacturing
- Plastic pipe and pipe fitting manufacturing
- Farm machinery and equipment manufacturing
- Other commercial and service industry machinery
- Farm supplies and merchant wholesalers
- Industrial machinery and equipment wholesalers

As indicated in Figure 4.6-1, water-related farm machinery manufacturing and plastic pipe manufacturing were the largest cluster components but contributed to the largest employment losses over the past decade. Non-farm related water technologies and distribution (wholesalers) provided much of the growth within the cluster.

FIGURE 4.6-1
COMPONENTS OF THE WATER TECHNOLOGY CLUSTER: SIZE AND GROWTH



Source: ADE, Inc.; data from IMPLAN CEW/ES202 county employment database

EMPLOYMENT INDICATORS

Table 4.6-1 summarizes Water Technology employment trends from 2001 through 2010, including employment changes and rate of growth, concentration (compared to the state), and shift-share (a ratio derived from the region's rate of growth compared to that of the state. The following is a summary of key trends:

- The Water Technology Cluster accounted for nearly 2,700 jobs in the San Joaquin Valley.
- Cluster employment declined by 26.9 percent between 2001 and 2010. This regional job decline occurred at a slower rate than the statewide average. During this period, the total jobs in the cluster declined by nearly 1,000 positions (Table 4.6-1).
- The concentration of employment in the cluster was more than twice the statewide average, showing the region's comparative advantage.

TABLE 4.6-1**WATER CLUSTER EMPLOYMENT AND GROWTH BY COUNTY**

Description	Employment 2001	Employment 2010	Employment Change 2001 to 2010	Percentage Change 2001 to 2010	Location Quotient 2010	Shift-share
Water Flow Technology Cluster Total	3,651	2,668	-983	-26.9%	2.44	2.77%

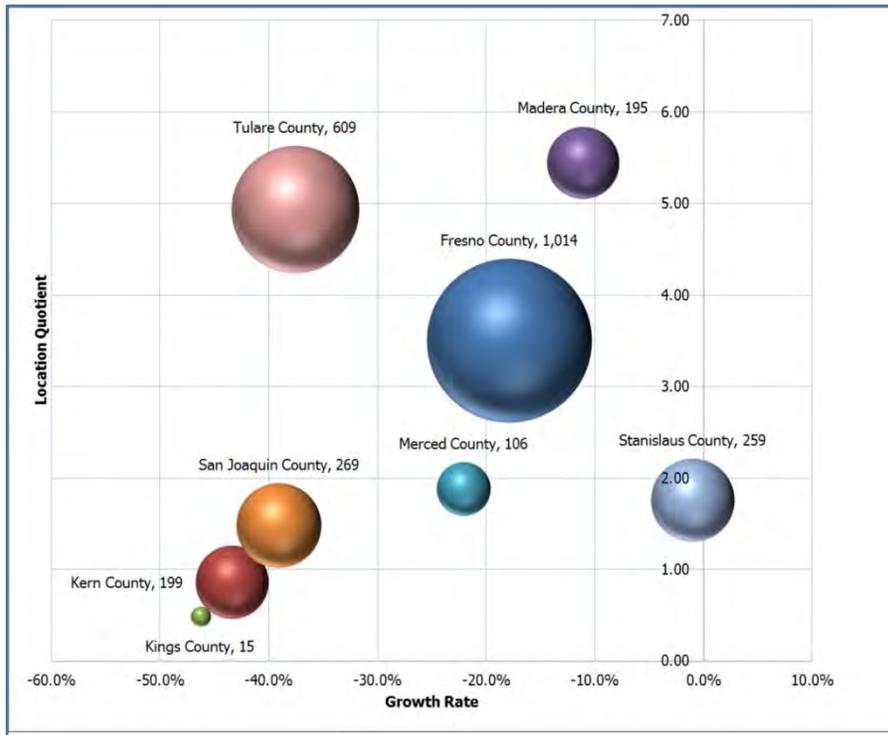
GEOGRAPHIC CONSIDERATIONS

Figure 4.6-2 illustrates the growth trends geographically of the Water Technology Cluster by each county in the Valley.

- The Water Technology Cluster had the largest job counts in Fresno and Tulare counties, which together accounted for 60 percent of jobs in the cluster.
- The employment concentration was above average in every county, except for Kern and Kings counties. The highest employment concentrations were in Fresno, Madera, and Tulare counties, each of which has a concentration more than triple the statewide average.
- All counties lost jobs in this cluster between 2001 and 2010, with Stanislaus County having the smaller rate of loss.

While the amount of employment was small in most counties, it will be important to track how this cluster is recovering and identify opportunities to build the cluster regionally.

FIGURE 4.6-2
WATER CLUSTER EMPLOYMENT AND GROWTH BY COUNTY



Source: ADE, Inc.; data from IMPLAN CEW/ES202 County Employment Database - STANDARDIZE the source

TRADE INDICATORS

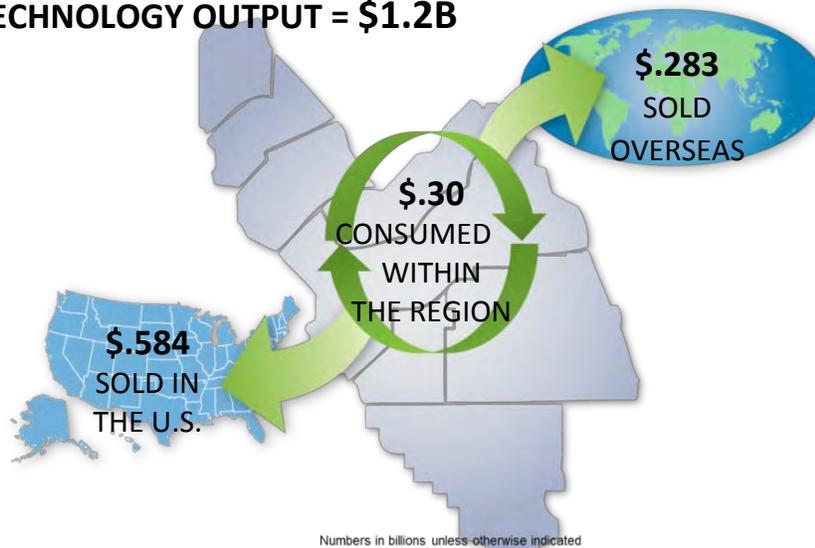
This section presents information on the regional trade flows – outputs, inputs required for regional commodity inputs to produce the Water Technology Cluster’s outputs, and the gaps, or leakage – that represent potential economic development opportunities in terms of filling the leakage.

- The commodity value of the Water Technology cluster in the region totaled \$1.2 billion (Figure 4.6-3). Only 24 percent of that production was sold within the Valley, with 50 percent sold elsewhere in the US and nearly 25 percent sold to foreign markets.
- Total commodity demand for this cluster was \$945 million (\$565 million in final demand by consumers and institutions, and \$379 million in trade with other businesses).
- The supplier purchases that support the Water Technology cluster had a total value of \$871 million, of which \$187 million is purchased from suppliers within the region. An additional \$684 million in commodity demand (leakage) came from outside the region (Figure 4.6-4).

FIGURE 4.6-3

VOLUME OF SALES AND MARKETS PRODUCED WITHIN THE REGION FOR THE WATER TECHNOLOGY CLUSTER

WATER TECHNOLOGY OUTPUT = \$1.2B

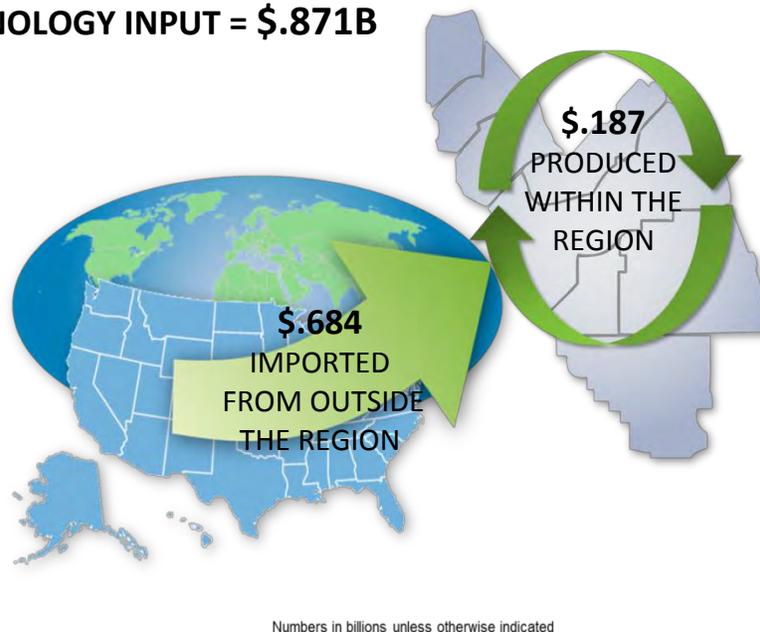


Source: ADE, Inc.; data IMPLAN3 input-output model

FIGURE 4.6-4

PRODUCTION INPUTS REQUIRED FOR THE WATER TECHNOLOGY CLUSTER

WATER TECHNOLOGY INPUT = \$.871B



Source: ADE, Inc.; data IMPLAN3 input-output model

Table 4.6-2 indicates top sectors where commodity leakages from the Water Technology Cluster may represent economic development opportunities in the Valley. While not all are likely candidates, there are large gaps in several manufacturing inputs that could be import substitution opportunities.

TABLE 4.6-2

TOTAL INPUT (PURCHASES) AND LEAKAGE (SELECTED INDUSTRIES), 2010

Description	Total Input Purchases	Share Purchased w/in Region	Inputs Purchased in Region	Commodity Leakage (Inputs)
Total Commodity Inputs	\$871,674,000	NA	\$187,321,000	\$684,353,000
Plastics material and resin manufacturing	\$130,416,000	1.0%	\$1,364,000	\$129,052,000
Iron and steel mills and ferroalloy manufacturing	\$60,963,000	7.5%	\$4,567,000	\$56,397,000
Other engine equipment manufacturing	\$32,447,000	0.1%	\$37,000	\$32,410,000
Valve and fittings other than plumbing manufacturing	\$31,279,000	3.5%	\$1,093,000	\$30,187,000
Motor and generator manufacturing	\$28,535,000	1.5%	\$430,000	\$28,105,000
Wholesale trade businesses	\$70,745,000	64.6%	\$45,666,000	\$25,079,000
Motor vehicle parts manufacturing	\$23,509,000	7.6%	\$1,783,000	\$21,726,000
Ferrous metal foundries	\$21,705,000	5.6%	\$1,212,000	\$20,493,000
Fluid power process machinery manufacturing	\$18,527,000	1.0%	\$183,000	\$18,343,000
Other plastics product manufacturing	\$18,136,000	6.5%	\$1,186,000	\$16,951,000
Other water flow technology cluster establishments	\$23,427,000	31.7%	\$7,432,000	\$15,994,000
Semiconductor and related device manufacturing	\$15,593,000	0.2%	\$27,000	\$15,566,000
Crown and closure manufacturing and metal stamping	\$18,410,000	21.1%	\$3,892,000	\$14,519,000
Management of companies and enterprises	\$27,347,000	52.0%	\$14,225,000	\$13,122,000
Machine shops	\$11,747,000	4.6%	\$542,000	\$11,205,000

Source: ADE, Inc.; data from IMPLAN3 Input-Output Model

4.7 OVERALL REGIONAL CLUSTER LEAKAGE AND ECONOMIC DEVELOPMENT TARGETS

Each of the cluster analyses discussed earlier in this chapter listed industry sectors from which the regional clusters import significant portions of the production inputs they require in order to manufacture their products or provide services (output). These gaps are defined as business-to-business leakage. When these leakage gaps are aggregated across the region and all the clusters, they represent an additional level of scale regarding potential new economic development opportunities for the Valley.

This section summarizes key targets that are an aggregation of possible market opportunities across the Valley's shared clusters, selected by ADE as a starting point for further consideration. In particular, this information is intended as a resource for the California Central Valley Economic Development Corporation (CCVEDC), which markets investment opportunities for business location and expansion in the Valley and provides site location assistance, especially for targeted industry clusters, along with Pacific Gas and Electric Company, individual economic development agencies and other partners. These partners include the Central Valley Business Incubator, the California Small Business Development Network, UC Merced Regional Network, and other organizations working on business attraction, expansion, retention and entrepreneurship.

METHODOLOGY

ADE evaluated each cluster with regard to the inputs of goods and services needed to support production within each cluster, using the Implan Input-Output (I-O) model described in Section 2.2. Analyzing the results of the model, ADE estimated the portion of inputs that each cluster obtained from other businesses within the San Joaquin Valley region, and what portion was obtained from outside the region. The I-O model makes these estimates based on the industry requirements derived from a national economic model and the employment distributions by industry within the region. The dollar values of industry inputs are regional averages and do not necessarily reflect actual buyer-supplier relationships for individual businesses within the region.

As such, the figures provide an indication of potential gaps or supplier "leakages" but may not be an exact estimate of supply chain behavior throughout the entire cluster. Also, industry sectors that are not likely to be located in the Valley have been eliminated from the list of targets. Further investigation and validation of the cluster leakage data is required in order to identify realistic opportunities for economic development purposes.

POTENTIAL ECONOMIC DEVELOPMENT TARGETS

Table 4.7-1 summarizes the potential economic development targets for business expansion, attraction, start-ups and marketing by type of commodity supplied from outside the region and the estimated level of “leakage” and therefore market support for these new or expanded businesses. Figure 4.7-1 illustrates the same information emphasizing the targets by level of market support. With refinement, the analysis can also indicate the potential number of establishments that could be supported with an increase in local market share.

TABLE 4.7-1

POTENTIAL SAN JOAQUIN VALLEY ECONOMIC DEVELOPMENT TARGETS BY TYPE OF COMMODITY

Description	Market Support
Lessors of nonfinancial intangible assets	\$712,684,902
Scientific research and development services	\$699,203,194
Paper mills	\$611,657,224
Oilseed farming	\$457,939,735
Other basic organic chemical manufacturing	\$395,251,263
Petrochemical manufacturing	\$388,307,767
Artificial and synthetic fibers and filaments manufacturing	\$385,174,775
Software publishers	\$375,381,255
Plastics material and resin manufacturing	\$363,583,853
Automotive equipment rental and leasing	\$336,797,184
Plastics bottle manufacturing	\$336,106,827
Management, scientific, and technical consulting services	\$323,596,782
Aluminum product manufacturing from purchased aluminum	\$303,463,414
Advertising and related services	\$284,775,137
Paperboard Mills	\$257,933,907
Other plastics product manufacturing	\$244,701,794
Semiconductor and related device manufacturing	\$241,774,577
Metal can, box, and other metal container (light gauge) manufacturing	\$222,663,225
Plastics packaging materials and unlaminated film and sheet manufacturing	\$220,030,995
Motor vehicle parts manufacturing	\$212,772,162
All other chemical product and preparation manufacturing	\$169,215,313
All other basic inorganic chemical manufacturing	\$166,138,528
Architectural, engineering, and related services	\$165,780,479

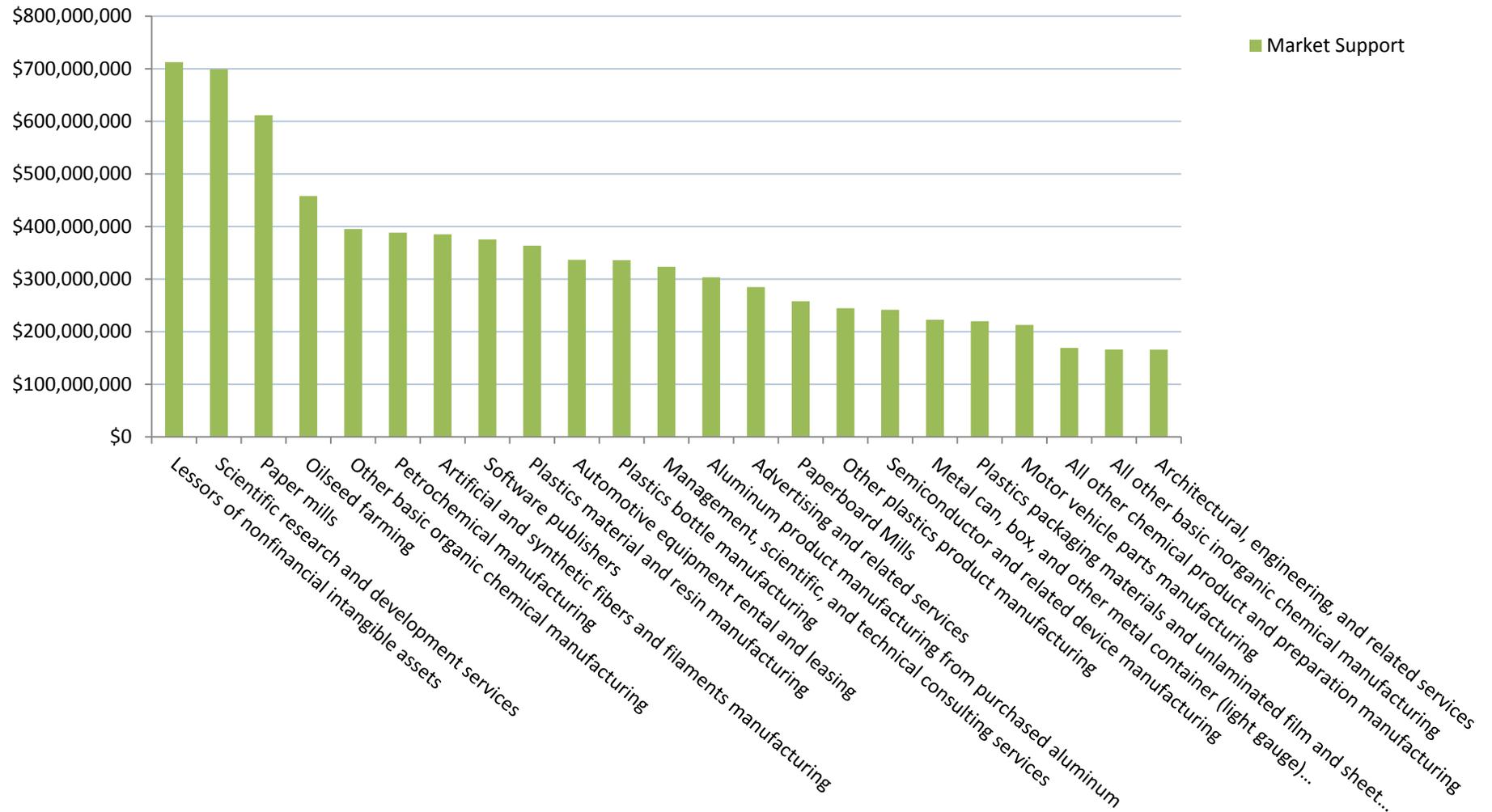
Source: IMPLAN3 I-O model, ADE

“Lessors of nonfinancial intangible assets” was the largest category shown. According to the NAICS definition, this industry “comprises establishments primarily engaged in assigning rights to assets, such as patents, trademarks, brand names, and/or franchise agreements for which a royalty or licensing fee is paid to the asset holder.” Activities include brand name licensing; franchising agreements, leasing, selling or licensing; oil royalty companies; oil royalty leasing; industrial design licensing; patent buying and licensing; patent leasing; and trademark licensing. This industry represents specialization including legal expertise that is sought outside of the Valley.

Scientific research and development services was the next largest market gap. Combined with management, scientific and consulting services, these industries provide another professional services target for developing specialized expertise within the Valley. As noted in the Energy Cluster analysis, research and scientific consulting services are a growth opportunity. Oilseed farming was the fourth largest gap and also relates to the Energy Cluster, as an input for biofuels. Most of the other potential targets are in manufacturing industries. The architectural, engineering, and related services industry is another potential growth area, especially with opportunities related to public sector infrastructure construction as described in the next section of this report.

OCED and ADE met with the CCVEDC to discuss the findings and next steps related developing a collaborative valley-wide strategy to pursue these opportunities. Recommendations are presented in Chapter 5.

FIGURE 4.7-1
ECONOMIC DEVELOPMENT TARGETS BASED ON CLUSTER REQUIREMENT



Source: Applied Development Economics

4.8 PUBLIC SECTOR INFRASTRUCTURE (CONSTRUCTION)

The Great Recession affected the construction industry more than any other sector in the Valley, especially with residential construction and the collapse of the housing market. According to California Employment Development Department (EDD) data for the eight county San Joaquin Valley region, construction employment fell from 89,400 jobs in 2006 to 45,900 in 2010, a loss of almost 50 percent in just four years (43,500 jobs).⁵³ A slow recovery is starting to be evident with the creation of 5,700 new construction jobs between July 2011 and July 2012 (preliminary) but it will take time to replace the jobs lost and absorb the existing unemployed labor force which was estimated.

To address the large number of layoffs in the region's construction industry, the Central California Workforce Collaborative (CCWC) secured a National Emergency Grant in 2010 to assess workforce opportunities related to the region's planned public sector infrastructure investments. With the decline in residential construction, construction of public infrastructure and facilities represents perhaps the largest current investment underway in Central California and an opportunity to revitalize the construction sector and the regional economy, and build new skills for workers, especially for middle-skill infrastructure jobs. Skills building will help ensure the Valley's workforce is qualified for local construction jobs that will be created by these investments.

The CCWC region spans the San Joaquin Valley south of Sacramento, the Mother Lode foothill counties, and the high desert areas of Kern, Inyo and Mono counties, so it is larger than the San Joaquin Valley itself. However, the Valley comprises the greatest part of the jobs and workforce, and the analysis and the strategy are reflective of conditions in the Valley region.

ADE prepared the project analysis of the construction workforce, planned public sector infrastructure investments and construction workforce needs and skills for fifteen high-demand occupations over the next ten years. The analysis – *Workforce Needs for Public Sector Infrastructure* (April, 2011), incorporated a broader definition of public sector infrastructure than is commonly used, and included an initial scan of regional education and training resources to meet projected occupational demand across several areas of infrastructure. The Council for Adult and Experiential Learning (CAEL) prepared the project implementation strategy – *the Public Infrastructure Workforce Plan* (2012).

Because construction is generally considered a primarily local-serving sector, there is only one construction-related cluster in the Valley, which was formed as part of the Regional Jobs Initiative (RJI). A cluster SWOT analysis prepared by RJI cluster leaders in 2009 identified several challenges, including those posed by the economic downturn, lack of momentum to keep diverse private sector participation, and missing out on funding sources (such as ARRA funds) due to lack of representation and organization.

⁵³ California Employment Development Department, Labor Market Information Division, Industry Employment Data, Monthly Profiles. Note: Figures for the counties of Kings, Madera, Merced, Stanislaus and Tulare counties also include mining and logging activities but construction employment is the primary source of jobs.

It also identified the potential to build network “infrastructure,” be a collective voice, and prepare for the future upturn of the economy.⁵⁴ The Cluster is in transition and OCED has discussed with cluster leaders, the CCWC, the CCVEDC, the Regional Policy Council and other partners the opportunity for its revitalization and regionalization based on leveraging public sector infrastructure investments.

PUBLIC SECTOR INFRASTRUCTURE CLUSTER OPPORTUNITIES

The major infrastructure categories covered in the CCWC analysis are: transportation (not rail); rail transit including High Speed Rail; infrastructure including water and wastewater systems, flood control, and other public works; buildings/community assets including hospitals, educational facilities and correctional facilities; broadband infrastructure; and energy facilities, including solar farms and wind energy projects and transmission. When aggregated across these infrastructure categories, major construction projects budgeted by the public sector, utilities and institutional entities for the CCWC region totaled an estimated \$36.6 billion between 2010 and 2020 (Table 4.8-1).

Most of these projects were planned for the first three to five years of this period, since the information for local government Capital Improvement Programs (CIPs) - a primary data source - is not yet available beyond that time frame. Regional projects with longer time frames include the High Speed Rail at \$6 billion and the Delta Conveyance at \$6-\$10 billion. Non-rail transportation projects comprise 30 percent of expenditures, and alternative energy/broadband projects totaled approximately 25 percent. Projected expenditures in public buildings/community facilities such as schools, colleges, hospitals, and prisons were estimated at \$3.1 billion or almost nine percent, and “other infrastructure” (minus the Delta Conveyance) estimated at about \$863 million.

TABLE 4.8-1
SUMMARY OF MAJOR INFRASTRUCTURE EXPENDITURES IN CCWC REGION, 2010-2020

Infrastructure Category	Planned Expenditures (\$billions)	Percent
Transportation (not rail)	\$10.46	28.56%
Rail transit (including high-speed rail)	\$6.10	16.63%
Infrastructure (including water and wastewater)	\$7.53	20.57%
Buildings/community assets	\$3.15	8.60%
Broadband	\$0.13	0.36%
Energy	\$9.26	25.28%
TOTAL	\$36.61	100%

Source: ADE, based on data from state and local government agencies, CPUC, CEC, California High-Speed Rail Authority, California Secretary of State (bond and sales tax measures), Regional Transportation Plans, project team interviews and other research.

⁵⁴ SWOT Analysis, Construction Cluster, June 2009, Regional Jobs Initiative.

According to the analysis, construction jobs associated with these public infrastructure expenditures were projected to create 197,300 person-years of employment across a variety of construction industries (Table 4.8-2). It is estimated that these projects would have the potential to support 31,500 jobs in 2010 and would support an average of 24,500 jobs per year between 2011 and 2014. Of the total jobs, about 6.1 percent are in professional services – design and engineering – occupations.

Based on the results of the analysis, CAEL developed a workforce development strategy for CCWC to focus on the opportunity to link local workers with the public infrastructure investments planned for the region. Training strategies are geared to helping workers with residential construction experience transition to the skill sets needed for heavy construction, as well as working with labor organizations to anticipate the skill needs associated with the impending retirement of union workers. There is a strong need for ongoing intelligence gathering and communications in order to track effectively the changing opportunities in public infrastructure development and the timing of these opportunities. Chapter 5 contains recommendations to support the implementation of the Workforce Plan.

TABLE 4.8-2

SUMMARY OF PROJECTED JOBS FROM MAJOR INFRASTRUCTURE EXPENDITURES IN CCWC REGION, 2010-2020

Project Type	Total	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Transportation	54,646	7,595	7,012	6,700	6,263	8,168	4,383	3,805	3,790	3,544	3,385	0
Construction	52,828	7,342	6,779	6,477	6,055	7,896	4,237	3,679	3,664	3,426	3,272	0
Design/Engineering	1,818	253	233	223	208	272	146	127	126	118	113	0
High Speed Rail	25,499	0	237	2,285	4,416	6,838	6,090	4,189	1,443	0	0	0
Construction	24,209	0	225	2,176	4,205	6,487	5,776	3,966	1,374	0	0	0
Design/Engineering	1,290	0	11	110	211	352	315	223	69	0	0	0
Other Rail Transit	597	276	258	31	1	1	1	1	27	1	1	0
Construction	577	266	250	30	1	1	1	1	26	1	1	0
Design/Engineering	20	9	9	1	0	0	0	0	1	0	0	0
Infrastructure	5,175	1,978	1,921	811	331	134	0	0	0	0	0	0
Construction	4,792	1,832	1,779	751	307	124	0	0	0	0	0	0
Design/Engineering	383	146	142	60	25	10	0	0	0	0	0	0
Delta Conveyance	33,283	0	0	2,142	4,545	4,383	4,229	4,076	3,931	3,447	3,324	3,206
Construction	30,819	0	0	1,983	4,209	4,058	3,916	3,774	3,640	3,192	3,078	2,969
Design/Engineering	2,464	0	0	159	336	324	313	302	291	255	246	237
Buildings/Other Government	19,897	7,413	5,913	5,878	555	138	0	0	0	0	0	0
Construction	18,714	6,965	5,558	5,541	521	130	0	0	0	0	0	0
Design/Engineering	1,183	448	355	337	34	9	0	0	0	0	0	0
Broadband	868	442	426	0	0	0	0	0	0	0	0	0
Construction	804	409	395	0	0	0	0	0	0	0	0	0
Design/Engineering	64	32	31	0	0	0	0	0	0	0	0	0
Energy	57,334	13,853	10,954	9,835	6,236	6,263	5,096	5,096	0	0	0	0
Construction	53,119	12,835	10,149	9,112	5,778	5,802	4,721	4,721	0	0	0	0
Design/Engineering	4,215	1,018	805	723	458	460	375	375	0	0	0	0
Total All Projects	197,299	31,556	26,722	27,683	22,348	25,925	19,799	17,167	9,191	6,992	6,710	3,206
Construction	185,862	29,649	25,135	26,070	21,074	24,498	18,651	16,142	8,704	6,619	6,351	2,969
Design/Engineering	11,437	1,907	1,587	1,612	1,273	1,427	1,148	1,026	487	373	359	237

Source: ADE, Inc.; data from state and local government agencies, CPUC, CEC, California High-Speed Rail Authority, California Secretary of State (bond and sales tax measures), Regional Transportation Plans, project team interviews and other research.

CHAPTER 5

CHARTING THE COURSE FOR THE SAN JOAQUIN VALLEY'S ECONOMIC FUTURE

“If we work together we can make a difference.”

Participant, Manufacturing, Energy and Logistics Cluster Meeting, Fresno, June 11, 2012

This chapter presents overall findings and recommendations for the New Valley's next stage of implementation, as well as specific cluster priorities and recommendations, and recommendations for alignment of organizational capacity and support for cluster strategy implementation.

The Valley has significant assets. There are an almost overwhelming number of initiatives underway throughout the Valley related to the clusters, including those that are increasingly a convergence across the clusters, such as with energy, water and agriculture. A great deal of leadership and expertise resides with the partners involved in these initiatives, but they are dealing with diminished resources, the very large scale of the Valley, a diversity of issues facing the clusters, and the inherent challenges of collaboration such as dedication of time and capacity. However, partners increasingly are developing the capacity to regionalize their networks and ways to engage in specific initiatives on behalf of their networks. This network-to-network process is proving to be very beneficial. The Partnership and OCED's goal should be to connect, support and optimize these assets and initiatives.

5.1 OVERALL FINDINGS

A number of the findings cut across the individual clusters and pertain to the overall economy and the region's organizational context. Overall Project findings include the following:

- The Valley's economy is beginning a slow recovery but lags behind many other California regions, especially coastal areas with technology sectors. Innovation indicators such as venture capital investment and patents show a similar disparity.
- The Valley had an estimated Gross Domestic Product of \$140 billion and of \$228.6 billion in economic output in 2010. Several areas (components) within the Valley's clusters showed resilience during the recession and are a platform for the next stage of the New Valley Economy. Overall, the clusters have been the engine of most of the Valley's employment growth since 2001.
- However, even in clusters where the Valley has comparative advantage, such as agriculture and logistics, the Valley is not “capturing the value chain.” There is leakage through outsourcing for industry supplier inputs, talent (workers commuting out of the Valley for jobs), innovation (inventions and ideas leaving the Valley for specialized services and capital), and loss of value-added activities such as processing of raw materials into more finished products.

- Leakage occurs across all the clusters and there is a strong economic development opportunity to fill these gaps, both within the clusters and aggregated across the clusters.
- The Partnership's five original SAP clusters continue to be shared priorities across the Valley, with some adaptations. They are the foundation for the Cluster Action Plan along with the Water Technology Cluster and consideration of Public Sector Infrastructure (construction).
- Initiatives, including county industry cluster activities and the Partnership's New Valley Work Groups, are challenged by resource and capacity issues, calling for a restructuring and alignment of organizational approaches, including the role of OCED and the Work Groups.

Several common themes were expressed by cluster meeting participants, partners, and Valley leaders to guide recommendations for the Cluster Action Plan:

- Given the Valley's many cluster and sector-focused assets, what is needed is leadership and support to connect and convene them in order to identify the shared priorities that can best be addressed and advanced at the regional level.
- Improving the educational status and skills levels of the workforce, and creating pathways for opportunity is a high priority and a focus of many of the Valley's sector-based strategies. There is a strong commitment to connecting students with educational opportunities that are present; to create a college-going culture in the Valley; and to train people for jobs that are here and in sectors that are growing. Additional information is needed on priority occupational demand.
- There is a clear nexus across the clusters. Issues are interconnected and the clusters need to be addressed synergistically. As an example, combining manufacturing, energy and logistics in a broad coalition was recommended as the right way to engage to move the Valley forward.
- The list of economic development leakage targets, aggregated and by cluster, needs to be refined by those working on the ground to determine the most realistic targets. Closing the gaps will require a concerted collaborative strategy and a designated lead to execute the strategy.
- Regional collaboration across systems and across the Valley will create efficiencies, better labor market information on high demand workforce skills and occupations, and market export opportunities. This collaboration should be made more systematic where possible.
- The New Valley Work Groups leads, with support from OCED, should convene the cluster groups regularly to advance shared Action Plan priorities, identify partnership opportunities, network, and seek new project and funding opportunities for the region. Participation of Partnership Board members for high level conversations will help identify and advance strategic priorities. Action Plan implementation should be guided by the Partnership Executive Committee.
- The Valley needs to have a stronger voice in Sacramento, both with the Legislature and state agencies.

The Valley is poised for a shift in the next phase of its economy, especially through attention to “capturing the value chain” and becoming a leader in new technologies for water, energy, air quality, recycling and other resource efficiencies and infrastructure. For example, the vision is for the San Joaquin Valley to be recognized as a global leader for water and energy technology – for being the best area for testing and getting water and energy technologies to market – the BlueTech Valley. This shift can both drive specific cluster growth and improve the efficiencies, competitiveness and environmental outcomes of other clusters such as Agriculture. It also will help improve the Valley’s overall health and well-being of people, communities and life-sustaining systems.

5.2 KEY CLUSTER RECOMMENDATIONS

The Project’s planning process generated many ideas, priorities and recommendations for the overall New Valley Cluster Action Plan and individual clusters. They have been distilled into a summary list of specific issues and proposed actions for each cluster, and are presented on page 119. They are a starting point for clarifying the highest priority issues and actions, and developing targeted implementation plans under the umbrella of the overall Cluster Action Plan. These plans should be developed through the New Valley Cluster Work Groups (and Cluster Action Teams), with a focus on areas where the Partnership can add value through its regional mission, leadership and state-regional collaboration assets, along with the resources, expertise and networks of OCED (see Section 5.3 for organizational recommendations). Working with OCED, the Partnership Executive Committee will guide the identification of a selected set of tangible initiatives across the clusters for implementation in 2013.

Recommendations for the Agriculture Cluster and the Public Sector Infrastructure Cluster are based on the Regional Economic Summit held in March, 2012, and the economic analysis and Regional Workforce Plan prepared for the Central California Workforce Collaborative, respectively. The San Joaquin Valley Interregional Good Movement Plan being prepared for the Regional Policy Council provided information for recommendations for the Logistics and Public Sector Infrastructure Clusters.

Based on the framework for the State Economic Summit which was used for the Regional Economic Summit for the Agriculture Value Chain, recommendations for the other clusters were grouped into the following five areas: infrastructure (goods movement, water, broadband, energy); workforce needs; innovation; regulations and sustainability; and access to capital. The emphasis varied by cluster. Some of the issues areas such as energy are also a cluster. Others like broadband are an enabling technology across all of the clusters. The majority of the recommendations are in the category of workforce needs, followed by regulations and sustainability. Access to capital was raised as a more general issue, especially for various stages of capital related to promoting research, commercialization of technology, and innovation. Further exploration of these issue areas by the Cluster Work Groups is merited.

Addressing workforce needs is a strong area of focus due to the concerted efforts on the part of Valley leaders to raise the educational attainment of the Valley’s youth and adults; provide a skilled workforce

that meets the needs of employers and provides a pathway to prosperity for workers; and reduce unemployment and stagnation of workers in low-skill low-wage jobs, especially in the Valley's rural areas. As noted in other parts of this report, there are several innovative regional workforce sector strategies underway, focused on occupations across many clusters. Many of these are successful models that need to be brought to scale. This will continue to be a high priority for the Valley and is reflected in action priorities across the clusters.

The Ation Plan also addresses the need for cultivation of and support for an entrepreneurial culture and "eco-system" to reduce the intellectual/innovation leakage gap and to foster new jobs, start-ups and business expansions in the Valley. This approach should capitalize on new research assets such as UC Solar, the UC Merced Health Sciences Research Institute (HSRI), and the UC Merced Sierra Nevada Research Institute, as well as numerous existing research assets. The existing assets are many and include: other University institutes and research stations, the WET Center (Water, Energy, Technology), the Lyles Center for Innovation and Entrepreneurship, the Central Valley Business Incubator, the Cal Valley Tech iHub, the UC Merced Small Business Development Center Regional Network, the Business and Entrepreneurship Center, the Central Valley Fund, the Center for Applied Competitive Technologies, the California Centers for International Trade Development, CalFOR, and private sector, federal and state research and development assets.

OCED can play an important role in helping to connect, coordinate and leverage these assets to address the targets and opportunities identified in the Cluster Action Plan. Elevating these assets will in turn help address capital needs, catalyze entrepreneurship and the commercialization of new technologies, and foster the Valley's pipeline of innovation.

Additional detailed information and resources generated during the planning process will be available through OCED and the Partnership's website as resources for the Cluster Work Groups.

KEY CLUSTER ACTION PLAN PRIORITIES

Cluster	Issues/Opportunities	Recommended Actions
Agriculture	<ul style="list-style-type: none"> All 5 issue areas addressed in Regional Economic Summit 	<ul style="list-style-type: none"> All actions have designated champions and recommended actions; Partnership & OCED are tracking progress. See www.sjvpartnership.org
Energy	<ul style="list-style-type: none"> Regional focus on cluster development & coordination needed; opportunity to develop biofuels; better define cluster components Conditional Use permits vary by county – frustrating for international companies willing to invest in the Valley; results in project delays or cancellations Increase entrepreneurial climate; need to create culture of early stage investment, create dialogue with entrepreneurs, & encourage students to create the next generation of solar technology Leakage of energy use 	<ul style="list-style-type: none"> SJV Clean Energy Organization should be lead for cluster development action plan; expand networking to connect more stakeholders Advocate for funding for SJV Regional Energy Plan Roadmap Coordinate with County Planners (CSAC) working on simpler expedited solar permitting process throughout the state; coordinate locally Coordinate with UC Solar Research Institute, CVBI, Lyles Center for Innovation and Entrepreneurship, Central Valley Fund, Business and Entrepreneurship Center, UC Merced SBDC Regional Network, CalFOR & others to accelerate technology commercialization & entrepreneurship Provide input to PUC on energy facilities sitings See Regional Economic Summit Strategy recommendations
Health and Wellness	<ul style="list-style-type: none"> Difficult to coordinate with so many initiatives across the Valley Need for consistent and regionalized standards and curriculum for same occupations/certificates, and for transferability of credits from Community Colleges to CSUs Need to standardize residency requirements for nurses Address gaps in workforce skills – need for better information, programs to increase skill levels Need to prepare for health information technologies; expand broadband infrastructure Need improved access to jobs and health care services in rural areas Wellness/prevention focus will increase demand for services and workers 	<ul style="list-style-type: none"> Partnership health leaders should convene high level cluster meetings Advocate for transfers within regional network of accredited courses (C6 project is opportunity to standardize curriculum), including for nursing Collaborate with hospitals to unify employee competencies, translate to college curriculum Expand nursing residencies across the Valley; coordinate with hospitals, community colleges, universities Advocate for Regional Industry Clusters of Opportunity (RICO) funding Expand mentoring programs Coordinate with SJV Regional Broadband Consortium, employer networks like Central Valley Health Network, WIBs, etc. for e-health Collaborate with Councils of Government, employers, transit agencies to develop more regional, coordinated transportation systems Expand Patient Navigator, Promotora and other model programs Coordinate with UC Merced Health Sciences Research Institute, CVBI, and entrepreneurship centers
Logistics	<ul style="list-style-type: none"> Additional options for goods movement needed (non-truck) Foreign Trade Zones underutilized Emissions impact air quality and health Issues identified at Regional Economic Summit 	<ul style="list-style-type: none"> Ensure coordination between Regional Policy Council/COGs (stakeholder planning process underway), SJV Air Pollution Control District, CCVEDC, Caltrans, Partnership Sustainable Communities Work Group, railroad companies on planning/projects See Regional Economic Summit Strategy recommendations
Manufacturing	<ul style="list-style-type: none"> Main issue for employers is workforce development Lack of high-level engineering jobs in the Valley, so many students leave the region Need cross-pollination of engineering workplace skills with existing workforce Need appropriate infrastructure to create new products out of recycled products; waste commodities being shipped overseas 	<ul style="list-style-type: none"> Coordinate with C6 and California Center for Applied Competitive Technologies for increased training Match resources of the universities to the manufacturers; connect internships with employers; support UCAM Develop a strategy to close supplier gaps Do policy advocacy (coordinated by REACON) on increase markets for recycling in California (Recycling BIN – Build Infrastructure Now)
Water Technology	<ul style="list-style-type: none"> Demand for clean water, sustainable water resources & infrastructure is creating new business opportunities beyond agriculture Issues identified at Regional Economic Summit 	<ul style="list-style-type: none"> Broaden focus of R&D to address diverse water supply and quality issues across an increased range of industries; coordinate with WET Center, Lyles College of Engineering, CVBI and other partners Focus on growth of specific technologies (BlueTech Valley) See Regional Economic Summit Strategy recommendations
Public Sector Infrastructure - (CCWC Project)	<ul style="list-style-type: none"> RJI Construction Cluster not active Lack of awareness regarding aggregated impact of public sector investments Updated inventory of projects & schedules needed on ongoing basis Coordination needed with economic development and planning to secure project funding 	<ul style="list-style-type: none"> Implement CCWC Regional Plan as Cluster Strategy for workforce Coordinate with Partnership to advocate for public sector investment/local hiring Identify lead to update project inventory and schedule Coordinate with Regional Policy Council and SJV Economic Development District to link project priorities with possible funding sources

5.3 ORGANIZATIONAL RECOMMENDATIONS

The Cluster Action Plan findings and engagement process provide a platform to align organizational focus, initiatives and resources to support the evolution of the Valley's regional cluster initiatives. This section of the report provides recommendations for the role of the Partnership, and OCED at the regional scale, focused on the next stage of the New Valley initiative, including the organization of Work Groups to lead or support the Valley's Regional Innovation Clusters.

ROLE OF THE PARTNERSHIP

Given its mission and role, how and where can the Partnership best add value at the regional level for successful on-the-ground implementation and overall progress for the Valley? The stakeholder engagement process clearly identified that an important value-added role for the Partnership is to:

Network - Help connect the many efforts across the region that are cluster-based or support the clusters (cluster foundations such as infrastructure – including broadband, sustainable communities, financing, environmental quality, and education and workforce).

Convene – Play a convening role for the bigger valley-wide issues that are not being addressed in other forums, to drive the agenda for the growth and vitality of the clusters.

Integrate - Provide synergy across the region, helping to knit together the clusters, the issues and the initiatives to pursue shared priorities.

Advocate - Promote and advocate regarding cluster priorities on behalf of the Valley, including the removal of barriers, elevation of regional issues and opportunities, resource needs including funding, and networking with partners and investors outside of the region.

Catalyze – Be a catalyst for collaboration and the diffusion of innovation, including through the elevation of models.

The Partnership plays this role to varying degrees already. The next step is for more intentional engagement around a cluster-based economic strategy. Cluster processes are by their nature vehicles for engagement of champions, businesses, stakeholders and partners in regional strategies. During the course of the Project, ADE found that awareness of the Partnership was mixed. Proactive engagement of the Partnership around a core set of tangible initiatives will increase this awareness and expand its impact. Involvement of Board members in specific cluster areas such as health and wellness in a high level convening role (as well as participation in implementation initiatives) was identified by cluster meeting participants as a very value-added activity. At the Partnership's September 2012 Board meeting, the Executive Committee agreed to convene to discuss follow up on Project opportunities, including to identify a specific set of tangible initiatives for 2013, and provide guidance for the ongoing implementation of the Action Plan.

ROLE OF OCED/NEW VALLEY WORK GROUPS

As described in the report's Executive Summary, OCED plays a critical backbone role for the work of the Partnership and the New Valley. Implementation of the Cluster Action Plan will require an increase in or realignment of existing OCED capacity to support or lead the New Valley Work Groups; continue OCED's outreach, networking, coordination and consultation process around cluster opportunities; and engage new partners, stakeholders and leaders in Work Group and Action Plan initiatives.

As described earlier, there are ten Work Groups implementing aspects of the New Valley Initiative. Most of the Work Groups are led by regional partners, such as the California Central Valley EDC (Economic Development Work Group) and the Central California Workforce Collaborative (co-lead of the Higher Education and Workforce Development Work Group). Several of the Work Groups are managed by Fresno State institutes. As the Secretariat for the Partnership, OCED provides ongoing support to the Work Groups. OCED also is the lead for the Advanced Communications Services Work Group (San Joaquin Valley Regional Broadband Consortium) and the Housing Work Group, and is reorganizing the Health and Human Services Work Group as the Health and Wellness Cluster Work Group, taking the opportunity to align the Work Group with cluster opportunities. OCED will manage this Work Group's for this transition. In addition, OCED supports the RJI which has twelve clusters, staffing two of them.

The Work Groups are in varying levels of capacity and operational status. Some need to be revitalized or refocused in terms of leads/champions, partners and work plans. Table 5.3-1 on p. 123 presents a proposed Work Group structure to facilitate Action Plan implementation. The table lists the proposed Work Groups, the lead and support entity, and key regional initiatives and partners to be involved. This listing is illustrative of the wide range of partners. There are other entities that need to be involved.

The Work Groups are sorted by those which are directly related to the specific clusters, such as Health and Wellness, Energy and Economic Development - the CCVEDC has targets across four clusters, and those which are related to the cluster foundations, such as broadband, air quality and workforce. These foundations support all the clusters. In most cases the Work Groups and lead groups are the same as before, but the Plan calls for a more proactive role for some of them, as described in the Key Cluster Action Plan Priorities in Section 5.2. OCED has been discussing with the partners the role they can and would like to play in Action Plan implementation, and will be following up with them to discuss specific Action Plan recommendations, how they fit with existing Work Group roles and activities, and how OCED can support the Work Groups to integrate the recommendations into their work plans.

Several of the recommended actions are related to the Economic Development Work Group. A major priority is the creation of a strategy to refine the list of economic development leakage targets identified in Chapter 4.7, and lead entity to execute the strategy. These targets are an opportunity for the Work Group and partners to take a more proactive role in leveraging regional and county-level economic development opportunities. Another opportunity is via the newly designated EDA-funded Economic Development District, wherein economic development leaders can collaborate with the San Joaquin

Valley Regional Policy Council as it identifies infrastructure project priorities that will be recommended through the San Joaquin Valley Interregional Goods Movement Plan process. Some of the projects may be eligible for EDA and other public sector infrastructure funds. These projects could contribute to the revitalization of the Construction Cluster, while helping to achieve mobility, air quality and other goals.

In addition to CCWC’s regional work in the health and green economy arena (the Regional Industry Clusters of Opportunity Project funded by the California Workforce Investment Board, and the State Energy Sector Partnership Grant for renewable energy and recyclables), CCWC can play a major role in the public sector infrastructure arena related to workforce development and local job creation and skills building, through the implementation of the 2012 Workforce Development Plan. CCWC is encouraged to utilize the Partnership’s website and other resources to establish increased visibility and a regional portal for the excellent information and strategies that have been developed, and to continue its model of collaboration and resource leveraging related to the region’s industry cluster strategic priorities.

Figure 5.3-1 below illustrates the proposed New Valley Work Groups, the foundational support provided by OCED, and the role of the Partnership Executive Committee to support and guide the overall implementation of the Cluster Action Plan. Section 5.4 on implementation “Next Steps” (page 126) provides specific recommendations for the Partnership and OCED as well as the Work Groups.

FIGURE 5.3-1
PROPOSED WORK GROUPS

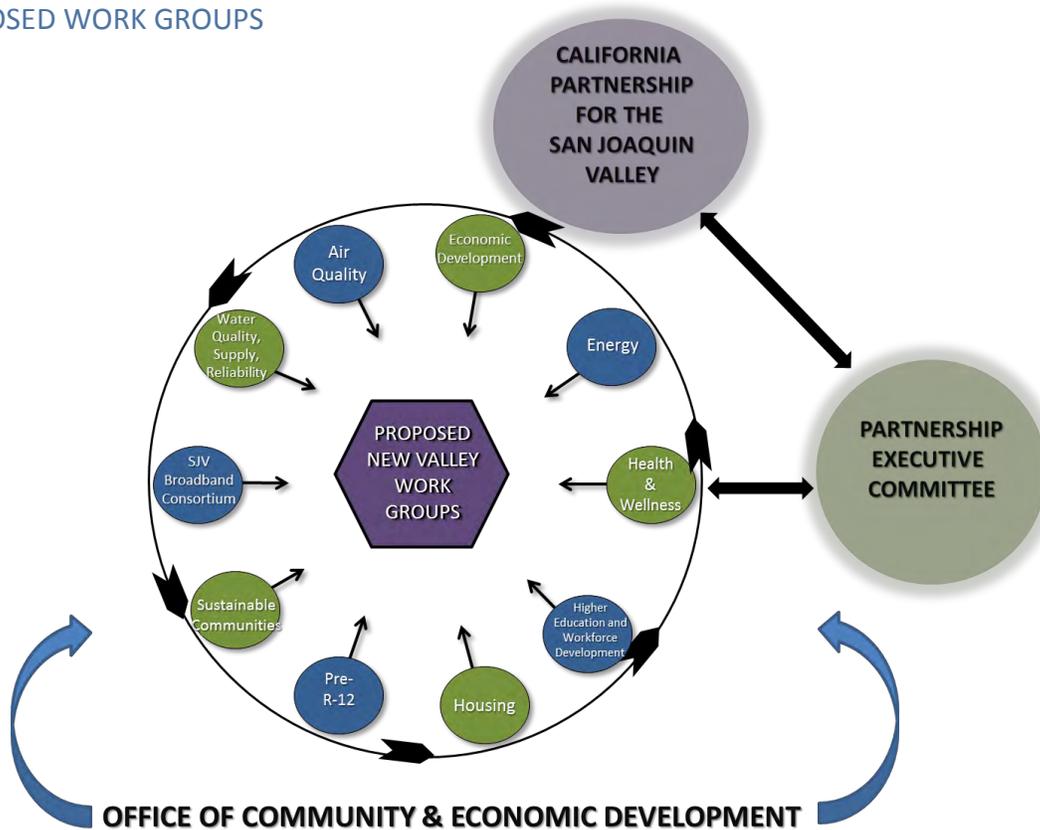


TABLE 5.3-1

PROPOSED WORK GROUP STRUCTURE FOR CLUSTER ACTION PLAN IMPLEMENTATION

Current Work Group	Proposed Work Group	Lead / Support	Key Regional Initiatives/Partners
Health and Human Services (not active)	Health and Wellness Cluster	Partnership Health Sector Board Members/OCED	<ul style="list-style-type: none"> • Central California Workforce Collaborative (CCWC) (RICO – Regional Industry Clusters of Opportunity) • C6 – Central California Community Colleges Committed to Change • Central Region Consortium (Community Colleges) • Hospital Council of Northern and Central California • Central Valley Health Network • San Joaquin Valley Nursing Education Consortium • UC Merced Health Sciences Research Institute • Councils of Government
Energy	Energy	SJV Clean Energy Organization/OCED	<ul style="list-style-type: none"> • Regional Policy Council • CCVEDC • SJV Air Pollution Control District • Water and Energy Technology (WET) Center • Central Valley Business Incubator (Innovation Hub) • Utilities • Valley REACON (Recycling, Energy, Air, Conservation). Greater Stockton Chamber • Clean Energy Center, KCCD • CCWC (State Energy Sector Partnership) • C6 • Central Region Consortium • Business and Entrepreneurship Center • UC Advanced Solar Technologies Institute
Economic Development	Economic Development	California Central Valley EDC (CCVEDC)/OCED	<ul style="list-style-type: none"> • Manufacturers Council of the Central Valley • Central Valley Business Incubator (Innovation Hub) • UC Merced SBDC Regional Network • Lyles Center for Innovation and Entrepreneurship • Merced College Business, Industry and Community Services • Business and Entrepreneurship Center, KCCD • CCWC • C6 • Central Region Consortium • International Center for Water Technology • California Centers for International Trade Development (State Center) • Valley REACON (Recycling, Energy, Air, Conservation). Greater Stockton Chamber • Jordan College of Agricultural Sciences and Technology, CSU Fresno • Craig School of Business, CSU Fresno • California Center for Applied Competitive Technologies (College of the Sequoias) • San Joaquin Valley Regional Policy Council • Fresno-Madera-Tulare-Kings Labor Council • North Valley Labor Federation
Advanced Communications	SJV Broadband Consortium	OCED	<ul style="list-style-type: none"> • Many Consortium Members, USDA Rural Development • Great Valley Center • Telecoms

TABLE 5.3-1**PROPOSED WORK GROUP STRUCTURE FOR CLUSTER ACTION PLAN IMPLEMENTATION
(CONTINUED)**

Current Work Group	Proposed Work Group	Lead / Support	Key Regional Initiatives/Partners
Air Quality	Air Quality	The Maddy Institute, CSU Fresno	<ul style="list-style-type: none"> • SJV Air Quality Pollution Control District • Regional Policy Council • Valley CAN (Clean Air Now) • Clean Energy Organization
Higher Education and Workforce Development	Higher Education and Workforce Development	Central California Workforce Collaborative, Central California Higher Education Consortium	<ul style="list-style-type: none"> • C6 • Central California Consortium • Workplace Learning Center Resource, Merced College • San Joaquin Valley Nursing Education Consortium • Centers of Excellence, Central California • Fresno-Madera-Tulare-Kings Labor Council • North Valley Labor Federation
Pre-K-12	Pre-K-12	Central Valley Educational Leadership Institute (Fresno State)	<ul style="list-style-type: none"> • C6 • Central California Workforce Collaborative
Housing	Housing	San Joaquin Valley Housing Collaborative/ OCED	<ul style="list-style-type: none"> • Councils of Government • Other Work Group Partners
Sustainable Communities (integration of Land Use, Housing and Agriculture Work Groups & Transportation Work Group in 2011)	Sustainable Communities	San Joaquin Valley Regional Policy Council	<ul style="list-style-type: none"> • Councils of Government • Smart Valley Places • SJV Rural Development Center • Central California Workforce Collaborative (Public Sector Infrastructure)
Water Quality, Supply and Reliability	Water Work Group	California Water Institute	<ul style="list-style-type: none"> • C6 • International Center for Water Technology (ICWT) • Water, Energy and Technology (WET) Center • Center for Irrigation Technology • SJV Clean Energy Org

Integrating the Action Plan’s recommendations into the Work Group work plans will help align their work with and support key cluster priorities, but it will not address all of the seven Valley-wide clusters explicitly in terms of having a cluster lead entity and a specific action plan. Table 5.3-2 presents an option to organize regional Cluster Action Teams for each cluster, building on existing efforts and leaders. Some of these efforts currently have more capacity than others and OCED would need to work with the partners to see if they can take on a lead cluster role, and if CCVEDC could take on a support role with increased resources. The table shows how the action teams line up with the targeted cluster initiatives of the CCVEDC, CCWC and the Community Colleges.

TABLE 5.3-2

CLUSTER WORK GROUP OPTIONS FOR ACTION PLAN IMPLEMENTATION

PROPOSED NEW VALLEY CLUSTER ACTION TEAMS				
Valley-Wide Clusters	Proposed Lead/Support	California Central Valley EDC (CCVEDC) Targets	Central California Workforce Collaborative (CCWC) Targets	Community Colleges Consortium Targets
Agriculture Value Chain	Regional Economic Summit identified leads for different areas through the Partnership/ CCVEDC, OCED	Food Processing		C6 Project (Central California Community Colleges Committed to Change) (trades)
Health and Wellness	Health and Wellness Cluster Work Group/OCED		Regional Industry Clusters of Opportunity (seeking funding)	C6 Project
Manufacturing (cross-cluster)	Manufacturing Council of the San Joaquin Valley/ University Center to Advance Manufacturing/Center for Applied Competitive Technologies, OCED, CCVEDC	Manufacturing	State Sector Energy Partnership (recyclables)	C6 Project (trades)
Energy Including Renewable	San Joaquin Valley Clean Energy Org/ CCVEDC	Renewable Energy	State Sector Energy Partnership	C6 Project (trades)
Logistics and Distribution	San Joaquin Valley Regional Policy Council/ CCVEDC	Logistics		
Water Technology	International Center on Water Technology			
Public Sector Infrastructure – Construction (cross-cluster)	San Joaquin Valley Regional Policy Council		Public Sector Infrastructure Grant/Strategy	

5.4 NEXT STEPS

The following is a list of next steps for OCED and the Partnership to initiate and organize the implementation process for the Cluster Action Plan. Cluster strategies are vehicles for ongoing engagement of partners and stakeholders, but need dedicated focus and resources to yield action and results.

1.	Work Group Leads/Work Plans. OCED staff will meet with Work Group leads and partners to review Project findings and recommendations and alignment with existing work plans; confirm lead partners and expanded/refined roles; identify 2013 priority cluster initiatives; and support work plan updates and expanded engagement of stakeholders. OCED should convene the stakeholders from the June meeting of the Manufacturing/Energy/Logistics Clusters to identify cross-cluster priorities and actions. This process will be coordinated with the Partnership’s Executive Committee. OCED should coordinate with USDA Rural Development and other champions on the implementation of the Ag Value Chain Regional Economic Summit action priorities.
2.	Health and Wellness Cluster Work Group. OCED should work with Partnership board members to convene the Cluster stakeholders to identify priorities, develop the work plan around Action Plan recommendations, and drive the implementation of the work plan.
3.	Economic Development Targets. OCED is working with CCVEDC and other partners on the process to develop a strategy for the Economic Development Targets (aggregated and cluster-specific), and identify a lead for implementation of the strategy. Partners should coordinate with TeamCalifornia to enhance marketing and outreach opportunities on the Valley’s cluster priorities.
4.	Economic Development/Education/Workforce Coordination. OCED should develop a process for increased, systemic linkages between economic development, education, and workforce development partners (CCVEDC, CCWC, Central Region Consortium, C6, universities) around regionalized cluster-focused issues. The partners should collaborate to seek funding support for: research to identify priority workforce gaps and occupational demand; designated staff to facilitate the coordination process across the clusters and the systems; expanding the reach of innovative training programs. OCED should facilitate integrated connections with state partners such as the California Workforce Investment Board, California Labor and Workforce Development Agency, Chancellor’s Office, the Employment Training Panel, and the U.S. Dept. of Labor.
5.	Public Sector Infrastructure/Logistics. OCED should convene the CCWC, the SJV Regional Policy Council, CCVEDC, Caltrans, labor, and other partners to link the interregional goods movement planning process and CCWC’s Public Sector Infrastructure Workforce Plan, including for identification of project funding priorities, funding sources for construction projects, and workforce development needs. Leverage the new Economic Development District.
6.	Work Group Coordination. OCED should convene the leadership of the New Valley Work Groups quarterly for updates on their work plans, and facilitate coordination across Work Groups and initiatives on an ongoing basis.
7.	Regional/State Economic Summits. The Partnership and OCED will continue coordination with the statewide economic summit process, and align the annual outcomes of the Work Group work plans for the Valley’s next regional economic summit (fall of 2013) and state-wide summit (late 2013). OCED and the Work Groups should report on the progress of the 2013 cluster initiatives at the next Regional Economic Summit.
8.	Reporting Process. OCED should develop a process to report on Cluster Action Plan activities, metrics and progress to the Partnership’s Executive Committee on an ongoing basis. The growth of the clusters should be tracked as an annual metric.
9.	Communications. OCED should create a dedicated location on the Partnership’s website for the Cluster Action Plan and resource materials, building upon the Regional Economic Summit materials. It should use the Cluster Action Plan implementation as a vehicle for communications about the Partnership, and as a portal to partner initiatives and resources.

As part of its ongoing mission and role, OCED will continue to connect with state, federal and other partners to ensure alignment with the Cluster Action Plan. One of the most timely is the *“Doing What Matters for Jobs and the Economy,”* a new initiative of the California Community Colleges, Division of Workforce and Economic Development. Its goals are to supply in-demand skills for employers, create relevant career pathways and stackable credentials, promote student success, and get Californians into open jobs. The focus is on spurring job creation and bridging skills gaps in priority/emergent sectors and clusters; taking effective practices to scale; integrating and leveraging programming between funding streams; promoting metrics for student success; and removing structural barriers. This initiative is in collaboration with the California Workforce Investment Board as it prepares the State Strategic Workforce Plan.

The Central California Community Colleges Committed to Change (C6) Project and the Central Region Consortium (Community Colleges members) are partners in the development of the Cluster Action Plan and OCED will host and is planning with these partners for a Valley-wide meeting on linking the clusters with the initiative.

Other examples of resource assets include the federal partnership for the Strong Cities Strong Communities (SC2) initiative, especially related to the development of the region’s Ag Tech Cluster and regional broadband capacity; the new resource guide on access to capital to support local economies and regional clusters, developed by the California Financial Opportunities Roundtable (CalFOR); and a possible new regional task force on workforce and small business development opportunities, organized by the Federal Reserve Bank of California. OCED also will connect with Valley Vision which is preparing the regional cluster strategy for the Sacramento region – the Next Economy – to explore cross-regional collaboration opportunities related to common clusters such as food and agriculture.

In terms of the RJI and OCED’s role, it will be important for OCED to concentrate on supporting the organization and management of the core regional cluster priority action areas, and filling in leadership gaps where necessary. There is an opportunity for the RJI to benefit from integration with a more regionalized approach on shared issues.

APPENDIX – A: CLUSTER MEETING PARTICIPANTS

HEALTH AND WELLNESS CLUSTER MEETING PARTICIPANTS

FRESNO STATE UNIVERSITY, MAY 24, 2012, FRESNO		
NAME	TITLE	ORGANIZATION
Arakel Arisian	Principal	Arisian Development
Lynn Ashbeck	Regional Vice President	Hospital Council of Northern and Central California
Tim Curley	Director, Community and Government Relations	Childrens Hospital Central California
Jerry Dickerson, PMP	Project Manager, Corp. IT	Community Medical Centers
Randy Dodd	Vice President, Business Development and Strategic Planning	Adventist Health
Mike Dozier	Executive Director, Office of Community & Economic Development	Fresno State
Chaz Felix, J.D.	Health Policy Fellow	Central Valley Health Policy Institute
Nicole Ferreira	Workforce Analyst	Tulare Workforce Investment Board
Carole Goldsmith	Vice Chancellor, Project Director C6	Educational Services & Workforce Development, West Hills Community College
Jose Gonzalez	Health Promotion Specialist	Health Net Community Solutions
Nancy Hoff	MSN,RN, Health Care RED Team Leader	Central California Community Colleges Committed to Change (C6) Consortium
Trish Kelly	Principal	Applied Development Economics
Mary Renner	Chief Operations Officer	Central Valley Health Network
Stephanie Robinson	Director of Nursing	Fresno City College
Veronica Salas	Economic Development Analyst	Fresno Economic Development Corporation
Matt Severson	Corporate Locations Coordinator	Fresno Economic Development Corporation
Susan Smilie Janecek	Director of Research and Development	San Joaquin Valley College
Kathie Studwell	Senior Associate	Applied Development Economics
John G. Taylor	Director, Public Affairs	Community Medical Centers
Jim VanDeVelde	Associate Administrator	Community Regional Medical Center
Reyna Villalobos	Community Building Specialist	Central California Regional Obesity Prevention Program (CCROPP)

APPENDIX – A (CONTINUED)

HEALTH AND WELLNESS CLUSTER MEETING PARTICIPANTS

GREAT VALLEY CENTER, JUNE 6, 2012, MODESTO		
NAME	TITLE	ORGANIZATION
Mike Amman	President/CEO	San Joaquin Partnership
Arakel Arisian	Principal	Arisian Development
Janalynn Castillo	Public Affairs Representative	Planned Parenthood Mar Monte
Paula Chiarmonte	Senior Research Analyst Business Resource Center	Stanislaus Economic Development and Workforce Alliance
Charleen Chituras	Owner	InVision Development
Jennifer Downs-Colby	Assistant Manager, Community Benefits and Volunteer Services	Memorial Medical Center
Valerie A. Fisher, RN, MA	Project Director, Innovate What Matters-Allied Health	Ca. Community College Chancellor's Office Division of Workforce and Economic Development
Cathy Frey	CEO	Central Valley Health Network
Heidi E. Hall	Program Manager	Merced County Human Services Agency
Corwin N. Harper	Senior Vice President/Area manager	Kaiser Permanente, Central Valley, Modesto
Ismael Herrera	Director, Rural Development Center	Fresno State
Nancy Hoff	MSN,RN, Health Care RED Team Leader	Central California Community Colleges Committed to Change (C6) Consortium
Linda Hoile	Program Manager	Great Valley Center
Trish Kelly	Principal	Applied Development Economics
Warren Kirk	CEO	Doctors Medical Center of Modesto
Adolph Lopez	Program Manager	Alliance Worknet, Stanislaus County
Dotty Nygard, RN, BSN	Vice Mayor	City of Riverbank
Rebecca Petty	Family Services Supervisor	Merced County Human Services Agency
Jeff Rowe	Workforce Development Director	Alliance Worknet, Stanislaus County
Heidi Santino	Executive Director	Stanislaus Health Foundation
Kurt Schuparra, Ph.D.	Assistant Secretary	California Labor & Workforce Development Agency
Scott Seamons	Regional Vice President	Hospital Council of Northern and Central California
Dejeune Shelton	Executive Director	Great Valley Center
Geneva Skram	Community Coordinator	University of California, Merced
Kathie Studwell	Senior Associate	Applied Development Economics
Robert Tse	Special Projects Lead	USDA CA Rural Development
Kim Viviano	Fitness Program Manager	Health Aging Association

APPENDIX – A (CONTINUED)

HEALTH AND WELLNESS CLUSTER MEETING PARTICIPANTS

WEILL CENTER, KERN COMMUNITY COLLEGE DISTRICT, JUNE 21, 2012, BAKERSFIELD		
NAME	TITLE	ORGANIZATION
Debra Anderson	Agency Representative	San Joaquin Valley College, Bakersfield
Arakel Arisian	Principal	Arisian Development
Aurora Cooper	Human Resources Director	National Health Services, Inc.
Candy Gettman	Deputy Director	Employers' Training Resource
Karen K. Goh	Supervisor	Fifth District, County of Kern
Freddy Hernandez	Assistant Director	Clinica Sierra Vista
Teresa Hitchcock	Administrative Analyst, Economic Development	Kern County Administrative Office
Nancy Hoff, MSN, RN	Health Care RED Team Leader	Ca. Community College colleges Committed to Change (C6) Consortium
Pam Holiwell	Assistant Director	Employment and Financial Services, Department of Human Services, Kern County
Myrna James	Case Manager	Kern County Career Services Center
Fiona Kelly	Business Services Coordinator	Business and Entrepreneurship Center Kern Community College District
Trish Kelly	Principal	Applied Development Economics
Sean Kenny	Wellness Coordinator	Mercy and Memorial Hospitals
Cori Kitchen	Business and Grants Development Coordinator	Kern Economic Development Corporation
Dr. Kathleen Knutzen	Dean, School of Social Sciences and Education	California State University Bakersfield
Robin Mangarin-Scott	Director of Strategic Marketing	Dignity Health
John Means	Associate Vice Chancellor, Economic and Workforce Development President, CCCAOE	Kern Community College District
Ali Morris	President	Kern County Black Chamber of Commerce
Ralph Martinez	Director, Planning, Research and Development	Community Action Partnership of Kern
David Michael	Associate Direction of Administrative Health Services	National Health Services, Inc.
Dan Murray	Kern/Inyo/Mono WIB Executive Committee Member	NTrust Healthcare LLC

APPENDIX – A (CONTINUED)

HEALTH AND WELLNESS CLUSTER MEETING PARTICIPANTS

WEILL CENTER, KERN COMMUNITY COLLEGE DISTRICT, JUNE 21, 2012, BAKERSFIELD (CONTINUED)		
NAME	TITLE	ORGANIZATION
Dr. Avtar Nijjer-Sidhu	Senior Health Educator, Environmental Health Division	Public Health Services Dept., County of Kern
Robert Pimentel	Interim, Director, C6 Project	West Hills Community College District
Pritika Ram	Executive Assistant	Clinica Sierra Vista
Mary Renner	Chief Operations Officer	Central Valley Health Network
Stefanie Robinson	Director of Nursing	Fresno City College
Annalisa Robles	Program Manager	The California Endowment
Lucas Rucks	Educational Advisor/ Program Manager	Bakersfield College Allied Health Department
Steve Schilling	CEO	Clinica Sierra Vista
Cheryl Scott	Vice President	Kern Economic Development Corporation
Eman Shurabaji	Grant Writer	Alzheimer's Disease Association of Kern County
Andy Stanley	Field Representative	Office of Supervisor Karen Goh, County of Kern Fifth District
Bonita Steele	Director, Grants/Resource Development	Kern Community College District
Ashley Vorhees	NHWP Community Director - Kern County, Viridian Region Manager	Viridian Health Management
Kelly Walters	Campus Director	San Joaquin Valley College, Bakersfield
Gayle Winters	Case Manager	Kern County Career Services Center
Dr. Jim Young	Arvin Resident	"We the People," Arvin High School

APPENDIX – A (CONTINUED)

MANUFACTURING/LOGISTICS/ENERGY TECHNOLOGY CLUSTER MEETING PARTICIPANTS

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, JUNE 11 TH , 2012, FRESNO		
NAME	TITLE	ORGANIZATION
Angela Allison	Director, Special Grants	West Hills Community College District
Mike Ammann	CEO	San Joaquin Partnership
Arakel Arisian	Principal	Arisian Development
Darnell Austin	Professor, Industrial Technology, Co-Director	Fresno State
Vincent Bischoff	Western Region Sales Manager	National Pump Company
Justine Blanchet	Training Associate	GRID Alternatives
Melinda Brown	Director of Business Development	Kern EDC
Clint Cowden	Instructor, Ag Science & Technology	West Hills College
Monica Cuevas	Dean of Students, Madera Center	State Center Community College
Nathalie Culver-Dockins	Dean, Workforce Development	Fresno City College
Mike Dozier	Director, Office of Community and Economic Development	Fresno State
Ron Durbin	Executive Director	University of California Advanced Solar Technologies Institute
Shari Bender Ehlert	Director, District 6	Caltrans
Frank J. Ferral	Program & Public Policy Director	Greater Stockton Chamber of Commerce
Charles Francis	Director	Fresno City College Training Institute
Candy Gettman	Deputy Director	Employers Training Resources
Carole Goldsmith, Ed. D.	Vice Chancellor, Educational Services & Workforce Development	West Hills Community College District
Steve Haze	1 st Vice President	Yosemite Sequoia
Terri Hicks	Director, Business & Entrepreneurship Center	Kern Community College District
Aaron Husak	Home Energy Auditor	ConSol (Independent Contractor)
Jerry James	Director of Corporate Sales	Farm Grown
Ed Jones	Division Director	Sequoia Community Corps
Tom Jordan	Senior Policy Advisor	San Joaquin Valley Air Pollution Control District
Courtney Kalashian	Associate Executive Director	Clean Energy Organization, California Partnership for the San Joaquin Valley
Kristin Kawaguchi	Investor Relations Manager	EDC Serving Fresno County

APPENDIX – A (CONTINUED)

MANUFACTURING/LOGISTICS/ENERGY TECHNOLOGY CLUSTER MEETING PARTICIPANTS

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, JUNE 11 TH , 2012, FRESNO (CONTINUED)		
NAME	TITLE	ORGANIZATION
Trish Kelly	Principal	Applied Development Economics
Pam Lassetter	RICO Program Manager	Workforce Connection, Fresno WIB
John Lehn	President	Kings County Economic Development Corporation
Adriane Lepage	Project Assistant	Applied Development Economics
Ed Martin	Regional Manager	Proteus Group
Donald McCoon	Owner	McCoon Commercial Real Estate
Sandi Miller	Business Services Team	Tulare Workforce Investment Board
Mark Miller	Talent Acquisition Manager	Jason Ryan & Associates
William Myers	Managing Partner	Fresno Strategic Consulting
Walter Mizuno	Co-Director, UCAM	Lyles College for Engineering, Fresno State
Helle Peterson	General Manager	Water, Energy & Technology Center
Robert Pimentel, MSW	Interim Director, C6 Project	West Hills Community College District
Tim Rainey	Executive Director	California Workforce Investment Board
Barbara Rodiek	COO	Central Valley Business Incubator
Paulette Rush	Business Development Associate	Kern EDC
Michael A. Sandoval	Facilities & Engineering Manager	I Love to Create
Michael Sigala	Valleywide Coordinator	Regional Policy Council
Jay Saylor	Economic Development Manager	Kings County Economic Development Corporation
Kurt Schuparra (by phone)	Deputy Secretary	California Labor & Workforce Development Agency
Dejeune Shelton	Executive Director	Great Valley Center
Don Smail	Director	Manteca Economic Development
Dan Sousa	Instructor, Applied Technology Division	Fresno City College
Kathie Studwell	Senior Associate	Applied Development Economics
Bonita Steele	Director, Grants and Resource Development	Kern Community College District
Tina Summer	Director of Community & Economic Dev.	City of Clovis
Doug Svensson	President	Applied Development Economics
Rob Terry	Associate Regional Planner	Fresno Council of Governments
Robert Tse	Special Projects Lead	USDA California, Rural Development
Louann Waldner, PhD	Director	Center for Applied Competitive Technologies
Pete Weber	Executive Committee Chair	California Partnership for the San Joaquin Valley

APPENDIX – B: CLUSTER NAICS DEFINITIONS BY COMPONENTS

AGRICULTURE CLUSTER

SUPPORT			
221310	Water Supply and Irrigation Systems	541380	Testing Laboratories
237110	Water and Sewer Line and Related Structures Construction	541613	Marketing Consulting Services
325311	Nitrogenous Fertilizer Manufacturing	541614	Process, Physical Distribution, and Logistics Consulting Services
325312	Phosphatic Fertilizer Manufacturing	541820	Public Relations Agencies
325314	Fertilizer (Mixing Only) Manufacturing	541830	Media Buying Agencies
325320	Pesticide and Other Agricultural Chemical Manufacturing	541840	Media Representatives
326291	Rubber Product Manufacturing for Mechanical Use	541850	Display Advertising
326299	All Other Rubber Product Manufacturing	541870	Advertising Material Distribution Services
332311	Prefabricated Metal Building and Component Manufacturing	541890	Other Services Related to Advertising
332420	Metal Tank (Heavy Gauge) Manufacturing	541940	Veterinary Services
333111	Farm Machinery and Equipment Manufacturing	551111	Offices of Bank Holding Companies
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	551112	Offices of Other Holding Companies
333294	Food Product Machinery Manufacturing	551114	Corporate, Subsidiary, and Regional Managing Offices
333911	Pump and Pumping Equipment Manufacturing	561110	Office Administrative Services
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	561310	Employment Placement Agencies
333992	Welding and Soldering Equipment Manufacturing	561320	Temporary Help Services
333993	Packaging Machinery Manufacturing	551112	Offices of Other Holding Companies
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	551114	Corporate, Subsidiary, and Regional Managing Offices
423830	Industrial Machinery and Equipment Merchant Wholesalers	561110	Office Administrative Services
423840	Industrial Supplies Merchant Wholesalers	561310	Employment Placement Agencies
423850	Service Establishment Equipment and Supplies Merchant Wholesalers	561320	Temporary Help Services
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	561710	Exterminating and Pest Control Services
444210	Outdoor Power Equipment Stores	561730	Landscaping Services
444220	Nursery, Garden Center, and Farm Supply Stores	562213	Solid Waste Combustors and Incinerators
522292	Real Estate Credit	562219	Other Nonhazardous Waste Treatment and Disposal
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	562920	Materials Recovery Facilities
541360	Geophysical Surveying and Mapping Services	811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance
541370	Surveying and Mapping (except Geophysical) Services		

PRODUCTION			
111	Crop Production	115111	Cotton Ginning
112	Animal Production	115112	Soil Preparation, Planting, and Cultivating
113110	Timber Tract Operations	115113	Crop Harvesting, Primarily by Machine
113210	Forest Nurseries and Gathering of Forest Products	115114	Postharvest Crop Activities (except Cotton Ginning)
114111	Finfish Fishing	115115	Farm Labor Contractors and Crew Leaders
114112	Shellfish Fishing	115116	Farm Management Services
114119	Other Marine Fishing	115210	Support Activities for Animal Production
114210	Hunting and Trapping	115310	Support Activities for Forestry
114210	Crop Production		

APPENDIX – B (CONTINUED)

PROCESSING			
311111	Dog and Cat Food Manufacturing	311919	Other Snack Food Manufacturing
311119	Other Animal Food Manufacturing	311920	Coffee and Tea Manufacturing
311211	Flour Milling	311930	Flavoring Syrup and Concentrate Manufacturing
311212	Rice Milling	311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing
311213	Malt Manufacturing	311942	Spice and Extract Manufacturing
311221	Wet Corn Milling	311991	Perishable Prepared Food Manufacturing
311222	Soybean Processing	311999	All Other Miscellaneous Food Manufacturing
311223	Other Oilseed Processing	312111	Soft Drink Manufacturing
311225	Fats and Oils Refining and Blending	312112	Bottled Water Manufacturing
311230	Breakfast Cereal Manufacturing	312113	Ice Manufacturing
311311	Sugarcane Mills	312120	Breweries
311312	Cane Sugar Refining	312130	Wineries
311313	Beet Sugar Manufacturing	312140	Distilleries
311320	Chocolate and Confectionery Manufacturing from Cacao Beans	312210	Tobacco Stemming and Redrying
311330	Confectionery Manufacturing from Purchased Chocolate	312221	Cigarette Manufacturing
311340	Nonchocolate Confectionery Manufacturing	312229	Other Tobacco Product Manufacturing
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	313111	Yarn Spinning Mills
311412	Frozen Specialty Food Manufacturing	313112	Yarn Texturizing, Throwing, and Twisting Mills
311421	Fruit and Vegetable Canning	313113	Thread Mills
311422	Specialty Canning	313210	Broadwoven Fabric Mills
311423	Dried and Dehydrated Food Manufacturing	313221	Narrow Fabric Mills
311511	Fluid Milk Manufacturing	313230	Nonwoven Fabric Mills
311512	Creamery Butter Manufacturing	313241	Weft Knit Fabric Mills
311513	Cheese Manufacturing	313249	Other Knit Fabric and Lace Mills
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	316110	Leather and Hide Tanning and Finishing
311520	Ice Cream and Frozen Dessert Manufacturing	321113	Sawmills
311611	Animal (except Poultry) Slaughtering	321920	Wood Container and Pallet Manufacturing
311612	Meat Processed from Carcasses	322211	Corrugated and Solid Fiber Box Manufacturing
311613	Rendering and Meat Byproduct Processing	322212	Folding Paperboard Box Manufacturing
311615	Poultry Processing	322213	Setup Paperboard Box Manufacturing
311711	Seafood Canning	322214	Fiber Can, Tube, Drum, and Similar Products Manufacturing
311712	Fresh and Frozen Seafood Processing	322215	Nonfolding Sanitary Food Container Manufacturing
311811	Retail Bakeries	322291	Sanitary Paper Product Manufacturing
311812	Commercial Bakeries	325411	Medicinal and Botanical Manufacturing
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	325414	Biological Product (except Diagnostic) Manufacturing
311821	Cookie and Cracker Manufacturing	326111	Plastics Bag and Pouch Manufacturing
311822	Flour Mixes and Dough Manufacturing from Purchased Flour	326160	Plastics Bottle Manufacturing
311823	Dry Pasta Manufacturing	327213	Glass Container Manufacturing
311830	Tortilla Manufacturing	332115	Crown and Closure Manufacturing
311911	Roasted Nuts and Peanut Butter Manufacturing	332431	Metal Can Manufacturing

APPENDIX – B (CONTINUED)

DISTRIBUTION			
424410	General Line Grocery Merchant Wholesalers	481212	Nonscheduled Chartered Freight Air Transportation
424420	Packaged Frozen Food Merchant Wholesalers	481219	Other Nonscheduled Air Transportation
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers	482	Rail Transportation
424440	Poultry and Poultry Product Merchant Wholesalers	483111	Deep Sea Freight Transportation
424450	Confectionery Merchant Wholesalers	483112	Deep Sea Passenger Transportation
424460	Fish and Seafood Merchant Wholesalers	483113	Coastal and Great Lakes Freight Transportation
424470	Meat and Meat Product Merchant Wholesalers	483114	Coastal and Great Lakes Passenger Transportation
424480	Fresh Fruit and Vegetable Merchant Wholesalers	483211	Inland Water Freight Transportation
424490	Other Grocery and Related Products Merchant Wholesalers	483212	Inland Water Passenger Transportation
424510	Grain and Field Bean Merchant Wholesalers	484110	General Freight Trucking, Local
424520	Livestock Merchant Wholesalers	484121	General Freight Trucking, Long-Distance, Truckload
424590	Other Farm Product Raw Material Merchant Wholesalers	484122	General Freight Trucking, Long-Distance, Less Than Truckload
424810	Beer and Ale Merchant Wholesalers	484220	Specialized Freight (except Used Goods) Trucking, Local
424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers	484230	Specialized Freight (except Used Goods) Trucking, Long-Distance
424910	Farm Supplies Merchant Wholesalers	488111	Air Traffic Control
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	488119	Other Airport Operations
445110	Supermarkets and Other Grocery (except Convenience) Stores	488190	Other Support Activities for Air Transportation
445120	Convenience Stores	488210	Support Activities for Rail Transportation
445210	Meat Markets	488310	Port and Harbor Operations
445220	Fish and Seafood Markets	488320	Marine Cargo Handling
445291	Baked Goods Stores	488390	Other Support Activities for Water Transportation
445292	Confectionery and Nut Stores	488510	Freight Transportation Arrangement
445299	All Other Specialty Food Stores	488991	Packing and Crating
445310	Beer, Wine, and Liquor Stores	493110	General Warehousing and Storage
481111	Scheduled Passenger Air Transportation	493120	Refrigerated Warehousing and Storage
481112	Scheduled Freight Air Transportation	493190	Other Warehousing and Storage
481211	Nonscheduled Chartered Passenger Air Transportation		

ENERGY CLUSTER

ALTERNATIVE ENERGY GENERATION/PRODUCTION			
23711	Water and Sewer Line and Related Structures Construction	311223	Other Oilseed Processing
23816	Roofing Contractors	325193	Ethyl Alcohol Manufacturing

ALTERNATIVE ENERGY DISTRIBUTION			
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers
423690	Other Electronic Parts and Equipment Merchant Wholesalers		

APPENDIX – B (CONTINUED)

ENERGY EFFICIENCY			
23821	Electrical Contractors and Other Wiring Installation Contractors	23831	Drywall and Insulation Contractors
23822	Plumbing, Heating, and Air-Conditioning Contractors		

EQUIPMENT MANUFACTURING			
333132	Oil and Gas Field Machinery and Equipment Manufacturing	335110	Electric Lamp Bulb and Part Manufacturing
333414	Heating Equipment (except Warm Air Furnaces) Manufacturing	335121	Residential Electric Lighting Fixture Manufacturing
333611	Turbine and Turbine Generator Set Units Manufacturing	335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	335129	Other Lighting Equipment Manufacturing
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	335311	Power, Distribution, and Specialty Transformer Manufacturing
334517	Irradiation Apparatus Manufacturing		

PETROLEUM PRODUCTION & PETROLEUM DISTRIBUTION			
211111	Crude Petroleum and Natural Gas Extraction	424710	Petroleum Bulk Stations and Terminals
211112	Natural Gas Liquid Extraction	424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)
212399	All Other Nonmetallic Mineral Mining	486110	Pipeline Transportation of Crude Oil
213111	Drilling Oil and Gas Wells	486210	Pipeline Transportation of Natural Gas
324110	Petroleum Refineries	486910	Pipeline Transportation of Refined Petroleum Products
324199	All Other Petroleum and Coal Products Manufacturing		

POWER GENERATION AND TRANSMISSION			
221111	Hydroelectric Power Generation	221121	Electric Bulk Power Transmission and Control
221112	Fossil Fuel Electric Power Generation	221122	Electric Power Distribution
221113	Nuclear Electric Power Generation	221210	Natural Gas Distribution
221119	Other Electric Power Generation	237120	Oil and Gas Pipeline and Related Structures Construction
		237130	Power and Communication Line and Related Structures Construction

RESEARCH & SERVICES			
541	Professional, Scientific, and Technical Services	533110	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)
523910	Miscellaneous Intermediation	811219	Other Electronic and Precision Equipment Repair and Maintenance
523999	Miscellaneous Financial Investment Activities	811310	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance

APPENDIX – B (CONTINUED)

HEALTH AND WELLNESS CLUSTER

HEALTH CARE DELIVERY			
621111	Offices of Physicians (except Mental Health Specialists)	621512	Diagnostic Imaging Centers
621112	Offices of Physicians, Mental Health Specialists	621512	Diagnostic Imaging Centers
621210	Offices of Dentists	621610	Home Health Care Services
621310	Offices of Chiropractors	621910	Ambulance Services
621320	Offices of Optometrists	621991	Blood and Organ Banks
621330	Offices of Mental Health Practitioners (except Physicians)	622110	General Medical and Surgical Hospitals
621340	Offices of Physical, Occupational and Speech Therapists, and Audiologists	622210	Psychiatric and Substance Abuse Hospitals
621391	Offices of Podiatrists	622310	Specialty (except Psychiatric and Substance Abuse) Hospitals
621410	Family Planning Centers	623110	Nursing Care Facilities
621420	Outpatient Mental Health and Substance Abuse Centers	623210	Residential Mental Retardation Facilities
621491	HMO Medical Centers	623220	Residential Mental Health and Substance Abuse Facilities
621492	Kidney Dialysis Centers	623311	Continuing Care Retirement Communities
621493	Freestanding Ambulatory Surgical and Emergency Centers	623312	Homes for the Elderly
621498	All Other Outpatient Care Centers	623990	Other Residential Care Facilities
621511	Medical Laboratories	624310	Vocational Rehabilitation Services

MEDICAL DEVICE MANUFACTURING			
339112	Surgical and Medical Instrument Manufacturing	339115	Ophthalmic Goods Manufacturing
339113	Surgical Appliance and Supplies Manufacturing	339116	Dental Laboratories
339114	Dental Equipment and Supplies Manufacturing		

PHARMACEUTICALS			
325411	Medicinal and Botanical Manufacturing	325413	In-Vitro Diagnostic Substance Manufacturing
325412	Pharmaceutical Preparation Manufacturing	325414	Biological Product (except Diagnostic) Manufacturing

SUPPLIES AND SERVICES			
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	424210	Drugs and Druggists' Sundries Merchant Wholesalers
423460	Ophthalmic Goods Merchant Wholesalers	813212	Voluntary Health Organizations
423490	Other Professional Equipment and Supplies Merchant Wholesalers		

WELLNESS AND FITNESS			
446110	Pharmacies and Drug Stores	532291	Home Health Equipment Rental
446130	Optical Goods Stores	621399	Offices of All Other Miscellaneous Health Practitioners
446191	Food (Health) Supplement Stores	621999	All Other Miscellaneous Ambulatory Health Care Services
446199	All Other Health and Personal Care Stores	812191	Diet and Weight Reducing Centers

APPENDIX – B (CONTINUED)

LOGISTICS CLUSTER

AIR, RAIL, WATER TRANSPORTATION			
481111	Scheduled Passenger Air Transportation	483211	Inland Water Freight Transportation
481112	Scheduled Freight Air Transportation	483212	Inland Water Passenger Transportation
481211	Nonscheduled Chartered Passenger Air Transportation	488111	Air Traffic Control
481212	Nonscheduled Chartered Freight Air Transportation	488119	Other Airport Operations
481219	Other Nonscheduled Air Transportation	488190	Other Support Activities for Air Transportation
482	Rail Transportation	488210	Support Activities for Rail Transportation
483111	Deep Sea Freight Transportation	488310	Port and Harbor Operations
483112	Deep Sea Passenger Transportation	488320	Marine Cargo Handling
483113	Coastal and Great Lakes Freight Transportation	488330	Navigational Services to Shipping
483114	Coastal and Great Lakes Passenger Transportation	488390	Other Support Activities for Water Transportation

FREIGHT & WAREHOUSING			
484110	General Freight Trucking, Local	493110	General Warehousing and Storage
484121	General Freight Trucking, Long-Distance, Truckload	493120	Refrigerated Warehousing and Storage
484122	General Freight Trucking, Long-Distance, Less Than Truckload	493130	Farm Product Warehousing and Storage
484210	Used Household and Office Goods Moving	493190	Other Warehousing and Storage
484220	Specialized Freight (except Used Goods) Trucking, Local	541614	Process, Physical Distribution, and Logistics Consulting Services
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance	561910	Packaging and Labeling Services

OTHER SERVICES			
488410	Motor Vehicle Towing	488999	All Other Support Activities for Transportation
488490	Other Support Activities for Road Transportation	492110	Couriers and Express Delivery Services
488510	Freight Transportation Arrangement	492210	Local Messengers and Local Delivery
488991	Packing and Crating		

RELATED MANUFACTURING			
336120	Heavy Duty Truck Manufacturing	336611	Ship Building and Repairing
336510	Railroad Rolling Stock Manufacturing	336612	Boat Building

TRANSIT			
485111	Mixed Mode Transit Systems	485310	Taxi Service
485112	Commuter Rail Systems	485410	School and Employee Bus Transportation
485113	Bus and Other Motor Vehicle Transit Systems	485510	Charter Bus Industry
485119	Other Urban Transit Systems	485991	Special Needs Transportation
485210	Interurban and Rural Bus Transportation	485999	All Other Transit and Ground Passenger Transportation

MANUFACTURING CLUSTER (CROSS-CLUSTER)

HEALTH & WELLNESS MANUFACTURING			
339112	Surgical and Medical Instrument Manufacturing	325411	Medicinal and Botanical Manufacturing
339113	Surgical Appliance and Supplies Manufacturing	325412	Pharmaceutical Preparation Manufacturing
339114	Dental Equipment and Supplies Manufacturing	325413	In-Vitro Diagnostic Substance Manufacturing
339115	Ophthalmic Goods Manufacturing	325414	Biological Product (except Diagnostic) Manufacturing
339116	Dental Laboratories		

APPENDIX – B (CONTINUED)

FOOD PROCESSING			
311111	Dog and Cat Food Manufacturing	311920	Coffee and Tea Manufacturing
311119	Other Animal Food Manufacturing	311930	Flavoring Syrup and Concentrate Manufacturing
311211	Flour Milling	311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing
311212	Rice Milling	311942	Spice and Extract Manufacturing
311213	Malt Manufacturing	311991	Perishable Prepared Food Manufacturing
311221	Wet Corn Milling	311999	All Other Miscellaneous Food Manufacturing
311222	Soybean Processing	312111	Soft Drink Manufacturing
311223	Other Oilseed Processing	312112	Bottled Water Manufacturing
311225	Fats and Oils Refining and Blending	312113	Ice Manufacturing
311230	Breakfast Cereal Manufacturing	312120	Breweries
311311	Sugarcane Mills	312130	Wineries
311312	Cane Sugar Refining	312140	Distilleries
311313	Beet Sugar Manufacturing	312210	Tobacco Stemming and Redrying
311320	Chocolate and Confectionery Manufacturing from Cacao Beans	312221	Cigarette Manufacturing
311330	Confectionery Manufacturing from Purchased Chocolate	312229	Other Tobacco Product Manufacturing
311340	Nonchocolate Confectionery Manufacturing	313111	Yarn Spinning Mills
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	313112	Yarn Texturizing, Throwing, and Twisting Mills
311412	Frozen Specialty Food Manufacturing	313113	Thread Mills
311421	Fruit and Vegetable Canning	313210	Broadwoven Fabric Mills
311422	Specialty Canning	313221	Narrow Fabric Mills
311423	Dried and Dehydrated Food Manufacturing	313230	Nonwoven Fabric Mills
311511	Fluid Milk Manufacturing	313241	Weft Knit Fabric Mills
311512	Creamery Butter Manufacturing	313249	Other Knit Fabric and Lace Mills
311513	Cheese Manufacturing	316110	Leather and Hide Tanning and Finishing
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	321113	Sawmills
311520	Ice Cream and Frozen Dessert Manufacturing	321920	Wood Container and Pallet Manufacturing
311611	Animal (except Poultry) Slaughtering	322211	Corrugated and Solid Fiber Box Manufacturing
311612	Meat Processed from Carcasses	322212	Folding Paperboard Box Manufacturing
311613	Rendering and Meat Byproduct Processing	322213	Setup Paperboard Box Manufacturing
311615	Poultry Processing	322214	Fiber Can, Tube, Drum, and Similar Products Manufacturing
311711	Seafood Canning	322215	Nonfolding Sanitary Food Container Manufacturing
311712	Fresh and Frozen Seafood Processing	322291	Sanitary Paper Product Manufacturing
311811	Retail Bakeries	325411	Medicinal and Botanical Manufacturing
311812	Commercial Bakeries	325414	Biological Product (except Diagnostic) Manufacturing
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	326111	Plastics Bag and Pouch Manufacturing
311821	Cookie and Cracker Manufacturing	326160	Plastics Bottle Manufacturing
311822	Flour Mixes and Dough Manufacturing from Purchased Flour	327213	Glass Container Manufacturing
311823	Dry Pasta Manufacturing	332115	Crown and Closure Manufacturing
311830	Tortilla Manufacturing	332431	Metal Can Manufacturing
311911	Roasted Nuts and Peanut Butter Manufacturing	332439	Other Metal Container Manufacturing
311919	Other Snack Food Manufacturing	339112	Surgical and Medical Instrument Manufacturing

APPENDIX – B (CONTINUED)

ENERGY RELATED MANUFACTURING			
333132	Oil and Gas Field Machinery and Equipment Manufacturing	311225	Fats and Oils Refining and Blending
333414	Heating Equipment (except Warm Air Furnaces) Manufacturing	311613	Rendering and Meat Byproduct Processing
333611	Turbine and Turbine Generator Set Units Manufacturing	322299	All Other Converted Paper Product Manufacturing
334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	333298	All Other Industrial Machinery Manufacturing
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	334413	Semiconductor and Related Device Manufacturing
334517	Irradiation Apparatus Manufacturing	334519	Other Measuring and Controlling Device Manufacturing
335110	Electric Lamp Bulb and Part Manufacturing	335312	Motor and Generator Manufacturing
335121	Residential Electric Lighting Fixture Manufacturing	335314	Relay and Industrial Control Manufacturing
335122	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing
335129	Other Lighting Equipment Manufacturing	311223	Other Oilseed Processing
335311	Power, Distribution, and Specialty Transformer Manufacturing	325193	Ethyl Alcohol Manufacturing
311225	Fats and Oils Refining and Blending	324110	Petroleum Refineries
335311	Power, Distribution, and Specialty Transformer Manufacturing	324199	All Other Petroleum and Coal Products Manufacturing

LOGISTICS MANUFACTURING			
336120	Heavy Duty Truck Manufacturing	336611	Ship Building and Repairing
336510	Railroad Rolling Stock Manufacturing		

WATER TECHNOLOGY MANUFACTURING			
326122	Plastics Pipe and Pipe Fitting Manufacturing	333319	Other Commercial and Service Industry Machinery Manufacturing
333111	Farm Machinery and Equipment Manufacturing	333911	Pump and Pumping Equipment Manufacturing

HEALTH & WELLNESS MANUFACTURING			
339112	Surgical and Medical Instrument Manufacturing	325411	Medicinal and Botanical Manufacturing
339113	Surgical Appliance and Supplies Manufacturing	325412	Pharmaceutical Preparation Manufacturing
339114	Dental Equipment and Supplies Manufacturing	325413	In-Vitro Diagnostic Substance Manufacturing
339115	Ophthalmic Goods Manufacturing	325414	Biological Product (except Diagnostic) Manufacturing
339116	Dental Laboratories		

OTHER MANUFACTURING			
31-33	All Manufacturing Industries not listed above		

WATER TECHNOLOGY CLUSTER

2007 NAICS U.S. TITLE			
326122	Plastic Pipe and Pipe Fitting Manufacturing	333911	Pump and Pumping Equipment Manufacturing
333111	Farm Machinery and Equipment Manufacturing	423830	Industrial Machinery and Equipment Merchant Wholesalers
333319	Other Commercial and Service Industry Machinery Manufacturing	424910	Farm Supplies Merchant Wholesalers

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APPENDIX – D: CLUSTER COMPONENT DATA BY COUNTY

AGRICULTURE CLUSTER

Regional Total	Agriculture and Food Cluster Total	Agriculture and Food Cluster - Support	Agriculture and Food Cluster - Production	Agriculture and Food Cluster - Processing and Packaging	Agriculture and Food Cluster - Distribution
2010 Allocated Employment	289,014	119,394	81,795	62,579	25,246
Percent Change, 2001 to 2010	2.9%	2.9%	-6.6%	9.0%	27.5%
Location Quotient	4.14	5.50	4.93	3.33	1.98
Shift-Share	4.56%	-0.53%	2.61%	18.19%	12.13%
Fresno County Total					
2010 Allocated Employment	71,454	32,519	18,093	14,673	6,169
Percent Change, 2001 to 2010	-2.7%	-3.3%	-10.4%	5.5%	7.4%
Location Quotient	3.87	5.66	4.12	2.96	1.83
Shift-Share	-1.10%	-6.65%	-1.25%	14.66%	-7.97%
Kern County Total					
2010 Allocated Employment	57,107	30,451	17,221	5,768	3,667
Percent Change, 2001 to 2010	9.6%	7.2%	-1.8%	51.2%	54.5%
Location Quotient	3.89	6.67	4.93	1.46	1.37
Shift-Share	11.21%	3.86%	7.39%	60.31%	39.08%
Kings County Total					
2010 Allocated Employment	10,712	2,931	3,934	3,515	332
Percent Change, 2001 to 2010	8.0%	-16.0%	6.9%	46.7%	-5.8%
Location Quotient	5.46	4.81	8.44	6.67	0.93
Shift-Share	9.68%	-19.33%	16.10%	55.86%	-21.19%
Madera County Total					
2010 Allocated Employment	12,452	6,160	4,737	1,138	416
Percent Change, 2001 to 2010	6.6%	9.1%	2.7%	-4.8%	85.4%
Location Quotient	5.45	8.67	8.72	1.85	1.00
Shift-Share	8.27%	5.77%	11.86%	4.34%	69.98%
Merced County Total					
2010 Allocated Employment	19,788	4,477	7,333	6,085	1,894
Percent Change, 2001 to 2010	-1.9%	0.4%	-5.6%	-6.2%	30.3%
Location Quotient	5.48	3.99	8.54	6.27	2.88
Shift-Share	-0.23%	-2.97%	3.56%	2.99%	14.94%
San Joaquin Total					
2010 Allocated Employment	34,423	10,482	8,051	9,079	6,811
Percent Change, 2001 to 2010	1.1%	3.0%	-24.5%	1.6%	58.9%
Location Quotient	2.96	2.91	2.93	2.86	3.23
Shift-Share	3.01%	-0.33%	-15.31%	11.52%	43.54%
Stanislaus County Total					
2010 Allocated Employment	34,258	7,825	7,299	15,595	3,539
Percent Change, 2001 to 2010	-6.8%	-23.2%	-4.5%	-0.8%	10.6%
Location Quotient	3.65	2.68	3.27	6.18	2.07
Shift-Share	-5.15%	-26.59%	4.67%	8.38%	-4.80%
Tulare County Total					
2010 Allocated Employment	48,819	24,549	15,127	6,725	2,418
Percent Change, 2001 to 2010	14.4%	22.1%	-2.0%	35.8%	11.7%
Location Quotient	6.21	10.04	8.08	3.18	1.69
Shift-Share	16.05%	18.67%	7.15%	44.91%	-3.70%

APPENDIX – D (CONTINUED) – ENERGY CLUSTER

Regional Total	Energy Cluster Total	Energy Core – Alt Energy Distribution	Energy Core - Alt Energy Production	Energy Core - Energy Efficiency	Energy Core - Equipment Mfg.	Energy Core - Petroleum	Energy Core - Petroleum Distribution	Energy Core - Power Generation	Energy Related - Services and Research
2010 Allocated Employment	33,353	1,572	3,758	13,697	820	4,516	1,701	4,781	2,507
Percent Change, 2001 to 2010	-6.9%	-0.7%	1.7%	-27.1%	38.3%	5.3%	24.3%	35.9%	26.2%
Location Quotient	1.01	0.40	1.06	0.96	0.31	2.18	2.03	1.39	1.11
Shift-Share	13.32%	20.55%	-5.55%	-0.33%	80.04%	2.80%	21.39%	50.89%	21.91%
Fresno County Total									
2010 Allocated Employment	8,222	469	1,176	3,696	50	87	243	1,756	745
Percent Change, 2001 to 2010	-2.7%	-10.2%	12.8%	-22.4%	305.1%	278.3%	49.1%	29.5%	32.0%
Location Quotient	0.94	0.45	1.25	0.98	0.07	0.16	1.10	1.93	1.24
Shift-Share	17.53%	11.13%	5.52%	4.34%	346.81%	275.83%	46.15%	44.48%	27.64%
Kern County Total									
2010 Allocated Employment	11,679	396	879	3,238	447	4,381	663	905	769
Percent Change, 2001 to 2010	9.4%	-7.1%	43.0%	-3.8%	57.5%	4.3%	94.4%	1.9%	38.8%
Location Quotient	1.68	0.47	1.18	1.08	0.81	10.06	3.77	1.25	1.62
Shift-Share	29.59%	14.15%	35.79%	22.94%	99.21%	1.76%	91.50%	16.86%	34.50%
Kings County Total									
2010 Allocated Employment	578	24	144	243	0	0	34	69	64
Percent Change, 2001 to 2010	-11.1%	2.2%	79.3%	-24.2%	-100.0%	-100.0%	-46.8%	-35.5%	140.8%
Location Quotient	0.62	0.21	1.45	0.61	0.00	0.00	1.43	0.71	1.01
Shift-Share	9.14%	23.48%	72.10%	2.59%	-58.29%	-102.51%	-49.70%	-20.53%	136.44%
Madera County Total									
2010 Allocated Employment	752	10	168	297	52	12	37	127	49
Percent Change, 2001 to 2010	-26.5%	N/A	-39.8%	-38.1%	7619.4%	N/A	-77.0%	92.4%	29.4%
Location Quotient	0.70	0.08	1.45	0.64	0.60	0.18	1.34	1.13	0.66
Shift-Share	-6.27%	N/A	-47.04%	-11.35%	7661.12%	N/A	-79.88%	107.41%	25.06%
Merced County Total									
2010 Allocated Employment	1,005	27	129	431	61	0	47	213	96
Percent Change, 2001 to 2010	-32.5%	-24.3%	-1.5%	-34.8%	-75.0%	N/A	-34.7%	-23.9%	50.6%
Location Quotient	0.59	0.13	0.70	0.59	0.45	0.00	1.09	1.20	0.82
Shift-Share	-12.29%	-3.01%	-8.74%	-8.05%	-33.28%	N/A	-37.65%	-8.92%	46.27%
San Joaquin Total									
2010 Allocated Employment	4,559	374	506	2,283	108	33	193	757	304
Percent Change, 2001 to 2010	-11.1%	75.5%	-10.1%	-38.8%	467.5%	-23.8%	161.5%	313.8%	1.2%
Location Quotient	0.83	0.57	0.86	0.97	0.25	0.10	1.40	1.33	0.81
Shift-Share	9.14%	96.78%	-17.35%	-12.04%	509.21%	-26.29%	158.53%	328.78%	-3.12%
Stanislaus County Total									
2010 Allocated Employment	4,559	374	506	2,283	108	33	193	757	304
2010 Allocated Employment	3,836	157	386	2,176	96	1	303	386	330
Percent Change, 2001 to 2010	-29.9%	-34.9%	-28.2%	-44.2%	309.0%	N/A	21.2%	78.9%	9.6%
Location Quotient	0.86	0.29	0.81	1.13	0.27	0.01	2.69	0.83	1.08
Shift-Share	-9.69%	-13.58%	-35.48%	-17.47%	350.72%	N/A	18.27%	93.87%	5.24%
Tulare County Total									
2010 Allocated Employment	2,723	116	370	1,332	6	2	181	568	148
Percent Change, 2001 to 2010	-7.3%	-5.4%	-17.3%	-14.6%	364.8%	N/A	-26.4%	34.6%	8.6%
Location Quotient	0.73	0.26	0.92	0.83	0.02	0.01	1.92	1.46	0.58
Shift-Share	12.95%	15.84%	-24.52%	12.16%	406.48%	N/A	-29.35%	49.58%	4.32%

APPENDIX – D (CONTINUED) – HEALTH AND WELLNESS CLUSTER

Regional Total	Health and Wellness Cluster Total	Health Care - Delivery	Health Care - Medical Device Manufacturing	Health Care – Pharmaceutical	Health Care - Supplies and Services	Health Care - Wellness and Fitness
2010 Allocated Employment	128,178	114,585	1,269	311	2,434	9,579
Percent Change, 2001 to 2010	21.5%	22.6%	-24.3%	145.1%	80.7%	8.0%
Location Quotient	1.01	1.08	0.30	0.09	0.53	1.10
Shift-Share	3.49%	1.50%	-22.26%	134.86%	68.58%	5.93%
Fresno County Total						
2010 Allocated Employment	35,540	31,609	521	90	674	2,646
Percent Change, 2001 to 2010	15.4%	17.6%	-28.0%	70.2%	-12.4%	11.6%
Location Quotient	1.05	1.12	0.47	0.10	0.55	1.15
Shift-Share	-2.62%	-3.51%	-26.04%	60.02%	-24.47%	9.55%
Kern County Total						
2010 Allocated Employment	23,500	21,123	382	0	131	1,864
Percent Change, 2001 to 2010	22.5%	23.1%	-13.8%	N/A	4.7%	28.4%
Location Quotient	0.88	0.94	0.44	0.00	0.13	1.02
Shift-Share	4.51%	2.00%	-11.77%	N/A	-7.40%	26.35%
Kings County Total						
2010 Allocated Employment	3,903	3,632	1	9	15	246
Percent Change, 2001 to 2010	44.2%	48.4%	-86.4%	-13.8%	-36.2%	12.9%
Location Quotient	1.09	1.22	0.01	0.09	0.12	1.01
Shift-Share	26.24%	27.36%	-84.41%	-24.01%	-48.35%	10.86%
Madera County Total						
2010 Allocated Employment	5,481	5,160	1	0	12	308
Percent Change, 2001 to 2010	32.8%	34.8%	-95.2%	N/A	16.1%	16.8%
Location Quotient	1.31	1.48	0.01	0.00	0.08	1.08
Shift-Share	14.83%	13.70%	-93.19%	N/A	4.00%	14.73%
Merced County Total						
2010 Allocated Employment	5,960	5,462	22	29	18	430
Percent Change, 2001 to 2010	18.7%	17.8%	8.3%	104.7%	51.4%	26.8%
Location Quotient	0.90	0.99	0.10	0.15	0.08	0.96
Shift-Share	0.65%	-3.32%	10.28%	94.46%	39.25%	24.75%
San Joaquin Total						
2010 Allocated Employment	23,328	20,194	117	16	1,276	1,725
Percent Change, 2001 to 2010	25.5%	23.3%	-50.2%	-6.3%	2401.7%	-9.2%
Location Quotient	1.10	1.15	0.17	0.03	1.67	1.20
Shift-Share	7.50%	2.17%	-48.22%	-16.53%	2389.59%	-11.26%
Stanislaus County Total						
2010 Allocated Employment	21,261	19,420	213	136	129	1,363
Percent Change, 2001 to 2010	21.5%	24.0%	6.5%	423.7%	-33.8%	-4.4%
Location Quotient	1.24	1.36	0.38	0.28	0.21	1.17
Shift-Share	3.45%	2.94%	8.50%	413.47%	-45.87%	-6.41%
Tulare County Total						
2010 Allocated Employment	9,204	7,985	12	32	179	996
Percent Change, 2001 to 2010	21.6%	23.3%	-45.5%	352.4%	11.1%	10.4%
Location Quotient	0.64	0.67	0.03	0.08	0.34	1.02
Shift-Share	3.64%	2.26%	-43.46%	342.14%	-0.98%	8.38%

APPENDIX – D (CONTINUED) - LOGISTICS CLUSTER

Regional Total	Logistics Total	Logistics - Related Manufacturing	Logistics - Air, Rail, and Water Transport	Logistics - Truck Transport	Logistics - Freight and Warehousing	Logistics - Transit	Logistics - Other Transportation Services
2010 Allocated Employment	33,192	292	2,420	13,118	12,368	2,523	2,472
Percent Change, 2001 to 2010	15.2%	-23.3%	9.3%	1.3%	29.7%	1.8%	98.4%
Location Quotient	1.04	0.34	0.37	1.78	1.06	0.96	0.89
Shift-Share	24.92%	-24.06%	32.60%	13.64%	39.26%	-2.62%	62.76%
Fresno County Total							
2010 Allocated Employment	7,091	4	1,273	2,774	2,116	516	409
Percent Change, 2001 to 2010	14.5%	-96.4%	93.6%	4.8%	-1.9%	17.8%	109.8%
Location Quotient	0.84	0.02	0.73	1.42	0.69	0.74	0.56
Shift-Share	24.14%	-97.23%	116.88%	17.19%	7.64%	13.29%	74.11%
Kern County Total							
2010 Allocated Employment	4,950	0	363	2,335	1,725	180	347
Percent Change, 2001 to 2010	-6.7%	N/A	-62.2%	-5.8%	29.9%	-49.8%	93.5%
Location Quotient	0.74	0.00	0.26	1.51	0.70	0.32	0.60
Shift-Share	2.98%	N/A	-38.95%	6.57%	39.41%	-54.31%	57.85%
Kings County Total							
2010 Allocated Employment	553	0	52	310	54	112	25
Percent Change, 2001 to 2010	102.5%	N/A	285.7%	47.7%	125.2%	N/A	-3.3%
Location Quotient	0.62	0.00	0.28	1.50	0.17	1.51	0.32
Shift-Share	112.19%	N/A	308.98%	60.08%	134.72%	N/A	-38.90%
Madera County Total							
2010 Allocated Employment	534	0	52	321	53	14	94
Percent Change, 2001 to 2010	34.5%	N/A	449.7%	28.2%	186.3%	-81.3%	115.8%
Location Quotient	0.51	0.00	0.24	1.33	0.14	0.16	1.03
Shift-Share	44.21%	N/A	472.99%	40.57%	195.88%	-85.72%	80.16%
Merced County Total							
2010 Allocated Employment	1,789	172	16	891	469	198	43
Percent Change, 2001 to 2010	41.4%	-37.2%	-57.5%	62.7%	222.7%	7.6%	-44.5%
Location Quotient	1.09	3.87	0.05	2.34	0.78	1.45	0.30
Shift-Share	51.06%	-38.04%	-34.25%	75.10%	232.27%	3.09%	-80.19%
San Joaquin Total							
2010 Allocated Employment	10,140	7	431	3,639	4,453	338	1,272
Percent Change, 2001 to 2010	13.2%	N/A	18.2%	-9.9%	25.5%	-29.9%	141.1%
Location Quotient	1.92	0.05	0.40	2.98	2.30	0.77	2.78
Shift-Share	22.87%	N/A	41.48%	2.47%	35.09%	-34.37%	105.47%
Stanislaus County Total							
2010 Allocated Employment	4,721	100	139	1,644	1,917	710	211
Percent Change, 2001 to 2010	67.0%	2412.0%	32.6%	11.2%	223.0%	36.8%	65.1%
Location Quotient	1.10	0.87	0.16	1.66	1.22	2.00	0.57
Shift-Share	76.67%	2411.23%	55.89%	23.56%	232.58%	32.35%	29.50%
Tulare County Total							
2010 Allocated Employment	3,415	8	94	1,205	1,581	456	71
Percent Change, 2001 to 2010	-4.6%	N/A	42.9%	-7.6%	-8.1%	8.2%	2.9%
Location Quotient	0.95	0.08	0.13	1.45	1.20	1.53	0.23
Shift-Share	5.05%	N/A	66.17%	4.78%	1.40%	3.75%	-32.74%

APPENDIX – D (CONTINUED) – MANUFACTURING CLUSTER

Regional Total	Manufacturing Total	Food Processing, Ag Support, Water Flow	Medical Device Mfg. & Pharmaceuticals	Logistics - Related Manufacturing	Energy Equipment & Petroleum Mfg.	Diversified Manufacturing
2010 Allocated Employment	101,382	66,303	1,580	292	1,779	31,429
Percent Change, 2001 to 2010	-9.3%	6.0%	-12.3%	-23.3%	75.1%	-31.7%
Location Quotient	0.99	3.30	0.20	0.34	0.47	0.45
Shift-Share	21.33%	17.25%	-15.62%	-24.06%	108.64%	5.22%
Fresno County Total						
2010 Allocated Employment	24,441	16,072	611	4	206	7,548
Percent Change, 2001 to 2010	-11.2%	3.6%	-21.3%	-96.4%	1574.8%	-32.1%
Location Quotient	0.90	3.02	0.30	0.02	0.21	0.41
Shift-Share	19.45%	14.87%	-24.64%	-97.23%	1608.30%	4.83%
Kern County Total						
2010 Allocated Employment	12,877	6,021	382	0	1,236	5,237
Percent Change, 2001 to 2010	15.0%	44.2%	-13.8%	#DIV/0!	78.9%	-11.0%
Location Quotient	0.60	1.42	0.23	0.00	1.57	0.35
Shift-Share	45.64%	55.39%	-17.07%	N/A	112.42%	25.94%
Kings County Total						
2010 Allocated Employment	4,112	3,554	10	0	0	549
Percent Change, 2001 to 2010	21.0%	45.9%	-43.7%	N/A	-100.0%	-41.4%
Location Quotient	1.43	6.29	0.04	0.00	0.00	0.28
Shift-Share	51.65%	57.13%	-46.99%	N/A	-78.83%	-4.19%
Madera County Total						
2010 Allocated Employment	2,810	1,504	1	0	52	1,252
Percent Change, 2001 to 2010	-8.1%	-7.5%	-95.2%	N/A	7619.4%	-11.0%
Location Quotient	0.84	2.29	0.00	0.00	0.42	0.54
Shift-Share	22.53%	3.75%	-98.49%	N/A	7652.92%	25.97%
Merced County Total						
2010 Allocated Employment	7,998	6,202	50	172	36	1,538
Percent Change, 2001 to 2010	-19.7%	-6.7%	48.0%	-37.2%	N/A	-48.9%
Location Quotient	1.51	5.97	0.13	3.87	0.40	0.41
Shift-Share	10.91%	4.53%	44.67%	-38.04%	N/A	-11.70%
San Joaquin Total						
2010 Allocated Employment	17,958	9,632	133	7	120	8,066
Percent Change, 2001 to 2010	-20.3%	-2.3%	-47.3%	N/A	241.4%	-34.9%
Location Quotient	1.06	2.89	0.10	0.05	0.19	0.69
Shift-Share	10.34%	8.94%	-50.55%	N/A	274.88%	2.08%
Stanislaus County Total						
2010 Allocated Employment	20,626	15,927	349	100	97	4,152
Percent Change, 2001 to 2010	-9.1%	-0.9%	54.5%	2412.0%	315.3%	-34.7%
Location Quotient	1.49	5.89	0.33	0.87	0.19	0.44
Shift-Share	21.56%	10.36%	51.19%	2411.23%	348.78%	2.22%
Tulare County Total						
2010 Allocated Employment	10,560	7,391	44	8	6	3,111
Percent Change, 2001 to 2010	-7.6%	18.8%	50.6%	N/A	421.1%	-40.0%
Location Quotient	0.91	3.26	0.05	0.08	0.01	0.39
Shift-Share	23.01%	30.09%	47.27%	N/A	454.63%	-3.01%

APPENDIX – D (CONTINUED) – WATER TECHNOLOGY CLUSTER

	Regional Total
2010 Allocated Employment	2,668
Percent Change, 2001 to 2010	-26.9%
Location Quotient	2.44
Shift-Share	2.77%
Fresno County Total	
2010 Allocated Employment	1,014
Percent Change, 2001 to 2010	-17.9%
Location Quotient	3.50
Shift-Share	11.81%
Kern County Total	
2010 Allocated Employment	199
Percent Change, 2001 to 2010	-43.4%
Location Quotient	0.86
Shift-Share	-13.70%
Kings County Total	
2010 Allocated Employment	15
Percent Change, 2001 to 2010	-46.3%
Location Quotient	0.49
Shift-Share	-16.59%
Madera County Total	
2010 Allocated Employment	195
Percent Change, 2001 to 2010	-11.1%
Location Quotient	5.45
Shift-Share	18.59%
Merced County Total	
2010 Allocated Employment	106
Percent Change, 2001 to 2010	-22.1%
Location Quotient	1.88
Shift-Share	7.62%
San Joaquin Total	
2010 Allocated Employment	269
Percent Change, 2001 to 2010	-39.1%
Location Quotient	1.48
Shift-Share	-9.40%
Stanislaus County Total	
2010 Allocated Employment	259
Percent Change, 2001 to 2010	-1.0%
Location Quotient	1.76
Shift-Share	28.68%
Tulare County Total	
2010 Allocated Employment	609
Percent Change, 2001 to 2010	-37.6%
Location Quotient	4.94
Shift-Share	-7.88%