



# San Joaquin Valley Regional Economic Forum

*Creating a Great Place for People and Business*

## 2013 Regional Progress Report



California Partnership for the  
San Joaquin Valley

# INFRASTRUCTURE

## Goods Movement

### 1. Goods Movement Transportation Options

Goods Movement in the San Joaquin Valley (Valley) is currently dominated by a single transportation mode – trucking. In 2007, of the 450 million tons of goods that moved into, out of, or within the region, more than 85 percent moved by truck. There are some good reasons for this, and trucks will always be a very important component to goods movement in the Valley; however, it is important to continue to study the potential of expanding other modes in the region – including short-haul rail (namely an inland port at Shafter or Crows Landing to the Port of Oakland), access to Class I rail, and increased use of air cargo.

- **Consolidation Centers** - Identify sites for consolidation centers within the Valley that will allow better access and connectivity to Class I rail services.  
**CHAMPION:** San Joaquin Valley Councils of Governments Regional Policy Council (RPC), regional planning efforts  
**ADVISOR:** California Central Valley Economic Development Corporation (CCVEDC)  
**PROGRESS:** *The San Joaquin Valley MPOs are in the process of completing an Interregional Goods Movement Study, which will be released in June 2013. Issues like Class I rail connectivity will be discussed in further detail in the study. In Kern County, there is a truck to rail facility (Railex) that serves as an example of such a facility. In addition, the Office of Community and Economic Development's (OCED's) Regional Industry Cluster Initiative is convening stakeholder meetings to leverage public/private partnerships to achieve such objectives.*
- **Public Private Partnerships** - Develop plans to invest in non-truck modes (such as short-haul rail and air cargo) within a public-private partnership. This will ensure that plans have been vetted and that there is a business case for developing alternate transportation modes.  
**CHAMPION:** RPC, regional planners  
**ADVISOR:** CCVEDC  
**PROGRESS:** *Public-private discussions on goods movement are occurring through OCED's Regional Industry Cluster Initiative, an effort in which the COGs are participating. The first meeting was held in February 2013 and subsequent meetings will be occurring to facilitate regional discussions among public and private entities pertaining to infrastructure and logistics. The Goods Movement Plan will have a public-private financing strategy to implement these partnerships.*
- **Leverage of Existing Assets**- Capitalize on existing assets such as Foreign Trade Zones (FTZ) and investigate opportunities for export potential (e.g., Castle airport in Merced for cargo service).  
**CHAMPION:** City of Merced  
**PROGRESS:** *EDCs continue to market the availability of FTZ in the Valley. To date the FTZ has not been used to full potential.*

## 2. **Regional Corridors**

The region has several critical goods movement corridors (most notably I-5 and SR-99) that carry the highest volumes of trucks within the Valley. However, there are also many corridors and local roads that, though carrying smaller total volumes of trucks, are still vital to the region's goods movement. East-West corridors throughout the Valley (including SR-152, SR-58, SR-198 and SR-46) are especially important, as are numerous smaller facilities that connect single industrial sites, farms, agricultural processing centers, or other freight-generating activities to the Statewide and National freight system. It is crucial that all of these corridors are maintained at a level where the safe, efficient movement of goods is possible.

- **Upgrade SR-99** - Upgrade SR-99 fully per the plans identified in the 2009 Revised SR-99 Business Plan and other recent corridor studies.  
**CHAMPION:** RPC and Caltrans  
**UPDATE:** *A 2013 SR-99 Business Plan has been developed by Caltrans. This includes a revised financial plan to "assure a continuum of implementation of the Business Plan." In addition, nearly all of the Proposition 1B 99 projects have been implemented.*
- **Upgrade Local Connectors and East-West Corridors** - Create criteria within the San Joaquin Valley Goods Movement Plan to allow for local connector roads and East-West corridors to be evaluated fairly in the project prioritization process.  
**CHAMPION:** RPC, ongoing regional planning efforts  
**UPDATE:** *The SJV Goods Movement plan is expected to be released in June 2013. This document includes a discussion of East-West corridors and will inform current and future regional planning efforts.*

## 3. **Air Quality and Safety Impacts**

Goods movement in the San Joaquin Valley results in environmental and safety impacts to communities. Movement of trucks, trains, and airplanes all contribute to the region's air quality concerns, which has corresponding impacts to public health concerns. In addition, safety concerns exist around at-grade rail crossings, as well as along some corridors not designed to safely carry high truck traffic. Problems with illegal truck parking also impact communities.

- **Air Quality Conformity and Safety Criteria** - Build air quality conformity and safety goals into regional planning activities and project prioritization efforts. For example, create criteria within the San Joaquin Valley Goods Movement Plan to allow for the prioritization of projects that improve air quality or mitigate the impacts of goods movement.  
**CHAMPION:** RPC, ongoing regional planning efforts  
**UPDATE:** *These issues are being addressed in the forthcoming Goods Movement Study, which will look at a full range of environmental and community impacts from freight movement.*
- **Freight Integration with Land Use Planning**- Implement innovative actions at the location and regional level that help to better integrate freight into land use

planning. This will help to maximize the benefits of freight land use (jobs, GDP), as well as minimize the impacts on the Valley's residents and natural environment.

**CHAMPION:** RPC, ongoing regional planning efforts

**UPDATE:** *The COGs continue to evaluate and are deploying innovative modeling tools to better integrate land use and transportation planning, and to also be included in the scenario development of the SB-375 Sustainable Communities Strategies.*

#### 4. **Multimodal Connectivity to Ports**

Many of the Valley's agricultural and manufacturing products are exported out of the Valley to the Port of Oakland for access to national and international markets. This connectivity is essential to the livelihood of the Valley and should be preserved. In addition, as industries within the Valley strive to move up the value chain in agricultural production, these links to domestic and international markets will become even more crucial.

- **Port Connectivity** - Create criteria within the San Joaquin Valley Goods Movement Plan to allow for port connectivity projects to be evaluated fairly in the project prioritization process.

**CHAMPION:** RPC, ongoing regional planning efforts

**UPDATE:** *This will be included in the forthcoming Goods Movement Study.*

- **Public-Private Multimodal Projects** - Work in public-private partnerships to investigate multimodal options to connect to international and domestic markets, in particular as product moves up the value chain.

**CHAMPION:** RPC, ongoing regional planning efforts, private sector.

**UPDATE:** *The COGs continue to advocate for multimodal freight options, including short-haul rail, logistics operations out of Kern County, and projects with the Port of Stockton. This is also being discussed through OCED's Regional Industry Clusters Initiative, which is connecting public and private sector partners to promote our region's economic vitality in the fields of public sector infrastructure and logistics.*

## **Water**

### 1. **Water Education**

A recent poll by the firm Probolsky Research indicated that 78 percent of Californians do not know what the Sacramento-San Joaquin Delta is in Southern California, and a staggering 86 percent of those polled do not know what the Delta is. California residents' apparent lack of awareness of where their water comes from can be construed as evidence that water is not a high priority for Californians, despite chronic drought and an expanding population. Californians in the Valley and beyond must be educated about the state's water infrastructure and the impact strategic water management ultimately has on the Ag Value Chain, employment in the San Joaquin Valley, and consumer food prices.

- **Water Education for Valley Urban Residents**- Launch comprehensive campaign to educate residents in urban areas about the connection between water infrastructure, water conservation, and the San Joaquin Valley's economic livelihood (topics to include: the San Joaquin Valley's reliance on the Delta, the

Valley groundwater basin and their linkages).

**CHAMPION:** Smart Valley Places (SVP) & Rural Development Center (RDC)/  
Small Communities Network

**PROGRESS:** *Water education will be included in the SVP third convention scheduled for the fourth quarter of 2013. The RDC offers water education to smaller communities of 50,000 populations or below.*

- **Water Education for Valley Rural Residents-** Launch comprehensive effort to educate rural residents about water infrastructure and water-wise agricultural practices.

**CHAMPION:** Smart Valley Places & Rural Development Center/  
Small Communities Network

**PROGRESS:** *12 counties adopted water conservation as a water supply project for all Valley and Delta counties. A more comprehensive education will be considered for 2014.*

## 2. **Need for a Comprehensive Water Project to achieve the co-equal goals of Delta Sustainability and Water Reliability**

California's water system was designed for 17 million people. The population is projected to reach 38 million this year, and 50 million by 2040. The Sacramento-San Joaquin Delta, at the convergence of the Sacramento and San Joaquin Rivers, supplies water for 25 million Californians. The Delta is in crisis and the price of waiting to address this issue could be a disaster of unimaginable proportion. Even in the absence of catastrophic failure, major economic damage has been experienced by the state from inadequate means to collect, store and convey water during "wet" El Niño years. The economics of the Ag Value Chain in the Valley are in a chronically threatened condition because of the absence of a reliable, reasonably predictable supply of water. No issue is more important to the economic future of the Valley than a reliable supply of water. Because there is no single action that will "fix" the problem, a comprehensive project plan that strengthens levees, improves floodplain management, improves water circulation and quality, increases storage and conveyance, and provides for the Delta system to function as an integral part of a healthy estuary is critical moving forward.

- **Build Consensus for a Plan that Addresses the Needs of All California Water Stakeholders** - The California Partnership for the San Joaquin Valley has convened discussions between the eight Valley counties and the five Delta Counties (San Joaquin County overlaps the two groups) to build consensus for a solution that meets the needs of all water stakeholders. These discussions are being informed by the ongoing development of the Bay Delta Conservation Plan (BDCP).

**CHAMPION:** Water Work Group of the California Partnership for the San Joaquin Valley, Latino Water Coalition.

**UPDATE:** *The Partnership signed an MOA for participation in the United States Bureau of Reclamation (USBR) "Basin Study," designed to elevate future water demands and supplies for the Valley. The "Basin Study" includes \$500,000 of federal dollars and other agency match.*

## 3. **Interim Solutions for Water Reliability and Delta Sustainability**

Implementation of a comprehensive plan will take at least a decade. Interim solutions are available to bridge California to the time when a comprehensive plan is completed.

- **Develop Consensus on Priority Projects that Provide Interim Solutions-** Unprecedented cooperation has enabled the eight counties in the Valley and the five Delta Counties to converge on a set of water projects that will increase through-Delta capacity and reduce reliance on the Delta. This list of projects was finalized in the spring of 2012.

**CHAMPION:** Water Work Group of the California Partnership for the San Joaquin Valley.

**PROGRESS:** *12 county groups, consisting of eight Valley counties and four Delta counties, convened and adopted a list of projects for all areas of the Delta and San Joaquin Valley. The 12 counties adopted Delta Levees as a high priority for implementation projects, four ground water recharge projects, and one recycle water project as high priority. The 12 counties also adopted water conservation as a water supply project for all Valley and Delta counties. The Partnership approved the 12 counties' agreement at the September 2012 Board meeting.*

#### 4. **Maximize the Efficiency of Current and Future Water Supply Systems in the Valley**

It is vitally important to the future economic competitiveness of the Valley Ag Value Chain that water be an affordable resource. Attainment of water efficiencies is not a want – it is a necessity.

- **Development of Regional Water Budgets-** The region has initiated a process to develop a 50-year integrated regional water management plan through the use of water budgets (sources and uses). Progress on this project must be accelerated.

**CHAMPION:** Department of Water Resources and International Center for Water Technology

**PROGRESS:** *In Progress*

- **Maximize Groundwater Storage-** The largest and most cost-effective storage reservoir south of the Delta is the San Joaquin Valley water groundwater basin. The region must support institutional, financial and infrastructure investments that support the continued effective development of this resource.

**CHAMPION:** Partnership Water Work Group & Valley Legislators.

**PROGRESS:** *12 counties adopted four ground water recharge projects and one recycle water project as high priority.*

## Energy

### 1. **High Energy Rates**

For the last two decades, the Valley has shown average annual unemployment rates ranging from 62percent to 153percent above the state average. Valley efforts to target new employers or expand existing businesses have been adversely affected by electricity rates that are significantly higher than rates in other California regions and other states. Food processors are particularly large energy users and rely heavily on electricity for production processes. In Fresno County, food processors rank number two among all market segments in total electricity, consuming over \$170 million in annual electricity costs (using 2010 data). This has contributed to a condition where, while the Valley continues to be the production agriculture capital of the

nation, much of the value added in the Ag Value Chain has moved out of the Valley. There have, in the past, been electricity rates to promote economic development, but none have met with much success due to limited discount, complexity and constraints.

- **Energy Conservation Grant Program** - Working with the utilities serving the Valley, develop an energy conservation grant program, funded out of Public Benefit Charges and federal grant programs, that creates incentives for businesses in the Ag Value Chain to implement energy conservation projects.

**CHAMPION:** San Joaquin Valley Clean Energy Organization

**PROGRESS:** *No action was taken as grant opportunities did not materialize.*

- **California Public Utilities Commission (CPUC) Approval of PG&E Enhanced Economic Development Rate**

**CHAMPION:** “Local Government Parties” - 40 cities and counties throughout the State, and numerous business and community groups.

**PROGRESS:** *PG&E, which serves the majority of customers in the Valley, filed an application with the Public Utilities Commission on March 1, 2012 to create an enhanced economic development (EED) rate that offers a substantial discount for businesses (industrial or commercial users) that locate or expand in the Valley as well as businesses that might otherwise relocate away from the Valley. The rate, if approved as proposed, would be available in all counties with an unemployment rate 125 percent higher than the state average (22 California counties met this criterion in 2011), and utilized by those businesses retaining or adding a minimum of 200 kW of energy use. The rate has gone through a formal PUC proceeding schedule, and a proposed decision is expected by the administrative law judge no later than May 2013. After the proposed decision, the CPUC commissioners will make a final decision concerning the rate. The decision is anticipated to be made by June 2013.*

*Valley stakeholders must urge the CPUC Commissioners to support PG&E’s request for approval of such a special rate as proposed. Additional information and a draft letter of support for the EED Rate can be downloaded at [www.fresno.gov/energy](http://www.fresno.gov/energy).*

## Broadband

### 1. Expedite the provision of Broadband access in all areas of the San Joaquin Valley.

- **Create San Joaquin Valley Regional Broadband Consortium (SJRBC)**

**CHAMPION:** Office of Community and Economic Development, Fresno State.

**PROGRESS:** *The SJRBC was established in 2012 and awarded a California Public Utilities Commission grant of \$150,000 per year for three years. The goals of the SJRBC is to encourage expansion of broadband to 95 percent of the Valley by 2015, provide digital literacy education, and expand telemedicine and telehealth*

*opportunities to unserved areas of the Valley. The SJVRBC has identified local best practices, developed case studies, and will be seeking grant funding to develop an agricultural pilot site to promote broadband throughout the Valley.*

- **Define Projects to Close Valley Broadband Gaps**

**CHAMPION:** Office of Community and Economic Development, Fresno State.

**PROGRESS:** *Using the California Public Utilities Commission’s Interactive Broadband Map, staff has identified the least served communities by county in our region. SJVRBC has identified a variety of innovative strategies, including TV white space technology and municipally-owned fiber networks, as practices that could be deployed to increase access in our region.*

2. **Increase Farm Access to Broadband**

There is an urgent need to promote accessibility and utilization of broadband in targeted underserved and unserved communities and populations on farms. The twin challenges of water and energy faced by production agriculture, and opportunities to increase yield to meet global demand, can be met with new agricultural technology; however, farm field access to wireless broadband is needed as the connective platform for the new technology. Farmers do not have adequate wireless broadband access to utilize new agricultural technology. Wireless broadband with sufficient data transmission capacity to meet future needs at minimal cost must be deployed throughout the San Joaquin Valley in order for agriculture to continue to increase its productivity.

- **Improve Wireless Broadband Access in Agricultural Areas**

**CHAMPION:** San Joaquin Valley Regional Broadband Consortium

**PROGRESS:** *The SJVRBC continues to promote the ag pilot site and will seek funding for this effort in Q3 2013. Staff is working with H2M Group to promote their technology which enables wireless carriers to lease utility pole space for service. In addition, the city of Fresno was awarded an IBM Smarter Cities Challenge grant that will provide them access to an international team of technical experts in spring 2013. SJVRBC will be participating in that, and it will provide technical assistance in developing the pilot site.*

- **Integrate with State Plans and Neighboring Regions.**

**CHAMPION:** San Joaquin Valley Regional Broadband Consortium

**PROGRESS:** *Staff continues to work and exchange information with CPUC staff and other consortia on projects of mutual interest as part of our regular activities.*

3. **Healthcare Access in Rural Communities**

With current barriers to healthcare access in most of the rural areas, telemedicine and telehealth technology through broadband must be increased.

- **Expand Telemedicine/Telehealth**

**CHAMPION:** San Joaquin Valley Regional Broadband Consortium

**PROGRESS:** *SJVRBC is working with CTN to promote telehealth in rural areas. The staff is working with Kern County medical and a team of medical and community stakeholders in Allensworth to provide access in their community center. Staff is also involved in OCED's Regional Industry Cluster Initiative (RICI), which has a Health and Wellness Cluster that has a large telehealth focus.*

4. **Apply Telehealth/Telemedicine Model to Other Valley Applications.**

- **Expand Telemedicine/Telehealth Model To Other Valley Applications**

**CHAMPION:** San Joaquin Valley Regional Broadband Consortium

**PROGRESS:** *SJVRBC is tracking telehealth funding opportunities and connecting them to eligible valley organizations. The hope is to find eligible grantees for the FCC's recently allocated \$400 rural telehealth fund.*

## **WORKFORCE**

1. **Reliable Supply of Ag Production Workers**

Agriculture needs a steady stream of seasonal labor and skilled workers to meet the needs of growers, producers and other employers to keep agriculture viable; meet projected growth demand across the value chain, including emerging needs for new skilled labor; and address the growing need to replace retiring skilled workers. While there is an existing workforce of skilled, full-time employees with a unique skill set, many workers are undocumented and there are chronic labor shortages. There is a need for a workable immigration program to ensure a legal, qualified workforce, one that provides flexibility for employers and employees, takes care of workers who are here, and provides a guest worker component to meet the temporary and seasonal needs of farms and processors. The program should be coordinated with recommendations for E-Verify legislation (see Issue 2).

In the absence of federal comprehensive immigration reform, legislation has been passed or introduced in a few other states creating state guest worker programs, and several other states have studies or are considering the introduction of such state initiatives. In California, proposed state legislation (M. Perez AB 1544) would establish a program that provides agricultural and service sector businesses a safe and legal way for their currently unauthorized workforce to work in California. Creation of the program would be contingent on California receiving authority from the federal government. The author is seeking to move the dialogue forward.

- **Guest Worker Program**

- Valley leaders should work with the legislature, including the Valley delegation, on AB 1544 as a vehicle to address the need for a guest worker program with the federal government.
- Valley leaders should coordinate with leaders in other regions to develop the policy recommendations for a legal, qualified work program and work with State officials, who in turn should advocate for the policy with the federal government.
- Valley leaders should continue to monitor legislative developments and engage in grassroots advocacy when the call for action is issued by the

national coalition working on immigration reform (Ag Coalition for Immigration Reform).

**CHAMPION:** Nisei Farmers League

**PROGRESS:** *Congress is currently developing a comprehensive Immigration Bill. Valley Leaders have been working with Valley legislators.*

## 2. **E-Verify Program for Agricultural Workers**

E-Verify is a voluntary internet-based free federal program administered by the Department of Homeland Security (along with the Social Security Administration) that some businesses use to verify the legal status, and thus eligibility, of employees being hired. The E-Verification process as currently designed is unworkable for agricultural employers, upstream and downstream. The Nisei Farmers League has documented the unique challenges for agricultural employment, based on the experiences of farmers who have attempted to use the program. These challenges include: user-unfriendly process; hiring done in the field instead of an office; large number of employees hired at one time; technology constraints (lack of high-speed internet connectivity, computers, etc.). E-Verify federal officials hosted by the Nisei Farmers League agreed that it would be difficult to implement the program in an agricultural setting. The Department of Homeland Security should complete the E-Verify for Agriculture Program they have been developing for two years.

- **E-Verify Agriculture Program-** Valley leaders should coordinate with other regional leaders to work with the California Department of Food and Agriculture and Labor and Workforce Agency to advance support for an E-Verify Agriculture Program, for State advocacy with the federal government.

**CHAMPION:** Nisei Farmers League

**PROGRESS:** *Congress is currently developing a comprehensive Immigration Bill. Valley Leaders have been working with Valley legislators.*

## 3. **Middle Skills Training**

The Valley has several opportunities/assets which can be leveraged to meet both regional and statewide demand for a highly skilled Ag workforce, including new models for education and workforce development. The Central California Community Colleges Committed to Change (C6) consortium is a new federally funded initiative that will focus on redesign of the educational system working with employers in Ag and other areas. The Central California Workforce Collaborative (Valley Workforce Investment Boards - WIBs) is working on state and federally funded regional sector-based strategies, also the focus of the California Central Valley Economic Development Corporation. Fresno State's Jordan College of Agricultural Sciences and Technology is responsible for producing a significant fraction of college graduates in agricultural fields in the Valley, with other Valley CSU's contributing to this educational base. Fresno State is conducting a value chain clusters strategy that can help engage employers and facilitate partnerships.

- **Education/Workforce/Employer Partnerships-** Planning time is needed to convene work groups of industry and faculty leadership to make the needed curriculum and program redesign that will be used regionally to meet common industry needs and put students to work. C6 education partners will collaborate with industry associations and businesses to develop *Employer Partnerships* to increase career awareness and educational opportunities for students, parents and faculty through

mentoring, industry tours, and business internships (high school and up). The community colleges will work within well-established partnerships with the regional Workforce Investment Boards to develop on-site customized training (through possible contact Ed or distance Ed and certificate programs specific to an occupation rather than a 2-4 year degree), with an industry cluster focus. Partners will need to help increase industry awareness of this resource.

**CHAMPION:** Central California Community Colleges Committed to Change (C-6); Central California Workforce Collaborative.

**PROGRESS:** *Through the Regional Industry Cluster Initiative (RICI) workforce agencies, (Workforce Investment Boards, Community Colleges and Valley Universities) are collaborating with industry leaders and associations to close the “skills gap” in seven industry clusters – Ag, Water Technology, Energy, Manufacturing, Logistics, Public Infrastructure, and Health and Wellness.*

- **Employer Education Activities-** Education and workforce partners should work more closely with employers on strategies to improve incumbent worker skills, including counting of work credits for learning, employee educational assistance programs, and working with K-12 on scholarships.

**CHAMPION:** Central California Community Colleges Committed to Change (C-6); Central California Workforce Collaborative.

**PROGRESS:** *This is also being addressed through the RICI.*

- **Funding Support for Career Technical Programs-** The C6 partners should and will proactively seek additional funding sources, including banks and foundations, to support collaborative ag-related workforce initiatives.

**CHAMPION:** Central California Community Colleges Committed to Change (C-6); Central California Workforce Collaborative.

**PROGRESS:** *The Office of Community and Economic Development (OCED) at Fresno State is working with Community Colleges and Workforce Investment Boards on identifying funding opportunities. OCED will collaborate with workforce partners and writing grants.*

## **INNOVATION**

### 1. **Identify and Fill the Voids in the Regional Ag Value Added Chain**

A major opportunity is to supply more “product,” both raw and processed, to export markets at a competitive price. This requires that we find ways to improve production, processing and delivery efficiencies, as well as increase the information content supplied with the products.

- **Connect technology Solutions to Voids in the Valley Ag Value Chain.**
  - Identify all crops and agriculture products produced in the region
  - Identify the voids of production and value added processes in the region
  - Quantify the economic benefits that are being lost from potential value-added processes that could be feasible if barriers were overcome through new or existing applied technology
  - Identify the specific innovative techniques and technologies that will assist production and value added agricultural products in the region

- Utilize a partnership of industry, academia, and regional government agencies to identify innovation deficits in agriculture production and value-added processes in the region.
- Identify and apply technology solutions from non-agriculture industries to address Ag challenges.

**CHAMPION:** Tony Oliveira

**PROGRESS:**

- ***Agriculture production data has been gathered and merged, including crops and livestock from the eight county regions for the 2011 production year.***
- ***A combined data base of all eight counties is being built and the area is being treated as a regional production and consumption market place for crops and livestock produced.***
- ***When completed the data base will include regional:***
  - ***Farm gate economic values***
  - ***Location and needs assessment for support infrastructure such as transportation, water, energy, etc.***
  - ***Locations of existing processing facilities by product addresses and GPS locations***
- ***Using existing and trend data will calculate value added facilities needed and best location probabilities***
- ***Establish existing, five year, 10 year, and longer term voids of infrastructure, labor, and technology to meet the identified value added opportunities***
- ***A side by side study has begun of how the new oil and natural gas project by Oxy chemical will facilitate general economic growth in the region and how it can bolster value added agriculture, especially in the areas that utilize natural gas as a processing energy source input and by lowering production input costs by the manufacturing of fertilizers in the region.***
- ***A database of numerous technologies has been started and can be adapted to production agriculture and agribusiness processes that increase efficiency and create jobs.***
- ***Working relationships with Fresno State, UC Merced, and the Blue Technology Group have been established.***
- ***Funding is being sought to be able to complete data collection and research analysis.***

## 2. **Industry and Academic Partnerships.**

There are both short and long-term applications of innovation and technology that can have significant impacts on jobs and economic opportunities for the Valley, California, and far beyond. While California research universities historically have had significant impacts on finding technologies that improve many aspects of the agriculture and manufacturing value-added chains, the process may take longer than some of the more immediate opportunities require. Community colleges have played significant and more immediate roles for the needs of applications of innovation and technology to prepare the regional workforce to attract or maintain value-added businesses. Innovative leaders in agriculture production and manufacturing typically evaluate and adopt new technologies to remain competitive. However, for the larger community of the industry, the adoption of new technology is often delayed due to

the costs, and, to a certain extent, a complete understanding of how new technology will improve the company's bottom line. Overcoming this, and realizing the beneficial effect on a much larger fraction of the regional industry, is a challenge. There is some level of disconnect between the needs of the Valley and the universities and community colleges of California when seeking innovative solutions to increasing the amount of value-added processes within the region.

- **Create Industry/Academia Partnerships to Develop Technology Solutions for the Ag Value Chain**
  - Utilizing a partnership of industry, academia, and regional government agencies, form a task force that recognizes the deficits in innovation in identified production and value-added processes to seek development and application of innovation and technology.
  - Form regional working groups between production agriculture leaders with the universities and community colleges within the region to target industry- identified barriers to adding production and value-added processes.
  - Seek direct investment of industries into university and college projects that are identified that would enhance the value-added process.
  - Form and/or advance regional working relationships between universities and community colleges to solve the needs of industry when the time is critical to solve workforce training, such as time and motion studies, and needed applications of innovative technologies to solve the issues and attract or maintain production and value-added industries.

**CHAMPION:** Valley Universities and Community Colleges

**PROGRESS:** *All activities identified above are being addressed as part of the RICl process.*

### 3. **Finding the Efficiencies of Water and Energy**

Much of the opportunity for the value-added to expand both in the domestic and international markets will be driven by the ability to add value through the use of innovative ways to efficiently use energy and water. The Valley economic ecosystem has substantial challenges but also some important advantages relative to value-added processing. It has plentiful energy sources in terms of solar and biomass, a new UC with a distinctive mission that equally weights regional and global impact, and an innovative private sector in the field of energy and water technology.

- **Establish Technology Prominence in Water and Energy** - Establish a mechanism to help producers and processors identify needs AND evaluate the potential of existing technologies to mitigate the problem. It would then be critical that their findings be conveyed to those sectors of the industry that would benefit from their work.

**CHAMPION:** Water, Energy and Technology (WET) Center

**PROGRESS:** *Technology Innovation Evaluation committee is in place to evaluate technologies and suggest next steps in the commercialization process. The Water, Energy and Technology (WET) center can assemble interdisciplinary teams of experts from academia, industry, investment community and entrepreneurship to validate and evaluate technologies.*

**Water Cohort at Fresno State was established.**

**PG&E's Water and Energy Facility at Fresno State was created.**

- **Leverage the state-of-the-art WET center as a resource to attract new and growing tech-based companies and technologists to the Central Valley.**  
**CHAMPION:** Water, Energy and Technology (WET) Center  
**PROGRESS:** *The WET Center is continuously working towards being a center that will catalyze and enable focused development of new technology solutions and businesses to improve management of water. WET is focusing on local water problems to develop technology solutions with potentially global applications. Promotion through BTV provides exposure for the WET Center.*
  
- **Expand the reach and capacity of the Water and Energy Technology Incubator program – an intense, self-driven, mentor-based business development program designed to accelerate the process from concept to commercialization**  
**CHAMPION:** Water, Energy and Technology (WET) Center  
**PROGRESS:** *Programs and services are in place at the WET Center to help and assist companies and entrepreneurs launch their business. Approximately 20 companies are currently members of the WET Center; five are housed at the center. Companies include AquaCents, AG/H2O, Aquacue, Arbsource, Auldan Inc., Beet Energy, C3, Climatedinder, Coltvalve, Duane Morris, Enernoc, Global Eco Soils Solutions, GoEngineer, Landview, MCRE, mOasis, Nautilus Systems, New Sky Energy, Nobska Technologies, Puresense, Vorsana, and Znano.*
  
- **Maximize the resources and network of the WET Center to support and grow the development of innovative technologies in the Water and Energy fields.**  
**CHAMPION:** Water, Energy and Technology (WET) Center  
**PROGRESS:** *Tech showcase in collaboration with OCED and USDA in the planning stage. This will provide a great opportunity for local companies to license technology developed within USDA.*
  
- **Strengthen and expand the BlueTechValley (BTV) initiative that is identifying, naming and establishing access to the many resources and assets available to support and grow the technologies and commercialize the products necessary to enhance Ag production.**  
**CHAMPION:** Water, Energy and Technology (WET) Center  
**PROGRESS:** *Expansion of BTV Committee to include broader representation from private industry. The committee is now comprised of the following individuals:*
  - *Henrik Skov Laursen- Director, Grundfos Silicon Valley/Chair, BlueTechValley Committee*
  - *Helle Petersen- General Manager, Water, Energy and Technology Center*
  - *Aric Olson- President, Jain Irrigation*
  - *Bill Covino- Provost, California State University, Fresno*
  - *Claude Laval- Chairman of the Board, Claude Laval Company*
  - *David Zoldoske- Executive Director, Water Resources and Water Initiatives, Fresno State*
  - *Kirk Nagamine- President/CEO CVBI-SBDC*
  - *Lance Donny- CEO/Founder, OnFarm*

- *Bill Smittcamp- President /CEO – Wawona Frozen Food*
- *Antonio Oliveira- Economist/ Research and Public Policy Consultant*
- *Scott Jackson- CEO/Owner – Jackson Consulting*
- *Vaughn Koligian- Director Coporate Sustainability – Sun-Maid Growers*
- *Stuart Woolf- President, Woolf Farming Co.*
- *Alice Saviez- Saviez Farms, Central Valley Business Incubator Board Member*
- *Barbara Rodiek- Chief Operating Officer, Central Valley Business Incubator*
- *Karl Longley- Professor Emeritus, Lyles College of Engineering, Fresno State*

*The WET Center has partnered with ImagineH2O, a San Francisco based non-profit aiming at turning water problems into opportunities, in launching a start-up competition focusing on solutions to water efficiencies in the food and beverage industry. The objective is to identify and find companies and technologies that can be tested and commercialized in this area, using the vast amount of resources available in BTV.*

*BTV was invited to be part of EPA’s Water Technology Innovation Cluster Leaders’ group. The objective is promoting collaboration between the different water cluster/initiatives in the US. BTV is the only west coast representation.*

*The WET Center continues to promote BTV as a smart-water living laboratory to provide new and existing companies a real-world testing and validation site for water technology innovation.*

- **Market the BlueTechValley brand to a statewide, national and international audience – promoting the established and unique ecosystem of water and energy innovation and the marketplace it represents.**  
**CHAMPION:** Water, Energy and Technology (WET) Center  
**PROGRESS:** *WET Center is launching website and BTV publication to establish brand and provide educational information about BTV.*  
*WET Center is hosting the second BTV Water Conference in May 2013, focusing on water efficiency in food supply*

#### 4. **Absence of Efficient Regional Supply Systems**

There is a significant opportunity to design regional supply systems to supply regional markets, thereby increasing integration and adding value in the chain. Such supply systems should aim to serve local markets as well as geographically proximate markets. For example, there is a significant opportunity for the San Joaquin Valley to meet the demand for freshness in the L.A. market.

- **Design Efficient Regional Supply Systems-** Continue to convene farms, aggregators (and food hubs), distributors and end-business to design and implement efficient regional food supply systems.  
**CHAMPION:** USDA Rural Development  
**PROGRESS:** *Numerous Valley organizations including OCED and the Partnership are working with USDA Director Glenda Humiston on establishing food hubs in the Valley through Food Commons. Additionally, efforts are underway to making connection to Oakland and LA ports for exporting value-added Ag products.*