WIRED CALIFORNIA INNOVATION CORRIDOR
SEPTEMBER 22, 2006

Executive Summary

The California Innovation Corridor infrastructure is, by almost any lens – federal laboratories, research universities, corporate R&D, national security RDT&E installations, advanced manufacturing, Nobel laureates - the greatest concentration of potential innovation assets in the world. Yet, as outlined in the CIC WIRED proposal, despite California's reputation for entrepreneurship, according to the *Innovation-Entrepreneurship NEXUS* study, not a single sub-region within the Corridor region was ranked within the top 25 most entrepreneurial areas of the country.

A second issue, at least partially attributable to globalization, is the Corridor's 26.4% manufacturing job loss. This staggering decline, which occurred from 1990-2004, represented nearly all of the decline in California manufacturing, as well as 13% of the national decline during the same time period. One manufacturing industry typifying California's past innovation represented the largest segment of California's manufacturing decline. Computer and electronic product manufacturing represented 33.9% of the Corridor's manufacturing recession.

A shortage of technical workers represents a third challenge to the Corridor. Nearly every sector of California's high-tech economy reports difficulty finding qualified workers. The problem is compounded by the graying of the workforce and the quantity of those in the pipeline. The Corridor's 1.5M manufacturing workers are rapidly reaching retirement age, creating a technical worker crisis of profound proportions. The retirement issue is exacerbated by the fact that 37% of the University of California technical grads are foreign students ineligible to work on high security projects. California is just not graduating enough science and math majors…the state currently needs 2100 math teachers, not counting those needed for industry, and the California only graduated 1389 math majors in 2004.

California's annual unemployment rate in the Innovation Corridor has averaged more than a percentage point higher than the nation's for the period of 1990-2004. Job growth for 2001-2004 shows a disturbing trend - industries experiencing a net increase in employment paid an annual wage $14,827 lower than those industries experiencing a net decrease in jobs.

As a global portal, the Corridor boasts many export-contributing industries. Yet, off-shore manufacturing and global competition are having their effects. In 2004, California saw a $1.5B negative trade balance.

To address the above situation, the California Innovation Corridor proposed for its WIRED grant a three target approach: Innovation Support, Industrial Rejuvenation, Talent Development. Twenty-five projects were outlined under these three areas, with five of these projects being identified as "Sustainability Projects", those projects seen as having not only stand-alone impact, and impact within the target area, but also across all three target areas and synergistically across the whole.

WIRED California Innovation Corridor (CIC) Goals

Upon award of the grant, the Corridor Leadership Team developed a Project Integration Protocol (PIP) for its WIRED grant in which the Intention of the CIC WIRED Initiative was stated as: *Optimize the Corridor for Innovation.*

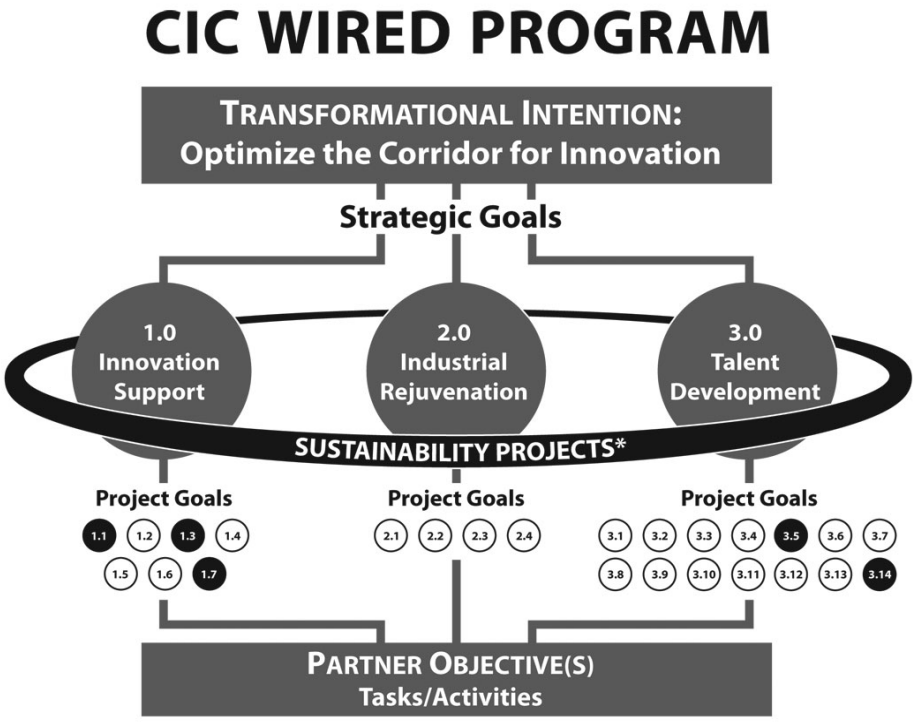
Three strategic transformational goals aligning with the three target areas were articulated in the PIP:

Strategic Transformational Goal #1:
Create an atmosphere in which the culture, environment and systems are characterized and driven by robust innovation and flourishing entrepreneurship.

Strategic Transformational Goal #2:
Ensure common "smart supplier" competitiveness and enterprise-driven outcomes across supply chain provider/support network.

Strategic Transformational Goal #3:
Integrate consideration of current and future industry enterprise needs into workforce and educational planning and policymaking.

To illustrate how the Intention of the CIC WIRED grant, the Strategic Goals, the 25 Project Goals, the Sustainability Projects and the ensuing Partner Tasks would all fit together, the CIC Leadership Team created the graphic which follows.



*Sustainability projects are those projects that support both a strategic transformational goal and also the greater CIC WIRED grant effort as a whole. Sustainability projects include: 1.1 (Economic Development Model), 1.3 (Innovation Asset Inventory), 1.7 (Web Toolkit), 3.5 (K-U STEM Collaboration Strategic Action Plan), 3.14 (Learning Collaboratory)

Strategic Transformational Goal #1

Key Strategies (Projects)	Partners (* designates lead)	Timeframes Milestones	Resources Needed	Desired Outcomes Metrics
1.1 Economic Development Model for Entrepreneurship Support	*BAEF/BASIC CCST Chabin CSA ECEDC LAEDC SLOEDC Golden Capital	▪ Incorporate 1.3 Innovation Assets Inventory results (Year 2) ▪ Host Bay Area Innovation Network for decision-makers (Year 2) ▪ Research innovative strategies and creative economic development tools ▪ (Year 1) ▪ Develop a communication strategy to deploy the economic model to key targeted industries to reach the targeted entrepreneur audience. (Year 2) ▪ Complete training in the 3 pilot project Venture Communities (Year 2) ▪ Provide technical assistance to innovation-based entrepreneurs (Year 2) ▪ Provide detailed report of Venture Communities pilots during CIC "All Partners Meeting" (Year 3) ▪ Produce a project final report (year 3)	T.A. to review strategy to determine if on the right path	▪ Develop an economic development model in the first 18 months incorporating effective economic development roadmaps, integrating resources and innovative tools to reach the targeted entrepreneur audience. ▪ Complete annual benchmarking report and index to see how each of 3 venture communities has grown its innovation sector network.
1.2 21st Cent Workforce Profiles	*BAEF/BASIC CCST CSA LA Co WIB NOVA RIVER WIB SBAY WIB SBEDP SBERWIB SDWP	SOW in development	SOW in development	SOW in development
1.3 Asset Inventory	AVBOT *BAEF/BASIC CSA ECEDC GAVEA IEEP KERN EDC LAEDC LOMPOC OCBC SBEDP SLOEVC SMariaEDC VCEDA	• Develop CIC innovation asset templates (Year 1) • Inventory 20 key innovation assets (Year 1) • Design the CIC "portal" within the Connectory.com to display • Search, and link innovation assets to CIC partners and companies (Year 1)	SOW in progress	▪ Identification and profiling of a minimum of 140 CIC Innovation Assets (Federal and private R&D labs, military installations, and private companies) ▪ Add the 140 profiles to the Connectory.com
1.4 Demonstration project with SBIR Phase II awardees	*ECEDC Golden Cap LA Co WIB LAEDC MCSC NASBO SDWP	▪ Team attendance at VC Forum (Year 1) ▪ Identify location for Venture Community Forums(Year 1) ▪ Identify target entrepreneurs to participate(Year 2) ▪ Collection of key data for benchmarking(Year 2) ▪ Logistics of hosting forums(Year 2) ▪ Recruitment of investors and participants(Year 2) ▪ Data collection from attendees (Year 2) ▪ Analyze data (Year 3) Develop conclusions and write final report (Year 3)	TA – similar to 1.1 – Provide info on other efforts to support entrepreneurs nationwide or other WIRED projects.	▪ Collection of key data for benchmarking of activities that support entrepreneurs to successfully grow their companies ▪ Facilitate 10 SBIR Phase II companies to reach phase III ▪ Secure 50 participating investors and 40 Innovation All-Stars as ▪ Develop best practices from data collected ▪ Foster development of community investors
1.5 Pilot program: Innovation/Entrepreneurship Industry/Gov't Lab Review (formerly professorial internship)	CSA *Stanford UCR	SOW in progress	SOW in progress	SOW in progress

Key Strategies (Projects)	Partners (* designates lead)	Timeframes Milestones	Resources Needed	Desired Outcomes Metrics
1.6 Pilot program: Innovation/Entrepreneurship Industry/Gov't Lab Review (formerly graduate internship)	CSA *Stanford UCR	SOW in progress	SOW in progress	SOW in progress
1.7 WIB Toolkit	*CCST CSEWI CWA	• Develop a WIB resource manual (tool kit) with a focus on support for innovation companies and entrepreneurs (Years 1-3) • Complete research (Year 1) • Hold preliminary meetings and discussion regarding possible content of task (Year 1) • Begin discussion of task development, content, results(Year 1) • Identify areas requiring information gathering and data collection (Year 1) • Identify appropriate consultants to assist with research tasks. (Year 1-2) • Prepare a substantive draft WIB manual (Year 2) • Organize meetings with WIBs and other local and regional groups to validate findings(Year 3) • Present findings at CWA Meeting of the Minds forum (Year 2- 3) • Involve key stakeholders in discussions leading to the publication of a final WIB manual/toolkit. (Year 3)	TBD	Develop a WIB resource manual (tool kit) with derivative products with a focus on support for innovation companies and entrepreneurs.

Strategic Transformation Goal #2:

Key Strategies (Projects)	Partners (* denotes project lead)	Timeframes Milestones	Resources Needed	Desired Outcomes Metrics
2.1 Supply Chain Industry Advisory Group; Industry Training Needs Survey, Forum	AVBoT AV College *CSA L5/SEA SVLLC	• Prepare survey (Year 1) • Develop the survey (Year 1) • Distribute survey link to prime and supplier network (Year 1) • Analyze results of survey (Year 1) • Report survey results (Year 1)	TBD	• Generate completion of a minimum of 1,000 company responses to the survey • Develop a report identifying the common outcomes needed by both the primes and the suppliers to sustain and support global competitiveness
2.2 Smart Supplier common competitiveness learning outcomes across provider support network	AV College CMTC *CSA L5/SEA	• Recruit industry representatives to the Industry Advisory Group (IAG) • Attend or participate in the Industry Forum • Develop "smart supplier" common learning outcomes • Develop implementation strategy of the common learning outcomes • Develop a final report	TBD	• Host "Smart Supplier" Supply Chain Transformation Forum • Documentation of the needs of primes and suppliers • Develop into a final report
2.3 Outreach plan to 3000 supplier contacts re: ETP training funds	*CSA	SOW in progress	None expected	SOW in progress

Strategic Transformation Goal #2:

Key Strategies (Projects)	Partners (* denotes project lead)	Timeframes Milestones	Resources Needed	Desired Outcomes Metrics
2.4 Industry-driven community college manufacturing technician certification program	*EL Camino College SBAY WIB	• Identify Project Coordinator Establish Mfg Advisry Comm Identify Subj Matter Experts Focus Grps: Analyze assessmt tools, certification exams (Year One) • Review assessmt instruments Establish Curriculum Dev Teams Develop MTTC curriculum Recruit incumbent wkrs for MTTC training Recruit students/displaced wkrs for training Implement support services (Year Two) • Conduct pilot trng: incumbent wkrs Conduct trng for pilot group of students/entry level workers Disseminate project info thru Network of CACTs Evaluate project outcomes and prepare final report and make recommendations (Year Two)	None expected	- Conduct industry-driven analysis/validation of wkforce assessment instruments for sequential certification process in mfg: Workkeys, Mfg Skills Stds Cert (MSSC), Nat'l Inst. Of Mfg (NIMS) and Society of Mfg Engineers (SME) - Develop Certificated mfg Technology curriculum for students/entry level and dislocated workers referred through SBWIB - Develop student/trainee retention program through ongoing student support services including tutoring, counseling, mentoring, and financial aid. - Disseminate and promote project outcomes for replication of 21st C Mfg Tech Cert program throughout corridor by industry and through the CA Community Colleges' Economic Development Program and the Centers for Applied Competitive Technologies

Strategic Transformational Goal #3:

Key Strategies (Projects)	Partners	Timeframes Milestones	Resources Needed	Desired Outcomes Metrics
3.1 Workforce Analysis on 200 companies	*CSA GAVEA Kern EDC LA Co WIB LAEDC OCBC OC WIB RIVER WIB SBAY WIB SBEDP SBER WIB SLOEVC SLOPIC VCWIB	• Identify meet with innovation drivers within the CIC. (Year 1) • Develop project survey tool (Year 1) • Team with WIB or economic develop partner to identify prospective survey participants (Year 1) • Plan and attend the industry session at the CWA "Meeting of the Minds" 9/7/06 event (Year 1) • Recruit participation in survey by a minimum of 200 targeted companies (Year 1) • Compile and analyze survey data. (Year 2) • Develop conclusions. (Year 2) • Publicize survey results (Year 2) • Develop strategies to address identified training and education gaps (Year 2) • Share strategies across the nine regions and the entire CIC (Year 1)	TBD	• Generate a minimum of 200 company responses to the survey • Develop a final report of the survey results • Publicize survey results • Develop strategies to address identified training and education gaps • Share strategies across the nine regions and the entire CIC
3.2 Space employer/university consortium	CSA *CSEWI	SOW in progress	None expected	SOW in progress

Strategic Transformational Goal #3 (con't):

Key Strategies (Projects)	Partners	Timeframes Milestones	Resources Needed	Desired Outcomes Metrics
3.3 Space-related experiential university internships	CSA Garvey *Stanford	• Coordinate development of payloads with K-12 students Supervise integration of payloads (Years 1-3) • Provide initial flight testing with high altitude balloon flights and supervision of the development of student payloads (Years 2-3) • Support students on data analysis and presentation (Years 1-3) • Recruit mentors from government and industry engineers for their projects (Year 2) • Provide internet interactive meeting capabilities for mentors and supply all of the necessary tools and fabrication materials for the payloads. (Years 2-3) • Purchase and set up a V-Sat terminal system for broadcasting of flight integration, launch and operations back to the participating schools (Year 2) • Sponsor an annual conference for students to report on the results of the payload flights Assist with planning of future payloads. (Years 2-3) • Provide the facilities for development of the flight rocket, integrations supervision of payloads, launch, operations and recovery. (Years 1-3) • Participate in the annual payload conference to provide feedback and analysis of the flight tests and suggestions for improvements in payloads and payload integration for future flights. (Years 1) • Identification schools, coordination with K-12 teachers and administration (Year 2) • Mentors - working relationship with student using internet interactive meetings. (Years 2 & 3) • Students - provide written update reports on project progress to the mentors. (Years 2 & 3)	None expected	• Students engaged in actual balloon flight with and student test integration • Students get experience with actual flight of student payload • Report of results • Annual conference
		•		•
3.4 Outreach program: Systems Engineering	*Aerospace Corp Cal Poly CSEWI	• Develop and implement needs assessment survey (Year 1) • Identify initial set of course providers (Year 1) • Define intro course curriculum (Year 1) • Complete needs assessment (Year 1) • Website concept design (Year 1) • Concept design of Orientation/Introduction course (Year 1) • Define course providers (Year 2) • Establish preliminary curriculum* Define outreach concept (Year 2) • Design and activitate website content (Year 2) • Finalize course providers (Year 2) • Create preliminary and final course catalog and pilot course recruitment mailings (Year 2) • Finalize Orientation/Introduction course (Year 2) • Recruit pilot course students (Year 2) • Deliver pilot Orientation/Introduction course (Year 2)	None expected	• Create a catalogue of systems engineering courses within the CIC to address an identified skills gap • Complete a demonstration training for 20 incumbent engineers with a need for systems engineering skills • Train an additional 80 incumbent engineering trainees

Strategic Transformational Goal #3 (con't):

Key Strategies (Projects)	Partners (* designates lead)	Timeframes Milestones	Resources Needed	Desired Outcomes Metrics
3.6 Two pilot science/math middle and high school teachers institutes	*CSEWI MESA	• Develop three-year plan for logistics -- number of sites, number of teachers per site, venues, calendar, site budgets, and partners (Year 1) • Identify venues, site project directors/ managers, and dates for 2007 summer MPTIs (Year 1) • Identify and recruit instructors (Year 1) • Integrate space concepts into existing MPTI curricula (Year 1) • Develop and produce announcements, flyers, and teacher applications (Year 1) • Publicize MPTI to California MESA Centers and Advisors (Year 1) • Distribute applications (Year 1) • Confirm instructors, identify TAs (Year 1) • Develop daily lesson plans and activities (Year 2) • Order materials, supplies, calculator technology (Year 2) • Select and accept teachers (Year 2) • Logistics - facilities, food, parking, etc. (Year 2) • Reproduce teacher hand-out notebooks (Year 2) • Meet/train instructors on curricula, activities, and technology (Year 2) • Transfer funding to MPTI site institutions (Year 2) • Develop evaluation instruments (Year 2) • Host 2 two-week MPTIs, at USC and UCR (Year 2) • Evaluate summer MPTI (curriculum, numbers, sites, goals) (Year 2) • Revise, upgrade, and expand curriculum (Year 2) • Monitor teacher usage of curriculum, activities, and technology in their classrooms (Year 2)Identify venues, site project directors/managers, dates, instructors for three 2008 summer MPTIs (Year 2)Three two-week MPTIs, at USC, UCR, and tbd (Year 3) • Re-evaluate summer MPTI (Year 3) • Revise, upgrade, and expand curriculum (Year 3) • Evaluate results of the program (Year 3) • Develop report of the implementation, lessons learned to provide opportunities to replicate the program (Year 3)	None expected	• 150-225 teachers participate and gain enriched skills to motivate STEM students to higher levels of academic success • 20,000 to 30,000 students will be positively impacted indirectly by the improved of the 150 teachers
3.7 Industry-driven pilot training project	CSA *NOVA UCSCruz-EXT	SOW in progress	None expected	SOW in progress
3.8 Orientation of university and graduate advisors	*CSEWI/NSPWG	SOW in progress	None expected	SOW in progress

Strategic Transformational Goal #3 (con't):

Key Strategies (Projects)	Partners	Timeframes Milestones	Resources Needed	Desired Outcomes Metrics
3.9 Troops to teachers recruitment targeting math/science teachers	CSEWI *Troops	Partnering with teacher prep programs; outreach; test preparation resource referral; financial assistance, accelerated credentialing and internship advisement; job referral and placement assistance Year One: Outreach Materials Partnerships Identification of Teacher Test Prep Options Lead/Participant Tracking System Year Two: Outreach Effort Counseling of Program Participants Year Three: Ongoing Recruitment Program Eval Final Report	None Expected	Have a total of 20 new teachers produced by the pilot project.
3.10 Stanford model high school mentoring program	CSEWI *Stanford	SOW in progress	TBD	SOW in progress
3.11 Pilot community college industrial technology-based degree in Mechatronics; demonstration of student recruitment strategies for technical certification programs	*Allan Hancock College Cerritos College College of the Canyons Lancaster University Center CSEWI	SOW in progress	TBD	SOW in progress
3.12 Science educator conferences	SIL	• Spring and Fall Conferences, with selection of conference program, date, time 4-6 months prior; recruitment of co-sponsors and workshop presenters, scientist dinner speakers and conference registration 3-4 months prior; final arrangements one week prior	None expected	150 to 200 teachers will participate in the teacher conferences
3.13 Skills/knowledge "dictionary"	CEF	• Development of a working coalition of 15 or more participants and contributors. (Years 1–2) • Develop a set of job characteristics reflecting the data gathered from industry and other contributors (Years 2-3) • Complete ten individual assessments reflecting the inputs from the data gathered from participants (Year 2) • Complete a set of ten comparative evaluations for the skills described by industry and by individuals (Year 2) • Develop a strategic plan for sustainability to accomplish the long-range objectives for this important work accomplished under the banner of the CIC WIRED program (Year 3)	None expected	• Working coalition developed with a minimum of 15 participants • Activity log of contacts, and reports of data and analysis, including findings of areas of agreement and areas of differences with recommendations with a minimum of 21 job-related data points for five corporations • Ten personal descriptions of intellectual capital skills. • A compendium of intellectual capital skills and a user guide for application and will evolve during the period of performance. • A sustainability plan, which looks forward into the next steps and approaches that should be followed
3.14 Learning Collaboratory	CWA	SOW in progress	Calel assistance.	SOW in progress

Governance

As a nonprofit, the California Space Authority (CSA) is governed by an elected Board of Directors comprised of not less than fifteen (15) and not more than twenty-one (21) members. A total of twelve Directors are elected by the voting members and serve three-year terms. Four are elected by the Northern Region members, four by Central Region members, and four by Southern Region members. Directors are either residents of or employed in the Region that they represent. Voting members may only vote for directors in the region in which the Member is located, is employed or resides in accordance with the current membership policy. Each Elected Director holds office for three years.

In addition, the Board Nominating Committee places in nomination a slate of candidates, without limitation to region, in order to ensure constitution of a Board that represents the diversity of the Corporation's membership, from which the Board selects the Appointed At Large Directors.

Additional nonvoting, ex-officio Directors may be added at the discretion of the Board, to serve at the pleasure of the Board, not to be counted as or in any of the above numbers or calculations. Ex-officio Directors shall have all rights to be notified of and attend Board meetings, but have no voting or other rights of a Director.

Current membership reflects industry (19), State and Local Government and Special Districts (9) and academia (3). Much of the CIC WIRED proposal was based upon CSA's strategic planning process which included collaborative work sessions involving over 200 participants to identify key issues important to the future of the space enterprise industry with associated strategies to address them. The Board of Directors was briefed on CSA's WIRED proposal and have received updates on the progress of the grant implementation to date. Fifteen of the Board of Director organizations are also partners in the WIRED CIC grant. CSA provides direct governance to the WIRED grant. Please see Attachment 1 for the CSA Board of Director roster.

A thirteen member CIC Leadership Team consisting of key partners of the CIC WIRED grant who are project leads on the five sustainability projects or have key leadership roles, provide oversight to the grant implementation process. Please Attachment 3 for members of the CIC Leadership Team. In addition, there are three CIC task forces that provide input and guidance regarding the three key areas: 1) Data – To facilitate the WITS initiative. Membership to have expertise in either data collection or analysis; 2) External Communication – Led by CSA media and public relations staff; and 3) Policy/Legislation – Led by CSA Executive Director Andreas Seastrand and assisted by CSA governmental relations staff at both the federal and state level.

Industry is a major player in the CIC WIRED grant implementation. Representatives from a variety of sectors will be invited and encouraged to participate on a variety of advisory panels to provide valuable insights and facilitate the successful completion of projects. Following are some of the panels already identified that require industry input:

- Strategy 3.5 - K-U STEM education strategy: Input on current and future technically skilled shortages

- Strategy 3.1 – Workforce and skill gaps analysis: Input on future anticipated skill needs to assist economic development and workforce specialists to prepare for future workforce needs.
- Strategies 2.1 – 2.3: Industry forum of manufacturing supplier base to assist service providers with insights into the development of common outcomes.
- Strategy 1.4: Participation by venture capitalists to assist in the development of support mechanisms for entrepreneurial Phase II SBIR companies

The advisory panel for the K-U STEM education event is provided as Attachments 4.

Operations

Project Management

The hiring of additional staff was necessary to ensure appropriate administrative oversight and effective management of the CIC WIRED grant. New CSA WIRED staff includes the WIRED program grant manager, contract manager, two administrative assistants, an education and workforce specialist, a technical support specialist position and a contracts staff position. In addition, much of the pre-existing CSA staff are assuming various levels of responsibility for the implementation of the CIC WIRED grant. An organization chart is included as Attachment 2. In addition, CSA plans to implement the use of Microsoft Project to effectively track the progress of the work plans for the 25 projects and the activities identified in the statements of work by the 50 CIC WIRED partners.

Internal Communications

The WIRED program manager leads a weekly internal CSA WIRED staff communication meetings to provide consistent communication while identifying and addressing issues impacting the implementation of the grant. In addition, CSA also leads monthly calls with representatives of the ETA, CA Labor Agency and EDD to ensure all parties are aware of the status of the grant implementation. Further, the CSA grant manager provides an electronic bi-weekly communication that serves to keep all of the partners routinely informed about the grant implementation. CSA also hosts semi-annual all partner meetings to enhance communication while providing forums to discuss the grant implementation and foster project team communication. The CSA Board receives a report on the progress of the grant implementation on a quarterly basis. Lastly, CSA is considering hiring a consultant to develop and populate a website that would track the success stories of the CIC WIRED grant. A Request for Proposal is being developed to identify the best resource at a competitive cost. This resource would serve both the entire WIRED team of partners, supporters, collaborators and affiliates of the grant, but would also serve as a reservoir of information on the continuous success of the grant for public awareness. It is planned that each CIC partner's website would be linked to the website to expand the likelihood of viewing and awareness.

External Communications

Press releases are planned to be regularly issued to increase communications on the CIC WIRED grant successes and significant activities. It is anticipated that this will assist in the promotion of the initiative and bring additional opportunities to partner and leverage resources for the project.

All WIRED information is posted on CSA's website. Outreach and public presentations on the CIC WIRED initiative have been made and are planned to continue to be held throughout the 13 county CIC region to local, including briefings to state and federal legislators. The purpose of these presentations is to educate the region on the WIRED CIC Initiative and to gain support for long-term sustainability of the project. In addition, CIC partners have been and will continue to host similar media events to publicize their own regional initiatives supported by the CIC WIRED grant...

Budget Allocations & Fiscal Management

A detailed CIC WIRED budget has been created; please see Attachment 5. There has already been some re-allocation of funds as the projects have evolved and the roles of some partners have changed.

As stated previously, CSA has hired a contract manager to ensure not only federal grant compliance requirements but also sound project financial oversight. Travel Policies and Guidelines as well as a Procurement Policy have been implemented and given to all partners for their implementation. All partners have also been given copies of the General Provisions and Standards of Conduct and advised that they are expected to fully comply with these instructions. In addition a Subagreement document outlining all terms and conditions of the subgrant has been implemented and will be signed by all partners. A Contracts Manager has been hired to oversee all elements of the contracts and to ensure compliance with all directives.

Financial systems are in place to adequately monitor expenditures of funds for the grant. Quick Books software is the program that has been implemented to track and control expenditures by partner and their respective project number(s).
Strict segregation of WIRED and CSA funds and expenses has been implemented. The CSA General Counsel is assisting with the creation of the contract language for the CIC WIRED partners. Additionally, we utilize the services of an outside professional accounting firm for audit services for CSA.

In addition, the Contracts Manager has attended State EDD Financial Training on Costs and Expenditure Software programs necessary to request funds and report on expenditures. All partners have been given an Invoice Detail and Submittal Requirements document for their use in submitting auditable invoices for their expenditures.

Anticipated Technical Assistance Requests

We anticipate that CSA and the 25 project teams will need the services of the technical assistance consultants. Following are initial ideas of those needs but we anticipate many more will need to be determined:

- Project Team 1.4 has requested technical assistance at the CIC August 10th All Partner meeting in San Francisco to help them in the development of their project goals.
- Data Task Force will need some guidance with NES regarding the WITS implementation.
- Project 1.1 will be building an Economic Development Model and it would be good towards the end of year one for some technical assistance from NES to bring national thinking from the other regions as to best practices and models to build upon.
- Project 3.12 and other STEM focused projects could use the assistance of CAEL to identify grants and resources to support the expansion and sustainability of their projects beyond the WIRED initiative scopes of work.

- Strategies for connecting entrepreneur development to commercialization processes.
- Connection of entrepreneur development for use in manufacturing product development and business spin-outs.

ATTACHMENT 1

California Space Authority Board of Directors

Benson, James (Jim)
Founder/Chairman/CTO
SpaceDev, Inc.

Benson, Yolanda
Deputy Secretary, Jobs, Economic Dev & Trade
CA Business Transportation & Housing Agency (BTH)

Bridge, Stephen (Steve), President/CEO
CSA BoD Vice Chair Central
Bridge Business & Engineering Services

Catlin, (Bob) Robert Col. [3]
Director of Staff
Space & Missile Systems Center
Air Force Space Command (AFSPC)
Los Angeles Air Force Base

Diaz, Angela
Director of Strategic Communications & Development
NASA Ames Research Center

Cromer, Donald, USAF (Ret) Lt. Gen.

Crowley, Mark, VP, Space Based Infrared Systems
CSA BoD Chairman
Lockheed Martin Space Systems Company

Deutsch, Raymond (Ray)
Sr. Architect Community Relations Director
Westberg & White, Inc., Architects and Planners

Diani, James (Jim), President
Diani Companies

Dozier, Kenneth (Ken), Executive Director [1]
USC Viterbi School of Engineering
Wetern Research Application Center (WESRAC)

Ford, Celeste, President/CEO
CSA BoD Vice Chair North
Stellar Solutions, Inc.

ATTACHMENT 1

California Space Authority Board of Directors

(Con't)

Gallo, Michael (Mike), President/COO
CSA BoD Chief Financial Officer
Kelly Space & Technology, Inc.

Haile, Dr. Allen, (Retired)
Director Commuity & Government Relations
California State University, San Luis Obispo

Hoeber, Christopher (Chris)
Sen. VP/Prog Mgmt & Sys Eng
Space Systems Loral

Manchak, Michael (Mike)
President/CEO
Economic Vitality Corp. of San Luis Obispo Co.

Martin, Campbell (Cam)
Director
Office of External Affairs
NASA, Dryden Flight Research Center

McGlothlin, James
President/CEO
Quintron Systems, Inc.

Molvar, Jan
Chief Engineer
Scitor Corporation

Murphy, Diane
Director, Communications
Northrop Grumman Corporation

Nordel, Stephen
Future Cargo Aircraft Prog Dir
Raytheon Company

Randolph, Bernard
USAF (Ret), Gen.
Consultant

ATTACHMENT 1

California Space Authority Board of Directors

(Con't)

Rosen, Dr. Stanley
Consultant, CSA BoD Past Chairman
Toffler Associates

Sarver, Michael
Space Initiatives Manager
Cisco Systems, Global Defense & Space

Scurry, Bryan, Deputy Program Executive Office
Space Systems
Space and Naval Warfare Systems Command (SPAWAR)

Shockley, Laurel
Project Manager, Economic & Bus Development
Southern California Edison (SCE)

Shotwell, Gwynne
VP/Business Development
Space Exploration Technologies

Smith, Drexel
Senior Vice President
Wyle Laboratories, Inc.

Tattini, Eugene
USAF (Ret) Lt. Gen.
Deputy Director (South)
Jet Propulsion Laboratory (JPL)

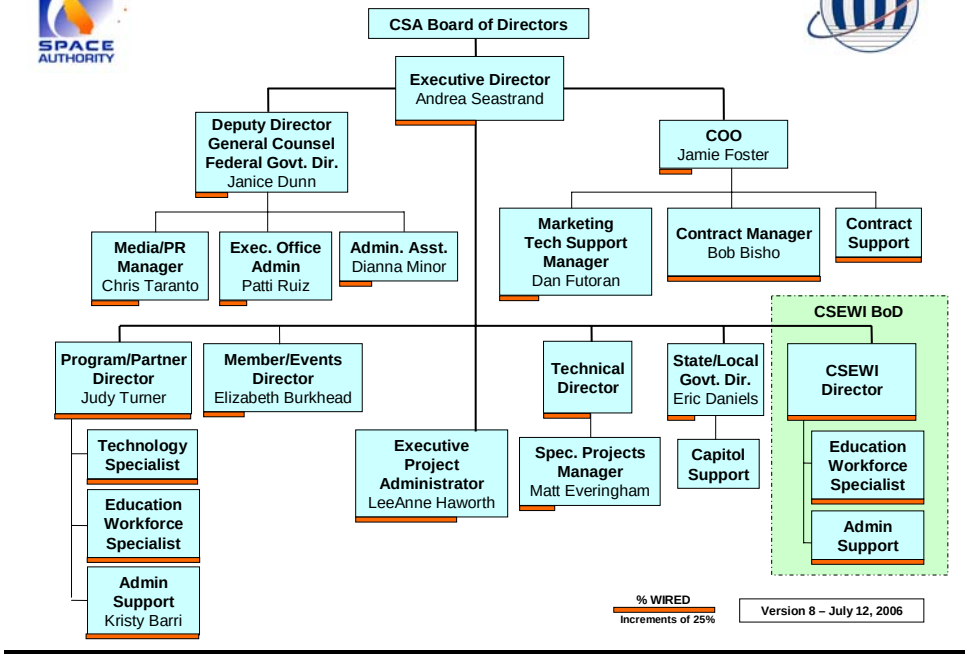
Twiggs, Robert
Dir. Space Sys. Dev Lab.
Stanford University (North)

Van Scoy, Michael
Sr. Manager Delta Integration & Support
CSA BoD Vice Chair South
The Boeing Company

Weinstein, Jack Col.
Commander 30 SW/CC
U.S. Air Force
US Air Force

ATTACHMENT 2

CSA/CSEWI Organizational Chart



ATTACHMENT 3

WIRED California Innovation Corridor Leadership Team

Andrea Seastrand, Executive Director, California Space Authority
Jaime Fall, Assistant Secretary, California Labor & workforce Agency
Yolanda Benson, Deputy Secretary, Business, Transportation & Housing
Victoria Conner, Principal, Strategic Vitality, LLC
Sally DiDomenico, Vice President, Bay Area Science and Innovation Consortium (BASIC)
R. Susan Hackwood, Executive Director, California Council on Science & Technology
Virginia Hamilton, Executive Director, California Workforce Association
Brian McMahon, Director, California Workforce Investment Board
R. Sean Randolph, President/CEO, Bay Area Economic Forum
Laurel Shockley, Project Manager, Southern California Edison
TBD, Director, California Space Education & Workforce Institute
Jo-Marie Diamond, East County Economic Development Council

ATTACHMENT 4

K through U STEM Education Event Panel

Emily Chi	Northrop Grumman
Dean Davis	Boeing
Bruce E. Gardner, Ph.D.	The Aerospace Corporation
Laura R. Gillion, Ph.D.	Lawrence Livermore National Laboratory
Jack Gregg, Ph.D.	Northrop Grumman
Art Hammon	Jet Propulsion Laboratory
Ray Haynes, Ph.D.	Northrop Grumman
Susan Johnson	Southern California Edison
Rose Marie Mungaray	The Boeing Company
Parvin Kassaie, Ph.D.	National Aeronautics & Space Administration
Michael Sarver	Cisco Systems
Elane V. Scott	The Boeing Company
David M. Seidel	Jet Propulsion Laboratory
Laurel Shockley	Southern California Edison
Richard Stephens	The Boeing Company
Edward Taylor	Google
Kris Tuller	Lockheed Martin