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PROJECT LEADS MEETING
Sept. 6, 2007: 1:00 pm – 5:30 pm
Sept. 7, 2007: 8:30 am - Noon
Monterey Marriott Hotel

MEETING RECAP

Meeting Briefings

The InnovateCalifornia.net section where the Project Leads meeting briefings will be soon be housed is currently under construction. Because some project lead partners may prefer not to receive the emailed briefings due to the size of the file, we ask that anyone wishing a copy of the Project Leads meeting briefings themselves in addition to this recap contact Jeff Martin:(626) 440-0565, jeff.martin@californiaspaceauthority.org

Attendees

Project Leads*/Other Attendees

Bob Bartron*, CA Troops to Teachers
Edmund Burke*, Space Information Laboratories
Victoria Conner, Strategic Vitality, LLC
Daphne Dador, CA Space Education & Workforce Institute
Sally DiDomenico, Bay Area Economic Forum
Jo Marie Diamond*, East County EDC (Connectory)
David Gonzales, El Camino College
Virginia Hamilton*, California Workforce Assn.
Teresa Henderson, CA Space Education & Workforce Institute
Deborah Hirsh*, CA Space Education & Workforce Institute
Jeanette Langdell*, NOVA (Santa Clara Valley WIB)
Richard Mains, Mains and Associates
Paul Murphy*, Allan Hancock College
Paul Oliva, Bay Area Economic Forum
Oscar Porter*, MESA
Donna Riordan*, California Council on Science & Technology
Joel Shrater*, The Aerospace Corporation
Michael Tomasello, MESA
Bob Twiggs*, Stanford Space Development Lab

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State/DOL representatives

Linda Toms Barker, WIRED Evaluator (Berkeley Policy Associates)
Jaime Fall, California Labor and Workforce Development Agency
Martie Evans, Employment Development Department
Denise Miller, Employment Development Department
Steven Narowleski, US Department of Labor
Joshua Shapiro, WIRED Evaluation (UCSD Extended Studies & Public Programs)

California Space Authority, Program Lead

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Judy Turner, WIRED Program Manager
Eric Daniels
Jamie Foster
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1. Judy Turner introduced first Project Lead, each introducing the next, in presenting project snapshots
2. Corridor Deliverables/Accomplishments to date – Brainstormed Sampling:

Training/Employment:

Fifteen people certified through University of California in software engineering for aerospace/defense applications – six hired by Lockheed Martin
 Space-Related trainees enrolled to date (SS/L) – 1000+
 32 teachers trained in science teacher summer institutes
 125 teachers trained in STEM and space-related classroom activities

Capacity-Building:

Asset Inventory Project Completed
 Innovation Roundtable held/insights of 40 innovators captured
 California Tech 100 trained/showcased 20+ entrepreneurs in venture capital-raising
 Three STEM statewide public/private forums held
 Regionalism Monograph
 Two STEM Teacher Summer Institutes held
 Communications Plan complete
 Mentoring Program in place
 Sub-contractors hired
 Outreach Brochure(s) produced
 Federal Labs energized around WIRED/innovation/value of entrepreneurship to their efforts
 Numerous Steering and Advisory Groups formed (Suppliers, STEM, Manufacturing, etc.)
 Unexpected asset retention
 Forty-one partners on contract
Racing for the Future – draft WIB toolkit developed, presented at CWA Meeting of the Minds
 Metrics developed for all 25 projects
 Two K-12 STEM Teacher Conferences held
 Two Mechatronics Degrees developed
 UC approved Certificate: Software Engineering for Aerospace and Defense Applications
 Corridor information portal established (InnovateCalifornia.net)
 Project Integration Protocol developed
 Supplier Survey developed/distributed
 Systems Engineering Survey developed/distributed
 PearlSat launch involving 500 students
 Many, many others!

3. Sampling of Insights/Key Findings to Date by partners (statistics quoted are individual submissions and have not been verified by the Corridor leadership team):
 - Our partnership focus extends far beyond the Corridor, to the statewide workforce development system; we cannot promote change in the workforce system if the transformation agenda is narrowly region-specific
 - The workforce system's role for promoting innovation in business is linked to our ability to move the system toward greater attention to and investment in worker skills enhancement
 - Need for change in workforce system performance measures
 - Need to identify appropriate workforce leadership role

- Message that demand-driven model serves both businesses and worker prosperity still needs reinforcing
- Demand-driven means not just filling job openings, but increasing worker readiness and skills for high-wage jobs
- New partnerships, regional approaches, policy priorities, clarification of purpose and other changes are necessary
- Importance of “re-tooling” WIB perspective: less operational, broader in leadership
- Opportunity for turning the “workforce crisis” and the impact of S&T on industry, into urgent motivation for operational change
- The challenge is in developing pathways to new practice
- Web 2.0 is relevant to younger audiences; To “optimize Corridor for innovation” require using today’s latest internet tools to get young people on board (“companies that design their software, their systems, their Web sites and their encyclopedias to encourage participation will be the ones that draw the most users” ...T Friedman); Student.Net: 98% of 8.8M 4-year college students in U.S. have free internet access and spend more time online than any other group; more than 2M kids 6-17 have their own websites; over 900,000 teachers rated on RateMyTeachers.com; 8M on 2nd Life – young people moving away from static websites to participatory online activities
- Excellence in K-12 STEM education critical to sustain aerospace and Innovation Corridor
- Economic development dependent on K-12 STEM education
- Add'l K-12 STEM teacher training programs required to cultivate master teachers
- Relevant STEM curriculum important at all levels, but especially K-12
- K-12 California teachers not adequately trained in STEM; strong STEM teachers will produce strong graduates to build and sustain a talented Corridor workforce
- CA high schools not adequately preparing students for college success in science and engineering – 40-50% dropout/flunkout rate of CA students enrolling in CSA/UC engineering BS degrees
- Real-world relevance not stressed enough in K-12 educational system
- Higher education can provide a critical link in the pipeline between K-12 and 21st Century workforce. Success requires ongoing communication/systematic evaluation
- Re: systems alignment: process is evolutionary, time/effort intensive, but leads to newer, greater, more exciting partnerships and opportunities
- Need to seek, develop, nurture relationships with strategic partners both within and outside your own organization
- Successful programs need follow-on funding, expansion of the pilots and a permanent federal or state allocation
- A culture of innovation is ready to emerge with the addition of a strategic perspective and industry background
- New professionals and students may be a key to next generation systems alignment – get them working together now
- Need others besides academic advisors to help students gain perspective
- Specialized certificate program can help acquaint unemployed workers with the culture and language of a specific industry
- Even with certificate, a foot in the door of a new industry is difficult
- Managing student/trainee expectations is important
- Ongoing after-program collaboration critical for continued success of promising programs
- Systemic changes needed in K-12, but can’t wait for that to integrate, collaborate and align at local levels
- Synchronization/alignment/leverage all part of global competitiveness
- Terminal recognition (degree, certificate) important for training, education

- Some regional projects should be integrated into national efforts where possible
- Distance learning becoming major delivery tool
- Non-technical skills lacking in system engineers
- Large variation in available systems engineering courses for incumbent workers
- Training difficult where worker category not yet clearly defined (e.g. systems engineering)
- “At present, there are insufficient methods for students to acquire hands-on experience in the scientific and technical disciplines necessary for space commerce and exploration...Commission on Implementation of US Space Exploration Policy, 2004)
- Numerous manufacturing technician programs in place, with existing programs filling critical industry need; gap exists in manufacturing “support” processes, manufacturing “generalists”, with key skills in areas such as precision assembly, special processing, manufacturing process flow
- Optimize Corridor for Innovation/21stC Workforce Development: think interdisciplinary, systems-based, life cycle; early collaboration with customer; shared risk, investment, benefits; common industry requirements and assessments, dynamic, complex relationships rather than static stable relationships; manage contractual relationships, slowdowns
- High risk avoidance can be contrary to innovation
- Regional solutions lab can help with systems integration/alignment
- Industry-driven common requirements needed for global competitiveness
- Innovation ecosystem success factors: trust, open collaboration necessary to minimize oscillation in dynamic complex supplier network
- Common learning outcomes desirable in developing talent
- 80% of innovation coming from suppliers
- “Not everything that can be measured matters; not everything that matters can be measured”.
- Systems alignment/integration a “tough nut to crack”
- Regional collaboration: identify individuals willing to be change agents, develop ways for “out of the box” actions to succeed and be recognized; invite adaptation to regional needs
- Talent development success factors: identification of need for talent in a region, identification of assets available to develop talent; identification of pool of potential talent to develop
- Not sure that systems alignment/integration conversations are taking place at the State at the right level
- Perhaps there is a role for public/private partnerships at the right level to instigate the kind of policy changes that might address systems alignment
- Innovation is not one thing; at regional and local levels, requires common understanding of goals, roles of various organizations, assets, strategies and metrics
- Identification of assets in locale/region is critical; need for effective communication among key assets
- Metrics critical to demonstrating impact of innovation ecosystem
- Integration of education/workforce/economic development requires willingness to directly connect with companies, tech sectors, investment community
- Personal involvement with critical stakeholders is the key building an innovation culture
- Companies eager to access resources supporting their business model
- Relationships among federal labs, universities, eds, WIBs, educators foster innovation ecosystem
- Integration of systems requires cultivation, demonstration of mutual benefit

- Non-Corridor partners can be successfully recruited for support
 - Knowing “what you have” is critical to reach across sectors to innovate
 - Willingness to step outside comfort zone critical to forming, maintaining relationships with potential assets
 - More cost effective to maintain asset inventory on dynamic platform than to conduct ad hoc research
 - Getting “deep” into asset core competencies fosters collaboration
 - Innovation doesn’t stop with research, diffuses through supply chain
 - Asset inventory process identified mutual interest in STEM/CTE across stakeholders
 - Need shift from “competency addiction” to willingness to play “change agent”
4. Communications Update – Wil Simon, CSA ([see InnovateCalifornia.net/media](http://www.innovatecalifornia.net/media))
5. Discussions: Workforce Development, Education and Economic Development: Systems Integration and Alignment across Projects

Table Questions: What might your project contribute to the major domain deliverable (WIB toolkit, STEMCAP or Economic Innovation Model)? What key findings/insights from this domain deliverable should be passed on to another key deliverable team?

Workforce Table Inputs

- Link youth career centers to 3.2 (employer/university consortium) and 3.8 (technical career outreach to universities)
- Profiles of young people – MESA and young professionals
- LMID data packaging 3.1 and 1.2 (worker profiles) for both WIB toolkit and Economic Toolkit
- 2.2 supplier capabilities model (charts) good for WIB toolkit and Economic Innovation Toolkit
- Challenge technology companies to develop courses
- WIB Toolkit as plug into 1.1 Economic Development Toolkit
- For STEMCAP: Take some of same info for adult systems engineering, adapt and make accessible for kids
- Create more connections from workforce to education “What’s an engineer?”
- Link URL of 3.4 (systems engineering catalog) to WIB toolkit

Economic Development Table Inputs

Individual Project contributions:

- 1.1 creates a national economic development innovation model with interactive tools, background resources, etc., integration of WIB toolkit and STEMCAP; platform for projects to report results; system for describing project relevance and key elements
- International project component of 1.1 matchmaking event with El Camino/CITD at International Satellite and Communications exchange (ISCe); project write-up on how to engage matchmaking in sector and ITAR training
- Living tool, document what you have, opportunities to collaborate and rules for engagement with platform underneath (asset inventory/Connectory)
- Templates and action model for matching and tracking results
- Economic Model components:
 - Context
 - Cornerstones
 - Catalysts
 - Cycle

- Model and approaches for evaluating opportunities and threats and deciding on action, taking action, measuring results
- Economic Model/Toolkit: specific data and findings that provide ideas for specific how-to
- Workforce toolkit will be part of Economic Model project in the toolkit
- Other teams could use 1.1 template for projects as a reporting template
- Workforce needs to see compliance officers (?); Economic development linkage on instruction and infrastructure
- Asset inventory informs all three sustainable project deliverables – you’ve got to know what you have to take action
- Project 1.4 should report back to workforce and education communities on the project, the reasons, methodology for impact and considerations for action
- Project 1.2 – Eco dev and workforce at least to look at process and findings

Education (STEMCAP deliverable)

- For economic development/workforce stakeholders working with education: “Guidebooks” could be created from WIRED projects, e.g. for teacher professional development, articulation between systems, creating degrees, certificates
- Create Collaborative central workspace where “guidebooks” could be accessed
- STEMCAP could generate ongoing “community of practice”, with more industry participation in education, recruiting industry dollars so that industry “puts its money where its mouth is”
- Insight: since all education is local, education can become gathering theme
- Sustainability an issue

6. Reporting Results for Accelerated Invoice Approval

Turner emphasized importance of timely reporting for invoice handling and accuracy of the Corridor’s quarterly report. Discussion ensued about perhaps using the 1.1 template to suggest projects for inclusion into the Economic Development Innovation Toolkit as a basis for redesigning the quarterly or monthly reports. CSA will take this under consideration and attempt to streamline reporting requirements.

7. Inputs regarding November 9 Partner Meeting

- Design and present new reporting template
- Updates on projects: use only 1-2 slides, project report-outs can be tedious
- Project update idea:
 - a. Brief
 - i. Where does your project “fit”
 - ii. Where are your funding opportunities and funding partnership opportunities?
- Have some “open space” time
- Quick topic discussions on things like bench scientists not desirable career to some, engineers need acculturation, new STEM professionals retention strategies, etc.
- Web 2.0
- STEM sustainability and partnering sessions
- Grantstation list of potential opportunities
- Three Corridor pillars
 - a. Innovation
 - b. Supply Chain competitiveness
 - c. Talent Development

- Three signature Corridor projects: 1.1 Economic Development Innovation Model/Toolkit; 1.7 *Racing for the Future* WIB Toolkit; 3.5 STEM Collaborative Action Plan
 - a. One hour for each with constellation of aligned projects
 - b. Discuss individual project integration/sustainability through partnering
 - c. Facilitated by project lead, backed up by CSA project liaison
8. Federal/State policymaker education
Eric Daniels presented a slide indicating a potential approach to partial sustainability through Federal/State policymaker education
- Identify sustainable initiatives
 - Develop resource development strategy
 - Identify districts and/or committees potentially interested in sustainable initiatives
 - Recruit champions
 - Garner support to generate resources
9. Resource development
- a. The Corridor has collectively studied problems, done demos, identified “next steps”; we should position ourselves to use these “next steps” as funding opportunities
 - b. Seek dollars for integrating WIRED tools for non-WIRED needs
 - c. Need awareness at local, State, Federal levels; use domain publications for building credibility, e.g. economic development publication, etc.
 - d. “Institutionalize” WIRED Corridor initiative through economic development, workforce development, education
 - e. Seek opportunities within existing policies/programs
 - f. Seek political champions; map successes to legislative districts
 - g. Build WIRED partnership as experts
 - h. Host three policymaker education days, positioning WIRED partnership, articulating issues address by WIRED: one education day, one workforce day, one eco dev day
 - i. Three conferences with key legislators
 - j. Sen. Tolakson’s bill proposes some regional planning dollars – authorizes regional grants with California WIB
 - k. CTE – seven years, grants currently out of Chancellor’s office
 - l. A question arose as to CSA’s “vision” for Corridor WIRED sustainability
 - i. Twofold answer:
 1. Projects encouraged to seek funding on their own, collaborate with partners with whom they find synergy
 2. Resource Development Task Force
 - a. Those interested in big picture sustainability invited to join Task Force – meeting held on 9/7/07 at 12 noon
 - b. Held July webinar
 - c. DOL offering regions “Grantstation” as a resource...will get out to partners
 - d. Will forward resources as they are encountered for review
 - e. Another Task Force webinar will be scheduled
 - m. Success story website (InnovateCalifornia.net) is key to funding success – can use to refer funders to for information about projects, greater WIRED Corridor impact, but only if we all submit appropriately to it
 - i. Made as easy as possible – give Mains and Associates anything electronically – press releases, agendas, recaps, charts, graphs, white papers and they will attempt to capture it into project accomplishments

- n. Is there activity and/or intention to integrate Corridor WIRED with other WIRED USA regional efforts? Response: has not yet been considered by Corridor, but CSA will take up with DOL the question of how a “WIRED integration USA” effort (for sustainability), might work
- o. Keck Foundation a good STEM contact
- p. Find dollars for hands-on education bridging gap with academic instruction
- q. What is role of Council on Competitiveness in sustainability?
- r. Seek funding for best practices identified/mentioned in three signature deliverables
- s. NSF currently funding weather/sun projects
- t. Need testimonials/quotes re WIRED/projects/successes – on InnovateCalifornia.net

Partner Meeting: Friday, November 9, 2007, 8:00 am – 3:00 pm
Watch for announcements regarding Resource Development Task Force and Sustainability Project Leads webinars before then!