



WORKFORCE INVESTMENT BOARD OF VENTURA COUNTY

MANUFACTURING COMMITTEE MEETING

Wednesday, February 12, 2014

8:00 a.m. - 9:30 a.m.

NOTE: CHANGE OF MEETING LOCATION

Ventura College (Room MCW 312)
4667 Telegraph Road, Ventura CA

REVISED AGENDA

8:00 a.m.	1.0 Call to Order and Agenda Review	Alex Rivera
8:02 a.m.	2.0 Public Comments <u>Procedure:</u> The public is welcome to comment. All comments not related to items on the agenda may be made at the beginning of the meeting only.	Alex Rivera
8:07 a.m.	3.0 Approval of Minutes: January 8, 2014	Alex Rivera
8:10 a.m.	4.0 Ventura County Regional Strategic Workforce Development Plan <ul style="list-style-type: none">Regional Manufacturing Sector Research<ul style="list-style-type: none">Inventory of Industry Sector Career Pathways: Updated DraftOccupational Data and Employment Sector Projections: UpdateManufacturing Committee 2-Year Plan Outline: Draft	Theresa Salazar Vital
8:40 a.m.	5.0 Manufacturing Program Development <ul style="list-style-type: none">Ventura College Applied Science Center: Project OverviewManufacturing Readiness Skill Categories: Next Steps	Scot Rabe Alex Rivera
9:20 a.m.	6.0 Event and Public Service Announcements	Committee Members
9:25 a.m.	7.0 Committee Member Comments	Committee Members
9:30 a.m.	8.0 Adjournment <u>Next Meeting</u> March 12, 2014 (8:00 a.m.-9:30 a.m.) Ventura County Community Foundation, Camarillo	Alex Rivera

2.0 PUBLIC COMMENTS

During the WIB Manufacturing Committee meeting on February 12, 2014, Kathleen Schrader made a public comment and distributed the attached document to the Committee members and staff: "Career Pathways Trust SB 86."

OVERVIEW

*Career Pathways Trust
SB 86*

Due March 28, 2014

A. Purpose

The California Department of Education (CDE) is accepting applications from school districts, county offices of education, direct-funded charter schools, and community college districts for the California Career Pathways Trust (CCPT). Funds in the amount of \$249,750,000 have been appropriated as part of Assembly Bill 86, Chapter 48, Statutes of 2013, for the establishment of kindergarten through community college (K–14) career pathways programs in the form of one-time competitive grants available for the 2014–15 fiscal year through the 2017–18 fiscal year.

Applicants must target K–14 career pathway programs that provide students with a sequenced pathway of integrated academic and career-based education and training, aligned to current or emerging regional economic needs. Career pathway programs are designed to lead students to a postsecondary degree or certification in a high-skill, high-wage, and high-growth field.

The overarching goal of the CCPT is to build robust partnerships between employers, schools, and community colleges in order to better prepare students for the 21st century workplace and improve student transition into postsecondary education, training, and employment.

To accomplish this goal, successful applicants will:

1. Establish or strengthen existing regional collaborative relationships and partnerships between business entities, community organizations, and educational agencies.
2. Develop and integrate standards-based academics with a career-relevant, sequenced curriculum following industry-themed pathways that are aligned to high-skill, high-wage, high-growth jobs, or emerging regional economic sectors.
3. Provide articulated pathways to postsecondary education aligned with regional economies.
4. Leverage and build on any of the following:
 - Existing structures, requirements, and resources of the Carl D. Perkins Career and Technical Education Improvement Act of 2006, California Partnership Academies, and Regional Occupational Centers and Programs (ROCPs) including staff knowledge, community relationships, and course development.

- Matching resources and in-kind contributions from public, private, and philanthropic sources.
- The California Community Colleges Economic and Workforce Development Program and its sector strategies and deputy sector navigators.
- Participation in the local California Community Colleges Skills Panel.

Career pathways programs may be delivered through high schools, ROCPs, California Partnership Academies or other career academies, alternative education programs, continuation schools, programs administered by county offices of education, adult education programs, or community colleges.

B. Assumptions:

The CCPT is built on the following evidence-based assumptions and core principles:

1. Students participating in career pathways programs will be more fully prepared for career and college.
2. Collaborative regional or county-wide networks are more likely to build innovative and quality (high-skill, high-wage, and high-growth) career pathways programs that lead to employment or postsecondary education than programs designed by a single institution.
3. Work-based educational and training opportunities will enhance the employment prospects of low and moderate income individuals, and contribute to the stability and economic development of their communities.
4. Integrated academic and technical learning will best prepare students for both postsecondary education and careers in high-skill, high-wage, and high-growth sectors of the economy.


PROGRAM DESCRIPTION

A. Grant Information

The CCPT provides one-time funding for a grant period beginning July 1, 2014, through June 30, 2018. Funds are available to each applicant based on the application and proposed budget. The total grant budget for this Request for Application (RFA) is \$249,750,000.

B. Funding Levels

There are three categories of funding available:

- Regional Consortium Grants: No more than 10 grants will be awarded for up to \$15,000,000.00
- Regional or Local Consortium Grants: No more than 15 grants will be awarded up to \$6,000,000.00
-  • Local Consortium Grants: No more than 15 grants will be awarded up to \$600,000.00

The CDE will fund successful grant applications at the level requested if the program application is well-justified and the budget is realistic and well-supported. The CDE reserves the right to fund applications at a lesser amount or not fund all career pathways within the application if it is determined that the application can be implemented with less funding, or if state funding is not sufficient to fully fund all applications that merit award. The CDE also reserves the right to award a fewer or greater number of grants in each category depending on the quality of the grants submitted.

C. Fund Distribution

The grant period will cover the 2014–15, 2015–16, 2016–17, and 2017–18 school years. Funds for this grant will be distributed over a period of three years as follows:

- Year 1: 50 percent of the total award for expenditures beginning in the 2014–15 school year
- Year 2: 35 percent of the total award for expenditures beginning in the 2015–16 school year
- Year 3: 15 percent of the total award for expenditures beginning in the 2016–17 school year

D. Eligibility Requirements

Applicants can apply as a:

1. Regional consortium consisting of multiple local educational agencies (LEA), community colleges, and business partners formed to address the employment needs of a specific economic region or a;
2. Local consortium including at least one LEA, one community college, and one business partner.

For the purposes of this grant, an LEA is defined as a school district, direct-funded charter school, or a county office of education.

In addition to the partnership requirement, applicants must meet the following requirements:

1. Identify an applicant agency/fiscal agent. An applicant agency/ fiscal agent must be a school district, a county office of education, a direct-funded charter school, or a community college district.
2. The applicant agent/fiscal agent must set aside funding within its own budget and obtain funding commitments from program partners sufficient to support the ongoing costs of the program.
3. Prepare the application in the name of the applicant agency/fiscal agent, not the partnership/consortium, since the group is not a legal entity.
4. Confirm that all partners meet the following requirements:
 - a. Agree and provide all responsibilities listed on pages 9–11 below.
 - b. Sign a partnership agreement that specifically outlines all services each consortium member agrees to provide and for what period of time those services will be provided (submit as part of Section IV of narrative).
5. Confirm that the applicant agency/fiscal agent:
 - a. Will receive and administer the grant funds and submit the required reports to account for the use of grant funds.
 - b. Will be responsible for the performance of any services provided through funds awarded under this grant by the partners, consultants, or other organizations.

Please note an eligible agency can be an applicant agency/ fiscal agent for only one CCPT application. However, an agency who is serving as the applicant agency/fiscal agent for one application may be a partner in other CCPT applications.

E. Letter of Intent to Apply Requirement

All applicants intending to submit an application are required to send a Letter of Intent to Apply, Form A, to the CDE postmarked by **Friday, February 14, 2014**, to the following mailing address or by e-mail to careerpathways@cde.ca.gov.

Career and College Transition Division
California Career Pathways Trust
California Department of Education
1430 N Street, Suite 4202
Sacramento CA 95814

F. Defining the Labor Market

High-skill, high-wage, high-growth jobs, in industry sectors that drive the regional economy can be tracked by state and local occupational employment projections. These projections estimate the changes in occupational employment over time resulting from industry growth, technological changes, and other factors. The California Employment Development Department (EDD) has developed state and sub-state area long-term projections for a 10 year period. The projections are revised every two years to incorporate economic changes that occur in the state and local areas. Statewide short-term projections are for a two year period and are revised annually.

In addition to the EDD labor market data, applicants may also use studies and resources available from the California Community College Chancellor's Office (CCCCO) Doing What Matters for Jobs and Economy Web page at www.doingwhatmatters.cccco.edu. The goals of the Doing What Matters for Jobs and the Economy framework are to supply in-demand skills for employers, create relevant career pathways and stackable credentials, promote student success, and get Californians into open jobs.

For the purposes of this RFA, high-skill, high-wage, and high-growth jobs in industry sectors that drive a regional economy or that are emerging in economic sectors will be aligned with the EDD labor market projections and/or the CCCCCO Doing What Matters framework (see links below). Applicants may use data other than the EDD labor market projections/data or Doing What Matters resources, however the applicant must justify the source and the quality of the data to receive maximum points.

EDD labor market information can be found on the EDD Projections of Employment by Industry and Occupation Web page at http://www.labormarketinfo.edd.ca.gov/LMID/Projections_of_Employment_by_Industry_and_Occupation.html.

An inventory of priority and emergent sectors along with economic regions identified through the community college regional consortia can be found on the CCCCCO Doing

What Matters for Jobs and the Economy Interactive Resource Map Web page at <http://doingwhatmatters.cccco.edu/ResourceMap.aspx>.

Applicants can also contact Deputy Sector Navigators who coordinate industry-specific workforce services aligning community colleges and other workforce development resources. Industry specific resources can be found on the California Community Colleges Web site at <http://www.cccewd.net/>.

An additional resource is California's Workforce Investment System, which is comprised of 49 local workforce investment areas, each with its own business-led local board. The local board oversees the delivery of workforce services to local residents and businesses. More information is available on California's Workforce Investment Board Local Boards Web page at http://www.cwib.ca.gov/local_boards.htm.

G. Essential Responsibilities of Partners

Secondary Partners Responsibilities:

- Commit to fully implement a career pathways program(s);
- Form a strong collaboration, documented in a formal agreement, with postsecondary, business, and any other community partners;
- Develop a formal decision-making structure including identifying key leaders from each sector;
- Recruit a student cohort broadly representative of the overall school population, including students with special needs for enrollment in the career pathway;
- Identify potential school leaders who have demonstrated the ability to drive student outcomes; can provide the leadership skills essential for program success; and can integrate high school, college, and work-based learning experiences;
- Provide dedicated staff to work on the career pathways program who have the authority to coordinate with postsecondary education on the LEAs behalf;
- Work with higher education, workforce development entities, and industry partners to develop seamless transitions for students into postsecondary education, employment, and or training;
- Establish opportunities for all students to:
 - Accelerate into community college courses while still in high school.

- Participate in appropriately sequenced work-place experiences to make informed choices among postsecondary options.
- Develop personal dispositions such as time management, collaboration, problem-solving, leadership, study skills, communication, and analytical skills, which are required for success in the workplace.
- Provide relevant and ongoing professional development for administrators, and all participating teachers/instructors, including support and frequent opportunities for reflection and collaboration during the school year; and
- Maximize available funding streams (in addition to the grant funding), to support the needs of participating students within the career pathway.

Postsecondary Partners Responsibilities:

- Form a strong collaboration, documented in a formal agreement, with secondary, business, and any other community partners;
- Identify appropriate credit-bearing college courses and dual enrollment courses in a career pathway to prepare students to enter postsecondary without need for remediation;
- Collaborate with the secondary partner(s) to determine which courses will be taught by college faculty, by high school teachers with adjunct status, or by a combination of the two (ensuring the appropriate college-level rigor of courses taught by adjunct faculty) leveraging dual enrollment, credit recognition on e-transcript, and credit-by-exam policies in support thereof;
- Collaborate with high school faculty to ensure that course content will prepare students for college level work;
- Negotiate agreements with participating secondary agencies to support dual enrollment and early admission to aligned pathway programs;
- Collaborate with business partners to align college coursework with relevant technical skills and workplace competencies, as defined by industry;
- Maintain student advisory resources and credit transfer policies that protect the pathway to degree completion for participating students;
- Commit to maximize available funding streams (in addition to grant funding), to support the needs of participating students;

- Provide dedicated staff to work on the career pathways program who has the authority to coordinate with the LEA on the college/university partner's behalf; and
- Leverage, connecting and building upon existing investments in education and workforce development.

Business partner Responsibilities:

- Form a strong collaboration, documented in a formal agreement, with secondary, postsecondary, and any other community partners;
- Commit to provide all students enrolled in a career pathway an opportunity to participate in some form of workplace learning, including job shadowing, paid or unpaid internships, virtual and group experiences, and paid part-time and/or summer employment;
- Create an up-to-date skills map for the industry/sector that identifies essential job requirements and competencies;
- Provide workplace visits, speakers, and mentors for participating students and externships for teachers and community college faculty as appropriate;
- Collaborate with LEA and postsecondary staff to align technical skills and workplace competencies with curriculum, course offerings, and other resources; and
- Provide dedicated staff to work on the career pathways program including an Industry Liaison who has the authority to coordinate with the school on the business partners' behalf.

All partners must commit to participate in statewide CCPT Network meetings, and to become members of a virtual learning community to share expertise and experiences on the development of career pathways programs, as well as pertinent resources, tools, and strategies.

All partners will be obligated to collect, analyze, and submit data to a data collection repository administered by an entity to be designated by the CDE.

H. Allowable Activities and Costs

Budgets for the use of grant funds will be reviewed and scored as part of the application process. Items deemed non-allowable, excessive, or inappropriate will be eliminated and the budget adjusted accordingly. Budgets that include non-allowable, excessive, or inappropriate items will receive a lower score. Generally, all expenditures must

Form C: California Career Pathways Trust Program of Study Worksheet

Industry Sector: _____

Career Pathway: _____

LEVELS	GRADE	English/ Language Arts	Math	Science	Social Studies	Career/ Technical Education Courses	Other Required Courses or Recommended Electives	Occupations Relating to this Pathway (Multiple Exit Points) with Hourly Wage
SECONDARY	9							Occupations Requiring Less Than a Baccalaureate Degree ▲ ▲ ▲ ▲ ▲
	10							
	11							
	12							Occupations Requiring a Baccalaureate Degree ▲ ▲ ▲ ▲ ▲
		Articulated Dual Credit courses may be taken/moved to the secondary level for articulation/dual credit purposes.						
POSTSECONDARY	Year 13							
	Year 14							Industry recognized certifications, licenses, or Credentials related to this pathway ▲ ▲ ▲ ▲ ▲
	Year 15							
	Year 16							

WIB Manufacturing Committee Meeting
January 8, 2014

MINUTES

Committee Members

Tavi Udrea, Vice Chair*
Vic Anselmo*
Teresa Johnson*
Joe Klocko **
Tiffany Morse
Scot Rabe

WIB Member

Iris Ingram

WIB Staff

Patricia Duffy
Cheryl Moore
Theresa Salazar Vital

Guests

Brad Hudson (Congresswomen Julia Brownley)
Marybeth Jacobsen (Simi Valley Chamber of Commerce)

**WIB Members*

*** Advanced Manufacturing Deputy Sector Navigator*

1.0 Call to Order and Agenda Review

Tavi Udrea called the meeting to order at 8:07a.m. No changes were made to the agenda.

2.0 Public Comments

No comments

3.0 Committee Vice Chair Comments

No comments

4.0 Approval of Minutes: December 6, 2013

Motion to approve: Scot Rabe
Second: Vic Anselmo
Abstain: Teresa Johnson
Motion approved

5.0 Pathways to Prosperity Institute: December 19, 2013

Tiffany Morse shared highlights of the new California effort to build pathways to careers by linking business leaders with the California Department of Education, the California Community College Chancellor's Office, the California Workforce Investment Board, and the Pathways to Prosperity Network. The goals are for educational agencies and businesses to collaborate and create regional career pathways aligned to local labor market needs; integrate academic and career-based learning aligned to high-need, high-growth, and emerging regional economic sectors; and establish effective work-based learning programs between educational agencies and businesses. Notes shared from this meeting are listed below:

Critical Need

a. Quality Markers that Ensure Young Professional's Success:

- Qualifications are transferable among companies
- The student "owns" his or her skills and can sell them in the marketplace
- Workplace trainers are credentialed to work with young people

- Applied assessments are given by teams of employers, unions, and educators
- Apprenticeships are keyed to the needs of the labor market but employers must meet standards to participate

b. Challenges to Systems Building

- Early Career Advising: Most schools and communities lack a systemic strategy to introduce young people to the world of careers beginning in the early grades.
- 9-14 Technical Pathways: Providers do not offer enough "high demand" and high quality career education that includes work-based learning.
- Intermediaries: Communities lack organizations to serve as the "glue" between the school system and employers: to convene employers, aggregate work based learning opportunities, align education with labor market needs.
- Employer Engagement: Employers do not partner with education systems to build talent pipelines for young professionals.

c. Intermediary Agencies

(David Rattray, Senior Vice President of Education and Workforce Development, Los Angeles Area Chamber of Commerce)

- Relationship managers
- Backbone organizations
- Intermediary fanatics
- Being "of" versus being "between"
- Act like a system, look like a program
- Position allies in high levels of stakeholder groups

Teresa Johnson commented on how the Pathways to Prosperity model is a foundational piece for the Council on Occupational Education (COE), accreditation process. The California Community College Chancellor's Office (CCCCO) and the California Department of Education (CDE) released the AB 86 Adult Education Regional Consortium Program Certification of Eligibility (COE) Materials. The AB 86 Regional Consortium Program COE is the result of a partnership between the CCCCCO and the CDE. The agencies jointly established an AB 86 Cabinet to guide and oversee the activities of a Work Group that developed the COE. The COE focuses on Community College Districts and K-12 School Districts coming together to improve Adult education in five key areas. The areas of focus are as follows:

- Elementary and secondary basic skills, including classes required for a high school diploma or high school equivalency certificate
- Classes and courses for immigrants eligible for education services in citizenship and English as a second language and workforce preparation classes in basic skills
- Education programs for adults with disabilities
- Short-term career technical education programs with high employment potential
- Programs for apprentices

6.0 Ventura County Regional Strategic Workforce Development Plan

- Manufacturing Readiness Skill Categories: WIB staff is in process to finalize and release the outline for public use.

- Manufacturing Sector Research and Job Priorities: Committee members discussed two documents: Ventura County Occupational Employment Data & Growth Projections: Manufacturing and an initial listing of Ventura County Career Education Pathways for 2013-14, listing, in part, Ventura County High School, Adult School, and Community College courses. Updated information will be shared at the February 12th meeting.
- Sector Committee 2-Year Plan Outline: The Committee added Elected Officials and Chamber of Commerce to the list of organizations that should play a part in discussions of manufacturing workforce needs.

7.0 Event and Public Service Announcements

- January 16, 2014 (3-6:00 p.m.): EDC-VC 17th Annual Meeting, Spanish Hills Country Club 999 Crestview Avenue, Camarillo
- April 3, 2014 (8:00 - 11:30 a.m.): Ventura County Civic Alliance Workforce Education Conference, Ventura County Office of Education Conference Center 5100 Adolfo Road, Camarillo

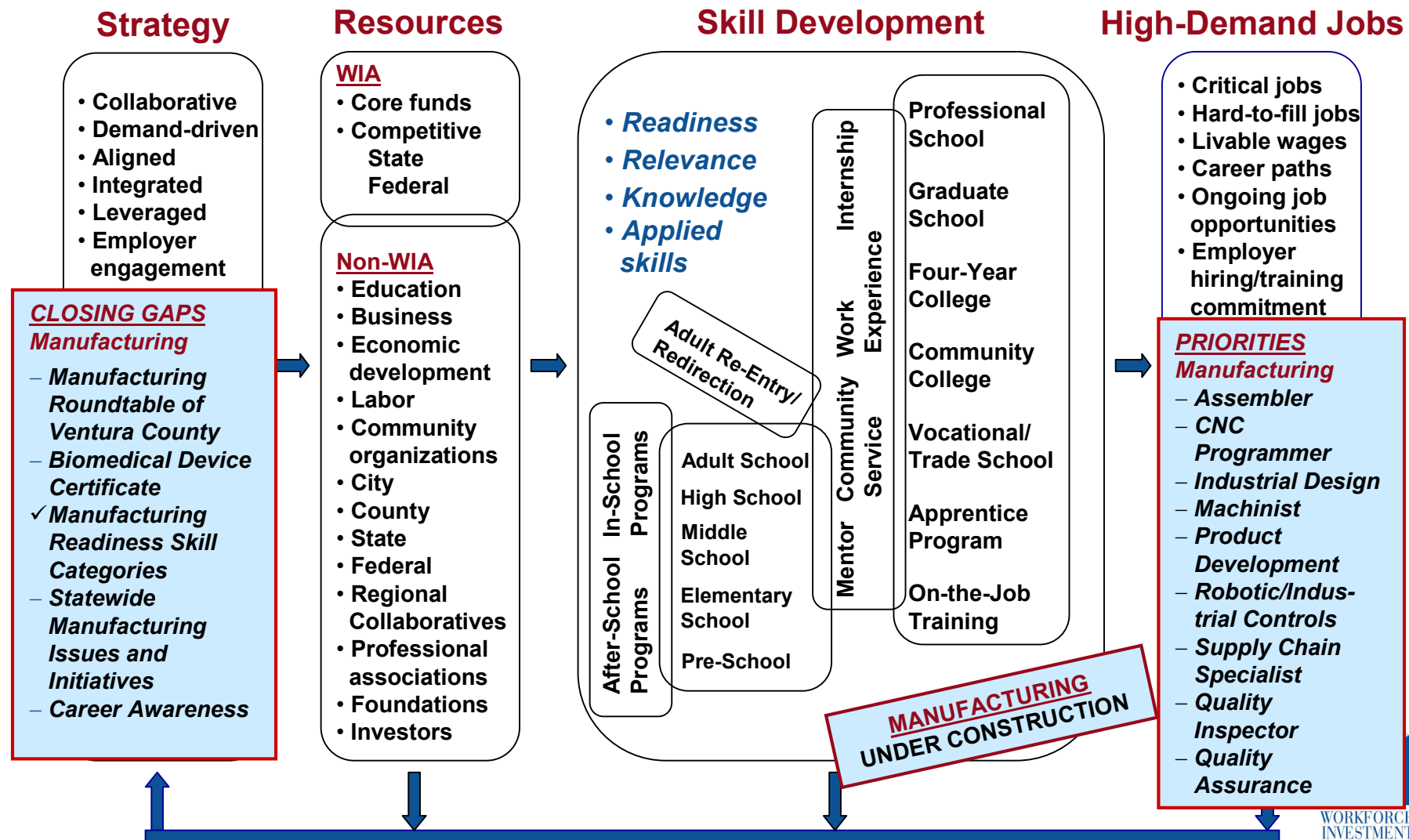
8.0 Adjournment

Motion to adjourn the meeting at 9:27a.m.: Teresa Johnson
 Second: Vic Anselmo
 Motion carried

Next Meeting

February 12, 2014 (8:00 a.m. - 9:30 a.m.)
 Ventura College (Room MCW 312)
 4667 Telegraph Road, Ventura CA

BUILDING A COMPETITIVE WORKFORCE PIPELINE IN VENTURA COUNTY



Industry Sector Pathways		
Agriculture and Natural Resources	<ul style="list-style-type: none"> • Agricultural Business • Agricultural Mechanics • Agriscience • Animal Science 	<ul style="list-style-type: none"> • Forestry and Natural Resources • Ornamental Horticulture • Plant and Soil Science
Arts, Media, and Entertainment	<ul style="list-style-type: none"> • Design, Visual, and Media Arts • Performing Arts 	<ul style="list-style-type: none"> • Production and Managerial Arts • Game Design and Integration
Building and Construction Trades	<ul style="list-style-type: none"> • Cabinetry, Millwork, and Woodworking • Engineering and Heavy Construction 	<ul style="list-style-type: none"> • Mechanical Systems Installation and Repair • Residential and Commercial Construction
Business and Finance	<ul style="list-style-type: none"> • Business Management • Financial Services 	<ul style="list-style-type: none"> • International Business
Education, Child Development, and Family Services	<ul style="list-style-type: none"> • Child Development • Consumer Services 	<ul style="list-style-type: none"> • Education • Family and Human Services
Energy, Environment, and Utilities	<ul style="list-style-type: none"> • Energy and Power Technology • Environmental Resources 	<ul style="list-style-type: none"> • Telecommunications
Engineering and Architecture	<ul style="list-style-type: none"> • Architectural Design • Engineering Technology 	<ul style="list-style-type: none"> • Engineering Design • Environmental Engineering
Fashion and Interior Design	<ul style="list-style-type: none"> • Fashion Design and Merchandising • Interior Design 	<ul style="list-style-type: none"> • Personal Services
Health Science and Medical Technology	<ul style="list-style-type: none"> • Biotechnology • Patient Care • Health Care Administrative Services 	<ul style="list-style-type: none"> • Health Care Operational Support Services • Public and Community Health • Mental and Behavioral Health
Hospitality, Tourism, and Recreation	<ul style="list-style-type: none"> • Food Science, Dietetics, and Nutrition • Food Service and Hospitality 	<ul style="list-style-type: none"> • Hospitality, Tourism, and Recreation
Information and Communication Technologies	<ul style="list-style-type: none"> • Information Support and Services • Networking 	<ul style="list-style-type: none"> • Software and Systems Development • Games and Simulation
Manufacturing and Product Development	<ul style="list-style-type: none"> • Graphic Production Technologies • Machining and Forming Technologies 	<ul style="list-style-type: none"> • Welding and Materials Joining • Product Innovation and Design
Marketing, Sales, and Services	<ul style="list-style-type: none"> • Marketing • Professional Sales 	<ul style="list-style-type: none"> • Entrepreneurship/Self-Employment
Public Services	<ul style="list-style-type: none"> • Public Safety • Emergency Response 	<ul style="list-style-type: none"> • Legal Practices
Transportation	<ul style="list-style-type: none"> • Operations • Structural Repair and Refinishing 	<ul style="list-style-type: none"> • Systems Diagnostics, Service, and Repair

Agriculture and Natural Resources

High School	District	High School	Pathway	Courses	
	Oxnard Union High School District	Adolfo Camarillo	Agriculture Business Management/ Animal Science	Animal and Plant Physiology I Animal and Plant Physiology II Nursery Operations Agriculture Business Agriculture Business Academy	
			Agriculture Business Management/ Ornamental Horticulture	Intro to Floral Design Advanced Floriculture and Floristry Nursery Operations Agriculture Business Agriculture Business Academy	
		Channel Islands	Marine Science Academy	Ocean Careers/Technology Marine Biology Environmental Science	
	Santa Paula Unified School District	Santa Paula	Agriscience	Agriculture Science Academy I Agriculture Science Academy II Agriculture Science Academy III Agriculture Science Academy IV Supervised Agriculture Experience Program	
	Ventura Unified School District	Ventura	Ornamental Horticulture	Agriculture Biology Landscape Landscape Design Floral Design	
			Plant and Soil Science	Agriculture Biology Landscape AP Environmental Science	
Adult School	Ventura County Office of Education	Career Education Center	Capstone	Floral Design	
	School	Classes		Certificate	
	Conejo Valley				
	Oxnard				
	Simi Valley				
	VACE				
Community College	College	Classes	AA/AS	Certificate of Accomplishment	Proficiency Award
	Moorpark	<ul style="list-style-type: none"> Botany Zoology 	<ul style="list-style-type: none"> Environmental Studies Exotic Animal Training Management 	<ul style="list-style-type: none"> Exotic Animal Training Management 	
	Oxnard	<ul style="list-style-type: none"> Marine Studies 	<ul style="list-style-type: none"> Coastal Environmental Studies 		
	Ventura	<ul style="list-style-type: none"> Resource Management 	<ul style="list-style-type: none"> Biological Sciences Water Science 	<ul style="list-style-type: none"> Biological Sciences Water Science 	<ul style="list-style-type: none"> Biotechnician Biotech Manufacturing Technician

Arts, Media and Entertainment

	District	High School	Pathway	Courses
High School	Conejo Valley Unified School District	Westlake	Media and Design Arts	Computer Graphics Advanced Computer Graphics
	Ojai Unified School District	Nordhoff	Media Arts Academy	Beginning Graphic Design Advanced Graphic Design Digital Imaging Digital Illustration/Intro to Animation Video Production
	Moorpark Unified School District	Moorpark	Media and Design Arts	Advanced Graphic Arts and Website Design AP Studio Art: 2-D Design
	Simi Valley Unified School District	Santa Susana	Digital Graphics and Publication	Basic Design Digital Photo AP Studio Art Graphics and Publication Graphic Design (ROP)
			Production and Managerial Arts (School of Technical Arts)	Basic Design Video Production Movie Production Video Editing Broadcasting Video Entrepreneur Stagecraft (ROP)
	Ventura County Office of Education	Career Education Center	Capstone	Graphic Communications App Development
Adult School	School	Classes		Certificate
	Conejo Valley	Photoshop Level I Photoshop Level II Illustrator Level I InDesign Level I		Adobe Production Graphics
	Oxnard			
	Simi Valley	Graphic Design Multimedia Video and Animation Production		
	VACE	Graphics Designer for Web Digital Multimedia Technician Studio Production Technician		

Arts, Media and Entertainment - Continued

Community College	College	Classes	AA-T/AS-T	AA/AS	Certificate of Achievement	Proficiency Award
	Moorpark	<ul style="list-style-type: none"> Journalism Commercial Photography 		<ul style="list-style-type: none"> 2-D Studio Art FTVM Production Graphic Design Multimedia Technical Theater 	<ul style="list-style-type: none"> FTVM Production Graphic Design Multimedia Technical Theater 	
	Oxnard	<ul style="list-style-type: none"> Digital Media Studies 	<ul style="list-style-type: none"> TV, Filmmaking and Media Arts (2014-2015) 	<ul style="list-style-type: none"> TV, Filmmaking and Media Arts 	<ul style="list-style-type: none"> TV, Filmmaking and Media Arts 	
	Ventura	<ul style="list-style-type: none"> Commercial Photography Digital Media 		<ul style="list-style-type: none"> Photography 	<ul style="list-style-type: none"> Photography 	

Building Trades and Construction					
High School	District	High School	Pathway	Courses	
	Conejo Valley Unified School District	Conejo Valley Newbury Park Thousand Oaks	Cabinet Making and Wood	Wood I Wood II Cabinet Making (ROP)	
		Thousand Oaks	Cabinet Making and Wood	Wood I Wood II Construction Basics Cabinet Making (ROP)	
	Oxnard Union High School District	Adolfo Camarillo Oxnard	Cabinet Making and Wood	Wood I Wood II Cabinetmaking Production Technology	
		Oxnard	Green Technologies Academy	Wood A Wood B Project Lead the Way Engineering	
	Simi Valley Unified School District	Simi Valley	Wood Technology	Wood Advanced Wood Design	
	Ventura Unified School District	Buena	Cabinet Making and Wood	Wood I Wood II Wood III Cabinet Making	
		Ventura	Residential and Commercial Construction	Wood I Wood II	
Adult School	School	Classes		Certificate	
	Conejo V.	Woodworking/Refinishing			
	Oxnard				
	Simi V.				
	VACE				
Community College	College	Classes	AA/AS	Certificate of Accomplishment	Proficiency Award
	Moorpark				
	Oxnard				
	Ventura	• Construction Technology	• Building Inspection • Construction Management • Drafting Industl Design	• Building Inspection • Construction Management • Drafting Industl Design	• Electrician Trainee

Finance and Business

District	School	Pathway	Courses
High School	Moorpark Unified School District	Moorpark	Virtual Enterprise/Business Seminar Introduction to Business and Computers Small Business Manager
	Oxnard Union High School District	Adolfo Camarillo	Accounting Services
		Adolfo Camarillo Channel Islands	Banking and Related Services
	Simi Valley Unified School District	Santa Susana Royal Simi Valley	Business Education
		Royal Simi Valley	Business Education
	Ventura Unified School District	Buena	Business Financial Management
School	Classes		Certificate
Adult School	Conejo Valley	QuickBooks Pro, Level I QuickBooks Pro, Level II Applied QuickBooks Bookkeeping Certificate Program Loan Signing Agent	Computerized Accounting Technician QuickBooks and Computerized Accounting
	Oxnard	Computerized Accounting	
	Simi Valley	Account Clerk Bookkeeper	
	VACE	Accounting Clerk Computerized Financial Accounting Payroll Clerk Business Administration Business Administration and Management Business Manager/World Wide Web	

Finance and Business - Continued

Community College	College	Classes	AA-T/AS-T	AA/AS	Certificate of Achievement	Proficiency Award
	Moorpark	<ul style="list-style-type: none"> Accounting 		<ul style="list-style-type: none"> Business 		
	Oxnard	<ul style="list-style-type: none"> Accounting Business Human Services 	<ul style="list-style-type: none"> Business Administration 	<ul style="list-style-type: none"> Business Administration 	<ul style="list-style-type: none"> Business Business Management Administrative Asst. 	<ul style="list-style-type: none"> Office technologies
	Ventura			<ul style="list-style-type: none"> Accounting Business Management 	<ul style="list-style-type: none"> Accounting Business Management Receptionist Administrative Asst. 	<ul style="list-style-type: none"> Bookkeeping Administrative Asst.

Education, Child Development, and Family Services

High School	District	School	Pathway	Courses		
	Conejo Valley Unified School District	Newbury Park, Thousand Oaks	N/A	Educational Aide for Young Children		
	Oxnard Union High School District	Adolfo Camarillo, Oxnard, Pacifica, Hueneme, Channel Islands, Rio Mesa	Child Development	Core A and B Developmental Psychology of Children and Adolescents A Developmental Psychology of Children and Adolescents B Vocation Pre-school Aide		
		Pacifica	Teaching, Educational, and Careers Academy	Intro to Educational Careers Teaching and Education I Teaching and Education II Educational Aide for Young Children		
	Santa Paula Unified School District	Santa Paula	Human Services Academy	Introduction to Human Services Child Development and Care Elementary Aide Internship Human Services Internship Preschool Aide Internship		
Adult School	School	Classes		Certificate		
	Conejo Valley					
	Oxnard					
	Simi Valley					
	VACE					
Community College	College	Classes	AA-T/AS-T	AA/AS	Certificate of Achievement	Proficiency Award
	Moorpark			• Child Development /ECE	• Child Development/ECE • Associate Teacher	
	Oxnard	• Child Development • Early Childhood Ed	• Early Childhood Education	• Child Development	• Child Development	
	Ventura			• Child Development	• Child Development	

Engineering and Design

High School	District	School	Pathway	Courses	
	Conejo Valley Unified School District	Thousand Oaks	N/A	Computer Aided Drafting Architectural Design I Architectural Design II	
		Westlake	N/A	Architectural Design	
	Oxnard Union High School District	Adolfo Camarillo	Architectural and Structural Engineering	Beginning Drafting Architectural Design Architecture II Computer Aided Drafting Technical Illusion	
		Hueneme	Engineering Design Pathway	Intro to Engineering and Design Intro to Engineering Computer Engineering/Multimedia Architecture and Design	
Adult School	School	Classes		Certificate	
	Conejo Valley				
	Oxnard				
	Simi Valley	Introduction to CAD/CAM Programming CAD Drafting and Design: CAD Drafting principles, AutoCAD 2D, AutoCAD 3D Revit Architecture, Solidworks			
	VACE	Computer-Aided Design Technician Solid Works Technician			
Community College	College	Classes	AA/AS	Certificate of Accomplishment	Proficiency Award
	Moorpark			• Engineering	
	Oxnard				
	Ventura	<ul style="list-style-type: none"> • Architecture • Engineering • Manufact Applic. • Welding 	<ul style="list-style-type: none"> • Industrial Design/Manufacturing • Drafting 	<ul style="list-style-type: none"> • Industrial Design/Manufacturing • Drafting • CAD 	<ul style="list-style-type: none"> • Drafting • CAD • CNC Machine

Energy and Utilities					
High School	District	School	Pathway	Courses	
Adult School	School	Classes		Certificate	
	Conejo Valley				
	Oxnard				
	Simi Valley				
	VACE				
Community College	College	Classes	AA/AS	Certificate of Achievement	Proficiency Award
	Moorpark				<ul style="list-style-type: none">Photovoltaic Technology
	Oxnard	Energy Auditing	<ul style="list-style-type: none">Environmental Control Technology	<ul style="list-style-type: none">Environmental Control Technology	
	Ventura				

Fashion and Interior Design

	District	School	Pathway	Courses	
High School	Oxnard Union High School District	Adolfo Camarillo, Oxnard, Pacifica, Hueneme, Channel Islands, Rio Mesa	Fashion Design, Manufacturing, Merchandising	Core A and B Fashion Technology I Fashion Technology II Fashion Design (ROP) Entrepreneurship in Fashion	
	Ventura County Office of Education	Career Education Center	Capstone	Fashion Retail Merchandising Screen Printing	
	School	Classes		Certificate	
Adult School	Conejo Valley				
	Oxnard	Clothing Upholstery			
	Simi Valley				
	VACE				
	College	Classes	AA/AS	Certificate of Accomplishment	Proficiency Award
Community College	Moorpark				
	Oxnard				
	Ventura				

Health Science and Technology

	District	School	Pathway	Courses
High School	Moorpark	Moorpark HS	Health Science Academy	Health in Depth Health Issues
	Ojai Unified School District	Nordhoff	Health Science Academy	Health Medical Terminology Health Careers I and II Anatomy and Physiology Emergency First Responder
	Oxnard Union High School District	Pacifica	Health Science Academy	Health Science Survey Medical Technology Applied Medical English
	Simi Valley Unified School District	Simi Valley	Medical and Health Careers Academy	Health Careers Survey Medical Terminology Pharmacology Anatomy and Physiology Medical and Health Careers Internship
	Ventura Unified School District	Foothill	Bio Tech Research and Development	Bio Science Survey Medical Technology Bio Technology
	Ventura County Office of Education	Career Education Center		Health Careers Medical Assistant Nurse Assistant I Nurse Assistant II Dental Assistant Emergency First Responder

Health Science and Technology - Continued

Adult School	School	Classes	Certificate
	Conejo Valley	Administrative Medical Assistant/Billing and Coding Specialist (Eligible for Test) Medical Laboratory Assistant Phlebotomy Skills Workshop Pharmacy Technician Emergency Medical Technician Physical Therapy Aide Heartsaver CPR Heartsaver First Aid BLS Healthcare Provider CPR Pediatric First Aid/CPR	Administrative and Clinical Medical Assistant Administrative Medical As Clinical Medical Assistant Phlebotomy Technician I Clinical Medical Assistant/Phlebotomy Technician I Medical Insurance Billing and Coding (Certificate and Eligible for Test) Certified Caregiver Training
	Oxnard	Pharmacy Technician Externship Certified Nursing Assistant/ Home Health Aide Medical Terminology CPR Medical Assistant Back Office Medical Assistant Front Office	
	Simi Valley	Technology, Removable Prosthodontic Appliances, Fixed Prothodontic Appliances Advanced Dental Technology Coronal Polishing California Radiation Safety Course Pit and Fissure Sealants Basic Life Support for Healthcare Providers Medical Insurance Billing/Insurance Clerk Medical Terminology Home Health Aide Pharmacy Technician Phlebotomy Program Surgical Technologist Physical Therapy Aide Respiratory Care	Dental Technologist: Intro to Dental EMT:: EMT Basic, EMT Skills Testing Electrocardiography Technician (Eligible for Test) Medical Assistant (Eligible for test) Nurse Assistant (Eligible for test) Advanced Practitioner Respiratory Therapist (Eligible for Test)
	VACE	Back Office Medical Assistant Front/Back Office Medical Assistant Front Office Medical Assistant Medical Receptionist Pharmacy Technician Phlebotomy, Basic Phlebotomy, Advanced	

Health Science and Technology - Continued

Community College	College	Classes	AA-T/AS-T	AA/AS	Certificate of Achievement	Proficiency Award
	Moorpark	<ul style="list-style-type: none"> Anatomy Physiology Health Education Health Sciences Nutritional Science 		<ul style="list-style-type: none"> Kinesiology Exercise Science Registered Nurse Radiation Technology 	<ul style="list-style-type: none"> Fitness Specialist Nuclear Medicine 	
	Oxnard	<ul style="list-style-type: none"> Anatomy Physiology Health Education 	<ul style="list-style-type: none"> Kinesiology (2014-2015) 	<ul style="list-style-type: none"> Dental Assisting Dental Hygiene 	<ul style="list-style-type: none"> Dental Assisting 	<ul style="list-style-type: none"> Emergency Medical Technician
	Ventura	<ul style="list-style-type: none"> Anatomy Physiology Emergency Medical Technician Health Education Health Sciences Kinesiology Physiology 		<ul style="list-style-type: none"> Medical Assistant Administrative Medical Assistant Multi-Skilled Nursing Science Paramedic 	<ul style="list-style-type: none"> Medical Assistant Administrative Medical Assistant Multi-Skilled Paramedic 	<ul style="list-style-type: none"> Medical Insurance Billing Reception Skills Holistic Studies Cert. Nurse Asst. Home Health Ad. EMT Admin Assist.

Hospitality and Tourism

	District	School	Pathway	Courses	
	Simi Valley Unified School District	Royal, Simi Valley	Family and Consumer Science	Foods and Nutrition Foods and Nutrition II Food Service Lab Aide	
	Conejo Valley School District	Newbury Park, Westlake	Food Services and Hospitality	Food and Nutrition I Food and Nutrition II Culinary Arts	
	Ventura Unified School District	Ventura	Food Services and Hospitality	Foods and Nutrition Foods and Nutrition Science Culinary Arts I Culinary Arts II	
	Oxnard Union High School District	Adolfo Camarillo, Oxnard, Pacifica, Hueneme, Channel Islands, Rio Mesa	Food Services and Hospitality	Core A and B Regional Cuisine Senior Foods Food Science International Cuisine Hospitality and Tourism Culinary Arts	
		Pacifica	Food Services and Hospitality	Core A Intro to Culinary Arts Regional Cuisine International Cuisine Intro to Baking and Pastry Culinary Arts	
Adult School	School	Classes		Certificate	
	Conejo Valley	Nutrition 101			
	Oxnard				
	Simi Valley				
	VACE				
Community College	College	Classes	AA/AS	Certificate of Achievement	Proficiency Award
	Moorpark				
	Oxnard		<ul style="list-style-type: none">Culinary ArtsRestaurant Management	<ul style="list-style-type: none">Culinary ArtsRestaurant Management	
	Ventura				

Information Technology

District	School	Pathway	Courses	
High School	Conejo Valley Unified School District	Conejo Valley, Newbury Park, Thousand Oaks	N/A	Personal Computing I Personal Computing II
		Newbury Park	N/A	Webpage Design
		Newbury Park, Thousand Oaks	N/A	Computer Programming I Computer Programming II
		Conejo Valley, Thousand Oaks	N/A	Microsoft Computer Applications
	Simi Valley Unified School District	Santa Susana, Royal High School, Simi Valley	Computer Education	AP Computer Science Computer Apps I Computer Apps II
		Santa Susana	Computer Education	AP Computer Science Computer Apps I Computer Apps II
			Academy of Computer Programming	Computer Programming I Computer Programming II Computer Programming III AP Computer Science
			Internet Development	Web-site Design Graphics and Publication Webmaster (ROP)
			Buena	Media Support and Services
	Ventura Unified School District	Ventura	Computer Hardware and Electrical	Computer Repair Network Technology Robotics
			Software and Systems Development	Keyboarding and Computer Apps AP Computer Science Robotics Education in the Digital Age
			Foothill	Media Support and Services
		Oxnard Union High School District	Adolfo Camarillo, Oxnard, Pacifica, Hueneme, Channel Islands, Rio Mesa	Information Support and Services

Information Technology - Continued

High School	Oxnard Union High School District	Adolfo Camarillo, Oxnard, Pacifica, Hueneme, Channel Islands, Rio Mesa	Media Support and Services	Computer Foundations Computer Applications Multi Media Production I and II Web Design I Web Design II Desktop Publishing Webmaster/Internet OC
			Networking Pathway	Computer Foundations Computer Applications Internet Applications Network Technology
			Software and Systems Development	Computer Foundations Computer Applications Computer Programming A Computer Programming B Advanced Programming
	Ventura County Office of Education	Career Education Center	Capstone	Computer Business Software App Design Graphic Communications
Adult School	School	Classes		Certificate
	Conejo Valley	Computer Basics Microsoft Level I Microsoft Level II Website Creation and Maintenance Website Creation and Maintenance + Adobe Graphics Microsoft Word I Microsoft Word II Microsoft Word III Microsoft Office PowerPoint Excel I Excel II Excel III Windows 7 Windows 8 Access Database Basics Access Table Rules and Queries Access Forms and Reports Dreamweaver Website Code, Beginning Photo Optimization for the Web WordPress Level I		
	Oxnard	Windows 7 Computer Business Applications		

Information Technology - Continued

Adult School	Simi Valley	Keyboarding Computer Literacy Intro to PC PC Computer Operator Specialist Access I, II Excel I, II Outlook PowerPoint Publisher Windows Word I, II Intro to HTML Cascading Style Sheets			
	VACE	Computer Support Technician Network Support Technician Computerized Office Professional Graphics Designer for Web Microsoft Office Basics	Microsoft Certified Systems Administrator		
Community College	College	Classes	AA/AS	Certificate of Achievement	Proficiency Award
	Moorpark	<ul style="list-style-type: none">• Computer Information Systems• Computer Science	<ul style="list-style-type: none">• Computer Network Systems Engineer	<ul style="list-style-type: none">• Advanced Network Specialist• Windows Engineering	<ul style="list-style-type: none">• Basic Network Specialist• Cisco System Networks Associate• Windows Administration
	Oxnard	<ul style="list-style-type: none">• Computer Information Systems	<ul style="list-style-type: none">• Computer Networking/IT	<ul style="list-style-type: none">• Computer Networking/IT	<ul style="list-style-type: none">• Office Technologies
	Ventura	<ul style="list-style-type: none">• Computer Science			

Manufacturing and Product Development

	District	School	Pathway	Courses
High School	Conejo Valley Unified School District	Thousand Oaks	Machine and Forming Tech	Metals I Metals II Metals III Metals IIII
	Oxnard Union School District	Rio Mesa	Machine and Forming Tech	Beginning Manufacturing Advanced Manufacturing Manufacturing and Product Development
	Simi Valley Unified School District	Simi Valley	Industrial Technology	Manufacturing Technology
		Royal	Industrial Technology	Furniture and Cabinet Construction
		Royal, Simi Valley	Industrial Technology	Wood Design I Wood Design II Woodshop Manager
	Ventura Unified School District	Buena	Welding Technology	Metal I Metal II Metal III Industrial Plant Welding
		Ventura	Machine and Forming Tech	Metal I Metal II CAD for Manufacturing
	Ventura County Office of Education	Career Education Center	Capstone	Welding
Adult School	School	Classes		Certificate
	Conejo Valley	Intro to Metalworking		
	Oxnard	Welding		
	Simi Valley	Beginning Welder Advanced Welding Welding Fabricator		Basic Machine Shop CNC operations and Programming Intro to MasterCAM Intro to GibbsCAM Master Welding Course
	VACE			

Manufacturing and Product Development - Continued

Community College	College	Classes	AA/AS	Certificate of Achievement	Proficiency Award
	Moorpark			<ul style="list-style-type: none"> • Biotech Manufacturing 	
	Oxnard				
	Ventura	<ul style="list-style-type: none"> • Drafting • Architecture • CAD 		<ul style="list-style-type: none"> • Welding 	<ul style="list-style-type: none"> • CNC Machine operator • Manufacturing Applications • Welding • Biotech. Manufact. Tech.

Marketing, Sales and Service						
High School	District	School	Pathway		Courses	
	Conejo Valley School District	Thousand Oaks (ETHOS)	Entrepreneurship		Entrepreneurship Sports and Entertainment Marketing Economics/Virtual Enterprise	
	Oxnard Union High School District	Adolfo Camarillo, Oxnard, Pacifica, Hueneme, Channel Islands, Rio Mesa	Marketing/Entrepreneurship/ Self-Employment/Professional Sales		Computer Foundations Exploring Business and Technology Intro to Accounting Marketing Business Law Economics of Business Ownership ROP Fashion Retail Merchandising	
Adult School	School	Classes			Certificate	
	Conejo Valley	Tricks and Tips for SEO Notary in One Day (Eligible for Test)				
	Oxnard					
	Simi Valley	Internet for business Telephone techniques Customer Service Representative Notary Public (Eligible for test) Real Estate Agent/Broker (Pre-license course)				
	VACE	Computerized Marketing Support Technician Web Business Graphics/Desktop Publishing Customer Services Representative/Collections				
Community College	College	Classes	AA-T/AS-T	AA/AS	Certificate of Achievement	Proficiency Award
	Moorpark					
	Oxnard	<ul style="list-style-type: none">• Business• Business Management• Administrative Asst.	<ul style="list-style-type: none">• Business Administration	<ul style="list-style-type: none">• Business• Business Management• Administrative Asst.	<ul style="list-style-type: none">• Business• Business Management• Administrative Asst.	<ul style="list-style-type: none">• Office technologies
	Ventura			<ul style="list-style-type: none">• Business Management• Accounting	<ul style="list-style-type: none">• Business Management• Accounting	<ul style="list-style-type: none">• Reception Skills• Administrative Assistant• Bookkeeping

Public Service

	District	School	Pathway	Courses	
High School	Moorpark Unified School District	Moorpark		Fire Cadet	
	Oxnard Union School District	Oxnard	Law and Public Services	Intro to Legal Systems Criminal Justice Forensics	
	School	Classes		Certificate	
Adult School	Conejo Valley				
	Oxnard				
	Simi Valley	Legal Office Procedures Legal Terminology			
	VACE	Legal Secretary			
	College	Classes	AA/AS	Certificate of Achievement	Proficiency Award
Community College	Moorpark			• Criminal Justice	
	Oxnard		• Fire Technology • Paralegal Studies	• Fire Technology • Paralegal Studies	
	Ventura		• Criminal Justice • Human Services	• Criminal Justice • Human Services	• Social Services Affiliate • Social Welfare Specialist • Mental Health Rehab. Pract.

Transportation

	District	School	Pathway	Courses	
High School	Simi Valley Unified School District	Simi Valley	Industrial Technology	Automotive Essentials Automotive Advanced	
	Ventura Unified School District	Buena	Vehicle Maintenance and Repair	Auto II Auto Technology Auto Technology	
		Ventura	Systems Diagnostics and Service	Auto Mechanics I Auto Mechanics II Auto Service	
	Oxnard Union School District	Channel Islands, Oxnard	Operations	Intro to Auto Intermediate Auto Advanced Auto ROP	
			Structural Repair and Refinishing	Intro to Auto Intermediate Auto Advanced Auto ROP ROP Collision and Repair	
			Systems Diagnostics and Service	Intro to Auto Intermediate Auto Advanced Auto ROP Auto Service	
Adult School	School	Classes		Certificate	
	Conejo Valley				
	Oxnard	Auto Service Auto Body/Auto Paint			
	Simi Valley				
	VACE				
Community College	College	Classes	AA/AS	Certificate of Achievement	Proficiency Award
	Moorpark				
	Oxnard		<ul style="list-style-type: none"> Automotive Body and Fender Repair Automotive Technology 	<ul style="list-style-type: none"> Automotive Body and Fender Repair Automotive Technology 	
	Ventura		<ul style="list-style-type: none"> Automotive Technology 	<ul style="list-style-type: none"> Automotive Technology State Smog Technician 	

Ventura County Occupational Employment Data & Growth Projections																	
MANUFACTURING																	
SOC / ONET Code*	Occupations	2013 Education and Training Level***	2010 VENTURA COUNTY Median Annual Wages**	2020 CALIFORNIA Employment Growth Projection	CALIFORNIA Average Annual Job Openings****	2020 VENTURA COUNTY Employment Growth Projection	VENTURA COUNTY Average Annual Job Openings****	2010 CALIFORNIA Average Annual Employment	2010 VENTURA COUNTY Average Annual Employment	2010-2013 WIA Placements	2010-2013 Training Related Placements	JTA 53 Job Readiness Training	JTA 54 Occupational Skills Training	JTA 55 On-the- Job Training	OS License	OS Certificate	Notes
51-9198	Helpers--Production Workers	Less Than H.S.	\$21,855	7.9	970	14.3	22	39,400	700	8	4	0	0	0	1	2	
51-9031	Cutters and Trimmers, Hand	Less Than H.S.	\$22,883	-8.3	50	N/A	N/A	2,400	N/A	0	0	0	0	0	0	0	
51-9192	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	Less Than H.S.	\$23,210	5.9	40	N/A	N/A	1,700	N/A	1	1	0	0	0	0	0	
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	H.S. Diploma + OJT	\$23,984	-3.6	140	0.0	2	8,300	120	1	1	0	0	1	0	0	
49-9098	Helpers--Installation, Maintenance, and Repair Workers	H.S. Diploma + OJT	\$24,772	16.9	820	17.4	14	13,000	230	2	2	0	0	1	0	0	
51-2092	Team Assemblers	H.S. Diploma + OJT	\$25,210	8.8	2,180	7.7	58	76,400	2,070	13	6	0	0	0	0	6	Assembler
51-9022	Grinding and Polishing Workers, Hand	Less Than H.S.	\$26,200	0.0	130	18.2	4	4,200	110	0	0	0	0	0	0	0	
51-9194	Etchers and Engravers	H.S. Diploma + OJT	\$27,215	9.1	20	N/A	N/A	1,100	N/A	0	0	0	0	0	0	0	
51-2099	Assemblers and Fabricators	H.S. Diploma + OJT	\$27,555	11.2	740	12.4	33	24,200	1,050	14	4	0	0	0	0	7	Assembler
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	H.S. Diploma + OJT	\$28,387	-2.4	150	15.4	7	4,100	130	0	0	0	0	0	0	0	
51-9399	Production Workers, All Other	H.S. Diploma + OJT	\$28,538	12.3	840	12.1	23	21,900	580	0	0	0	0	0	0	0	
51-2091	Fiberglass Laminators and Fabricators	H.S. Diploma + OJT	\$28,556	-6.7	30	N/A	N/A	1,500	N/A	0	0	0	0	0	0	0	
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	H.S. Diploma + OJT	\$29,329	-2.0	110	8.3	4	5,100	120	2	1	0	0	0	0	1	
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	H.S. Diploma + OJT	\$29,769	-2.3	100	11.1	3	4,400	90	2	2	0	0	0	0	2	
51-2022	Electrical and Electronic Equipment Assemblers	H.S. Diploma + OJT	\$29,870	12.2	580	-3.6	20	22,200	1,370	52	45	0	72	4	3	37	Assembler
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	H.S. Diploma + OJT	\$30,018	-2.6	80	0.0	3	3,800	90	1	1	0	0	0	0	1	
51-9021	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	H.S. Diploma + OJT	\$31,455	3.7	90	N/A	N/A	2,700	N/A	1	1	0	0	0	0	1	
51-4199	Metal Workers and Plastic Workers	H.S. Diploma + OJT	\$31,468	5.6	20	N/A	N/A	1,800	N/A	0	0	0	0	0	0	0	
51-9196	Paper Goods Machine Setters, Operators, and Tenders	H.S. Diploma + OJT	\$31,472	-12.3	60	3.2	4	6,500	310	0	0	0	0	0	0	0	
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	H.S. Diploma + OJT	\$31,674	-7.7	100	N/A	N/A	1,300	N/A	0	0	0	0	0	0	0	
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	H.S. Diploma + OJT	\$32,135	4.1	110	0.0	5	4,900	270	1	1	0	0	0	0	1	
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	H.S. Diploma + OJT	\$32,637	3.6	380	0.0	6	11,200	190	2	0	0	0	0	0	0	
51-2031	Engine and Other Machine Assemblers	H.S. Diploma + OJT	\$33,638	14.3	50	0.0	2	1,400	60	0	0	0	0	0	0	0	Assembler
51-9141	Semiconductor Processors	Associate's Degree	\$34,633	2.3	110	-16.7	4	4,300	180	0	0	0	0	0	0	0	
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	H.S. Diploma + OJT	\$36,100	13.4	1,690	7.8	45	47,900	1,540	7	3	0	0	2	0	5	Quality Inspectors
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	H.S. Diploma + OJT	\$36,244	4.2	70	14.3	3	2,400	70	6	5	0	17	0	0	5	
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	H.S. Diploma + OJT	\$36,514	21.1	390	16.7	7	9,500	180	5	5	0	30	0	0	5	
51-2041	Structural Metal Fabricators and Fitters	H.S. Diploma + OJT	\$36,971	13.9	240	28.6	3	7,200	70	0	0	0	0	0	0	0	
51-4121	Welders, Cutters, Solderers, and Brazers	H.S. Diploma + OJT	\$37,621	11.1	820	20.4	23	21,700	490	12	10	0	3	0	0	10	
51-4041	Machinists	H.S. Diploma + OJT	\$40,242	13.1	950	10.0	23	30,500	800	14	13	0	10	0	0	12	Machinist
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	H.S. Diploma + OJT	\$41,015	26.5	290	N/A	N/A	6,800	N/A	0	0	0	0	0	0	0	
51-9011	Chemical Equipment Operators and Tenders	H.S. Diploma + OJT	\$44,949	8.0	60	N/A	N/A	2,500	N/A	0	0	0	0	0	0	0	
19-4099	Life, Physical, and Social Science Technicians	Associate's Degree	\$46,349	14.1	440	6.3	36	7,800	950	5	4	0	0	0	1	1	Quality Assurance
51-4111	Tool and Die Makers	H.S. Diploma + OJT	\$49,015	0.0	10	0.0	0	2,800	90	0	0	0	0	0	0	0	
51-8091	Chemical Plant and System Operators	H.S. Diploma + OJT	\$51,522	8.3	60	N/A	N/A	1,200	N/A	0	0	0	0	0	0	0	
17-3026	Industrial Engineering Technicians	Associate's Degree	\$51,790	15.6	160	N/A	N/A	4,500		0	0	0	0	0	0	0	
17-3024	Electro-Mechanical Technicians	Associate's Degree	\$52,618	13.9	120	N/A	N/A	3,600		6	3	0	3	2	0	3	Robotics/Industrial Controls

Ventura County Occupational Employment Data & Growth Projections																		
MANUFACTURING																		
SOC / ONET Code*	Occupations	2013 Education and Training Level***	2010 VENTURA COUNTY Median Annual Wages**	2020 CALIFORNIA Employment Growth Projection	CALIFORNIA Average Annual Job Openings****	2020 VENTURA COUNTY Employment Growth Projection	VENTURA COUNTY Average Annual Job Openings****	2010 CALIFORNIA Average Annual Employment	2010 VENTURA COUNTY Average Annual Employment	2010-2013 WIA Placements	2010-2013 Training Related Placements	JTA 53 Job Readiness Training	JTA 54 Occupational Skills Training	JTA 55 On-the-Job Training	OS License	OS Certificate	Notes	
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	H.S. Diploma + OJT	\$53,872	17.4	80	16.7	2	2,300	60	0	0	0	0	0	0	0	CNC Programmer	
17-3013	Mechanical Drafters	Associate's Degree	\$54,580	10.4	140	13.3	5	4,800	150	3	2	0	5	2	0	3		
49-9041	Industrial Machinery Mechanics	H.S. Diploma + OJT	\$55,655	26.9	880	33.3	16	19,300	330	2	2	0	0	0	0	1		
17-3012	Electrical and Electronics Drafters	Associate's Degree	\$55,771	10.0	120	0.0	3	4,000	120	3	3	0	3	0	0	3		
17-3027	Mechanical Engineering Technicians	Associate's Degree	\$56,163	10.0	110	6.7	4	4,000	150	0	0	0	0	0	0	0		
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	Vocational / OJT	\$59,680	10.6	230	0.0	3	6,600	140	1	0	0	0	1	0	0		
17-3023	Electrical and Electronics Engineering Technicians	Associate's Degree	\$61,504	8.3	570	-1.2	16	20,400	810	7	4	0	8	3	0	2		
27-1021	Commercial and Industrial Designers	Bachelor's Degree	\$63,105	22.5	210	26.7	9	4,000	150	1	1	0	1	0	0	1	Industrial Design	
51-8021	Stationary Engineers and Boiler Operators	H.S. Diploma + OJT	\$64,384	5.9	100	0.0	1	3,400	60	0	0	0	0	0	0	0		
17-2141	Mechanical Engineers	Bachelor's Degree	\$90,973	9.8	940	6.4	30	22,500	780	3	3	0	3	0	0	2		
17-2112	Industrial Engineers	Bachelor's Degree	\$92,771	11.1	630	3.1	8	19,000	320	1	0	0	0	0	0	1		
11-3051	Industrial Production Managers	Bachelor's Degree	\$94,671	10.1	590	11.8	23	17,800	680	1	0	0	2	0	0	0	Quality Inspectors and Quality Assurance	
17-2071	Electrical Engineers	Bachelor's Degree	\$102,201	10.5	740	1.9	15	21,000	530	0	0	0	0	0	0	0		
11-9199	Managers, All Other	H.S. Diploma + OJT	\$119,786	11.7	2,980	14.0	84	87,900	2,360	4	4	0	23	1	0	2	Supply Chain Specialist	
11-9041	Architectural and Engineering Managers	Bachelor's Degree	\$144,681	13.9	1,010	9.6	15	30,200	520	0	0	0	0	0	0	0	Supply Chain Specialist	
51-8000	Plant and System Operators		N/A	6.7	980	8.5	23	26,700	590	0	0	0	0	0	0	0		

*2010 Standard Occupational Classifications and Occupational Information Network provided by the Department of Labor
**Median Annual Wages are the estimated 50th percentile of the distribution of wages; 50 percent of workers in an occupation earn wages below, and 50 percent earn wages above the median wage. The wages are from 2010-1st quarter and do not include self-employed or unpaid family workers.
***Occupational training and education classifications were developed by the Bureau of Labor Statistics (BLS).
****Average Annual Job Openings includes new jobs and replacement needs.

Data Source: State of California Employment Development Department - Labor Market Info

Additional Information:
Living Wage in Ventura County as of December 2013 (California Budget Project)

\$34,109.00 Single Adult
\$79,549.00 Single-Parent Family*
\$64,203.00 Two-Parent Family* (one working)
\$85,713.00 Two-Working-Parent Family*

*All family types are assumed to have two children.

Current Employment Data
Priority Occupations Identified by WIB Manufacturing Committee
WIA Placement and Training Data
2020 Growth Projection Data

Manufacturing Committee 2-Year Plan

Workforce Investment Board of Ventura County

Goal: The Manufacturing Committee will strive to create a diverse pipeline of workers to fill manufacturing positions in Ventura County and will work to bring together partners in business, economic development, education, labor, government, and community-based organizations to address workforce shortages in manufacturing.

Action Plan

- 1) Maintain a core team of Ventura County employers, key agencies and organizations most involved in manufacturing workforce development.
 - a) Ventura County manufacturers
 - b) Economic Development Collaborative-Ventura County
 - c) Manufacturing Roundtable of Ventura County
 - d) CA Community College Deputy Sector Navigator
 - e) Educational institutions (e.g., CSUCI, VCCCD, VCOE, Adult Education, Career Technical Education)
 - f) Elected Officials
 - g) Chambers of Commerce
 - h) Others
- 2) Develop ways to identify, engage, and communicate effectively with the core team and other manufacturing workforce partners.
- 3) **Inventory current training providers in the region.**
 - a) Certification programs
 - b) Apprenticeships
 - c) Pre-work experience
 - d) High school academies
 - e) Regional Occupational Program
 - f) Community colleges
 - g) Universities
- 4) Conduct annual research to evaluate workforce needs and changes.
- 5) Identify the gaps between education and workforce needs and work to provide a bridge to fill those gaps.
- 6) Continue to identify and pursue options in support of a sustainability strategy for the Manufacturing Roundtable of Ventura County.
- 7) Continue partnership with the Manufacturing Roundtable of Ventura County to establish a training institute (possibly in Simi Valley) which builds on the successful practices of the Technical Employment Training, Inc. program in San Bernardino.
- 8) **Pursue options to integrate Manufacturing Readiness Skill Categories training within the Ventura County educational institutions (e.g. Ventura College Applied Science Center).**
- 9) Determine follow-up activity in support of the new Biomedical Device Certificate training.
- 10) Continue working with College of the Canyons to identify, approve and establish local training programs with increased levels of industry-recognized certification attainment.
- 11) Establish a form of measurement that can accurately monitor the progress of the Manufacturing Committee.

Applied Science Center

Ventura College



Applied Science Center



Funding Source	S Bond
Total Square Feet	18,600
Total Budget	15,000,000
Construction Budget	9,000,000
Architect	Gensler
Contractor	Woodcliff
Start Date	November, 2013
Completion Date	July, 2015

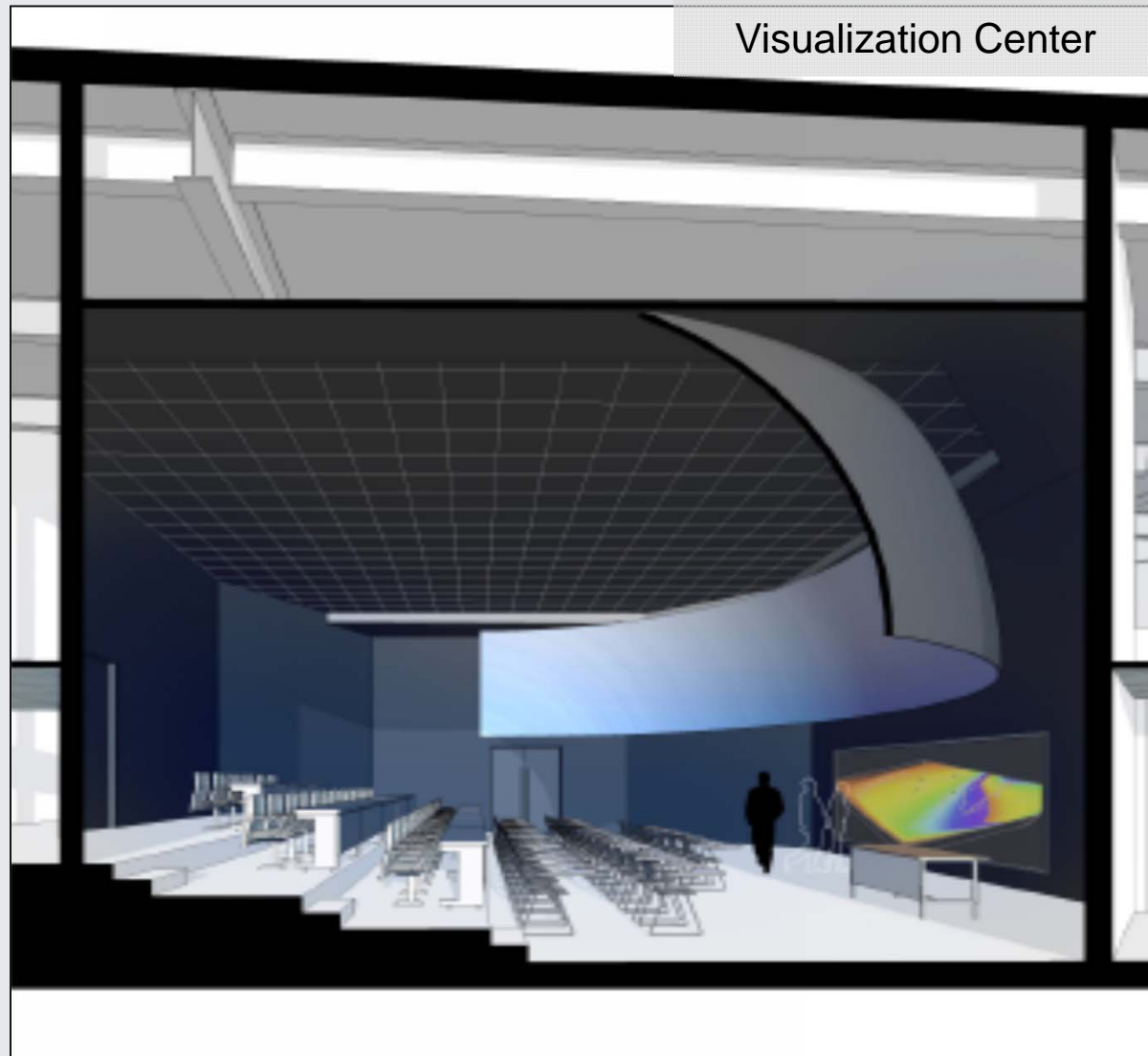
Applied Science Center



Lobby



Applied Science Center



Applied Science Center



200 Seat Auditorium



Applied Science Center



120 Seat Smart Classroom



Applied Science Center

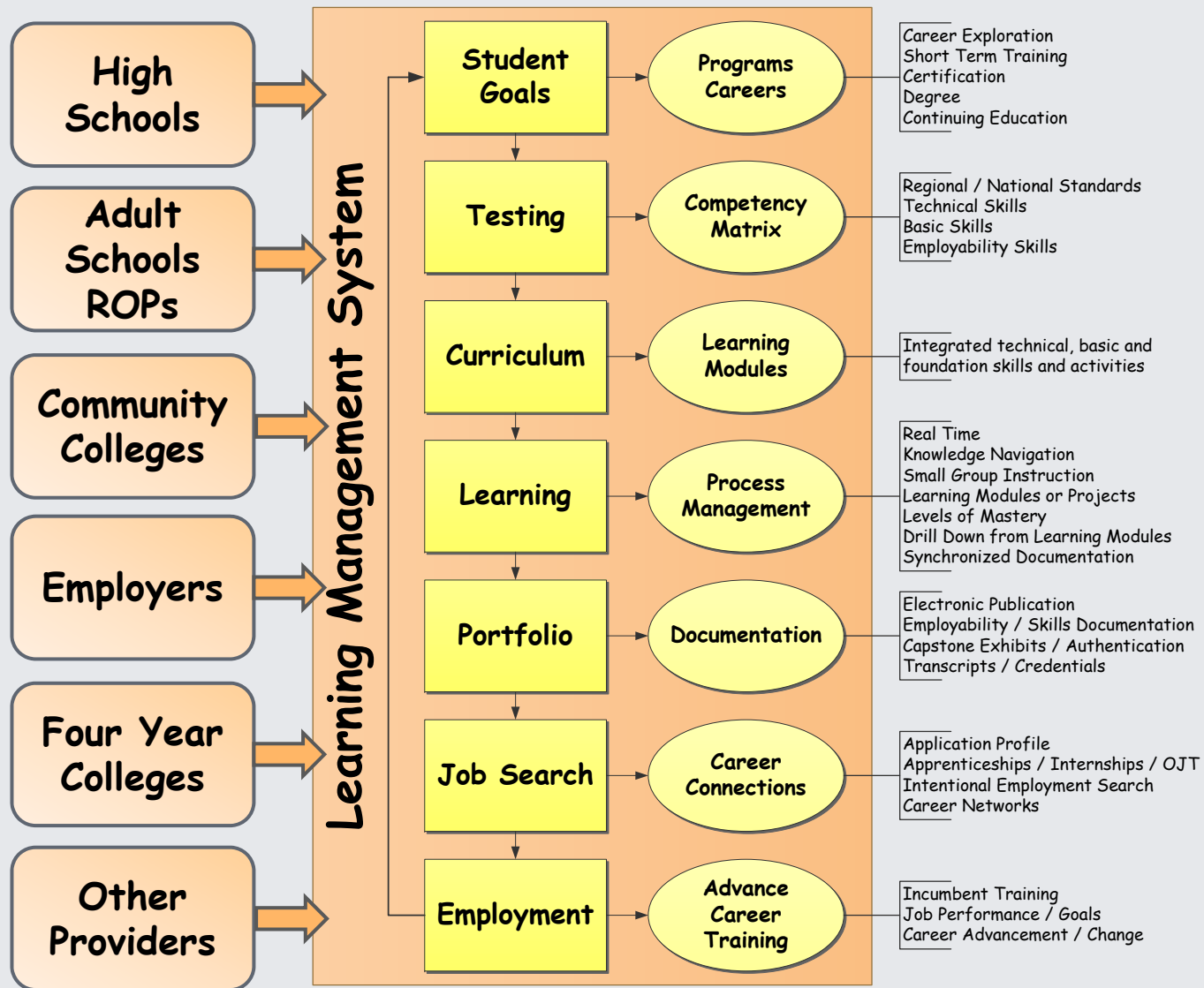


Career Training Center



Education and Career Pathways

Student Centered Life-Long Education



Technical Education Platform



Learning Management System

Hands On Training Laboratory

Prescribed and Assessed Activities
(Individual and Team Projects)

Virtual Trainers

Integrated Simulations within the
Training Content

On-Line Training Content

Licensed for 24/7 Access for all
County Students – Open Entry
(Primary Course or Supplemental)

Applied Science Center



Fundamentals and Employability - Entry Level Career Pathways

Safety

Basic Skills

Principles of Tech

Tools/Machines

Employability

Reference/Prints

Business Essentials

Career Exploration

Electronics
Mechanics
Hydraulics
Pneumatics
Process Controls

Career Technical Education Curriculum Redesign

credit and not-for-credit pathways

flexible competency-based instructional delivery with an integrated learning management system

Advanced Skills Education and Training

Associate Degree General Education Courses

Natural Science

Social/Behavioral

Humanities

Language/Rational

Health/PE

Career Pathways: Proficiencies, Certificates or Degrees

Automotive

Diesel

Hybrids

Aviation

Transportation

Computers

Solar/Wind Energies

Medical Equip Tech

Construction

Water Science

Technologies

Machining/CNC/CAM

Welding

Mechatronics

Drafting/CAD

Manufacturing

Nursing

Nursing Assistant

Paramedics/EMT

Home Healthcare

Allied Health

Fundamentals and Employability - Entry Level Career Pathways

Safety

Basic Skills

Principles of Tech

Tools/Machines

Employability

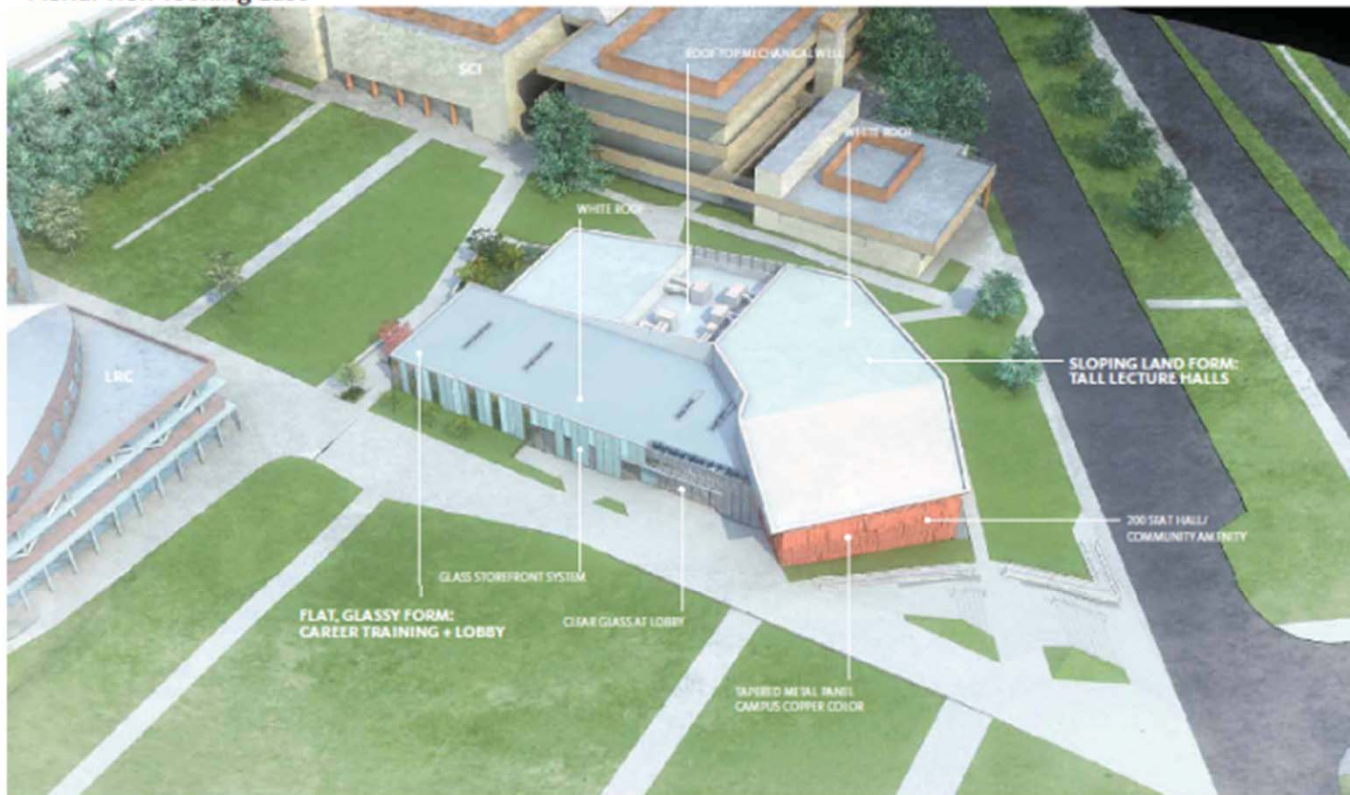
Reference/Prints

Business Essentials

Career Exploration

Applied Science Center

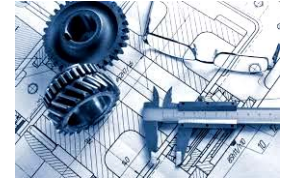
Aerial view looking East





MANUFACTURING READINESS SKILL CATEGORIES

Workforce Investment Board of Ventura County



SAFETY	MATH CONCEPTS	MEASUREMENTS	HAND AND POWER TOOLS
<ul style="list-style-type: none">• Lock-out, Tag-out, Try-out• Bio mechanics• MSDS• Potential energy sources (gravity, pneumatic, hydraulic, chemical , steam/gas pressure)	<ul style="list-style-type: none">• Combined operations of fractions and mixed number• Table of decimal equivalents and combined operations of decimals• Degree of precision, tolerance and clearances• Steel rules and gage blocks• Algebraic operations of addition, subtraction and multiplication• Ratios and proportions• Mathematical conversions from standard to metric• RPM, and implication of gearbox reduction to RPM and torque	<ul style="list-style-type: none">• Standards• Units of measurement• Mass and weight measurement• Metric measurement• Measuring motion• Measuring fluids• Indicators• Micrometers• Gauging tools• Calipers• Diameter tape	<ul style="list-style-type: none">• Electric drills• Pneumatic drills and hammers• Screwdrivers, nut-runners and wrenches• Air supply for pneumatic tools• Wrenches• Hacksaws• Taps and dies• Hammers• Squares• Levels• Pipe threading machines
BASICS OF QUALITY CONTROL	BLEUPRINT CONCEPTS	SOFT SKILLS	COMPUTER SKILLS
<ul style="list-style-type: none">• Process• Basic quality methodology and inspection techniques• Importance of individual – do it right the first time• Manufacturing theory and quality• Lean manufacturing and quality	<ul style="list-style-type: none">• Introduction to schematics and symbols• Pneumatics and hydraulic schematics• Piping schematics• Piping symbols• Differences in schematics• Views• Electrical symbols• Hydraulic and pneumatic symbols• Hydraulic and pneumatic diagrams• Assembly instructions	<ul style="list-style-type: none">• Basics of interviewing• Work ethic• Communication skills• Continuous Improvement skills• Basic company policy understanding• Time management• Task prioritization• Worker, supervisor, manager etiquette and protocol basics	<ul style="list-style-type: none">• Excel• Word• OS basics• Computer navigation• Computer security• Computer etiquette• ERP basics• Viewer basics, PDF, CAD, jpg, png, bmp, TIFF, Solid Works, etc.• File extension basics

VC MIB Mfg Readiness Certificate



WIB RESOURCE PLANNING WORKSHEET - DRAFT Manufacturing Committee

Manufacturing Readiness Certificate Curriculum

SAFETY	MATH CONCEPTS	MEASUREMENTS	HAND AND POWER TOOLS
<ul style="list-style-type: none"> • Lock-out, Tag-out, Try-out • Bio mechanics • MSDS • Potential Energy Sources (Gravity, Pneumatic, Hydraulic, Chemical, Steam/Gas Pressure) 	<ul style="list-style-type: none"> • Combined operations of fractions and mixed number • Table of decimal equivalents and combined operations of decimals • Degree of precision, Tolerance and clearances • Steel rules and gage blocks • Algebraic operations of additions, subtraction and multiplication • Ratios and proportions • Mathematical conversions from Standard to Metric • RPM, and implication of gearbox reduction to RPM and Torque 	<ul style="list-style-type: none"> • Standards • Units of measurement • Mass and weight measurement • Metric measurement • Measuring motion • Measuring fluids • Indicators • Micrometers • Gauging tools • Calipers • Diameter Tape 	<ul style="list-style-type: none"> • Electric drills • Pneumatic drills and hammers • Screwdrivers, Nut-runners and wrenches • Air supply for pneumatic tools • Wrenches • Hacksaws • Taps and dies • Hammers • Squares • Levels • Pipe Threading machines
BASICS OF QUALITY CONTROL	BLUEPRINT CONCEPTS	SOFT SKILLS	COMPUTER SKILLS
<ul style="list-style-type: none"> • Process • Basic quality methodology and inspection techniques • Importance of individual – do it right first time • Manufacturing theory and quality • Lean manufacturing and quality 	<ul style="list-style-type: none"> • Introduction to schematics and symbols • Pneumatics and hydraulic schematics • Piping schematics • Piping symbols • Differences in Schematics • Views • Electrical symbols • Hydraulic and pneumatic symbols • Hydraulic and pneumatic diagrams • Assembly instructions 	<ul style="list-style-type: none"> • Basics of interviewing • Work ethic • Communication skills • Continuous Improvement skills • Basic company policy understanding • Time management • Task prioritization • Worker, supervisor, manager etiquette and protocol basics 	<ul style="list-style-type: none"> • Excel • Word • OS basics • Computer Navigation • Computer Security • Computer Etiquette • ERP basics • Viewer basics, PDF, CAD, jpg, png, bmp, TIFF, Solid Works, etc • File extension basics
MSSC Modules	COC Fast Track Curriculum	COC ETI Programs	

STRATEGY OUTLINE
MANUFACTURING ROUNDTABLE OF VENTURA COUNTY

Manufacturing Roundtable of Ventura County (MRVC) --- Mission Statement: Strengthen Manufacturing Base In Ventura County				
	Problems/Opportunities	Details	2013	2014
Develop a Relevant & Ready Workforce	<ul style="list-style-type: none"> Lack of skilled entry level Workforce bubble Lack of interest/awareness Lack of pipeline – Gateway to entry 	Operators, Maintenance, Tool Makers, Programmers Career Speaker Programs, Social Media, Internships	Mfg Training Centers Basic → Intermediate → Advanced Certification thru Mfg Institute	
	<ul style="list-style-type: none"> Leverage existing Tax Incentives Government Awareness/Support Environmental Restrictions Statistics → Economy Decline in Education programs (ROP, Shop, Etc) Bureaucratic Interference Loss of Mfg to overseas Competitiveness 	Scholarships, Counselors, Sponsorship of competitive events, Field Trips, School Board and other local official's involvement	Career Speakers	
			Field Trips & Tours	
Collaborate on Regional Issues				
Attract New Manufacturers				
Strengthen Networks	<ul style="list-style-type: none"> Infrastructure / Regional Focus Awareness / Lack of Marketing Share best practices Attract Contract / Contingent Workforce Build partnerships with Education Interface with CA Mfg. associations 	Brochure / Data on VC Mfg (Advantages, etc) Reach more VC Manufacturers Identify & align with other Interested groups MRVC Governance Structure & Mtg. Objectives	Mfg / Mfg Group Outreach (Grow MRVC Membership) Sharing Best practices / Mfg., Lean, , etc Maintenance, Etc MRVC – Gov. Meetings - Logistics	