



WORKFORCE DEVELOPMENT BOARD OF VENTURA COUNTY

JOINT MEETING WDB REGIONAL SECTOR COMMITTEES

WDB Business Services Committee
WDB Clean/Green Committee
WDB Healthcare Committee
WDB Manufacturing Committee

Friday, August 5, 2016
8:00 a.m.–10:00 a.m.

NOTE DIFFERENT LOCATION

Ventura County Office of Education (Salon C)
5100 Adolfo Road Camarillo, CA

AGENDA

8:00 a.m.	1.0 Call to Order and Agenda Review	Vic Anselmo
8:05 a.m.	2.0 Public Comments <small>Procedure: 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.</small>	Vic Anselmo
8:10 a.m.	3.0 Welcome and Introductions	Vic Anselmo
8:20 a.m.	4.0 WDB Sector Committees	Greg Barnes Anthony Mireles Alex Rivera Jesus Torres
8:35 a.m.	5.0 WIOA Regional Sector Requirements	Cheryl Moore
8:45 a.m.	6.0 Opportunities for Collaboration – <i>What are the high-demand jobs in the next 3-5 years?</i> – <i>Which of those jobs are hard to fill? Why?</i> – <i>What challenges do we have in common?</i>	Sector Committees Small Groups
9:45 a.m.	7.0 Summary and Next Steps	Cheryl Moore
9:55 a.m.	8.0 Committee Member Comments	Committee Members
10:00 a.m.	9.0 Adjournment	Vic Anselmo

Individuals who require accommodations for their disabilities (including interpreters and alternate formats) are requested to contact the Workforce Development Board of Ventura County staff at (805) 477-5306 at least five days prior to the meeting. TTY line: 1-800-735-

For information about the Workforce Development Board of Ventura County, go to workforceventuracounty.org.

WDB SECTOR COMMITTEES



- ✓ Healthcare
- ✓ Clean/Green
- ✓ Manufacturing
- ✓ Business Services



WDB SECTOR COMMITTEES

✓ Healthcare Committee



- **Clinical Lab Scientist (CLS):** Completed and received approval for the CLS Field Experience Program Combined State application. Four hospitals collaborated with CSUCI to create a local program to meet workforce needs.
- **Care Coordinator Certification:** Actively participated in a California WDB-funded, two-region project with six Los Angeles workforce boards to develop a certification program for care coordinators in response to healthcare employer needs.
- **A.S.N. to B.S.N. Transition:** Continued to monitor and explore the Associate Degree Nursing to Bachelor of Science Nursing transition needs and challenges in the region.



WDB SECTOR COMMITTEES

✓ Clean/Green Committee

- **Green Business Practices:** Formed an Employer Awareness Workgroup to develop a green practices message that would raise awareness in the region.
- **Water/Wastewater Jobs:** Collaborated with the community colleges on a survey to identify the water/wastewater training and job opportunities in the region.
- **Labor Apprenticeships:** Coordinated with LiUNA to make apprenticeship training accessible through our WIOA Eligible Training Provider List (ETPL).
- **Education/Training Inventory:** Developed a draft inventory of the clean/green-related education and training programs available through the community colleges, adult schools and labor unions in Ventura County.



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WDB SECTOR COMMITTEES

✓ Manufacturing Committee

- **Manufacturing Career Ladders:** Provided employer feedback on the initial *VC Innovates* draft of the Manufacturing and Engineering Career Pathways Career Ladder Chart. Suggestions related to production, maintenance and facilities, engineering, quality assurance, regulatory affairs, and supply chain positions.
- **Manufacturing Curriculum Development:** Provided the WDB Manufacturing Readiness Skills list and manufacturing employer feedback to help support the development of a Ventura College curriculum of eight manufacturing-related courses.
- **Manufacturing Network Development:** Created a quarterly networking event to help engage businesses in MRVC and workforce development. For Manufacturing Day 2015, opened manufacturing doors to more than 300 students.



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WDB SECTOR COMMITTEES

✓ Business Services Committee

New committee will focus on regional employer needs in occupations relating to:



- Financial, Real Estate and Insurance Services
- Professional, Scientific and Technical Services
- Information and Communication Technologies
- Entertainment, Arts, Media, Publishing, and Printing
- Retail
- Household Goods and Services
- Personal Services: Non-Medical
- Education and Training
- Government and Public Administration





WIOA Regional Sector Requirements

WDB Joint Sector Committees
August 5, 2016

Cheryl Moore, Executive Director
Workforce Development Board of Ventura County

WIOA WORKFORCE DEVELOPMENT SYSTEM

WIOA ALIGNED
WORKFORCE
DEVELOPMENT
SYSTEM

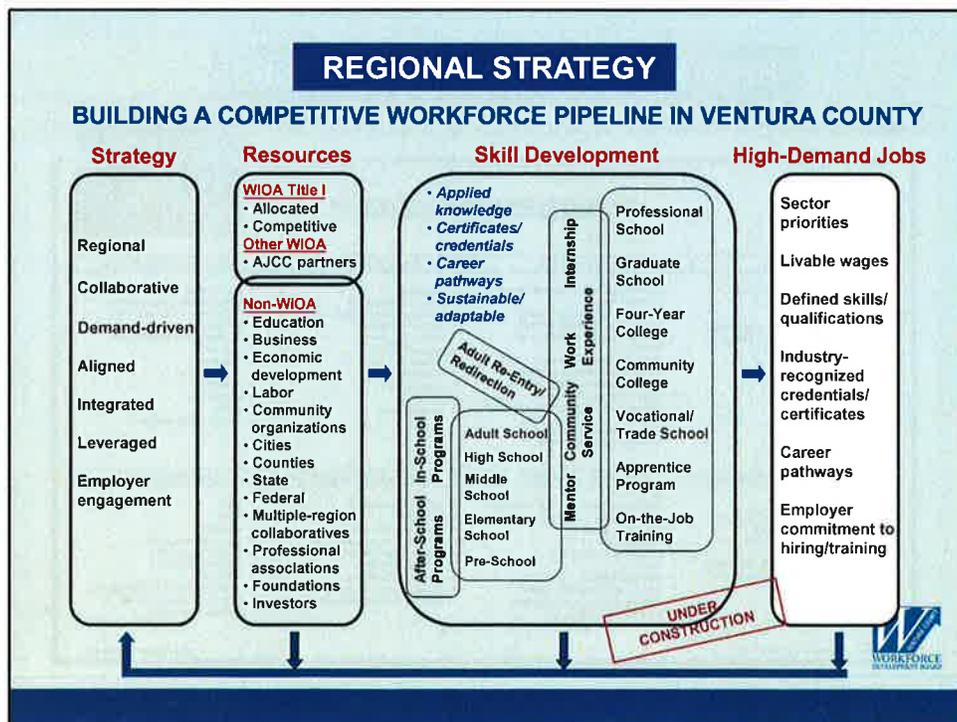
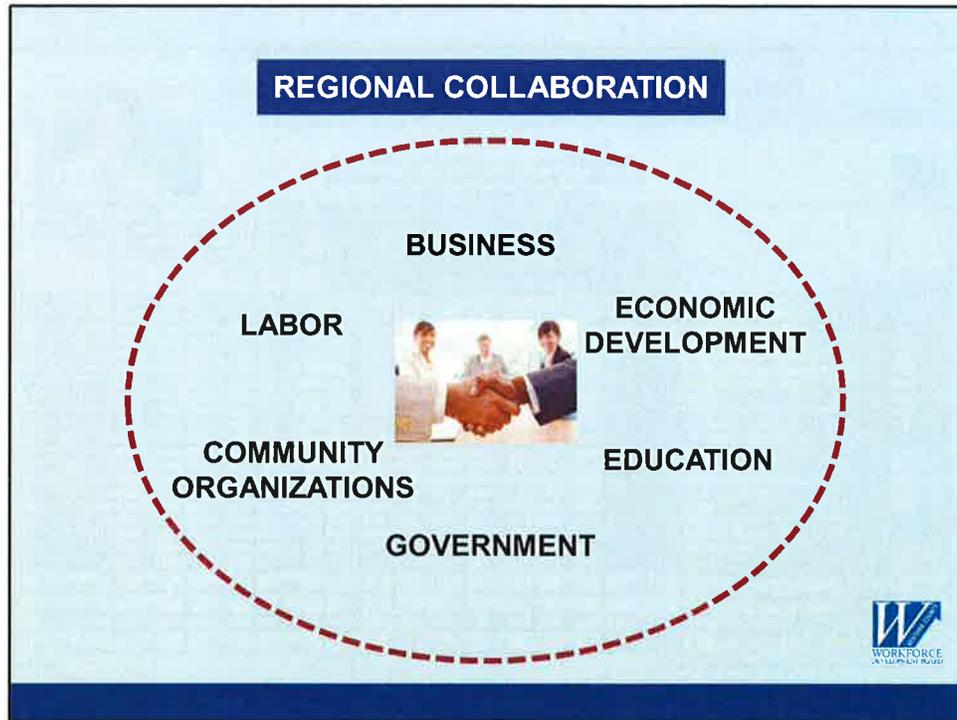


STATE PLAN ↔ REGIONAL PLAN ↔ LOCAL PLAN





- ### WIOA REGIONAL PLANNING
- A. Plan development and implementation
 - B. **Service strategies and cooperative delivery agreements**
 - C. Industry initiatives for in-demand sectors or occupations
 - D. **Labor market data collection and analysis**
 - E. Administrative cost arrangements, including pooling of funds for administrative costs
 - F. **Coordination of transportation and other supportive services**
 - G. Coordination with regional economic development services and providers
 - H. **Agreement for collectively negotiating and reporting on levels of performance for local areas**
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REGIONAL SECTORS/OCCUPATIONS

Regional Data Analysis



Ventura County Regional Planning Unit (RPU)
Occupational Employment Data Growth Projections
WDB HEALTHCARE COMMITTEE



U.S. D.O.L. SOC Code	Occupations	2010 VENTURA COUNTY Median Annual Wages**	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Projection %	2012 VENTURA COUNTY Average Annual Job Openings***	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings***	2014 Education and Training Level**
20-1141	Registered Nurses	\$60,035	3,720	13.4	172	72	254,500	16.9	8,700	Associate's Degree
31-2002	Medical Assistants	\$35,966	2,370	29.7	113	45	81,600	23.2	3,400	Vocational / OJT
31-1014	Nursing Assistants	\$30,471	1,470	17.7	54	36	98,400	23.6	4,100	Vocational / OJT
31-1011	Home Health Aides	\$26,605	1,700	43.1	81	35	44,900	30.0	2,019	Less Than HS
31-0001	Dental Assistants	\$26,211	1,000	29.0	46	21	45,200	15.5	1,640	Vocational / OJT
29-2001	Nurses	\$52,325	750	28.7	38	18	49,700	25.7	3,040	Vocational / OJT
29-2021	Dental Hygienists	\$56,342	660	31.8	38	17	21,800	23.4	1,060	Associate's Degree
11-0111	Medical and Health Services Managers	\$119,253	400	19.3	20	12	27,400	22.2	1,250	Bachelor's Degree
29-1091	Pharmacists	\$132,789	400	13.9	17	11	26,900	15.2	1,250	Doctoral Degree
29-2052	Pharmacy Technicians	\$37,019	430	23.3	13	4	31,500	18.5	500	H.S. Diploma
28-1123	Physical Therapists	\$47,563	430	34.9	26	11	16,400	28.7	670	Doctoral Degree
31-2011	Occupational Therapy Assistants	\$31,806	390	49.2	24	6	1,000	43.8	100	Associate's Degree
29-1040	Physicians and Surgeons, All Other	\$164,497	370	24.3	10	0	27,900	12.0	1,050	Doctoral Degree
21-1029	Social Workers	\$54,825	300	8.3	11	8	14,000	7.9	400	Bachelor's Degree
21-1022	Healthcare Social Workers	\$65,201	300	15.2	12	7	13,200	24.2	600	Bachelor's Degree
31-2009	Healthcare Support Workers, All Other	\$41,809	320	21.9	12	6	12,400	12.7	400	H.S. Diploma
29-1127	Speech-Language Pathologists	\$68,119	320	18.8	11	5	11,200	14.3	300	Master's Degree
28-2034	Radiologic Technologists	\$70,771	310	12.9	8	4	15,000	17.3	470	Associate's Degree
29-1002	Family and General Practitioners	\$212,262	310	19.4	14	8	17,400	12.1	640	Doctoral Degree
11-0151	Social and Community Service Managers	\$57,202	300	20.0	12	6	14,200	15.5	510	Bachelor's Degree
31-9096	Medical Records and Laboratory Animal Carekeepers	\$31,735	290	7.1	7	5	9,200	4.3	210	H.S. Diploma
29-2041	Emergency Medical Technicians and Paramedics	-	290	35.7	17	8	18,800	23.2	650	Vocational / OJT
31-2022	Physical Therapist Assistants	\$29,603	270	44.4	18	6	5,900	33.9	300	H.S. Diploma
29-2071	Medical Records and Health Information Technicians	\$46,084	270	14.8	11	7	16,500	20.5	780	Vocational / OJT

WDB Healthcare Committee: 01/22/2016 (Updated wages only as of 6/16)

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REGIONAL SECTORS/OCCUPATIONS

Regional Sector Skills



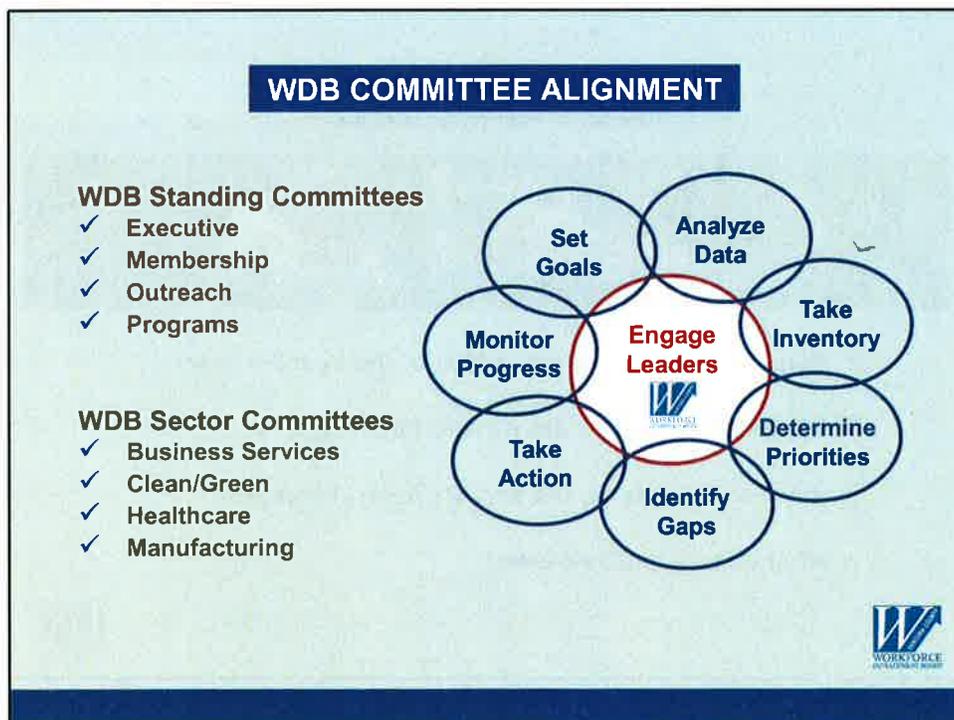
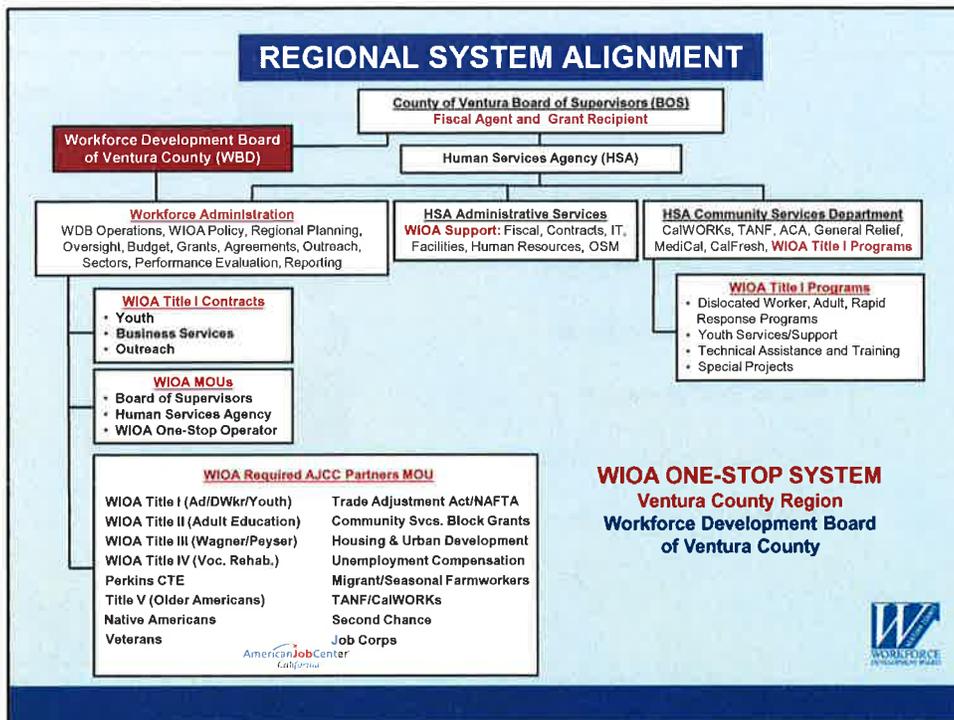
MANUFACTURING WORK READINESS SKILL CATEGORIES
Workforce Development Board of Ventura County



SAFETY	MATH CONCEPTS	MEASUREMENTS	HAND AND POWER TOOLS
<ul style="list-style-type: none"> Lock-out, Tag-out, Try-out Bio references 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 rounded operations of decimals Degrees 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	BLUEPRINT CONCEPTS	EMPLOYABILITY 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

WDB VC Manufacturing Committee: Rev. 08.13.14

www.wdbvcmanufacturing.org



REGIONAL PERFORMANCE

- **Program Performance (WIOA Title I)**
 - **Adults**
 - **Dislocated Workers**
 - **Youth**
 - **Business Services**
- **Fiscal Performance**
- **Eligible Provider Performance**
- **AJCC Delivery System Performance**



FOR DISCUSSION



- ***What are the high-demand jobs in the next 3-5 years?***
- ***Which of those jobs are hard to fill? Why?***
- ***What challenges do the sectors have in common?***
- ***What action could we take?***





Ventura County Regional Planning Unit (RPU)
Occupational Employment Data Growth Projections
WDB BUSINESS SERVICES COMMITTEE

Working Document

U.S. D.O.L. SOC Code*	Occupations	2016 VENTURA COUNTY Median Annual Wages***	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Growth Projection %	2012 VENTURA COUNTY Average Annual Job Openings****	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings****	2014 Education and Training Level**
41-2011	Cashiers	\$24,564	7,860	14.6	455	340	357,800	9.7	18,950	Less Than H.S.
43-9061	Office Clerks, General	\$35,490	6,010	10.0	186	126	329,800	9.2	9,950	H.S. Diploma + OJT
11-1021	General and Operations Managers	\$123,907	5,720	15.4	195	107	253,800	16.5	8,940	Bachelor's Degree
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$28,728	4,860	18.1	238	150	270,500	19.1	13,560	Less Than H.S.
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$39,941	4,720	20.6	153	57	212,800	17.5	6,290	H.S. Diploma + OJT
43-3031	Bookkeeping, Accounting, and Auditing Clerks	\$47,565	4,050	19.0	113	37	182,400	14.5	4,310	H.S. Diploma + OJT
37-3011	Landscaping and Groundskeeping Workers	\$29,144	3,840	19.8	173	97	137,600	13.8	5,360	Less Than H.S.
29-1141	Registered Nurses	\$92,035	3,720	13.4	122	72	254,500	16.9	9,230	Associate's Degree
43-5081	Stock Clerks and Order Fillers	\$26,720	3,680	6.8	136	111	200,800	6.4	7,350	Less Than H.S.
43-4051	Customer Service Representatives	\$29,831	3,610	19.9	170	98	195,300	16.4	8,520	H.S. Diploma + OJT
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$31,041	3,370	15.1	115	63	228,200	14.5	7,610	Less Than H.S.
43-1011	First-Line Supervisors of Office and Administrative Support Workers	\$59,917	3,290	17.6	135	78	167,900	14.9	6,490	H.S. Diploma
13-1199	Business Operations Specialists, All Other	\$78,931	3,100	7.4	65	42	135,700	14.2	3,790	H.S. Diploma
13-2011	Accountants and Auditors	\$84,631	2,330	14.2	103	69	151,900	16.9	7,060	Bachelor's Degree
49-9071	Maintenance and Repair Workers, General	\$42,325	2,240	12.5	71	43	116,600	12.1	3,650	H.S. Diploma + OJT
51-2092	Team Assemblers	\$30,459	2,220	12.6	64	35	78,700	3.9	1,550	H.S. Diploma + OJT
43-6011	Executive Secretaries and Executive Administrative Assistants	\$62,465	2,110	2.4	30	25	104,600	3.0	1,570	H.S. Diploma + OJT
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$44,009	2,080	11.5	57	33	136,100	16.4	4,410	degree award
43-4171	Receptionists and Information Clerks	\$31,519	2,060	17.1	91	56	98,900	11.2	3,770	H.S. Diploma + OJT
43-5071	Shipping, Receiving, and Traffic Clerks	\$33,832	2,030	12.3	78	53	87,500	8.3	3,030	H.S. Diploma + OJT
47-2031	Carpenters	\$48,675	1,910	22.5	67	24	94,700	29.6	3,970	H.S. Diploma + APP
47-2061	Construction Laborers	\$46,337	1,820	33.0	99	39	108,800	29.2	5,510	Less Than H.S.

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11-9199	Managers, All Other	\$125,565	1,790	5.0	49	39	88,800	14.1	3,190	H.S. Diploma
37-2012	Maids and Housekeeping Cleaners	\$24,871	1,780	7.8	49	35	143,300	15.2	5,020	Less Than H.S.
53-3033	Light Truck or Delivery Services Drivers	\$38,304	1,750	17.1	58	28	87,600	9.9	2,260	H.S. Diploma + OJT
41-3099	Sales Representatives, Services, All Other	\$62,471	1,750	22.3	86	48	105,700	22.3	5,250	H.S. Diploma + OJT
13-1111	Management Analysts	\$95,131	1,680	21.4	62	26	95,200	31.6	4,490	Bachelor's Degree
53-7064	Packers and Packagers, Hand	\$25,285	1,650	0.2	69	43	93,000	11.2	3,480	Less Than H.S.
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$38,809	1,410	7.8	41	31	48,200	8.3	1,460	H.S. Diploma + OJT
23-1011	Lawyers	\$168,771	1,380	17.4	46	22	87,400	11.3	2,390	professional degree
11-3031	Financial Managers	\$131,766	1,340	14.9	45	25	74,200	13.6	2,400	Bachelor's Degree
43-3021	Billing and Posting Clerks	\$40,115	1,300	21.5	52	24	56,400	16.7	1,980	H.S. Diploma + OJT
13-1161	Market Research Analysts and Marketing Specialists	\$86,749	1,280	35.2	63	18	70,900	40.2	3,830	Bachelor's Degree
51-1011	First-Line Supervisors of Production and Operating Workers	\$61,500	1,270	6.3	26	18	52,800	1.1	800	Postsecondary non-degree award
51-2099	Assemblers and Fabricators, All Other	\$27,152	1,250	36.0	66	20	22,800	9.2	570	H.S. Diploma + OJT
41-2021	Counter and Rental Clerks	\$32,034	1,220	12.3	45	31	78,900	13.1	3,050	Less Than H.S.
53-7051	Industrial Truck and Tractor Operators	\$35,075	1,160	11.2	40	27	55,300	7.6	1,690	Less Than H.S.
11-2022	Sales Managers	\$118,821	1,100	14.5	40	24	58,500	15.6	2,170	Bachelor's Degree
51-9198	Helpers--Production Workers	\$25,611	1,090	7.3	27	19	43,600	9.2	1,150	Less Than H.S.
43-9199	Office and Administrative Support Workers, All Other	\$31,581	1,040	7.7	38	29	82,400	9.3	3,080	H.S. Diploma + OJT
33-9032	Security Guards	\$32,183	990	-11.1	15	15	139,000	16.0	4,350	H.S. Diploma + OJT
51-4041	Machinists	\$43,035	980	17.3	39	22	34,000	15.3	1,300	H.S. Diploma + OJT
13-1071	Human Resources Specialists	\$69,956	980	18.4	35	18	48,300	15.3	1,620	Bachelor's Degree
43-3011	Bill and Account Collectors	\$44,812	880	14.8	38	25	39,100	17.9	1,800	H.S. Diploma + OJT
15-1132	Software Developers, Applications	\$105,639	840	15.5	24	11	95,100	29.4	4,020	Bachelor's Degree
51-9199	Production Workers, All Other	\$30,480	790	17.7	35	21	19,000	16.3	800	H.S. Diploma + OJT



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49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	\$69,469	720	13.9	29	20	38,400	12.5	1,520	H.S. Diploma
11-3021	Computer and Information Systems Managers	\$144,057	710	8.5	16	10	46,800	22.2	1,690	Bachelor's Degree
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	\$69,608	690	5.8	16	12	33,400	7.2	840	H.S. Diploma + OJT
43-5061	Production, Planning, and Expediting Clerks	\$51,444	670	6.0	21	17	38,900	9.5	1,350	H.S. Diploma + OJT
11-1011	Chief Executives	\$201,416	670	10.4	21	14	37,000	7.8	1,070	Bachelor's Degree
41-9099	Sales and Related Workers, All Other	\$38,494	530	22.6	22	10	15,900	18.9	610	H.S. Diploma
27-1024	Graphic Designers	\$61,245	530	13.2	22	14	34,400	12.5	1,340	Bachelor's Degree
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	\$49,865	520	19.2	16	6	20,700	14.0	530	H.S. Diploma
51-4121	Welders, Cutters, Solderers, and Brazers	\$36,747	500	10.0	18	12	24,700	6.5	770	H.S. Diploma + OJT
37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	\$40,616	490	12.2	19	12	24,400	13.1	900	H.S. Diploma
51-5112	Printing Press Operators	\$28,520	470	2.1	9	8	15,200	-13.8	270	H.S. Diploma + OJT
43-3051	Payroll and Timekeeping Clerks	\$45,386	460	15.2	17	10	22,400	17.0	870	H.S. Diploma + OJT
43-4071	File Clerks	\$38,631	450	-2.2	10	10	24,500	-4.1	560	H.S. Diploma + OJT
53-7081	Refuse and Recyclable Material Collectors	\$49,887	440	27.3	21	9	15,400	16.9	580	Less Than H.S.
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$53,015	440	15.9	16	9	21,700	13.4	760	H.S. Diploma + OJT
17-2112	Industrial Engineers	\$89,833	440	4.5	16	13	23,100	8.2	860	Bachelor's Degree
43-9021	Data Entry Keyers	\$31,355	380	-15.8	4	4	23,700	-21.1	280	H.S. Diploma + OJT
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	\$42,459	380	0.0	10	10	16,400	1.8	450	H.S. Diploma + OJT
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$33,001	340	2.9	5	3	12,300	-8.1	100	H.S. Diploma + OJT



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43-5032	Dispatchers, Except Police, Fire, and Ambulance	\$39,450	340	17.6	16	10	20,900	16.3	950	H.S. Diploma + OJT
49-9099	Installation, Maintenance, and Repair Workers, All Other	\$44,064	330	21.2	13	6	23,100	14.7	730	H.S. Diploma + OJT
17-2199	Engineers, All Other	\$102,981	320	6.3	9	6	17,600	13.1	550	Bachelor's Degree
41-9041	Telemarketers	\$35,633	310	16.1	11	6	14,000	12.1	460	Less Than H.S.
11-2021	Marketing Managers	\$143,351	300	10.0	10	6	30,300	21.8	1,310	Bachelor's Degree
17-3029	Engineering Technicians, Except Drafters, All Other	\$76,614	280	-3.6	6	6	8,700	6.9	240	Associate's Degree
29-2071	Medical Records and Health Information Technicians	\$45,886	270	14.8	11	7	16,500	20.6	780	Postsecondary non-degree award
41-9011	Demonstrators and Product Promoters	\$30,225	260	15.4	11	7	107,600	15.7	3,560	H.S. Diploma + OJT
15-1141	Database Administrators	\$89,377	250	0.0	5	5	10,900	21.1	440	Bachelor's Degree
27-3041	Editors	\$82,214	190	52.6	15	5	12,100	12.4	440	Bachelor's Degree
11-3121	Human Resources Managers	\$122,536	180	11.1	7	5	14,000	20.0	650	Bachelor's Degree
43-9071	Office Machine Operators, Except Computer	\$29,749	170	0.0	4	4	8,800	-8.0	210	H.S. Diploma + OJT
43-9051	Mail Clerks and Mail Machine Operators, Except Postal Service	\$31,314	160	0.0	4	4	8,000	-7.5	180	H.S. Diploma + OJT
47-4041	Hazardous Materials Removal Workers	\$41,510	60	50.0	4	1	4,500	15.6	170	H.S. Diploma + OJT
49-2098	Security and Fire Alarm Systems Installers	\$51,467	60	-16.7	1	1	7,600	17.7	310	H.S. Diploma + OJT



**Ventura County Regional Planning Unit (RPU)
Occupational Employment Data Growth Projections
WDB BUSINESS SERVICES COMMITTEE**

Working Document

U.S. D.O.L. SOC Code*	Occupations	2016 VENTURA COUNTY Median Annual Wages***	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Growth Projection %	2012 VENTURA COUNTY Average Annual Job Openings****	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings****	2014 Education and Training Level**
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*2010 Standard Occupational Classifications and Occupational Information Network provided by the Department of Labor

**Occupational training and education classifications were developed by the Bureau of Labor Statistics (BLS).

***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 2016-1st quarter and do not include self-employed or unpaid family workers.

****Average Annual Job Openings includes new jobs and replacement jobs.

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

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.



2015-2016 YEAR-END REVIEW **Workforce Development Board of Ventura County**

WDB CLEAN/GREEN COMMITTEE

2015-2016 Members

WDB Members: Anthony Mireles, Vice Chair/Acting Chair (Laborers International Union of North America), Nancy Williams, Chair (Southern California Edison), Kimberly Nilsson, Vice Chair/Chair (Solid Waste Solutions, Inc.), Teresa Johnson (Ventura Adult and Continuing Education)

Other Members: John Brooks (City of Thousand Oaks), Rebekah Evans (Ventura County Lodging Association), David Fleisch (County of Ventura Public Works Agency), Paul Grossgold (County of Ventura General Services Agency), Eric Humel (Oxnard City Corps), Margaret Lau (Deputy Sector Navigator, South Central Coast Region of California Community Colleges), Valeria Makarova (California Lutheran University), Tiffany Morse (Ventura County Office of Education), Douglas O'Brien (The Energy Coalition), Wayne Pendrey (Ventura County Contractors Association), Mary Ann Rooney (Ventura County Civic Alliance)

Committee Accomplishments

In support of the WDB's *Ventura County Regional Strategic Workforce Development Plan 2013-2017*, the WDB Clean/Green Committee accomplishments included:

- **Workforce Innovation and Opportunity Act (WIOA)**
Stayed informed on the transition from WIA to WIOA, particularly in relation to regional requirements and industry sector strategies. The new law was effective on July 1, 2015, and Workforce Investment Boards (WIB) under the previous Workforce Investment Act (WIA) were renamed Workforce Development Boards (WDB).
- **Clean/Green Committee 2-Year Plan**
Formed a workgroup to develop recommendations for the Clean/Green Committee 2-Year Plan. The workgroup also developed draft definitions to help clarify education/career readiness and workforce development terminology. The Committee used a new WDB format for the 2-Year Plan, designed to standardize documents used by all of the WDB sector committees and make plans easier to follow.
- **WDBVC Clean/Green Occupational Employment Data**
Updated the Clean/Green Occupational Employment Data chart for reference during priority and planning discussions.
- **Regional Economic Analysis Profile for Ventura County (REAP)**
Reviewed the Occupational Analysis: Construction Materials and Services Cluster and other sections of the larger REAP document, expressing concern that the REAP report might not provide sufficient information for Clean/Green workforce development decision making.
 - Discussed the methodology of data collection and submitted questions to WDB staff for responses from Labor Market Information Division (LMID). Reviewed the responses from LMID and identified the need for more complete data that would provide a more accurate perspective on clean/green workforce needs in Ventura County.
 - Designated a Clean/Green Committee representative to work with a new, cross-sector WDB Data Analysis Workgroup to determine ways to collect more complete/accurate information on local employers.



2015-2016 YEAR-END REVIEW

Workforce Development Board of Ventura County

Committee Accomplishments (Continued)

- Inventory of Clean/Green Programs
Developed a draft matrix to inventory clean/green-related education and training programs available through the community colleges, adult schools and labor unions in Ventura County. Committee members offered to assist in the completion of the inventories.
- Regional Survey of Water/Wastewater Industry
Formed a workgroup to identify contacts in the water and waste water industry. The workgroup developed an extensive list of contacts and submitted it to the coordinator of the Center of Excellence South Central Coast Region of Community Colleges to use when distributing the survey to the Ventura County region.
- Clean/Green Workforce Development
Began discussions to identify the top three Ventura County clean/green workforce development priorities and possible next steps.
- Clean/Green Business Practices:
Discussed ways to raise employer awareness and promote clean/green jobs, emphasizing the importance of education on how to incorporate best practices into all types of business operations.
 - Formed an Employer Awareness Workgroup to examine how to create a green practices message for businesses and how to work with training programs to identify green skills needed to create a “sustainability” workforce to meet changing industry needs.
 - The workgroup recommended ways to help businesses understand the value of incorporating sustainability into their business practices. It was discussed how early adopters of sustainable practices in their businesses grew and profited. Sustainability often opens up new supply chains. The workgroup will continue to work on developing a way for businesses to tell their stories, on how incorporating sustainability has benefitted their businesses.
- Apprenticeship Training
Coordinated with the Laborers International Union of North America, Local 585 (LIUNA) to have apprenticeship training in Ventura County included on the Eligible Training Provider List (ETPL) training list.
- Career Pathways
Received updates from the California Career Pathways Trust grant project representatives and discussed opportunities to connect business and education for career awareness and workforce preparation.
- Environmental Education
Welcomed Melanie Peck, Program Manager for the PEAK Program, for a presentation on the statewide environmental education program focused on energy, water and career pathway development. PEAK is a program of The Energy Coalition and partners with California investor-owned and municipal electric and water utilities to empower students to be resource wise.



2015-2016 YEAR-END REVIEW
Workforce Development Board of Ventura County

WDB CLEAN/GREEN COMMITTEE

Insights

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Examples of insights from 2014-2015

- *Clean/green encompasses so many industries, it is difficult to identify which projects are the most important to work on. Many jobs are green jobs.*
- *We need to determine who else should be at the table. For example, we should consider having a construction business on the committee.*
- *Employers need to communicate, and job seekers need to understand, the realities of job expectations and the work environment.*
- *Building a sustainability-supportive business environment would benefit Ventura County. Every business should have sustainability built into the entrepreneurial design process. When calling for RFPs, there is a need to provide a sustainability plan for procurement.*



CLEAN/GREEN COMMITTEE 2-YEAR PLAN Workforce Development Board of Ventura County 2016-2018

Goal

The Clean/Green Committee will develop a pipeline of skilled workers in clean/green occupations to address the workforce needs of employers, working in collaboration with business, economic development, education, labor, government, and community-based organizations. Focus areas:

- Recycling/reuse
- Energy efficiency
- Natural and sustainable product manufacturing
- Renewable energy
- Water conservation
- Infrastructure
- Services

Components of Plan

- 1. Engage Leaders**

Engage a core team of Ventura County employers, agencies, education, labor, and other organizations most involved in clean/green workforce development. Develop ways to identify, engage, and communicate effectively with the core team and other clean/green workforce partners

 - Waste Facilities/ Recycling Centers
 - Water/Wastewater
 - Trash Haulers
 - Utilities/Energy
 - Landscapers
 - Architects
 - Contractors
 - Agriculture
 - Automotive
 - California State University, Channel Islands
 - Ventura County Community College District
 - Ventura County Office of Education
 - Adult education
 - Others
- 2. Analyze Data**

Conduct annual research to analyze clean/green workforce needs and changes.
- 3. Take Inventory**

Inventory current training providers in the region.

 - Industry-recognized certification programs
 - Apprenticeships
 - Pre-apprenticeships
 - Internships
 - Externships
 - High school academies
 - Regional Occupational Program
 - Adult education
 - Community colleges
 - Universities
 - Trade associations
 - Community organizations



CLEAN/GREEN COMMITTEE 2-YEAR PLAN
Workforce Development Board of Ventura County
2016-2018

- 4. Determine Priorities** Determine focus area priorities for clean/green workforce development.
- Sector workforce readiness
 - Career pathways
 - Sector certifications
 - Stackable credentials
 - Pre-apprenticeship programs
 - Apprenticeship programs
 - Business participation:
 - Curriculum development
 - Job shadowing
 - Internships
 - Externships
 - On-the-job training
 - Career awareness/outreach
- 5. Identify Gaps** Monitor identified gaps and continue to identify new gaps between education and clean/green workforce development needs.
- 6. Take Action** Many employers, particularly small businesses, in Ventura County are not aware of the activities of the Workforce Development Board Clean/Green Committee in developing a pipeline of skilled workers for clean/green jobs. As such, we need to:
- **Create awareness** throughout all business communities and the public sector of clean green jobs and certification programs that exist to provide skilled workers.
 - **Develop understanding** by employers and managers of the importance clean green practices in their operation (regardless of size) and how hiring skilled clean green workers will improve their organization’s performance. Emphasize that virtually every job, in every industry, should incorporate clean green practices.
 - **Encourage involvement** by leaders in business and the public sector, in the education of skilled clean green workers through engagement in the classroom, providing internships or job training programs for students or externships for faculty.
 - **Complete integration** of clean green practices and workers in all components of the workforce in businesses and the public sector in Ventura County.
- 7. Monitor Progress** The progress of the Clean/Green Committee is measured by the Workforce Development Board Year-End Review and a review of the Committee’s 2-Year Plan.



WDB CLEAN/GREEN COMMITTEE DEFINITIONS

- Workforce readiness
- Career pathways
- Sector certifications
- Stackable credentials
- Pre-apprenticeship programs
- Apprenticeship programs
- Business participation:
 - Curriculum development
 - Job shadowing
 - Internships
 - On-the-job training
 - Career awareness/outreach
 - Externships

Workforce readiness: These are identified skills that are needed for certain industry sectors. Each of the skills categories are defined by the sectors' chief activities.

Career pathway programs: Offer a clear sequence or pathway of education coursework and/or training credentials aligned with employer-validated work readiness standards and competencies. (Department of Labor Career Pathways Toolkit)

Certifications: Industry-recognized certifications that are particular to a given industry. Community colleges, trade schools and apprenticeship programs can prepare students for certifications. Some training programs have the additional authority to test for or approve the certifications on site, depending on the certification requirements.

Stackable credentials: These are credentials earned in different levels of programs within industry sectors. For example, a person might earn a water distribution credential of D1 level with less than a high school diploma. Through work experience and classes water distribution professionals can move up to D2, D3, D4 D5 levels. The California Department of Public Health and American Water Works Association (A.W.W.A) can issue these certifications. Requirements can vary for both agencies.

Pre-apprenticeship and apprenticeship programs: Formalized training programs, usually sponsored or organized by post-secondary agencies, in which skills development is based on number of hours of work experience and On the Job Training combined with a requisite amount of class time. At the end of a certified apprenticeship, a certification is obtained.

Curriculum development - Career Technical Education (C.T.E.): The partnership between industry representatives and educators to collaborate in the development of career technical education curriculum that reflects the needs of industry.

Job shadowing: The opportunity for participants to observe the actions of an industry employee while they are engaged in the common functions of their job. It is usually limited to a few hours in a day and is not a regularly occurring activity.

Internships: A paid/unpaid position within a business whereby a student does work of value to the organization while they are engaged in completing the educational program or training leading to an entry level job in that industry.

On-the-job training: A position in which the employee learns the essential skills of a job while he is engaged in the job usually under the supervision of a senior employee.

Career awareness/outreach: Any variety of activities that raises the participant's awareness of an industry sector's job opportunities, or allows them to explore the variety of careers related to an industry sector.

Externships: Opportunities (paid or unpaid) for a teacher to work within a business so they can learn what that career is like from the inside out. Theoretically, the experience will help them speak with authority when they inform their students of work in that industry sector.



**Ventura County Regional Planning Unit (RPU)
Occupational Employment Data Growth Projections
WDB CLEAN/GREEN COMMITTEE**

Working Document

U.S. D.O.L. SOC Code*	Occupations	2016 VENTURA COUNTY Median Annual Wages***	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Growth Projection %	2012 VENTURA COUNTY Average Annual Job Openings****	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings****	2014 Education and Training Level**	U.S. D.O.L. Green Jobs in Demand
45-2000	Agricultural Workers	-	18,670	16.4	858	551	308,300	11.6	12,700	Less Than H.S.	
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	\$28,728	4,860	18.0	238	150	270,500	19.1	13,560	Less Than H.S.	
43-4051	Customer Service Representatives	\$38,631	3,610	19.9	170	98	195,300	16.4	8,520	H.S. Diploma + OJT	
13-1199	Business Operations Specialists, All Other	\$78,931	3,100	7.4	65	42	135,700	14.2	3,790	H.S. Diploma + OJT	
49-9071	Maintenance and Repair Workers, General	\$42,325	2,240	12.5	71	43	116,600	12.1	3,650	H.S. Diploma + OJT	
51-2092	Team Assemblers	\$30,459	2,220	12.6	64	35	78,700	3.9	1,550	H.S. Diploma + OJT	
43-5071	Shipping, Receiving, and Traffic Clerks	\$33,832	2,030	12.3	78	53	87,500	8.3	3,030	H.S. Diploma + OJT	
47-2061	Construction Laborers	\$46,337	1,820	33.0	99	39	108,800	29.2	5,510	Less Than H.S.	
13-1111	Management Analysts	\$95,131	1,680	21.4	62	26	95,200	31.6	4,490	Bachelor's Degree	
53-7064	Packers and Packagers, Hand	\$25,285	1,650	16.4	69	43	93,000	11.2	3,480	Less Than H.S.	
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$38,809	1,410	7.8	41	31	48,200	8.3	1,460	H.S. Diploma + OJT	
11-3031	Financial Managers	\$131,766	1,340	14.9	45	25	74,200	13.6	2,400	Bachelor's Degree	
51-2099	Assemblers and Fabricators	\$27,152	1,250	36.0	66	20	22,800	9.2	570	H.S. Diploma + OJT	
53-7051	Industrial Truck and Tractor Operators	\$35,075	1,160	11.2	40	27	55,300	7.6	1,690	Less Than H.S.	
51-2022	Electrical and Electronic Equipment Assemblers	\$31,858	1,120	-5.4	14	14	28,600	0.7	370	H.S. Diploma + OJT	
51-9198	Helpers--Production Workers	\$25,611	1,090	7.3	27	19	43,600	9.2	1,150	Less Than H.S.	
47-2111	Electricians	\$52,527	1,060	24.5	45	20	48,700	22.2	2,000	H.S. Diploma + OJT	
51-4041	Machinists	\$43,035	980	17.3	39	22	34,000	15.3	1,300	H.S. Diploma + OJT	
45-2091	Agricultural Equipment Operators	\$26,284	900	32.2	56	27	14,100	12.8	610	Less Than H.S.	
13-2099	Financial Specialists, All Other	\$66,681	860	10.5	19	9	20,500	11.7	460	Bachelor's Degree	
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	\$82,216	810	25.9	29	9	46,800	28.4	1,840	H.S. Diploma + OJT	
11-9021	Construction Managers	\$125,371	800	15.0	25	13	52,300	18.4	1,780	Associate's Degree	

Ventura County Regional Planning Unit (RPU)
Occupational Employment Data Growth Projections
WDB CLEAN/GREEN COMMITTEE

U.S. D.O.L. SOC Code*	Occupations	2016 VENTURA COUNTY Median Annual Wages***	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Growth Projection %	2012 VENTURA COUNTY Average Annual Job Openings****	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings****	2014 Education and Training Level**	U.S. D.O.L. Green Jobs in Demand
17-3023	Electrical and Electronics Engineering Technicians	\$73,530	780	-3.8	16	16	20,700	1.9	470	Associate's Degree	
17-2141	Mechanical Engineers	\$96,154	770	0.1	37	26	23,500	4.7	910	Bachelor's Degree	
13-1081	Logisticians	\$91,109	680	8.8	14	8	13,700	32.1	590	Bachelor's Degree	
43-5061	Production, Planning, and Expediting Clerks	\$51,444	670	6.0	21	17	38,900	9.5	1,350	H.S. Diploma + OJT	
17-2071	Electrical Engineers	\$110,367	650	-1.5	14	14	23,800	4.6	620	Bachelor's Degree	
47-2073	Operating Engineers and Other Construction Equipment Operators	\$64,592	610	31.1	33	14	22,100	22.2	990	H.S. Diploma + OJT	
11-3051	Industrial Production Managers	\$98,948	580	13.8	18	10	19,200	0.5	360	Bachelor's Degree	
11-9041	Architectural and Engineering Managers	\$150,299	580	8.6	19	14	32,300	11.1	1,160	Bachelor's Degree	
13-2051	Financial Analysts	\$78,358	560	3.6	16	14	32,100	23.1	1,520	Bachelor's Degree	
47-2152	Plumbers, Pipefitters, and Steamfitters	\$51,023	520	25.0	19	6	34,100	24.3	1,250	H.S. Diploma + OJT	
51-4121	Welders, Cutters, Solderers, and Brazers	\$36,747	500	10.0	18	12	24,700	6.5	770	H.S. Diploma + OJT	
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$51,356	490	20.4	22	12	20,000	23.0	970	Vocational / OJT	
17-2112	Industrial Engineers	\$89,833	440	4.5	16	13	23,100	8.2	860	Bachelor's Degree	
53-7081	Refuse and Recyclable Material Collectors	\$49,877	440	27.3	21	9	15,400	16.9	580	Less Than H.S.	
17-2051	Civil Engineers	\$108,054	420	11.9	15	10	39,300	18.3	1,670	Bachelor's Degree	
19-2041	Environmental Scientists and Specialists, Including Health	\$80,683	410	34.1	26	12	14,900	29.5	880	Bachelor's Degree	
13-1151	Training and Development Specialists	\$63,642	370	10.8	11	7	21,100	23.7	890	Bachelor's Degree	
53-3021	Bus Drivers, Transit and Intercity	\$29,401	360	-5.6	7	7	23,300	13.3	740	H.S. Diploma + OJT	
49-9098	Helpers--Installation, Maintenance, and Repair Workers	\$31,028	340	11.8	14	10	14,300	14.7	640	H.S. Diploma + OJT	
13-1022	Wholesale and Retail Buyers, Farm Products	\$55,343	330	21.2	14	8	17,600	15.9	720	H.S. Diploma + OJT	
47-2181	Roofers	\$42,760	310	41.9	20	6	16,400	25.6	770	Less Than H.S.	



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11-2021	Marketing Managers	\$143,351	300	10.0	10	6	30,300	21.8	1,310	Bachelor's Degree	
17-3029	Engineering Technicians, Except Drafters, All Other	\$76,614	280	-3.6	6	6	8,700	6.9	240	Associate's Degree	
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$47,669	280	14.3	12	8	8,600	16.3	380	H.S. Diploma + OJT	
11-3071	Transportation, Storage, and Distribution Managers	\$105,845	250	20.0	10	6	12,700	12.6	460	H.S. Diploma + OJT	
17-2081	Environmental Engineers	\$92,694	230	26.1	12	6	7,300	24.7	360	Bachelor's Degree	
51-2023	Electromechanical Equipment Assemblers	\$34,481	220	13.6	6	3	6,900	-7.2	80	H.S. Diploma + OJT	
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$49,637	190	15.8	7	4	6,500	9.2	190	Vocational / OJT	
53-6099	Transportation Workers, All Other	\$33,628	190	10.5	10	7	6,300	19.0	370	H.S. Diploma + OJT	
27-1021	Commercial and Industrial Designers	\$62,665	180	11.1	7	5	4,800	10.4	170	Bachelor's Degree	
27-3031	Public Relations Specialists	\$64,999	170	11.8	4	2	22,800	13.2	610	Bachelor's Degree	
47-4011	Construction and Building Inspectors	\$73,160	160	12.5	6	4	9,200	14.1	340	H.S. Diploma + OJT	
17-3011	Architectural and Civil Drafters	\$60,596	150	-6.7	2	2	12,200	-0.8	160	Associate's Degree	
19-4093	Forest and Conservation Technicians	-	120	-8.3	5	5	7,400	-1.4	290	Associate's Degree	
19-3051	Urban and Regional Planners	\$83,919	110	9.1	6	5	7,100	18.3	450	Master's Degree	
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	\$25,835	110	-9.1	2	2	5,500	-7.3	90	H.S. Diploma + OJT	
17-3027	Mechanical Engineering Technicians	\$37,587	100	-10.0	2	2	5,300	3.8	130	Associate's Degree	
19-2042	Geoscientists, Except Hydrologists and Geographers	\$107,942	100	40.0	7	3	5,800	22.4	310	Bachelor's Degree	
19-4091	Environmental Science and Protection Technicians, Including Health	\$48,209	100	40.0	8	4	3,800	26.3	250	Associate's Degree	
17-3013	Mechanical Drafters	\$53,555	90	0.0	1	1	4,100	-7.3	50	Associate's Degree	
17-3022	Civil Engineering Technicians	\$64,532	90	0.0	2	2	6,300	3.2	150	Associate's Degree	
49-9043	Maintenance Workers, Machinery	\$49,667	90	11.1	2	1	7,000	14.3	190	H.S. Diploma + OJT	



Ventura County Regional Planning Unit (RPU) Occupational Employment Data Growth Projections WDB CLEAN/GREEN COMMITTEE

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17-3012	Electrical and Electronics Drafters	\$68,255	80	0.0	1	1	4,500	11.1	120	Associate's Degree	
17-3025	Environmental Engineering Technicians	\$50,583	80	37.5	4	2	1,800	27.8	90	Associate's Degree	
19-4011	Agricultural and Food Science Technicians	-	80	12.5	4	3	3,600	16.7	200	Associate's Degree	
19-4031	Chemical Technicians	\$45,672	70	28.6	4	2	5,000	16.0	200	Associate's Degree	
45-4011	Forest and Conservation Workers	-	70	28.6	2	1	2,000	10.0	60	H.S. Diploma + OJT	
17-3026	Industrial Engineering Technicians	\$54,539	60	0.0	1	1	4,200	2.4	90	Associate's Degree	
47-4041	Hazardous Materials Removal Workers	\$41,510	60	50.0	4	1	4,500	15.6	170	H.S. Diploma + OJT	
51-8021	Stationary Engineers and Boiler Operators	\$72,483	60	0.0	2	2	3,800	7.9	150	H.S. Diploma + OJT	
11-3131	Training and Development Managers	\$149,235	50	20.0	2	1	2,700	18.5	120	Bachelor's Degree	
37-3011	Landscaping and Groundskeeping Workers	\$29,144	50	20.0	2	1	137,600	13.8	5,360	Less Than H.S.	
51-2031	Engine and Other Machine Assemblers	-	50	60.0	4	1	1,300	0.0	20	H.S. Diploma + OJT	
11-9199	<i>Managers, All Other</i>	\$125,565	-	-	-	-	88,800	14.1	3,190	H.S. Diploma + OJT	
41-3031	<i>Securities, Commodities, and Financial Services Sales Agents</i>	\$76,077	-	-	-	-	45,400	7.9	1,430	Bachelor's Degree	
19-2031	<i>Chemists</i>	\$71,826	-	-	-	-	13,600	15.4	560	Bachelor's Degree	
11-9121*	<i>Natural Sciences Managers</i>	-	-	-	-	-	9,300	18.3	360	Bachelor's Degree	
29-9011	<i>Occupational Health and Safety Specialists</i>	\$84,538	-	-	-	-	7,200	23.6	360	Bachelor's Degree	
51-8013	<i>Power Plant Operators</i>	-	-	-	-	-	4,300	7.0	160	H.S. Diploma + OJT	
47-3013	<i>Helpers--Electricians</i>	\$26,955	-	-	-	-	4,200	35.7	210	H.S. Diploma + OJT	
17-1022	<i>Surveyors</i>	\$76,838	-	-	-	-	4,000	7.5	120	Bachelor's Degree	
17-1012	<i>Landscape Architects</i>	-	-	-	-	-	3,200	12.5	120	Bachelor's Degree	
47-3011	<i>Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters</i>	\$32,769	-	-	-	-	2,900	58.6	210	Less Than H.S.	
17-3024	<i>Electro-Mechanical Technicians</i>	\$78,075	-	-	-	-	2,800	7.1	70	Associate's Degree	



Ventura County Regional Planning Unit (RPU) Occupational Employment Data Growth Projections WDB CLEAN/GREEN COMMITTEE

Working Document

U.S. D.O.L. SOC Code*	Occupations	2016 VENTURA COUNTY Median Annual Wages***	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Growth Projection %	2012 VENTURA COUNTY Average Annual Job Openings****	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings****	2014 Education and Training Level**	U.S. D.O.L. Green Jobs in Demand
47-3015	<i>Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters</i>	\$37,037	-	-	-	-	2,800	28.6	120	H.S. Diploma + OJT	
25-1032	<i>Engineering Teachers, Postsecondary</i>	-	-	-	-	-	2,700	11.1	70	Doctoral Degree	
51-9011	<i>Chemical Equipment Operators and Tenders</i>	-	-	-	-	-	2,700	7.4	110	H.S. Diploma + OJT	
17-2131	<i>Materials Engineers</i>	\$90,270	-	-	-	-	2,700	3.7	100	Bachelor's Degree	
47-3014	<i>Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons</i>	\$25,926	-	-	-	-	2,600	23.1	110	Less Than H.S.	
45-2011	<i>Agricultural Inspectors</i>	\$50,870	-	-	-	-	2,100	4.8	80	Bachelor's Degree	
19-1013	<i>Soil and Plant Scientists</i>	\$87,896	-	-	-	-	2,000	35.0	140	Bachelor's Degree	
47-3012	<i>Helpers--Carpenters</i>	\$30,614	-	-	-	-	2,000	40.0	110	Less Than H.S.	
47-3019	<i>Helpers, Construction Trades, All Other</i>	\$24,210	-	-	-	-	1,700	29.4	80	Less Than H.S.	
49-2095	<i>Electrical and Electronics Repairers, Powerhouse, Substation, and Relay</i>	\$90,829	-	-	-	-	1,600	12.5	50	Vocational / OJT	
49-2092	<i>Electric Motor, Power Tool, and Related Repairers</i>	-	-	-	-	-	1,400	0.0	30	Vocational / OJT	
47-3016	<i>Helpers--Roofers</i>	-	-	-	-	-	1,300	-7.7	30	Less Than H.S.	
19-2032	<i>Materials Scientists</i>	\$89,164	-	-	-	-	1,300	15.4	60	Bachelor's Degree	

*2010 Standard Occupational Classifications and Occupational Information Network provided by the Department of Labor

**Occupational training and education classifications were developed by the Bureau of Labor Statistics (BLS).

***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 2016-1st quarter and do not include self-employed or unpaid family workers.

****Average Annual Job Openings includes new jobs and replacement jobs.

— No data available. Data has been removed from the California or Ventura County listings.

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



**Ventura County Regional Planning Unit (RPU)
Occupational Employment Data Growth Projections
WDB CLEAN/GREEN COMMITTEE**

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U.S. D.O.L. SOC Code*	Occupations	2016 VENTURA COUNTY Median Annual Wages***	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Growth Projection %	2012 VENTURA COUNTY Average Annual Job Openings****	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings****	2014 Education and Training Level**	U.S. D.O.L. Green Jobs in Demand
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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.

Priority Occupations Identified by Living Wages & Employment Growth
Infrastructure Jobs
Removed from the 2012-2022 Occupational Employment Projections for Ventura County



INFRASTRUCTURE WORK READINESS SKILL CATEGORIES
Workforce Development Board of Ventura County

SAFETY	MATH CONCEPTS	MEASUREMENTS	HAND AND POWER TOOLS
<ul style="list-style-type: none"> • General workplace safety • Electrical safety including Lock-out/Tag-out procedures • Worker safety • Equipment safety • Climbing/ladder safety • Power tool safety • Safety data sheets • OSHA10 • First aid/CPR/AED 	<ul style="list-style-type: none"> • Multiplication, division, addition and subtraction of fractions • Combined operations of fractions and mixed numbers • Algebraic operations of addition, subtraction and multiplication • Ratios and proportions • Table of decimal equivalents and combined operations of decimals • Degree of precision, tolerance and clearances 	<ul style="list-style-type: none"> • Standards • Units of measurement • Tape measure use • Measuring for cutting materials • Basic layout (surveying) • Mass and weight measurement • Measuring fluids • Measuring solid materials (sand, cement, etc.) 	<ul style="list-style-type: none"> • Tape measures, squares and levels • Basic hand tools – saws, hammers, screw drivers, wrenches • Power tools – saws, drills, screwdrivers • Pneumatic drills and nail guns • Powder actuated tools • Laser equipment
SUSTAINABILITY AND QUALITY	BLUEPRINT CONCEPTS	EMPLOYABILITY SKILLS	COMPUTER SKILLS
<ul style="list-style-type: none"> • Sustainable work processes: <ul style="list-style-type: none"> ○ Conservation ○ Reuse ○ Recycle ○ Repurpose ○ Reduce ○ Economy of use/right-sizing • Importance of individual – do it right the first time • Continuous process improvement for green purposes 	<ul style="list-style-type: none"> • Introduction basic construction drawings • Basic blueprint reading • Understanding different drawing types: <ul style="list-style-type: none"> ○ Civil ○ Electrical ○ Mechanical ○ Repair/renovation ○ New construction 	<ul style="list-style-type: none"> • Basics of interviewing • Work ethic • Oral communication • Written communication • Time management • Task prioritization • Worker, supervisor, manager etiquette and protocol basics • Basic company policy understanding 	<ul style="list-style-type: none"> • Excel • Word • OS basics • Computer navigation • Computer security • Computer etiquette • Viewer basics, PDF, CAD, jpg, png, bmp, TIFF, Solid Works, etc. • File extension basics



HOSPITALITY WORK READINESS SKILL CATEGORIES Workforce Development Board of Ventura County

BASICS OF QUALITY CONTROL	COMPUTER SKILLS	EMPLOYABILITY SKILLS
<ul style="list-style-type: none"> • Knowledge of standards and processes, as applicable per job function • Basic quality control methodology of each job function • Importance of personal responsibility (do it right the first time or ask for clarification first) • Specific hotel and hospitality culture and quality control measures • Knowledge of system processes • Knowledge of “clean-green” (energy, efficiency, sustainability) processes • Cost control and purchasing procedures 	<ul style="list-style-type: none"> • Microsoft Word • Microsoft Excel • Operating system basics • Computer navigation • Computer etiquette • Computer security 	<ul style="list-style-type: none"> • Initiative • Work ethic • Basics of interviewing • Job search skills • Communication skills • Continuous improvement skills (ability to use constructive criticism) • Basic company policy understanding • Time management • Task prioritization • Worker, supervisor, and manager etiquette and protocol basics • General reading skills • Critical thinking skills • General math skills

LODGING SKILLS	SALES AND MARKETING	FOOD AND BEVERAGE SERVICE
<ul style="list-style-type: none"> • Safety and security practices and procedures • Hotel management skills • Facilities and grounds management • Human resources and employment law • Food management and catering • Accounting • Guest service and guest relationships • Front desk operations-reservations, registration, check-out and settlement • Housekeeping management 	<ul style="list-style-type: none"> • Hospitality advertising and marketing via social media, telephone, brochures, local media • Catering and meeting room promotions • Public relations • Hospitality and lodging development and strategic planning 	<ul style="list-style-type: none"> • Hotel food and beverage service • Menus, dining, and beverage service • Event planning (bridal, meetings, etc.) • Sanitation, health, and safety

HOSPITALITY Accommodations: hotels, motels, resorts, hostels, vacation rentals, vacation ownership, bed and breakfast properties, recreational vehicles, camping

Food and Beverage: restaurants, full-service, fine dining, quick service, banquet facilities, lounges

Transportation: airlines, cruise lines, rail, car rentals, tour/coach operators, bus lines, taxis

Attractions: theme parks, zoos, national/state/local parks, natural wonders, heritage sites

Tourism /Destination: convention and visitors bureaus, state travel groups, Chambers of Commerce



CLEAN/GREEN WORK READINESS ESSENTIAL SKILL CATEGORIES
Workforce Development Board of Ventura County

BASICS OF QUALITY CONTROL	EMPLOYABILITY SKILLS	COMPUTER SKILLS
<ul style="list-style-type: none"> • Know processes, as applicable, per business • Basic quality methodology and inspection techniques • Importance of individual responsibility – to do it right the first time • Manufacturing theory and quality control • Lean manufacturing and quality control • Knowledge of regulations and systems processes • Knowledge of waste management – waste reduction advantages • Certification and best practices 	<ul style="list-style-type: none"> • Initiative • 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 • Opportunities for work experience – applications of skills in work settings • Apprenticeships- knowledge sustainable career pathways and paid training opportunities 	<ul style="list-style-type: none"> • Microsoft Excel • Microsoft Word • Microsoft Access • Operating System basics • Computer navigation • Computer security • Computer etiquette • ERP basics • Viewer basics like PDF, CAD, jpg, png, bmp, TIFF, Solid Works, etc. • File extension basics • Basic programming



2015-2016 YEAR-END REVIEW Workforce Development Board of Ventura County

WDB HEALTHCARE COMMITTEE

2015-2016 Members

WDB Members: Greg Barnes, Chair (Los Robles Hospital and Medical Center), Martel Fraser (United Food and Commercial Workers, Local 770), Teresa Johnson (Ventura Adult and Continuing Education), Paul Matakiewicz (Service Employees International Union, United Healthcare Workers), Richard Trogman (Kaiser Permanente), Celina Zacarias, (California State University, Channel Islands)

Other Members: John Cordova (College of the Canyons, Deputy Sector Navigator), Ed Gonzales (St. John's Regional Medical Center), Carol Higashida (Moorpark College), Amy Mantell (St. John's Regional Medical Center), Sandra Melton (Ventura College), Tiffany Morse (Ventura County Office of Education), Dawn Neuman (California State University, Channel Islands), Irene Ornelas (VC Innovates), Michelle Reynolds (Ventura County Health Care Agency), Mary Anne Rooney (Ventura County Civic Alliance), Brett Watson (Camarillo Healthcare Center), Bill Werner (Simi Valley Hospital)

Committee Accomplishments

In support of the WDB's *Ventura County Regional Strategic Workforce Development Plan 2013-2017*, WDB Healthcare Committee accomplishments included:

- Clinical Laboratory Scientist (CLS) Field Experience Program: Completed, submitted, and received conditional approval for the CLS Field Experience Program Combined State application. Committee member Dawn Neuman coordinated the process and paperwork for four hospitals to submit a combined application for certification. This will be the first consortium approach to CLS certification in California. What is unique about this initiative is that the four hospitals have collaborated to create a local post-graduate program to grow a future workforce, while giving California State University, Channel Islands (CSUCI) students the opportunity to rotate to different hospitals to complete their training so that hospital lab expertise in certain areas can be shared. (A fifth hospital might join.)
- Regional Healthcare Case Manager/Care Coordinator Career Pathway Project: Actively participated in the Los Angeles/Ventura regional project, funded through a SlingShot grant from the California Workforce Development Board. Six Los Angeles Workforce Development Boards and the Ventura County WDB, along with industry partners in healthcare and education, are working together. Examples of our support for the project:
 - Formed a WDB Healthcare Committee Workgroup to develop a local survey to determine training and employment needs for Case Managers/Care Coordinators in Ventura County. The survey will be sent to more than 3,000 healthcare providers.
 - At the kick-off meeting in Los Angeles for industry partners interested in the LA/Ventura Regional Case Manager/Care Coordinator Pathway Project, the WDB Healthcare Committee was represented by members Brett Watson and John Cordova and WDB staff.
 - Representing Ventura County at the kick-off meeting in Los Angeles for educators were WDB Healthcare Committee member John Cordova, CSUCI professor Kristen Linton, and WDB staff.



2015-2016 YEAR-END REVIEW

Workforce Development Board of Ventura County

- A.D.N. to B.S.N. Transition: Continued to monitor and explore the Associate Degree, Nursing (A.D.N.) to Bachelor of Science, Nursing (B.S.N.) transition challenges in the region. In response to a concern that acute care hospitals would be requiring newly hired nurses to have Baccalaureate Degrees vs. Associate Degrees in Nursing, Committee member Sandra Melton reported that, locally, we are not facing a critical problem at this time and that 100% of the nursing graduates with A.D.N. degrees are finding employment, although not as often in acute care facilities.

Committee members noted the importance of exploring ways to reduce the cost of A.D.N. to B.S.N. fast track programs to make them more affordable. Also helpful would be to find out which local hospitals are requiring B.S.N. degrees by a certain date, after hiring, and if they are providing educational benefits.

- Amgen Biotech Experience Program: Sherry Tsai, Site Director ABE-Greater Los Angeles Area and Carol Fujita, Coordinator ABE-LA CSUCI reported on the program which provides free teacher training, and loans up to \$24,000 in equipment during the training, for teachers to learn how to teach students the techniques that biotechnology researchers use. Connections were made at the meeting that will assist in expanding the program in Ventura County.
- Workforce Innovation and Opportunity Act (WIOA): Stayed informed on the transition from WIA to WIOA, particularly in relation to regional requirements and industry sector strategies. The new law became effective on July 1, 2015, and Workforce Investment Boards (WIB) under the previous Workforce Investment Act (WIA) were renamed Workforce Development Boards (WDB).
- Regional Economic Analysis Profile (REAP): Committee members reviewed the healthcare occupations report for Ventura County and expressed concern that the REAP report might not provide sufficient information for healthcare workforce development decision making. A cross-sector Data Analysis Workgroup was formed to determine ways to collect more accurate local data. Greg Barnes will represent the WDB Healthcare Committee on this workgroup.
- Healthcare Occupational Employment Data and Growth Projections: Updated the Committee's data worksheet for reference and discussion. Identified jobs, wages, employment growth projections, growth/replacement job potential, hard-to-fill occupations, and priorities for workforce education and training.
- Healthcare Committee Planning: Formed a workgroup to make recommendations to the Committee for the draft of the WDB Healthcare Committee 2-Year Plan. Reviewed labor market data and provided input from first-hand experience to help identify priorities, gaps, and opportunities.



2015-2016 YEAR-END REVIEW
Workforce Development Board of Ventura County

WDB HEALTHCARE COMMITTEE

Insights

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HEALTHCARE COMMITTEE 2-YEAR PLAN Workforce Development Board of Ventura County 2016-2018

Goal

The Healthcare Committee will strive to create a diverse pipeline of workers to fill healthcare 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 healthcare.

Components of Plan

- 1. Engage Leaders**

Broaden the Healthcare Committee's core team of Ventura County employers, key agencies, and organizations most involved in healthcare workforce development. Develop ways to identify, engage, and communicate effectively with the core team and other healthcare workforce partners.

 - Hospitals
 - Home health
 - Assisted living
 - Skilled nursing
 - Community clinics/ambulatory care centers
 - Ambulatory surgical centers
 - Mental health clinics
 - Physician offices
 - Agencies (e.g., Area Agency on Aging)
 - California State University, Channel Islands
 - Ventura County Community College District
 - Ventura County Office of Education
 - Adult education
 - Elected officials
 - Others

- 2. Analyze Data**

Validate State employment data with a local survey of healthcare workforce needs.

- 3. Take Inventory**

Inventory current training providers in the region. Develop a matrix that includes inventories of high school academies, ROP, adult education, community colleges, universities, certification programs, apprenticeships and internships.

 - Industry-recognized certification programs
 - Apprenticeships
 - Internships
 - Externships
 - High school academies
 - Regional Occupational Program
 - Adult education
 - Community colleges
 - Universities



HEALTHCARE COMMITTEE 2-YEAR PLAN Workforce Development Board of Ventura County 2016-2018

- 4. Determine Priorities** Determine focus area priorities for healthcare workforce development.
- Sector workforce readiness
 - Career pathways
 - Sector certifications
 - Stackable credentials
 - Pre-apprenticeship programs
 - Apprenticeship programs
 - Business participation:
 - Curriculum development
 - Job shadowing
 - Internships
 - Externships
 - On-the-job training
 - Career awareness/outreach
- 5. Identify Gaps** Identify the gaps between education and regional healthcare workforce needs and determine priorities.
- 6. Take Action** Develop an action plan to provide a bridge to fill those gaps.
- Clinical Laboratory Scientist: Finalize the Clinical Laboratory Field Experience Program pending State Certification of the joint application for four participating hospitals.
 - Case Manager/Care Coordinator: Assist the Case Manager/Care Coordinator Regional Career Pathway Project through the Healthcare Committee's input and survey of local needs. (The Case Manager/Care Coordinator Regional Career Pathway Project was initiated by six LA Workforce Development Boards and the Workforce Development Board of Ventura County to bring healthcare and education partners together to develop and implement a healthcare case manager/care coordinator career pathway and training program)
 - A.D.N. to B.S.N.: Identify nursing workforce development needs and form a workgroup to make recommendations.
 - Pharmacy Technician: Explore the possibility of an apprenticeship.
 - Cultural Awareness: Encourage cultural awareness training in healthcare.
 - Education Advisory Process: Recommend the alignment of healthcare business advisory committees to help streamline the regional education advisory process.
- 7. Monitor Progress** Measurement is through the Healthcare Committee's annual Workforce Development Board Year-End Review report and a review of the Committee's 2-Year Plan.



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WDB HEALTHCARE COMMITTEE

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29-1141	Registered Nurses	\$92,035	3,720	13.4	122	72	254,500	16.9	9,230	Associate's Degree
31-9092	Medical Assistants	\$35,966	2,370	28.7	113	45	81,600	23.2	3,450	Vocational / OJT
31-1014	Nursing Assistants	\$30,121	1,470	17.7	54	28	98,400	23.6	4,180	Vocational / OJT
31-1011	Home Health Aides	\$26,605	1,300	43.1	81	25	44,900	39.0	2,610	Less Than H.S.
31-9091	Dental Assistants	\$36,211	1,000	25.0	46	21	45,200	15.5	1,640	Vocational / OJT
29-2061	Nurses	\$52,825	750	26.7	38	18	60,700	25.7	3,040	Vocational / OJT
29-2021	Dental Hygienists	\$95,342	660	31.8	38	17	21,800	23.4	1,060	Associate's Degree
11-9111	Medical and Health Services Managers	\$119,353	490	16.3	20	12	27,900	22.2	1,290	Bachelor's Degree
29-1051	Pharmacists	\$132,706	460	13.0	17	11	26,900	15.2	1,050	Doctoral Degree
29-2052	Pharmacy Technicians	\$37,019	430	23.3	13	4	31,400	18.5	900	H.S. Diploma
29-1123	Physical Therapists	\$87,003	430	34.9	26	11	16,400	28.7	870	Doctoral Degree
31-2011	Occupational Therapy Assistants	\$61,806	390	46.2	24	6	1,600	43.8	100	Associate's Degree
29-1069	Physicians and Surgeons, All Other	\$154,497	370	24.3	19	9	27,900	12.9	1,050	Doctoral Degree
21-1029	Social Workers	\$54,925	360	8.3	11	8	14,000	7.9	400	Bachelor's Degree
21-1022	Healthcare Social Workers	\$65,201	330	15.2	12	7	13,200	24.2	600	Master's Degree
31-9099	Healthcare Support Workers, All Other	\$41,809	320	21.9	12	6	12,400	13.7	400	H.S. Diploma
29-1127	Speech-Language Pathologists	\$86,110	320	18.8	11	5	11,200	14.3	330	Master's Degree
29-2034	Radiologic Technologists	\$70,771	310	12.9	8	4	15,000	17.3	470	Associate's Degree
29-1062	Family and General Practitioners	\$212,262	310	19.4	14	8	17,400	12.1	640	Doctoral Degree
11-9151	Social and Community Service Managers	\$87,292	300	20.0	12	6	14,200	15.5	510	Bachelor's Degree
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	\$31,235	280	7.1	7	5	9,200	4.3	210	H.S. Diploma
29-2041	Emergency Medical Technicians and Paramedics	-	280	35.7	17	8	16,800	23.2	850	Vocational / OJT
31-2022	Physical Therapist Aides	\$29,603	270	44.4	18	6	5,900	33.9	330	H.S. Diploma
29-2071	Medical Records and Health Information Technicians	\$45,886	270	14.8	11	7	16,500	20.6	780	Vocational / OJT



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29-1122	Occupational Therapists	\$95,707	270	25.9	11	4	9,300	22.6	340	Master's Degree
29-1021	Dentists, General	\$116,418	270	14.8	10	6	14,400	8.3	470	Doctoral Degree
29-1126	Respiratory Therapists	\$84,751	230	13.0	6	3	14,100	17.7	450	Associate's Degree
31-9011	Massage Therapists	\$38,454	180	22.2	6	2	17,200	18.0	500	Vocational / OJT
29-2081	Opticians, Dispensing	\$42,041	170	29.4	10	5	7,500	17.3	350	H.S. Diploma
29-1131	Veterinarians	\$143,419	170	11.8	8	6	6,900	5.8	260	Doctoral Degree
29-2056	Veterinary Technologists and Technicians	\$34,371	160	31.3	7	2	8,600	20.9	270	Associate's Degree
19-4099	Life, Physical, and Social Science Technicians	\$55,341	150	40.0	12	6	8,000	20.0	470	Associate's Degree
21-1023	Mental Health and Substance Abuse Social Workers	\$44,597	150	26.7	6	3	11,200	11.6	370	Bachelor's Degree
29-9011	Occupational Health and Safety Specialists	\$84,538	150	6.7	6	4	7,200	23.6	360	Bachelor's Degree
29-2012	Medical and Clinical Laboratory Technicians	\$52,713	140	7.1	5	4	16,000	28.1	870	Associate's Degree
29-1071	Physician Assistants	\$118,067	140	42.9	9	3	8,300	33.7	430	Master's Degree
29-2055	Surgical Technologists	\$57,491	120	25.0	3	1	9,400	25.5	330	Vocational / OJT
29-2053	Psychiatric Technicians	\$59,226	120	0.0	1	1	8,400	1.2	100	Vocational / OJT
19-4021	Biological Technicians	\$47,367	110	9.1	3	0	11,100	17.1	520	Bachelor's Degree
29-2099	Health Technologists and Technicians, All Other	\$43,055	100	10.0	1	1	15,000	26.0	540	Vocational / OJT
31-2021	Physical Therapist Assistants	\$63,428	100	40.0	6	2	4,500	35.6	250	Associate's Degree
29-1031	Dietitians and Nutritionists	\$57,948	100	10.0	2	1	7,800	19.2	240	Bachelor's Degree
29-2011	Medical and Clinical Laboratory Technologists	\$86,871	100	0.0	2	2	10,300	11.7	400	Bachelor's Degree
19-1021	Biochemists and Biophysicists	-	90	22.2	4	4	6,300	27.0	350	Doctoral Degree
29-1041	Optometrists	\$118,208	90	33.3	5	3	4,700	14.9	210	Doctoral Degree
29-2051	Dietetic Technicians	\$40,742	80	25.0	3	1	3,400	23.5	120	H.S. Diploma
31-9093	Medical Equipment Preparers	\$46,989	80	0.0	2	1	6,600	21.2	260	H.S. Diploma
29-2032	Diagnostic Medical Sonographers	\$92,258	80	37.5	3	1	4,700	42.6	260	Associate's Degree



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29-1011	Chiropractors	\$64,786	80	25.0	4	2	3,200	3.1	80	Doctoral Degree
31-9094	Medical Transcriptionists	\$52,690	50	-20.0	1	1	4,600	4.3	100	Vocational / OJT
19-1042	<i>Medical Scientists, Except Epidemiologists</i>	\$107,942	-	-	-	-	28,000	17.9	1,100	Doctoral Degree
31-9095	<i>Pharmacy Aides</i>	\$28,298	-	-	-	-	9,000	11.1	270	H.S. Diploma
29-1199	<i>Health Diagnosing and Treating Practitioners</i>	\$74,890	-	-	-	-	7,300	13.7	260	Master's Degree
29-1063	<i>Internists, General</i>	\$191,709	-	-	-	-	6,400	7.8	210	Doctoral Degree
29-1067	<i>Surgeons</i>	\$231,842	-	-	-	-	5,800	15.5	230	Doctoral Degree
29-1065	<i>Pediatricians, General</i>	\$164,835	-	-	-	-	5,400	9.3	190	Doctoral Degree
29-1066	<i>Psychiatrists</i>	\$109,322	-	-	-	-	5,200	11.5	190	Doctoral Degree
31-1015	<i>Orderlies</i>	\$37,924	-	-	-	-	5,000	14.0	170	Vocational / OJT
19-1022	<i>Microbiologists</i>	\$83,777	-	-	-	-	4,500	20.0	210	Bachelor's Degree
19-3099	<i>Social Scientists and Related Workers</i>	\$83,899	-	-	-	-	4,200	21.4	160	Bachelor's Degree
29-1129	<i>Therapists, All Other</i>	\$42,454	-	-	-	-	3,800	31.6	160	Master's Degree
29-1061	<i>Anesthesiologists</i>	-	-	-	-	-	3,400	17.6	140	Doctoral Degree
29-2031	<i>Cardiovascular Technologists and Technicians</i>	\$90,625	-	-	-	-	3,400	26.5	140	Associate's Degree
29-1064	<i>Obstetricians and Gynecologists</i>	\$208,255	-	-	-	-	2,700	7.4	90	Doctoral Degree
31-1013	<i>Psychiatric Aides</i>	-	-	-	-	-	2,500	8.0	70	H.S. Diploma
29-2033	<i>Nuclear Medicine Technologists</i>	\$102,433	-	-	-	-	1,500	13.3	50	Associate's Degree
29-1125	<i>Recreational Therapists</i>	\$49,304	-	-	-	-	1,400	14.3	50	Bachelor's Degree
29-1029	<i>Dentists, All Other Specialists</i>	-	-	-	-	-	1,300	0.0	50	Doctoral Degree
19-3039	<i>Psychologists</i>	\$103,732	-	-	-	-	1,300	7.7	50	Master's Degree
29-9091	<i>Athletic Trainers</i>	-	-	-	-	-	1,200	16.7	50	Bachelor's Degree
29-1124	<i>Radiation Therapists</i>	-	-	-	-	-	1,100	18.2	40	Associate's Degree
29-1081	<i>Podiatrists</i>	-	-	-	-	-	1,100	0.0	30	Doctoral Degree
29-1023	<i>Orthodontists</i>	-	-	-	-	-	1,100	9.1	30	Doctoral Degree
29-1181	<i>Audiologists</i>	-	-	-	-	-	1,000	30.0	50	Doctoral Degree



**Ventura County Regional Planning Unit (RPU)
Occupational Employment Data Growth Projections
WDB HEALTHCARE COMMITTEE**

Working Document

U.S. D.O.L. SOC Code*	Occupations	2016 VENTURA COUNTY Median Annual Wages**	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Growth Projection %	2012 VENTURA COUNTY Average Annual Job Openings****	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings****	2014 Education and Training Level***
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*2010 Standard Occupational Classifications and Occupational Information Network provided by the Department of Labor

**Occupational training and education classifications were developed by the Bureau of Labor Statistics (BLS).

***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 2016-1st quarter and do not include self-employed or unpaid family workers.

****Average Annual Job Openings includes new jobs and replacement jobs.

— No data available. Data has been removed from Ventura County or California listings.

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

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.

Top 20 In-Demand Occupations Identified by Living Wages & Employment Growth
WIB Allied Health Committee: Critical, Hard-to-Fill Occupations/Resource Matrix (Sept. 2012)
<i>Removed from the 2012-2022 Occupational Employment Projections for Ventura County</i>



HEALTHCARE WORK READINESS SKILLS CATEGORIES
Workforce Development Board of Ventura County

SAFETY	MATH CONCEPTS	EMPLOYABILITY SKILLS
<ul style="list-style-type: none"> • General workplace safety • Lock-out/tag-out procedures • Worker safety • Equipment safety • Body mechanics • Safety data sheets • First aid/CPR/AED • Infection control (contact/ airborne) 	<ul style="list-style-type: none"> • Multiplication, division, addition, and subtraction • Combined operations of fractions and mixed numbers • Units of measurement • Mass and weight measurement • Measuring fluids • Ratios and proportions • Table of decimal equivalents and combined operations of decimals • Dimensional analysis 	<ul style="list-style-type: none"> • Basics of interviewing • Work ethic • Oral communication • Written communication • Time management • Task prioritization • Worker, supervisor, manager etiquette and protocol basics • Basic company policy understanding • Cultural awareness/inclusion • Interpersonal skills • Dress code/personal presentation • Teamwork/leadership • Willingness to learn • Critical thinking
LEGAL/ ETHICS	COMPUTER SKILLS	HEALTHCARE EQUIPMENT
<ul style="list-style-type: none"> • HIPAA • Medical record documentation • Introduction to basic ethics • Customer service/people skills 	<ul style="list-style-type: none"> • Excel • Word • OS basics • Computer navigation • Computer security • File extension basics • Overview of e-medical records software programs • Social media 	<ul style="list-style-type: none"> • Blood pressure cuff • Vital signs monitor • Oxygen saturation monitor • Proper use of patient lift and transport equipment • Proper use of other medical equipment



2015-2016 YEAR-END REVIEW **Workforce Development Board of Ventura County**

WDB MANUFACTURING COMMITTEE

2015-2016 Members

WDB Members: Vic Anselmo, Chair (Applied Powdercoat), Tavi Udrea, Vice Chair (Haas Automation, Inc.), Byron Lindros (Amgen Inc.), Cindy Guenette (Hi-Tech Engineering), Gregory Liu (Jaxx Manufacturing, Inc.), Bill Pratt (Kinamed), Alex Rivera (Milgard Manufacturing, Inc.), Tony Skinner (Tri-Counties Building and Construction Trades Council), Bruce Stenslie (Economic Development Collaborative-Ventura County), Peter Zierhut (Haas Automation, Inc.)

Other Members: Jim Avery (MWS Wire), Mike Bastine (SCCRC Deputy Sector Navigator for Manufacturing), Patrick Grimes (Dynamic Automation), Marybeth Jacobsen (Workforce Education Coalition), Subhash Karkare (Moorpark College), Jason Miller (California State University, Channel Islands), Tiffany Morse (Ventura County Office of Education), Scot Rabe (Ventura College), Mary Anne Rooney (Alliance for Linked Learning)

Committee Accomplishments

In support of the WDB's *Ventura County Regional Strategic Workforce Development Plan 2013-2017*, the WDB Manufacturing Committee:

- **Manufacturing Committee Workgroups**

Formed workgroups to draft recommendations for discussion and priority-setting. The groups include Employer Needs, Manufacturing Roundtable of Ventura County, Business/Education, and Regional Partnerships. Work is ongoing, and the committee receives regular updates.

- **Career Pathways**

- Served in an advisory role and provided a neutral platform for facilitating employer interaction with educators in support of the California Career Pathways Trust Grants (*Alliance for Linked Learning* and *VC Innovates*) to develop curriculum aligned with manufacturing industry needs. Responded to questions about the California Manufacturing/Engineering Pathways Standards and provided feedback on the Manufacturing and Engineering Career Pathways Career Ladder Chart.
- Provided feedback to *VC Innovates* on the initial draft of the Manufacturing and Engineering Career Pathways Career Ladder Chart. Discussions generated insightful recommendations on how the charts could more accurately reflect manufacturing jobs and career pathways. Suggestions included production, maintenance and facilities, engineering, quality assurance, regulatory affairs, and supply chain positions. Committee will continue to provide feedback and receive updates from *VC Innovates*.

- **Manufacturing Roundtable of Ventura County (MRVC):**

- Partnered with the Manufacturing Roundtable of Ventura County (MRVC) and Amgen to organize a networking event for manufacturing professionals in Ventura County. Agenda included an Amgen presentation on Improving Manufacturing Operations Using Lean Six Sigma. In 2016-2017, MRVC will partner with city representatives on future MRVC



2015-2016 YEAR-END REVIEW **Workforce Development Board of Ventura County**

WDB MANUFACTURING COMMITTEE

Committee Accomplishments (Continued)

manufacturing network events to foster engagement and collaboration on regional business and workforce issues.

- Created a Manufacturing Professional Network to help engage businesses in MRVC and workforce development. Manufacturers in the county will meet informally each quarter on-site at different locations. Businesses volunteering to host 2016-2017 networking events are Kinamed, Milgard Inc., Dynamic Automation, Hi-Tech Engineering and Haas Automation, Inc.
- Identified ways to revitalize the MRVC LinkedIn site for communication and to align and coordinate messages to the manufacturers who are part of the MRVC network.

• **National Manufacturing Day**

Collaborated on planning for 2015 National Manufacturing Day with the MRVC, local manufacturers, and the Ventura County Office of Education (VCOE). The event introduced careers in manufacturing to more than 300 students, teachers, counselors, and school administrators. Expressed appreciation to the participating manufacturers: Alcoa Fastening Systems, Amgen, Inc., Applied Powdercoat, Inc., Dynamic Automation, Haas Automation, Inc., and Milgard Manufacturing, Inc.

• **Community Colleges**

- The WDB Manufacturing Readiness Skills list was used as a reference by Ventura College to create a curriculum of eight manufacturing-related courses. Scot Rabe was the lead instructor and reported that the State had approved the curriculum, thanks to the input from the manufacturing committee members.
- Discussed bimonthly updates from the Deputy Sector Navigator for manufacturing, representing the South Central Coast Regional Consortium of Community Colleges. College of the Canyons STEM robotics program awarded robotics kits to six middle schools in Ventura County. A taskforce from industry was established by the College of the Canyons to work on a community college regional study on in-demand manufacturing jobs, and grants to help teachers develop curriculum and obtain new equipment for robotics and 3D printing manufacturing. Updates are provided to the committee at each meeting.

• **Advanced Manufacturing Partnership for Southern California (AMP SoCal)**

- Provided a neutral platform for reporting and coordinating Ventura County participation on six AMP SoCal Pillar Committees (Workforce and Training, Supplier Networks, Research and Innovation, Infrastructure and Site Development, Trade and International Development, and Operations Improvement and Capital Access). Leveraged professional networks to help connect educators with aerospace and defense manufacturers to support for federal grant proposals.



2015-2016 YEAR-END REVIEW **Workforce Development Board of Ventura County**

WDB MANUFACTURING COMMITTEE

Committee Accomplishments (Continued)

- Manufacturing Committee member Jason Miller (CSUCI) was elected as Chair of the AMP SoCal Research & Innovation Pillar Committee, and serves with Cheryl Moore on the AMP SoCal Executive Council. An application for U.S. Department of Commerce for continuation of the *Investing in Manufacturing Communities Partnership* designation is in progress and includes an expanded AMP SoCal membership of ten counties in Southern California.

Insights

- Continue consistent manufacturing advocacy, collaborate on ongoing regional workforce issues, and leverage resources in order to increase regional economic value and visibility.
- Identify the advanced manufacturing skills (beyond manual skills) that employers expect from job seekers who want to work in manufacturing.
- Find efficient collaborative methods to connect business needs with education curriculum.
- Communicate with manufacturers about how they can participate in building a future skilled workforce by providing teacher externships/professional development opportunities that connect the classroom to the workplace.
- Communicate with manufacturers about how they can participate in building a future skilled workforce by providing student opportunities to gain awareness and appreciation in the value of manufacturing careers.
- Continue supporting the efforts of the Manufacturing Roundtable of Ventura County (MRVC) successful outreach, which has produced a marked increase in manufacturer's participation in Manufacturing Day/Week. MRVC has the potential to reach beyond Manufacturing Day/Week by incorporating a regional speaker's bureau.
- Use MRVC Manufacturing Week as a meaningful rudder for advancing public awareness in Ventura county region to raise appreciation and value of manufacturing careers and economic impact.



MANUFACTURING COMMITTEE 2-YEAR PLAN **Workforce Development Board of Ventura County** **2016-2018**

Goal

Champion the creation, support, and training of a diverse pipeline of skilled workers to fill in-demand manufacturing positions in Ventura County. Align educational skills development with hiring trends and emerging technologies. Foster an environment that will engage and bring together Ventura County partners to advocate manufacturing workforce needs and support a robust manufacturing sector.

Components of Plan

- 1. Engage Leaders**

Maintain a core team of Ventura County employers, key agencies, and organizations most involved in manufacturing workforce development: Invite others to participate in topic-specific discussions.

 - Ventura County manufacturers
 - Manufacturing Roundtable of Ventura County
 - Economic Development Collaborative-Ventura County
 - Chambers of Commerce
 - California State University, Channel Islands
 - Ventura County Community College District
 - Adult education
 - Ventura County Office of Education
 - Career pathways programs
 - Maker Spaces
 - Professional Societies
 - Labor Unions
 - Ventura County STEM Network
 - City Incubators
 - Naval/ Military Command Staff
- 2. Analyze Data**

Update labor market data annually. Seek local employer feedback regarding data as it relates to regional industry sector workforce needs.

 - Form a workgroup to analyze labor market data and report to the committee.
 - Interpret data in relation to local business needs.
 - Form a workgroup to provide forums for feedback from manufacturers on workforce needs and opportunities.
 - Disseminate findings and data analyses.
- 3. Take Inventory**

For the list below, inventory current manufacturing training programs and providers in the region. Develop a matrix and/or Venn diagram for communicating easily. Develop a one-stop, online catalog of manufacturing training/education in Ventura County for easy reference by employers and job seekers.



MANUFACTURING COMMITTEE 2-YEAR PLAN **Workforce Development Board of Ventura County** **2016-2018**

- Industry-recognized certificates
- National certificates
- Stackable credentials
- Apprenticeships
- Internships
- Externships
- On-the-job training
- Career pathways
- Regional Occupational Programs
- Adult education
- Community colleges
- Universities
- Trades
- Community organizations

- Inventory business/education participation opportunities. Develop a one-stop, online resource for employers to see descriptions of the opportunities and register to participate.
- Inventory key manufacturing leaders. Develop a list and a strategy for outreach.

4. Determine Priorities

Group priorities into three areas:

- Linking Business and Educational Communities
 - Develop opportunities for classroom participation (e.g., real world problem solving)
 - Facilitate mentoring and coaching opportunities
 - Internships
 - Externships
 - Job shadowing
 - Manufacturing Day tours
- Promoting the Manufacturing Sector
 - Foster manufacturing networks
 - Find out what manufacturers are willing to do to help promote/support manufacturing in Ventura County
 - Raise business and community awareness of what manufacturing brings to the county
 - Leverage and coordinate communication channels (e.g., Manufacturing Roundtable of Ventura County; Manufacturing Day; Workforce Wednesday; Ventura County Grows Business; government and education activities)
 - Provide inventory of manufacturing support resources (training support, etc.)
 - Identify opportunities to raise awareness of the value of manufacturing sector



MANUFACTURING COMMITTEE 2-YEAR PLAN
Workforce Development Board of Ventura County
2016-2018

- Manufacturing Workforce Development
 - Sector workforce readiness skills
 - Career pathways
 - Sector certifications
 - Apprenticeship programs
 - Curriculum development
 - Preferred applicant programs

5. Identify Gaps

- Identify gaps between education preparedness and manufacturing workforce needs
- Identify gaps in manufacturing support resources

6. Take Action

Note to Manufacturing Committee: We need to develop an action plan that is “achievable” in a two-year window. A suggestion would be to form workgroups that could report progress to the Manufacturing Committee:

- Employer Needs Workgroup Analyze labor market data and report to the committee, Offer forums for hearing feedback from manufacturers on workforce needs and opportunities.
- Manufacturing Roundtable of Ventura County (MRVC): Continue to support Manufacturing Day (Week), including a meeting of manufacturing and educational leaders. Convene informal evening mixers for networking. Participate in the regional manufacturing expo event in spring 2016. Work toward the development of private resources to support MRVC.
- Business/Education: Continue to provide input for the development of manufacturing courses, manufacturing certificates, manufacturing apprenticeships, and other workforce development opportunities. Continue to provide input for career pathways curriculum development and promote manufacturer participation in learning experiences at school and business locations. Explore development of a website that would enable employers to volunteer to offer hands-on learning experiences (all levels of education).
- Regional Partnerships Workgroup Participate in/stay connected with the research and activities of the Advanced Manufacturing Partnership of Southern California (AMP SoCal) and its pillar committees.

7. Monitor Progress

The Manufacturing Committee will report on progress through the annual Workforce Development Board Year-End Review process and a review of the Committee’s 2-Year Plan.



**Ventura County Regional Planning Unit (RPU)
Occupational Employment Data Growth Projections
WDB MANUFACTURING COMMITTEE**

Working Document

U.S. D.O.L. SOC Code*	Occupations	2016 VENTURA COUNTY Median Annual Wages**	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Growth Projection %	2012 VENTURA COUNTY Average Annual Job Openings****	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings****	2014 Education and Training Level***
51-2092	Team Assemblers	\$30,459	2,220	12.6	64	35.0	78,700	3.9	1,550	H.S. Diploma + OJT
11-9199	Managers, All Other	\$125,565	1,790	5.0	49	39.0	88,800	14.1	3,190	H.S. Diploma + OJT
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	\$38,809	1,410	7.8	41	31.0	48,200	8.3	1,460	H.S. Diploma + OJT
51-2099	Assemblers and Fabricators	\$27,152	1,250	36.0	66	20.0	22,800	9.2	570	H.S. Diploma + OJT
51-2022	Electrical and Electronic Equipment Assemblers	\$31,858	1,120	-5.4	14	14.0	28,600	0.7	370	H.S. Diploma + OJT
51-9198	Helpers--Production Workers	\$25,611	1,090	7.3	27	7.3	43,600	9.2	1,150	Less Than H.S.
51-4041	Machinists	\$43,035	980	17.3	39	22.0	34,000	15.4	1,300	H.S. Diploma + OJT
51-9199	Production Workers, All Other	\$30,480	790	17.7	35	17.7	19,000	16.3	800	H.S. Diploma + OJT
17-3023	Electrical and Electronics Engineering Technicians	\$73,530	780	-3.8	16	16.0	20,700	1.9	470	Associate's Degree
17-2141	Mechanical Engineers	\$96,154	770	14.3	37	26.0	23,500	4.7	910	Bachelor's Degree
17-2071	Electrical Engineers	\$110,367	650	-1.5	14	14.0	23,800	4.6	620	Bachelor's Degree
51-8000	Plant and System Operators	-	600	5.0	25	21.0	28,200	5.0	1,130	-
11-3051	Industrial Production Managers	\$98,948	580	13.8	18	10.0	19,200	0.5	360	Bachelor's Degree
11-9041	Architectural and Engineering Managers	\$150,299	580	8.6	19	14.0	32,300	11.1	1,160	Bachelor's Degree
51-4121	Welders, Cutters, Solderers, and Brazers	\$36,747	500	10.0	18	12.0	24,700	6.5	770	H.S. Diploma + OJT
17-2112	Industrial Engineers	\$89,883	440	4.5	16	13.0	23,100	8.2	860	Bachelor's Degree
51-9196	Paper Goods Machine Setters, Operators, and Tenders	\$56,896	430	-2.3	4	-2.3	6,400	-10.9	60	H.S. Diploma + OJT
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	\$26,407	420	16.7	19	12.0	11,100	7.2	400	H.S. Diploma + OJT
49-9041	Industrial Machinery Mechanics	\$57,010	390	23.1	20	11.0	20,900	24.9	1,120	H.S. Diploma + OJT
49-9098	Helpers--Installation, Maintenance, and Repair Workers	\$31,028	340	11.8	14	10.0	14,300	14.7	640	H.S. Diploma + OJT
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$37,574	320	-12.5	6	6.0	5,200	-13.5	100	H.S. Diploma + OJT
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	\$47,669	280	14.3	12	8.0	8,600	16.3	380	H.S. Diploma + OJT



Ventura County Regional Planning Unit (RPU) Occupational Employment Data Growth Projections WDB MANUFACTURING COMMITTEE

Working Document

U.S. D.O.L. SOC Code*	Occupations	2016 VENTURA COUNTY Median Annual Wages**	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Growth Projection %	2012 VENTURA COUNTY Average Annual Job Openings****	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings****	2014 Education and Training Level***
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$63,164	190	15.8	7	4.0	6,500	9.2	190	Vocational / OJT
27-1021	Commercial and Industrial Designers	\$62,665	180	11.1	7	5.0	4,800	10.4	170	Bachelor's Degree
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	\$26,345	180	-5.6	2	2.0	9,900	-16.2	120	H.S. Diploma + OJT
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	\$38,298	170	41.2	10	4.0	3,600	19.4	160	H.S. Diploma + OJT
19-4099	Life, Physical, and Social Science Technicians	\$55,341	150	40.0	12	6.0	8,000	20.0	470	Associate's Degree
51-9022	Grinding and Polishing Workers, Hand	\$28,050	120	16.7	5	4.0	5,200	0.0	150	Less Than H.S.
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	\$25,835	110	-9.1	2	2.0	5,500	-7.3	90	H.S. Diploma + OJT
17-3027	Mechanical Engineering Technicians	\$37,587	100	-10.0	2	2.0	-	-	-	-
17-3013	Mechanical Drafters	\$53,555	90	0.0	1	1.0	4,100	-7.3	50	Associate's Degree
51-4111	Tool and Die Makers	\$55,651	90	33.3	3	0.0	3,200	3.1	30	H.S. Diploma + OJT
51-4199	Metal Workers and Plastic Workers	\$37,625	90	33.3	4	1.0	-	-	-	-
17-3012	Electrical and Electronics Drafters	\$68,225	80	0.0	1	1.0	4,500	11.1	120	Associate's Degree
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	\$56,488	80	37.5	5	2.0	2,500	44.0	180	H.S. Diploma + OJT
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	\$36,165	80	25.0	4	2.0	1,400	0.0	30	H.S. Diploma + OJT
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	\$31,112	80	0.0	2	2.0	3,400	-8.8	70	H.S. Diploma + OJT
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	\$30,163	80	12.5	4	12.5	3,900	2.6	140	H.S. Diploma + OJT
17-3026	Industrial Engineering Technicians	\$54,539	60	0.0	1	1.0	4,200	2.4	90	Associate's Degree
51-8021	Stationary Engineers and Boiler Operators	\$72,483	60	0.0	2	2.0	3,800	7.9	150	H.S. Diploma + OJT
51-2031	Engine and Other Machine Assemblers	\$36,186	50	60.0	4	1.0	1,300	0.0	20	H.S. Diploma + OJT
51-9012	<i>Machine Setters, Operators, and Tenders</i>	\$43,382	-	-	-	-	6,400	20.3	350	H.S. Diploma + OJT
51-2041	<i>Structural Metal Fabricators and Fitters</i>	\$41,279	-	-	-	-	6,000	8.3	290	H.S. Diploma + OJT



**Ventura County Regional Planning Unit (RPU)
Occupational Employment Data Growth Projections
WDB MANUFACTURING COMMITTEE**

Working Document

U.S. D.O.L. SOC Code*	Occupations	2016 VENTURA COUNTY Median Annual Wages**	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Growth Projection %	2012 VENTURA COUNTY Average Annual Job Openings****	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings****	2014 Education and Training Level***
51-9141	Semiconductor Processors	\$38,819	-	-	-	-	5,800	-22.4	140	Associate's Degree
51-9041	Machine Setters, Operators, and Tenders	\$29,769	-	-	-	-	4,100	0.0	110	H.S. Diploma + OJT
51-9031	Cutters and Trimmers, Hand	\$28,009	-	-	-	-	2,900	-13.8	50	Less Than H.S.
17-3024	Electro-Mechanical Technicians	\$78,075	-	-	-	-	2,800	7.1	70	Associate's Degree
51-9011	Chemical Equipment Operators and Tenders	\$44,949	-	-	-	-	2,700	7.4	110	H.S. Diploma + OJT
51-9192	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	\$24,886	-	-	-	-	2,300	4.3	70	Less Than H.S.
51-9021	Operators, and Tenders	\$24,937	-	-	-	-	1,900	0.0	50	H.S. Diploma + OJT
51-2091	Fiberglass Laminators and Fabricators	\$28,556	-	-	-	-	1,700	-5.9	30	H.S. Diploma + OJT
51-8091	Chemical Plant and System Operators	-	-	-	-	-	1,400	-7.1	50	H.S. Diploma + OJT
51-9194	Etchers and Engravers	\$27,215	-	-	-	-	-	-	-	-

*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 2016-1st 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 jobs.

- No data available.

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



**Ventura County Regional Planning Unit (RPU)
Occupational Employment Data Growth Projections
WDB MANUFACTURING COMMITTEE**

Working Document

U.S. D.O.L. SOC Code*	Occupations	2016 VENTURA COUNTY Median Annual Wages**	2012 VENTURA COUNTY Average Annual Employment	2022 VENTURA COUNTY Employment Growth Projection %	2012 VENTURA COUNTY Average Annual Job Openings****	2012 VENTURA COUNTY Average Annual Job Replacement Openings	2012 CALIFORNIA Average Annual Employment	2022 CALIFORNIA Employment Growth Projection %	2012 CALIFORNIA Average Annual Job Openings****	2014 Education and Training Level***
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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.

Priority Occupations Identified by WDB Manufacturing Committee
<i>Removed from the 2012-2022 Occupational Employment Projections for Ventura County</i>
<i>Removed from the 2012-2022 Occupational Employment Projections for California</i>



MANUFACTURING WORK READINESS SKILL CATEGORIES
Workforce Development 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 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	EMPLOYABILITY 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