



ECONOMIC
DEVELOPMENT
COLLABORATIVE

BEST PRACTICES: WORKFORCE SYSTEMS

EDC REGIONAL RESEARCH



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Preface

The Ventura County Workforce System maintains robust training and placement services, effectively serving adult and dislocated workers, in-school and out-of-school youth. Traditional approaches to employment services have proven successful for exceeding local performance thresholds. Current and recent past success noted, fast evolving changes in the economy and labor markets have increased the need to focus more attention and resources on investing in the skills enhancements necessary for meeting industry demand.

The Great Recession of 2008 had an enormous impact on the way by which communities nation-wide approach the development of human capital. The Recession caused a substantial downsizing of the workforce. That disruption, combined with exponentially advancing technology, initiated the greatest shift in the development of human talent since the industrial revolution. This shift was reflected in the reauthorization of the Workforce Investment Act of 1998 as the Workforce Innovation and Opportunity Act of 2014 (WIOA).

The advent of WIOA marked the beginning of a reinvigorated emphasis for workforce system services responsive to industry need as a balance to attention on job-seeker need. This meant that while services remained focused on income eligible individuals, the type of training and methods to providing placement and upskilling were increasingly required to reflect economic conditions and industry demand in the Local Workforce Area. The legislation emphasizes the distribution of services that directly impact poverty with the goal of supporting local economies, hence the required inclusion of labor market information and industry trends in Workforce System Plans.

To this end, the apprenticeship model has been touted by the US Department of Labor as a modern “earn-and-learn” model to address the needs of individuals and the local economy. The registered apprenticeship model has proven effective in addressing high-demand workforce needs in high-impact industry sectors nationally and globally. The model affords workers the ability to be employed full-time while concurrently attending 144 hours of training and education per annum for the duration of the apprenticeship (which may last 2,000-10,000 hours). This model leverages skill development through on-the-job training with the enhanced productivity and problem solving that comes with theoretical foundations.

Partners within the Ventura County Workforce System recognize the increased complexity in the delivery of services in this era and seek to find collaborative solutions that leverage all partner resources including services provided through the One-stop (AJCC), Vocational Rehabilitation, Adult Education, youth program providers and economic development organizations.

In an effort to support and enhance the workforce systems in Ventura County and throughout the State, the EDC—in partnership with the California Stewardship Network and by the support of the Morgan Family Foundation—has compiled this Report, outlining seven case studies and federal guidance on the integration of the registered apprenticeship model into the local Workforce System, with an emphasis on best practices for braiding funds and functions among WIOA partners to scale the apprenticeship model.

Federal Guidance

The U.S. Department of Labor (USDOL) issued guidance on the integration of registered apprenticeships into the WIOA workforce system at the regional and local level in early 2017.

As a workforce development model, registered apprenticeships contribute directly to the successful achievement of performance metrics for WIOA programs.

A formal registered apprenticeship (RA) program consists of two primary elements, the RA sponsor and the related supplementary instruction (RSI). The RA sponsor is the entity that approves the apprenticeship standards and submits initial paperwork and progress updates on the apprentice. The RSI is the entity providing the 144 hours of theoretical training for the apprentices.

Traditional RA sponsors and RSI trainers are the **employer**, however, in recent years **non-profits, industry associations**, and **community colleges** have begun to fulfill the role of sponsor and trainer with fee-based or subsidized services through state grants.

These entities are defined as **intermediaries** according to federal guidance. They are the eligible training provider (ETP, as defined by WIOA) and conduct the administration of the RA program. They must identify the RSI training partner if they are not conducting the training themselves. Intermediaries can be community-based organizations, industry organizations, or two- and four- year post-secondary institutes.¹

RA sponsors may be listed on the ETP List (ETPL), though the majority have not been engaged with the workforce system under WIOA and will need to be introduced to the rules and regulations by WDBs. Per federal policy, it is the responsibility of each state to notify existing sponsors of their eligibility to be on the ETPL.

When developing policy and procedures, states and Local Workforce Areas are encouraged by USDOL to minimize the burden to the registered apprenticeship program to be on the ETPL or to leverage WIOA subsidies. Registered apprenticeship programs are not subject to the same application and performance information requirements or to a period of initial or continued eligibility as other providers given their extensive application and vetting process to become an RA program sponsor with USDOL.²

The USDOL identifies four options for operationalizing the registered apprenticeship model in the local workforce area:

RA SPONSOR	RSI PROVIDER/ETP
EMPLOYER	Employer
EMPLOYER	Intermediary
JOINT APPRENTICESHIP TRAINING	Union training center
INTERMEDIARY	Intermediary

Functions of Intermediary

- 1.EMPLOYER IDENTIFIES OCCUPATION IN NEED OF AN APPRENTICESHIP PROGRAM.
- 2.INTERMEDIARY TAKES THIS INFORMATION TO THE STATE USDOL OFFICE OF APPRENTICESHIP FOR APPROVAL
- 3.INTERMEDIARY ASSISTS EMPLOYER IN THE COMPLETION OF PAPERWORK THAT IDENTIFIES THE COMPETENCIES TO BE LEARNED DURING THE OJT AND THE CONTENT TO BE LEARNED DURING THE 144HRS OF THEORETICAL INSTRUCTION (RSI)
4. INTERMEDIARY SUBMITS PAPERWORK TO USDOL OA
- 5.APPRENTICESHIP PROGRAM APPROVED BY USDOL WITH ALLOTTED TIME PERIOD OF 1-5 YEARS
- 6.INTERMEDIARY WORKS WITH MENTOR AT PLACE OF EMPLOYMENT TO TRACK OJT AND COMPETENCIES
- 7.INTERMEDIARY WORKS WITH APPRENTICE AND EMPLOYER TO CONDUCT RSI
- 8.APPRENTICE COMPLETES 1-5 YEAR PROGRAM, INTERMEDIARY SUBMITS COMPLETION PAPERWORK, EMPLOYER HAS SKILLED LABORER THAT ADDS TO BOTTOM LINE AND THE CYCLE BEGINS AGAIN FOR THAT OCCUPATION

¹ TEGL WIOA 13-16, January 12, 2017.

² TEGL WIOA 13-16, January 12, 2017.

Registered Apprenticeship Models



Common Metrics

The registered apprenticeship model expedites outcome achievement for eligible Adult and Dislocated Workers and out-of-school Youth ages 16-24. The following table articulates how the apprenticeship model contributes to successful performance outcomes for the Local Workforce System.

WIOA Metric	RA Contribution
Employment Rate in the 2nd Quarter after Exit	Apprenticeship is an “earn and learn” model offering employment from day one. Registered apprenticeships vary in length but require a minimum of 2000 hours (more than 2 months). Whether or not the WIOA participant was an apprentice (i.e., employed) at the time of participation, Adults and Dislocated Workers will be included in this metric, and because Registered Apprenticeship (RA) is employment, it yields a positive outcome. (For Adults, in order to make the low income priority, enroll potential apprentices before they start their RA program.) Exit can occur prior to the completion of the RA program, once WIOA services are complete, still yielding a positive outcome.
Youth Employment and Education Rate in the 2nd Quarter after Exit	RA is employment and education combined, yielding a positive outcome for this metric. Exit can occur prior to the completion of the RA program, once WIOA services are complete, still yielding a positive outcome.
Employment Rate in the 4th Quarter after Exit	As long as the individual remains in a RA program (or completes their program), they are employed, yielding a positive outcome. Exit can occur prior to the completion of the RA program, once WIOA services are complete, still yielding a positive outcome.
Youth Employment and Education Rate in the 4th Quarter after Exit	As long as the individual remains in a RA program (or completes their program), they are employed, yielding a positive outcome for this metric. Exit can occur prior to the completion of the RA program, once WIOA services are complete, still yielding a positive outcome.
Median Earnings—2nd Quarter after Exit	Registered apprenticeship programs have built-in earnings gains as skill gains are achieved. As long as the individual remains in a RA program (or completes their program), they are employed and earning a wage. Exit can occur prior to the completion of the RA program, once WIOA services are complete.
Credential Attainment	All registered apprenticeships end in a nationally portable, employer recognized credential. A RA Completion Certificate is a recognized post-secondary credential under WIOA. ** Some RA programs also include interim credentials, which are also industry-recognized. As long as the WIOA participant exits within one year of credential attainment, RA will yield a positive outcome for this metric. Also note that if Local Boards are supporting only the OJT component of a RA program, this metric does not apply.
Measurable Skill Gains	The apprenticeship model has an increasing skill gain built into all registered apprenticeships. There are a number of opportunities for a positive outcome on this metric during RA program participation, such as completion of one year of the full RA program, a scheduled wage increase (which indicates an increase in skill levels), or the completion of the related instruction component. This metric supports longer term RA programs in particular, allowing Local Boards to take credit for positive outcomes during RA program participation.

Pre-apprenticeships

Pre-apprenticeship programs provide an effective enhancement to the apprenticeship model by establishing an employer-driven training that integrates entry-level technical skills with soft skill development through career readiness and career exploration. The addition of basic skills (English and mathematics) into the program further promotes success in the workplace and positive performance outcomes. Pre-apprenticeship programs must have at least one RA partner with which completers may continue as a registered apprentice in order to be eligible for WIOA funding. In other words, the pre-apprenticeship must be tailored to address a specific need of an RA competency.

The model has been applied for Adult and Dislocated Workers, and more frequently in successful WIOA Youth programs. Pre-apprenticeships can satisfy the requirements for work experience element for youth programs.³ Successful Youth models have been implemented by non-profit intermediaries who partner with K-12 districts and employers to connect students with technical training, work readiness, career exploration, and employment. Pre-apprenticeship programs have also been successful in addressing hard to serve populations such as re-entry individuals and foster youth.

Best Practices for Braiding Funds & Functions in the Workforce System

Workforce Innovation and Opportunity Act funds for Adult and Dislocated Workers⁴ may be used to subsidize the sponsorship activities or the related supplementary instruction. All providers of training for RSI must be on the ETPL in order to leverage WIOA funds. Pre-vocational services, language skills, and job readiness may be provided under WIOA to prepare participants to enter apprenticeship programs. WIOA funds can be used to fund pre-apprenticeship programs that provide basic skills, work experiences, and other support to help participants obtain the skills needed to be placed into an apprenticeship.⁵ The Employment and Training Administration “strongly encourages the workforce system to use WIOA funding to support registered apprenticeships in (the following) ways...”⁶

1. Individual Training Accounts: Individual Training Accounts (ITAs) can be used to fund the related classroom instruction component of an apprenticeship program, as long as the apprenticeship program or the education/training provider for the apprenticeship program is on the Eligible Training Provider List (ETPL). Under WIOA, all Registered Apprenticeship program sponsors are automatically eligible to be placed on the ETPL. WIOA participants can use ITA funds to pay for the cost of tuition, as well as fees, books, equipment, and other training-related costs (consistent with the policies for ITAs established by the local workforce board). ITA funds can be used in combination with on-the-job training funds to support WIOA participants in apprenticeship.
2. Contract Training: for eligible individuals, contract training monies can fund cohort-based RSI training for new employees who are RAs or incumbent workers. (cohort training works well for standards in the Uniform Guidance)
3. Youth Occupational Skills Training (pre-apprenticeships)
4. Supportive Services (transportation, tools, uniform, books)
5. RA sponsors can be supported using custom training agreements: WIOA funds can be used for customized training with the employer paying for a significant portion of the cost

³ WIOA Section 129(c)(2)(C)(ii)

⁴ WIOA Title 1b

⁵ Making Apprenticeship USA Work for the Public Workforce System: USING WORKFORCE FUNDS TO SUPPORT APPRENTICESHIP

⁶ TEGL WIOA 13-16, 2017.

of the training, as determined by the local workforce board. Customized training can be used to support apprenticeship programs by meeting the special requirements of an employer or a group of employers. Customized training may be used for both job seekers and current (incumbent) employees

6. OJT: subsidized wages up to 75% of total wages for a period of time (typically up to six months), individuals may work at multiple sites, supported by contract not ITAs. Under WIOA, on-the-job training (OJT) contracts may be established with employers to support the OJT component of Registered Apprenticeship programs. While employer OJT reimbursement rates were 50% under the Workforce Investment Act, Governors and local boards may choose to provide reimbursement to employers of costs up to 75% of apprentice wage rates under WIOA. OJT may be used with both job seekers and current (incumbent) workers already employed by the business
7. Incumbent Worker Training: up to 20% of Title 1b funds may be designated for incumbent worker training enabling workers to remain on the job while in training. Under WIOA, local areas may use up to 20% of their adult and dislocated worker funds, and states may use their statewide activities and rapid response funds, for incumbent worker training. Employers pay a portion of the cost. Apprenticeships are a good way to up-skill entry-level employees, retain them, and provide workers with an upward career path. Therefore, incumbent worker training is an effective strategy to support apprenticeship programs. (strongly encouraged in WIOA)

Other funding to support RAs may be accessed through Department of Education resources. Apprentices may be eligible for Federal Financial Aid under certain circumstances. If the apprenticeship is connected to a post-secondary institution, apprentices may be eligible for Pell Grants - \$3,000 on average per apprentice to support tuition, books and lab fees. Also, the post-secondary institution may choose to provide federal work-study grants, which average \$2,000 per apprentice which may be applied to wages at an RA employer sponsor.⁷

Case Studies

This report contains seven case studies on workforce systems throughout the nation that have integrated the registered apprenticeship model and/or non-profit collaborations that substantially enhance the local workforce system. These case studies reflect the diversity of models available for apprenticeship initiatives depending on contextual needs and resources.

Program	Workforce Services	RA Sponsor/ RSI	Funding & Partners
Detroit Employment Solutions Corporation (DESC, non-profit) One-stop	<u>Occupations:</u> <ol style="list-style-type: none"> 1. Pharmaceutical technician 2. IT Network techs 3. Instrumentation technicians for hydrology 	<u>RA Sponsor:</u> Employer (CVS) Grant Circus (private) PCI (private) <u>RSI:</u> Employer (CVS) Grant Circus (private) PCI (private)	DESC connects individuals with ETPL approved private training companies CVS, Grant Circus, and PCI. CVS hires direct, Grant Circus and PCI provide sponsorship and RSI. DESC places individuals into employment. DESC account executives and WDB staff are conveners who work with employers to explain the apprenticeship model and produce buy-in. They further connect employers with RA sponsors and

⁷ Making ApprenticeshipUSA Work for the Public Workforce System: USING WORKFORCE FUNDS TO SUPPORT APPRENTICESHIP.

Program	Workforce Services	RA Sponsor/ RSI	Funding & Partners
			<p>RSI resources subsidized through WIOA.</p> <p>Strong connectivity to Detroit Mayor's Workforce Council as the primary advocacy and industry input group.</p> <p>Start-up funding through two USDOL grants in 2015-2016 along with state funding for apprenticeship coordination. State general funds include a program that provides \$1500 for training per incumbent worker, and \$3000 for any new apprenticeship training.</p> <p>The One-stop uses ITAs for continued funding.</p> <p>J.P. Morgan Chase funded an analysis for a workforce plan to focus on middle-skilled jobs. They have further provided a portion of the funding for the Detroit Youth Program that also includes \$2 mill from WIOA and state resources. This program funds 8,000 youth.</p>
Colorado State	<p><u>Sectors:</u> IT Healthcare Financial Services</p> <p><u>Youth Services:</u></p> <ol style="list-style-type: none"> 1. Production tech 2. Maintenance tech 3. Quality control inspector 4. Logistics 5. CNA to LPN 6. MA 7. Computer tech 8. Junior Coder 9. Software QA tester 10. Accounting clerk 11. Insurance service expert 12. Financial coordinator 13. Customer Service 14. Purchasing coordinator 15. Operations specialist 16. Project coordinator 	<p><u>RA Sponsor:</u> Employer Colorado Career Wise (non-profit) Unions Community Colleges</p> <p><u>RSI:</u> Employer Private training co. Non-profits Community colleges</p>	<p>Start-up funding for adult model through USDOL grant, Veteran's funds, corporate gifts and Chamber sponsorships.</p> <p>The state Department of education received a \$12 mill grant to start a Healthcare apprenticeship pathway. State k-12 and community college systems apply for federal grants and then bring on school districts and colleges.</p> <p>Some community colleges will register students at the One-stop to apply ITA funds.</p> <p>Youth model through Colorado Career Wise is employer funded. \$2000 per apprentice and at total of \$12,000 for services over the three-year high school apprenticeship model.</p> <p>Community colleges accept Prior Learning Assessment (PLA) to give apprentices college credit and continue their education.</p>

Program	Workforce Services	RA Sponsor/ RSI	Funding & Partners
Goodwill Industries of Southern California (Strong Workforce Apprenticeship Group) One-stop	<u>Occupations:</u> <ol style="list-style-type: none"> 1. Tool Programmer, Numerical 2. Numerical Control Machine Operator (CNC) 3. Metal Fabricator 4. Machinist 5. Machine Operator I 6. Industrial Manufacturing Technician 7. Assembler, Metal Building 8. Cyber Security Support Technician 9. Material Coordinator 10. Quality Control Inspector 11. Cyber Security tech (+pre-apprenticeship) 12. CNA 13. Material Coordinator 	<u>RA Sponsor:</u> Employer College of the Canyons <u>RSI:</u> Employer Goodwill Industries Tooling U on-line training (in partnership with College of the Canyons) Pre-apprenticeship runs through Tooling U and College of the Canyons. RA for CNC machining is sponsored through College of the Canyons for both administration and training.	<p>Start-up funding for SWAG occurred through a federal USDOL grant for apprenticeships. The initiative began in 2016 with a concerted effort from the One-stop and partner college. Start-up funding for training at College of the Canyons procured through CCCC CO CAI grants. Once a college receives a grant for an occupation, they cannot receive another grant for that occupation, thus they require a sustainable model for funding by braiding WIOA funds.</p> <p>The One-stop recruits and refers individuals to the college's program for sustained enrollment. The One-stop and the college conduct industry events for outreach. They are now operating from referrals since the word has spread through industry and there is high demand for the programs.</p> <p>The One-stop uses ITAs and cohort training by identifying new workers in need of the same training.</p> <p>The One-stop account executives identify incumbent workers for cohort training in these occupations.</p> <p>Sustained funding through I-TRAIN and ETP funding.</p>
Vermont HITEC (non-profit)	<p>HITEC is a non-profit, intermediary organization that takes full accountability for the success of its Registered Apprenticeship services for both job seekers and employers. HITEC provides outreach, recruitment and educational training for the Vermont and New Hampshire employers engaged in the apprenticeship model.</p> <p><u>Occupations:</u> 18 current occupations</p>	<u>RA Sponsor:</u> Employer HITEC <u>RSI Provider:</u> HITEC at employer Site	<p>Funding Sources:</p> <ul style="list-style-type: none"> -Workforce Innovation and Opportunity Act programs; ITA, cohort training, incumbent worker. -National Emergency Grant from the U.S. Department of Labor -Trade Adjustment Assistance program (funded by the U.S. Department of Labor) -Vermont tax incentive program (VEGI) -New Hampshire Health and Human Services funds

Program	Workforce Services	RA Sponsor/ RSI	Funding & Partners
	<p>1. Healthcare – positions including phlebotomists, pharmacy technicians, medical assistants, registration representatives, licensed nursing assistants, electronic health record data extractors/go-live support positions and medical coders.</p> <p>2. Information Technology – positions including IT account managers, software developers, interface analysts, software installation consultants, software support specialists, web developers and IT support analysts.</p> <p>3. Advanced Manufacturing – positions including CNC operators, machinists, structural steel welders and fitters.</p> <p>4. Business Services – positions including technical document writers and technical illustrators (coming soon).</p>		
Sonoma CTE Foundation (non-profit)	<p>Funding source for k-12 and community college technical programs. They determined that funding priority would go to establishing CTE programs that align with Sonoma County's 5 key economic development industries as identified by the Economic Development Board: Advanced Manufacturing (including STEM); Construction/Green Services; Health Care; Agriculture; and Sonoma Wine/Hospitality/Tourism. They offer various types of Competitive Grants: New/enhanced CTE section \$21,500 Planning \$10,000 Supplies/WBL/Technology \$5,000 They also offer special initiatives grants.</p>	<p>The Foundation provides sustainable funding for construction and electric vehicle training at SCOE (k-12). They provide career exploration for healthcare and food and beverage manufacturing for both SVOE and SRJC students (community college).</p> <p>They help subsidize and environmental resource management 3-credit hour class for high school students through the community college.</p>	<p>Start-up funding to launch the Foundation in 2013 was procured through a three-year commitment from public, private and philanthropic partners, including banks, utilities, individuals, and a Founder's Circle.</p> <p>They have over 138 funders and 50 Workforce Program Sponsors. Workforce Program Sponsors participate in work-based learning opportunities.</p> <p>They host the Community Women Investing in STEM Equity Initiative.</p>

Program	Workforce Services	RA Sponsor/ RSI	Funding & Partners
	Industry intermediary for county-wide work-based learning initiative for k-12.		
South Bay WIB (Aero-Flex Apprenticeship program)	<p><u>Occupations:</u> Quality Control Inspector Production Tech Machine mechanic</p> <p><u>Pre-apprenticeship:</u> Manufacturing Technologies Training and work-based learning offered through Tooling U, West LA College, Pierce College.</p>	<p><u>RA Sponsor:</u> community college private school</p> <p><u>RSI:</u> El Camino CC Tooling U-SME Training Funding Partners</p>	<p>Start-up funding for The Aero-Flex program was through LA County Supervisor discretionary funds, a federal USDOL grant, and CCCCCO CAI funding with West LA CC.</p> <p>Continued funding through public and private grants. The SBWIB will write the grants, including the development of the learning objectives and competencies required for the RA program. The SBWIB then gives those partner community colleges the grant for the Local Educational Agency to submit and implement according to standards written into the grant.</p> <p>The WDB has an operations consultant specializing in manufacturing on staff to market the benefits of RA programs to employers. This person conducts much of the recruitment for the RA program and typically conducts an operational analysis for the company to display the benefits of an improved training program using the RA model.</p> <p>The WDB has a non-profit arm that works symbiotically with the WDB to acquire funding and design RA programing. The One-stop uses ITAs and cohort training models for RA programs.</p>
San Joaquin Valley Manufacturing Alliance (non-profit)	<p>Industry intermediary for manufacturing.</p> <p>Operates internships for K-12, community colleges, University, Re-entry and Adult and Dislocated workers through WDB and criminal justice system.</p>	<p>Industry single-point of contact for educators including k-12, community colleges, private training centers, and Fresno State.</p> <p>Initiating discussion on capacity required to implement the apprenticeship model in Fresno. They have partnered with WDB on</p>	<p>Funded in part through Fresno Business Council and their primary fundraiser, "Valley Made Summit" ..</p> <p>Activities include designing training programs as the intermediary for industry and education, facilitation of internships, public outreach and policy advocacy. The Alliance produces the Valley Made Summit in collaboration with Fresno State annually. They host quarterly roundtables for HR staff and Operations staff in</p>

Program	Workforce Services	RA Sponsor/ RSI	Funding & Partners
		the Reskilling and Upskilling Initiative included in the Fresno DRIVES economic strategy. They will seek funding in partnership with the WDB to support this initiative which may include registered apprenticeships.	manufacturing.**
<p>Iowa State</p> <p>In 2014, the Iowa Legislature enacted the Iowa Apprenticeship Act to increase the number of apprentices in Iowa through training grants for eligible apprenticeship program sponsors.</p>	<p>Iowa Workforce Development (IWD) and the Iowa Economic Development Authority (IEDA) work hand-in-hand on behalf of the business community. Together, they have identified and supported the state's key industry sectors, which include Advanced Manufacturing, Financial Services and Insurance, and Biosciences.</p> <p><u>Sectors:</u> Advanced Manufacturing, Aerospace, Biotechnology, Construction, Financial Services and Insurance, Healthcare, Information Technology, Transportation and other fields. A new area for apprenticeship of particular importance to Iowa is the biofuel industry. MidAmerican Energy, which has a Registered Apprenticeship program, is a national leader in wind energy.</p>	<p><u>RA Sponsor:</u> Employer</p> <p><u>RSI Provider:</u> Community Colleges Trade Unions</p> <p><u>Pre-apprenticeship:</u> The Eastern Iowa Community College culinary program is a national model for youth apprenticeship, and Iowa has been a leader in developing pre-apprenticeship activities.</p>	<p>Funding Sources:</p> <ul style="list-style-type: none"> -Workforce Innovation and Opportunity Act programs; ITAs, incumbent worker training, custom training by contract, Youth Funds. -State funds from the Iowa Apprenticeship Act -National Emergency Grants from the U.S. Department of Labor -Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant from the U.S. Department of Labor <p>The Iowa Office of Apprenticeship, IEDA and IWD work as a team to make employers aware of the benefits that the apprenticeship model provides, and use their successful apprenticeship programs as a selling point when recruiting new businesses to Iowa.</p>

Summary

RA program start-up is frequently subsidized with city or county funds, WIOA, and state funds. Innovative models have also sought private sector and philanthropic sponsorships that help sustain the model over a period of time, and involve integration of Department of Education Pell grants and Federal Work Study funding to subsidize training and wages. A common model for fiscal sustainability of Intermediary RA sponsors is fee-based, charging \$1,000-\$2500 per apprentice, braided with WIOA Adult and Dislocated Worker, Incumbent Worker, and Contract Training funding.

Federal Department of Labor, Housing and Urban Development, Transportation, and Agriculture agencies have released funding opportunities under the USA Apprenticeship Initiative.

Local Leadership

Successful RA models demonstrate trends in local leadership, specifically for the braiding of funds and functions and sustained joint industry and workforce partner collaboration.

Successful WDBs in this arena are performing the marketing and engagement with industry to introduce the RA model and connecting employers and individuals to WIOA eligible resources. They are conducting informational campaigns for employers on the benefits of RA models for workers and employers using federal marketing resources. WDB staff and One-stop account executives are engaging RSI providers and RA sponsors to assist them in applying for the ETPL and leveraging partners and funding resources for registered apprenticeship activities. They are also working with multiple employers to scale cohort training opportunities for registered apprenticeships. Successful models involve a close collaboration between the One-stop staff and the RSI provider, whereby staff often recruit for the training programs to ensure minimum enrollment.

The greatest outcomes from RA models nation-wide display a robust collaborative environment among local government, WDB staff, One-stop account executives, non-profit intermediaries, industry associations and education (k-12, adult schools, community colleges and other post-secondary). These environments are fostered by leadership at local levels through an agreed-upon shared mission, identified priority occupations and sectors, and common performance metrics.

These models are community models, building on and expanding traditional workforce system models. They are holistic in their engagement; partners understand and commit to their roles and responsibilities to reach a common outcome that supports both the alleviation of poverty and economic prosperity in their respective communities. The Ventura County and other Local Workforce Systems contain all of the elements required to achieve these dual objectives. Through focused efforts and strategic investment of resources, existing success may be leveraged to best serve our community in the coming era.

Appendix A:

USDOL Recommended Action Steps for Communities/Ventura County Regional Self-Assessment

- Step 1: Identify Regional Labor Demand
- Step 2: Build Apprenticeship Partnerships
- Step 3: Design a High Quality Apprenticeship Program
- Step 4: Register the Program with the USDOL and CA DOA
- Step 5: Identify Partner Roles and Responsibilities
- Step 6: Evaluate Performance Outcomes – Contextualized and WIOA

STEP 1 Current State

According to recent environmental scans included in the Ventura County Economic Vitality Strategic Plan and the Ventura County Comprehensive Economic Development Strategy, top occupations that contribute to the economic output of Ventura County and have a high demand include advanced manufacturing, wholesale and warehousing, technical and information services, and agriculture. The demand for construction occupations has also increased in recent years with projected growth. These occupations have the potential to produce a substantial local economic impact when combined with public projects that have a corresponding Project Labor Agreement.

Particular jobs in advanced manufacturing, construction, and agriculture are prime for the registered apprenticeship (RA) model given the existing partnerships and employer-driven training available in Ventura County. IT Networking occupations also carry potential for the RA model with some employers showing interest, though progress on these types of RAs is not as advanced as the three aforementioned sectors. Table 1 displays projected high-demand occupations in these three sectors. Those primed for a registered apprenticeship model are highlighted in light blue (four occupations); those primed for a pre-apprenticeship to apprenticeship model are highlighted in dark blue (five occupations).

Table 1

SOC	Description	2019 Jobs	2024 Jobs	2019 - 2024 % Change	2019 - 2024 % Change	2024 Location Quotient	Annual Openings	Median Hourly Earnings	Typical Entry Level Education
19-4011	Agricultural and Food Science Technicians	71	75	4	6%	1.18	8	\$18.60	Associate's degree
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	754	784	30	4%	5.99	107	\$22.66	High school diploma or equivalent
45-2091	Agricultural Equipment Operators	918	967	49	5%	5.84	152	\$14.23	No formal educational credential
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	11,088	11,115	27	0%	7.03	1,683	\$11.93	No formal educational credential
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	102	103	1	1%	0.66	9	\$31.01	Postsecondary nondegree award
49-9041	Industrial Machinery Mechanics	463	479	16	3%	0.51	44	\$28.13	High school diploma or equivalent
49-9043	Maintenance Workers, Machinery	222	226	4	2%	1.12	23	\$27.79	High school diploma or equivalent
49-9099	Installation, Maintenance, and Repair Workers, All Other	573	593	20	3%	1.17	59	\$24.17	High school diploma or equivalent
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	370	386	16	4%	1.05	40	\$23.81	High school diploma or equivalent
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	97	109	12	12%	1.64	12	\$33.87	Postsecondary nondegree award
51-1011	First-Line Supervisors of Production and Operating Workers	1,249	1,274	25	2%	0.83	126	\$32.45	High school diploma or equivalent
51-2098	Assemblers and Fabricators, All Other, Including Team Assemblers	2,419	2,347	(72)	(3%)	0.77	276	\$14.33	High school diploma or equivalent
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,610	1,494	(116)	(7%)	1.15	185	\$19.51	High school diploma or equivalent
51-9199	Production Workers, All Other	529	569	40	8%	0.91	70	\$13.68	High school diploma or equivalent
47-2073	Operating Engineers and Other Construction Equipment Operators	765	807	42	5%	0.80	94	\$32.24	High school diploma or equivalent
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	1,281	1,360	79	6%	0.78	147	\$32.75	High school diploma or equivalent
47-2031	Carpenters	3,698	3,880	182	5%	1.48	384	\$25.74	High school diploma or equivalent
47-2061	Construction Laborers	2,861	3,070	209	7%	0.87	341	\$17.72	No formal educational credential
47-2073	Operating Engineers and Other Construction Equipment Operators	765	807	42	5%	0.80	94	\$32.24	High school diploma or equivalent

STEP 2 Current State

There are five foundational partners in a Registered Apprenticeship Model: *Industry, Public Workforce System, Education, Apprenticeship System, and Workforce Intermediaries.*

In order to verify demand and supplementary resources required by partners to build an effective model, two surveys are recommended: (1) An industry survey which identifies skills and occupations; (2) A partner survey to identify need for resources, data and LMI, information on best practices/career pathways/funding notices, involvement in workforce system redesign, and professional development in career coaching.

Two Naval Research Centers at Naval Base Ventura County have expressed interest in RA programs for electrical/electronic technicians and cyber security technicians. These programs are not currently supported by the educational system and are not included in this analysis, though these occupational skills are in demand throughout the region and may become prioritized in the future. Additional industry demand analysis will be necessary to validate the need.

Current partners in the County Workforce System, including public, private, and non-profit partners, have committed to the Ventura County Apprenticeship Consortium. The Consortium was established in the Fall of 2018 with a mission to scale the Apprenticeship model in Ventura County and enhance the quality and capacity of the local labor force. The Consortium has provided the anchor for the Apprenticeship Initiative in Ventura County through its operating structure defined as “lead by industry and facilitated by the workforce system and college district.” This has allowed for increased industry engagement and advocacy for the initiative. Current progress and status are summarized in the following:

(1) Ventura County Industry Partners that have provided Letters of Commitment to the Registered Apprenticeship Model or Pre-apprenticeship include:

TMJ Concepts (mfg)	Reiter and Affiliates (agriculture)
Haas Automation	Good Farms – Anderson Williams
LTA Machining	Grupo Bimbo – Wholesome Harvest
Skyworks Solutions (mfg)	

Both the General Laborers and Carpenters Unions are also supportive of a formal pre-apprenticeship program for construction trades.

- Industry Role (RA and Pre-App, individual company or consortium of businesses)
 - Identify the skills and knowledge that apprentices must learn.
 - Hire new workers, or select current employees, to be apprentices
 - ✓ Serve as the RA sponsor if needed
 - ✓ Provide on-the-job training
 - ✓ Identify an experienced mentor to work with apprentices
 - ✓ Pay progressively higher wages as skills increase
 - ✓ Provide instruction in-house or in partnership with educators (private or public)

(2) The Ventura County Workforce Development Board and AJCC have expressed interest in scaling the Registered Apprenticeship Model in Ventura County.

- Public Workforce System Role (workforce boards, one-stop centers, all signatories on the AJCC Partnership Consortium including Area Agency on Aging, Adult Education, Community Colleges, etc.)
 - Develop industry sector strategies and career pathway initiatives utilizing apprenticeship
 - Connect businesses to training providers
 - Recruit and screen candidates to be apprentices and pre-apprentices
 - Provide pre-apprenticeship and basic skills preparation
 - Provide supportive services (e.g. tools, uniforms, equipment, books, transportation)
 - Contribute funding for on-the-job training and related instruction (RSI)

(3) The Ventura County Adult Education Consortium and Ventura County Community College District have existing programming that correlates to two identified RA occupational needs and one pre-apprenticeship. For training not currently offered by the educational system, employers have developed internal training in consultation with subject matter experts in development for two identified RA occupational needs. No pre-apprenticeship is currently offered in four construction/trade occupations, though Ojai Adult School is currently working to become an MC3 program.

- Education and Training Role (4-year colleges, Adult Schools, community colleges, private career and technical trainers/schools)
 - Provide RSI - academic and skills instruction driven by industry standards (e.g. instructors, curriculum, instructional equipment, adequate scheduling for industry)
 - Grant progressive credentials based on competency testing
 - Facilitate access to financial aid and other support resources (e.g. student loans, tutoring, counseling, federal work study)
 - Utilize marketing and outreach channels to identify apprentice candidates

(4) Apprenticeship System Requires Engagement

- Apprenticeship System (state apprenticeship offices)
 - Provide technical assistance and support to program sponsors
 - Answer questions about the apprenticeship model
 - Guide partners on each phase of developing and registering a program
 - Advise partners on available funding sources to support apprenticeships

(5) Workforce Intermediary Requires Engagement

- Workforce Intermediary (industry associations, labor organizations, joint labor-management organizations, community-based organizations)
 - Provide industry and/or occupation-specific expertise to support employers in a particular industry sector (e.g. to inform curriculum development)
 - Provide Sponsorship for RA and/or RSI
 - Coordinate partner responsibilities and with the Public Workforce System
 - Provide program administration to aggregate and scale demand for apprentices, particularly for small- and medium-size employers that may not have the capacity to operate programs on their own
 - Provide assistance with instruction for hard and soft skills and supportive services

STEPS 3-5 Require Action for Implementation

Step 3: Design a High Quality Apprenticeship Program

Step 4: Register the Program with the USDOL and CA DOA

Step 5: Identify Partner Roles and Responsibilities

STEP 6

Program evaluation may involve both WIOA performance metrics as mentioned in the working paper, as well as contextualized indicators to display impact within local businesses and the regional economy.

Table 2 displays a sample arrangement of contextualized indicators. These may require a contracted expert for the initiative to provide counseling and analysis of business performance. Additional lagging indicators may be developed to denote the impact of the initiative on the regional economy.

Table 2

APPRENTICESHIP OUTCOMES PERFORMANCE MATRIX		
<i>INDICATOR</i>	<i>OUTCOMES</i>	<i>TIMEFRAME</i>
EMPLOYERS		
NUMBER OF APPRENTICES RETAINED		
DECREASE IN RECRUITMENT COSTS		
INCREASE IN PRODUCTIVITY		
INCREASE IN WORKFORCE DIVERSITY		
INCREASE IN WORKPLACE SAFETY		
APPRENTICES/WORKERS		
WAGE INCREASES		
NUMBER OF CREDENTIALS EARNED		
PARTNER ORGANIZATIONS		
NUMBER OF PROGRAMS DEVELOPED		
NUMBER OF INDIVIDUALS TRAINED		
INCREASE IN UNDER-REPRESENTED POPULATIONS ENGAGED (E.G. WOMEN IN NON-TRADITIONAL OCCUPATIONS, VETERANS, INDIVIDUALS WITH DISABILITIES, ETC.)		
NUMBER OF APPRENTICES RETAINED ¹		

¹ USDOL, Employment and Training Administration, Apprenticeship USA, “Advancing Apprenticeship as a Workforce Strategy, and assessment and planning tool for the public workforce system.”

Appendix B: Performance Measures, Benefits for Workers & Business

Common WIOA and Apprenticeship Performance Measures:

- Employment at 2nd and 4th quarter: Apprenticeship is an “earn and learn” model offering employment from day one. Registered apprenticeships vary in length but require a minimum of 2000 hours (more than 2 months).
- Youth employment and education rate after 4th Q exit
- Median earnings: Registered apprenticeship programs have built-in earnings gains as skill gains are achieved.
- Measurable Skills Gain: The apprenticeship model has an increasing skill gain built into all registered apprenticeships.
- Credential attainment: All registered apprenticeships end in a nationally portable, employer recognized credential.
- Employer Engagement: Apprenticeship is a direct response to the needs of businesses to provide a qualified workforce that meets skill needs in high demand industries.

For apprentices, benefits include the following:

- Immediate paid employment;
- Improved skills and competencies;
- Incremental wage increases as their skills improve;
- On-the-job training and occupation-focused education;
- Career advancement;
- Industry issued, nationally recognized credentials; and
- Articulation agreements between certain apprenticeship training programs and two- and four-year colleges that create opportunities for college credit and future degrees.

For employers, benefits include the following:

- Customized training that results in highly skilled employees trained to industry/employer specifications;
- Increased productivity and knowledge transfer due to on-the-job learning from an assigned mentor combined with related technical instruction;
- Enhanced retention -- 87 percent of program completers in 2011 were still employed nine months after completing their apprenticeship;
- Emphasis on safety training that may reduce workers' compensation costs;
- A stable and predictable pipeline for the development of qualified workers;
- Recognition of the training program;
- A systematic approach to training that ensures that employees are trained and certified to produce at the highest skill levels required for that occupation;
- The ability to conduct a ready assessment of where the employer and employee are in terms of the continuous improvement process; and
- A proven training model that allows employers to set the benchmark and the structure that can determine the Return on Investment in training dollars.

References:

Workforce Innovation Technical Assistance Center, consortium led by San Diego State University:

<http://www.wintac.org/topic-areas/apprenticeships-and-customized-training>

Webinar (sponsored by US DOL/ETA):

<https://apprenticeshipusa.workforcegps.org/resources/2017/08/07/15/05/Apprenticeship-and-WIOA-Performance-Outcomes>

Federal Grants (US DOL/ETA partners): <https://www.workforcegps.org/ForGrantees>

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