Unlocking Apprenticeship:
A Strategic Plan for Expanding New and Innovative Apprenticeship Models in Rhode Island

Governor’s Workforce Board • Department of Labor and Training • State Apprenticeship Council

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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Governor Gina M. Raimondo
Introduction

Apprenticeship is a proven workforce training strategy to develop new talent in highly-skilled occupations and combines paid on-the-job learning with related technical instruction in the classroom. Registered Apprenticeships are high quality work-based learning and post-secondary education models that meet national standards for registration. Since 1937, Registered Apprenticeship (RA) programs have met the skilled workforce needs of American industry by training millions of workers for lifelong careers. Once primarily a “best kept secret” of the construction industry, the model is now being utilized around the nation for all growing occupations, such as careers in Information Technology and Healthcare.

For employers, apprenticeship is an effective and cost-efficient strategy to build their current and future workforce. In addition to lower recruitment and relocation costs, apprenticeship can enable employers to develop strong and permanent talent pipelines. In a recent study by the US Department of Commerce, companies were unanimous in their support of apprenticeship. They found much value in the program and identified benefits that more than justified the costs and commitments they made to the apprentices. Within the apprenticeship framework, companies found great flexibility to adapt the model to their needs. In fact, Siemens USA found at least a 50% rate of return on their investment. ¹

For workers, apprenticeship means a real job that leads to a portable credential that is valued in the labor market, along with the ability to ‘earn while you learn’ - which is particularly beneficial to low-income individuals who can support themselves and their families as they learn the skills their employer needs.

Apprentices enter into a structured training program of classroom and paid on-the-job training under the guidance of a mentor. As their skills increase, so do their wages. The payoff for workers is clear: 91 percent of apprentices find employment after completing their program, and their average starting wage is above $60,000²

¹ http://www.esa.doc.gov/reports/benefits-and-costs-apprenticeships-business-perspective
² http://www.esa.doc.gov/reports/benefits-and-costs-apprenticeships-business-perspective
Apprenticeship is also a great investment for the public sector. As referenced in Senate Resolution 2017 S 0826 - in 2012, Mathematica Policy Research demonstrated that every public dollar invested in Registered Apprenticeship provided $27 in tax returns and more than $35 in total benefits. The estimated benefit to society of one apprentice completing a program ranges from $49,000 to $124,000. The public also benefits by leveraging significant private sector investments in training, which are estimated at over $1 billion per year.\(^3\)

Yet despite its proven effectiveness registered apprenticeship remains notably underused in the United States, outside of construction-based occupations. The United States has fewer new apprentices per capita than most developed nations, and the number of Rhode Island’s apprentices per capita are some of the lowest in the United States.

At a time when millions of jobs nationally and potentially thousands of jobs regionally remain unfilled due to a reported ‘skills gap’, and at a time when college debt is a growing national concern-expanding apprenticeship is sound public policy that takes advantage of a proven training model and updates it for the 21\(^{st}\) century economy.

For this reason, both the current and previous Presidential Administrations have prioritized the expansion of apprenticeship.\(^4\) Expanding apprenticeships enjoys bipartisan support in Congress and the US Department of Labor has made a number of grants and development assistance programs available in recent years to encourage states to grow this model.


Rhode Island has also taken a number of strategic steps in recent years to promote the expansion of apprenticeship. These efforts will be described in greater detail in this report and include:

- The **Non-Trade Apprenticeship Development Program**
- The **Non-Trade Apprenticeship Incentive**
- The **Machine/Tool Apprenticeship Tax Credit**
- **Apprenticeship RI** - an initiative to plan for and expand new and innovative registered apprenticeship models across all sectors by providing direct assistance to employers in establishing a RA program. In partnership with Building Futures, RIDLT leverages US DOL American Apprenticeship Initiative (AAI) grant funds to achieve these purposes. Apprenticeship RI staff are available to all RI employers and can help with designing and registering a new Apprenticeship program, maximizing state and federal benefits, connecting with other employers and education partners, and leveraging national Apprenticeship initiatives; all at no cost to the employer.

Rhode Island’s efforts to date reflect some of the best and leading practices nationally to encourage and expand apprenticeships into nontraditional occupations and industries; however, there is much more work to be done. This report will describe the steps and accomplishments that have been met to date and provide a series of recommendations for the comprehensive expansion of new skills and competency based apprenticeships and the enhanced development of new registered apprenticeship models.

“Apprenticeship programs offer demand-based skills and good, stable jobs with reduced or no student debt... and are the best way of reducing the skills gap.”

– Current U.S. Secretary of Labor Alexander Acosta

“Apprenticeships are a time-tested, earn-while-you-learn model that helps create opportunities for American workers to succeed while providing employers with the reliable pipeline of skilled talent.”

– Former U.S. Secretary of Labor Tom Perez
WHAT IS APPRENTICESHIP?

Defining a ‘Registered Apprenticeship’

Registered Apprenticeships are high-quality work-based learning and post-secondary earn-and- learn models that meet national standards for registration with the U.S. Department of Labor, RIDLT is the federally recognized State Apprenticeship Agency. Sometimes, ‘apprenticeship’ is used as a generic term to describe any work-based experiential learning where one person learns from another person with more experience. However, a “Registered Apprenticeship” is part of the National Apprenticeship System and has five core components:⁵

**Business Involvement**
Employers are the foundation of every apprenticeship program and play an active role in designing and delivering the program. Employers frequently work together through joint apprenticeship training councils, industry associations, or other partnerships to share the administrative tasks involved in operating and maintaining a high-quality registered apprenticeship program.

**Structured On-the-Job Training**
Apprenticeships always include an on-the-job learning (OJL) component. Apprentices receive hands-on training from an experienced mentor at the job site. The structure of OJL focuses on the skills and knowledge an apprentice must learn during the program to be fully proficient on the job. This training is based on national industry standards – and further customized to the needs of the particular employer.

**Related Instruction**
Apprenticeships combine on-the-job learning with related instruction on the technical and academic competencies that apply to the job. Education partners collaborate with business to develop the curriculum, which often incorporates established national-level skill standards. The related instruction may be provided by community colleges, technical schools, or apprenticeship training schools – or by the business itself. It can be delivered at a school, online, or at the job site.

**Nationally-recognized Credential**
A Certificate of Apprenticeship Completion is a nationally recognized credential. Increasingly apprenticeships also include industry certifications and college credit toward a degree.

**Rewards for Skill Gains**
Apprentices receive wages when they begin work, and pay increases as they meet benchmarks for skill attainment.

The benchmarks for skill attainment can be customized to the employer needs. Wage steps can be based on competency attainment, hours/experience on the job, or a combination of both. Competency-based models of apprenticeship are an option, where candidates progress at their own pace and validate competency and skills gains through demonstration and assessments. The “hybrid” program model, combining time and competency models, have increased in popularity.

⁵ [https://www.dol.gov/apprenticeship/toolkit/toolkitfaq.htm](https://www.dol.gov/apprenticeship/toolkit/toolkitfaq.htm)
The Benefits of ‘Registered Apprenticeship’

To Employers

The primary benefit of Apprenticeship to the employer community is that it is one of the most effective models available to help develop a highly-skilled workforce. Apprenticeship has been proven to reduce turnover rates, increase productivity, and lower recruitment costs. It combines a proven ‘off the shelf’ training model that is still customizable to the needs of the individual business as well as industry standards.

On average, 91% of apprentices that complete their apprenticeship remain employed with their sponsor nine months later. Furthermore, employers are able to develop a tiered pay structure that only grows as the individual’s value to the company grows. Lastly, sponsoring employers may be eligible for both federal and state-based tax credits and other incentives outlined herein that can help reduce the cost of their investment. From business perspective, a demonstrated 50% return on investment provides a strong case for registered apprenticeship.6

To Workers

From day one of their apprenticeship, a worker is receiving a paycheck that is guaranteed to increase as their training progresses. They also receive both hands-on and classroom based training (which may be assigned college credit). At the conclusion of their apprenticeship, the worker has earned a nationally portable credential that is recognized by industries throughout the country and they have firmly entered into a career ladder at a competitive salary - all while taking on little if any educational debt.

To Taxpayers

Apprenticeship is one of the most cost-effective workforce training models available. According to frequently-cited analysis conducted for Washington State’s Workforce Board, the state nets almost three times what is spends on apprenticeships within two and a half years of the program’s completion.7 Benefits to taxpayers total about five times the costs. By the time the apprentice completes his or her career, projections indicate that the public has received $23 for every $1 spent on apprenticeship. This same study found that CTE programs received the second highest yield for the public, at $9 return for every $1 spent. Importantly, CTE programs can be effectively aligned with registered apprenticeship programs to amplify the impacts of each.

6 http://www.esa.doc.gov/reports/benefits-and-costs-apprenticeships-business-perspective
WHAT HAS RHODE ISLAND DONE TO EXPAND APPRENTICESHIP?

Non-Trade Apprenticeship Development Program: The Governor’s Workforce Board provides developmental funds to organizations throughout the state to create new and innovative apprenticeship models outside of the traditional trades. This grant program provides up to $25,000 to cover costs such as curriculum development, supplies, consultants, meetings, and other expenses associated with developing apprenticeships in high-growth, high-demand fields. Considered to be outside of the skilled construction trades, non-trade apprenticeships are increasingly being recognized as an effective pathway toward family-sustaining middle skilled careers.

Originally, only Board-approved ‘Industry Sector Partners’ could apply for these funds. In FY 2017 that was changed to allow any entity (employer, academic institution, nonprofit, etc.) to apply:

Fiscal Year 2014 – Funded at $150,000
- Three Industry Partners applied
- Two Proposals were funded
- One Apprenticeship Model was approved

Fiscal Year 2017- Funded at $100,000
- Five Organizations applied
- Four Proposals were funded
- Four Apprenticeship Models were approved

To date, six nontrade apprenticeship models have been successfully developed through the program, with the majority coming in the most recent fiscal year:

- CNC Machinist
- Licensed Practical Nurse
- Community Health Worker
- Construction Manager
- Professional Land Care Specialist
- Composite Tool and Pattern Maker
**Apprenticeship Rhode Island:** Apprenticeship Rhode Island is an effort funded through an American Apprenticeship Initiative grant of the U.S. Department of Labor. The initiative was designed in partnership with GWB and RIDLT in its role as State Apprenticeship Agency. Apprenticeship Rhode Island provides a ‘free consultancy’ service and technical assistance that works to maximize the use of Registered Apprenticeship by offering the following services at no cost to employers:

- Assisting with Apprenticeship program design
- Registering Apprenticeship Standards with the State Apprenticeship Council
- Maximizing state and federal financial benefits
- Connecting with other employer and higher education partners
- Leveraging national Apprenticeship initiatives

Apprenticeship Rhode Island assisted the FY 2017 Non-Trade Apprenticeship Development grantees in RA program design and strongly contributed to why all four grant recipients successful in their efforts.

Beyond technical assistance, **Apprenticeship Rhode Island** has an ambitious goal to place 1,200 RI residents into RA programs by 2020. Four industries were initially identified as poised to capitalize on the value registered apprenticeship can provide. Sectors included 1) healthcare, 2) information technology; 3) advanced manufacturing; and 4) marine trades.

New employers from additional sectors have been attracted to the early successes of the initiative, and some have begun RA program development through the Non-Trade Development Grant Program. In total, over 20 new non-trade apprenticeship programs have been developed since launch and 150 apprentices have been placed – almost 50% are from target populations. [For more information visit: apprenticeshipri.org]

**Non-Trade Apprenticeship Incentive:** Rhode Island’s nontrade apprenticeship incentive offers $1,000 per registered non-trade apprentice, payable after the apprentice has completed the probationary period. Small incentives are being utilized in other leading states to jumpstart new apprenticeship programs, such as South Carolina. Employers are eligible for up to $5,000 within any 12-month period. Unlike other states where the incentive is structured as a tax credit; Rhode Island’s nontrade apprenticeship incentive is in the form of a grant payment from the Governor’s Workforce Board. The payment provides direct resources to help offset the cost of sponsoring an apprentice and is designed to encourage “early adopters” of such models. To date - two $1000 incentive payments have been issued and an additional eight are pending in process as of the writing of this report.

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8 [https://www.americanprogress.org/issues/economy/reports/2016/02/09/130750/how-states-are-expanding-apprenticeship/]
Tax Credit for Machine Tool and Plastics Apprenticeships: Employers that hire an apprentice as a machine toolmaker, machinist, model-maker, gage maker, pattern-maker, plastic process technician, tool and machine setter, die-sinker, mold-maker, tool & die maker, and similar occupations may be eligible for a tax credit of 50% of actual wages or $4,800, whichever is less. The apprentice must be registered in a qualified program through the DLT Apprenticeship Office.

Apprenticeship Solutions for Real Jobs RI Partnerships: Registered Apprenticeship is one of the tools in the Real Jobs toolkit because it is entirely industry and employer driven. Real Jobs RI is a workforce development initiative designed to address the unique workforce challenges of Rhode Island’s high demand and high wage industries through a network of strategic employer-led partnerships which develop customized workforce solutions to meet demand. Several of these partnerships have focused on the expansion of traditional apprenticeships, including pre-apprenticeship programs for plumbing and pipefitting, as well developing nontraditional apprenticeships like biomedical equipment technicians and data scientists.

Alignment with Community of College Rhode Island: The Community College of Rhode Island (CCRI) has a long history delivering technical training for Electrician Apprenticeships and offering a path through the IBEW’s Registered Apprenticeship to an Associate’s Degree. More recently the Community College of Rhode Island drawn on existing academic programs to customize related technical instruction for non-trade apprenticeship for Data Scientists, Biomedical Equipment Technicians, Construction Management, and Licensed Practical Nurses.

State Apprenticeship Agency Capacity: The RIDLT is the State Apprenticeship Agency recognized by the US Department of Labor to register apprenticeship programs and apprentices. Rhode Island’s State Apprenticeship Council advises the RIDLT on policies for administration, operation and expansion of the Apprenticeship System. Recent US Department of Labor grants have supported systems change and capacity building. The award of AAI grant funds to Rhode Island from the US Department of Labor in turn launched the afore-mentioned Apprenticeship Rhode Island program. In addition, the RIDLT received an Apprenticeship Accelerator Grant to build departmental capacity to administer a quality apprenticeship system. Highlights of improvements from the past 18 months include:

Streamlining: The Rhode Island Apprenticeship Council in collaboration with RIDLT has undertaken a systematic review of policies and practices related to apprenticeship, identifying ways to improve and streamline the system. For example, recent changes in policies and forms ensure that rules specific to apprenticeships in licensed construction trades do not inadvertently apply to new sponsors of nontraditional Apprenticeships.

Registration fees were a barrier for new employers and individuals to participate in the voluntary Registered Apprenticeship system and furthermore, fees collected were not directly supporting the program administration. With the passage of FY2018 budget, registration fees for programs and apprentices have been removed.
Summary

Rhode Island has done much to expand new and innovative registered apprenticeship programs. Importantly, a supportive ecosystem is being established to bring this work to the next level.

For example, an Apprenticeship Liaison position now exists at the Workforce Partnership of Greater RI, which provides a direct connection between the federally-funded public workforce system and the Apprenticeship RI initiative. Rhode Island jobseekers can access the resources of the public workforce system and employers can benefit from the recruitment, front-end assessment, and benefit coordination through the netWORKri system. Registered Apprenticeship is becoming more central as alignment improves.

Despite strong gains in expanding registered apprenticeship over the past two years, there still remains significant unrealized potential. Outlined in the section to follow, the Governor’s Workforce Board has identified six productive areas for growth in our continued work with the Rhode Island Department of Labor and Training to ensure the comprehensive expansion of new and innovative registered apprenticeships across all sectors – and that employers gain the assistance they need.
WHAT MORE COULD BE DONE TO EXPAND APPRENTICESHIP?

Over the past few years, the Center for American Progress has been looking at what states can do to most effectively expand registered apprenticeship. In many respects, Rhode Island is on the leading edge of best practices in this new and emerging areas of newly-apprenticed occupations. Below we provide five priority strategies to expand the adoption of Registered Apprenticeship in Rhode Island.

1. Improve Marketing to Businesses
As advantageous as Registered Apprenticeship may be for employers; they are of no use if an employer does not know they are available. The Governor’s Workforce Board has long prioritized stronger more robust outreach to business and in Q4 2017 intends to release a web-based workforce concierge service that will better inform and connect employers with the array of workforce development services that are available. However, given the unique relationship and investment of time required to develop an apprenticeship program; the Department of Labor and Training, in close partnership with Apprenticeship Rhode Island, the state’s Real Jobs RI industry sector partnerships, and the state Chambers of Commerce should effort to specifically market apprenticeships, along with the related development and incentive programs, to employers.

2. Better Coordination with One-Stop Career Centers (NetWORKri)
The Workforce Innovation and Opportunity Act (WIOA) is the primary federal law governing employment, education, training, and support services for job seekers. WIOA was passed by bipartisan majorities in both houses of Congress and signed into law on July 22, 2014. The law supersedes the previous Workforce Investment Act (WIA) and looks to more fully integrate states’ workforce and talent development systems to better serve employers and job seekers. Under WIOA, Registered Apprenticeship program sponsors are automatically eligible for placement on the state-approved ‘Eligible Training Provider list’ (the list of approved vendors where WIOA-funded training assistance can be spent). Registered Apprenticeship programs are not subject to the same application and performance information requirements as other providers because they have already gone through the vetting process to become a Registered Apprenticeship program.

The WIOA-funded One-Stop Career Centers, which offer a range of career counseling and employment services to job seekers, should take full advantage of this new opportunity and provide workers with information and resources about apprenticeships. As the placement of Registered Apprenticeships on the ETPL is a relatively new requirement - information about apprenticeships is not easily accessible at many centers. As the number of apprenticeship opportunities grows, technical assistance and training should be provided to One-Stop Career Center staff on how and when to connect with RA programs.
3. **Improve integration of RA with the Community College of RI and Institutes of Higher Education**

One of the major differentiators cited by the Center for American Progress in expanding apprenticeship is Access to the State Community /Technical College System. By this they mean a deep partnership at the program development level that goes beyond current practice in Rhode Island.

Rhode Island’s public institutions of higher education have been active players in the state’s apprenticeship development activities – serving as the related instruction provider, or the lead entity, on several non-trade apprenticeship development proposals. However, the linkages between apprenticeship and higher education could be expanded dramatically. Collaboration with the Office of Postsecondary Commissioner can greatly expand the number of articulation agreements that allow apprenticeship training—both in the classroom and on the job—to count toward degree requirements. Such agreements will allow individuals to advance their academic, as well as professional, career and can likely increase the appeal of apprenticeship training to employers and workers alike.

In South Carolina, Apprenticeship South Carolina is operated out of the Community College system and state workforce development funds flow directly to the college to provide training for employers. Harper College, a Chicago Area Community College seeks out employers to develop apprenticeship programs as a way to drive enrollment, increase completion, and serve their students better. The majority of community college students attend college to help gain access to a career and the number one reason people leave college before completing their program is financial. Community College programs that are integrated with Registered Apprenticeships address both because the student is hired as an employee at the start of the Registered Apprenticeship and they are paid making it less likely that they will drop out for financial reasons.

4. **Expand Career Access for Underrepresented RI residents**

Quality pre-apprenticeship programs represent an exceptional strategy to extend the impact of the new RA programs being developed. Registered Apprenticeships, through their structure, extend the entry point of an occupation to the most basic skill-level needed by an employer to have a productive employee. Pre-apprenticeship programs close the skill-gap in applicants for those entry-level apprentice positions. While pre-apprenticeship programs can be embedded as CTE programs in high-schools, many community-based organizations provide quality pre-apprenticeship programs for adults across the nation and in Rhode Island.

Apprenticeship programs provide equal pay for equal work. Despite comprising roughly 47% of the labor force nationally, women make up only 7% of Apprentices currently. Partially, this is due to most registered apprenticeship being concentrated in occupations and industries where women are traditionally underrepresented. Regardless of the group that may be underrepresented in a particular occupation, quality pre-apprenticeship programs are an effective means to expand employment opportunities for many in RA programs. A deliberate focus on expanding apprenticeship opportunities through pre-apprenticeship programs should be utilized to expand career access through registered apprenticeships.

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9 USDOLETA Training Employment Notice 13-12 provides a definition of pre-apprenticeship programs and establishing a quality framework for programs. This and additional resources at: https://doleta.gov/oa/preapp/
5. Explore Youth Apprenticeship Program Models

As noted in recent federal guidance, there is growing federal and state support for the expansion of youth employment and training programs to meet the demands of businesses. The Workforce Innovation and Opportunity Act (WIOA) places increased emphasis on this issue; at least twenty percent of WIOA youth formula funds allocated to local areas must be used to provide youth with paid and unpaid work experiences, including pre-apprenticeship and other types of on-the-job training. Also, local WIOA formula funds may also be used to support apprentices participating in a RA program.”

States have approached the issue of youth apprenticeship differently, but there are emerging – and mature – models of best practice in Youth Apprenticeship Programs. For example, in Wisconsin the Youth Apprenticeship Program has over 3,500 active youth apprentices and has been operating since the 90s. In Colorado, the emerging youth apprenticeship program is driven by an intermediary. Rhode Island would benefit from exploring how a strong Youth Apprenticeship Program might be structured in our state. In alignment with objectives of the Prepare RI plan, and multiple initiatives already underway within the K-12 education system, utilizing a youth apprenticeship model to link efforts directly to the emerging models of Registered Apprenticeship programs has significant potential.

In Conclusion

Rhode Island has done much to expand new and innovative registered apprenticeship programs and work continues to bring these efforts to maximum scale and impact. As evident from the five recommendation areas above, there is more to explore. The Governor’s Workforce Board and the Rhode Island Department of Labor and Training look forward to working with the Legislature to further assist employers embrace new models of registered apprenticeship and to integrate, align and leverage these programs within our education and workforce development systems.

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12 https://docs.legis.wisconsin.gov/statutes/statutes/106/II/13
RESPECTFULLY REQUESTING THE GOVERNOR'S WORKFORCE BOARD WORK WITH THE RHODE ISLAND DEPARTMENT OF LABOR AND TRAINING TO DEVELOP A PLAN FOR THE COMPREHENSIVE EXPANSION OF NEW SKILLS AND COMPETENCY BASED APPRENTICESHIPS IN A FULL ARRAY OF SECTORS AND TO ASSIST EMPLOYERS THROUGH THE PROCESS OF INITIATING A NEW REGISTERED APPRENTICESHIP PROGRAM

Introduced By: Senators Ruggerio, McCaffrey, Goodwin, Pearson, and Algiere
Date Introduced: April 27, 2017
Referred To: Senate Labor

WHEREAS, An apprenticeship is a combination of on-the-job learning and related classroom instruction in which workers learn the practical and theoretical aspects of a highly skilled occupation; and

WHEREAS, Apprenticeships provide workers with practical skills and expand the pool of skilled workers in sectors where employers cannot find the workers they need; and

WHEREAS, America's youngest workers tend to experience the most drastic drop in employment as measured by the employment to population ratio during a recession; and

WHEREAS, A 2012 report by Mathematica Policy Research estimated the government tax return for each dollar invested in Registered Apprenticeships are more than twenty-seven dollars per dollar invested, and on average, total benefits reach more than thirty-five dollars per dollar; and

WHEREAS, Employers also realize financial benefits associated with apprenticeship programs, gaining on average one dollar and forty seven cents per dollar invested in an apprentice; and

WHEREAS, Rhode Island currently has traditional apprenticeship programs with over one thousand and four hundred apprentices, mostly within a construction trade, and has begun expansion into nontraditional apprenticeship program; and

WHEREAS, Opportunities and challenges exist to more fully expand such programs to meet the needs of our workers and employers and to maximize the return on investment; now, therefore be it

RESOLVED, That this Senate of the State of Rhode Island and Providence Plantations hereby respectfully requests that the Governor's Work Force Board work with the Rhode Island Department of Labor and Training develop a plan for the comprehensive expansion of new skills and competency based apprenticeships in a full array of sectors and to assist employers through the process of initiating a New Registered Apprenticeship Program; and be it further
RESOLVED, That this Senate hereby respectfully requests that a progress report on the status and expansion of apprenticeship programs in Rhode Island be submitted to the Senate President and the Senate Majority Leader on or before January 1, 2018; and be it further
RESOLVED, That the Secretary of State be and hereby is authorized and directed to transmit duly certified copies of this resolution to the Executive Director and Chairperson of the Governor's Work Force Board, and the Director of the Department of Labor and Training.