

Diversifying the Construction Workforce:
**Building for 21st Century
Competitiveness**

2013 Report to the Oregon Legislature





July 3, 2013

The Bureau of Labor and Industries is pleased to submit its Report on Diversifying the Construction Workforce.

While there are some successes to share with you, I also want to identify challenges that today's weak and uncertain economy is generating for our state's apprenticeship programs, their affiliated employers and their ability to advance workforce diversity within the building and construction trades.

Let's start with the some of the successes. Even during the worst recession seen in most of our lives, our apprenticeship programs have done a fair job **retaining apprentices and keeping them employed**. That's good for everyone.

Participation rates for **minority apprentices during 2012 held steady at between 14 to 15-percent** of all registered apprentices and 14.7-percent of all newly registered apprentices were from protected class minority groups. The participation rate for female apprentices at the end of the year was 6.25-percent of all registrations, an **all-time high in Oregon**.

In addition to the encouraging numbers, we have had some other notable highlights:

- In collaboration with BOLI, Portland State University researchers published the findings of their survey of over 10,000 past and current apprentices: **Apprenticeship Needs Assessment in Heavy Highway Construction Workforce (2012)**. The study provides a detailed statistical analysis of the trends underlying the reality that women and protected class minorities are not registered and retained in heavy highway apprenticeships at the same rate as white men, underscoring the need to craft additional remedies.
- Our agency worked with the Oregon Department of Transportation to launch the **Supportive Services Workforce Program** to increase registration and completion rates for all apprentices working on state transportation projects.
- The Oregon Legislature's funding for **career and technical education** helped restore shop classes to 21 middle and high schools, an especially critical investment as the loss these programs had a more significant adverse impact on minority and female students. Hands-on learning in the classroom strengthens our state's workforce while **developing a more diverse pool** of potential apprenticeship candidates and throughout Oregon.

The recovery from the recession remains slow and uncertain. Jobs are tight everywhere and double-digit unemployment continues unabated throughout many areas of our state. Apprenticeship program rosters ebb and flow with the economy, while the total number of registered apprentices has declined sharply over the past five years. This brings fewer opportunities to diversify the construction workforce by registering new female and minority apprentices due to the general lack of job opportunities.

This report will provide you additional information on our current efforts, but more importantly, it includes our thoughts and recommendations about how we can meet our state's workforce diversity goals even in today's challenging economic times.

Sincerely,

A handwritten signature in cursive script, reading "B. Avakian", followed by a vertical line.

Brad Avakian
Oregon Labor Commissioner

Executive summary

Despite a difficult economy, **minority apprentice participation rates during 2012 held steady at between 14 to 15-percent** of all registered apprentices. However, a recent BOLI-commissioned study provides an analysis of the trends underlying the reality that women and protected class minorities are not registered and retained in heavy highway apprenticeships at the same rate as white men. The findings underscore the need to craft additional remedies.

One central challenge for Oregon is that the state is not replacing skilled workers leave the workforce, creating a “skills gap” that hurts Oregon businesses. This challenge is exacerbated by the looming demographic bubble in the American labor market as skilled baby boomers retire.

A major step in the right direction is the legislature’s funding for **career and technical education** to help restore shop classes to 21 middle and high schools, an especially critical investment as the loss these programs had a more significant adverse impact on minority and female students.

Given the long, male dominated history in the construction trades, the high water mark of 6.25 percent female participation reached at the end of 2012 is both laudable and discouraging. Consequently, we continue to recommend that we set our sights on modest interim goals for women female participation that increase incrementally over time until we reach a female participation rate of 24-percent. In light of this ambitious long-term goal, BOLI encourages apprenticeship programs to establish a goal of increasing female participation in programs by 3-percent every five years. BOLI has established internal diversity goals for registered apprenticeship programs at 17-percent for minorities and 10-percent women by 2020.

Recommendations:

- **Recruit workforce talent:** Public bodies should pursue and promote best practices to ensure high quality recruits for registered apprenticeship programs with an emphasis on promoting workforce diversity.
- **Protect training investments:** Once candidates have been accepted into an apprenticeship program, substantial efforts should be made to make sure that they complete the program. With proper recruitment and targeted supportive services, increasing graduation rates will ultimately lead to a more diverse workforce.
- **Maximize taxpayer purchasing power:** Public bodies should pursue the highest possible returns on federal, state and local government investments during capital construction. We will advocate for the inclusion of more workforce diversity requirements in the public works contracts and other initiatives to create market-driven demand for a more overall diverse workforce.
- **Measure operations for accountability:** The Apprenticeship and Training Division will continue to hold ourselves and our apprenticeship programs accountable for the efficient and effective operations for a workforce system that produce results for Oregon businesses.

Part 1: Background

In 2007, the Oregon Legislature directed the Bureau of Labor and Industries (BOLI) to develop a plan to increase diversity among workers employed on state public works projects, report progress and make additional legislative recommendations as appropriate.¹

Notably, ORS 279C.800 through 279C.870 makes no other reference to workforce diversity and does not establish any obligations on the part of contracting agencies or public works contractors to develop a workforce representative of the demographics in the state. Using public works projects to diversify the workforce is a laudable goal, but one that is difficult to achieve without statutory tools or agency contract language that requires public bodies and vendors to maximize public investments.

The following section provides some additional context on the nature of public works and background on our efforts.

What are “public works projects”?

Broadly stated, public works projects involve the construction or renovations of roads, highways, buildings and other structures carried on or contracted for by any public agency to serve the public interest. Public works projects include any similar project that uses funds of a private entity and \$750,000 or more of funds of a public agency for the project or a similar project in which a public agency will use or occupy 25-percent or more of the square footage of the completed project.

What types of trades are usually involved?

Public works projects typically involve those trades most commonly associated with heavy construction such as iron workers, carpenters, plumbers and steamfitters, scaffolding erectors, cement masons, and painters. The state recognizes more than 40 occupational categories as being covered by its prevailing wage law.

¹ **OR 279C.807 Workforce diversity for public works projects.** (1) The Bureau of Labor and Industries shall develop and adopt a plan to increase diversity statewide among workers employed on projects subject to ORS 279C.800 to 279C.870. The bureau shall develop the plan after conducting a statewide public process to solicit proposals to increase diversity and shall adopt the plan after considering proposals submitted to the bureau. (2) The bureau shall report each year to the Legislative Assembly or to the appropriate legislative interim committee concerning progress that results from the plan adopted under this section and may submit recommendations for legislation or other measures that will improve diversity among workers employed on projects subject to ORS 279C.800 to 279C.870. [2007 c.844 §9]

2010-11 quantitative data on prevailing wage projects

Ten Largest Prevailing Wage Contracting Public Bodies – 2011	
Public body	Amount
1. OREGON DEPARTMENT OF TRANSPORTATION (ODOT)	\$262,234,709.62
2. TRI CO METRO.TRANS.DIST. (TRI MET)	\$190,871,546.70
3. CITY OF PORTLAND	\$162,856,099.94
4. PORTLAND STATE UNIVERSITY	\$111,565,700.91
5. PORT OF PORTLAND	\$52,578,679.44
6. SALEM KEIZER PUBLIC SCHOOLS (SKSD)	\$51,696,538.31
7. LANE COMMUNITY COLLEGE	\$39,590,652.00
8. PORTLAND COMMUNITY COLLEGE	\$31,158,310.00
9. WEST LINN WILSONVILLE SCHOOL DIST.	\$30,520,583.55
10. UNIVERSITY OF OREGON	\$27,255,072.42

Ten Largest Prevailing Wage Contracting Public Bodies – 2010	
Public body	Amount
1. OREGON DEPARTMENT OF TRANSPORTATION (ODOT)	\$391,326,910.95
2. OREGON DEPARTMENT OF CORRECTIONS	\$211,302,731.00
3. CITY OF PORTLAND	\$128,160,293.89
4. TRI CO METRO.TRANS.DIST. (TRI MET)	\$119,467,125.61
5. OREGON TRAIL SCHOOL DISTRICT #46	\$79,280,587.00
6. OREGON STATE UNIVERSITY	\$73,327,803.53
7. UNIVERSITY OF OREGON	\$64,813,038.00
8. SALEM KEIZER PUBLIC SCHOOLS (SKSD)	\$58,646,386.01
9. HERMISTON SCHOOL DISTRICT 8R	\$47,322,170.00
10. PORTLAND DEVELOPMENT COMMISSION	\$36,421,989.25

2011 Leading Private Contractors		
Contractor	Total	# of contracts
1. STACY & WITBECK INC/MOWAT JV	\$190,366,139.70	2
2. JE DUNN NORTHWEST	\$110,000,000.00	1
3. SSC CONSTRUCTION INC	\$80,238,574.00	1
4. KERR CONTRACTORS INC	\$63,442,064.53	19
5. FORTIS CONSTRUCTION INC	\$52,613,333.00	20
6. LEASE CRUTCHER LEWIS CORP	\$50,077,122.00	9
7. OREGON MAINLINE PAVING LLC	\$45,654,560.34	11
8. CPM DEVELOPMENT CORP	\$39,776,000.00	1
9. P & C CONSTRUCTION CO	\$33,174,970.00	8
10. KIRBY NAGELHOUT CONSTRUCTION CO	\$32,287,256.25	9

2010 Leading Private Contractors		
Contractor	Total	# of contracts
1. JE DUNN NORTHWEST INC.	\$213,086,900.00	3
2. HOFFMAN CONSTR. CO. - OREGON	\$182,342,263.89	7
3. KIEWIT INFRASTRUCTURE WEST CO	\$118,908,363.00	1
4. HOWARD S WRIGHT	\$76,561,166.00	12
5. LCG PENCE LLC	\$60,742,402.00	13
6. HAMILTON CONSTRUCTION CO OREGON	\$53,592,852.64	3
7. KERR CONTRACTORS INC	\$50,394,499.58	17
8. FORTIS CONSTRUCTION INC	\$47,539,697.00	12
9. CHERVENELL CONSTRUCTION CO	\$47,236,836.00	4
10. WILDISH STANDARD PAVING CO	\$45,300,419.42	5

A full list of agency public spending and contractors engaged in public works is available upon request by contacting BOLI.

What are BOLI's diversity goals for the construction trade workforce?

To identify more measurable programmatic goals for the legislative directive, BOLI's Apprenticeship Division has set two specific workforce targets to capture the spirit of the legislature's directive.

- BOLI has determined that the minority workforce goal for public works projects should reflect the ethnic diversity that currently exists in the state's general workforce. According to the Oregon Employment Department, protected class minorities make up 17-percent of today's civilian labor force as of January 2012 and women constitute 47-percent of the civilian labor.
- Federal Executive Order 11246 establishes an initial goal for female participation of 6.9-percent in the construction trades in recognition that a goal reflective of female participation in the civilian labor force may be too ambitious.

BOLI believes that the long-term goal should be more ambitious and has established a non-binding goal for female participation in apprenticeship programs of one-half of the percentage of women in the civilian labor force. Women make up 47-percent of the civilian labor force so our initial goal for female participation in our construction trades is 23-percent. We know that it will take time and sustained effort, but believe that apprenticeship program sponsors should have a clear objective for measuring success.

Our goals for female and minority participation in apprenticeship programs are consistent with federal affirmative action rules for apprenticeship programs, but the goal for women is unrealistic as a starting point. Given the long, male dominated history in the construction trades, the high water mark of 6.25 percent female participation reached at the end of 2012 is

both laudable and discouraging. Consequently, we continue to recommend that we set our sights on modest interim goals for women female participation that increase incrementally over time until we reach a female participation rate of 24-percent. In light of this ambitious long-term goal, BOLI encourages apprenticeship programs to establish a goal of increasing female participation in programs by 3-percent every five years.

BOLI has established internal diversity goals for registered apprenticeship programs at 17-percent for minorities and 10-percent women by 2020. Higher female and minority participation rates in apprenticeship will gradually increase a greater number of female and minority journey workers who should eventually change the face of the public works workforce.

Building workforce diversity from the ground up

To determine the best way to drive women and minority participation, the state should establish a procedure for tracking workforce diversity goals on public works projects and participation over time. However, no effective mechanism exists to track the number of women and minorities employed on every prevailed project across the more than 350 independent state, county and local agencies engaged in public contracting. Based on discussions with many agencies, establishing such a mechanism would be cost prohibitive given dwindling resources.

At the same time, many public works contractors say that they cannot identify or recruit an adequate number of qualified women and minority applicants to meet their aspirational workforce or apprenticeship goals. If public agencies do not have the resources to track workforce demographics and contractors cannot identify an adequate number of female and minority workers, it seems that long-term, **workforce diversity would be best achieved if it were grown from the ground up with workforce agencies and community-based organizations recruiting and identifying qualified individuals** who then move through the system.

Our Apprenticeship and Training Division's primary strategy is to build a pipeline of skilled labor that will meet the future needs of Oregon businesses while also achieving the workforce diversity goals of our state. We collaborate with local school districts, community organizations, contracting agencies and contractors.

As we build diversity in our apprenticeship programs, we will see subsequent increases in workforce diversity on public works projects in the construction and industrial trades. These goals cannot be achieved without the active participation the contracting agencies and owners to drive the diversity effort. Public contracting policy can be used as a tool to encourage contractors to hire and nurture a strong, diverse workforce.

Where did we start?

When we issued our initial diversity report in January 2009, the agency reported our apprenticeship population as of November 2008—a point in time just before the major impacts

of the Great Recession hit our economy. At that time, there were 7,972 active apprentices in all trades (both industrial and construction). The total included 1,122 (14.07 percent) people of color³ and 435 (5.46 percent) women.

Even in those pre-recession days of a relatively healthy economy, the participation rates for minorities in our apprenticeship programs fell short of the statewide workforce number at the time of 15.5 percent. The disparity with respect to female participation was much more notable and failed to even meet the federal goal of 6.9 percent.

Where are we today?

Despite a decline in the overall number of active apprentices, there are signs that we are making progress toward diversifying the construction workforce. During the past four years our overall apprenticeship diversity participation rates increased to 14.7 percent minorities and 6.25 percent female. The improvement suggests that many registered **apprenticeship committees and participating employers have done a good job of retaining apprentices—including female and minority apprentices—during difficult economic times.**

While the numbers indicate some positive results, a recent BOLI-commissioned study by the Portland State University still finds that white males in the heavy highway trades complete apprenticeship programs at a statistically significant higher rate (41-percent) than their minority (32-percent) and female (25-percent) counterparts. The study suggests that white males are also completing apprenticeship programs at a faster pace because they receive some level of preferential treatment when it comes to job assignments. For example, many white males remain with the same employer after a project has been completed, while employers often terminate female and minority apprentices after the completion of a job and rather than carry them over to the next project.

The bottom line is that while we are making progress in terms of small increases in female and minority participation and identification of some of the causes for low participation rates, we have a long way to fully address the race and gender disparities in our construction trades.

³ Diversity participation rates for minorities had been growing steadily over the previous decade from 12.6% in 1997 to 14.07 percent in 2008. This correlates closely with the Bureau's decision to eliminate the "employer choice" option from the selection processes used by many committees.

Part 2: Program Highlights 2010-2012

Tracking progress

During the 2010-2012 period covered in this report, the Bureau's Apprenticeship and Training Division has provided affirmative action oversight and technical assistance services to more than 150 registered apprenticeship programs. Staff has worked effectively and collaboratively with apprenticeship programs throughout the state. The efforts are producing results. While much more work remains to be done, our collective efforts have produced a 4.1 percent increase in the apprenticeship participation rates for minorities and a 2.2 percent increase for women since 2008.

In addition to day-to-day activities, we have also made significant progress on a number of special projects to foster workforce diversity:

Research: Researchers at Portland State University (PSU) published the results of their study of apprenticeship participations and completions rates in the heavy highway construction trades as commissioned by BOLI.⁵ The study may be the most thorough investigation of the factors influencing apprenticeship completion rates for women and minorities undertaken in the country.

Comprehensive support services: Our agency worked closely with the Oregon Department of Transportation (ODOT) to create and implement the BOLI-ODOT Supportive Services Workforce Program. Pursuant to ORS 184.866, ODOT is directed to expend each biennium one-half of one percent of its federal capital projects appropriation up to an amount of \$1.5 million as permitted by 23 U.S.C. 140(b), to increase diversity in the highway construction workforce, prepare individuals interested in entering the highway construction workforce, and support apprentices working on the state's transportation systems. ODOT contracts with BOLI to administer the program. The program, operational since 2010, has provided outreach, recruitment, trade orientations, pre-apprenticeship training, mentorship and supportive services to more than 11,000 Oregonians.

Expanding youth apprenticeship programs: We continue to support our Youth Apprenticeship programs. Last spring, BOLI facilitated a partnership between Portland's Benson Polytechnic High School and one of our state's premier manufacturing companies, Blount, Inc. The partnership has the potential to diversify our state's skilled workforce from the ground up as high school students move from the youth program into one of our adult programs.

⁵ Kelly and Wilkinson, *Apprenticeship Needs Assessment in Heavy Highway Construction Workforce* (August 2012).

Outreach: Our sponsor-operated www.oregonapprenticeship.com website – targeted at women, minorities and potential applicants aged 18 to 39 – continues to attract young people interested in the trades. The site includes pictures and stories of female and minority pre-apprentices and apprentices and provides direct information on how to get involved with apprenticeship opportunities. While BOLI oversaw the development and implementation, a coalition of apprenticeship program sponsors and community-based organizations contribute to the content of the site, providing more diverse content than what could be made available on a BOLI-only website.

Part 3: Challenges on the horizon

The 2008 recession and the anemic economic recovery have had a significant impact on market demand for skilled labor throughout the state. The economic reality combined with the other challenges outlined below creates a potentially dangerous kink in our state’s workforce development pipeline.

Unless we attract more individuals into the construction pipeline, our capacity to continue diversifying our construction trades will be seriously compromised – and the competitiveness of Oregon businesses will be at risk.

A rupture in the workforce pipeline

The weak economy negatively impacts demand for apprentices, making it difficult to generate the apprenticeship graduation rate necessary to diversify the rosters. In other words, we need to graduate the current generation of apprentices to create new spaces for the next (hopefully, more diverse) generation.

Perhaps more importantly, we are not replacing the skilled workers leave the workforce, creating a “skills gap” that hurts Oregon businesses. This challenge is exacerbated by the looming demographic bubble in the American labor market as skilled baby boomers retire.

The real problem will occur when the pace of the economy recovery picks up without enough apprentices in the pipeline to replace the skilled workers retiring. Further, apprenticeship programs can last from three to six years –acerbating the dynamic. In effect, as the economy improves, we will open the faucet by registering more apprentices, but it will take up to three to six more years to fully train them as journey workers.

This dynamic poses a serious peril to our state’s long-term economic health. We need to promote more skill training and education now to ensure that we enough skilled labor to compete when demand increases. It also brings opportunity. If we create deeper, more diverse pools of apprentices, we will expand workforce diversity and ensure an adequate supply of skilled labor for an expanding economy.

Workplace bias and apprenticeship completion rates

Workplace bias remains a reality. A recently completed Portland State University study shows that apprenticeship job opportunities go to white males at a disproportionately high rate in comparison to women and minorities.⁶ While the researchers found isolated evidence of overt racism and sexism, the bigger problem lies in race and gender-based affinity group bias. In more colloquial terms, the dynamic could be described as unintentional inherent bias, the simple fact that since white males have more and deeper networks with journey workers, supervisors and contractors, white males are more likely to be hired than their female and minority counterparts.

The dynamic may not be evidence of malicious racial or gender discrimination, but its effects produce a construction workforce that's less diverse. Regardless of motivation, the end results often send a non-verbal message to minority and women apprentices that they are at a disadvantage.

As long as the completion rates for minorities and women apprentices fall short of completion rates for white males, we will be hard pressed to see any significant long-term improvement in diversity at the journey worker level. The question becomes: How do we overcome a systemic bias that may be more rooted in human nature than in bigotry?

Uncertain funding for public works projects

For the past five years, the ability to recruit more apprentices into the construction trades has been significantly driven by the federal stimulus investments in capital construction.

Unfortunately, the federal investments are coming to an end. Many projects are wrapping up, with no substantial new funding coming out of Washington for the foreseeable future. In the coming years, we are more likely to see a dramatic reduction in the number and size of public works projects. While public infrastructure investments will undoubtedly continue at some level, we are concerned that a sharp reduction in federal spending will severely limit the work opportunities for Oregon apprentices for a minimum of two to three years.

While this may reduce the immediate urgency of replacing our skilled workforce today, it also creates the risk of producing an even larger kink in the workforce pipeline. Without more capital investment in infrastructure projects today, we may lose even more ground in the challenge of training the journey workers for tomorrow's skilled workforce.

⁶ In addition to the PSU Study, a 2008 University of Utah study of Oregon apprenticeship programs previously documented the work-experience gap for women and minority apprentices. Berik, Bilginsoy and Williams, *Gender and Racial Training Gaps in Oregon Apprenticeship Programs* (September 2008).

Part 4: Opportunities

Tools for success

A comprehensive solution to the under-utilization of women and people of color on public improvement projects has four essential components.

- First, underrepresented populations must have **access to early education and training** in career and technical education so they are prepared to enter careers in the trades. An increase in female and minority trades participation can only occur if more individuals leaving high school have the necessary skills to compete for entry into apprenticeship programs and this means that they will have to have access to career and technical education classes in high school.
- The solution will also require that an adequate system be put in place to **recruit women and minorities** who have received career and technical education in high school with additional training to compete for apprenticeship opportunities.
- Next, public and private contracting bodies must be more creative in **motivating their contractors to address the issue of diversity**. This includes contract language that promotes a diverse workforce and contractor efforts to make sure that women and minorities feel secure and welcome in the construction trades.
- Finally, all these factors can become fully operational when a **healthy economy creates more opportunities** to employ more apprentices, regardless of gender or ethnicity.

Career and technical education as an essential gateway

Employers in the construction trades often state that they feel the female and minority applicants do not bring the right job skills or prepared for a construction career. The perceived lack of preparation is not isolated to the construction trades.

The Oregon Career and Technical Education Revitalization Grant Fund (adopted by the Oregon Legislature during the 2011 session) increases access to Career and Technical Education (“CTE”) programs for Oregon students by funding a grant program to immediately jump-start CTE programs around the state.

Supported by a broad coalition of businesses, labor union, trade association, educators and legislators from both parties, the grant fund helps prepare more Oregonians for living wage jobs in the trades and other occupations, while ensuring businesses have access to highly skilled workers. It’s important that with an increased interest in Science, Technology, Engineering and Mathematics (STEM) curriculum, that we also not ignore CTE programs that can serve as a pathway for women and people of color to living wages jobs that do not require four-year degrees.

Pre-apprenticeship preparation programs and supportive services

Apprenticeship preparation programs such as Oregon Tradeswomen, Constructing Hope Program/Irvington Covenant Community Development Corporation, Evening Trades Apprenticeship Program, Portland Community College's Trades Preparation Program, YouthBuilders, and Construction Apprenticeship and Workforce Solutions can play an important role in diversifying the workforce. Leaders within these organizations are exploring the concept of creating a certification process similar to that used for green building to further diversify the sector. Unfortunately, their efforts are limited to the Portland metropolitan area.

Pre-apprenticeship programs are similar to a construction boot camp. Learning is fast-paced, intense and industry-driven to allow individuals to start developing the skills needed to succeed. These programs can serve as a bridge between students leaving high school with an interest in the trades and actual access to a registered apprenticeship program.

Each pre-apprenticeship program serves a slightly different demographic. All programs offer outreach, recruitment and assessment services as well as job readiness and basic skills training in coordination with local apprenticeship programs. These programs also offer general supportive services, mentorship and placement services.

All of the foregoing apprenticeship preparation programs are public or private non-profits that struggle to secure apprenticeship funding. A stable source of funding for BOLI-approved apprenticeship preparation programs serving women and minorities candidates is essential to building capacity. Steady funding – coupled with consistent reporting and measurement – will allow effective programs to concentrate on recruiting and training good quality candidates for the industry.

Case study: The BOLI/ODOT Workforce Development Program

The BOLI-ODOT Workforce Development Program works to build a diverse, skilled construction workforce to meet the needs of the Oregon construction industry by developing the next generation of workers. The partnership supplements services provided by pre-apprenticeship programs for Oregonians interested in the heavy highway trades. Since 2010, the program has provided support to individuals either preparing to enter or have entered a trade associated with highway construction and provided basic support (such as transportation, childcare, medical expenses, work attire and tools) as well as training-related services.

The primary goal of the highway partnership is to increase the effectiveness of ODOT's existing support by raising awareness of training opportunities and encouraging individuals to enter and complete highway construction training programs.

New Diversity Initiatives

In September 2012, the City of Portland expanded its efforts with a new model community benefits agreement that includes specific measures to strengthen the diversity of the region's construction workforce.

The 23-page "Model Community Benefits Agreement" requires that on select projects over \$15 million, future owners, contractors and unions may voluntarily agree to expand contracting and employment opportunities for women and minorities.

The agreement sets the following goals:

- At least 18-percent of the work will be performed by minorities, and 9-percent by women and the targets apply both to journeymen and apprentices;
- At least 20-percent of the work on contracts of over \$200,000 (and subcontracts of over \$100,000) will be performed by apprentices; and
- At least 20-percent of the hard construction costs will go to women-owned, minority-owned and "disadvantaged" businesses.

Significantly, the initiative dedicates 1.5-percent of Portland city construction budgets to help women and minority workers and contractors get ready for the job, including:

- Monitoring and enforcement of the agreement;
- Investment in pre-apprenticeship training programs that focus on training women and minorities, implemented with Worksystems Inc.; and
- Technical and business assistance for women- and minority-owned contractor.

Initiatives such as the community benefit agreement provide a blueprint for contracting policy that not only supports a diverse workforce, but investment in the necessary infrastructure to make the proposed goal of workforce diversity a reality. There is no better time than now for public agencies to adopt similar models.

Part 5: Recommendations

In light of state funding cuts, BOLI has adjusted the operations of its Apprenticeship and Training Division to ensure regular compliance reviews of registered apprenticeship programs and technical assistance support for these apprenticeship programs.

While the division's service delivery model may have changed, BOLI's goals remain the same: to ensure that its apprenticeship system is operating as efficiently as possible to meet the skilled labor needs of Oregon businesses while ensuring equal access to career path training. To that end and within the capacity of available resources, the bureau's recommendations primarily focus on the following four areas:

- **Recruit workforce talent:** Public bodies should pursue and promote best practices to ensure the best quality recruits for registered apprenticeship programs with an emphasis on promoting workforce diversity.
- **Protect training investments:** Once candidates have been accepted into an apprenticeship program, substantial efforts should be made to make sure that they complete the program. With proper recruitment and targeted supportive services, increasing graduation rates will ultimately lead to a more diverse workforce.
- **Maximize taxpayer purchasing power:** Public bodies should pursue the highest possible returns on federal, state and local government investments during capital construction. We will advocate for the inclusion of more workforce diversity requirements in the public works contracts and other initiatives to create market-driven demand for a more overall diverse workforce.
- **Measure operations for accountability:** The Apprenticeship and Training Division will continue to hold ourselves and our apprenticeship programs accountable for the efficient and effective operations for a workforce system that produce results for Oregon businesses.

Recommendation 1: Recruiting workforce talent

The Bureau will continue to support programs that build the skilled labor pipeline.

If we target efforts correctly, our system will provide multiple ways for every qualified candidate, regardless of race or sex, to enter an apprenticeship program.

Develop the workforce pipeline through career and technical education: Restoration of CTE programs throughout the K-12 education system will ensure that more Oregonians have the tools to competitively enter the workforce. By re-introducing work experiences and hands-on training programs into our high schools, young people will be more prepared to enter the construction workforce. In partnership with the Oregon Department of Education, the first round of CTE revitalization grants supported local partnerships and efforts around Oregon in 2012.

Youth apprenticeship programs: Our youth apprenticeship programs have been an effective conduit for high school students to enter the trades. While our joint venture with Oregon Office of Community Colleges and Workforce Development (OCCWD) was discontinued in 2012 due to funding cuts, we will continue to seek ways to support and even expand youth programs. These initiatives provide a highly cost effective recruitment tool for Oregon businesses to identify talented young people who can be easily transitioned into adult apprenticeship programs.

Pre-apprenticeship programs: Our pre-apprenticeship programs produce a diverse pool of quality apprenticeship candidates and represent an essential component of the overall effort to promote workforce diversity.

We will continue to promote the work of our pre-apprenticeship programs and track the placement and completion rates of their graduates. In return, public contracting agencies and employers must actively support these programs and work to stabilize funding for their efforts.

Identify more objective apprenticeship selection tools

The process for evaluating and selecting apprentices needs to be simplified and standardized, using fair and objective selection criteria. Creating more objective requirements will require a thorough evaluation and redesign of the various selection processes used by approved apprenticeship programs. The ideal outcome would be implementation of a unified apprentice application and screening process. While BOLI's analysis of apprentice application and selection data does not disclose a pattern of practices intended to impede access to women and minorities, the reality is that many qualified applicants never make their way into an apprenticeship. Applicants should have a clear picture of criteria needed to compete for an apprenticeship opportunity. BOLI will continue its efforts to assist programs in developing such tools.

Tracking different entry points into apprenticeship programs

Depending on resource availability, BOLI would like to develop more consistent tracking and reporting mechanisms to determine which pathway programs work as gateways for which populations. Some programs may help individuals become more job-ready in general terms. Other programs may prove to be more effective avenues into certain trades.

This additional insight and information will allow us to plan more effectively as the economy changes. With the help of state economists and the Oregon Labor Management Information System (OLMIS), we may be able to better anticipate where workforce demand will surface as the economy improves. As trends emerge, we should be able to focus our resources on specific programs. With careful targeting, we should be able to help Oregon businesses stay competitive by producing more quality apprenticeship candidates in high demand occupations.

As we track outcomes by race and gender, we can highlight and amplify programs that will help ensure that women and minorities can compete effectively for emerging new career opportunities.

Recommendation 2: Protecting our training investments

We want to ensure the maximum return on public and private sector apprenticeship investments by boosting apprenticeship completion rates. Our agency also intends to increase our affirmative action compliance efforts.

In general, the majority of Oregon's registered apprenticeship committees have worked hard to keep apprentices working through the recovery. While we have some evidence that committees may show a preference for white males in terms of work assignments, we are still

pleased to report that committees have done a good job keeping minorities and women on their active apprentice lists. Rates of retention and completion for women and minorities remain the primary issue.

We will renew our compliance review and enforcement efforts and recommending the following:

- BOLI's Apprenticeship and Training Division should update its affirmative action compliance records by December 2013;
- Out-of-compliance committees should be required to have an updated Affirmative Action Plan and Goals and Timetables in place by the March 2014;
- Our Apprenticeship and Training Division will develop a best practices tool kit to help committees meet their affirmative action goals; and
- Apprenticeship and Training Division will re-visit its procedures for working with out-of-compliance committees and more clearly identify those remediation measures.

Recommendation 3: Maximizing taxpayer purchasing power

Oregon should leverage its significant purchasing power to build a more diverse workforce. Contracts must require prime and subcontractors to track workforce diversity on public projects. Incentives and disincentives must be included in contracts to ensure that projects are reaching workforce diversity goals targets. Contractors who fail to demonstrate a good faith effort to employ a diverse workforce should not benefit from public works contracts.

During these difficult economic times, public works projects remain one of the constant sources of market demand for skilled labor. If state taxpayers are going to fund capital construction projects, they should also want to see that these projects not only create public infrastructure improvements but also generate new apprenticeship opportunities for all Oregon residents. Some of the largest public works contracting agencies – such as ODOT, the city of Portland, Tri-Met and the Portland Development Commission – have adopted strong diversity criteria. BOLI recommends that all public works contracting agencies be required to adopt workforce diversity strategies.

BOLI recommends that the 2015 Oregon Legislative Assembly implement market-driven systems – leveraging the state's purchasing power — to help diversify our state's workforce.

We further recommend that a statewide overall workforce diversity goal of 20-percent minority participation rate and 20-percent female participation all public works projects. Establishing such goals creates a barometer for the legislature to measure success, including determining which agencies are making the most progress towards diversity goals.

Incentives and disincentives

The legislature, public agencies and BOLI can create financial incentives and disincentives for progress toward workforce diversity goals.

As noted, many public agencies do not believe that they have the resources to track or require contractors to capture the demographics of their projects. However, contractors might prove very willing to track and provide information if given financial incentive to do so. Just as many public contracts offer an incentive for early completion, an incentive program could offer employers payment for meeting diversity goals. In light of such a financial benefit, more contractors would work with their local apprenticeship program to make sure that an adequate number of female and minority apprentices were available.

Absent such strategies, we are left to rely upon the inner motivation of public contractors to meet workforce diversity goals. No matter how much any agency may work to convince contractors that workforce diversity is a sound overall strategy, many will not be convinced of this imperative unless provided with a clear financial benefit for supporting these goals.

Stronger language in public contracting law

The longstanding challenge of driving greater diversity into the construction workforce diversity will not be fully addressed unless statutory language compels agencies and contractors to take affirmative steps to ensure greater opportunity for women and minorities. BOLI is willing to take the lead with any interested parties to explore contracting rules that will ensure that all Oregonians can share in the benefits of public works contracting.

Recommendation 4: Accountability for results

Later this year, the bureau will adjust the Apprenticeship and Training Division's administrative and programmatic priorities to reflect the realities of our reduced operating budget. While we already have made various programmatic cuts, we will continue to refine operations consistent with our state's apprenticeship system and workforce diversity goals:

- Concentrate program compliance reviews and follow-up efforts on apprenticeship programs with poor diversity records;
- Collaborate with successful apprenticeship programs to identify "best practices" and initiate more focused analysis of strategies that work;
- Develop pilot projects in collaboration with one or more apprenticeship programs to test new strategies and refine best practices in recruitment and retention;
- Recruit at least five current programs to participate in a variety of workforce diversity activities with our apprenticeship division providing concentrated affirmative action technical assistance;
- Set a specific goal for the effort to increase minority participation rates by 20-percent and female participation rates by 10-percent of the targeted programs within the next 24-months;
- Improve our data collection system to track and report outcomes for pre-apprenticeship, youth apprenticeship, career and technical, and BOLI-ODOT supportive services program; and
- Track and publicly report individual committee performance outcomes regularly.

Recommendation 5: Invest in workforce data research and measurement

BOLI and its industry partners have identified the need for comprehensive data on levels of participation by minorities and women apprentices on projects identified in HB 2021. With adequate annual funding, BOLI and its industry and agency partners` can identify key information reported by agencies, reviewing effective data collection methods currently in use, such as at TriMet.

Further, funding should support research (by interview and other methods) that focuses on current and inactive women and apprentices of color to determine the specific barriers to participating in pre-apprenticeship programs.

By establishing a statewide baseline of data on the participation of minority and women workers employed on prevailed projects through all programs, and specific information on barriers, BOLI can further its work to create, implement and enforce programs that effectively increase the diversity of the workforce.

Part 6: Conclusion

As the economy improves, we have a great opportunity to help Oregon businesses find the quality workforce that they will need to be competitive over the next 30 years. We also have the opportunity to ensure that all Oregonians have access to new career opportunities.

To meet the goal of a stronger, more diverse workforce, Oregon will need:

- The public education system to develop high quality female and minority candidates that industry can recruit for their apprenticeship programs;
- Increased funding for the programs that prepare individuals specifically for apprenticeship opportunities;
- Establishment of fair and objective qualification requirements that will provide female and minority applicants with equal access to entry into apprenticeship programs, supportive services and work-experience opportunities;
- Contracting public agencies to create a market demand for apprentice labor in general and specifically for a diverse workforce by leveraging its substantial resources; and
- Careful monitoring and measurement for apprenticeship programs for compliance with state and federal apprenticeship requirements.

We are confident that with these goals, we can build a stronger, more diverse workforce for our state. Oregon can help drive greater opportunity and prosperity to more working families by expanding the influence and participation of women and minorities within our state's talented construction sector.