



# **Solutions for an Emerging Workforce:**

*Strategies for recruiting, training, hiring, retaining  
and advancing youth of color and women in the  
highway construction trades*

Western States Regional Summit on  
Youth of Color and Women in the  
Highway Construction Trades Project

White Paper  
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Youth of Color and Women in the Highway Construction Trades Project.**

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**Copies of the report are posted on the Oregon Tradeswomen, Inc. web site  
[www.tradeswomen.net](http://www.tradeswomen.net) and the Oregon Department of Transportation Office of Civil  
Rights web site [www.odot.state.or.us/civilrightspub](http://www.odot.state.or.us/civilrightspub).**

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## Message from the Oregon Department of Transportation, Office of Civil Rights

### Marie McHone, Manager

On behalf of the ODOT team, I am pleased to present the strategies highlighted at the Western Regional Summit held on September 21-23, 2004 in Portland, Oregon. I would like to echo our appreciation of everyone's active participation and help with the Summit. We would not have accomplished this endeavor without the work of many. I know that this document will serve you and your organization well since we share a deep interest in finding solutions to the construction workforce shortage. The opportunity exists today to implement strategies to increase workforce diversity and to reach out to bring underutilized groups such as women, minorities and youth of color into the construction industry. The time has come to act, and put into place solutions that will lead to long-term results for the benefit of the construction industry, specifically highway-related work.

"One of the greatest challenges facing today's highway construction trades is recruiting and maintaining a skilled and diverse workforce." This statement was mentioned by Christine M. Johnson, Federal Highway Administration Director of Field Services West, in her memo inviting colleagues to the Summit. I agree with her statement. Today, our 160,000 miles<sup>1</sup> of interstate system links every major city in the United States, and connects us with Canada and Mexico. Our current surface transportation system is made up of an immense network of paved roads, residential streets, expressways, and freeways to support millions of vehicles and has become an essential element of our economic growth and job creation. In Oregon, we have 19,076 lane miles of state highway and 6,640 bridges to sustain.<sup>2</sup> We have identified more than 350 state-owned bridges that are close to the end of their designed use.

For Federal Fiscal Year 2005, President Bush is proposing \$33.6 billion in budgetary resources for FHWA to improve the quality and performance of our Nation's highway system and its intermodal connectors through the use of State Transportation Agencies.<sup>3</sup> With this in mind, we are faced with maintaining, rehabilitating, and improving our highway and road systems. Work in heavy and highway construction is going to be in demand in the very near future – sooner than we expect. Thus, come the needed workers to recruit, train, and retain for upcoming work in preserving our highway and road systems. New recruitment strategies are needed, and implementation is quickly becoming critical.

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<sup>1</sup> Federal Highway Administration 2005 Budget Request; website: <http://www.dot.gov/bib2005/admins.html#fhwa>

<sup>2</sup> Oregon Department of Transportation Key Facts 2004, page 12

<sup>3</sup> Federal Highway Administration 2005 Budget Request; website: <http://www.dot.gov/bib2005/admins.html#fhwa>

According to a recent study<sup>4</sup> done for Oregon Department of Transportation, Oregon is projected to have a shortage of construction workers in the next seven to ten years. “The construction workforce is aging fast and a ten-year projection of Oregon’s construction industry indicates that approximately 14,000 new workers are needed. It is therefore critical that a strategic plan is developed and implemented now to avoid serious shortages and the inevitably linked increased costs.”<sup>5</sup>

Christine M. Johnson pointed out that two emerging trends are contributing to the problem: the current baby-boomer based workforce in the highway construction trades is aging and approaching retirement within the next few years and a trend to direct high school students toward goals of college degree programs rather than toward the vocational trades. Of course, there are other factors to consider to this widespread problem including the fact that many applicants to state apprenticeship programs are unable to meet the program entrance requirements for reading and basic math skills. Why not find ways to help the youth begin with career preparation and help them acquire the prerequisites within their high school years? How about reaching out to the untapped rich pool of historically underutilized women and youth of color? The construction industry has not regularly utilized their strength, skills, and potential as a solution to workforce shortage and diversity. Strategies to target these groups and interest them in applying for careers in the construction trades can be of tremendous assistance to the industry and potential solution to workforce shortage and diversity.

As you read the following pages, think of ways to implement the strategies presented at the Summit. The strategies can be applied to your respective organizations, states or local area. I encourage you to find resources and advocates for finding solutions. ODOT is committed to developing and implementing ways to develop, hire, and retain diverse construction workers with the strategies mentioned in this document. I consider workforce shortage and diversity a universal problem for us, thus, the Western Regional Summit applies to each of us. Once again, thank you for your assistance, support and participation. Your combined shared experience is within this resulting document.

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<sup>4</sup> [Gap Analysis/Bridge Worker Study, performed by the Portland State University Population Research Center compiled for Group AGB LLC and Oregon Bridge Delivery Partners.](#)

<sup>5</sup> [Components of Oregon Department of Transportation Comprehensive Workforce Plan, authored by Group AGB LLC, a subconsultant to Oregon Bridge Delivery Partners \(OBDP\) who has been hired by ODOT to manage its bridge repair and replace program.](#)

## THE VISION

The vision for the concept which led to the Youth of Color & Women in Trades initiative was first proposed by the Oregon Department of Transportation, Office of Civil Rights Manager Amanda Vallejo in 2002. Specific funding was available for workforce training using federal highway funds for on-the-job/supportive services (state optional) dollars amounting to ½ of 1% of the state's Surface Transportation Program (STP) and Highway Bridge Replacement & Rehabilitation Program (HBRR) Funds.

Office of Civil Rights staff desired to find a way to address and promote minority youth and women in the construction trades. Initially a statewide process for ascertaining the current state of workforce development was entertained. The brainstormed idea and discussion with the staff quickly expanded to incorporate the Western Region, composed of fourteen states, as a strategy to explore the best practices of a larger sample of similarly focused jurisdictions.

Rather than tackle the development of this idea internally, staff decided to seek advice from a broad-based, multi-disciplinary panel of experts from agencies and organizations whose missions focused on workforce development. Representatives from state, federal and local government agencies with responsibilities in this area were recruited, along with construction industry advocates and construction trades training organizations to form a "Visioning Group" (See Appendix B, Visioning Team Roster).

The Visioning Group was responsible for defining the purpose and mission and then creating a format by which such a mission could be achieved. Diligence and passion were the bywords of the group, which performed beyond anyone's expectations, in creating a direction, format and a strategy for the Youth of Color & Women in Trades Initiative.

At the center of its work was the Vision Statement, created by the Group and adopted by ODOT. A consultant team was chosen to deliver the Focus Group and Summit and their products.

Here is the Vision Statement which served as the core value statement for this exercise: "The Conference Visioning Group's mission is to collaboratively develop a comprehensive regional conference which will investigate, gather, and publicize "best practices" in the fields of education, preparation, job development, career training, retention of minorities and women preparing for employment in the building trades. With a planning emphasis on heavy highway construction, the group will consider multiple tracks for policy development, operations strategies and consumer/trainee concerns and priorities."

Our deepest gratitude to those who served to identify and execute the vision for this important endeavor.

## HISTORY AND OPPORTUNITY

Our society is still adapting to change: the 1964 Civil Rights Act opened up full participation in the trades for men of color; it wasn't until Title IX in 1972 that girls could take shop classes in high school; and most women were excluded from apprenticeship programs until the 1978 President's Executive Order 11246. Federal Highway Administration regulations addressing equal employment opportunity in the external workforce were first promulgated in 1975 as Title 23, Highways, Part 230. These describe the special requirements for the provision for on-the-job training. It also covers the implementation of supportive services which, subject to availability of Federal funds, are to be provided in conjunction with the training. Among the services which can be provided are counseling, recruiting, transportation, physical examinations and remedial training.

Historical exclusions from the trades because of past discriminatory practices means a community culture that remembers family stories of exclusion and discrimination, and tells young people of color that the trades are not welcoming to them. Traditional thinking about the occupations most appropriate for women remains, despite the now 26 years of women successfully working at trades occupations. Many studies show that targeted recruitment is necessary to draw diverse candidates when an occupation or field has been underrepresented.

More information about the history of under-representation in the trades can be found in the following books: "Black Workers in White Unions: Job Discrimination in the United States" - William Gould, Cornell University Press, 1977, "Race and the Invisible Hand: How White Networks Exclude Black Men from Blue-Collar Jobs" - Deirdre A. Royster, University of California Press, 2003 and "We'll Call You If We Need You: Experiences of Women Working Construction" - Susan Eisenberg, Cornell Press, 1998.

Increasing demands for transportation infrastructure around the Western Region will result in more need for workers. Among the projects foreseen are these examples from Oregon, California and Washington State.

**Oregon:** Oregon's 2001 Legislature took the first two of three major steps toward solving Oregon's highway infrastructure problems. House Bill 2142, also referred to as the Oregon Transportation Investment Act I (OTIA I), increased several Driver and Motor Vehicle fees to secure \$400 million in bonds to increase lane capacity and improve interchanges (\$200 million), repair and replace bridges (\$130 million), and preserve road pavement (\$70 million).

Favorable bond rates resulted in the passage of the second phase of the OTIA program during the first legislative session in 2002. OTIA II added \$50 million for projects to increase lane capacity and improve highway interchanges, \$45 million for additional bridge projects, and \$5 million to preserve road pavement.

The \$500 million in bonds from OTIA I and II was combined with matching funds from local governments. This allowed ODOT and local governments to deliver transportation projects across Oregon worth a total of \$672 million.

Recently, the Oregon Legislature passed the \$2.46 billion Oregon Transportation Investment Act of 2003 (OTIA), which provides \$1.3 billion to repair or replace hundreds of aging state-owned bridges in Oregon. This portion of the act is known as the OTIA III State Bridge Delivery Program. To perform the work, ODOT will create hundreds of job opportunities. The Legislature directed ODOT to outsource the work, stimulating the state's economy by creating and sustaining additional jobs for Oregonians.

ODOT recognizes that the state bridge program is much more than repairing or replacing bridges. It is an opportunity to provide a comprehensive transportation solution that reflects Oregon's values and responds to the issues that are important to Oregonians: economic prosperity and the safety and reliability of the state highway system.

**Washington State:** The Washington State Transportation Commission approved in 2004, the Washington State Department of Transportation's (WSDOT) proposed 2005 – 2007 budget by a unanimous vote. The \$3.4 billion budget is based on existing revenues and does not include any new revenue sources. The budget includes just over \$1 billion in operating costs and about \$2.4 for capital projects.

Also approved in 2004 for Washington State was nearly \$35 million for work on 33 city and county bridges. The funding comes from the Federal Highway Bridge Replacement and Rehabilitation Program, which is administered through WSDOT.

“The bridge program provides funding to replace bridges that are at the end of their service life, and for repairs that can add years to the life of a bridge at a fraction of the cost of replacement,” explained Grant Griffin, WSDOT Local Agency Bridge Engineer. “Often bridges have aged to the point where maintenance is not keeping up with the rate of deterioration. Others may suffer from deficiencies, such as narrow width, that are inherent in their original design. Still others may be in danger of being washed out in the next flood.”

**California:** The California Department of Transportation (Caltrans) announced in April of 2004 that work is ready to begin on the \$68 million East End Avenue and Reservoir Street rail projects that will ease auto and train traffic, increase safety and help curb pollution between Los Angeles and San Bernardino counties.

Caltrans is contributing \$52.3 million to the project, the Federal Highway Administration \$15.6 million, and Metropolitan Transportation Authority \$100,000.

“Each phase of the ACE project brings us closer to creating the unprecedented transportation efficiencies envisioned by the Alameda Corridor,” said Caltrans District 7 Director Douglas R. Failing. “The East End Avenue and Reservoir Street grade separation projects are especially gratifying because they will improve the quality of life for local students, residents and motorists.”

The projects involve roadway underpasses designed to reduce congestion and locomotive noise at two major rail crossings in Pomona. They are part of the 35-mile, \$889 million Alameda Corridor-East (ACE) rail transportation improvement project connecting the Alameda Corridor

and the ports of Los Angeles and Long Beach to the transcontinental rail network. It will allow faster, more efficient distribution of an anticipated \$314 billion in annual trade. The state has provided some \$189 million for the total project.

Numerous Federal laws and policies require equal employment practices by contractors working on these federally-funded projects. Federal Highway Administration (FHWA) rules and regulations also contain equal employment requirements pertaining to contractors and subcontractors on FHWA highway construction projects. The regulations cover a broad range of contractor employment practices and procedures, and require a strong good faith effort to offer meaningful employment opportunity to women and minority applicants. Since contractors are required to maintain work environments free from discrimination, discrimination under any of these laws may have a negative impact on a contractor's eligibility to participate in federally-funded and federally-assisted construction projects.

The creation of additional job opportunities also creates need by the construction industry for a trained, skilled, and sustainable labor pool. Currently, there is a projected shortage of trained and skilled construction workers. The use of apprenticeship training programs and OJT programs is an effective method to close the gap between employers' need for diverse, skilled workers in demand occupations and the supply of prepared workers.

## COMMUNITY INVOLVEMENT PROCESS

While this White Paper is written with a focus on state transportation agencies' perspective, leadership and experience, every stakeholder will be able to be part of the solutions mentioned in this Paper and engage in resolving the workforce issues. Educators, contractors, government agencies, workforce advocates, contractor associations, unions and trade organizations, apprenticeship programs and community-based organizations can contribute to the solutions for an emerging workforce.

Relationships begun at the 2004 Youth of Color and Women in the Highway Construction Focus Group and Summit will continue to make a lasting difference. In addition, we want to recognize that stakeholders are already engaged in implementing vital solutions, and in the planning process for more; we hope the Oregon Department of Transportation (ODOT) will collaborate with their strategies to the fullest extent possible.

The White Paper and its companion Oregon Plan of Action came out of a twenty-three month planning process. ODOT sought community input starting with the Visioning Group, Focus Group and the Western Regional Summit. Over 105 industry stakeholders were invited to attend the Focus Group which included representatives from education, government, diversity advocates, contractors, apprenticeship, employer associations, unions, and trades organizations. The Visioning Group, ODOT, Oregon Tradeswomen, Inc., and the other project partners submitted names and organizations to invite to the Focus Group. Sixty-two community representatives attended the Focus Group to identify the top ten issues and barriers that have prevented the full participation of minorities and women in the highway construction trades. This was done through an organized and facilitated process (A list of attendees is included in Appendix B).

The Focus Group discussion extended to a full day of healthy dialog with highlights recorded in a DVD format distributed to invitees to the Summit. A *Compilation of Best Practice Summaries*, and the top ten issues and barriers that were derived from the Focus Group discussion and delivered to the Summit invitees. The *Compilation of Best Practice Summaries* (included as Appendix A) are brief informative paragraphs of activities that work in recruiting, training, hiring, retaining and advancing minorities and women in the trades, as well as contact information for the organization innovating the best practice. The best practices were identified from the knowledge base of those attending the Focus Group, and additional research. These materials were distributed prior to the Summit to explain and prepare attendees for the Summit. It prepared Summit attendees to bring their thoughts and ideas on the day of the Summit to find workforce strategies and solutions to the identified barriers.

Notice about the Summit went out to the fourteen western states and nationwide, inviting over 3500 stakeholders to the Summit. Summit attendees included 198 stakeholders from eleven states and the District of Columbia. Among the attendees were: thirty diversity advocates, eighteen of them representing minorities and twelve representing women; twenty-three contractors or trades employers; twenty-three educators from middle and high schools; twenty-two Department of Transportation representatives from five states; nineteen students from youth groups or schools; seventeen government agencies representing apprenticeship, civil rights,

economic development or education; fourteen apprenticeship program staff; thirteen youth organizations including four that focused on youth of color; ten tradeswomen and two tradesmen of color; ten community college representatives; six union representatives; four Federal Highway representatives; three military recruiters; and two workforce development staff.

In the morning of each of the three days, there were presentations on best practice solutions to the ten issues. In the afternoon, in facilitated small groups, attendees worked on setting forth recommended objectives and action steps to create solutions to the issues. (A list of attendees is included in Appendix B)

This White Paper is based upon research into best practices, and community input from the Focus Group and Summit.

The White Paper will analyze the identified barriers, and look at recommendations and implementation mechanisms with both regional and national applications. The purpose is to develop a template that will be highly usable throughout the Western Region States, and in fact, nationally.

The companion Oregon Plan of Action will focus on the leadership of the Oregon Department of Transportation (ODOT), with recommended objectives and action steps for both ODOT and stakeholders.

The next section, Issues and Barriers, lists the ten issues and barriers identified by Focus Group attendees in their own words, and in the priority order they selected. Following will be key recommended solutions, an analysis of each issue and barrier, and a detailed prescription for change.

## **ISSUES AND BARRIERS**

The top ten issues that were selected by Focus Participants; listed in order of the number of votes awarded by participants and in their own words.

- 1. Education that provides:**
  - Realistic understanding of the industry
  - Applicable education for the construction industry
  - Academic / technical integration
  - Adequate preparation: math, career awareness. communication, work skills
  
- 2. Lack of identifiable, coordinated life-support systems:**
  - Transportation
  - Child care
  - Family
  - Community
  - School
  - Career
  
- 3. Industry lacks a systemic response to the problem.**
  
- 4. Image, perception:**
  - Workforce
  - Cultural
  - Gender
  
- 5. Failure among existing resources to communicate and share resources (in both public and private sectors).**
  
- 6. Educators do not offer construction as a viable career option.**
  
- 7. Cultural roadblocks**
  - Language
  - Discrimination
  - Preconceptions
  - Confidence building
  
- 8. Contractors view apprentices as short-term workers and make no long-term commitment to training.**
  
- 9. Lack of mentoring and support:**
  - Journey mentors
  - Peer mentors
  
- 10. Current contract constraints limit industry's creative response.**

## KEY RECOMMENDED STRATEGIES

- A long-term commitment is needed from the Oregon Department of Transportation and other transportation agencies, to achieve results in diversifying the workforce in the trades.
- Support from the CEO of each state's transportation agency is important in order to systematize and institutionalize action steps.
- Multifaceted solutions are needed to solve the complex problem of under-representation, because of the very nature of workforce development in the construction industry; how workers enter, build careers, and remain in the highway construction trades.
- These solutions need to be implemented at multiple levels: at the policy level with leadership from directors of Departments of Transportation and from state agency directors, all the way down to program managers, local transportation departments and districts. Implementation should include stakeholders; and direct work with communities.
- Implementation of a plan to increase the numbers of women and minorities in highway construction requires adequate staffing, funding and resources, both in direct work with the community, and at the transportation agency level.
- Stakeholders are eager to be part of the solution; many of them have already implemented creative strategies. Their participation is crucial to achieving success.
- Stakeholders need leadership, coordination and resources in order to reach diversity goals. Their efforts need to be expanded to reach more minorities and women over a broader geographic reach, and the efforts need to be more in-depth.
- Stakeholders can bring in-kind and financial resources from private foundations, industry donations, fee-for-service offerings and government grants to leverage the investment in states from Federal Highway dollars.
- Continuous government investment is necessary and basic to achieving success for workforce diversity. States and regions (Maine, Seattle, Oakland) that had the highest percentage of diversity had steady government investment, plus community involvement.
- Solutions need to be institutionalized within the structure of transportation agencies, and within regular operating procedures of stakeholders.

These recommended strategies are derived from the best practices identified by the project. The recommendations found within the narrative of the White Paper incorporate the strategies, and are illustrated with examples from the Best Practices in Appendix A.

## IDENTIFIED ISSUES AND BARRIERS/RECOMMENDED STRATEGIES

Ideas and comments contained in this White Paper do not reflect the personal opinion of the writer or the writer's organization. Ideas and comments are directly derived from the discussion that took place at the Focus Group and Summit.

While the issues of minorities and women partially overlap, there are some significant differences in the needs of each group; and in the needs of female youth of color who might otherwise be unseen. Solutions are intended to hold each underrepresented group in equal regard; and to promote strategies that, while recognizing different needs, have a goal of equitable representation in the high wage, highly skilled highway construction trades.

This section will discuss the ten issues and barriers identified by Focus Group attendees followed by recommended strategies. The issues will be discussed in the priority order the Focus Group selected, except for the issue that was ranked third in importance by the Focus Group, "Industry lacks a systemic response to the problem." This issue will be discussed first, because a systemic approach based upon the nature of the construction industry sets up crucial structures from within which to more efficiently implement other solutions.

### **Issue: Industry lacks a systemic response to the problem.**

Systemic solutions will be suggested in terms of number and intensity of activities, in terms of geographic reach so that all the regions' residents may benefit, and in terms of duration so that activities will continue over time, with minimal gaps in service and leadership.

In addition, a systemic approach means that transportation agencies do not do it alone, that stakeholders are engaged and become part of the solution, both in funding initiatives and in implementing activities. The stakeholder enthusiasm expressed at the Summit proves that they are ready to be engaged.

Despite the willingness of stakeholders from contractors, educators, apprenticeship programs, other government agencies, unions, contractor associations, diversity advocates and the community to be part of creating solutions, they need a leader and a coordinator to make their efforts long-lasting and effective. This will require transportation agencies to assign the necessary resources and staff for implementation.

### **Identified Issues and Barriers:**

- A glut of workers due to current high unemployment means non-traditional workers are perceived as not being needed.
- Backlash against affirmative action means systemic affirmative action regulations are applied weakly; as state and local governments are reluctant to develop strong affirmative action procedures for fear of lawsuits or political repercussions.
- Programs and projects are short-term, unconnected; and not to the scale needed to make systemic change.

- Changing leadership at transportation agencies can disrupt continuity of programs, with corresponding loss of momentum, public knowledge of the On-the-Job-Training Program and other services.
- Diversity-building strategies may not have been institutionalized within transportation agencies, or within other areas of state government.
- Legislative mandates to transportation agencies, without accompanying resources, hamper implementation of mandates.
- Uncertainty at the federal level, in terms of legislation and in availability of training dollars, leaves strategies at risk for being unfunded.

### **Recommended Strategies:**

Four connected systems can create the systematic approach that would efficiently implement solutions:

#### **1) At the Policy Level:** Four policy-level strategies are recommended.

First, that the Director of each state's transportation agency should take leadership to create a **Diversity in Construction Advisory Committee**, convening top agency staff from Governor's Office, Employment Division, Office of Community Colleges and Workforce Development, Health and Human Services, Corrections, Oregon Department of Education, and stakeholders from education, government, diversity advocates such as community-based organizations and for-profit diversity consultants, contractors, apprenticeship programs, employer associations, unions, tradesmen of color and tradeswomen.

The Diversity in Construction Advisory Committee will meet quarterly, or as needed to advise the state transportation agency as diversity strategies are implemented; reviewing and advising on both on community-level activities as well as the creation and implementation of intergovernmental policy agreements and memorandums of understanding that serve minorities and women in highway construction goals.

Secondly, that each state's **Transportation Commission** should annually be briefed on the progress of achieving diversity in the highway and transportation construction trades workforce.

Third, the Director of each state's transportation agency reviews the agency's **internal systems** for areas to institutionalize diversity activities (for instance in internships, in community outreach activities, and in communications activities).

Finally, that the Director of each state's transportation agency adopts key measures for diversity on transportation projects to be incorporated into **annual performance measures**, and reported on annually in an annual performance report.

#### **2) Create a Communication System:** transportation agencies could take leadership to connect and train stakeholders through three communication systems, each reaching different levels.

First, an annual statewide Diversity in the Trades training conference with best practices presentations, diversity training for contractors, program replication training for community-based organizations and the chance to network. Many Summit attendees requested this training.

With the recent successful Summit as a model, and with the enthusiasm for a repeat event, replication could potentially be funded primarily by charging a fee to attend.

Secondly, annual regional meetings in each of a state's transportation regions, for best practice sharing and networking would be a venue for growing and enhancing local stakeholder engagement in solutions.

Third, each state should have a web-based center for information on resources and best practices, notification of events, posting of reports, and posting of implementation manuals which could be a 24-hour medium for inspiring effective interventions.

**3) Community Level:** Each state's transportation agency funds a consortium of community-based organization and advocates in each of the state's highway regions for the purposes of recruitment/training/placement/retention of minorities and women in highway construction trades. Awarding of transportation agency funds would be contingent on development of regional partnerships, on bringing leveraging dollars and core services to the project, and on filling gaps in services. Maine and Colorado Departments of Transportation are models in the *Best Practices* in developing consortia.

These consortia will bring transportation agency needs and concerns into a collaborative effort with existing workforce systems, while at the same time recognizing that the One-Stop/Workforce Investment Act (WIA) system does not currently serve the specific structure of the construction industry. Three unique characteristics of the construction industry are a disincentive to the WIA system: first of all the complex nature of workforce development in construction, especially the multiple unwritten application points in terms of various apprenticeship programs, on site hiring, and word of mouth hiring; secondly, the length of time from apprenticeship application to first job, which can be a year or longer; and thirdly, the seasonal or job-based nature of employment that can result in a worker having multiple employers and lay-offs a year.

Members of these Regional Community Consortia for Trades Workforce Diversity will bring leveraged dollars and activities (General Equivalency Degree, English as a Second Language, life-support systems, established programs) to assist with the work of the consortium. In some regions, potential consortium members may already be doing recruitment, training, placement, and/or retention of minorities and women for highway construction. In other regions, there may be a need for technical assistance to establish this work. Apprenticeship preparation programs for minorities and women will be sponsored through these consortiums. This consortium model was successfully applied in Maine, where Maine DOT contractors consistently achieved 10% women workers and 4% minorities (This is a state with a 3% overall minority population).

Each Area Commission on Transportation or similar body should include a member from their regional Community Consortium, if possible, and the Consortium should report annually to the Area Commission on their work.

**4) Compliance Level:** Each state's transportation agency convenes a statewide network of public works and compliance officials. This network should strongly define good faith effort and

expectations of contractors in order to both further a diverse workforce, and to establish even-handed requirements for contractors. It will work together to provide technical assistance to contractors on good faith effort strategies, and to develop purchasing and compliance structures and procedures that reward contractor success, such as the Maine Department of Transportation's prequalification procedures.

Transportation agencies should work collaboratively with the apprenticeship agency for their state, to make agreements and policy around workforce diversity issues where apprenticeship compliance and contracting compliance connect.

**Issue: Education that provides:**

- **Realistic understanding of the industry**
- **Applicable education for the construction industry**
- **Academic / technical integration**
- **Adequate preparation: math, career awareness, communication, work skills**

**This issue was selected by the Focus Group as being the most important to address, in order to increase the opportunities for youth of color and women in the highway construction trades.**

**Identified Issues and Barriers:**

Historical exclusions from the trades because of past discriminatory practices mean a community culture that remembers family stories of exclusion and discrimination, and tells young people of color that the trades are not welcoming to them. Many studies show that targeted recruitment is necessary to draw diverse candidates when an occupation or field has been underrepresented.

- Our society is still adapting to change: the 1964 Civil Rights Act opened up full participation in the trades for men of color; it wasn't until Title IX in 1972 that girls could take shop classes in high school; and most women were excluded from apprenticeship programs until the 1978 President's Executive Order 11246.
- Because of historical exclusions and societal stereotypes, youth of color and female youth need to be actively, directly, and extensively recruited into training opportunities for the trades.
- Young women are not recruited and welcomed to shop classes, and graduate with fewer technical skills. According to a report from the Oregon Department of Education Professional Technical Education, only 894 female youth in middle and high school, 13% of the students in these classes, took two or more credits of Industrial and Engineering Systems classes during the 2003-2004 school year. According to a study by the National Women's Law Center, the pervasive sex segregation of female students into traditionally female programs severely compromises their future earning power. For example, cosmetologists earn a median hourly salary of \$8.49 and childcare workers earn a median hourly salary of \$7.43. In contrast, students in the predominantly male, higher-wage careers can expect to earn median hourly salaries of an average of at least \$20 as plumbers, electricians or mechanical drafters.

- Women and people of color are underrepresented and not specifically recruited to community college trades courses and programs where they could gain the necessary technical skills.
- Because of cultural, traditional and family attitudes, girls are less likely to be chosen by family to help with technical jobs around house.
- Urban young people, unless involved in sports, may not have experiences of working hard physically, working out in weather, working with tools, or with the team nature of building tasks.
- Occupational stereotyping often keeps women from early entry-level jobs that could lead to the trades: warehouse, shop hand, gas station attendant, etc.
- Popular culture information about the trades is more like “This Old House” rather than highway, bridge, other commercial construction.

**Recommended Strategies:**

Contractors, apprenticeship programs, schools and community-based organizations have been developing strategies and conducting activities around educating minorities and women about construction for many years, with mixed results. While tremendous good will and energy has been devoted, a key factor to consider in this area is the importance of regular, sustained, targeted and in-depth interventions. Efforts have primarily been short-lived, targeted to white male youth or adults, reached a small audience or were very local. Transportation agency leadership and funding could be the venue for expanding and coordinating practitioners and activities, to keep activities focused, and, very importantly, to sustain activities over time.

The following education recommendations include a section for outreach to K-12 age youth of color and female youth, as well as a section for reaching adult women and people of color.

**K-12 age youth:**

For youth of color and female youth, an obvious strategy is to create activities that are designed for them and welcome and encourage their participation. This can sometimes be easier said than done with the refrains of, “What about the boys?” or “Why aren’t white kids included?” Constraints on school systems especially restrict such targeted efforts. On the other hand, for transportation agencies to try to educate each child; white males as well as the underrepresented groups, would take too many resources. As school systems lose funding for technical education, many groups will look to transportation agencies to take on restoring shop to the schools. Transportation agencies must say, “Our mission is to target youth of color and female youth, not to save construction-related education in each school.”

Each state’s transportation agency could convene and sponsor a Diversity in Trades Education Task Force. The Task Forces would include representation from Departments of Education, contractor associations, youth of color educators, female youth educators, community-based organizations and apprenticeship programs. Transportation agencies would provide support staff to manage their state’s Task Force, as well as designate dollars annually for the Task Force to allocate to youth education projects in their state. The charge of the Task Force would be to generate ideas, to allocate funding for targeted pilot education projects around the state, to oversee the projects, to report/share on the projects at the annual Diversity in the Trades

conference and to post project reports on their transportation agency web site. Initial funding would come from the transportation agency; however, the Task Force would seek private/public partnerships to add to transportation agency dollars.

Recommended activities to be funded could include:

- Fostering partnerships between K-12 schools, youth of color and female youth groups, and affordable housing Community Development Corporations (CDC) or Habitat for Humanity chapters in order to provide youth with summer internships and hands-on after school activities. These would both provide applicable education for the construction industry and have the effect of building experience in physical activity and tool use but be easier to arrange than internships on highway construction sites with their constraints of labor contracts, federal wage rules and safety concerns.
- Targeted recruiting of youth of color and female youth from Middle Schools to enter High School trades courses or programs, in order to increase the opportunity for youth of color and female youth to graduate from High School with technical skills. Such recruiting activities could include adoption of a school by a contractor or union as modeled by Cianbro Corporation in the *Best Practices*, collaboration among contractors, unions, apprenticeship programs and the school professional technical teachers and program advisory committees, distribution of marketing materials portraying construction in a positive light, visits from tradespeople of color and tradeswomen as role models, and the supplemental activities listed below. Oregon Tradeswomen, Inc. has a guide posted on their web site “Ten Easy Steps for Recruiting and Retaining Girls for Your Professional Technical Classes” which could help schools as they seek to diversify their trades courses.

Supplemental activities could include:

- Mentoring from tradespeople of color and tradeswomen,
- After school and summer activities such as Habitat for Humanity work,
- Summer construction academies,
- Trips to training centers and construction sites, and
- Hands-on workshops taught by tradespeople of color and tradeswomen as role models.

The Oregon Building Congress’ Summer Youth Academy, Northern New England’s Rosie’s Girls Program, New York’s Youth Construction Initiative and other youth programs in the *Best Practice Summaries* are models of youth activities that could be replicated.

Such activities could also be sponsored and coordinated for youth of color and female youth groups, such as El Programa Hispana, Girl Scouts, Self-Enhancement, the Native American Youth Association and others.

Supplemental activities would assist in retaining the youth in technical education as well as connecting them to careers when they graduate.

To be systemic, and to lead to long-term results, activities must include tracking the youth over time, and continuing to offer them information and resources toward trades careers.

It would be necessary to have transitional activities that assist high school youth of color and female youth once they graduate to either further their trades education or begin their trades careers. These transitional activities could happen as an activity funded through the Diversity in Trades Education Task Force or through the Regional Consortia.

**Community College technical programs:**

Community colleges are an excellent resource for certificated and degree training programs in a variety of trade and technical fields. They offer affordable training and have extensive support services for students. Currently most community college technical programs are underutilized in terms of women and minorities. With extensive targeted recruiting similar to Long Beach City College's Women in Trades & Technology Center in the *Best Practice Summaries*, they could be a valuable resource for change.

Most states have programs providing services for Single Parents & Displaced Homemakers (SPDH). They all have curriculum and best practices that encompass work readiness skills. They are either located on and/or affiliated with their local community college. They would potentially be excellent partners with the Regional Community Consortia for Trades Workforce Diversity & any preparation for apprenticeship training programs.

**Preparation for apprenticeship programs:**

Many examples of successful preparation for apprenticeship programs are represented in the *Best Practices Summaries*, each tailored for their particular community or target audience. From Alaska Works Partnership to the Center to Protect Worker's Rights Minority Workers Training Program, these successful programs demonstrate that apprenticeship preparation programs are training models that work in establishing minorities and women in trades careers, especially when training is combined with intensive recruiting, as well as placement and long-term retention services (at least 3 years). Retention services should include both "life-support" systems and mentoring, and will be discussed in those sections below.

Apprenticeship preparation programs bridge a skills and awareness gap in order to provide adequate preparation and realistic understanding of the industry. Essential components of apprenticeship preparation are: hands-on skills, strength building, exploration through site visits and videos into the reality of careers, nature of the industry, career planning, life skills, construction culture, construction work ethic and employment skills, how to interview, how to apply, how to stay working and connections to successful female and minority role models.

This type of training is key to achieving workforce diversity and should be a funded activity of the Regional Community Consortia. However, as mentioned above, training should not be a stand alone component, but should be combined with intensive recruiting, as well as placement, and long-term tracking and retention services for at least 5 years, in order to track to completion of apprenticeship.

**Issue: Lack of identifiable, coordinated life-support systems:**

- **Transportation**
- **Child care**
- **Family**
- **Community**
- **School**
- **Career**

**This issue was ranked second by the Focus Group in its importance, as barriers to increasing opportunities for youth of color and women in the highway construction trades.**

**Identified Issues and Barriers:**

A recently released study by the Pew Hispanic Center showed that the median net worth of white families is greater than \$80,000 while for Hispanic families it is \$7,900 and for African-American families it is \$6,000. The median income for White women averages 24.4% less than that of men, Black women average 35.6% less income and Hispanic women average 65.8% less (2004 US Census).

This difference in assets or income can dramatically affect work readiness in terms of being able to afford a decent vehicle, a full set of tools, cost of travel to and lodging at remote sites, childcare costs and other work readiness costs.

For many transportation construction jobs, workers need the ability and willingness to travel to the work, often in remote areas, and find affordable lodging, either in a travel trailer, shared hotel with another worker, tent, or car.

Minority and single female families are less likely to be able to afford to work for a time at low apprentice wages in order to build up to high journey-level wages, and are less likely to be able to afford lay-offs between jobs. When faced with a choice of a permanent \$10 an hour job at a fixed location in their own neighborhood that has no opportunity for career advancement, or a seasonal job at \$12 an hour 200 miles away where they would need pay to stay in a motel or trailer – even if it would eventually lead to a \$30 an hour career, these families lack the assets to make the long-term career growth choice. Even if they have the assets to travel, women who have the responsibility for children may find traveling distances for work impossible.

**Recommended Strategies:**

**Community-centered support:** Providing resources for coordinated work readiness systems should be included in the assignment of the Regional Community Consortia for Trades Workforce Diversity under contract with transportation agencies. Community agencies could manage a Ready-to-Earn Fund that pays for job readiness needs. A systemic approach with a long-term commitment to each student is critical.

Part of the curriculum of apprenticeship preparation training would help the students plan up front for how they will handle and prepare for work readiness needs and emergencies.

The consortia could provide training for TANF (Temporary Aid to Needy Families, commonly known as welfare) case managers and/or parole officers on the demands of highway construction trades, and help their women and minority clients make a smooth transition from poverty to a successful career, while leveraging resources from these agencies.

After graduation from apprenticeship preparation, information about community resources, and financial assistance for work needs would be part of retention services. Long-term retention services and tracking of graduates once they go to work would be an integral component of the strategy of the Community Consortia. Recruitment and training should not be stand alone components; placement and long-term retention, at least three years, are necessary to achieve long-term career stability for minorities and women in the trades.

*Best Practices* for community support are evidenced in the Port of Seattle's study of effective car ownership programs, Century Housing's extensive retention strategies and the Colorado Department of Transportation and partners "Making A Connection" consortium.

**Job-based support:** While construction companies will continue to have remote locations, demanding hours and unexpected overtime, they could put in place systems that would help those with family responsibilities more comfortably handle those demands. Like Cianbro Corporation in Maine, contractors could notify workers as soon as overtime seems likely. Contractors could make sure phones are available to notify families of changing hours, and that workers are not penalized for needing to use the phone.

Cianbro also assisted workers to set up car pools, and funded access to a child care services referral agency as part of their employee benefits package.

Apprenticeship programs, the Community Consortia, and contractors should work together to place new workers close to the worker's neighborhood whenever possible, to alleviate transportation and travel difficulties.

Providing technical assistance to contractors to help them learn about and develop such family-friendly policies, while at the same time recognizing family-friendly practices as a part of a contractor's overall good faith efforts should be part of the Agency's strengthened contractor programs (more on this under the issue "Lack of Mentoring").

**Issue: Image, perception:**

- **Workforce**
- **Cultural**
- **Gender**

**This issue was ranked fourth by the Focus Group in its importance, as a barrier to increasing opportunities for youth of color and women in the highway construction trades.**

**Identified Issues and Barriers:**

There is a general lack of information on construction careers among the public including information about how to enter, training and qualifications needed. A common perception of the industry is that construction careers are not as beneficial as white-collar work that requires a college education. There is generally less status in our culture with a career that requires working with your hands compared to wearing a suit and working in an office.

Compounding this is a lack of knowledge of the construction industry in communities of color because of historic exclusions. Family stories about past discrimination of family members may discourage youth of color from the industry.

There is also a community perception and stereotype that women can't do construction or wouldn't want to do construction. The media also lacks portrayals of women construction workers and reinforces the perception that women can't do construction or wouldn't want to do construction.

Without role models they can relate to, minorities and women will not picture themselves in construction careers.

These substantial barriers indicate a need for strong intervention in order to attract and inform minority communities and women.

**Recommended Strategies:**

**A marketing campaign:** Changing the image and perception of highway construction careers among minorities and women will mean marketing and educational campaigns that are multifaceted, sustained, have a broad reach and are targeted to minorities and women.

The task for transportation agencies is similar to the task accomplished by the Oregon Nurses Association when, addressing a severe shortage in skilled nurses, they developed a campaign targeted to attract men to the nursing field.<sup>6</sup>

Transportation agencies should develop a marketing campaign designed to attract people of color and women to highway construction careers that could include: regular ads and articles in minority community papers, ads targeted to women in general papers; posters & brochures available at the Department of Motor Vehicles, Employment Division, and Health & Human

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<sup>6</sup> To see this campaign go to <http://www.oregoncenterfornursing.org>.

Services offices; web-based information; materials to distribute at career fairs and schools such as stickers, pencils, bookmarks, magazines; television and radio public service announcements and creation of a video or DVD or CD. The Diversity in Construction Advisory Committee could advise the transportation agency on the campaign.

Marketing should be targeted; it should portray highway trades careers as suitable, achievable and financially and professionally rewarding for minorities and women.

Marketing strategies must include contact information, including an address, phone, e-mail address and web site of places for the individual person of color or woman to use to get connected to a source of further guidance and to take the next step towards highway construction careers.

Transportation agency staff should be equipped with such marketing materials so they can spread the message wherever they go. Stakeholders would also be willing to distribute materials to their constituent groups.

Trades career fairs, or even general career fairs can be an important avenue for educating the community about highway construction careers. However, transportation agencies should support career fairs primarily in terms of targeted outreach and presentation to a diversity audience.

Outreach and marketing strategies were exemplified in the *Best Practices* of the Federal Highway's Construction Career Days, the web site of the State Building & Construction Trades Council of California, and the educational programs and materials of the National Center for Construction Education & Research, among others.

**Community-centered marketing:**

Churches, community-based organizations, community colleges, organizations serving minorities or female youth, community centers, libraries, coffee shops and the like are sites to distribute marketing materials. Visits to these community locations by diverse trades workers as role models would add an additional and vital outreach component, and could be a part of the efforts of the Community Consortia. The Community Consortia could distribute marketing materials when they attended or tabled at local community events. Contact lists of each state's community groups should be developed and regularly updated by the state transportation agency's Public Affairs department.

**Marketing to educators:**

This important task will be discussed under the issue "Educators do not offer construction as a viable career option."

**Project job-specific marketing:**

Pre-construction conferences could be used to introduce diversity advocates and the Community Consortia to contractors, who could explain about the jobs expected on the project, how to qualify for and access those jobs, and how to qualify for and access any apprenticeship programs the contractor is involved with. Each state's transportation agency should use this venue to offer

technical assistance to the contractor in implementing their good faith effort plans and to assist the contractor to connect to the Community Consortia.

Community involvement meetings about new construction projects should be regularly marketed to diversity advocates and communities of color and women, and be a venue to inform the community about potential jobs.

**Issue: Failure among existing resources to communicate and share resources (in both public and private sectors).**

**This issue was ranked fifth by the Focus Group in its importance, as a barrier to increasing opportunities for youth of color and women in the highway construction trades.**

**Identified Issues and Barriers:**

A frustration expressed by stakeholders has been the multiple efforts, the investment of stakeholder time, into discussing problems and thinking about solutions around diversity issues for many years, without subsequent action. In Oregon, efforts such as the Oregon Construction Workforce Alliance (OCWA), Construction Apprenticeship & Workforce Solutions (CAWS), the South Corridor & Delta Park-Lombard Workforce Discussion Group and even the recent Summit have been focused at examining the issues and making recommendations, not at implementation or carrying out of suggestions.

When projects aimed at promoting diversity come and go, when they are not at the scale needed to provide enough services, or when there are gaps in services, there is not the same impact as sustained in-depth programs.

Previously funded ODOT workforce diversity efforts lacked an assigned strategy for sharing best practices, networking, replication or partnerships, and so became stand-alone projects without the leveraging of impact that comes from collaboration.

Differences in ideology between management and labor, between union and open-shop mean that the strategic approaches of these groups hold an inherent conflict, one that OCWA was not able to overcome, and could become a landmine in future efforts.

Other states have developed best practices that show what could be done with collaborative efforts. In particular, look at the best practices of the State of Maine, State of Colorado, the Bay Area Construction Sector Intervention Collaborative, and the Port of Seattle's Office of Port Jobs.

**Communication and sharing of resources, and the necessary commitment of resources, could lead to the regular, targeted and in-depth interventions sustained over time that will lead to ending under-representation once and for all.**

**Recommended Strategies:****Each state's transportation agencies as leader and communication hub:**

Each state's transportation agency should lead the way, working collaboratively with partners and stakeholders, to implement solutions through the structures discussed under the issue "Systemic Response."

The community of stakeholders is looking to their state's transportation agency, as the agency with both the mission and the potential source of dedicated funding, to lead the way to achieving construction workforce diversity. Systemic solutions will set up a continuous and consistent process for communicating and sharing of resources, as well as leveraging the transportation agency's investment. Setting up clear purposes and guidelines will prevent the effort from being co-opted to fight ideological battles.

Each of the State agencies suggested as partners at the policy level, has something to benefit from communicating with and sharing resources with their transportation agency: from Health and Human Services TANF recipients gaining good highway construction employment that takes them off of welfare rolls; to the unemployed workers served under the Workforce Investment Act (WIA) gaining employment; to young people served by Departments of Education finding school more relevant through a transportation agency-sponsored program; a transportation agency's directive to bring minorities and women into the transportation industry, is the catalyst for such communication and sharing.

Each state's transportation agency leadership and support of the regional consortia, and of the annual conferences and of the web site will establish a state-wide network for communication and learning. Such a network could recognize and encourage in-kind good faith effort contributions from contractors as well as sharing of information and best practices.

Solutions should be applied equitably, with even distribution across regions, and with attention to the different needs of varying communities of color and of women.

**Reporting:**

Each state's transportation agency should annually post a report on its achievement towards diversity on its website. The report should include progress towards accomplishing objectives, statistics on the diversity of the overall trades workforce, and statistics on the diversity of major projects.

**Financial resources:**

Each state's transportation agency should commit to applying to draw down the entire available OJT/SS (On-the-Job Training/Supportive Services) funds – State Options, commonly known as ½ of 1%, allowed by the Federal Transportation Act annually.

The community of stakeholders should be supportive of their state transportation agency's effort to seek dedicated funding for diversity purposes from the Federal Highway Administration and other identified funding sources.

Each state's transportation agency sponsored projects promoting workforce diversity should be awarded through a Request for Proposal (RFP) process that requires both collaboration and matching dollars in the awarding of funds. Requiring matching or leveraging dollars in the contract will increase the impact of the project, ensure collaboration, and increase the likelihood of sustainability.

WIA funds should serve construction diversity efforts better. Current law requires states to include a description in their state WIA plan of how they will serve individuals seeking non-traditional occupations, low-income individuals, displaced homemakers, and single parents. Working with state WIA officials to actualize or strengthen this area of their state WIA plan could bring resources for diversity purposes.

With the proper technical assistance, One-Stops Centers could fulfill their requirements for designing services for individuals seeking non-traditional employment, including careers in construction.

Other potential resources to seek could be:

- Replication of the investment in apprenticeship that the Governor of Washington State created by allocating the Governors' WIA discretionary funds to this purpose;
- Industry donations or in-kind investment;
- Other government grants and;
- Local or national foundations, such as the Ford Foundation, the Kellogg Foundation or the Meyer Memorial Trust.

**Transportation agencies as partners and collaborators:**

While major building projects such as Oregon's South Waterfront Development in Portland are different enough from the needs and interests of highway construction that they want their own system of establishing and monitoring trades workforce diversity, such projects are similar enough that there should be agreements made on communicating and sharing of resources.

Other municipal public works departments in cities, counties and public transportation agencies such as the City of Portland, Multnomah County, TriMet and others are potential collaborators.

Each state's apprenticeship agency, and the local office of the Office of Federal Contract Compliance Programs (OFCCP) are other important agency collaborators.

**Issue: Educators do not offer construction as a viable career option.**

**This issue was ranked sixth in importance by the Focus Group, as a barrier to increasing opportunities for youth of color and women in the highway construction trades.**

**Identified Issues and Barriers:**

Trades career options are not seen as valuable by many teachers of academic subjects and by some counselors focused on college admission, or are seen as only for troubled boys who cannot succeed academically.

There is a lack of awareness by some counselors and educators of the real situation for their students – the majority of students will not be going to college for a variety of reasons, but still need to be informed about career options, and post-secondary technical learning options. In fact, according to Dr. Susan Quattrociocchi of the Center for Learning Connections<sup>7</sup>, only 23% of careers actually require a college education, but in order for people to have a decent income, some form of post-secondary education is required.

Many educators are not aware of the academic demands of construction, especially the math skills, and of the rigorous communication skills needed. Some counselors and professional technical education teachers do not suggest construction as a viable option to female youth, reflecting a common societal preconception and bias.

School-to-work programs in the schools come and go, and are generally underfunded and understaffed. However, most schools do have a staff person responsible for working with career related learning options for students, and can be a valuable partner in this effort.

**Recommended Strategies:**

Transportation agencies and stakeholders need to strengthen and expand partnerships with schools and youth educators. A formal partnership with each state’s Department of Education could be implemented through the Diversity in Trades Education Task Force recommended earlier. A long-term institutional commitment from both transportation agencies and state education agencies is important in achieving diversity goals. *Chicago Women in Trades* provides a model in the *Best Practices* of a partnership with Chicago Public Schools.

The Diversity in Trades Education Task Force should work with each state agency to develop a statewide education campaign to inform counselors, academic subject and professional technical educators of the viability of trades careers, and especially why construction is a viable career option for minorities and female youth. This effort could be accomplished by collaboration with and presentation to professional organizations similar to the Oregon Science Teachers Association (OSTA), and the Oregon Association of Career and Technical Education (OACTE). The campaign should also reach out to leaders of youth groups in communities of color, and to leadership of female youth groups (Girl Scouts, Boys and Girls Clubs, YWCA, etc.).

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<sup>7</sup> <http://www.learningconnections.org/>

Components of the campaign could be materials that not only show the benefit of a construction career but also detail the ways that the construction trades rely on math and science, and can relate to the state and federal education standards. It could include in-service presentations, construction-related lessons available for teachers, teacher/educator workshops such as the Oregon Building Congress's Math & Science Workshops for Educators, and educator or youth leader visits to apprenticeship training centers or job sites.

**Issue: Cultural roadblocks**

- **Language**
- **Discrimination**
- **Preconceptions**
- **Confidence building**

**This issue was ranked seventh by the Focus Group in its importance, as a barrier to increasing opportunities for youth of color and women in the highway construction trades.**

**Identified Issues and Barriers:**

Language: many Latino heritage men have construction experience, but cannot enter formal apprenticeship with its higher wages, related training and long-term career avenue because of lack of English language skills.

Discrimination: Lack of custom, understanding, or clear direction from company owners can lead to discrimination against minority and female workers from their co-workers and supervisors, in hiring and training.

Many women and men of color report that they are not given the higher-level technical jobs and the on-the-job training that is a part of training in the construction trades. Training on the job is an essential part of learning in order to become fast and productive, however which worker gets assigned to what job, and how the on-the-job training is offered can be haphazard. Without the good will of a more experienced worker, and if that co-worker perceives women and people of color to be “taking our jobs” or “lazy” or “should be home minding babies,” the more experienced worker would be unlikely to train or pass on skills. Construction work is teamwork, but if one team member is not an accepted part of the team, the isolation they experience may make the job unbearable.

Preconceptions: For many construction firms, hiring decisions are decentralized and left up to job site foremen and project superintendents. If those who make hiring decisions have preconceptions about women and people of color as workers, they are likely to be last-hired, poorly trained, and first laid-off. Such stereotyping and hiring discrimination has been documented in numerous studies.<sup>8</sup>

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<sup>8</sup> See “Breaking New Ground: Worksite 2000” by Chicago Women in Trades, and “Race and the Invisible Hand: How White Networks Exclude Black Men from Blue-Collar Jobs” by Deirdre A. Royster.

Confidence building: Training and knowledge, plus being an accepted part of a team leads to confidence on the part of a worker. If the message a worker is given on the job is that they are only there to “fulfill a quota,” they are likely to lack the confidence to advocate for their own training and career growth.

Another road block can be a woman or minority worker’s family not understanding the construction industry and being less likely to support this career choice or help problem-solve on work issues.

**Recommended Strategies:**

Cultural awareness, and harassment prevention training should be required for supervisors and foremen on transportation projects. This could be in the bidding specifications as a requirement for bidding. Training could be offered at the annual Diversity in the Trades Conference.

State transportation agencies could recognize it as part of a contractor’s good faith effort if a firm has supervisor performance reviews tied to success with retaining a diverse workforce.

State transportation agencies could replicate the exemplary model developed by Maine DOT where a consultant makes monthly job site visits to women and minority workers to assure that treatment is not discriminatory, and that proper training is occurring.

Contractors should use Wider Opportunities for Women’s *Preventing Sexual Harassment* checklist to develop a harassment-free work environment.

Contractors should provide a thorough job-site orientation for incoming women and minority workers, and assign them a specific journey-level worker as their trainer/mentor. As a *Best Practice* in this area, a very useful *Apprentice Orientation Checklist* is provided in the Transition to Trainer workshop manual developed by the Wisconsin Technical College System.

Activities of the ODOT- sponsored Indian Outreach Project will demonstrate how to target a specific culture and bridge the gap between the culture and the employment process. The recommended annual Diversity in the Trades Conference could be a venue for informing contractors/owners of the findings of this important project.

ESL (English as a Second Language) skills should be part of apprenticeship preparation or services offered through the Community Consortia. These community-based assistance programs could bridge informal construction experience into formal apprenticeship. The Colorado Department of Transportation’s “Making A Connection” consortium includes a partner with expertise in assisting ESL clients to succeed in highway construction.

Strong enforcement of good faith efforts combined with clearly defining what is expected in good faith efforts as well as providing technical assistance in the implementation of good faith efforts will bring contractors into partnership with transportation agencies in implementing solutions.

Contractors could be instrumental in educating female and minority workers' families about construction, by inviting them to family nights, offering tours of job sites, and assuring the family that minority and women workers are welcome and that careers in construction are both suitable and rewarding.

**Issue: Contractors view apprentices as short-term workers, and have no long-term commitment to training.**

**This issue was ranked eighth in its importance by the Focus Group, as a barrier to increasing opportunities for youth of color and women in the highway construction trades.**

**Identified Issues and Barriers:** Acknowledging that many contractors make a commitment to training through contributing to a registered apprenticeship program, what will be discussed here is primarily the on-the-job component of being an apprentice, not the related training that happens through apprenticeship classes.

Contracting constraints encourage contractors to have a core skilled workforce that they keep working, and a seasonal unskilled workforce that comes and goes with little training. Contractors ask why they should train a worker who may next season be working for their competitor.

Training frequently happens because a more experienced worker is a buddy or becomes a friend of the new worker. When barriers of race or gender prevent friendship from forming or seeming appropriate, on-the-job training may not happen.

**Recommended Strategies:**

In order for contractors to commit to training apprentices, especially minorities and women, and not just see them as short-term workers hired only to meet government demands, contractors need a level playing field. In other words, training is expensive to do right; it takes time, time for planning, explaining and tracking. In the competitive bidding world of construction, contractors who take that time have a competitive disadvantage in bidding, if not all contractors are investing in training.

Each state's transportation agency should take all steps in its power to level the playing field, so that contractors who invest in training, invest in good faith efforts and who show results in the diversity arena are rewarded with a competitive bidding advantage.

The first step should be to define good faith efforts and hold contractors accountable to achieving them. Adequate staff should be assigned to monitor contractor performance, and to conduct compliance reviews. Performance benchmarks and reviews should be fair but strict, holding all contractors to the same level of accountability.

State transportation agencies should budget for adequate resources to monitor contractors prior to bid approval, after bid award, and throughout the course of the project. Maine DOT required contractors to fill out a pre-qualification questionnaire related to civil rights. Each state's transportation agency should adopt this strategy.

In other states, i.e., Colorado and Maine, the Department of Transportation rewards contractors' success by waiving OJT requirements if the contractor met their training and diversity commitments in the previous season. Each state's transportation agency should adopt this strategy.

Employment goals are "per craft/trade" and are not limited to entry-level work. Contractors should set up an individual file for each apprentice or trainee in order to carefully ensure that they are receiving the necessary training and being promoted promptly upon completion of training requirements.

Wherever possible, contractors should be required to submit a workforce diversity plan as a part of their bid. The Diversity Advisory Committee recommended under the issue "Systemic Response to the Problem" could develop the guidelines for such a plan.

In each state, contractors' achievement of diversity should be reported on to the Area Transportation Commissions, the annual Diversity in the Trades conference, and posted on the state DOT web site. The highest-performing contractor in each region should be recognized at the annual Diversity in the Trades conference.

Whenever possible, contractors who have had past success in achieving diversity should be rewarded by an advantage in bidding. More about this suggestion and discussion of contracting models under the issue "Contract Constraints Limit Industry's Response" below.

**Issue: Lack of mentoring and support**

- **Journey mentors**
- **Peer mentors**

**This issue was ranked ninth in its importance by the Focus Group, as a barrier to increasing opportunities for youth of color and women in the highway construction trades.**

**Identified Issues and Barriers:**

Construction success is all about relationships. Good training happens for a new worker when they have a positive relationship with the more experienced worker on the job. Information about the next job, who is hiring, or expected behaviors for a construction worker, or even where to eat lunch comes from your co-workers. Because societal biases can interfere with forming relationships, it is critical that minority and women workers have journey-level or peer mentors they can turn to for this information, and for support.

**Recommended Strategies:**

Three exceptional models of mentoring were shown at the Summit and are worthy of replication.

One was the job site mentoring offered by the Northwest Labor & Employment Office's Community Rep program in Seattle. This program places experienced workers who have been trained by community-based organizations as mentors and observers, to be advisors and mentors on the job site. This results in mentoring that happens quickly and as needed, and results in a more experienced worker being available as an advocate to intervene with job site issues.

Secondly, was the requirement Wisconsin's Technical College System that each apprentice is trained during their last term of apprenticeship on how to become a trainer of apprentices. This sets up a culture where on-the-job training is expected and standardized, not just based on a relational or buddy system. Each state's apprenticeship agency should mirror Wisconsin's Transition to Trainer workshop and make it a requirement.

Third, was Maine Department of Transportation's model where a consultant makes monthly job site visits to women and minority workers to assure that treatment is not discriminatory, and proper training is occurring.

Studies by Oregon's Bureau of Labor and Industries show that men of color have the highest attrition rate of any group of apprentices. A mentoring project specific to minority men could provide the support needed for men of color to be retained in the trades.

State transportation agencies should work with community partners to adopt one or more of the mentoring models described above.

National partners in developing mentoring could be NAWIC - the National Association for Women in Construction<sup>9</sup> and TNT - Tradeswomen Now and Tomorrow<sup>10</sup>.

Mentoring *Best Practices* within industry are showcased from the Carpenter's Sisters in the Brotherhood events, the International Brotherhood of Electrical Worker's Electrical Workers Minority Caucus and Tradeswomen, Inc. of California's Tradeswomen Policy Committee and Tradeswomen's Conference.

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<sup>9</sup> [www.nawic.org](http://www.nawic.org)

<sup>10</sup> [www.tradeswomennow.org](http://www.tradeswomennow.org)

**Issue: Current contract constraints limit industry’s creative response.**

**This issue was ranked tenth in its importance by the Focus Group, as a barrier to increasing opportunities for youth of color and women in the highway construction trades.**

**Identified Issues and Barriers:** Contracting constraints encourage contractors to have a cursory good faith effort program.

Contractors’ purpose and goal is to make money for their firm. This basic fact of life needs to be taken into account in encouraging contractors to be full participants in diversity solutions. It would be counter-productive to their main goal to ask contractors to spend money on good faith efforts without a return on their investment.

In order for contractors to commit to continuous, extensive and meaningful good faith efforts, contractors need a level playing field. In other words, good faith effort is expensive to do right; it takes time, time for planning, carrying out and tracking. In the competitive bidding world of construction, contractors who take that time have a competitive disadvantage in bidding, unless recognition of those efforts gains points towards the award of bid.

The Office of Federal Contract Compliance Programs (OFCCP) requires 16 points of good faith effort on projects with federal funding. If a contractor truly implements efforts in all of the 16 areas, it would go a long way towards achieving diversity goals.

**Recommended Strategies:**

Each state transportation agency should explore, to the fullest extent possible, through purchasing systems and the compliance process, ways to reward or provide incentives to contractors who invest in good faith efforts or who achieve a diverse workforce, as well as ways to encourage contractors to strongly participate in achieving good faith efforts.

State transportation agencies should strongly enforce a contractor’s achievement of the 16 points of good faith effort on projects with federal funding. OFCCP has a training manual that offers many good suggestions on activities to carry out to meet these efforts.

Cultural awareness and harassment prevention training should be required for supervisors and foremen on transportation projects. This could be in the bidding specifications as a requirement for bidding. Training could be offered at the annual Diversity in the Trades Conference.

Each state transportation agency could recognize as part of a contractor’s good faith effort if a firm has supervisor performance reviews tied to success with retaining a diverse workforce.

In order to bid on transportation construction projects, contractors should have a good faith effort plan; if the contractor achieved a diverse workforce, they should receive a waiver of the requirement to formally participate and report on the OJT program. Those contractors that don’t meet good faith effort requirements should receive monetary penalties for violations, with the fines going into a fund for diversity programs.

Each state transportation agency could work with contractors and their associations to include clear EEO provisions in collective bargaining agreements with unions. One example of a provision is to allow contractors to directly indenture qualified minority or female workers into apprenticeship positions if the union could not provide them diverse workers after a specified period of time.

Each state transportation agency must have adequate staff to monitor contractor performance and compliance and accomplishments of good faith efforts.

A *Best Practice* in creative contracts was developed by TriMet, Portland, Oregon's public transportation agency, and put into application on the recent light rail line built by contractor Stacy & Witbeck. Design-Build<sup>11</sup> was the model they used. Both TriMet and Stacy & Witbeck are convinced that the value-added in achieving social objectives and in reducing costs made this alternative to the lowest-bidder system work for them.

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<sup>11</sup> For more information on Design-Build, see the February 2002 Oregon Public Contracting Coalition Design-Build Whitepaper, available on the Oregon Associated General Contractors web site - <http://www.agc-oregon.com/>.

## **ENGAGING AND WORKING WITH STAKEHOLDERS**

Stakeholders from the education sector, contractors, government agencies, diversity advocates, contractor associations, unions, apprenticeship programs and community, as well as tradesmen of color and tradeswomen themselves, have shown that they are eager to be part of creating solutions to the under-representation of women and minorities.

The networking, information sharing and training system for a regular Diversity in the Trades conference as well as a web-based center for information on resources and best practices recommended in the beginning of the Strategies section will be the glue that holds these groups together.

It is hoped that other states will adopt the Summit model so that networking, information sharing and training can occur in other regions. The network for communication, Summit planning timeline, Best Practices summaries, and White Paper developed by the Youth of Color and Women in Highway Construction Project are all available for other states to use as tools for continuing the important work begun at the Summit.

## CONCLUSION

- Transportation agencies are in the position to become leaders and catalysts for change.
- Stakeholders are eager to be part of the solution; they need leadership to coordinate their efforts.
- Transportation agency resources can have a multiplying effect on the leveraging resources of stakeholders.
- There is significant momentum towards change because of the Western Regional Summit; now is the time to take advantage of that momentum.

By creating the Western Regional Summit on Youth of Color and Women in the Highway Construction Trades, ODOT has shown great vision and leadership. From this position of leadership in the realm of highway construction, ODOT's vision, realized in the Summit, can serve as a catalyst for change. The stakeholders who participated in the event, and many more whose concern is for the future highway construction workforce, are eager to be a part of the solution. ODOT's example can offer leadership to coordinate the efforts of stakeholders across Oregon and the Western Region.

Transportation agencies alone do not have the resources to solve the problem, but when their resources are leveraged with the resources of stakeholders, the effect will multiply. As noted earlier, disjointed, limited-scale and duplicative efforts of stakeholders could make a greater impact on the future workforce if an agency or organization could coordinate these efforts and the resources that sustain them. Transportation agencies are the position of being that leader.

The Western Regional Summit re-energized stakeholders and Departments of Transportation across the region. The Summit has focused attention on this vital issue. There is a momentum towards change; now is the time to take advantage of that momentum.

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