



The Road To Good Jobs: Making Training Work

Boosting construction job access through
training and apprenticeship programs

Transportation Equity Network – October 2011

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About TEN

The Transportation Equity Network (TEN) is a grassroots network of more than 350 community organizations in 41 states working to create a more just, prosperous, and connected America. TEN is a project of Gamaliel, a faith-based community organizing network with regional affiliates around the United States.

TEN seeks to meet the challenges of current crises in the economy, energy security, and climate change by building healthy, equitable communities and providing fair public transportation access to all.

Our goals include:

- More transportation-related jobs for low-income people, women, and people of color;
- Increased investment in mass transit;
- Greater community participation in transportation planning and funding; and
- Growth that is smart *and* equitable, serving the needs of the poor, the working class, the middle class, and people of color.

Acknowledgements

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TEN dedicates this study to the countless grassroots leaders who follow in the tradition of Rosa Parks and work for transportation equity every day.

Civil rights advances in this country are not brought about solely by grassroots effort; civil servants who are dedicated to the cause of fair and good government are key to making these advances real and comprehensive. **TEN would like to thank** the Civil Rights Division of the Federal Highway Administration for their part in advancing the cause of civil rights.

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“Transportation investments like these will create jobs, increase mobility, improve quality of life for all Americans and strengthen our national economy.”

– USDOT Sec’y Raymond LaHood, August 2011

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Executive Summary

As joblessness continues to afflict millions of Americans, the national conversation has turned to investments in transportation infrastructure as a path to job creation. Calls to invest in our crumbling highways and bridges and cash-strapped transit systems have come from the AFL-CIO and U.S. Chamber of Commerce alike. President Obama's American Jobs Act proposes \$50 billion in immediate spending on transportation infrastructure¹, while Congressional Republicans are reportedly seeking ways to boost revenue levels in their proposed federal transportation authorization act.²

With major transportation infrastructure investments all but guaranteed as a near-term job creation strategy, **the question is whether those hit hardest by the recession—minorities and women—will be lifted up or left behind.**

Both groups have traditionally been excluded from the multi-billion-dollar highway construction field. The economic crisis makes that exclusion even more painful: about 26 percent of African-Americans and 22 percent of Hispanics were unemployed or underemployed as of September 2011, versus 15 percent of white workers.³ And while male unemployment has been ticking downward since June 2009, female unemployment has risen.⁴

The on-the-job training (OJT) and apprenticeship programs administered by state Departments of Transportation are an indispensable first step toward expanding job access for women and minorities in the highway construction field. **If transportation investments are to fuel an equitable economic recovery, states must make robust use of these training programs to break down historical barriers and help build careers, lives, and communities.**

The Transportation Equity Network (TEN) report *The Road to Good Jobs: Making Training Work* presents the **first-ever compilation of data from all 50 states** and the District of Columbia on the use of OJT and apprenticeship programs to boost job access for minorities and women in the federal highway construction field.

The study includes data from 2008-10, and features:

- Top 10 rankings in numerous categories
- Full data for all 50 states and DC in appendices and a **sortable Excel spreadsheet** (<http://transportationequity.org/dmddocuments/Making-Training-Work-all-data.xls>)

¹ <http://www.whitehouse.gov/the-press-office/2011/09/08/fact-sheet-american-jobs-act>

² <http://dc.streetsblog.org/2011/09/23/mica-gop-leadership-looking-to-raise-transportation-spending-levels-in-bill/>

³ "Stocks plunge after US hiring dries up in August," Associated Press, Sep. 6, 2011. Accessed at http://www.forbes.com/feeds/ap/2011/09/02/general-financials-us-wall-street_8657253.html

⁴ Bureau of Labor Statistics, cited by Institute for Women's Policy Research (<http://www.marketwatch.com/story/the-recovery-job-gap-between-women-and-men-remains-large-2011-09-07>).

- Brief interviews with trainees and public officials on the benefits of OJT and apprenticeships
- An analysis of the role of community organizing in making training programs work

Key report findings

- Most states are doing a poor job of using OJT and apprenticeship programs to boost highway construction job access for minorities and women.
- Four states—Illinois, Indiana, Connecticut, and Minnesota—succeeded in increasing the percentage of both women and people of color in training programs from 2008-10.
- Community organizing by TEN members to push for broad use of OJT and apprenticeship programs led to top rankings and breakthroughs in Missouri, Michigan, Minnesota, and Illinois
- Indiana and Illinois were standout states in terms of the overall increase in the use of OJT/apprenticeships from 2008-10, surpassing more populous states such as California and New York.
- Only two states had at least 50% women in OJT/apprenticeship programs from 2008-10: Maine (75%) and North Dakota (55%).

Key recommendations

- Adopt the Missouri Model of workforce development as the national and state workforce development model for federally funded projects;
- Strengthen current legislation in order to maximize workforce hours and funds allocated for targeted workers;
- Adopt community workforce agreements to ensure uniformity, stability, and accountability; and
- Adopt local workforce ordinances on all large, publicly funded construction projects.

Conclusions

- To help ensure a truly broad-based, equitable economic recovery, all 50 U.S. states should be maximizing the use of OJT/apprenticeship programs to help build an equitable and highly skilled construction workforce.
- Some states are getting closer to this goal through robust use of OJT and apprenticeship programs. Other states have not yet made any meaningful effort to use this opportunity to diversify and strengthen their construction workforces.
- The majority of states are somewhere in the middle. We need to provide the resources and support these states need to continue their work to create an equitable and highly skilled workforce.
- Policy at all levels should support states' efforts to use OJT and apprenticeships to ensure that our coming investments in transportation infrastructure create good jobs that benefit all members of the community, including women and minorities.



Introduction

America is in the midst of the greatest economic crisis it has faced in generations. While all Americans are suffering, people of color and women have been hit particularly hard. As of September 2011, roughly 15 percent of white workers were unemployed or underemployed, while 26 percent of African Americans were in the same condition, together with 22 percent of Hispanics.⁵ And while unemployment among men has been slowly decreasing since June 2009 (from 10.6 percent to 9.6 percent), unemployment among women has actually increased during the same period (from 8.3 percent to 8.5 percent).⁶ **The primary challenge facing our country today** is not only how to put Americans back to work, but how to make sure that job creation efforts don't leave behind those who have been hit hardest by the recession—and those who are still losing ground.

With job creation now a universal priority, one source of new jobs has drawn a broader consensus than any other: **investments in transportation infrastructure**. Voices as diverse as the U.S. Chamber of Commerce and the AFL-CIO, as well as elected officials on both sides of the partisan divide, are unanimous in their call to invest in rebuilding America's crumbling roads and bridges, to sustain our cash-starved transit systems. The Obama Administration has pressed repeatedly for major new transportation infrastructure investments, both to create jobs in the short term, and to keep America competitive in a world where countries such as Germany

⁵ "Stocks plunge after US hiring dries up in August," Associated Press, Sep. 6, 2011. Accessed at http://www.forbes.com/feeds/ap/2011/09/02/general-financials-us-wall-street_8657253.html

⁶ Bureau of Labor Statistics, cited by Institute for Women's Policy Research (<http://www.marketwatch.com/story/the-recovery-job-gap-between-women-and-men-remains-large-2011-09-07>).

and China are investing tens of billions in their own transportation systems. Most recently, this push has taken the form of President Obama's American Jobs Act, which proposes \$50 billion in immediate spending on transportation infrastructure, including highways.⁷

Though many construction projects are currently stalled, we are likely to see a surge of new transportation infrastructure investments over the next several years. The Transportation Equity Network (TEN) has long advocated for such investments. The question now is whether those investments will drive **a true economic recovery by expanding opportunity for those hit hardest by the recession**—people of color, women, and low-income people—or whether they will deepen existing inequities. This question is particularly urgent given that the construction industry has traditionally been dominated by white males. If transportation infrastructure projects are going to drive an equitable recovery, they need to include paths for people of color, women, and low-income people to enter the industry.

On the Job Training (OJT) and apprenticeship programs provide just this path.

Administered by state Departments of Transportation, these programs give women and people of color the chance to acquire the skills, knowledge, and relationships they need to enter the construction industry at a critical time. In addition to increasing short-term job access, these programs let struggling Americans build the kinds of careers that sustain lives, families, and entire communities.

Many OJT programs offer a wage benefit to contractors when they employ OJT workers. Other states have constructed more ambitious OJT programs, such as the Missouri Model, which devoted 0.5% of the total project budget on several projects to training and apprenticeship programs, and set a goal that a certain percentage of the total project work hours be performed by women, people of color, and economically disadvantaged individuals. Many states are using Labor/Management Apprentice programs as well to promote comprehensive, multi-year training for construction workers. Most of these states are using funds from SAFETEA-LU (the Safe, Accountable, Flexible, Efficient Transportation Equity Act, a Legacy for Users) and ARRA (America Recovery and Reinvestment Act) to fund their OJT and apprenticeship programs.

While these programs exist in various forms around the country, there has until now been no comprehensive picture of where they are being used most actively and successfully, nor any way to compare the use of them state by state. This study fills that gap.

This study is **the first to compile and analyze data** that state Departments of Transportation provide to the federal government on participation in OJT and apprenticeship programs for federally funded highway construction. The study covers 2008-10, and includes data from all 50 states and Washington, DC.

⁷ <http://www.whitehouse.gov/the-press-office/2011/09/08/fact-sheet-american-jobs-act>

The goal of this study is to report on which states are using OJT and apprenticeship programs to make real progress toward equity and diversity in highway construction, and which states are failing to recruit and train women and minorities. The study also describes the steps necessary to improve states' progress, and provides local, state and federal policy recommendations.

Maximizing the Use of Training Programs

While most state DOTs have yet to take full advantage of OJT and apprenticeship programs, several have made very significant gains over the last three years in breaking down barriers to participation in the transportation construction industry.

Using data for all 50 states from 2008 to 2010, we looked at three indicators of success: the total number of trainees⁸ during that period, the percentage change in trainees from 2008 to 2010, and what percentage of federally funded highway construction jobs were filled by trainees.

Table 1: Top 10 states by total number of OJT trainees and apprentices, 2008-2010

| State | # of OJT and apprentices (2008-10) |
|--------------|------------------------------------|
| Indiana | 1573 |
| Illinois | 1028 |
| California | 915 |
| Michigan | 911 |
| Wisconsin | 793 |
| New York | 778 |
| Ohio | 706 |
| Washington | 637 |
| Pennsylvania | 616 |
| Oregon | 554 |

Table 2: Biggest increases in OJT trainees and apprentices, 2008-2010

| State | % Increase | Numerical increase |
|---------------|------------|--------------------|
| Texas | 3175% | 127 |
| Massachusetts | 512% | 174 |
| Illinois | 240% | 221 |
| Utah | 202% | 95 |
| Delaware | 183% | 11 |
| Idaho | 93% | 25 |
| Connecticut | 57% | 32 |
| Indiana | 51% | 214 |
| Nebraska | 50% | 23 |
| Alaska | 47% | 17 |

All three measures are important. It is essential that states have a long-term commitment to training programs. It is no less important that they continue to improve, as all 50 states and the District of Columbia leave great room for improvement. Finally, it is essential that trainees are able to actually access jobs once their training or apprenticeship is complete.

⁸ It should be noted that because training/apprenticeship programs last for varying lengths of time, we based our calculations on "trainee-years." For instance, if one state had a single trainee in a three-year training program from 2008-10 (three "trainee-years" total) it would receive the same weight in our calculations as three trainees who each completed a single-year training program.

Indiana leads the nation in the overall number of trainees, with 1,573 over three years. For a smaller state, this is a mighty achievement. Illinois outstripped larger states like California and New York, and California came in third, with 915 trainees.

Table 3. Top 10 states by percentage of federally funded construction jobs filled by OJT trainees and apprentices, 2008-10

| State | % of jobs filled by O/A |
|---------------|-------------------------|
| Hawaii | 8.2% |
| Minnesota | 6.9% |
| Wisconsin | 6.3% |
| Massachusetts | 6.2% |
| Oregon | 5.8% |
| Indiana | 4.8% |
| Washington | 4.7% |
| California | 4.5% |
| Maryland | 4.3% |
| Alaska | 4.0% |

with between 6-7% each, and Oregon was close behind with 5.8% of federally funded highway jobs filled by trainees or apprentices.

In terms of increase in trainees from 2008 to 2010, Texas leaps out with a 3175% increase over the last three years (Table 2). The huge figure indicates that Texas was making virtually no use of training programs as of three years ago (with just four participants in 2008), but it is also a real sign of progress since then. Massachusetts is second with a 512% increase, and Illinois and Utah both top 200% increases.

In terms of the percentage of federally funded highway construction jobs filled by trainees and apprentices, Hawaii led the way with 8.2% (Table 3). Minnesota, Wisconsin, and Massachusetts followed,

Participation by Women in Training Programs

Table 4: Top 10 states by increase in percentage of women in OJT and apprenticeship programs from 2008-2010

| State | % increase, 2008-10 | Total women in O/A, 2008-10 | Women as % of total OJT and apprentices |
|-------------|---------------------|-----------------------------|---|
| Utah | 450% | 22 | 8% |
| Idaho | 400% | 9 | 8% |
| Illinois | 350% | 114 | 11% |
| Texas | 200% | 14 | 5% |
| Connecticut | 133% | 18 | 8% |
| New York | 94% | 135 | 17% |
| Minnesota | 57% | 48 | 10% |
| Indiana | 52% | 228 | 14% |
| Alaska | 38% | 22 | 18% |
| Michigan | 23% | 134 | 15% |

Table 5: Top 10 states by percentage of women as OJT and apprentices, 2008-10

| State | % women |
|---------------|---------|
| Maine | 75% |
| North Dakota | 55% |
| Vermont | 47% |
| Rhode Island | 31% |
| West Virginia | 29% |
| Kentucky | 27% |
| New Hampshire | 23% |
| Massachusetts | 20% |
| Virginia | 20% |
| Montana | 19% |

OJT and apprentice programs seek to increase the number of women being trained for—and eventually occupying—jobs in the construction field. Utah and Idaho showed high increases in the percentages of women in their training programs, 450% and 400% respectively, though the three-year total number of women in the programs remained low, with 22 women in Utah and only nine in Idaho.

Though these increases are considerable, it should be noted that in all of these states, women make up a far smaller percentage of trainees than they ought to: from 5-18%. Several states do

significantly better, as seen in Table 5.

Maine and North Dakota are the only states that have succeeded in recruiting women into at least half of their OJT/apprenticeship positions. The next eight states have percentages of women participants between 19% and 47%.

Participation by People of Color in Training Programs

Table 6: Top 10 states by minority participation in OJT and apprenticeships, 2008-10

| State | % of OJT and apprentice positions filled by minorities |
|----------------|--|
| Maryland | 90% |
| Georgia | 81% |
| Louisiana | 76% |
| New Mexico | 76% |
| Florida | 73% |
| Texas | 72% |
| South Carolina | 70% |
| Delaware | 68% |
| Oklahoma | 65% |
| DC | 61% |
| Virginia | 61% |

The leader in terms of recruiting minorities into training programs is Maryland, which filled 90% of its OJT and apprentice positions with minority workers from 2008-2010—a great step toward a more diverse construction workforce. Maryland, together with states such as Georgia (81%), Louisiana (76%), New Mexico (76%), and Florida (73%), is setting a high, but appropriate, bar for other states with significant minority populations to match.

Another statistic to be examined is the percentage increase of minority participation over the past three years. Massachusetts boasts a huge increase of 1,500%, the highest of any state, though it began with a mere three minority trainees in 2008. Wisconsin, Connecticut, and Florida follow with more than three-fold increases.

These results suggest a genuine commitment from these states toward increasing minority participation in the construction industry, a standard TEN would like to see more states meet—especially those with high minority populations.

Table 7: Top 10 states by percentage increase in minorities in OJT and apprenticeships, 2008-2010

| State | % Increase | Total # minorities, 2008-10 |
|---------------|------------|-----------------------------|
| Massachusetts | 1500% | 89 |
| Wisconsin | 335% | 253 |
| Connecticut | 328% | 124 |
| Florida | 305% | 176 |
| Wyoming | 214% | 33 |
| Illinois | 183% | 209 |
| Vermont | 67% | 23 |
| Delaware | 67% | 19 |
| Indiana | 65% | 415 |
| Minnesota | 57% | 101 |

Table 8: Top 10 states by percentage increase in OJT/apprenticeship positions from 2008-10, by category

| % Increase in women | % Increase in minorities |
|---------------------|--------------------------|
| Utah | Massachusetts |
| Idaho | Wisconsin |
| Illinois | Connecticut |
| Texas | Florida |
| Connecticut | Wyoming |
| New York | Illinois |
| Minnesota | Vermont |
| Indiana | Delaware |
| Alaska | Indiana |
| Michigan | Minnesota |

It is worth noting the consistent performance by four states—Illinois, Indiana, Connecticut, and Minnesota—in increasing the percentage of both women and people of color in training programs (Table 8). These four states increased their recruitment and training of women and

minorities at the same time, while states such as Maine or Maryland seemed to specialize in a single category (see Appendices B and C).

The Role of Community Organizing

The influence of community organizing on the success of training programs is demonstrated by the cases of Missouri, Michigan, Minnesota, and Illinois—states where TEN and its local affiliates have made strong grassroots organizing pushes in support of OJT and apprenticeship programs in highway construction.

Table 9: Top 10 states by total OJT and apprenticeships, 2008

| State | Total O/A |
|------------|-----------|
| Indiana | 421 |
| California | 374 |
| Wisconsin | 339 |
| Oregon | 305 |
| New York | 286 |
| Michigan | 278 |
| Ohio | 257 |
| Missouri | 246 |
| Washington | 235 |
| Minnesota | 216 |

Table 10: Top 10 states by minorities in OJT and apprenticeships, 2008

| State | Minority O/A |
|--------------|--------------|
| Michigan | 124 |
| Missouri | 113 |
| Indiana | 109 |
| Georgia | 105 |
| New York | 101 |
| Pennsylvania | 61 |
| Oregon | 60 |
| Hawaii | 53 |
| Ohio | 53 |
| Washington | 48 |

Table 11: Top 10 states by women in OJT and apprenticeships, 2008

| State | Women O/A |
|---------------|-----------|
| Indiana | 60 |
| Michigan | 43 |
| Ohio | 37 |
| Missouri | 36 |
| Pennsylvania | 35 |
| Oregon | 34 |
| New York | 31 |
| Wisconsin | 24 |
| Washington | 19 |
| West Virginia | 19 |

Missouri

In Missouri, TEN affiliates Metropolitan Congregations United (MCU), Metro Organization for Racial and Economic Equity (MORE²), and United Congregations of the Metro East (UCM) have worked with the Missouri DOT to create a workforce development and training program so successful it has become a national model—the “Missouri Model.” As Tables 9-11 show, the program put Missouri in the Top 10 in all three categories in 2008, the year the Missouri Model was established.

In addition to the outstanding results in 2008, the work of TEN affiliates helped make Missouri 11th in the nation in terms of percentage of trainees relative to total employees on federal highway projects for 2008-10 (3.9%, see Appendix A).

The Missouri Model recommends reserving at least 0.5% of project budgets for on-the-job training and apprenticeship programs, and devoting 30% of the work hours to economically disadvantaged individuals, minorities and women. Versions of this model have been used on two major highway and bridge programs so far: the \$550 million I-64 highway reconstruction project, which was completed three weeks early and \$11 million under budget, and the Christopher Bond Bridge. A modified version of the plan was used on the Mississippi River Bridge Project in St. Louis, Missouri.

The Missouri Model has been acknowledged by USDOT Secretary Ray LaHood. In addition, the model has been recommended for nationwide use in a series of workshops sponsored by FHWA for signature projects such as a Rapid Bus Project near Hartford, CT and the Kosciuszko Bridge in New York City.

It should be noted, however, that the overall number of trainees in Missouri has fallen since the breakthrough year of 2008. Dr. John Gaal, Director of Training and Workforce Development at Carpenters' District Council of Greater St. Louis, explains the ongoing challenge:

Today's economy is different than it was four years ago. The structure of today's training programs has to be focused on retention of workers, not just recruitment. In 2007, on the I-64 highway project, 80% of the workforce development program was focused on recruiting, 20% on retention. Today, that's flip-flopped: 80% has to be on retention, 20% on recruiting.

Michigan

In Michigan, TEN affiliates Gamaliel of Michigan, MOSES, EZEKIEL, and ISAAC worked strenuously with the Michigan DOT to shape their RCAR program (Road Construction Apprenticeship Readiness). The program began in 2008, resulting in Top 10 showings in all three categories that year (see Tables 9-11).

Over the three-year period studied, RCAR helped move Michigan to 4th place in terms of OJT trainees and apprentices from 2008-10 (Table 1). In addition, it led to a 48% increase in minority participation in training programs from 2008-10, making Michigan 12th in the nation by this measure.

Michigan is also tied for 12th in the nation in terms of percentage of trainees relative to total employees on federal highway projects (3.7%, see Appendix A), just behind Missouri.

Minnesota

In Minnesota, the statewide, faith-based community organizing group ISAIAH conducted a five-year campaign to win a greater commitment from the Minnesota Department of Transportation (MnDOT) to training low-wage workers, people of color, and women in the highway construction field. In 2010, MnDOT agreed to set aside 0.5% of the total budget of all federal highway projects statewide to training and apprenticeships for low-wage workers, people of color and women.⁹ The funds are projected to total \$6.2 million over five years.

ISAIAH won the statewide commitment from MnDOT—the first of its kind anywhere in America—after mobilizing more than 6,000 people of faith, conducting 10 public meetings, holding numerous legislative hearings, and working to pass legislation requiring MnDOT to report progress on their workforce diversity goals.

Illinois

In Illinois, TEN members have persistently promoted the Missouri Model through the tenure of three different Illinois Department of Transportation (IDOT) directors. In the spring of 2010,

⁹ <http://minnesota.publicradio.org/display/web/2010/05/24/mndot-minority-programs/>

Illinois activists saw their efforts come to fruition with the passage of the Illinois Project Labor Agreement Act.

The legislation has strong provisions aimed at increasing workforce diversity in the construction trades, and follows years of efforts to foreground the issue by members of Gamaliel of Illinois (United Congregations of Metro East, Quad Cities Interfaith, Faith Coalition for the Common Good, and Gamaliel of Metro Chicago).

Community Voices

Lester Woods, Jr., External Civil Rights Officer, Missouri Department of Transportation:

In the midst of cutbacks and challenges, federal regulations give every state the opportunity to utilize some funds toward on-the-job training and apprenticeship efforts. Even with a downturn and cutbacks, states can still do something to create a more prepared workforce. And even without state or federal dollars, there are still ways to build relationships and ‘connect the dots’ among stakeholders in a way that has beneficial results in putting people in jobs.



‘Connecting the dots’ means bringing the right people to the table together to gain a unified focus for developing training and equipping people to go to work on construction projects. That was a success in Missouri on the I-64 project, and we’ve done it on a couple of other projects too.

Workforce development matters because it lets us build a prepared workforce overall. We believe the economic situation is going to turn around at some point. Workforce development allows people the opportunity to be prepared for when it does turn around: it gives them the skills, the classroom time, and the equipment they need to go to work.

Dr. John Gaal, Director of Training and Workforce Development at Carpenters’ District Council of Greater St. Louis:

What training programs do is establish a baseline of skills that will immediately benefit workers on the job site. People who’ve been through the program, you know they’ve got skills, you know they’ve got staying power. But in this economy, not all of them are able to find work right away.



Focusing on retention means giving those people some higher-level skills that will differentiate them in their job search. There are people who are already in the system, who’ve established their commitment, but still need help in finding jobs.

Today's economy is different than it was four years ago. The structure of today's training programs has to be focused on retention of workers, not just recruitment. In 2007, on the I-64 highway project, 80% of the workforce development program was focused on recruiting, 20% on retention. Today, that's flip-flopped: 80% has to be on retention, 20% on recruiting.

We did a survey of stakeholders in the industry to help decide how we can best spend scarce training resources today: Is it better to focus on recruitment or retention? We've found that 70% say the right thing to do is to reach back to people who've graduated from training programs but aren't yet working in the industry and upscale their education.

Rocky Hwasta, Retired Carpenter, Carpenters' Local 212, Cleveland, OH:



In 1985, I was at a point in my life where I was working in a low-paying job with no benefits. I wanted to make a career change to a job that gave me more personal satisfaction, a higher wage, and benefits and to provide my children with a better life. In the summer of that year I was chosen to participate in a union-sponsored carpentry pre-apprenticeship class with 24 other people—all men—based on my test score. After completing the five-week

course, I was sent to a bridge job to perform concrete formwork.

During the next 25 years, I worked on more state-funded bridge jobs and all other aspects of the carpentry trade. My choice to swing a hammer paid off. I built things with my own hands. These accomplishments gave me a great sense of pride in my job. I gained skills that I continually improved and that no one could ever take away from me.

Thanks to the opportunity that pre-apprenticeship training gave me, I realized my goals of an improved life for my family, personal satisfaction and substantial wages and benefits. Now I am pleasantly retired, receiving an extremely worthwhile pension, continually serving my union, and fervently advocating for tradeswomen.

Honesty Smith-Cousins, Carpenter, Cleveland, OH:

I am a black female, and I have been in a union for six years. I was originally a floor-layer; now I'm a carpenter. I went through an apprenticeship program called UCIP-ASAP (Apprenticeship Skill Achievement Program). It was an eight-week course. There were math classes, workout classes to build strength, the chance to visit all the union halls and pick which one you wanted. Afterward, they find a contractor to hire you for 90 days.

It was a great program. It taught the kinds of skills you need to be successful on the job. You couldn't be late. You couldn't miss more than three days. It trained people to be on time. There

was some classroom learning, but most of the learning was in the field. That way you learn hands-on.

I love construction. I love to move around, to work with people, to work with my hands. I will stay in construction if I can. I love what I do.

Dr. Ron Trimmer, Jobs Task Force Leader, United Congregations of Metro East (UCM):

I am a Gamaliel and Transportation Equity Network (TEN) trained volunteer leader. Being an advocate for worker justice has been a big part of my life for the last 10 years. It has really changed my life and has been a blessing.



When TEN adopted the local hiring legislation as part of its platform, I took advantage of my frequent work trips to Washington, DC, to set up appointments on Capitol Hill to promote it. Community organizers helped me get my foot in the door with Barack Obama when he was an IL senator on the joint-House Senate Transportation Committee. He sponsored the local hiring legislation in the Senate and built bipartisan support for it. It became law as part of SAFETEA-LU (Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users).

Metropolitan Congregations United of St. Louis (MCU) joined with the United Congregations of Metro East (UCM) to advocate for our “Jobs Now” proposal for the I-64 construction project in St. Louis. Eventually we won an agreement that 0.5% of the total project cost be used for construction training, and that 30% of the work be reserved for the graduates of the training. The program gained national recognition as the “Missouri Model.”

Currently, I am working as a member of Gamaliel of Illinois to include our minority and female participation and training requirements into the Illinois AFL-CIO Project Labor Agreement and the IDOT On-the-Job Training Special Provisions with the contractors. We are also working on several other projects involving Community Benefits Agreements around High Speed Rail, the extension of the Red Line, and the building of a third airport in Chicago.

Best Practices and Barriers

There are four key elements to the successful use of OJT and apprenticeship programs:

- **Maximizing overall participation.** States such as Indiana, Illinois, California, and Michigan are making vigorous use of existing training programs. Texas’ remarkable improvement in the use of training programs is also worth noting (a 3175% increase over three years).
- **Recruiting and retaining minorities.** Missouri and Michigan have been successful in increasing the recruitment and training of minorities, while states such as New York have maintained high minority participation numbers year to year.

- **Recruiting and retaining more women.** Most state DOTs fall far short when it comes to training women in the transportation construction field, especially minority women. Among the exceptions are Utah and Idaho, which are greatly increasing the percentage of women in their programs, while Maine and North Dakota have maintained high percentages.
- **Partnering with community organizations.** A useful model for increasing the effectiveness of OJT and apprenticeship programs has come where state DOTs and stakeholders in the construction industry have partnered with community groups such as Metropolitan Congregations United in St. Louis and MOSES in Detroit, both TEN members. Workers in Missouri and Michigan are reaping the benefits of these partnerships, which have led to the Missouri Model and the RCAR (Road Construction Apprenticeship Readiness) programs.

In addition to analyzing this state DOT data for this study, TEN also engaged state DOTs on key training and recruiting efforts. Twenty-seven states and the District of Columbia responded to our extended survey. These surveys provide glimpses of creative and effective best practices that are helping states reach their DOT hiring goals. States like Minnesota and Tennessee and the District of Columbia have designed innovative methods for recruiting and monitoring their DOT OJT and apprenticeship programs. Unfortunately, the states that are failing to recruit and train women and minorities also failed to respond to our extended survey.

When asked what are the biggest barriers to the success of their state's OJT and apprenticeship program, the most common response was a lack of qualified trainers among the state's contractors to properly train OJT and apprenticeship participants. Other barriers cited by states included poor tracking of successful practices and a lack of information about employment rates. The slow economy was also cited as a barrier because it has adversely affected the entire construction field, including road building.

Federal, State, and Local Policy Recommendations

Recommendation 1: Adopt the Missouri Model of workforce development as the national and state workforce development model for federally funded projects.

The success of projects like the I-64/US 40 and the Christopher Bond Bridge projects in Missouri, as well as the Marquette Interchange in Wisconsin, has resulted in five other state DOTs adopting similar programs. Key features of this model include:

1. 20% of workforce hours devoted to on-the-job training for minorities, women, and low-income individuals;
2. 0.5% of the total project budget invested in pre-apprenticeship training for and recruitment of minorities, women, and low-income individuals; and
3. a community partnering agreement based on the input of community stakeholders and designed to ensure accountability and transparency throughout the project.

TEN urges the U.S. DOT and state DOTs to adopt the Missouri Model to ensure that federal funds allow low-income people—especially women and minorities—the opportunity to access living wage jobs and career paths, ultimately benefiting their lives, families, and communities.

Recommendation 2: Strengthen current legislation in order to maximize workforce hours and funds allocated for targeted workers.

On-the-job training, apprenticeships, and pre-apprenticeship programs are important vehicles for increasing diversity and access to good paying jobs in the construction workforce. The current transportation authorization, SAFETEA-LU, includes three key elements:

1. a “Sense of Congress” [Section 1920(b)] encouraging federal, state, and local governments, as well as training programs and community-based organizations to collaborate in order to ensure quality training opportunities and local participation in transportation projects;
2. access to funds [Section 5204(e)] from five core programs for workforce development activities that include training programs, academic course study, apprenticeship programs, and support for short-term work details or rotational assignments for the purpose of employee development; as well as
3. the option to draw down up to 0.5% of funds apportioned to them for the Surface Transportation Program (STP) [23 USC §104(b)(3)] for training and services that support and enhance the effectiveness of OJT programs.

TEN urges Congress to mandate the use of these funds for quality OJT and apprenticeship programs; and to increase the draw-down to 1%. TEN further urges State DOTs to reserve 30% of the work hours on highway and transit projects for low-income people—especially women and minorities.

Recommendation 3: Adopt community workforce agreements to ensure uniformity, stability, and accountability.

Community workforce agreements benefit the community and other stakeholders by giving them the opportunity to shape expectations for workforce recruitment, training, and participation that reflect the demographics of the community; maximize returns on federal, state, and local government investments in development; and hold project developers and contractors accountable for their commitments to the community. TEN urges State DOTs and local governments to adopt community workforce agreements on large, publicly-funded construction projects.

Recommendation 4: Adopt local workforce ordinances on all large, publicly funded construction projects.

Local workforce ordinances, like the one adopted in Kansas City, Missouri [Chapter 38, Code of Ordinances, §§38-83.1 through 38-83.13], increase the recruitment, training and retention of residents, minorities, and women in the community, resulting in a continually growing skilled and

diverse workforce. TEN urges local governments to adopt workforce ordinances for all large, publicly funded construction projects.

Conclusion

To help ensure a truly broad-based, equitable economic recovery, all 50 U.S. states should strive to achieve an equitable and highly skilled construction workforce.

Some states are getting closer to this goal through robust use of OJT and apprenticeship programs. Other states have not yet made any meaningful effort to use this opportunity to diversify and strengthen their construction workforces.

The majority of states are somewhere in the middle. We need to provide the resources and support these states need to continue their work to create an equitable and highly skilled workforce. Policy at all levels should support states' efforts to use OJT and apprenticeships to ensure that our coming investments in transportation infrastructure create good jobs that benefit all members of the community, including women and minorities.

Appendix A – Total OJT/Apprenticeship Participation, 2008-10

(Download **sortable Excel spreadsheet** at <http://transportationequity.org/dmdocuments/Making-Training-Work-all-data.xls>)

| TOTAL OJT AND APPRENTICESHIP PARTICIPATION - 2008-10 | Total O/A 2008 | Total O/A 2009 | Total O/A 2010 | Total O/A 2008-10 | # change 2008-10 | % change 2008-10 | Total Ees 2008-10 | O/A as % of Ees |
|---|-----------------------|-----------------------|-----------------------|--------------------------|-------------------------|-------------------------|--------------------------|------------------------|
| Alabama | 58 | 56 | 49 | 163 | -9 | -16% | 10046 | 1.6% |
| Alaska | 36 | 32 | 53 | 121 | 17 | 47% | 2989 | 4.0% |
| Arizona | 66 | 65 | 64 | 195 | -2 | -3% | 9518 | 2.0% |
| Arkansas | 29 | 2 | 23 | 54 | -6 | -21% | 7100 | 0.8% |
| California | 374 | 224 | 317 | 915 | -57 | -15% | 20162 | 4.5% |
| Colorado | 58 | 49 | 67 | 174 | 9 | 16% | 8696 | 2.0% |
| Connecticut | 56 | 90 | 88 | 234 | 32 | 57% | 7046 | 3.3% |
| DC | 17 | 9 | 20 | 46 | 3 | 18% | 3062 | 1.5% |
| Delaware | 6 | 5 | 17 | 28 | 11 | 183% | 2552 | 1.1% |
| Florida | 67 | 83 | 90 | 240 | 23 | 34% | 29031 | 0.8% |
| Georgia | 141 | 43 | 101 | 285 | -40 | -28% | 18380 | 1.6% |
| Hawaii | 68 | 47 | 33 | 148 | -35 | -51% | 1794 | 8.2% |
| Idaho | 27 | 27 | 52 | 106 | 25 | 93% | 5771 | 1.8% |
| Illinois | 92 | 623 | 313 | 1028 | 221 | 240% | 35893 | 2.9% |
| Indiana | 421 | 517 | 635 | 1573 | 214 | 51% | 33045 | 4.8% |
| Iowa | 66 | 79 | 57 | 202 | -9 | -14% | 12222 | 1.7% |
| Kansas | 65 | 29 | 26 | 120 | -39 | -60% | 7677 | 1.6% |
| Kentucky | 36 | 35 | 40 | 111 | 4 | 11% | 9182 | 1.2% |
| Louisiana | 46 | 25 | 16 | 87 | -30 | -65% | 7873 | 1.1% |
| Maine | no data | 13 | 11 | 24 | N/A | N/A | 1870 | 1.3% |
| Maryland | 20 | 178 | 16 | 214 | -4 | -20% | 4983 | 4.3% |
| Mass. | 34 | 163 | 208 | 405 | 174 | 512% | 6526 | 6.2% |
| Michigan | 278 | 274 | 359 | 911 | 81 | 29% | 24953 | 3.7% |
| Minnesota | 216 | 128 | 122 | 466 | -94 | -44% | 6727 | 6.9% |
| Mississippi | 64 | 18 | 11 | 93 | -53 | -83% | 18289 | 0.5% |
| Missouri | 246 | 134 | 155 | 535 | -91 | -37% | 13560 | 3.9% |
| Montana | 32 | 39 | 32 | 103 | 0 | 0% | 6160 | 1.7% |
| Nebraska | 46 | 43 | 69 | 158 | 23 | 50% | 4868 | 3.2% |
| Nevada | 68 | 50 | 36 | 154 | -32 | -47% | 5092 | 3.0% |
| New Hamp | 9 | 15 | 11 | 35 | 2 | 22% | 2773 | 1.3% |
| New Jersey | 111 | 5 | 9 | 125 | -102 | -92% | 6029 | 2.1% |
| New Mexico | 0 | 3 | 30 | 33 | 30 | N/A | 4242 | 0.8% |
| New York | 286 | 287 | 205 | 778 | -81 | -28% | 23853 | 3.3% |
| North Carolina | 44 | 19 | 64 | 127 | 20 | 45% | 20910 | 0.6% |
| North Dakota | 21 | 23 | 16 | 60 | -5 | -24% | 8024 | 0.7% |
| Ohio | 257 | 250 | 199 | 706 | -58 | -23% | 27494 | 2.6% |
| Oklahoma | 17 | 0 | 9 | 26 | -8 | -47% | 16635 | 0.2% |
| Oregon | 305 | 113 | 136 | 554 | -169 | -55% | 9587 | 5.8% |
| Pennsylvania | 175 | 217 | 224 | 616 | 49 | 28% | 25615 | 2.4% |
| Rhode Island | 25 | 6 | 8 | 39 | -17 | -68% | 1706 | 2.3% |
| South Carolina | 42 | 14 | 34 | 90 | -8 | -19% | 7794 | 1.2% |
| South Dakota | 44 | 33 | 27 | 104 | -17 | -39% | 5830 | 1.8% |
| Tennessee | 63 | 94 | 59 | 216 | -4 | -6% | 21949 | 1.0% |
| Texas | 4 | 129 | 131 | 264 | 127 | 3175% | 58322 | 0.5% |
| Utah | 47 | 86 | 142 | 275 | 95 | 202% | 10129 | 2.7% |

| | | | | | | | | |
|---------------|-----|-----|-----|-----|------|------|-------|------|
| Vermont | 27 | 16 | 17 | 60 | -10 | -37% | 3968 | 1.5% |
| Virginia | 12 | 32 | 17 | 61 | 5 | 42% | 16489 | 0.4% |
| Washington | 235 | 220 | 182 | 637 | -53 | -23% | 13421 | 4.7% |
| West Virginia | 84 | 47 | 72 | 203 | -12 | -14% | 5464 | 3.7% |
| Wisconsin | 339 | 218 | 236 | 793 | -103 | -30% | 12625 | 6.3% |
| Wyoming | 81 | 92 | 48 | 221 | -33 | -41% | 10810 | 2.0% |

Appendix B – Total OJT/Apprenticeship Participation Among Women, 2008-10

(Download **sortable Excel spreadsheet** at <http://transportationequity.org/dmdocuments/Making-Training-Work-all-data.xls>)

| TOTAL WOMEN IN OJT AND APPRENTICESHIP PROGRAMS - 2008-10 | O/A Women 2008 | O/A Women 2009 | O/A Women 2010 | Total O/A Women 2008-10 | # change women 2008-10 | % change women 2008-10 | Total O/A 2008-10 | Women as % of total O/A |
|--|----------------|----------------|----------------|-------------------------|------------------------|------------------------|-------------------|-------------------------|
| Alabama | 8 | disc* | 1 | 9 | -7 | -88% | 163 | 6% |
| Alaska | 8 | 3 | 11 | 22 | 3 | 38% | 121 | 18% |
| Arizona | 0 | 0 | 5 | 5 | 5 | N/A | 195 | 3% |
| Arkansas | 2 | 0 | 3 | 5 | 1 | 50% | 54 | 9% |
| California | 9 | 4 | 5 | 18 | -4 | -44% | 915 | 2% |
| Colorado | 8 | 2 | 4 | 14 | -4 | -50% | 174 | 8% |
| Connecticut | 3 | 8 | 7 | 18 | 4 | 133% | 234 | 8% |
| DC | 2 | 4 | 0 | 6 | -2 | -100% | 46 | 13% |
| Delaware | 0 | 1 | 2 | 3 | 2 | N/A | 28 | 11% |
| Florida | 12 | 10 | 3 | 25 | -9 | -75% | 240 | 10% |
| Georgia | 7 | 6 | 4 | 17 | -3 | -43% | 285 | 6% |
| Hawaii | 6 | 0 | 1 | 7 | -5 | -83% | 148 | 5% |
| Idaho | 1 | 3 | 5 | 9 | 4 | 400% | 106 | 8% |
| Illinois | 10 | 59 | 45 | 114 | 35 | 350% | 1028 | 11% |
| Indiana | 60 | 77 | 91 | 228 | 31 | 52% | 1573 | 14% |
| Iowa | 9 | 9 | 6 | 24 | -3 | -33% | 202 | 12% |
| Kansas | 9 | 1 | 2 | 12 | -7 | -78% | 120 | 10% |
| Kentucky | 13 | 6 | 11 | 30 | -2 | -15% | 111 | 27% |
| Louisiana | 0 | 0 | 0 | 0 | 0 | N/A | 87 | 0% |
| Maine | no data | 10 | 8 | 18 | N/A | N/A | 24 | 75% |
| Maryland | 3 | 0 | 4 | 7 | 1 | 33% | 214 | 3% |
| Massachusetts | 0 | 46 | 35 | 81 | 35 | N/A | 405 | 20% |
| Michigan | 43 | 38 | 53 | 134 | 10 | 23% | 911 | 15% |
| Minnesota | 14 | 12 | 22 | 48 | 8 | 57% | 466 | 10% |
| Mississippi | 2 | 0 | disc* | 2 | N/A | N/A | 93 | 2% |
| Missouri | 36 | 11 | 22 | 69 | -14 | -39% | 535 | 13% |
| Montana | 3 | 13 | 4 | 20 | 1 | 33% | 103 | 19% |
| Nebraska | 0 | 6 | 8 | 14 | 8 | N/A | 158 | 9% |
| Nevada | 1 | 0 | 2 | 3 | 1 | 100% | 154 | 2% |
| New Hampshire | 2 | 4 | 2 | 8 | 0 | 0% | 35 | 23% |
| New Jersey | 15 | 1 | 1 | 17 | -14 | -93% | 125 | 14% |
| New Mexico | 0 | 0 | 0 | 0 | 0 | 0% | 33 | 0% |
| New York | 31 | 44 | 60 | 135 | 29 | 94% | 778 | 17% |
| North Carolina | 6 | 1 | 5 | 12 | -1 | -17% | 127 | 9% |
| North Dakota | 10 | 15 | 8 | 33 | -2 | -20% | 60 | 55% |

| | | | | | | | | |
|----------------|----|----|----|-----|-----|-------|-----|-----|
| Ohio | 37 | 32 | 26 | 95 | -11 | -30% | 706 | 13% |
| Oklahoma | 1 | 0 | 2 | 3 | 1 | 100% | 26 | 12% |
| Oregon | 34 | 12 | 22 | 68 | -12 | -35% | 554 | 12% |
| Pennsylvania | 35 | 40 | 37 | 112 | 2 | 6% | 616 | 18% |
| Rhode Island | 11 | 0 | 1 | 12 | -10 | -91% | 39 | 31% |
| South Carolina | 4 | 2 | 1 | 7 | -3 | -75% | 90 | 8% |
| South Dakota | 4 | 4 | 0 | 8 | -4 | -100% | 104 | 8% |
| Tennessee | 2 | 6 | 1 | 9 | -1 | -50% | 216 | 4% |
| Texas | 2 | 6 | 6 | 14 | 4 | 200% | 264 | 5% |
| Utah | 2 | 9 | 11 | 22 | 9 | 450% | 275 | 8% |
| Vermont | 12 | 10 | 6 | 28 | -6 | -50% | 60 | 47% |
| Virginia | 3 | 7 | 2 | 12 | -1 | -33% | 61 | 20% |
| Washington | 19 | 20 | 18 | 57 | -1 | -5% | 637 | 9% |
| West Virginia | 19 | 18 | 22 | 59 | 3 | 16% | 203 | 29% |
| Wisconsin | 24 | 17 | 19 | 60 | -5 | -21% | 793 | 8% |
| Wyoming | 12 | 13 | 6 | 31 | -6 | -50% | 221 | 14% |

NOTE: “disc*” indicates that there are discrepancies in the state’s data reporting that prevent the recording of a single figure.

Appendix C – Total OJT/Apprenticeship Participation Among Minorities, 2008-10

(Download **sortable Excel spreadsheet** at <http://transportationequity.org/dmdocuments/Making-Training-Work-all-data.xls>)

| TOTAL MINORITIES IN OJT AND APPRENTICESHIP PROGRAMS - 2008-10 | O/A Minorities 08 | O/A Minorities 09 | O/A Minorities 10 | Total O/A Minorities 2008-10 | # change min. 08-10 | % change min 08- 10 | Total O/A 2008-10 | Minorities as % of total O/A |
|--|-------------------------|-------------------------|-------------------------|------------------------------------|------------------------------|------------------------------|-------------------------|------------------------------------|
| Alabama | 35 | disc* | 22 | 57 | -13 | -37% | 163 | 35% |
| Alaska | 22 | 11 | 22 | 55 | 0 | 0% | 121 | 45% |
| Arizona | 24 | 30 | 33 | 87 | 9 | 38% | 195 | 45% |
| Arkansas | 12 | 1 | 18 | 31 | 6 | 50% | 54 | 57% |
| California | disc* | 160 | 178 | 338 | N/A | N/A | 915 | 37% |
| Colorado | 34 | 29 | 42 | 105 | 8 | 24% | 174 | 60% |
| Connecticut | 18 | 29 | 77 | 124 | 59 | 328% | 234 | 53% |
| DC | 17 | 8 | 3 | 28 | -14 | -82% | 46 | 61% |
| Delaware | 6 | 3 | 10 | 19 | 4 | 67% | 28 | 68% |
| Florida | 21 | 70 | 85 | 176 | 64 | 305% | 240 | 73% |
| Georgia | 105 | 37 | 88 | 230 | -17 | -16% | 285 | 81% |
| Hawaii | 53 | no data | no data | 53 | N/A | N/A | 148 | 36% |
| Idaho | 11 | 4 | 8 | 23 | -3 | -27% | 106 | 22% |
| Illinois | 23 | 121 | 65 | 209 | 42 | 183% | 1028 | 20% |
| Indiana | 109 | 126 | 180 | 415 | 71 | 65% | 1573 | 26% |
| Iowa | 24 | 28 | 24 | 76 | 0 | 0% | 202 | 38% |
| Kansas | 24 | 23 | 19 | 66 | -5 | -21% | 120 | 55% |
| Kentucky | 12 | 11 | 10 | 33 | -2 | -17% | 111 | 30% |
| Louisiana | 33 | 23 | 10 | 66 | -23 | -70% | 87 | 76% |
| Maine | no data | 1 | no data | 1 | N/A | N/A | 24 | 4% |
| Maryland | 9 | 174 | 9 | 192 | 0 | 0% | 214 | 90% |
| Mass. | 3 | 38 | 48 | 89 | 45 | 1500% | 405 | 22% |
| Michigan | 124 | 135 | 183 | 442 | 59 | 48% | 911 | 49% |

| | | | | | | | | |
|----------------|---------|-----|---------|-------|-----|------|-----|-----|
| Minnesota | 30 | 24 | 47 | 101 | 17 | 57% | 466 | 22% |
| Mississippi | disc* | 0 | no data | disc* | N/A | N/A | 93 | N/A |
| Missouri | 113 | 67 | 64 | 244 | -49 | -43% | 535 | 46% |
| Montana | 8 | 15 | 6 | 29 | -2 | -25% | 103 | 28% |
| Nebraska | no data | 4 | 0 | 4 | N/A | N/A | 158 | 3% |
| Nevada | 35 | 29 | 14 | 78 | -21 | -60% | 154 | 51% |
| New Hamp | 5 | 7 | 2 | 14 | -3 | -60% | 35 | 40% |
| New Jersey | 44 | 0 | 9 | 53 | -35 | -80% | 125 | 42% |
| New Mexico | 0 | 2 | 23 | 25 | 23 | N/A | 33 | 76% |
| New York | 101 | 114 | 105 | 320 | 4 | 4% | 778 | 41% |
| North Carolina | 30 | 8 | 21 | 59 | -9 | -30% | 127 | 46% |
| North Dakota | 5 | 7 | 2 | 14 | -3 | -60% | 60 | 23% |
| Ohio | 53 | 58 | no data | 111 | N/A | N/A | 706 | 16% |
| Oklahoma | 12 | 0 | 5 | 17 | -7 | -58% | 26 | 65% |
| Oregon | 60 | 30 | 44 | 134 | -16 | -27% | 554 | 24% |
| Pennsylvania | 61 | 71 | 68 | 200 | 7 | 11% | 616 | 32% |
| Rhode Island | 6 | 2 | 3 | 11 | -3 | -50% | 39 | 28% |
| South Carolina | 35 | 7 | 21 | 63 | -14 | -40% | 90 | 70% |
| South Dakota | 11 | 11 | 6 | 28 | -5 | -45% | 104 | 27% |
| Tennessee | 0 | 35 | 16 | 51 | 16 | N/A | 216 | 24% |
| Texas | no data | 101 | 88 | 189 | N/A | N/A | 264 | 72% |
| Utah | 5 | 21 | no data | 26 | N/A | N/A | 275 | 9% |
| Vermont | 3 | 15 | 5 | 23 | 2 | 67% | 60 | 38% |
| Virginia | 7 | 20 | 10 | 37 | 3 | 43% | 61 | 61% |
| Washington | 48 | 64 | 48 | 160 | 0 | 0% | 637 | 25% |
| West Virginia | 17 | 1 | 4 | 22 | -13 | -76% | 203 | 11% |
| Wisconsin | 43 | 23 | 187 | 253 | 144 | 335% | 793 | 32% |
| Wyoming | 7 | 4 | 22 | 33 | 15 | 214% | 221 | 15% |

NOTE: “disc*” indicates that there are discrepancies in the state’s data reporting that prevent the recording of a single figure.

Appendix D – Methodology and Background on Form 1392

Methodology

The data contained in this study was drawn from Form FHWA-1392, Federal-Aid Highway Construction Summary of Employment Data, which state Departments of Transportation complete every year to provide a snapshot of employees, including a breakdown for women, minorities, and job types. Data on women and minorities are usually monitored by the state DOT Civil Rights Administrator. State DOTs, in turn, depend on reports from multiple contractors for much of the data contained on these forms. State highway officials or contract compliance managers sign off on the forms and they are ultimately compiled by the USDOT in Washington, DC.

With so many different entities involved in the completion and processing of these forms, discrepancies in the data can occur. Some of the discrepancies in the raw data may be the result of different interpretations of the form, while others may be due to data entry errors at the

state level. Many states submitted forms with one or more questions left blank, which we have noted in the master data table.

The preparers of this report made every attempt to use the data as reported by each state, unless the discrepancies were so clear and significant that including it would have degraded the accuracy of the study. In some cases where there were discrepancies in raw data, we were able to use the rest of the data provided on the form to discern the state's intent and amend the discrepancies. In cases where we were not able to discern the intent of the state DOT, we noted that on the master data table. Our decision not to include discrepant data where we could not discern the state's intent means that the actual performance of some states may be better than we were able to report in this study.

Background on Form 1392

This study uses the United States Department of Transportation form 1392. Prime contractors in the U.S. who are building a project using Federal Highway Administration funds give the demographic information of all their employees for one pay period in late July to the state DOT on an annual basis. Form 1392 is compiled by the state DOT for the federal government using the information from the contractors. The study includes 2008, 2009 and 2010.

From FHWA FAQ

(Accessed at <http://www.fhwa.dot.gov/resourcecenter/teams/civilrights/ojtfaqs.cfm>)

43. What OJT reports are required?

Contractors are required to submit a Federal-aid Highway Construction Contractors Annual EEO Report, FHWA-1391. The PR-1391 annual report is submitted by the contractor to the STA, each July, for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. The employment data entered on the PR-1391 reflects the workforce on board during all or any part of the last payroll period preceding the end of the month of July.

The contractor is also required to collect and report training data. (23 CFR Part 230, Appendix A to Subpart A, (10) (a-c)) The STA must submit a written report of its external training programs and activities which includes accomplishments of its OJT training program goal. In the event the STA does not attain its goal during a calendar year, the STA at the end of the calendar year will inform the FHWA Division Administrator the reasons for its inability to meet the suggested minimum number of training slots and the steps to be taken to achieve the goal during the next calendar year. The information is to be submitted not later than 30 days from the end of the calendar year. (23 CFR 230.111 (b))

44. What data should be collected?

The following data is gathered for the 1391 report required by federal-aid highway contractors:

- The total number of employees;

- The total number of all minorities;
- The total number of each ethnic group employed;
- The total number of apprentices;
- The racial and gender breakout of apprentices by classification;
- The total number of OJT trainees;
- The racial & gender breakout of OJT trainees by classification;
- The number of projects being reported on and;
- The total dollar value of the projects reported on.

The STA submits its annual OJT program reports to its FHWA Division Office. The Headquarters Office of Civil Rights is responsible for capturing civil rights program reports nationally. The only report Headquarters collect is the Federal-Aid Highway Construction Summary of Employment Data (Form PR 1392) which is completed by the STA, summarizing the reports on PR-1391 for the month of July received from all active contractors and subcontractors. The employment data entered on the PR-1391 reflects the workforce on board during all or any part of the last payroll period preceding the end of the month of July. The report includes a breakdown of minority, non-minority, and women within each construction craft for OJT trainees and apprentices. The report does not include federal dollars allocated for each state. The report captures the dollar value of the contractor who submitted the report.