

## Case Study

To enhance the effectiveness of its On-the-Job Training (OJT) program, the Michigan Department of Transportation piloted the OJT Voluntary Incentive Program (VIP). The OJT VIP program offers opportunities for participating contractors to earn bid incentives for exceeding their assigned OJT goals.

Between 2018 and 2021, this pilot program in Michigan demonstrated that an incentive-based OJT program can increase construction career opportunities for workers in the region.

Office of Infrastructure:  
FHWA-HIF-22-029  
January 2022

# Michigan Boosts Local Construction Workforce Through Innovative Training Strategy

*This case study provides an overview of implementation, benefits, challenges, and strategies of the Michigan Department of Transportation On-the-Job Training Voluntary Incentive Program.*

## Introduction

The Federal Highway Administration (FHWA) On-the-Job Training (OJT) Program requires State Departments of Transportation, as recipients of Federal transportation funds, to create training opportunities on their Federally assisted contracts ([23 CFR 230.107 and 111](#)). State DOTs comply with this requirement by setting OJT trainee goals on specific contracts or by requiring prime contractors to meet a certain number of trainee hours each year (*Id.*).

States' implementation of the OJT Program requirement not only increases the current and future availability of a skilled labor pool, but also creates a more diverse labor pool. The FHWA OJT Program's primary objective is for "training and upgrading minority group workers, women and disadvantaged persons" (23 CFR 230.111 (d)(1)). Thus, the program requires Federal-aid contractors to make full use of training programs and to make best efforts to recruit trainees from groups that have experienced historical exclusion in the construction industry (23 CFR 230, Appendix A to Subpart A).

This case study summarizes an innovative, incentive-based modification of the Michigan Department of Transportation (MDOT) OJT program. As described in this case study, MDOT reports its OJT Voluntary Incentive Program (OJT VIP) has successfully contributed to more apprenticeships, more program graduates, higher contractor participation, and significant trainee diversity over a 3-year period. The information in this case study may be useful to consider in developing workplans for the new contracting initiative announced by FHWA in 2021.



## **Background on Recent FHWA Labor-Related Contracting Initiatives**

The pilot program discussed in this case study was initially developed by the Michigan Department of Transportation (MDOT) in response to the U.S. Department of Transportation (USDOT) Local Labor Hire Pilot Program (LLHPP) contracting initiative, which was in effect from 2015 to 2017 (80 FR 12257). The 2015–2017 LLHPP allowed recipients and subrecipients to utilize various contracting requirements that generally have been disallowed due to concerns about adverse impacts on competition. USDOT stated it was interested in contracts that use local or other geographic labor hiring preferences, economic-based labor hiring preferences (i.e., for low-income workers), and labor hiring preferences for veterans (*Id.*, at 12258).

Following two extensions—on March 17, 2016 (81 FR 14524) and January 18, 2017 (82 FR 5645)—USDOT rescinded the pilot program on October 6, 2017 (82 FR 46716). During the 2 1/2 years the LLHPP was in effect, FHWA approved pilot program workplans from 11 State and local agencies, encompassing 18 construction projects. Participants in the LLHPP committed to evaluating and reporting on the effects of the relevant contracting requirements on competitive bidding, effectiveness and efficiency of Federal funds, and integrity of the competitive bidding process.

To enhance the effectiveness of OJT programs and other workforce development efforts by project sponsors, FHWA in May 2021 launched the Enhancing Highway Workforce Development Opportunities Contracting Initiative (86 FR 27667), which is similar to the 2015–2017 LLHPP contracting initiative. The May 2021 initiative provides a new 4-year pilot program that offers State DOTs more flexibility in developing workforce requirements. This pilot allows State DOTs to use “geographic, economic, or other hiring preferences,” which may include directing prime contractors to recruit and hire trainees and apprentices from areas in which Federal-aid highway projects are located. This pilot also allows State DOTs to create innovations in implementing their OJT programs, such as creating procurement incentives for prime contractors that exceed OJT goals. The FHWA would like to explore whether these flexibilities could result in a larger and more diverse pool to expand the Nation’s current and future workforce. For more information, see <https://www.fhwa.dot.gov/construction/workforcedevelopment>.

## **On-the-Job Training in Michigan**

The Michigan Department of Transportation (MDOT) recognized that its construction workforce was rapidly aging and fewer younger workers were choosing heavy highway construction careers. While MDOT had an established OJT Program, it desired to do more to increase its effectiveness.

In response to USDOT’s 2015 initiative mentioned above, MDOT saw an opportunity to jumpstart the agency’s workforce efforts by creating a modified OJT pilot program. MDOT’s existing OJT program assigned each Federal-aid prime contractor a trainee goal to be met each year. As with all FHWA OJT programs, the MDOT program emphasized the importance of recruiting and training minorities, women, and other disadvantaged persons to meet that goal. MDOT conceived an improved OJT program model where contractors could earn competitive bid incentives for exceeding their assigned annual trainee goal.

In 2016, MDOT proposed its experimental OJT pilot program, called the OJT Voluntary Incentive Program (VIP) to FHWA, requesting approval under FHWA’s Special Experimental Project No. 14

(SEP-14) program to (in part) “assess the impact of contractual bid incentives to increase workforce participation from historically under-represented populations (minority and low income).”<sup>1</sup> As part of its request, MDOT proposed awarding bid incentives (for purposes of determining lowest responsive bidder on select MDOT Federal-aid projects) in \$50,000 increments, up to a maximum of \$500,000, to participating contractors that exceeded their assigned annual trainee goals in 1,000 hour increments in the previous year. More information about MDOT’s program is available on MDOT’s website, [www.Michigan.gov/OJT](http://www.Michigan.gov/OJT), and through links provided below.

After consulting with construction industry stakeholders, MDOT revised its OJT VIP proposal and submitted an amended request in 2017.<sup>2</sup> FHWA approved MDOT’s pilot OJT VIP to run from 2018 to 2021 in three of the State’s southeastern transportation regions, including Metro Detroit.<sup>3</sup> In 2020, FHWA approved MDOT’s request to extend the pilot for one more year.<sup>4</sup>

The State has monitored the OJT VIP annually since it began and reports it has contributed to more apprenticeships, more program graduates, higher contractor participation, and significant trainee diversity. According to data provided by MDOT to the FHWA Michigan Division in April 2021, MDOT’s 2020 program included 295 trainees placed and working, 32 percent of whom were women and 68 percent of whom were minority men identifying with one or more minority groups.

“This program is benefiting and helping us to do our mission, which is to get more women, minority and disadvantaged individuals into the highway construction industry,” said Tonya Doyle-Bicy, MDOT business and workforce diversity manager, and a program manager. “It’s a pipeline to a long-term career and not just a job. And because it leads to journeyman status, more people have good jobs, make good wages, and have careers.”



*MDOT runs ads throughout Michigan to promote the OJT program. Source: MDOT*

<sup>1</sup> MDOT Innovative Contracting Practices SEP-14 Workplan, October 5, 2016, <https://www.fhwa.dot.gov/programadmin/contracts/sep14mi161005.pdf>

<sup>2</sup> MDOT Innovative Contracting Practices SEP-14 Workplan, November 6, 2017, <https://www.fhwa.dot.gov/programadmin/contracts/sep14mi171106.pdf>

<sup>3</sup> FHWA memorandum, February 6, 2018, <https://www.fhwa.dot.gov/programadmin/contracts/sep14mi180206.pdf>

<sup>4</sup> FHWA memorandum, December 22, 2020

## Implementation

MDOT's OJT Program is contractor-based. That is, contractors are assigned an annual trainee goal rather than project-specific goals and can move trainees from project to project. Trainees' hours are not limited to just one project. These additional opportunities allow trainees to complete the hours to attain journey-level status in a shorter timeframe. (Hours to achieve journey-level status vary by trade and may range from 1,800 hours to 8,000 hours.) Maximizing trainee opportunities is particularly important in a cold-weather State like Michigan, which has a relatively short construction season.

MDOT notifies and publishes a list of contractors that have exceeded OJT trainee goals each year, thereby earning bid incentives. In addition, a list of selected VIP pilot projects is published on the MDOT OJT website. The seven projects that were selected as VIP pilot projects in 2021–2022, for example, range from \$30 million to \$120 million. They included rebuilding a road and maintaining a bridge in Ingham County, rehabilitating a road in Wayne County, and rebuilding roads and bridges on an interchange in Jackson County. A current list of OJT VIP Selected Projects may be found at [www.Michigan.gov/OJT](http://www.Michigan.gov/OJT).

## Benefits

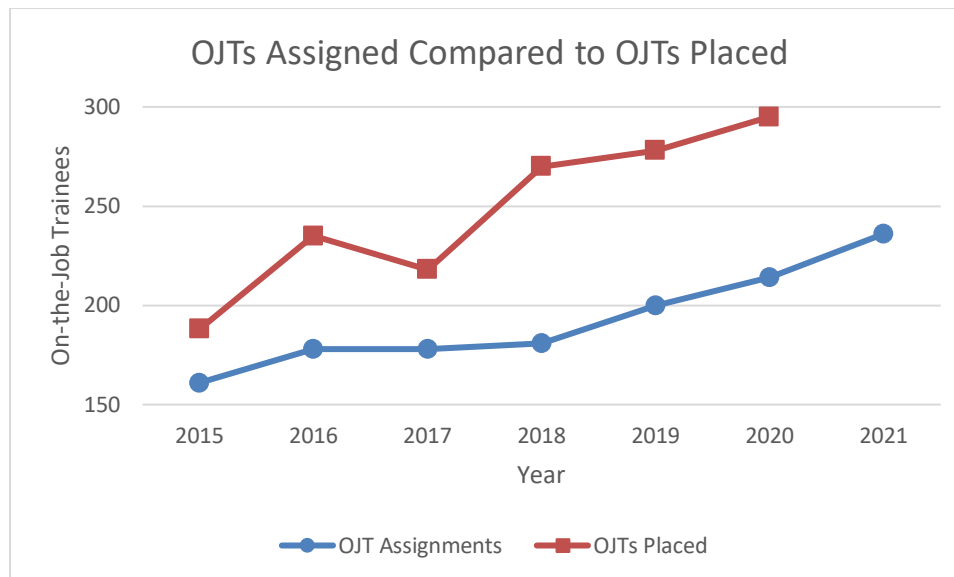
In an April 2021 presentation to the American Association of State Highway and Transportation Officials (AASHTO),<sup>5</sup> MDOT reported these specific outcomes of its OJT program while the VIP pilot was in effect:

- Increases each year in the number of trainees obtaining journey-level status. The program saw 28 graduates in 2018, 30 graduates in 2019, and 36 graduates in 2020.
- Hundreds of trainees placed in on-site employment: 302 trainees in 2019 and 295 in 2020. In 2020, 81 trainees (27 percent) of the 295 were VIP trainees.
- Growing participation from contractors. In 2019, 49 contractors participated, while 58 participated in 2020. Many of those contractors had earned incentives from previous years: 12 contractors with earned incentives in 2019 and 20 in 2020.
- An upward trend in the number of trainees placed, due to contractors voluntarily exceeding the number of positions assigned for that performance year. The largest increase in trainees placed occurred in 2018 when the pilot was first implemented. In 2019 there were 200 trainee assignments, yet 278 were actually placed. In 2020, 214 trainees were assigned and 295 were placed. (See graph.)

Also, MDOT staff has noted that contractors wanting to become eligible for the program have been stepping up efforts to recruit women and individuals from minority groups.

---

<sup>5</sup> AASHTO Committee on Civil Rights webinar, April 22, 2021, <https://www.youtube.com/watch?v=eceWwXgSfgw>



*Number of trainees assigned and placed 2015–2021 through the MDOT OJT program. Source: MDOT*

### Challenges

MDOT described some administrative challenges inherent in implementing such a complex program. At first, challenges included ironing out the program’s details to be viable, as well as being responsive to concerns voiced by the many interest groups. Later, the challenges included retaining sufficiently trained MDOT personnel to manage the program.

MDOT realized along the way the importance of communicating to not just the region engineers but to the people on the ground, such as project engineers, who may have a better understanding of a project’s feasibility for inclusion in the program.

### Strategies for Success

In interviews with FHWA, MDOT staff attributed these factors for the program’s successes so far:

- Gaining buy-in at the outset from State and industry partners and stakeholders. MDOT developed an internal committee of regional representatives from contractors, unions, FHWA, and industry associations that it consulted and met with regularly.
- Ensuring that the training programs and training hours can transfer across several projects. This gives trainees more opportunities to complete their training programs.
- Specifying that participating contractors provide at least 1,000 hours to every trainee participating in the program. This motivated contractors, for example, to provide trainees with opportunities as

early in the construction season as possible.

- Promoting and communicating the program within the industry and across the State. MDOT has a dedicated website ([www.Michigan.gov/OJT](http://www.Michigan.gov/OJT)) with information and resources for employee and contractor applicants. A video promoting the OJT program, played statewide in Michigan Secretary of State offices, where residents go for driver's licenses and other motor vehicle and business transactions.
- Holding OJT graduation ceremonies annually as part of the annual MDOT Disadvantaged Business Enterprise (DBE) conference. The ceremonies double as professional development and networking opportunities for the new graduates with potential employers among the contractors and small business owners attending the conference. MDOT has found that several OJT graduates are interested in becoming business owners and getting certified as a DBE. In fact, two previous OJT graduates are now MDOT-certified DBEs.

MDOT continues to build awareness of jobs in the highway construction industry in the traditional ways: schools, career fairs, and vocational programs.

Historically these jobs may have only been passed down by word-of-mouth and connections through families and friends, according to MDOT staff.

MDOT staff reports that while the existing program provided training opportunities, they believe the OJT VIP program is increasing participation. They have found the pilot program is motivating contractors to put more effort into outreach, do more to recruit women and minorities, and seek assistance from MDOT with recruiting.

### **How the MDOT OJT VIP Works**

MDOT issues OJT assignments each calendar year to prime contractors based on their Federal-aid receipts from the previous year. These assignments require contractors to hire and place trainees on MDOT Federal-aid highway projects.

After trainee assignments are issued, the contractor submits potential trainees to MDOT for review and approval. Trainees must meet the eligibility requirements of the OJT program and participate in an approved training program. MDOT's OJT Program standard training programs run anywhere from 1,800 hours to 8,000 hours of on-the-job training.

For example, an 1,800-hour training program, like the Pavement Marker Training Program, may take about two construction seasons to complete.

Once a trainee is approved, the contractor will assign and schedule MDOT-approved OJT Program trainees to begin their training on an MDOT Federal-aid highway construction project. In addition, the contractor must report monthly on the progress each of their trainees has made toward journey-level status.

Participating OJT program contractors that exceed their OJT goals earn bid incentives to be used when competing for future work on designated projects.

*Source: MDOT*

## Michigan Contacts and Resources

MDOT On-the-Job Training Program: [www.Michigan.gov/OJT](http://www.Michigan.gov/OJT)

Phone: 517-241-2981, Email: [MDOT-OJT@Michigan.gov](mailto:MDOT-OJT@Michigan.gov)

Arnita Furgason, FHWA Michigan Division, Civil Rights Specialist, [arnita.furgason@dot.gov](mailto:arnita.furgason@dot.gov)

FHWA Enhancing Highway Workforce Development Opportunities Contracting Initiative:  
<https://www.fhwa.dot.gov/construction/workforcedevelopment>

### Michigan Boosts Local Construction Workforce Through Innovative Training Strategy

**Contact** — For more information, contact the Federal Highway Administration (FHWA):  
Office of Infrastructure, James DeSanto — [james.desanto@dot.gov](mailto:james.desanto@dot.gov)  
Office of Civil Rights, Martha Kenley — [martha.kenley@dot.gov](mailto:martha.kenley@dot.gov)

**Distribution** — This case study is being distributed according to a standard distribution. Direct distribution is being made to the Division Offices and Resource Center.

**Availability** — This case study may be found at [www.fhwa.dot.gov](http://www.fhwa.dot.gov).

**Key Words** — FHWA On-the-Job Training Program, OJT, Special Experimental Project (SEP-14), Michigan Voluntary Incentive Program, transportation workforce

**Notice** — This study is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in this document. The U.S. Government does not endorse products or manufacturers. Trademarks or manufacturers' names appear in this report only because they are considered essential to the objective of the document. They are included for informational purposes only and are not intended to reflect a preference, approval, or endorsement of any one product or entity.

**Non-Binding Contents** — The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies.

**Quality Assurance Statement** — The Federal Highway Administration (FHWA) provides high-quality information to serve Government, industry, and the public in a manner that promotes public understanding. Standards and policies are used to ensure and maximize the quality, objectivity, utility, and integrity of its information. FHWA periodically reviews quality issues and adjusts its programs and processes to ensure continuous quality improvement.