

INNOVATIVE CONSTRUCTION TRAINING SOLUTIONS FOR STATE DOTs



SITUATION

The need for skilled construction workers is more pressing now than ever. With \$1.98 trillion allocated for infrastructure development and an estimated 41% of construction workers retiring in the next 7 years, the transportation construction industry must adapt to future-proof its workforce. To prepare the next generation of highway workers, the Department of Transportation (DOT) is reinventing workforce development by funding innovative training programs through community organizations. These organizations are increasing access to high paying DOT jobs by enhancing the skills and employability of adults aspiring to enter the industry.

NEW YORK STATE DOT TRAINING INITIATIVE

In New York State, the DOT partners with community organizations to develop untapped resources including workforce centers, colleges and non-profit organizations focused on workforce development. These organizations leverage DOT training funds to prepare future transportation and highway workers. To remove barriers of access, the organizations utilize a flexible online curriculum, developed by industry experts. The aQuiRe Construction Academy, powered by CA Hill's digital platform, delivers construction education, certified by the American Council for Construction Education. Students work independently, at their own pace on over 350 learning modules (90 hours of training) designed to equip future construction professionals with best-in-practice skills. The Department of Transportation's commitment to workforce development through this collaboration has enabled hundreds of individuals to obtain essential training and successfully transition into the construction workforce.

“DOT funding for the aQuiRe Construction Academy allows underrepresented populations to build careers in the construction industry for important infrastructure projects in the state.”

~Sondra Little, Director, Office of Diversity and Opportunity at NYS Department of Transportation has been instrumental in progressing workforce development via aQuiRe.

THE IMPACT OF FUNDING

Workforce Readiness: The industry training provided by the aQuiRe platform equips learners with construction fundamentals including heavy equipment, job readiness and health & safety awareness. In addition students take prep courses for necessary certifications such as **OSHA10**, **flagger**, and **aerial lift**, making them job-ready for various roles within the industry.

Increased Safety and Compliance: To join the talent pipeline, today's workforce requires upskilling to be jobsite ready. Trusted safety and compliance training, developed in concert with industry experts, accelerates job readiness and minimizes costly workplace hazards.

Accessibility and Resiliency: By allocating resources to community organizations, the DOT ensures broader access and is reaching resilient individuals who might not have access to traditional education pathways.

BENEFITS FOR DEPARTMENTS OF TRANSPORTATION

For Departments of Transportation across the United States, supporting the integration of the flexible mobile-optimized training presents numerous advantages:

- **Skilled Workforce Pipeline:** By investing in training programs, departments can ensure a steady supply of skilled workers ready to take on infrastructure projects, reducing delays caused by labor shortages and inadequate training.
- **Inclusion and Access:** Using technology removes barriers for adults who may be employed or underemployed but seeking to enter the transportation industry. Partnering with community organizations uncovers untapped talent resources to recruit the next generation of resilient workers. Much of the aQuiRe curriculum is available in Spanish.
- **Innovation and Efficiency:** A comprehensive robust workforce equipped with the latest tools and techniques contributes to more innovative and efficient project execution.
- **Safety and Compliance:** Training aligned with OSHA standards ensures that workers adhere to safety regulations, minimizing workplace accidents and enhancing overall project safety.
- **Cultural Shift:** Encouraging the adoption of digital learning platforms signals a commitment to modernization and continuous improvement within the construction sector.

“One of our graduates, Haseeb, began as an Assistant Engineer for the NYSDOT in December 2024. I truly believe that taking the aQuiRe construction training and receiving the special certifications aided in making him a more desirable candidate for this position. We are truly grateful for our partnership and look forward to more success stories just like this one.”

~Leslie Perez, Job Coach, CARECEN

CONCLUSION

The collaboration between the DOT and the aQuiRe Construction Academy represents a forward-thinking approach to workforce development. By funding programs that integrate cutting-edge training platforms into community organizations, the DOT is not only addressing current industry needs but also paving the way for a resilient and skilled future workforce.

Departments of Transportation across the nation have the opportunity to be catalysts for change by supporting and leveraging the aQuiRe platform. Together, they can drive a cultural shift towards innovation, safety, and excellence in the construction industry.



PARTICIPATING TRAINING PARTNERS

The **State University of New York at Morrisville (SUNY EOC)** in Central New York uses the aQuiRe platform in conjunction with their in-person training program for construction. In 2024, they had 88 users. Individuals from the SUNY EOC program are trained to go on to highway construction projects in Central NY.

The **Central American Resource Center (CARECEN)**, a non-profit organization that services new Americans living in NYC and Long Island, offers the aQuiRe app to those seeking career support who are interested in the construction industry. Many have been in the field and/or have related degrees but need upskilling and foundational industry knowledge to transition into the industry. CARECEN graduated 22 people in 2024; in 2025 they will continue to run cohorts every 8 weeks and be on pace to expand those numbers considerably.

SEAT Center

The **Social Enterprise and Training Center (SEAT Center)** in the Capital District of New York uses the aQuiRe app as part of their career training in construction. Participants couple the digital training app with hands-on classes and certifications, such as OSHA 10. There were eight graduates in 2024.

FUTURE PLANS

Building on the successful training partnership, NYSDOT and CAHill are further innovating. The aQuiRe Construction Academy will host two accelerated 8-week training programs in Buffalo and Syracuse to prepare individuals for key highway projects. The program will be a hybrid model with in-person weekly training and independent self study using the micro-learning modules available via the aQuiRe app. Participants receive training in many aspects of heavy highway construction including safety, site operations, machine operations, and green energy. They receive in-person training to earn certifications in OSHA 10, aerial lift and work zone traffic control, as well as critical skills like construction math, career empowerment, and job readiness.

The model connects CAHill's mission to bridge the labor gap in heavy civil construction with the needs of NY State. The program has direct entry relationships with four unions, paving pathways to employment. Graduates of aQuiRe programs have already started working on projects like the I-81 Viaduct, addressing structural deficiencies and upgrading non-standard highway features.



Corey McMullin on-site at a bridge construction project

Take Corey McMullin as an example—an aQuiRe graduate who, struggling with stable employment, found the program through the Department of Labor. The Academy's balance of theoretical knowledge via its digital app and hands-on skills like flagging and operating aerial lifts prepared him for the workforce. The training gave him essential knowledge to transition seamlessly to job sites.

This career transformation has provided Corey not only financial stability but also personal growth, allowing him to spend quality time with family. His aspirations include joining the Operator's Union and eventually starting his own company. His advice? Fully engage in the program, network, and seize opportunities.



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