Transit CHALLENGES Practical SOLUTIONS

RESEARCH IN ACTION:

A CASE STUDY

Metra Invests in a Sustainable Workforce with Targeted Training, Capacity-Building

The Challenge

NE OF THE NATION'S largest rail transit systems, Metra, oversees all commuter rail operations in the 3,700-square-mile northeastern Illinois region. The system comprises 11 separate lines radiating out from Chicago's Loop, and serves more than 100 communities at 241 rail stations. Implementing effective, indepth employee training programs is needed and challenging for a system of this size.

In recent years, Metra has absorbed a wave of retirements among skilled older workers. These retirements particularly affect Metra's mechanical and

Metra's "learning center" training reflects TCRP Report 162's recommendations on

- improving recruitment
- retention
- training and development, and
- professional capacity-building practices



engineering divisions, which include roughly 1,200 workers (electricians, car-men, sheet metal workers, machinists, track workers, and others).

TCRP

Localized Training Delivery

AROL TAYLOR, Metra's Director of Operations Training for the mechanical and engineering divisions, participated on the project oversight panel that helped shape the scope and content of TCRP Report 162: Building a Sustainable Workforce in the Public Transportation Industry—A Systems Approach. The report serves as a guidebook that addresses contemporary issues in workforce development, retention, attraction, and public transportation image management, while offering practical tools on a variety of workforce issues. Taylor's exposure to research on other transit gaencies' efforts to tailor effective strategies into workforce practices—a focal point of the report-informed her own thinking about Metra's workforce training challenges. The report makes a strong case for the value of integrating workforce training and development, and capacity building, as lynchpins in workforce retention.

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Localized Training Delivery (continued)

Taylor recognized from her TCRP-related research and prior experience in training development that bringing training directly to employees was critical to success. Taylor devised a pilot program in 2014, whereby one single district would focus on a single training issue. "We bring [the training] to them, in their environment, using their equipment, using their tools." This approach offered greater flexibility for managers and minimized downtime for employees.

For the initial pilot, the Metra Electric District, which covers a route with over 20 stops across Chicago, was chosen. This district was selected because operations employees there faced challenges in efficiently troubleshooting train car door issues, especially when responding to delays. Taylor and district management staff identified a half-dozen specific door issues that could be mitigated or repaired, given effective training.

Four rail cars, tagged as Learning Centers, were set up, with each one used to address a topic related to door troubleshooting. In Learning Center 1, car-men, machinists and electricians learned the theory of operation normal door operation and troubleshooting/repair safety practices). In Learning Centers 2 and 3, car-men and electricians (respectively) participated in door demonstrations and determined solutions to a bank of troubleshooting scenarios. In Learning Center 4, employees were challenged to demonstrate their ability to quickly and correctly resolve two door problems, under a time constraint.

Over a five-dayperiod, more than 34 car-men, machinists, and electricians went through the pilot training. Other learning events have covered event recorders, HVAC systems, air brakes, and more. These learning events are now held annually at different sites each year. In 2018, for example, the Rock Island District initiated Metra's first Positive Train Control (PTC) Revenue Service Demonstration, devoted to PTC topics for electricians, supervisors, and foremen. Between 2014 and 2018, 370 employees participated in mechnical learning events.

This intensive approach to effective, localized training is in line with the core findings in **TCRP Report 162**, which notes that one of the key building blocks to developing a sustainable transit workforce involves teaching "the knowledge and skills required to effectively perform a specific job while orienting employees and reinforcing on an ongoing basis the mission, vision, goals, and culture of the public transportation organization."

TCRP Report 162 also advocates for the importance of post-training knowledge and skill testing. To that end, Taylor ensures that detailed learner feedback and evaluation is obtained for each training. In particular, she says, "We want to know what their confidence level is in performing specific tasks." Conversations with district managers are ongoing, so that Taylor is continuously identifying new topics where site-specific training is needed to improve onthe-job competence, especially among the newer employees and apprentices coming up to speed.



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