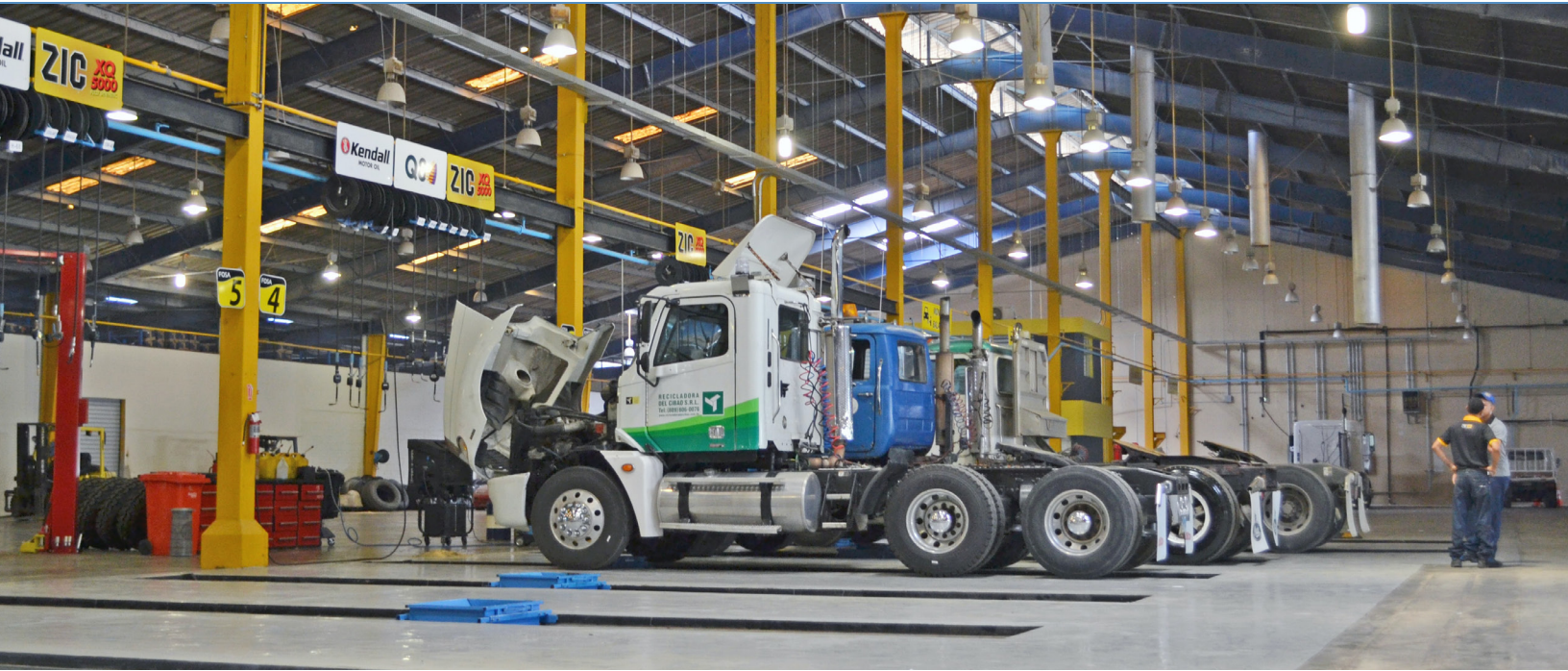


Southern California Regional Workforce Development Needs Assessment for the Transportation and Supply Chain Industry Sectors

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COVID-19 brought the public's attention to the critical value of transportation and supply chain workers as lifelines to access food and other supplies. This report examines essential job skills required of the middle-skill workforce (workers with more than a high school degree, but less than a four-year college degree). Transportation and supply chain businesses now rely heavily on data for their operations. All rungs of transportation and supply chain employees, including warehouse workers and truck drivers, now require digital skills such as using mobile devices, sensors, and dashboards. These requirements can pose problems because 50% of workers involved in the transportation and storage sectors have low or no digital skills. At the same time, many of these middle-skill transportation and supply chain jobs are what the Federal Reserve Bank defines as "opportunity occupations" -- jobs that pay above median wages and can be accessible to those without a four-year college degree. This research focuses on this workforce gap, where digital skills and operations overlap.

Study Methods

CITT researched types of middle-skill jobs in transportation and supply chain organizations and found the majority are in operations and maintenance, data management, compliance, front/back office staff, and human resources. The research team then gathered data from industry association publications and online job postings to identify the needed job skills. Following this initial research, the research team (1) identified logistics-related companies in Southern California from the ports to the Inland Empire; (2) investigated different apprenticeship and workforce development models; and (3) deployed a combination of surveys, in-depth interviews, and focus groups to further gather information from industry and education and training partners in the Southern California region.

Findings

Logistics organizations must find the talent to improve digital business, security, and safety processes. Employees who can analyze and present data, communicate, and

use digital tools are in high demand. Industry partners identified workforce competencies required in digital literacy, data management, front/back office jobs, and in operations and maintenance. Education and training providers identified strategies to develop programs, including addressing barriers to creating programs. Both groups emphasized industry input is critical to developing workforce instruction, competencies, content, and curricula.

Policy / Practice Recommendations

The pandemic has upended workforce education, including how workers learn, teach, and use new technology. Strategies to effectively teach require a reimagining of education to be customizable, personalized, and easily accessible. Universities can work toward increasing student access to digital learning while offering programs that emphasize lifelong workforce education. These programs can be offered to incumbent workers and potential new hires, as well to traditional students. This report includes examples of on the ground workforce training programs in transportation and supply chain that incorporate the research findings.

The logistics workforce requires new models of education and training that focus on data, connectivity, and collaboration.

About the Principal Investigator

Dr. Thomas O'Brien is the Executive Director of the Center for International Trade and Transportation at California State University (CSULB), Long Beach and the Deputy Director of Long Beach Programs for the METRANS Transportation Center, a partnership between CSULB and the University of Southern California. He also serves as the Director of the FHWA Southwest Transportation Workforce Center.

To Learn More

For more details about the study, download the full report at transweb.sjsu.edu/research/1921



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