The Trade and Transportation Workforce Development Challenge

By Thomas O’Brien

The transportation industry is facing a workforce development crisis. The aging baby boomer generation is affecting workforce trends in all industries; but the impact on the public sector, including transportation agencies, is even more pronounced. By 2020, nearly 20% of the population will be 65 or older. More than 50% of the state transportation agency workforce eligible to retire in 2003 - the people who plan for and engineer the networks which carry both people and goods - will do so by 2013. This is a figure more than double that for the nation’s entire workforce.

These trends are forcing transportation agencies to consider the role that succession planning, job recruitment and job retention play in their agency missions and training strategies. The nature of the workforce replacing soon-to-be retired workers is also changing. There will be more women, more Hispanics and more Asians seeking employment.

At the same time, transportation agencies are being forced to rethink their purpose as a result of changing trends in technology and service delivery. This has an effect on the type of skills needed by employees of transportation agencies, particularly mid and senior level managers. Skills once considered complementary (e.g. project management, communications, human resources) are now considered central to effectiveness. Many of these skills have not been included in the courses traditionally designed to train transportation workers.

Most of the studies done to assess the impact of changing trends on the transportation workforce have focused on the federal and state levels. We know for example that traditional educational and internship programs don’t prepare young workers for issues as diverse as team building and capital project analysis and for a transportation environment that depends upon just-in-time thinking.

The workforce development landscape at the local and regional level is even more challenging. Opportunities for collaborative workforce development are numerous, but often burdened by institutional impediments and by the sheer number of possible jurisdictional entities involved.

Workforce development at the local and regional level is also different because of the nature of locally provided transportation services. Transit, which is most often a local service, is highly unionized. This tends to redefine the training environment. The transit workforce, made up largely of bus operators and mechanics, is also older than other the rest of the transportation workforce. This influences training needs.

For better or for worse, our region will likely be the proverbial canary-in-the-coal mine when it comes to responding to transportation-related workforce development needs. Southern California is a microcosm of the State’s and the nation’s transportation systems. It is not like most other regions because of its size and complexity; but it is a useful model because of that complexity. It contains both urbanized and rural areas. It has public transportation systems that involve both maintenance and new construction. There are more than 5,500 buses in service facilitating more than 2 million average weekday boardings. It contains the nation’s largest port complex at LA/Long Beach and smaller ports in San Diego and Port Hueneme. 40% of the nation’s maritime trade is centered in the region. The region also contains the nation’s fourth largest air cargo facility and the world’s fifth largest passenger airport at LAX. Goods and people leave the region on an extensive road and rail network, making the region a valuable study in intermodalism, and in conflicts between freight, passenger and military transport uses. It offers the challenge of finding transportation solutions that meet environmental goals in a region that struggles to meet federal air quality standards.

Southern California is also useful because of the political structure which can make effective training responses problematic. The region comprises seven counties and 181 different cities in an area totaling more than 42,000 square miles. There are also metropolitan planning areas and special purpose districts complicating matters.

Finally, the region is confronted more acutely than many others with the dynamics of a changing workforce. According to a 2004 study by the Southern California Association of Governments, over 44% of the residents of Southern California had stopped their formal education at high school or less. In Los Angeles, San Bernardino and Riverside Counties, it was half or nearly half. As a result, the region may be forced to confront transportation workforce development issues sooner than others. Industry, educators and transportation officials will all have a role to play in identifying the educational gaps and possible ways to respond effectively. Getting it right here will pay dividends throughout the nation. An ineffective response, on the other hand, does not bode well for our ability to build and maintain transportation systems that can keep pace with the rest of the world.

Dr. Thomas O’Brien is the Director of Research for the Center for International Trade and Transportation at CSULB and the Associate Director for Long Beach Programs for the METRANS Transportation Center, a partnership of USC and CSULB. For past articles in this series, please go to http://www.nces.csulb.edu/IndustryArticles; http://www.nces.csulb.edu/ContainerCast. For related podcasts, please go to