Project Objective

The Caltrans Freight Academy was conducted on December 1-3, 8, and 10, 2020. The Academy was designed and coordinated by the California State University, Long Beach (CSULB) Center for International Trade and Transportation (CITT) under Task Order 022 (Contract No. 65A0674) as part of its work for the Caltrans-supported Pacific Southwest Region University Transportation Center (UTC).

The early 2020 release of the California Freight Mobility Plan provided valuable context for this year’s Academy. It underscored the role played by Caltrans in statewide freight planning and the need for department staff to remain on top of current trends and issues affecting the movement of freight throughout all parts of the State. In consultation with the Caltrans Office of Freight Planning, the Workforce Development Branch, and the Division of Research, Innovation, and System Information (which oversees Task Orders related to the UTC partners), CITT proposed two four-day, in-person trainings to be held in April 2020, but in the wake of COVID-19 Caltrans and CITT canceled the April classes. CITT proposed a modified training design building upon the same broad set of objectives but with a revised timeline allowing for curriculum modifications and course delivery by the end of calendar 2020.

The Academy consisted of presentations from goods movement professionals and subject matter experts, daily activities to supplement the instruction, and a final group presentation on regional freight issues using a web-based geospatial presentation platform. There were 88 participants that were divided into two groups with different study areas of focus: San Diego and Bakersfield. Each had a separate geographic focus and freight-related challenge: (San Diego Neo-bulk freight movement; Bakersfield agricultural freight).

Research Methodology

Each training included a common set of curricular materials plus materials, including exercises, contextualized for the unique training location. Both responded to a common theme “Freight and Communities” with course mini-modules organized around the themes of:

- Macroeconomic Trends Impacting Supply Chains/Freight System Disruptions
- Measuring Freight Impacts
- Freight Planning at the Federal, State and regional levels
- Using and Visualizing Freight Data

Freight Academy classes were delivered via a series of online Zoom Web Conferences taking place Dec.1-3, and Dec. 8 with a final day of presentations concluding the 2020 academy on Dec.10. Days 1 and 2 (Dec. 1 and 2) of the academy featured subject matter experts who addressed a range of macroeconomic freight and logistics issues.
Days 3 and 4 (Dec. 3 and 8) covered freight data and provided microeconomic focuses on specific supply chain case studies in Bakersfield and San Diego. The latter portion of the week also included a presentation on insights into data use and visualization. The exercise involved the development of a story map-based presentation on regional freight issues for a hypothetical meeting of the California Freight Advisory Committee (CFAC). On the morning of Dec. 10, the students worked in teams with data visualization specialists as they worked on their presentations. The agenda outlined below provides detailed information on session design, objectives and speakers. It also indicates which sessions included all participants and which were organized based upon the San Diego and Bakersfield case study groups.

All Freight Academy sessions were eligible for American Institute of Certified Planners (AICP) Continuing Education Units.

**Results**

Based on course evaluations, participant response to the training was positive overall. Participants recognized the constraints imposed by the pandemic but expressed a desire to return to in-person classes when allowed. The group exercises, while modified for a distance-based format, were made more cumbersome by the number of participants; and future exercises should take into account the challenges in coordinating on the student side. It was also suggested that the use of GIS story maps, while valuable, could be the subject of its own training. Other suggestions based upon student and coordinator response are listed in the full report.

**Figure 1. Example of a Bakersfield case study group’s Esri StoryMap presentation**

**Figure 2. Example of a San Diego case study group’s Esri StoryMap presentation**