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program

EDUCATION

Configuration Management Hits Rutgers Curriculum

Students at Rutgers, the State University of New Jersey, will examine the role of Configuration Management (CM) in real-life transportation projects, thanks to federal and private funds.

The concept of CM originated during the 1980s when Los Angeles' metro agency began building subway lines. "At one point we were spending \$3 million a day. And when you have a lot of activity, you have a lot of change orders," says Jeff Christiansen, then the program manager for the Metropolitan Transportation Authority. "We needed something to keep up with the volume.

Finding no off-the-shelf software available, Christiansen and colleagues created their own. "We could say how many change orders from Contractor X were over \$100,000—and how many were initiated by him," he says. Paperwork that grew drastically in volume could be handled by less than half the original staff. The scope expanded to include deliverables, sequences and pre-requisites, "probably 11 or 12 modules by the time I retired," he recalls.

"It's not rocket science," he says. "It's common sense."

In 2001, Christiansen sold the CM technology to Frank Otero, president of PACO Group, New York City. PACO continued developing it and applied it to various projects in Denver, New Jersey, Puerto Rico and Spain.

Gannett Fleming Inc.'s Phoenix office is using configuration management on the \$1-billion people-mover project at Sky Harbor Airport. "There isn't any project that doesn't need some level of CM," says Larry Miller, Gannett Fleming vice president. "As more projects become more complex, bigger and have more stakeholders, we need to make records very clear, so we need extra tools."

Otero notes that CM has now been required in some Requests For Proposals, but there's been no consistency or standardization yet. He hopes the new CM center at Rutgers will help promote that.



▲ **Management Pros.** Otero (left) and Christiansen Promote project management tool to students.

"We felt CM needed an academic home," says Martin Robbins, senior policy fellow at the Alan M. Voorhees Transportation Center of Rutgers' E.J. Bloustein School of Planning and Public Policy.

Recently, Rutgers engineering professor Trefor Williams invited Otero to speak to a graduate class on CM. The positive reception led Williams to incorporate CM into current classes. "We have the students take on different roles, like owner or contractor," Williams says.

A \$50,000 grant from the Federal Transit Administration, matched by PACO, will now allow students to focus on CM case studies. Robbins says a New Jersey Transit bridge project may be the first. Williams hopes the program will provide training for professionals as well.

By Aileen Cho