



PROFESSIONAL ENGINEERS

IN CALIFORNIA GOVERNMENT

FOR IMMEDIATE RELEASE

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MEDIA ADVISORY

Teachers building and breaking bridges to teach students about infrastructure design and engineering

With demand for engineers growing, more than two dozen Los Angeles-area high school teachers next week will design and build balsa wood model bridges – and then break them. Their goal: to learn computer-based engineering and design software skills to pass along to students who will build their own bridges and compete for all-expenses-paid trips and cash awards.

[Promoting Readiness for Engineering Professions](#) (PREP), a Sacramento-based non-profit arm of Professional Engineers in California Government (PECG), is organizing the free training. Caltrans is hosting the Sept. 15 event in its Los Angeles district office. The Los Angeles Community College Chancellor's Office (LACCCO) and PECG are paying for the materials and the Los Angeles County Office of Education (LACOE) is coordinating teacher attendance and providing lunch.

A national expert from the [American Association of State Highway and Transportation Officials](#) (AASHTO) will show teachers how to use professional visualization and drafting software to design and construct a model bridge. Then they will build their own bridges and test the structures' strength-to-weight ratios to the point of collapse.

At the end of the day, the school instructors will each receive materials and software licensing to teach the curriculum to their students, a \$657 value that will be provided free of charge by PECG and the Chancellor's Office.

Los Angeles-area students trained by their teachers may enter their work in next year's state and national bridge-building competitions. Last May, three students who won California's inaugural competition earned an all-expenses-paid trip to the national contest in Maine. The team placed 2nd there and took home \$900.

A Caltrans representative will make a lunchtime presentation about the state's transportation system and workforce needs. California will soon collect new revenue for infrastructure improvements, [spurring a need for hundreds of engineers in coming years](#). Nationally, federal forecasts indicate the economy will [add nearly 24,000 new civil engineering jobs by 2024](#).

- What:** Hands-on bridge design training for teachers, culminating in a stress-test of their creations.
- Who:** Chelsea Merrill and Dan Kemether, Professional Engineers in California Government (PECG) and Promoting Readiness for Engineering Professions (PREP).
Up to 30 teachers from Los Angeles-area middle schools and high schools.
- When:** Friday, Sept. 15, 2017, 8 a.m. to 3 p.m. Bridge stress-testing scheduled from 1:30 p.m. to 2 p.m. Press interviews prior to the training by telephone appointment.
- Where:** Caltrans District 7 Building, 100 S. Main St., Los Angeles, Calif.
- Why:** To promote student interest in design and engineering through hands-on instruction by trained professional instructors.

PECG represents 13,000 state-employed engineers and related professionals responsible for designing and inspecting California's infrastructure, improving air and water quality, and developing clean energy and green technology.

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