

Deployment of Research Findings

Division of Engineering Services

Office of Earthquake Engineering

Introduction:

The California Department of Transportation (Caltrans) and the Division of Engineering Services (DES) commits staff and resources to implement useful research findings as quickly as possible. Deployment is commonly defined as incorporation of research results into everyday practices. It is the last stage in the research process. Deployment may include a new or revised policy, procedure, standard, design, specification, test method, computer program, or manual change. It may also include the development, marketing, and use of new products, including new kinds of equipment.

Successful research at Caltrans begins when research ideas are generated by engineers, researchers, and interested members of the public. Ideas for research are generally based on problems encountered in everyday work. These ideas for future research are reviewed and evaluated by Technical Advisory Panels (TAP). Those ideas that best address the Department's needs are developed into formal research topics.

The Department advertises its research topics of interest by issuing a Call for Submissions (CFS) or a direct Request for Proposals (RFP). The Department then reviews and evaluates the research proposals (RP) received in response. The interested TAP will select the proposals that will best address the needs of Caltrans and the goals and priorities of the Department.

The Department will then review the selected RP and further refine them if necessary. A written contract is then prepared and negotiated for agreement. When the contract begins, a technical team is formed to work closely with the principal investigator (PI). The team provides the PI with Caltrans details and specifications and reviews the specimens, the testing, and the research reports. The team works with the PI to produce a final report with the research findings and conclusions.

Carefully written reports and presentations are important methods to communicate the research findings from the research projects. These findings may later be deployed as operational techniques, practices, or policies. Without this step, the value of even the best research is diminished.

Deployment Steps:

The steps to deploy research findings into the Department are:

1. The Department's Research Technical Team in cooperation with the PI will produce a Deployment Strategy document. This document outlines the research findings and makes specific recommendations for the deployment of the findings within the Department. These deployment documents are posted on the following website:

http://www.dot.ca.gov/hq/esc/earthquake_engineering/

2. The interested Technical Committee within the Department tests the Deployment Strategy and makes recommendations for changes to or the development of practices, guidelines, policies, procedures, standards, designs, specifications, test methods, or whatever else is affected by the research findings. These changes are then available for testing by the Department.

3. After successful testing of the research findings the committee will transfer the research findings into a “Memo to Designers” and or a change in the Caltrans Specifications_for final incorporation into the Department.

At the completion of these steps research findings are successfully deployed in the Department.