

Introduction and Purpose

In-house research differs from contracted research in that the researcher is typically also the Project or Task Manager. Performing research in-house enables Caltrans to:

- Give transportation administrators and managers accurate and substantive advice quickly, during emergencies or where problems being researched have safety implications;
- Bring technical knowledge and practical experience to bear on transportation problems;
- Assess emerging research results and determine appropriate solutions to benefit California transportation programs;
- Evaluate field-implemented transportation innovations for cost saving implications; and
- Provide a professional knowledge base to solicit, award, monitor, and evaluate the quality and cost-effectiveness of contracted research.

Qualifications for Researchers

The researchers must:

- Have expertise in the subject area of the research and the techniques to be used in the proposed research project;
- Be available to dedicate the required amount of time to the research during the life of the project;
- Liaise as required with the committees and panels identified in this Research Manual.

Processing and Funding Sources

In-house researchers work with DRI staff to prepare the proposal and perform the research. DRI requires in-house researchers to prepare a proposal that provides essential information used to program the project/task.

If the research receives SPR Part II funds, it must be approved for inclusion in the SPR Part II Annual Work Program. Work funding is not encumbered and must be spent within the awarded fiscal year.

Research Project Development

For in-house research projects, the PM may be the researcher in DRI or in another Caltrans District or Division. The researcher must:

- Design a detailed research methodology that is based on the research proposal;
- Develop a work plan that will achieve the research objectives within the proposed time frames and cost and staffing budgets;
- Adhere to the original research proposal, unless the research objectives cannot be met under the original plan;
- Control the scope of the project; and
- Provide deliverables, as required by the project work plan during the course of the research.

The responsibility of the Task Manager is greater with in-house research. Since the Task Manager usually acts as the researcher, the additional responsibilities include final delivery of the research deliverable(s) and related equipment disposition.

Analysis and Reporting

The researcher is encouraged to consult National Cooperative Highway Research Program Report 20-45, "Scientific Approaches to Transportation Research", for detailed guidance on conducting and analyzing research.

- Maintain objectivity and prevent preconceived notions from influencing their analysis and conclusions;
- Fill out the quarterly reports in the RPM Database within 30 days of the end of each quarter;
- To submit a final report and all closing documents required in the division's close-out process.