

## Reliability-based Condition Assessment and Life-cycle Maintenance Cost Analysis of Highway Bridges

**Principal Investigator:**

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**Project Sponsor:**

Paul Santo

**Need:**

A resource allocation program for the maintenance of Hawaii’s bridges requires information on the expected life-cycle maintenance cost and deteriorating bridges. Current bridge design based on AASHTO codes do not consider long-term conditions.

**Objective:**

To develop a rigorous model that can be used throughout a bridge’s life cycle for improved inspection, maintenance, load rating and use of resources for repair and reconstruction.

**Duration:**

May 1, 2007 – April 31, 2009

**Cost:**

\$126,252