

Instrumenting and Monitoring of the FRP Shear Strengthening of the Salt Lake Boulevard Bridge

Principal Investigator:

Professor H. Ronald Riggs

Co-Principal Investigators:

Professors Ian Robertson and Si-Hwan Park

Project Sponsor:

Paul Santo

Need:

Bring bridges in Hawaii up to AASHTO code.

Objective:

Determine time and traffic loading on FRP retro-fits. (de-lamination related to traffic.)

Duration:

November 1, 2003 – October 31, 2008

Cost:

\$360,866

Update:

- A Fiber Optical Data Acquisition system was acquired this past July and is being tested in the lab. Fiber strain sensors will allow the equipment to be installed at the bridge.
- Initial website design that will have live data links to data acquisition device in the lab has been completed
- Construction has been long delayed, but monitoring City's progress
- Continue work on new code for crack-propagation modeling to address fracture mechanics issues