

Statewide: Bridge Scour Monitoring and Retrofit Program **FY2006 Request: \$1,300,000**
Reference No: 36190

AP/AL: Allocation **Project Type:** Construction
Category: Transportation
Location: Statewide **Contact:** John MacKinnon
House District: Statewide (HD 1-40) **Contact Phone:** (907)465-6973
Estimated Project Dates: 07/01/2005 - 06/30/2010
Appropriation: Surface Transportation Program

Brief Summary and Statement of Need:

Install monitoring and telemetry and/or construct physical scour countermeasures at State bridges identified as scour critical by the federally mandated Scour Evaluation Program. This project contributes to the Department's Mission by reducing injuries, fatalities and property damage and by improving the mobility of people and goods.

Funding:	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	Total
Fed Rcpts	\$1,300,000						\$1,300,000
Total:	\$1,300,000	\$0	\$0	\$0	\$0	\$0	\$1,300,000

<input checked="" type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input checked="" type="checkbox"/> Phased Project	<input type="checkbox"/> On-Going
9% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
Totals:	0	0

Additional Information / Prior Funding History:

FY2005 - \$1,000,000; FY2004 - \$1,000,000; FY2003 - \$1,000,000; FY2002 - \$1,150,000; FY2001 - \$1,150,000.

Project Description/Justification:

Floods scouring streambed material from around bridge foundations is the most common cause of bridge failures. A national bridge scour evaluation program was established by FHWA (Federal Highway Administration) in 1988 to reduce damage and loss of life. As part of this federally mandated program, bridges that are "scour-critical" (foundation rated as unstable for observed or calculated conditions) must have the vulnerable component protected with a scour countermeasure, or be replaced.

This project provides scour-critical bridges with scour countermeasures. These countermeasures range from increased inspection, to continuous monitoring, to installations that counteract the scouring process, depending on the severity of scour at a particular site. Additionally, this project provides for limited re-evaluation of scour-critical bridges as new information becomes available.

So far, 149 bridges in Alaska have been identified as scour critical. Of these, 63 are either not owned by the State, or are considered lower risk. These can rely on normal inspections to monitor scour condition. Of the remaining bridges, 35 require an increased frequency of scour inspection, 25 require continuous monitoring, and 26 require a physical countermeasure to be installed. This funding level allows for increased scour inspections, and installation of approximately 5 to 8 monitors or physical countermeasures per year.