

Statewide - Seismic Retrofit - Bridges

FY2017 Request: \$2,000,000
Reference No: 36188

AP/AL: Allocation

Project Type: Construction

Category: Transportation

Location: Statewide

House District: Statewide (HD 1-40)

Impact House District: Statewide (HD 1-40)

Contact: Mike Vigue

Estimated Project Dates: 07/01/2016 - 06/30/2021

Contact Phone: (907)465-4070

Appropriation: Surface Transportation Program

Brief Summary and Statement of Need:

Structural enhancements to bridges that are determined to be seismically vulnerable in earthquake zones.

Funding:	<u>FY2017</u>	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>Total</u>
1002 Fed Rcpts	\$2,000,000						\$2,000,000
Total:	\$2,000,000	\$0	\$0	\$0	\$0	\$0	\$2,000,000

<input checked="" type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" 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

Prior Funding History / Additional Information:

Sec1 Ch5 SLA2011 P116 L25 SB46 \$2,000,000

Sec7 Ch43 SLA2010 P52 L30 SB230 \$2,000,000

Project Description/Justification:

Alaska is one of the most seismically active regions of the world. Bridges are quite vulnerable to earthquake induced ground motions and forces. Severe bridge damage and collapse seem to accompany every major earthquake around the world. Bridges constructed prior to the early 1990's are particularly vulnerable to significant damage. Seismic retrofitting is eligible for Highway Bridge Rehabilitation and Replacement Program funds for all bridges according to the Federal Highway Administration.

Phase 2 of this program identifies vulnerable bridges. Our bi-annual inspection program is used to determine the most vulnerable and critical bridges for seismic retrofit (strengthening). Vulnerability is based on structural details and proximity to known earthquake faults. Critical bridges are identified based on traffic demands, available detours, and bridge length. Retrofits typically include devices to keep beams from falling from their supports. In some cases, bridge column and abutment forces are reduced by installing special shock absorbing and isolation devices.