

**Agency: Commerce, Community and Economic Development****Grants to Municipalities (AS 37.05.315)****Grant Recipient: Matanuska-Susitna Borough****Federal Tax ID: 92-0030816****Project Title:****Project Type: Maintenance and Repairs**

# Matanuska-Susitna Borough - Substandard Roads and Bridges replacement and repair

**State Funding Requested: \$3,000,000****House District: Mat-Su Areawide (13-16)**

One-Time Need

**Brief Project Description:**

Funding for the rehabilitation or replacement of substandard roads and bridges.

**Funding Plan:**

Total Project Cost:	\$3,000,000
Funding Already Secured:	(\$0)
FY2012 State Funding Request:	<u>(\$3,000,000)</u>
Project Deficit:	\$0

**Detailed Project Description and Justification:**

The sufficiency rating is the output of a formula used for evaluating highway bridge data by calculating four separate factors to obtain a numeric value which is indicative of bridge sufficiency to remain in service. The result is a percentage in which 100% would represent an entirely sufficient bridge and zero percent would represent an entirely insufficient to deficient bridge. Some state use the sufficiency rating as the basis for establishing priority for repair or replacement of bridges; the lower the rating the higher the priority.

The project consists of completing the environmental, design, permitting, and construction to rehabilitate or replace several vehicular bridges throughout the Matanuska-Susitna Borough and correct problems on many substandard roads.

Several Borough bridges have been identified as unsafe by the State of Alaska. In addition to the need exists to repair substandard bridges, significant road problems. The substandard road problems include degraded surfaces, insufficient storm drainage, and narrow gravel surface roads with poor sight distance.

With rapid growth occurring in the Matanuska-Susitna Borough, there is an expanded need to provide safe, passable roads and bridges that can allow for emergency response and handle both commercial and residential traffic.

This request for funding is in line with the Borough's overall emphasis and priority of ensuring our infrastructure is safe, promoting economic development, and providing basic transportation infrastructure to its residents.

**Project Timeline:**

Upon receipt of funding, this project would begin design in Fall 2011, with construction in 2012.

**Entity Responsible for the Ongoing Operation and Maintenance of this Project:**

Matanuska-Susitna Borough

**Grant Recipient Contact Information:**

Name: Elizabeth Gray  
Title: Acting Borough Manager  
Address: 350 E. Dahlia  
Palmer, Alaska 99645  
Phone Number: (907)745-9689  
Email: egray@matsugov.us

Has this project been through a public review process at the local level and is it a community priority?  Yes  No

## Jody Simpson

---

**From:** Brad Sworts [Brad.Sworts@matsugov.us]  
**Sent:** Monday, February 07, 2011 5:13 PM  
**To:** Jody Simpson  
**Cc:** Shaune O'Neil  
**Subject:** FW: MSB Potential Bridge Replacements

Jody,  
Please find below a list of our needed bridge projects listed by sufficiency rating with the worst ones at the top.  
Brad

---

**From:** Scott Adams  
**Sent:** Monday, February 07, 2011 12:01 PM  
**To:** Brad Sworts  
**Subject:** MSB Potential Bridge Replacements

Brad

Listed below are several candidates for bridge replacement and their corresponding 2008 sufficiency rating.

The sufficiency rating is the output of a formula used for evaluating highway bridge data by calculating four separate factors to obtain a numeric value which is indicative of bridge sufficiency to remain in service. The result is a percentage in which 100 percent would represent an entirely sufficient bridge and zero percent would represent an entirely insufficient or deficient bridge. Some states use the sufficiency rating as the basis for establishing priority for repair or replacement of bridges; the lower the rating, the higher the priority. The four factors used are:

1. Structural adequacy and safety. For example superstructure or substructure condition and load capacity. This makes up to 55% maximum of the score.
2. Serviceability and functional obsolescence. For example deck condition, clearances, roadway alignment, and width. This makes up to 30% maximum of the score.
3. Essentiality for public use. For example detour length, average daily traffic, and defense highway designation. This makes up to 15% maximum of the score.
4. Special Reductions. For example detour length, traffic safety features, and structure type. This makes up to 13% maximum of the score.

Let me know if you have any questions.

Scott

BRIDGE NUMBER	LOCATION	2008 SUFFICIENCY RATING	ESTIMATED COST*
2161	Oilwell over Kroto Creek	35.2	\$2,225,000
1831	Shirley Towne over Willow Creek	51.5	\$2,738,000
2225	E Shorty over Little Susitna River	53.8	\$1,065,000
1935	Back Acres over Bodenbug Creek	57.5	\$526,000
1714	Elk over Bodenbug Creek	59.6	\$432,000
1985	Oilwell over Moose Creek	64.9	\$877,000
1936	Bradley over Trapper Creek	69.6	\$715,000
1209	Lewis over Fish Creek	70.3	\$539,000

\*Estimated cost based on (current span of structure x 31ft width x \$300/square foot) x (30% design & construction admin) x (15% construction contingency).

Scott R. Adams, P.E.  
Civil Engineer  
Matanuska-Susitna Borough  
350 E Dahlia Ave  
Palmer, AK 99645  
907 745-9810 (Office)  
907 355-9810 (Mobile)  
<http://www.matsugov.us>

*Honoring the Past, Caring for the Present, Building for the Future*