

Ted Stevens Anchorage International Airport: Taxiway E and M Reconstruction **FY2011 Request: \$20,000,000**
Reference No: 49094

AP/AL: Allocation **Project Type:** Construction
Category: Transportation
Location: Anchorage Area-wide **Contact:** Christine Klein
House District: Anchorage Area-wide (HD 17-32) **Contact Phone:** (907)269-0724
Estimated Project Dates: 07/01/2010 - 06/30/2015
Appropriation: Airport Improvement Program

Brief Summary and Statement of Need:

Reconstruct Taxiway E from Taxiway L north to Taxiway V, which will include minor pavement repairs at Taxiway E and L intersection. This project also includes reconstruction at Taxiway M from Taxiway E west to Taxiway R. Taxiway E Pavement Condition Index (PCI) is 50 and Taxiway M PCI is 51. Any PCI below 55 is considered poor and in need of replacement. If pavement continues to deteriorate, the taxiways may have to be closed. 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:	<u>FY2011</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Fed Rcpts	\$18,750,000						\$18,750,000
IntAptCons	\$1,250,000						\$1,250,000
Total:	\$20,000,000	\$0	\$0	\$0	\$0	\$0	\$20,000,000

<input type="checkbox"/> State Match Required	<input checked="" type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> On-Going
0% = 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:

None.

Project Description/Justification:

The reconstructions consist of excavating the existing structural section and replacing with structural section that is designed for the current aircraft mix that use the taxiway.

Taxiway E and Taxiway M are part of the main movement areas at Anchorage International Airport. Taxiway E is showing signs of advanced structural failure. There is alligator cracking occurring along the majority of both taxiways. Field Maintenance has to perform yearly pavement repairs (peel and pave). While the peel and pave helps keep taxiways open it does not fix the root cause of the pavement failure. The structural section was not designed for the current mix or volume of aircraft.

The Federal Aviation Administration (FAA) requires that airports have a Pavement Management System (AC 150/5380-7) that facilitates identification of expected pavement needs. ANC's Pavement Management System identifies pavement condition as a function of the PCI. The PCI is established through a survey and subsequent software analysis of asphalt and concrete pavement condition. The

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PCI is a metric value of 0-100, with 100 being the optimum pavement condition. The pavement condition surveys analyze cracks, spalling, rutting, and other pavement conditions that become part of the 0-100 metric. Poor pavement conditions result in Foreign Object Debris (FOD) on aprons, runways and taxiways and are safety concerns for aircraft moving on the airfield. A PCI condition below 60 is an indication that a project should be programmed in the short term to rehabilitate taxiways and aprons and existing paved airfield surfaces.

The existing asphalt at Taxiway E and Taxiway M is in poor condition. It has a PCI of 50 at Taxiway E and a PCI of 51 at Taxiway M. This is less than the desired minimum required under the Pavement Maintenance and Management Plan. The aprons are cracking, deteriorating, and fail to meet minimum Pavement Condition Index requirements. Existing pavement cracks will grow and expand, leading to pavement failures within the Taxiway's surface. This involves potential damage to aircraft and surface transportation vehicles from cracks, ruts, FOD and other impediments.