

AP/AL: Appropriation

Project Type: Gasline

Category: University

Location: Fairbanks Areawide

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House District: Fairbanks Areawide (HD 7-11)

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Estimated Project Dates: 07/01/2009 - 06/30/2014

Brief Summary and Statement of Need:

This request would enable acquisition of a machinery simulator package that would support training for any occupation utilizing heavy equipment. This will significantly reduce training cost and expand training opportunities.

Funding:	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	Total
AHCC Rcpts	\$1,072,000						\$1,072,000
Total:	\$1,072,000	\$0	\$0	\$0	\$0	\$0	\$1,072,000

<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:

	Amount	Staff
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
Totals:	0	0

Additional Information / Prior Funding History:

No previous funding has been provided for this project.

Project Description/Justification:

Surface Machinery Simulators

This request funds acquisition of a machinery simulator package to provide training for any occupation utilizing heavy equipment. Simulators offer a major advance in equipment operator training through a completely safe and truly cost-effective "virtual" hands-on training experience, without the high cost of equipment operation, removing equipment from production and the risk of accidents due to operator inexperience. This will significantly reduce training cost and expand training opportunities for trainees in the mining and oil and gas industries. There is significant overlap between occupational skills required for mining and gasline construction, so these simulators will be applicable to both industries.

Base simulator units and equipment modules to be purchased include the following:

Item	#	Cost	Extension
Base Units	2	\$ 275.0	\$ 550.0
Machine Simulators			
• Front End Loader	1	\$ 85.0	\$ 85.0
• D-11 Track Dozer	1	\$ 85.0	\$ 85.0
• Excavator	1	\$ 120.0	\$ 120.0
• Haul Truck (Off-road)	1	\$ 90.0	\$ 90.0
• Light Vehicle Package	1	\$ 55.0	\$ 55.0
• Surface Mine Visualizer	1	\$ 90.0	\$ 90.0
Computer Based Training for Each Simulator	6	\$ 25.0	\$ 150.0
Subtotal			\$ 1,225.0
Less 25% Industry Contribution			(\$ 300.0)
Maintenance @ 12% base			\$ 147.0
Total General Fund Request			\$ 1,072.0

Machine simulators were selected based on availability and utility to anticipated employer needs. For instance, we believe that training on a D-11 tracked dozer will be excellent preparation no matter what make or model of dozer a student will encounter. The basics are identical and standardization of operation controls and systems makes changeover between Komatsu and Caterpillar fairly routine.

Included is the light vehicle package for pickup and light truck training as well as forklift and similar light vehicles (less than 15,000 pounds). Also included is the surface mine visualizer to provide the necessary realism to retain student attention and contribute to learning operation on various terrain features.

The request also includes elements we consider essential to preparing our upcoming workforce such as the computer based training packages to increase instructor productivity and permit students statewide to access that portion of the training on-line thus reducing the amount of time actually spent at the simulator facility. Two base units are included to increase student throughput in anticipation of numerous upcoming construction projects. The request is based on a 25% industry contribution to the equipment's cost.

A five-year maintenance package for the entire system is included.

The simulators will be located in Fairbanks to serve construction related equipment training for mine development, road construction and pipeline workforce development.

In the future we will add modules for such equipment as side-booms, rotary trenchers and mobile rock drills; these items will have to be developed by the vendor as they do not currently include them in their inventory.