



**COMMISSION
AGENDA MEMORANDUM**

Item No. 6c

ACTION ITEM

Date of Meeting June 26, 2018

DATE: May 21, 2018

TO: Stephen P. Metruck, Executive Director

FROM: Brendalynn Taulelei, Senior Manager, Aviation Maintenance
Valarie Johnson, Planner/Coordinator Supervisor, Aviation Maintenance

SUBJECT: Seattle-Tacoma International Airport Ramp Snow Removal Contract

Amount of this request: \$1,600,000

ACTION REQUESTED

Request Commission authorization for Executive Director to execute two contracts totaling \$1,600,000 to provide snow removal services for the Airport Operations Area at the Airport. The contracts will be structured as one-year agreements with four one-year options.

EXECUTIVE SUMMARY

The current contracts expired on April 30, 2018. The ability to remove snow from the north and south ramp operation areas is crucial to the operations of the Airport during a snow event. We must have a snow removal plan and the necessary resources in place by October 1, 2018, as the snow season is considered to begin November 1.

JUSTIFICATION

Snow removal is required at Seattle-Tacoma International Airport to sustain commercial airline operations, passenger movements, and air cargo operations during snow and ice conditions. We do not currently have the internal resources and equipment to accomplish all snow removal requirements during extreme winter snow and ice storms. Maintenance will be working closely with the Central Procurement Office and Office of Social Responsibility to explore opportunities to incorporate a small or disadvantaged business component to the bid which aligns with the Port's Century Agenda strategy to "use our influence as an institution to promote small business growth and workforce development."

DETAILS

Historically two contractors have provided snow removal services. The contractors are required to provide heavy construction equipment and equipment operators to manage snow removal during peak snow conditions and ice accumulations. One contractor (contract A) has maintained the north side of the Airport Operations Area, the other contractor (contract B) has maintained the south side of the Airport Operations Area. The equipment has included dump

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trucks, front loaders, graders and other support vehicles. The contractors have cleared the Airport Operations Area ramp area and removed and transferred snow to designated snow dumps located at the north and south ends of the airfield. In addition, the contractors supported Aviation Maintenance airfield staff as needed for clearing snow. The snow season typically starts on November 1st and continues through April 1st of the following year. We have competitively bid this purchase.

Scope of Work

The scope of work in the preferred alternative is to develop an RFP and generate two contracts to provide services necessary for snow removal and transfer within the Airport Operations Area ramp area as well as to support Aviation Maintenance airfield staff as needed for clearing snow. The bids will include costs for all services necessary.

Schedule

Activity

Commission authorization	2018 Quarter 2
Bid	2018 Quarter 3
Contract in Place	2018 Quarter 4

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Increase Port FTE staff, hire seasonal staff and purchase additional snow removal equipment to meet peak snow and ice conditions.

Cost Implications: \$7 million over five years.

Snow removal contractors are required to provide a minimum of 13 heavy snow equipment vehicles and operators as part of their contract. The heavy equipment identified includes 3 motor graders, 3-wheel loaders, 4 dump trucks, 1 fuel truck and 2 trucks for supervisors. Based on state contract pricing the estimated capital cost to purchase the heavy equipment is approximately \$3.97 million dollars.

Minimal Heavy Equipment Requirement	Cost Per	Qty	Total
4x4 Trucks	\$33,660	2	\$67,320
Dump Truck	\$281,600	4	\$1,126,400
966 Front End Loader	\$313,500	3	\$940,500
14ft Road Grader	\$548,655	3	\$1,645,965
1000 Gallon Fuel Truck	\$195,000	1	\$195,000
Total Capital Requirement			\$3,975,185

In addition, maintenance costs to maintain equipment is estimated to be \$9,800 annually for ten pieces of heavy equipment (dump trucks, front end loaders and road graders) and

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\$7,500 annually for the two 4x4 trucks and one fuel truck. In a 5-yr period this amounts to \$602,500 (10*\$9800*5 and 3*\$7500*5).

With the new heavy equipment vehicles, 1 FTE Auto Mechanic is needed to maintain the additional snow fleet. Wage and benefit costs for 1 FTE Auto Mechanic at a \$68/hr rate amounts to \$707,000 over a 5-yr period.

Hire 13 seasonal staff to operate machinery @ \$55/hr. This estimate is for a 12-week period during winter season, with assumption staff can be brought on as seasonal emergency hires.

5-year seasonal staff cost estimate:	\$1,716,000	<i>(13 seasonal staff*12wks*5yrs)</i>
1 FTE (auto mechanic)	\$707,000	<i>(1 FTE*5yrs)</i>
New equipment cost:	\$3,975,185	
Equipment maintenance cost:	<u>\$602,500</u>	
Total estimated 5-year cost:	\$7,000,685	

Pros:

- (1) Hiring additional Port staff, seasonal staff and purchasing new equipment increases the Port’s available resource pool for extended shift rotations during lengthy snow events.
- (2) The additional staff can be deployed to support other Airport operational areas in the event of extreme snow and ice conditions.

Cons:

- (1) The additional FTE adds to the Port’s total staffing levels and will require compensation and benefits which will result in increased costs to the Port.
- (2) Purchasing new heavy equipment to add to the Port’s snow removal fleet will be a costly investment.
- (3) Total investment over a 5-year period for additional heavy snow equipment, equipment maintenance costs, 1 new FTE and seasonal staff is estimated to be \$7 million dollars.
- (4) Additional costs to be considered include building a heavy equipment storage facility, fueling the equipment and the training costs for operator certifications.
- (5) The Port also runs the risk of investing in purchasing heavy equipment that does not get used due to lack of snow and ice.

This is not the recommended alternative.

Alternative 2 – Rely on already limited Port staff, and purchase additional snow removal equipment, with the understanding that we cannot keep up during peak snow and ice conditions.

Cost Implications: \$4.68 million over five years.

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The cost for existing Aviation Maintenance staff dedicated to support snow removal events amounted to \$1,247,781 during the last 5 year-period (2014-2018), this includes training costs in preparation for snow operations. The cost does not include staff assigned to the snow command center, Airport Terminal Operations support, and snow removal material costs.

Although staff resource costs can be absorbed by using and repurposing existing Port FTEs, additional heavy equipment will be required to support Airport Operations Area ramp snow removal efforts. The existing snow fleet will be dedicated at capacity to the Aircraft Movement Area (AMA) snow removal efforts. The estimated costs to purchase a fleet of new snow equipment is \$3.97 million dollars. With the heavy equipment vehicles, 1 FTE Auto Mechanic is needed to maintain the additional snow fleet. Wage and benefit costs for 1 FTE Auto Mechanic at a \$68/hr rate amounts to \$707,000 over a 5-yr period.

1 FTE (auto mechanic)	\$707,000	<i>(1 FTE*5yrs)</i>
New equipment cost:	\$3,975,185	
Equipment maintenance cost:	<u>\$602,500</u>	
Total estimated 5-year cost:	\$5,284,685	

Pros:

- (1) Current Airport operations and facility staff already have experience and familiarity with snow removal operations, therefore the training period is minimal.

Cons:

- (1) Existing Port staff will not be able to keep up with snow and ice conditions under heavy demand, which may ultimately lead to an Airport closure.
- (2) An investment of \$3.97 million dollars is required to add particular snow removal heavy equipment to the snow fleet. The current fleet will be at capacity and dedicated to snow removal efforts on the AMA, it is not sufficient to also take care of the north and south ramp operation areas as well as the Airport.
- (3) Due to the additional new equipment, 1 FTE auto mechanic is required to maintain the new equipment. Wage and benefit costs for 1 FTE over the 5-year period amounts to \$707,000.
- (4) The use of existing staff and equipment severely limits the Port’s ability to keep all areas of the Airport operational during adverse weather conditions.
- (5) Airline needs during heavy snow events would not be met, flights may be grounded.
- (6) In extended snow events, work shift periods may be longer which may make it challenging to retain resources on-site for longer shift periods.

This is not the recommended alternative.

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Alternative 3 – Authorization to execute two new contracts for snow removal services at the Airport.

Cost Implications: Two contracts for snow removal for the north and south sides of the Airport Operations Area is estimated at \$1,600,000 in total. Actual ramp snow removal costs over the last 3-year snow period (2015-2018) was \$937,147, averaging approximately \$310,000/year, the estimate is based on averaging \$310,000/year for five years (\$310,000*5 = \$1,550,000).

Pros:

- (1) Current state and has met the operational needs of the Airport.
- (2) With contracted snow removal services in place, existing Port staff can focus on deicing and snow clearing efforts on the Aircraft Movement Area (AMA) during peak snow events to ensure continuity of operations.
- (3) The contractors will be responsible for hiring of operators and for securing the heavy construction equipment required for snow removal.
- (4) No additional hiring of staff is required; therefore, salary and benefit considerations and increases are avoided.
- (5) Purchasing new snow removal equipment is not necessary, therefore saving the Port an investment of \$3.97M, and not having to add it to our existing fleet to be operated and maintained.
- (6) Advertising a snow removal service contract as a procurement opportunity supports the Port’s Century Agenda strategy to “use our influence as an institution to promote small business growth and workforce development”.

Cons:

- (1) Total estimate cost of the contractor(s) is \$1,600,000.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

<i>Cost Estimate/Authorization Summary</i>	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$0	\$1,600,000	\$1,600,000
AUTHORIZATION			
Previous authorizations	0	0	0
Current request for authorization	0	0	0
Total authorizations, including this request	0	0	0
Remaining amount to be authorized	\$0	\$0	\$0

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Annual Budget Status and Source of Funds

The anticipated cost will be included in the annual operating budget. The funding source will be the Airport Development Fund.

Financial Analysis and Summary

Future Revenues and Expenses (Total cost of ownership)

Contracts will be budgeted within Aviation Maintenance Small Works through the annual Aviation Division budgeting process. The costs attributable to the airfield apron area cost center will be recovered from airlines through apron fees. The costs attributable to the airfield commercial area will reduce the net operating income of that cost center.

ATTACHMENTS TO THIS REQUEST

(1) 2017 POS Ramp Priorities Map

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None