



**COMMISSION
AGENDA MEMORANDUM**

Item No. 6f

ACTION ITEM

Date of Meeting July 11, 2017

DATE: June 30, 2017

TO: Dave Soike, Interim Executive Director

FROM: Jeffrey Brown, Director Aviation Facilities and Capital Programs
Wayne Grotheer, Direction Aviation Project Management Group

SUBJECT: Air Cargo Road Safety Improvements (CIP #C102162) and Cell Phone Lot (CIP #C800324)

Amount of this request: \$3,102,500

Total estimated project cost: \$11,800,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to (1) execute a professional services contract, (2) execute an interlocal agreement with King County for the operation and maintenance of traffic signals, (3) proceed with the design and preparation of contract bid documents for the C102162 Air Cargo Road Safety Improvements project, (4) utilize Port crews and small works contracts to complete the early pavement repair work, and (5) transfer \$3,019,590 of budget from the C800324 Cell Phone Lot project. This authorization is \$3,102,500 for a total of \$6,544,000 between the two projects.

EXECUTIVE SUMMARY

Air Cargo Road and S 170th Street experience heavy traffic volumes and significant congestion on a daily basis as one of two primary local access routes to the Main Terminal. The Air Cargo Road roadway assets are well beyond their useful life expectancy and are failing. Repair of critical pavement sections is required this summer. The Cell Phone Lot project’s permanent traffic signal and roadway improvements need to be completed to reduce traffic congestion and for the Port to meet its remaining obligations under the State Environmental Protection Act (SEPA) and to the City of SeaTac. These improvements are estimated at a total cost of \$11,800,000 and reflect a total budget increase of \$5,448,000 (\$1,379,590 of which is expense). These improvements could be displaced in as soon as three to six years after they are completed by future development identified in the Sustainable Airport Master Plan (SAMP).

JUSTIFICATION

These projects support the following Century Agenda and Aviation Division strategic goals:

- 1) Advance this region as a leading tourism destination and business gateway
- 2) Meeting the region’s air transportation needs at Seattle-Tacoma International Airport for the next 25 years

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3) Operate a world-class international airport by ensuring safe and secure operations

The Cell Phone Lot project relocated the Cell Phone Lot in April 2014 to support the expansion of an aircraft hardstand on the airfield. The Cell Phone Lot facility is an essential part of the Airport's strategy to supplement curbside capacity and reduce curbside congestion. Based upon traffic analyses completed in September 2014, both Port and City staff have concluded that the permanent traffic signal and roadway improvements appeared to be the best permanent access solution. These improvements are required for the Port to meet its remaining obligations under SEPA and to the City of SeaTac given transportation level of service and development standards. In April 2015 the Commission authorized staff to enter into an agreement to maintain the temporary traffic signal to allow the exploration of lower cost alternatives for a final permanent access solution.

The Air Cargo Road Safety Improvements project is a renewal and replacement project that will bring the roadway corridor up to current standards for operation and safety. Air Cargo Road was originally constructed circa 1970 and is the primary access for a number of airfield, cargo, and landside facilities. The Air Cargo Road on-ramp to the southbound Northern Airport Expressway is one of the primary access routes to the Main Terminal, and currently supports Cell Phone Lot customers, local businesses, ground transportation, and rental car busing. The existing pavement and lighting assets between S 166th Street and S 170th Street are failing and well beyond their useful life (see site photos in the attachment).

The improvement area for the completion of the Long Term Cell Phone Lot project and Air Cargo Road Safety Improvements project overlap as shown in the attachment. Current roadway standards require the completion of both projects to bring the roadway corridor up to current standards for operation and safety.

DETAILS

Since the improvement area for both projects overlap, and are both required to be completed, they will be combined and completed as one project in order to minimize overall costs and construction impacts to the traveling public. Due to the failing condition of the existing pavement on Air Cargo Road that can no longer be maintained, \$350,000 to repair critical pavement sections is required this summer. The total estimated cost for the complete Air Cargo Road Safety Improvements portion of the project is \$5,800,000 and reflects a budget increase of \$2,748,000. This increase is attributed to the addition of the pavement rehabilitation and roadway illumination scope given the deterioration of our roadway assets over time. The total estimated cost for the remaining Cell Phone Lot portion of the project is \$6,000,000 and includes \$2,980,410 for the construction of the existing lot and temporary traffic signal. This reflects a budget increase of \$2,700,000 and is due to the addition of the permanent traffic signal and roadway improvements.

In May 2015 the Port of Seattle entered into a contract with American Electrical Services, Inc. to operate and maintain the temporary traffic signal they had installed for the Cell Phone Lot

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project. The current contract can be extended through May 2020, and will need to be amended to support the construction schedule.

The permanent traffic signal that will be installed as part of the completed project will be owned by the Port of Seattle. The City of SeaTac currently contracts with King County to operate and maintain the traffic signal systems located in the City. Port staff plans to enter into an interlocal agreement with King County to support the design and construction of the permanent traffic signal, and to operate and maintain the permanent traffic signal once it is completed.

Scope of Work

As identified in the attachment the general improvement area for both projects includes Air Cargo Road from S 166th St to S 170th Street, S 170th St from Air Cargo Rd to the northbound off-ramp, and the Cell Phone Lot. The key elements of the combined project include pavement rehabilitation, capacity/access improvements, storm drainage, non-motorized transportation (pedestrians, bicycles), roadway illumination, signage, landscaping, and intelligent transportation systems. The portions of the projects that are to be expensed include the repair of critical pavement sections, and the work to be completed in City of Sea-Tac right-of-way on S 170th St. Based upon the analysis completed to date an improvement concept has been developed. As shown in the attachment the improvements include additional turn lanes and other operational and safety improvements for the corridor.

This project also includes the acquisition of a portion of City of SeaTac right-of-way along S 170th Street in support of the permanent traffic signal.

Small Business

Within the elements of the scope of work, there will be a number of contract opportunities for small and disadvantaged businesses, especially through the Port’s small works contracts.

Schedule

The early work effort to repair critical pavement sections on Air Cargo Road will be completed by September 2017. If necessary work to repair additional critical pavement sections is planned for 2018 Quarter 3. The table below summarizes the schedule for the remainder of the project.

Activity

Design start	2017 Quarter 2
Commission construction authorization	2019 Quarter 2
Construction start	2019 Quarter 3
In-use date	2020 Quarter 3

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Cost Breakdown

The cost breakdown is summarized below for each project.

C102162 Air Cargo Rd Safety Improvements	This Request	Total Project
Design	\$1,398,500	\$1,585,000
Construction	\$700,000	\$3,650,000
Total	\$2,098,500	\$5,800,000

C800324 Cell Phone Lot	This Request	Total Project
Design	\$959,000	\$1,890,911
Construction	\$0	\$4,064,089
Property Acquisition	\$45,000	\$45,000
Total	\$1,004,000	\$6,000,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Maintain the existing temporary traffic signal and complete critical pavement repair

Cost Implications: \$600,000

Pros:

- (1) Lowest level of investment for the Port. The above costs include the remaining costs for the temporary traffic signal operation and maintenance agreement (\$167,000), the critical pavement repair (\$350,000), and the costs that would be expensed if the project did not move forward (\$83,000).
- (2) Pavement repair addresses critical failing pavement sections on Air Cargo Rd this summer

Cons:

- (1) The Air Cargo Rd roadway assets are not renewed resulting in further degradation of the level of service and potential loss of operational use in the short-term.
- (2) Motorized and non-motorized transportation improvements are not completed to support safe and efficient operations.
- (3) The Port’s remaining obligations under SEPA and to the City of SeaTac for the Cell Phone Lot are not satisfied.

This is not the recommended alternative.

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Alternative 2 – Upgrade the full Air Cargo Road corridor and complete the Cell Phone Lot project

Cost Implications: \$24,700,000

Pros:

- (1) Early work pavement repair addresses critical failing pavement sections this summer and potentially next summer prior to construction
- (2) Motorized and non-motorized transportation improvements are completed to support safe and efficient operations.
- (3) The Port's remaining obligations under SEPA and to the City of SeaTac for the Cell Phone Lot project are satisfied.

Cons:

- (1) The portion of the Air Cargo Road corridor north of S 166th Street has several years of service life left. The estimated cost for this work (\$16,400,000) could be deferred.
- (2) Some of the improvements could be displaced as soon as three to six years after they are completed by future development identified in SAMP.

This is not the recommended alternative.

Alternative 3 – Upgrade the south end of the Air Cargo Road corridor and complete the Cell Phone Lot project

Cost Implications: \$11,800,000 (including \$2,980,410 for the initial construction of the Cell Phone Lot and temporary traffic signal).

Pros:

- (1) The project scope is reduced to include only the work required in the short-term.
- (2) Early work pavement repair addresses critical failing pavement sections this summer and potentially next summer prior to construction.
- (3) Motorized and non-motorized transportation improvements are completed to support safe and efficient operations.
- (4) The Port's remaining obligations under SEPA and to the City of SeaTac for the Cell Phone Lot project are satisfied.

Cons:

- (1) All of the improvements could be displaced as soon as three to six years after they are completed by future development identified in SAMP.

This is the recommended alternative.

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FINANCIAL IMPLICATIONS

The financial implications for each project are summarized separately in the tables below and do not reflect the requested budget transfer included with this request.

C102162 Air Cargo Road Safety Improvements

Cost Estimate/Authorization Summary

	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$3,052,000	\$0	\$3,052,000
Revised estimate	\$4,940,000	\$860,000	\$5,800,000
AUTHORIZATION			
Previous authorizations	\$141,500	\$0	\$141,500
Current request for authorization	\$1,398,500	\$700,000	\$2,098,500
Total authorizations, including this request	\$1,540,000	\$700,000	\$2,240,000
Remaining amount to be authorized	\$3,400,000	\$160,000	\$3,560,000

C800324 Cell Phone Lot

Cost Estimate/Authorization Summary

	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$1,768,000	\$0	\$1,768,000
Previous changes	\$1,351,590	\$180,410	\$1,532,000
Current change	\$2,180,410	\$519,590	\$2,700,000
Revised estimate	\$5,300,000	\$700,000	\$6,000,000
AUTHORIZATION			
Previous authorizations	\$3,119,590	\$180,410	\$3,300,000
Current request for authorization	\$814,410	\$189,590	\$1,004,000
Total authorizations, including this request	\$3,934,000	\$370,000	\$4,304,000
Remaining amount to be authorized	\$1,366,000	\$330,000	\$1,696,000

Annual Budget Status and Source of Funds

The Air Cargo Road Safety Improvements project (CIP #C102162) is included in the 2017-2021 capital budget and plan of finance as a prospective project with a total capital budget of \$3,052,000. A budget increase of \$1,888,000 will be transferred from the Aeronautical Allowance (CIP #C800753) for a total revised capital budget of \$4,940,000. The funding source for this project is Airport Development Fund.

The Cell Phone Lot project (CIP #C800324) is included in the 2017-2021 capital budget and plan of finance as a committed project with a total capital budget of \$3,119,590. A budget increase of \$2,180,410 will be transferred from the Aeronautical Allowance (CIP #C800753) for a total revised capital budget of \$5,300,000. Port and City staff had previously discussed utilizing City

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of SeaTac parking tax revenues as a partial funding source for the permanent access improvements. The Port/City of SeaTac Interlocal Agreement expires in February 2018 and would require an amendment. The funding source for this project is the Airport Development Fund and potentially City of SeaTac parking tax revenues.

The repair of critical pavement sections of expense in amount of \$350,000 is required this summer, 2017 and would be absorbed within the aviation 2017 operating expense budget.

Financial Analysis and Summary

Project cost for analysis	\$11,800,000
Business Unit (BU)	Roadways
Effect on business performance (NOI after depreciation)	NOI after depreciation will increase
IRR/NPV (if relevant)	N/A
CPE Impact	\$0.06 in 2020

Future Revenues and Expenses (Total cost of ownership)

Port staff estimates the impact to the on-going operation and maintenance costs associated with the Cell Phone Lot to be \$25,000 per year for the lot operations, and \$45,000 per year for the temporary traffic signal. The cost to operate and maintain a permanent traffic signal is estimated at \$30,000 annually and the contract will be included in the Aviation Maintenance’s budget. The operating and maintenance costs for the roadway illumination system could increase (more lights) or be reduced if a LED based system is pursued. Landscape maintenance costs for the Cell Phone Lot and adjacent roadways are anticipated to increase.

ADDITIONAL BACKGROUND

The Air Cargo Road Safety Improvements project was originally defined over fifteen years ago and when it was put on hold it had a total budget of \$3,052,000. At that time the pavement rehabilitation and roadway illumination scope were not included in the project scope. With the passage of time and the deterioration of the roadway assets that scope is now included with the project. The total estimated cost for the Air Cargo Road Safety Improvement has increased from \$3,052,000 to \$5,800,000.

In December 2012 when the Port began work on the Cell Phone Lot project the proposed permanent access solution was a roundabout. In May 2014 staff recommended the re-evaluation of the permanent access solution since at the completion of the 60% design phase the estimated costs for the roundabout had grown significantly. In April 2015 staff reported to the Commission that they had completed the analysis and that the roundabout was no longer the preferred permanent access solution. A permanent traffic signal was preferred since it would provide better operational performance, a more flexible and lower cost solution, and would have less impact on the traveling public during construction. Since a portion of these improvements are located within the City S 170th Street right-of-way, the Port reviewed the

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analysis with City staff and the City concurred that the traffic signal appears to be the appropriate permanent access solution. At this time the total estimated cost for the Cell Phone Lot project was \$5,200,000.

Staff is well underway with SAMP and the Commission was last briefed on August 23, 2016. The draft SAMP development concept includes a second terminal and expansion of gates to the north. The August briefing to Commission provided an overview of a draft phasing plan for projects which includes relocation of the southbound lanes of the North Airport Expressway and Air Cargo Road to enable gate expansion. Based upon the draft implementation plan schedule, this roadway work in SAMP would displace the existing cell phone lot in 2023, and the gate expansion would demolish the improvements to Air Cargo Road and S 170th Street in 2026.

ATTACHMENTS TO THIS REQUEST

- (1) Existing Site Photos, Vicinity Map, and Improvement Concept

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

April 14, 2015 – The Commission authorized the Chief Executive Officer to 1) execute a design contract for the Cell Phone Lot (#C800324) and the Air Cargo Road Safety Improvements (#C102162) project at the Airport, and 2) to continue the Cell Phone Lot (#C800324) project for an additional \$649,900.

May 6, 2014 – The Commission authorized an additional \$822,100 to complete the construction of the Cell Phone Lot at the Airport

September 10, 2013 – The Commission authorized the Chief Executive Officer to (1) proceed with construction of the Cell Phone Lot at the Airport; (2) use Port Construction Services crews to self-perform the construction; (3) advertise for bids and award a major public works project-specific unit price contract for asphalt and striping; and (4) execute interlocal agreements with the City of SeaTac for the design, installation, and operation of a temporary traffic control signal on South 170th Street for an additional \$1,420,000

December 11, 2012 – The Commission authorized the Chief Executive Officer to proceed with the design of the Cell Phone Lot project for \$408,000