PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

Item No. 4c

Date of Meeting September 11, 2014

DATE: September 4, 2014

TO: Tay Yoshitani, Chief Executive Officer

FROM: Michael Ehl, Director, Airport Operations
Nick Harrison, Senior Manager, Aviation Operations

SUBJECT: Cobus 3000 Airport Ramp Buses (CIP #C800714)

Amount of This Request:	$1,820,000	**Source of Funds:**	Airport Development Fund
Est. Total Project Cost:	$1,820,000		
Est. State and Local Taxes:	$160,000		
Net Proceeds to the Port:	N/A		

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to execute contracts for the purchase of three Cobus 3000 Airport ramp buses for use at Seattle-Tacoma International Airport for a total authorization of $1,820,000.

SYNOPSIS

Seattle-Tacoma International Airport is experiencing unprecedented growth in international air service, registering a 10.2% increase in passengers in 2013 (3,248,069 in 2012, vs. 3,579,365 in 2013), the second fastest growth rate in the nation. Given the geographic location of Sea-Tac, the aggregate schedule of international arrivals exceeds current widebody gate capacity during the peak time of 11 a.m. – 2 p.m. daily. Due to a shortage of international gates at the South Satellite and multiple airport-wide gate closures during upcoming construction, hardstand operations are anticipated as a common practice, which will involve busing passengers from remotely parked aircraft to the South Satellite for passport and customs clearance. Purpose-built high-capacity buses are needed to carry passengers to and from hardstands where aircraft will park when no gates are available for normal operation using a passenger loading bridge.

This project was not included in the 2014-2018 capital budget and plan of finance, as the full extent of Delta's Seattle flight schedule was not known at the time of its development. The budget will be transferred from the Aeronautical Allowance CIP #C800404 resulting in no net change to the Airport capital budget.

The purchase of dedicated ramp buses for these types of operations supports the Century Agenda goal of doubling the number of international flights and destinations at the Airport and is a cost-effective way to meet the needs of increased international traffic.

BACKGROUND

The immediate justification for passenger busing is the shortage of widebody gates at the South Satellite to accommodate international arrivals during the peak arrivals time. Eleven widebody gates are available at the South Satellite to accommodate international arrivals. During the summer months, current schedules show peak gate demand for international widebody gates at the South Satellite facility to be:

- 14 on Saturdays
- 13 five days a week
- 12 one day a week

The situation could become even more acute if any passenger loading bridges are made unusable because of mechanical failure or conflict with ramp activities. When passenger loading bridges are not available for arriving internationals flights, airlines will likely need to unload passengers at hardstands or at Concourse A and transport passengers in ramp buses to the South Satellite and directly into the international corridor. Widebody aircraft can carry in excess of 300 passengers, including 10–30 wheelchair passengers per flight.

In addition to the international gate shortage, multiple domestic gate closures are expected at Concourse A, the South Satellite and the North Satellite during construction of several upcoming projects. Hardstand operations will be needed with increasing frequency at least until the completion of the International Arrivals Facility and the NorthSTAR projects.

PROJECT JUSTIFICATION AND DETAILS

Existing landside buses can be used to transport passengers across the airfield on an infrequent, contingent basis, but the buses are not configured for high capacity or for quick loading and unloading. Each COBUS 3000 holds over 100 passengers and has three sets of double doors on each side and a shallow step up into the bus. These buses are also more fuel efficient than any buses in our current fleet and have a tighter turning radius, allowing for more precise movements on the crowded airfield ramp. They are made specifically for the level terrain of aircraft operating areas. Their very low floor, relatively slow speed and large size make them unsuitable for use on public roads. A competition waiver has been granted for purchase of these vehicles directly from COBUS Industries.

Alternative vehicle fuels (CNG and electricity) were investigated for the COBUS ramp bus operations. An environmental benefits analysis indicated that use of an alternative fuel would provide minimal advantages over standard clean diesel technology. In terms of greenhouse gas emissions, the addition of three COBUS vehicles would increase Airport fleet emissions less than 1 percent over an electric bus, and have marginal environmental impacts over using any of the CNG buses currently in the Port's fleet.

Staff evaluated different options of leasing the buses. The financial analysis shows purchasing these buses gives the Port better value than leasing.

Project Objectives

The objective of this project is to obtain special purpose airport buses for transporting passengers safely and efficiently across the ramp during hardstand operations or other special circumstances.

Scope of Work

The scope of work for this project is to purchase three COBUS 3000 airport ramp buses with diesel engines for use at the Airport, displaying Port of Seattle colors and branding.

Schedule

Commission Authorization	August 2014
Purchase Order Executed	September 2014
COBUS 3000s delivered and in service	April 2015

FINANCIAL IMPLICATIONS

Budget/Authorization Summary	Capital	Expense	Total Project
Original Budget	$1,820,000	$0	$1,820,000
Previous Authorizations	$0	$0	$0
Current request for authorization	$1,820,000	$0	$1,820,000
Total Authorizations, including this request	$1,820,000	$0	$1,820,000
Remaining budget to be authorized	$0	$0	$0
Total Estimated Project Cost	$1,820,000	$0	$1,820,000

Project Cost Breakdown	This Request	Total Project
Bus Procurement and Branding	$1,660,000	$1,660,000
Construction Management	$0	$0
Design	$0	$0
Project Management	$0	$0
Permitting	$0	$0
State & Local Taxes (estimated)	$160,000	$160,000
Total	$1,820,000	$1,820,000

Budget Status and Source of Funds

The Airport Ramp Buses CIP #C800714 was not included in the 2014-2018 capital budget and plan of finance. The budget will be transferred from the Aeronautical Allowance CIP #C800404 resulting in no net change to the Airport capital budget. The funding source for this project is the Airport Development Fund.

Financial Analysis and Summary

CIP Category	Customer Service
Project Type	Renewal and Enhancement
Risk adjusted discount rate	N/A
Key risk factors	N/A
Project cost for analysis	$1,820,000
Business Unit (BU)	Terminal Gates
Effect on business performance	NOI after depreciation will increase
IRR/NPV	N/A
CPE Impact	CPE will increase $0.02 in 2016

Lifecycle Cost and Savings

Average annual O&M (labor, material, & fuel) costs for a bus (based on the current Gillig CNG buses for Rental Car Facility (RCF) is estimated to be $33,479 each per year, or a yearly total of $100,439 for all three new buses. These buses will be driven by current landside drivers so will potentially result in additional labor costs but will not require additional FTE's in the budget.

The expected useful life of a COBUS 3000 is 15 years. The financial analysis shows purchasing these buses gives the Port better value than leasing. If the Port decides the buses are no longer needed after NorthSTAR and the International Arrival Facility are complete, the buses should maintain their resale value. The secondary market for used COBUS vehicles is anticipated to be stronger than the secondary market for other kinds of vehicles.

STRATEGIES AND OBJECTIVES

The purchase of dedicated ramp buses for these types of operations supports the Century Agenda goal of doubling the number of international flights and destinations at the Airport and is a cost-effective, environmentally friendly way to meet the needs of increased international passenger traffic. It also supports the Airport's goal to facilitate/accommodate growth in international operations until the new International Arrivals Facility is completed.

TRIPLE BOTTOM LINE

Economic Development

This project allows the Airport to accommodate increased flight activity which has positive economic benefits to the region.

Environmental Responsibility

Alternative vehicle fuels (CNG and electricity) were investigated for the COBUS ramp bus operations. An environmental benefits analysis indicated that use of an alternative fuel would provide minimal advantages over standard clean diesel technology. The selected model consumes only one gallon of fuel per hour of operation. In terms of greenhouse gas emissions, the addition of three COBUS vehicles would increase Airport fleet emissions less than 1 percent

over an electric bus, and have marginal environmental impacts over using any of the CNG buses currently in the Port's fleet.

Community Benefits

The airport experience is often considered the first impression of a region by visitors. Procuring airport ramp buses allows the airport to offer an efficient and secure method of transporting arriving international passengers in a fashion commonplace at many large international airports around the world. This provides a far more favorable experience for passengers arriving in our region than being held on board an aircraft to an undetermined amount of time.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1) – Do Nothing: Under this alternative, arriving international flights will have to hold on the ramp until an international gate becomes available. This occurred 12 times in 2013 and has occurred 9 times this year already, with hold times ranging from 10–45 minutes each. With increased international service beginning in 2014, this would likely happen several times per week, with hold times extending even longer. Delays in deboarding cost the airlines in missed connections and jeopardize departure operations. This is not the recommended alternative.

Alternative 2) – Restrict scheduling through the assignment of arrival slots. Becoming a slot-restricted airport, where the airport controls when airlines are allowed to schedule flights, would require Airline Airport Affairs Committee (AAAC) concurrence, significant changes to the airline agreement and a lengthy process with the FAA. The AAAC has made it clear they would not support this alternative, which would disadvantage some carriers and weaken open market economics. This is not the recommended alternative.

Alternative 3) – Require "split operations": In this alternative, the airport requires airlines that arrive at an international gate to tow aircraft to a non-international gate after passengers have deplaned so that another aircraft can arrive at the international gate. It should be noted that Delta Air Lines already splits several operations per day to Concourse A and therefore, gates may not be available for further split operations when required. Furthermore, this option is not preferred by the carriers as it involves risk when towing aircraft and disrupts turn activities such as fueling and cargo unloading and loading that could potentially cause delays. This is not the recommended alternative.

Alternative 4) – Bus passengers using employee parking or RCF buses already owned by the Port: The buses we currently own are not designed for ramp loading and unloading of passengers. They can accommodate only approximately 35 people each trip, require passengers to step up significantly from ramp level through a single load/unloading door and are already dedicated to their intended operations. While lifecycle costs of both our existing buses and the proposed Cobus vehicles are equivalent, the higher capacity of the purpose-built bus provides a significant advantage. This is not the recommended alternative.

Alternative 5) – Provide specialized, dedicated ramp buses to transport passengers during hardstand operations: This alternative is preferred because it provides dedicated equipment to allow international operations to continue as scheduled without delay to passengers and ground support activities. Ramp buses allow passengers to quickly and safely load and unload through multiple sets of double doors with only a shallow step up into the bus. These buses comfortably transport over 100 passengers (more than double employee and RCF buses) meaning less trips across the ramp and less risk. These buses are also more fuel efficient than any buses in our current fleet. **This is the recommended alternative.**

ATTACHMENTS TO THIS REQUEST

- None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- None