



COMMISSION
AGENDA MEMORANDUM

Item No. 8g

ACTION ITEM

Date of Meeting July 23, 2024

DATE: July 12, 2024

TO: Stephen P. Metruck, Executive Director

FROM: Keri Stephens, Director, Aviation Facilities and Capital Programs
Eileen Francisco, Director, Aviation Project Management

SUBJECT: Compactor Capacity Design and Construction Authorization (C801030)

Amount of this request: \$3,900,000

Total requested project cost: \$4,500,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to (1) authorize design and preparation of construction bid documents; (2) advertise, award, and execute a major works construction contract; (3) execute related project change orders, amendments, work authorizations, purchases, contracts, and take other actions necessary to support and deliver the Compactor Capacity project within the approved budget; and (4) authorize use of Port of Seattle crews to support the design and construction activities. This request is for \$3,900,000 of a total estimated cost of \$4,500,000.

EXECUTIVE SUMMARY

The purpose of this project is to expand capacity and improve sanitary conditions of the airfield solid waste (garbage, and recycling) infrastructure. Significant passenger growth in the past 15 years has resulted in solid waste volumes that require our solid waste systems to operate at or near maximum capacity with overages during peak times. The project supports the diversion of waste from landfills by ensuring throughput capacity is available for recycling. The project supports solid waste redundancy through providing additional solid waste assets, enabling operations to continue during peak times and inclement weather.

Solid waste throughput and capacity are essential for airport operations, worker safety, pest control, and overall sanitation. This project ensures operational integrity of the airfield solid waste operations by adding four new compactors, two trash and two recycling, at the north end of the airfield near gate E-100.

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JUSTIFICATION

This action ensures adequate airfield solid waste infrastructure is in place to meet operational needs, pest control, and worker safety requirements. Solid waste generation is directly proportional to the number of passengers utilizing SEA. Trash and recycling compactor locations are now experiencing higher volumes than intended and create single points of failure for the SEA waste management system. Trash and recycling outflow is constrained by infrastructure limitations. The dispersed trash and recycling compactor locations regularly reach maximum throughput during peak times and compactors are often full well before haul can be performed.

Limited waste throughput capacity along with unscheduled maintenance events, create safety hazards, unsanitary conditions, and impede airport operations. This project will reduce the single point of failure when a compactor is full, being hauled off, or goes out of service for maintenance by co-locating them to an accessible location. By co-locating the compactors, if one compactor is not available operators will be able to use the adjacent one and reduce the downtime to dispose of trash and recycling and increase the throughput capacity. The new location will be accessible to the ramp operations but removed from the high activity area. Haul off and disposal operations will not disrupt ramp operations or compactor operations which could lead to delays or no place to dispose of trash and recycling.

Diversity in Contracting

This project will use an existing Indefinite Delivery, Indefinite Quantity (IDIQ) contract for design that was established in 2022. The contract includes a 16% women-and-minority-owned business enterprise (WMBE) participation utilization requirement. The project team will work with Diversity in Contracting Department to determine participation opportunities and appropriate aspirational goals for WMBE for the construction phase of the project.

DETAILS

Project site will be developed outside of the airfield fence, and a fence relocation will be completed to include the project site during construction. The project site is a former fuel farm that will be repurposed for beneficial use. The compactors will primarily serve airplane waste and provide redundancy to existing compactor locations.

Scope of Work

- (1) Pre-manufactured covered trash compactor structure to accommodate four compactor units.
- (2) Structure will be open air on all sides with a fabric chain-link fence or similar enclosure to obscure three sides of the structure.
- (3) Design of structural pad and foundation to accommodate compactors and pre-manufactured structure.
- (4) AOA fence modification to have the compactor structure located on the secure airside.

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- (5) Roadway modifications required to provide trash compactor truck access from the apron to the new structure.
- (6) Site utilities to provide, power, communication for cameras and compactors, and water/sewer to the new structure.
- (7) All other work necessary to ensure the site function as intended.

Schedule

60% Design start	Quarter 3 2024
Construction start	Quarter 2 2025
In-use date	Quarter 1 2026

Cost Breakdown

	This Request	Total Project
Design Phase	\$400,000	\$ 1,000,000
Construction Phase	\$3,500,000	\$3,500,000
Total	\$3,900,000	\$4,500,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 –Status Quo – Don’t install new compactor location.

Cost Implications: \$500,000 spent to date would need to be expensed.

Pros:

- (1) Reduces capital expenditure

Cons:

- (1) Does not address airfield trash and recycling capacity.
- (2) Does not provide safe and updated compactor site location.
- (3) Does not address displaced compactors at C1

This is not the recommended alternative.

Alternative 2 – Develop site at E-100 location with CMU block building and add four (two each recycle and trash) 30 yard compactors, with accompanying infrastructure (power, rails, electronic access systems) at a location at the north side of the airfield (this includes relocating C1 compactors).

Cost Implications: \$5,500,000

Pros:

- (1) Prevents leachate, contains foreign object debris (FOD)
- (2) Provide uninterrupted disposal capability and eliminate single line of failures at airfield compactor locations.

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- (3) Increase overall airport trash and recycling capacity.

Cons:

- (1) Highest capital expenditure

This is not the recommended alternative.

Alternative 3 – Develop site at E-100 location with metal enclosed structure and add four (two each recycle and trash) 30 yard compactors, with accompanying infrastructure (power, rails, electronic access systems) at a location at the north side of the airfield (this includes relocating C1 compactors).

Cost Implications: \$4,500,000

Pros:

- (1) Lowest cost alternative
- (2) Prevents leachate, contains FOD
- (3) Provide uninterrupted disposal capability and eliminate single line of failures at airfield compactor locations.
- (4) Increase overall airport trash and recycling capacity

Cons:

- (1) Requires capital expenditure

This is the recommended alternative.

FINANCIAL IMPLICATIONS

<i>Cost Estimate/Authorization Summary</i>	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$1,700,000	\$0	\$1,700,000
Previous changes – net	\$1,800,000	0	\$1,800,000
Current change	\$1,000,000	0	\$1,000,000
Revised estimate	\$4,500,000	0	\$4,500,000
AUTHORIZATION			
Previous authorizations	\$600,000	0	\$600,000
Current request for authorization	\$3,900,000	0	\$3,900,000
Total authorizations, including this request	\$4,500,000	0	\$4,500,000
Remaining amount to be authorized	\$0	\$0	\$0

Annual Budget Status and Source of Funds

This project (CIP #C801030) was included in the 2024-2028 Capital Budget and plan of finance with a total capital budget of \$3,500,000. The capital increase of \$1,000,000 was transferred from

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the Aeronautical Allowance¹ CIP C800753 resulting in no net change to the Airport capital budget. The funding sources will be the Airport Development Fund (ADF).

Financial Analysis and Summary

Project cost for analysis	\$4,500,000
Business Unit (BU)	Terminal Building
Effect on business performance (NOI after depreciation)	NOI after depreciation will increase due to inclusion of capital (and operating) costs in airline rate base.
IRR/NPV (if relevant)	N/A
CPE Impact	\$0.01 in 2027

Future Revenues and Expenses (Total cost of ownership)

The compactors will be supported by Aviation Maintenance.

ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None

¹ The Aeronautical Allowance is included in the Capital Improvement Plan to ensure funding capacity for unspecified projects, cost increases for existing projects, new initiatives, and unforeseen needs. This ensures funding capacity for unanticipated spending within the dollar amount of the Allowance CIP.