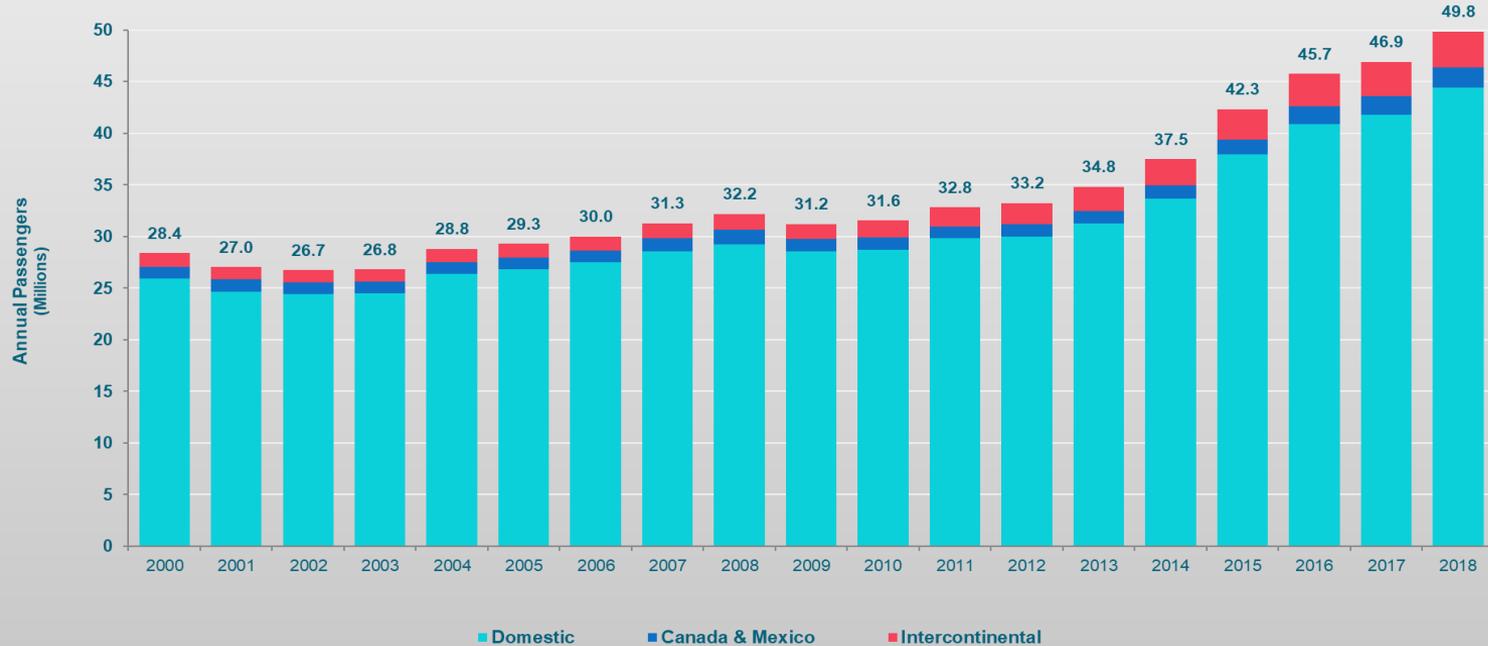


# Terminal Waste Receptacle Standardization and Procurement

# Sea-Tac Passenger Growth

## Total Annual Air Passenger Traffic



Strong demand growth since the existing receptacles were put into service

# Previous Standard

## Interior Receptacles

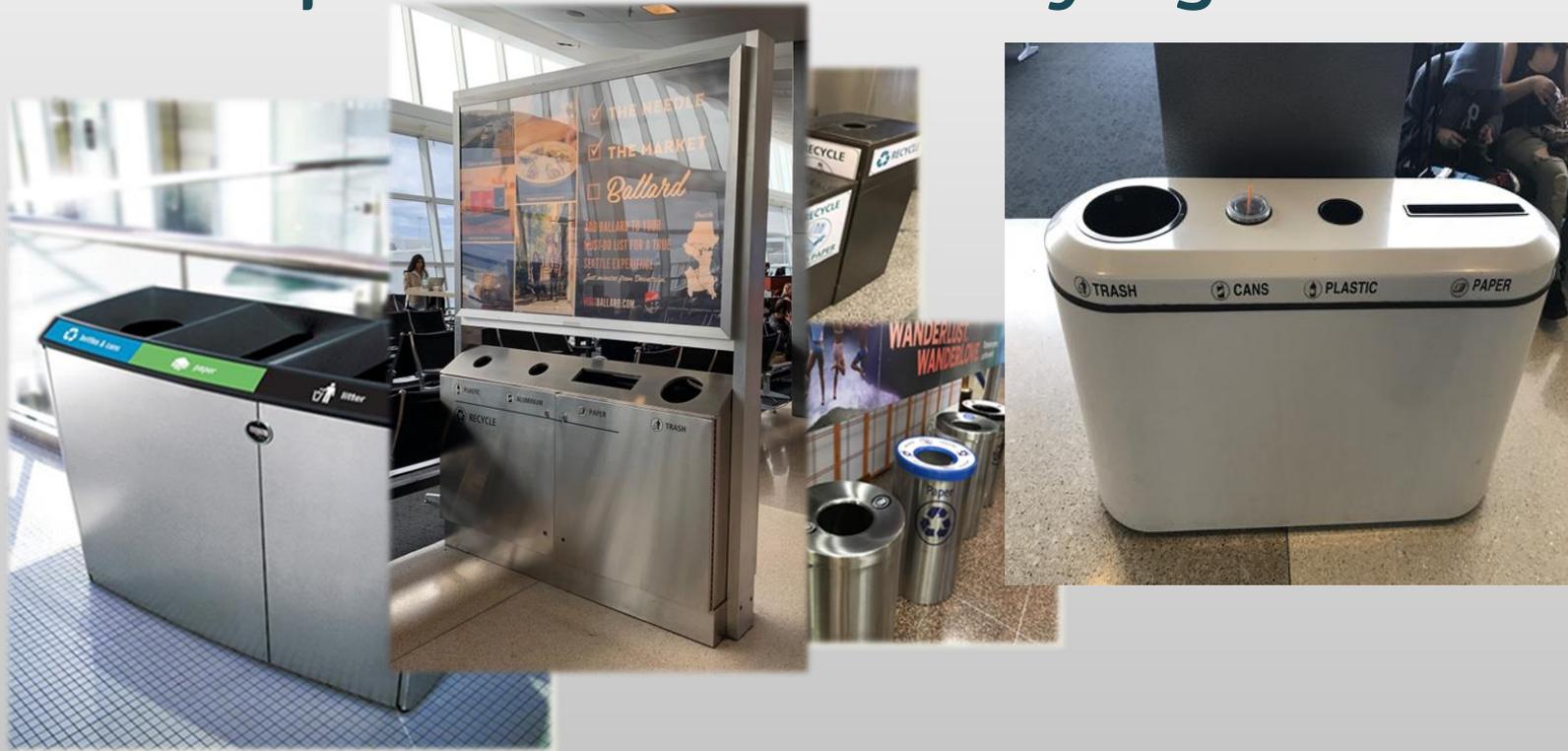
### Challenges

- Small openings – Bridging
- Small in capacity
- Single unit leads to pre-mature emptying



While addressing some of the Airport's current needs, does not address all needs

# What problems are we trying to solve?



Wide variety of existing conditions. No uniform standard or program. Need a plan forward.

# Old Receptacles

## Current challenges

- Graphics wear
- Cross-Contamination issues
- Equipment failure
- Visual appearance
- Odor problems



Aged receptacles have reached end of useful life and function poorly

# Challenges with current state

## Issues

- Inefficient for staff
- Not a fit for our waste streams
- Failing to meet the current passenger demand
- Not aligned with our sustainability initiatives



Damaged, older receptacles fail to meet the current needs and goals of the Airport

# Previous Standard

## Exterior Receptacles

### Challenges

- Capacity
- Failing to meet demand
- Design weakness for the application



Does not meet the capacity or duty demands for the current application

# New Standard Development

- Increased Capacity over previous standard.
- Heavy duty, yet attractive.
- Bigger openings avoid bridging.
- Front door opening for easy access.
- Slanted top avoids stacking.
- Modular: Interchangeable Flange.



Standard developed by cross-functional Port staff team

# Voice of the staff

“We love these new receptacles... They are so easy to maintain.”



“The slide out bins are easy to handle. No hassling with lids.”



“Makes our job easier.”



Majority of Staff are positive about new standard

# SeaTac Airport Current Waste Receptacle Inventory Plus Additions

As the Airport facility and passenger volume grows, the demand for such equipment grows.

## Estimated Cost

Replacement Summary	Location	Quantity
Replacement 2019-2020	Interior	345
	Exterior	142
<b>Replacement Total</b>		<b>487</b>
New Addition 2019-2020	Interior	269
	Exterior - NE Ground Transportation	59
New Addition 2020	IAF 2020	40
New Addition 2021	NSAT 2021	30
New Addition 2022	NSAT 2022	30
<b>New Addition Total</b>		<b>428</b>
2020 Contingency	6% of 2019 total	51
2021 Contingency	6% of 2020 total	54
2022 Contingency	6% of 2021 total	61
2023 Contingency	6% of 2022 total	65
<b>Contingency Total</b>		<b>231</b>
<b>Grand Total in Plan</b>		<b><u>1146</u></b>

Item	Quantity in Plan	Estimated Price per Receptacle	Total
Interior	945	\$1,100.00	\$1,039,500.00
Exterior	201	\$1,850.00	\$371,850.00
Total Quantity	1146		
Freight (average \$245)	1146	\$245.00	\$280,770.00
		Sub Total w/o Tax	\$1,692,120.00
		Tax	\$169,212.00
		<b>Grand TOTAL</b>	<b>\$1,861,332.00</b>

# Details of SeaTac Airport Old Waste Receptacle Inventory and Additions

Itemized Categories		
Replacement over 2019 - 2020		
Type for Interior Receptacle	Current Quantity	Replacement Quantity
Old Transit	96	192
Combo 3 Stream	39	78
Food Court Receptacles	48	48
Cylinder Cans	81	27
<b>Total to be replaced - Interior</b>	<b>264</b>	<b>345</b>
Type for Exterior Receptacle	Current Quantity	Replacement Quantity
Dispatch	71	142
<b>Total to be replaced - Exterior</b>	<b>71</b>	<b>142</b>

## New Additions over 2019-2020

Type	Number of Location in need of Receptacles	Quantity Need at Location
D Hardstand - Garbage/Recycle/Compost waste receptacle - 3 stream	1	3
D Hardstand - Duo for 7 Gate Counters	7	14
All Terminal Gate Counters including FIS - Duo	95	190
Baggage Claim - Duo	15	30
Skybridges - Duo	6	12
Checkpoints - cabinet receptacles w roll out bins - Duo	10	20
<b>TOTAL AIR TERMINAL OPS</b>	<b>134</b>	<b>269</b>
NE GT - Ticketing kiosks - Duo	6	12
NE GT - Exterior	10	20
NE GT - Garbage/Recycle/Compost waste receptacle - 3 stream	9	27
<b>TOTAL LANDSIDE OPS</b>	<b>25</b>	<b>59</b>

\* See Image Legend on the next slide

# Image Legend

\*1. Transit



\*2. Combo 3 Stream



\*3. Food Court Receptacles



\*4. Cylinder Cans



\*5. Dispatch



\*6. 3 Stream, New Standard



\*7. Duo



Types of Current Receptacles

# Questions

**THANK YOU!**

# Appendix



# Aged Receptacle

## Inefficient and Dysfunctional

### Custodial and Passenger Inefficiency

- Small openings
  - Trash gets stuck
  - Trash piles up on top
  - Appears full when it's not
- Small in capacity
- Inefficient top lid opening
- Inside only supplies thin wire rings to hold liners: paper clips to hold the waste weight
- Liner falls down, liquid spills out of the case onto floor
- Receptacle lid lifting and placement challenges around passengers when it's packed with passengers

### A Concourse



# Food Court Receptacles

## Challenges

- Opening Arrangement
- Materials of construction not rugged
- Not consistent or standard with the balance of the facility



While meeting some of the needs of the Food Court areas, do not meet all needs

# Landside/Garage Receptacles

## Challenges

- No real standard
- Inherent design weaknesses
- Attract rodents and pests
- Risk of injury for staff



Staff are deferring purchase of the previous landside standard for garage due to known challenges

# Previous Standard Interior Receptacle Specification

## “Transit” Pricing to the Port

- Current price **\$2,100.00** EA for 10EA purchase for new D Hardstand
- Total 60 gal. (3 x 20) gallons
- SLTRA-180 with cast aluminum lid
- H 35.9" x W 40.8" x D 19.5"
- Weight 128 lbs.

## “Transit” Pricing in 2012 to the Port

Price in 2011 and delivery in 2012

- **\$1,524.00** EA for 179EA purchase



# Airport Receptacles & Price Range

## Salt Lake City International Airport

Architectural Brass (AB) SLC: \$800 – \$1,200.00 (20gal. EA Bin)



## Calgary International Airport

AB Calgary: \$1,085.00 - \$1,595.00 (20gal. EA Bin)



# Airport Receptacles & Price Range

## San Jose International Airport

AB MOD: \$995 - \$1,195.00 (20gal. EA)



## LAX – Los Angeles World Airports

AB LAXWEST: \$ Not Available



# Airport Receptacles & Price Range

**Phoenix Sky Harbor International Airport**  
AB PHX: \$1,595.00 - \$1,895.00 (20gal. EA Bin)



**McCarran International Airport, Las Vegas**  
AB JELLO: \$ Not Available



# Airport Receptacles & Price Range

## Nashville International Airport

AB Citizen: \$2,795.00 - \$2,995.00 (20gal. EA Bin)



## Philadelphia International Airport

AB Convention: \$1,295.00 - \$1,495.00 (20gal. EA Bin)



# Airport Receptacles & Price Range

## Dallas Fort Worth International Airport

Ex-Cell Kaiser Echelon 3 Stream: \$2,100.00 - \$3,100.00  
(25gal. EA Bin)



## Atlanta Hartfield-Jackson Int'l Airport

AB Terminal (Left): \$1,195 - \$1,395.00 (20gal. EA)  
Harmony Compactor (right): \$8,000.00 (10x compaction, 25gal.EA)

