



PHILADELPHIA 2026

AIRPORTS COUNCIL INTERNATIONAL – NORTH AMERICA
ANNUAL CONFERENCE AND EXHIBITION
SEPTEMBER 14 – 17, 2026



SESSION 1.5- Waste Management Working Group

Moderators

B.J. Carpenter

Airport Environment and Sustainability Officer
City of Austin, Department of Aviation

Morgan Turner

Owner & Principal
Airport Zero Waste Consulting

Speaker

Melissa McMullen

Sustainability Planner
City of Philadelphia Department of Aviation

3:15PM-4:15PM | September 14, 2026



WMWG Agenda

- Welcome
- Introductions
- City of Philadelphia Department of Aviation
PHL Waste Program Case Study Presentation
- Working Group Updates

ACI-NA

Waste Management Working Group

City of Philadelphia – Department of Aviation

PHL Program Overview

September 14, 2026



Philadelphia International Airport
Northeast Philadelphia Airport



Content



PHL Program Overview



Waste Management Plan



Waste Diversion Plan



Strategy Implementation



Other Challenges & Opportunities

PHL Program Overview



Department of Aviation Team

DOA Sustainability

- Subset of Capital Development Group
- Lead waste diversion efforts for DOA
- Coordinate across DOA teams to implement initiatives

DOA Team
Coordination

Capital
Development

Commercial
Development

Facilities
Management

Guest
Experience

Properties

PHL Waste Structure

- The DOA and partners manage waste from passengers, airlines, concessionaires, government agencies, and DOA operations.
- The DOA sets waste policies, invests in infrastructure, and tracks trends.
- **Waste management at PHL is decentralized; non-DOA tenants handle their own waste and hauling contracts.**
- Current initiatives include recycling, waste reduction, special stream management (driftwood, gloves, cigarette butts, food waste), and concessionaire composting pilots.



DOA Waste & Recycling Practices

Waste

- Waste hauling managed under City-wide contract
 - Central transfer station
 - Waste-to-energy facility
- **Own and operate fleet vehicles**
- Provide dumpsters at collection points
- Maintain waste bins in DOA-controlled spaces

Recycling

- **City-wide goal of Zero Waste by 2035**
- Changed recycling hauler in 2022
 - Single-stream recycling
 - Accommodate plastic bags/film
- Hauler-provided compactors at collection points
- Maintain recycling bins in DOA-controlled spaces



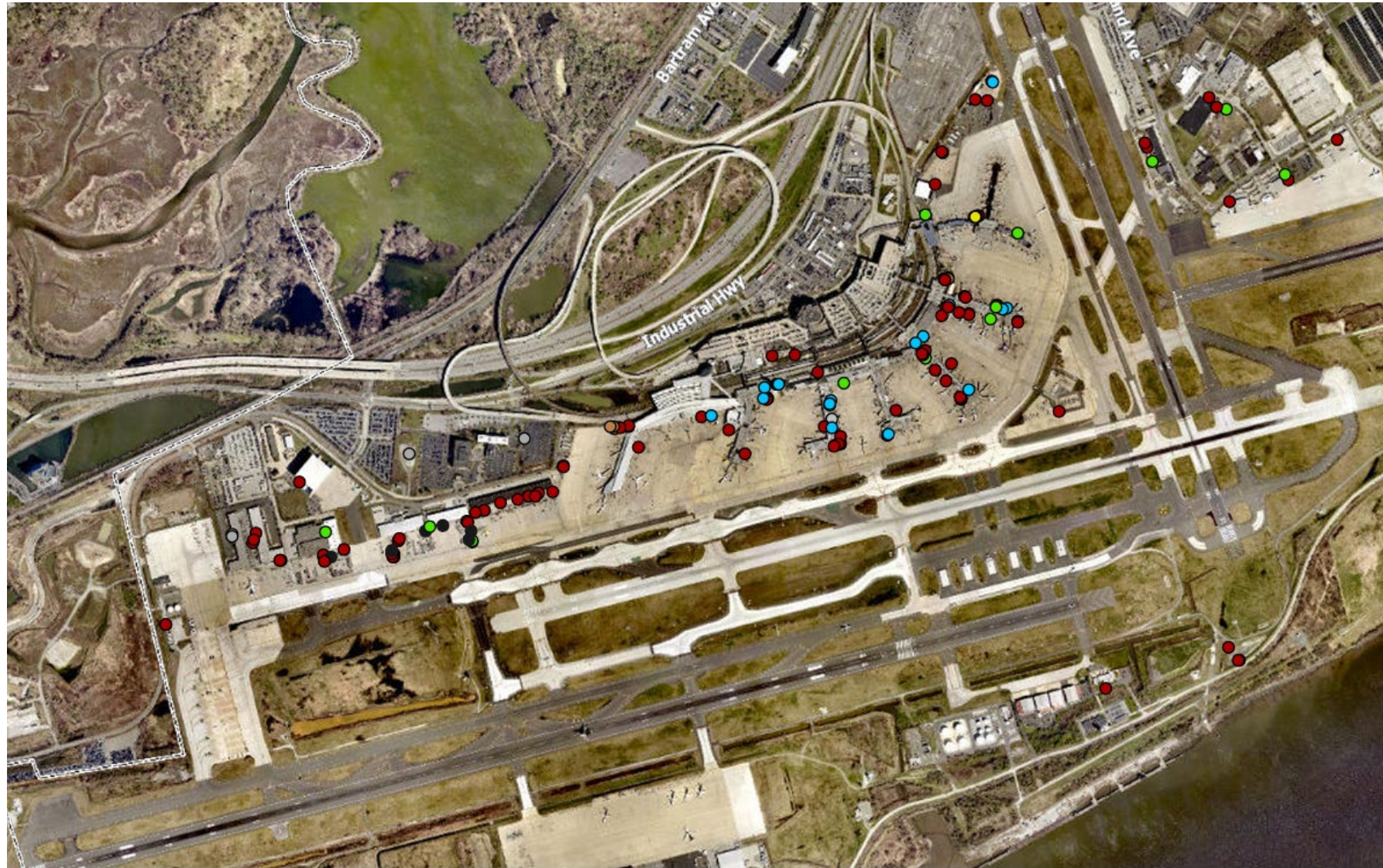
DOA Operated Dumpsters & Compactors



Legend

- Trash
- Recycling

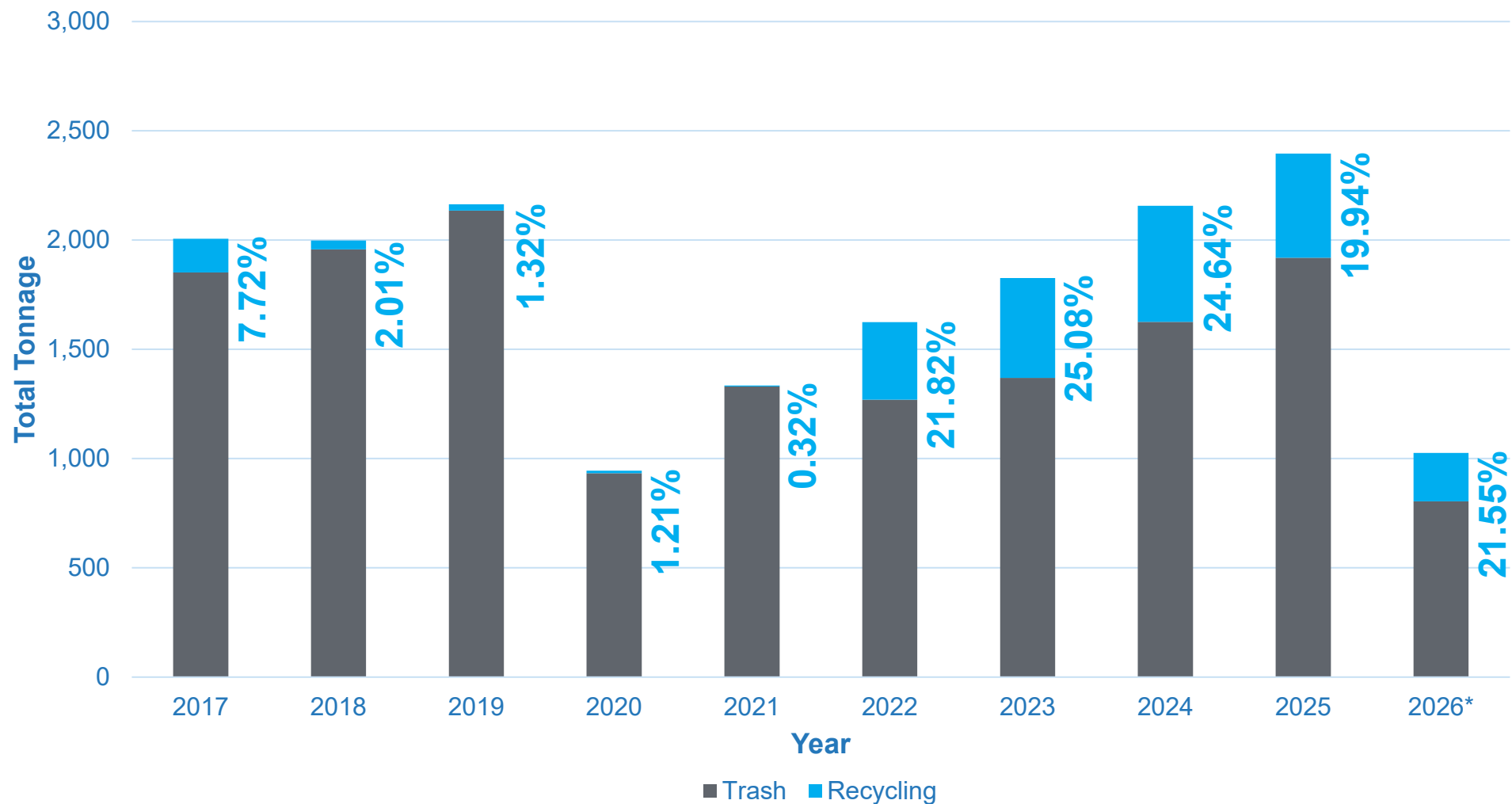
Other Dumpsters & Compactors



Legend

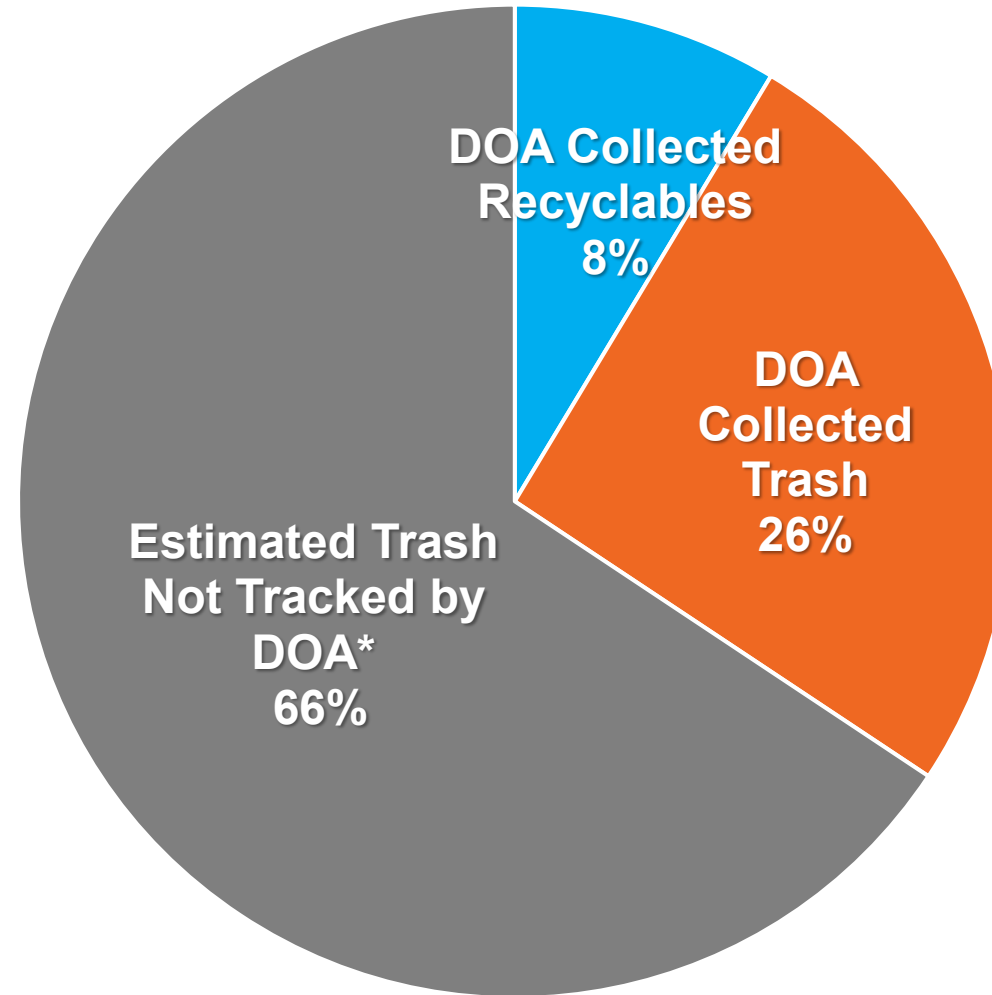
- Trash
- Recycling
- Construction
- Grease
- Metal
- Oil
- Other

DOA Waste Diversion Rate



* 2026 data includes total tonnage from January through July

PHL Waste Stream (2023)

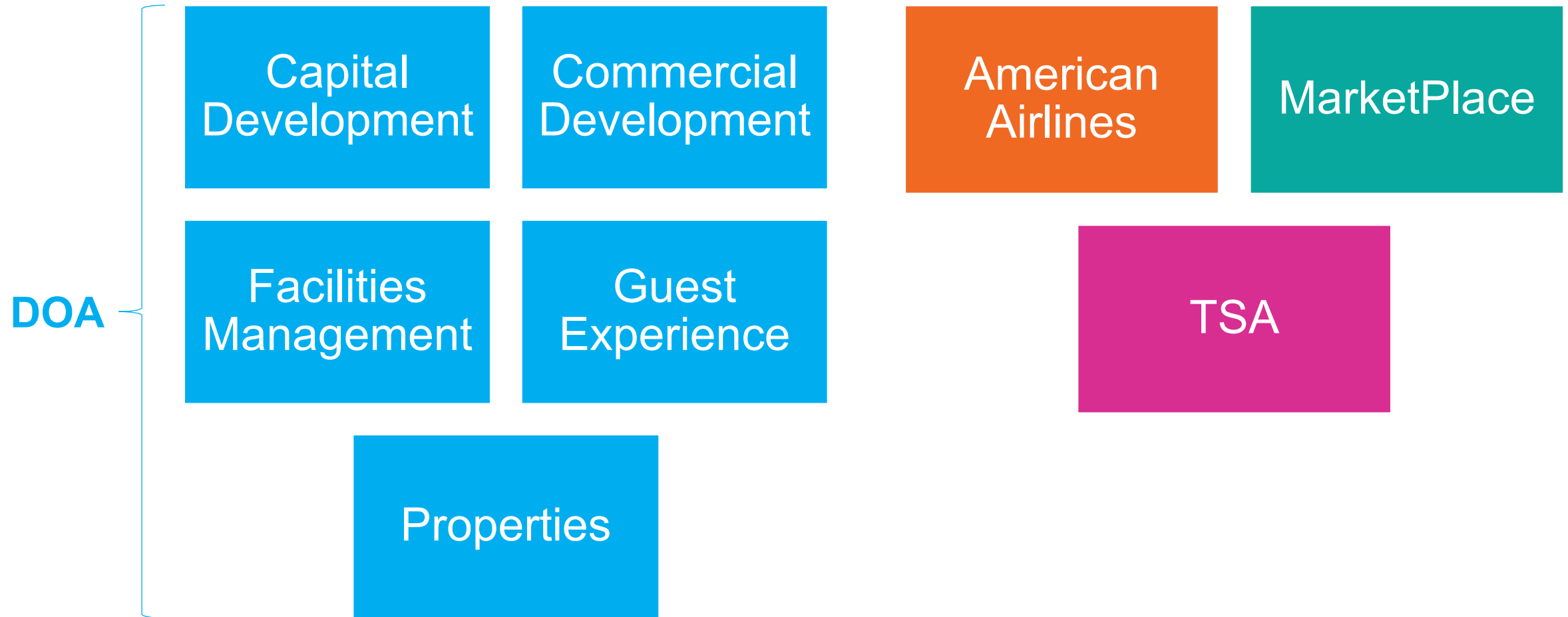


**Based on industry data, approximately 3,500 tons of waste was generated at PHL in 2023 (at 0.5 lbs. waste per passenger)*

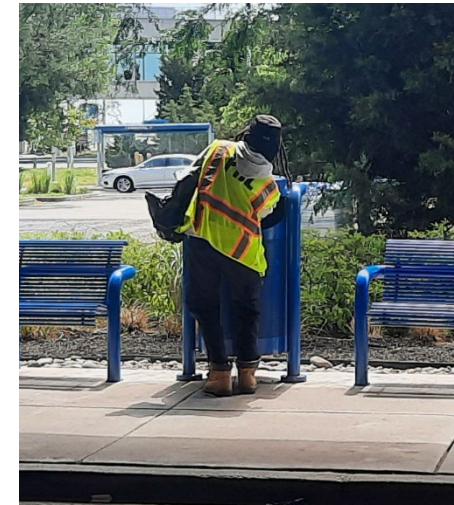
Waste Management Plan



PHL Waste Diversion Committee

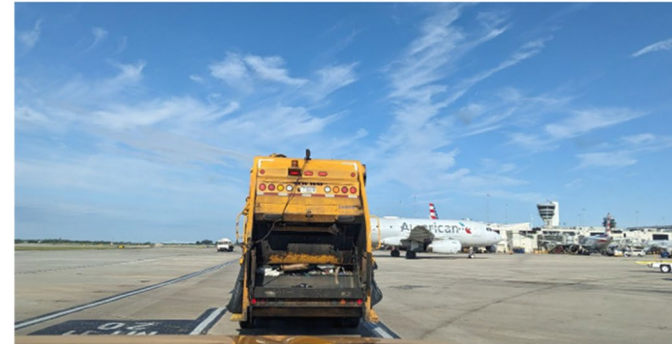


Stakeholder Engagement & Site Visits



Waste Management Plan

- Living document of current processes
- Resource for DOA teams, particularly during times of transition
- Site visits and ongoing engagement has been beneficial across all DOA and tenant teams



WASTE MANAGEMENT PLAN

City of Philadelphia Department of Aviation

PREPARED FOR



City of Philadelphia
Department of Aviation
Philadelphia International
Airport, Terminal E
Philadelphia, PA 19153

OCTOBER 2024

PREPARED BY



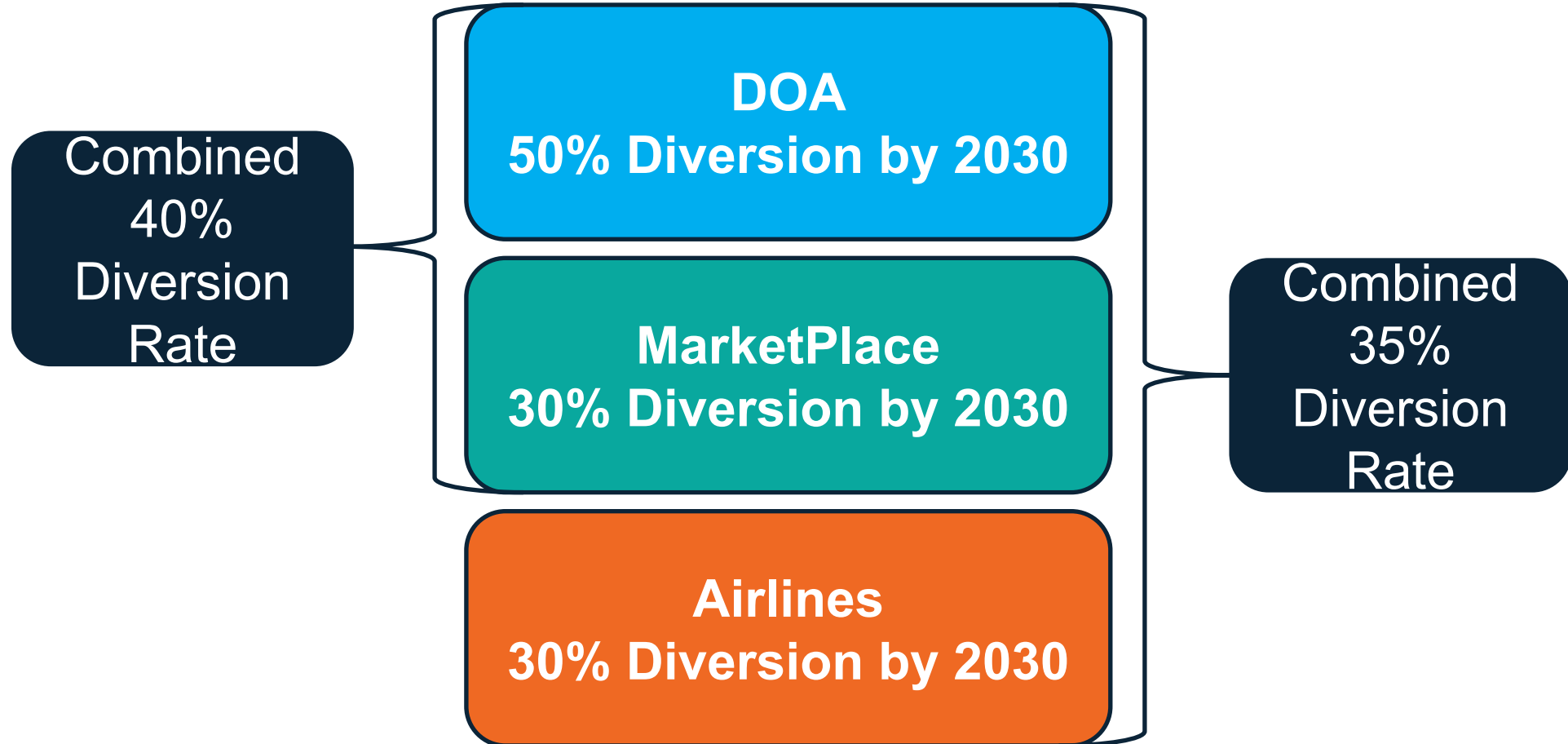
Waste Diversion Plan



Goals & Targets – DOA

Goal	Targets		
Zero Waste	2025	2030	2035
	25% diversion	50% diversion	90% diversion and up to 10% waste-to-energy (“zero waste”)

Goals & Targets – DOA, MarketPlace, & American Airlines



Strategy Identification & Screening Process

Step 1: Set Goals and Targets

- DOA
50% by 2030
- DOA + Partners
35% by 2030

Step 2: Review Resources

- Waste Management Plan
- Waste Management Hierarchy
- Local Conditions
- Industry Practices

Step 3: Identify Potential Strategies

- Programmatic Strategies
- Physical Practices

Waste
Diversion
Committee
Input



Strategy Identification & Screening Process

Step 4: Develop Screening Criteria

- Potential Diversion Impact
- Time Period
- DOA Resources Required
- Industry Trends
- Partnership

Waste
Diversion
Committee
Input



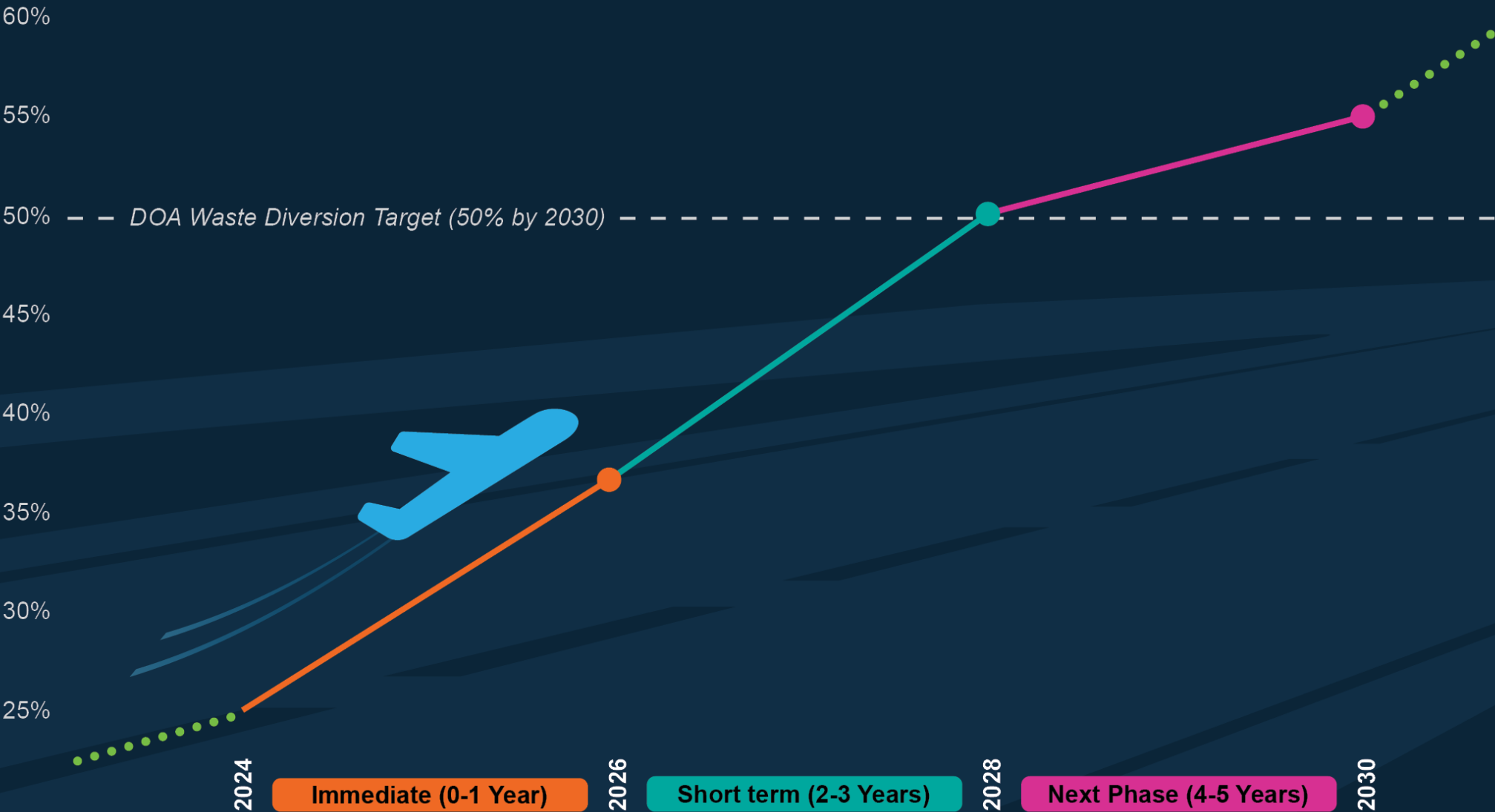
Step 5: Prioritize Strategies

Waste
Diversion
Committee
Input



Step 6: Waste Diversion Roadmap

DOA Waste Diversion Road Map



DOA Strategies – Immediate Term

Program Management

- **Establish Waste Management and Diversion Policy Statement**
- Align with Waste Hierarchy
- Align with Behavior Change Best Practices
- Document Waste Management Procedures
- **Adjust Calculations & Track Progress**
- **Employee Awareness, Education, and Training**

Physical Strategies

- **Install & Maintain Bottle Filling Stations**
- Maintain Exterior Collection Areas
- Color-coded Bag Requirements
- **Expand Recycling to Pre-Security Areas**

DOA Strategies – Short Term

2-3 Years, 2027-2028

- Incorporate Internal DOA Teams Input
- Incorporate Waste in Other Programs
- Add to Architectural and Engineering Standards
- Establish Green Tenants Program
- **Centralize Waste Contract**
- Establish Environmentally Preferred Purchasing Policy
- Establish Surplus Property Policy
- Track and Report Progress
- Conduct Quarterly Inspections
- Conduct Annual Composition Studies
- **Install Liquid Collection at Checkpoints**
- Donate Surplus Paper Products
- Collocate Collection Containers
- Standardize Labels/Signage
- Establish Cardboard Recycling
- **Pilot Restroom Paper Towel Composting**

DOA Strategies – Next Phase

4-5 Years, 2029-2030

- Require Reusable Cleaning Equipment & Supplies
- Provide Valet Service
- Install Cart Tippers/Lifters
- Establish Source-Separated Plastic Film Recycling
- **Implement Restroom Paper Towel Composting**

DOA Strategies – Mid- & Long-Term

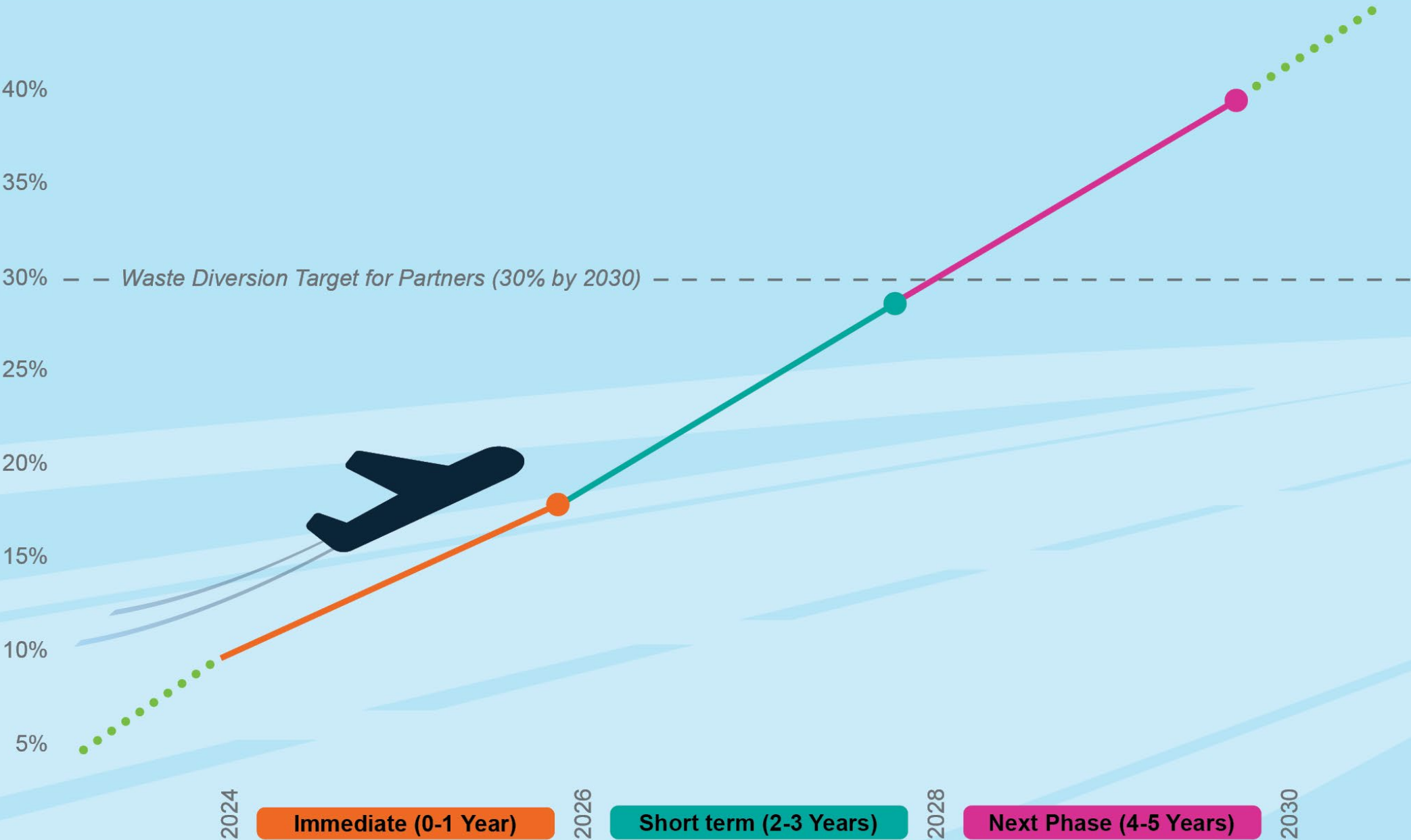
Mid-Term Strategies (6-10 Years, 2031-2035)

- Require DOA Deliveries to Use and Collect Reusable Pallets
- Install Three/Four-Stream Bins in DOA-controlled Areas
- Install Optical Sensors and AI System in DOA Collection Areas
- Implement Front of House Composting

Long-Term Strategies (11+ Years, 2036-2040)

- Achieve Third-Party Certification

DOA + Partner Waste Diversion Road Map



DOA + Partner Strategies – Immediate Term

Program Management

- Revise Requirements to Airport Rules and Regulations
- **Evaluate Centralizing Waste Management Contract(s)**
- Train Tenant Employees

Physical Strategies

- Encourage Tenants to Implement Reduction and Reuse Strategies
- Support Tenants' Food Donation Program(s)
- **Encourage Tenants to Recycle as Required by State and City**

DOA + Partner Strategies – Short Term

2-3 Years, 2027-2028

- **Centralize Waste Contract**
- Add Waste to Architectural and Engineering Standards (Tenant Provisions)
- Establish Green Tenants Program

Green Tenants Program:

- Host Biannual Meetings
- Incorporate Tenant Feedback
- Develop Incentives
- Require Annual Plan and Report
- Pilot Compliance Evaluations
- Support Tenant Training
- Recognize Sustainability Efforts
- Require Concessionaires to Refill Customer Containers
- Encourage Tenants to Discontinue Use of Single-Use Disposable Items (Pilot)
- Food Waste Avoidance and Diversion Education
- Support Tenants' Food Donation Program
- Unify Color-Coded Bags
- Require Tenants to Recycle Items as Required by State and City
- Establish Tenant Cardboard Recycling Program
- **Pilot Back of House Food Waste Composting**

DOA + Partner Strategies – Next Phase

4-5 Years, 2029-2030

- Introduce Passenger Education
- Expand Green Tenants Program

Green Tenants Program:

- Implement Compliance Evaluations
- Conduct Composition Study
- Establish Training Requirements
- Establish Sustainability Awards Program
- Require Tenants to Discontinue Use of Single-Use Disposable Items (Full Program)
- Support Tenant Baby Gear and Luggage Donation (Pilot)
- Require Reusable Pallets
- Establish Bulky Item Events
- Establish Bin and Signage/Labeling Requirements
- Evaluate Valet Waste Service
- Pilot AI Bins in Food Court
- Establish Tenant Plastic Film Recycling Program
- Coordinate with Airlines to Divert Deplaned Recyclables (Domestic) (Pilot)
- Require Cardboard Recycling
- Implement Back of House Composting (Full)

DOA + Partner Strategies – Mid-Term

6-10 Years, 2031-2035

- Expand Green Tenants Program

Green Tenants Program:

- Implement Enforcement Policy
- Implement Pay-As-You-Throw/Generation-Based Charges
- Update Incentives (as needed)
- Support Tenant Training and Education
- Require Tenants to Donate Baby Gear and Luggage
- Support Tenant Bin and Signage/Labeling Compliance
- Implement Waste Valet Service
- Coordinate with Airlines to Divert Deplaned Recyclables (International) (Pilot)
- Require Airlines to Recycle Deplaned Domestic Recyclables (Full)
- Require Tenants to Recycle Source-Separated Cardboard and Plastic Film
- Implement Front of House Composting
- Support Back of House Composting

DOA + Partner Strategies

Long Term Strategies (11+ Years, 2036-2040)

- Maintain Green Tenants Program
 - Enforce Program
 - Support Waste Valet Service



Strategy Implementation

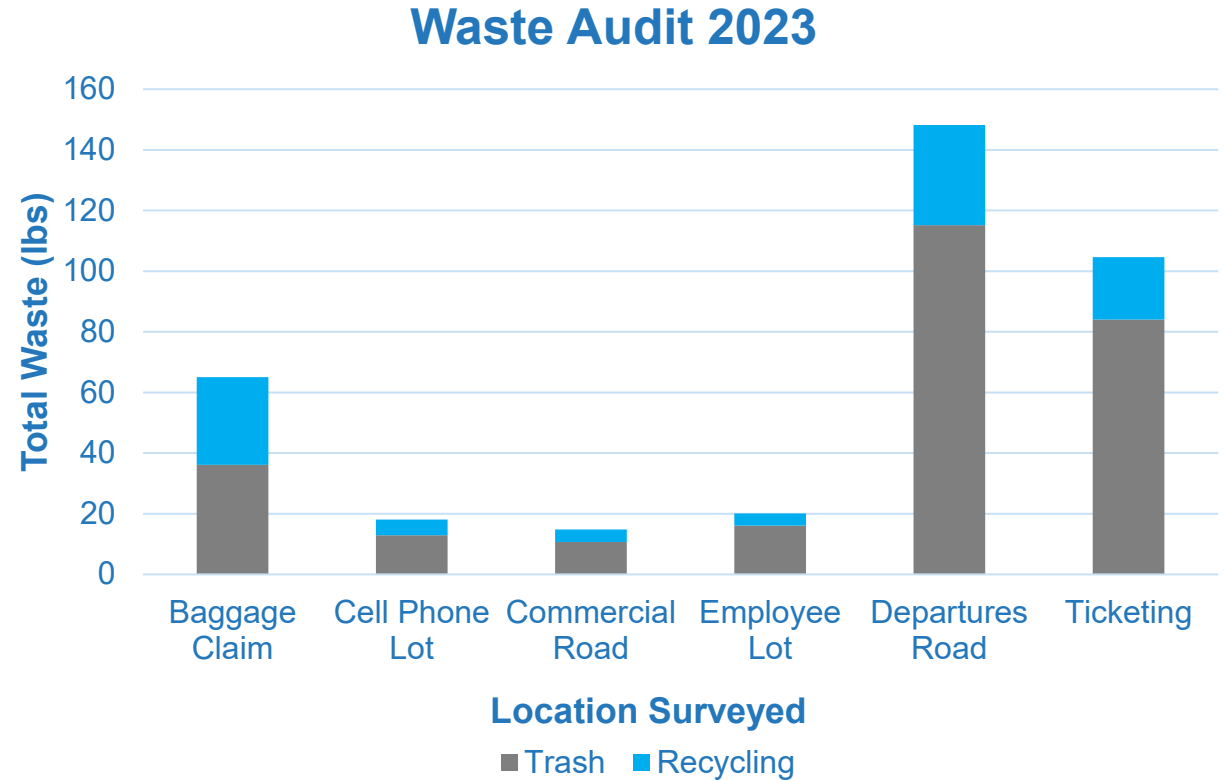


Waste Management & Diversion Policy

- Applies to waste generated by DOA operations, across DOA facilities and properties
- Compliance with local, state, and federal laws and regulations
- Commitment to the City's Zero Waste goal
 - Including DOA specific targets:
 - 50% diversion by 2030
 - Construction and Demolition waste diversion
 - Support emission reduction targets and participation in Airport Carbon Accreditation Program
- Achieve Zero Waste according to the Zero Waste Alliance International definition
- Continued development of plans and policies, coordination with key stakeholders, education of DOA employees and contractors, and improvement of our facilities

Pre-Security Recycling Implementation

- 2023 Waste Audit data suggested prime areas for recycling implementation
- Insufficient staffing held interior program from moving forward
- Collaborating with Facilities and Maintenance teams
 - Establish collection points
 - Replace dilapidated bins
 - Pair recycling bins at a 3:1 ratio
- Purchased paired compacting bins for deployment at Employee and Cell Phone Parking Lots

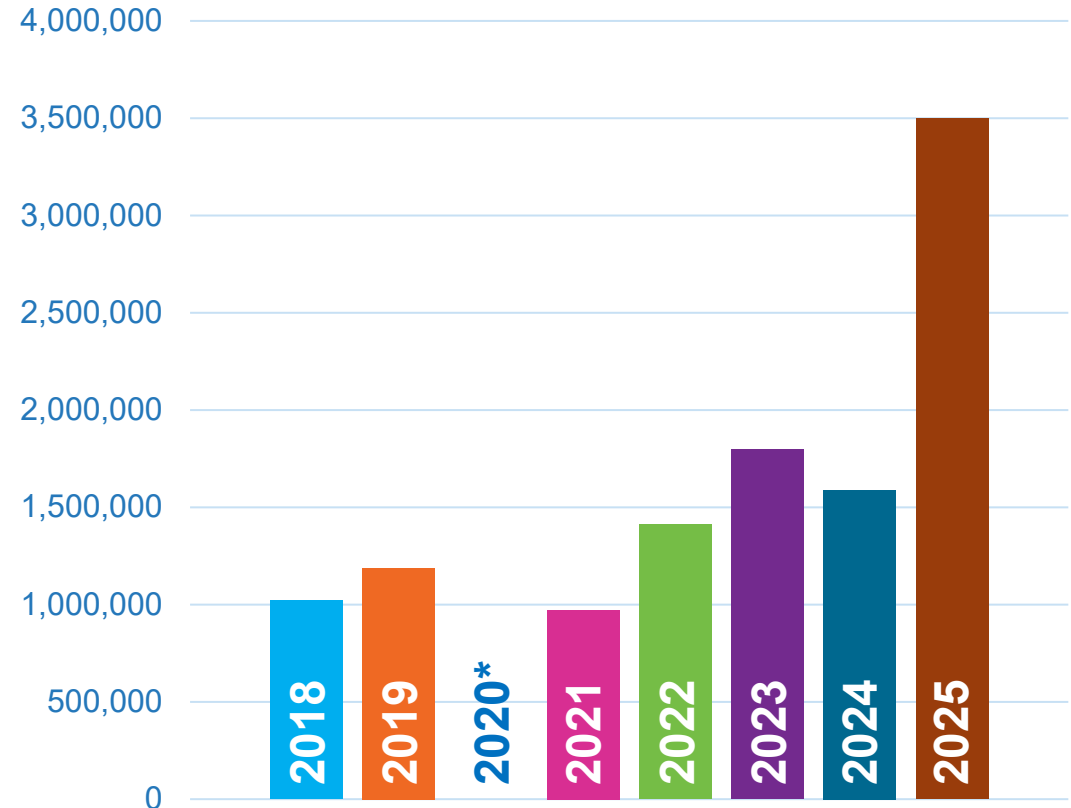


Water Bottle Filling Stations

- Biannual survey of filling stations
 - Number of bottles prevented from use
 - Status of equipment
- Restroom renovations paired with on-call repair in 2026 resulted in increased accessibility for passengers



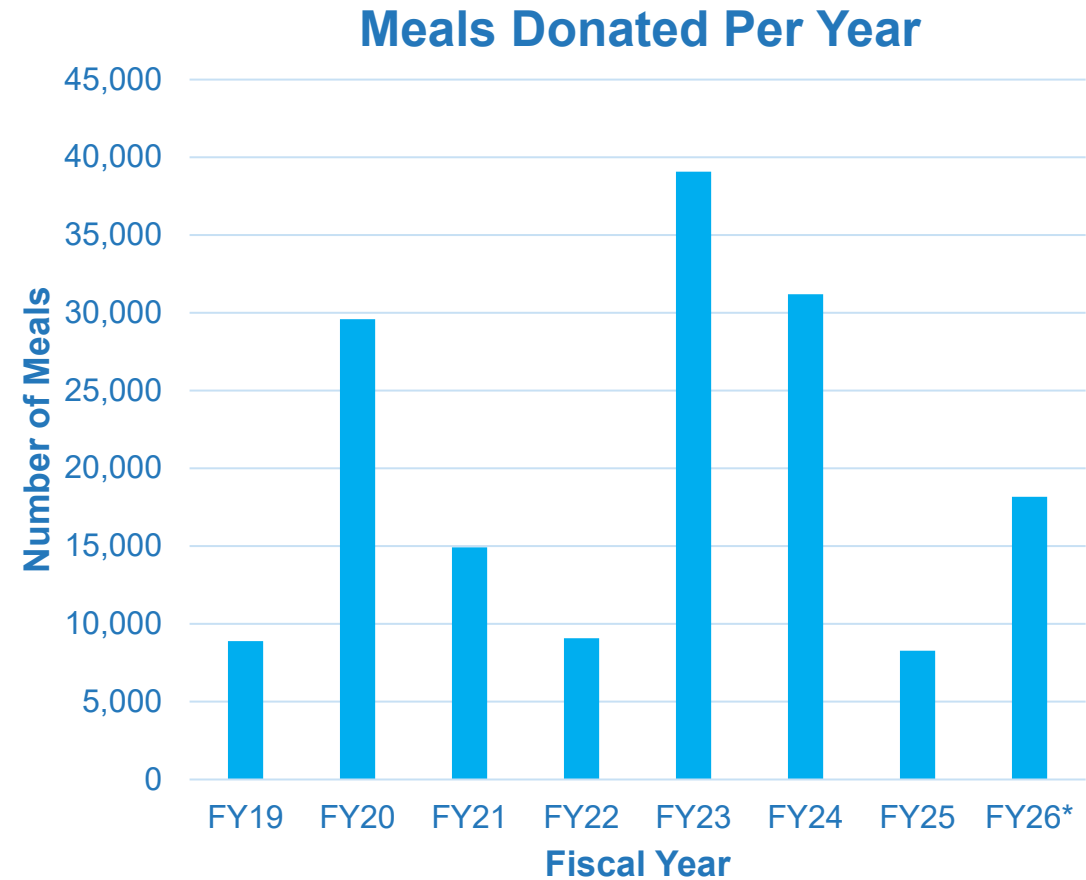
Water Bottles Prevented Per Year



*Filling station data was not recorded in 2020

Philabundance Food Donation Program

- MarketPlace-led program
- Food and Beverage Concessions may volunteer to participate
- Currently accepts pre-packaged foods for donation
- Refrigerator and freezer space available for collection and bi-weekly pick up



** Data collected through January 2026*

Local Composting Infrastructure

- **Philadelphia Parks and Recreation**
 - Transitioning Organic Recycling Center to accept food waste
 - PHL agreed to provide food waste to upgraded facility
 - EPA Region 3 Grant
 - Selected for potential funding in 2024
 - Grant funding cancelled after shortlisted for award
- **Delaware County Compost Facility Development**
 - EPA Solid Waste Infrastructure for Recycling Grant
 - 7-acre facility to be developed in Chester
 - Interest in partnering for PHL to provide organic food waste
- **Philadelphia Gas Works**
 - 2026 Organic Waste Diversion RFI
 - Interest in co-digestion of food waste and wastewater to produce renewable natural gas
 - PHL as potential partner for organic waste

Other Challenges & Opportunities

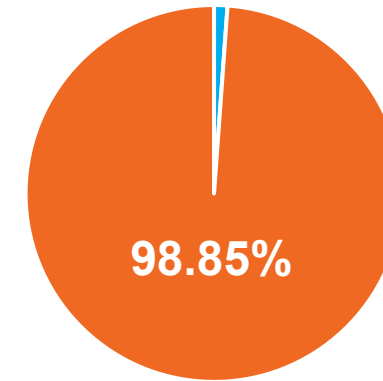


Capital Development Waste

- Sustainable Design Standards
 - Projects phased into standards starting June 2023
 - Diversion Requirements
 - Airside/ Landside – 75%
 - Other Projects – 50%
- Construction and Demolition Waste
 - Working to develop on-call contract for small C&D projects to mitigate issue

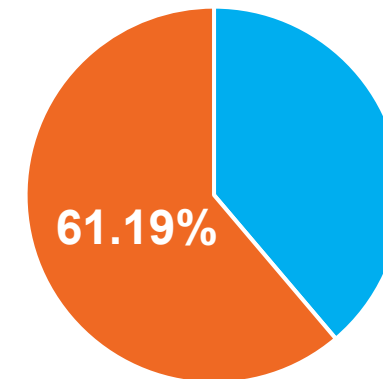


2024-2025 Airport-Led Projects



■ Landfilled Materials ■ Diverted Materials

2024-2025 Tenant-Led Projects



■ Landfilled Materials ■ Diverted Materials

Sustainability Events



Q&A

Melissa McMullen, CM, AICP

Sustainability Planner

City of Philadelphia Department of Aviation

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Thank You!

Melissa McMullen, CM, AICP

Sustainability Planner

City of Philadelphia Department of Aviation

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WMWG Updates

- Q4 Call
 - Metrics Whitepaper
 - Mini-Conference

 - Working Group Input 2027 Work Plan
-



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Thank you!

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