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LANA AIRLINES

# SUSTAINABILITY REPORT 2024

A solar array at VNY

# CONTENTS

Message from our Chief Executive Officer	
LAWA Executive Management and Governance	2
Acknowledgments	3
Acronyms	4
Executive Summary	5
Sustainability Action Plan Update	7
Energy Management	9
Water Management	12
Air Emissions Management	15
Material Resources Management	19
Noise Management	22
Natural Resources Management	24
Corporate Responsibility	26
Sustainable Construction and Green Bonds	29

Note: To view LAWA by the Numbers, please visit <u>www.lawa.org/lawa-sustainability</u>

# **MESSAGE FROM OUR CHIEF EXECUTIVE OFFICER**



#### **GREETINGS!**

On behalf of Los Angeles World Airports (LAWA), I am pleased to share our 2024 Annual Sustainability Report. Over the past year, we have made significant strides toward building a more sustainable and resilient airport system.

This report — developed by our Sustainability team, with support from various divisions and stakeholders across the organization — highlights LAWA's ongoing sustainability initiatives, commitments, and accomplishments at Los Angeles International Airport (LAX) and Van Nuys Airport (VNY).

In 2024, LAWA continued to lead the aviation industry with impactful initiatives and transformative projects. LAX increased operational waste diversion to 33%, supported by the launch of passenger-facing organics collection that encourages passengers to actively participate in our sustainability efforts. LAWA also had success in reducing air emissions by formally adopting the LAX Zero-Emission Ground Support Equipment Policy, and upgrading to Airport Council International's Airport Carbon Accreditation Level 4 for LAX and VNY — making VNY the first general aviation airport in the Americas to achieve this distinction. These efforts reinforce LAWA's commitment to curtailing operational emissions and establishing climate leadership.

# Key accomplishments and milestones for 2024 include:

- Achieved a 67% electric sedan fleet
- Received 1st Place Leadership Award in Demand Response from Los Angeles Department of Water and Power
- Increased organic waste diversion by 48% since 2023
- Removed 146,000+ pounds of non-native plant species from the LAX Dunes
- Achieved Leadership in Energy and Environmental Design Platinum for the Automated People Mover Maintenance and Storage Facility

Our success is a direct result of the dedication of our employees, tenants, and partnerships with local agencies, businesses, and organizations. We will continue our work to make LAWA a leader in the aviation industry and drive forward our goals for a cleaner and more sustainable future for everyone.

John Ackerman Chief Executive Officer, Los Angeles World Airports

# LAWA EXECUTIVE MANAGEMENT AND GOVERNANCE

#### **EXECUTIVE BOARD STRUCTURE AND OVERSIGHT**

LAWA is a proprietary department of the City of Los Angeles which owns and operates LAX and VNY. LAWA is governed by the Board of Airport Commissioners, which is comprised of public-spirited business and civic leaders appointed by the Mayor of Los Angeles and approved by City Council. Current members include:



Karim Webb (President)



Matthew Johnson (Vice President)



Vanessa Aramayo



Courtney La Bau



Nicholos Roxborough



Victor

Narro

Valeria Velasco

#### LAWA EXECUTIVE MANAGEMENT

- + John Ackerman, Chief Executive Officer
- + Marla Bleavins, Chief Airport Administrative Officer
- + Michael Christensen, Chief Airport Development Officer
- + Becca Doten, Chief of Staff
- + Ian Law, Chief Innovation & Experience Officer
- + Brian C. Ostler, General Counsel
- + Doug Webster, Chief Operations & Maintenance Officer
- + Robert Lowe, Chief People & Culture Officer
- + Tatiana Starostina, Chief Financial Officer
- + Jacob Adams, Deputy Executive Director, LAMP
- + Harold Samms, Deputy Executive Director, LAMP Performance
- + Richard Connolly, Deputy Executive Director, Facilities Management
- + Martin Elam, Deputy Executive Director, Public Safety & Security
- + Mark Frank, Deputy Executive Director, Sourcing & Economic Impact
- + Jacob Haik, VNY Airport Manager

- + Crystal Lee, Deputy Executive Director, Sustainability, Energy, Environmental & Development Services
- + Emery Molnar, Deputy Executive Director, Airport Development Program
- + Aura Moore, Deputy Executive Director, Information Management & Technology
- + Courtney Moore, Deputy Executive Director, Strategy, Innovation & Experience
- + David Reich, Deputy Executive Director, Mobility Strategy
- + Cecil Rhambo Jr, Chief of Airport Police
- + Vanessa Rodriguez, Deputy Executive Director, External Affairs
- + Hans Thilenius, Deputy Executive Director, Terminal Development & Improvement Program
- + Erin Trapp, Deputy Executive Director, Major Events & Strategy
- + Diego Alvarez, Deputy Executive Director, Capital Planning, Oversight, Management, and Analytics



# ACKNOWLEDGMENTS

LAWA Sustainability would like to thank the numerous individuals and divisions below for contributing information to the 2024 LAWA Sustainability report.

#### COMPILED BY THE LAWA SUSTAINABILITY TEAM

- + Crystal Lee, Executive Oversight
- + Michelle Barton, Project Oversight
- + Mahsa Ostowari, Project Management, Content Lead
- + Olivia Walker, Design Support
- + Ethan Small, Design Lead
- + Andres Ramirez Fromm, Data and Analytics Lead

#### LAWA DIVISIONS

Sustainability, Energy, Environmental & Development Services

**Facilities, Maintenance & Utilities** 

**Business and Jobs Resources** 

**Guest Services** 

- **Public Relations**
- **Community Relations**
- **Planning and Development**
- Rideshare

Landside Management and Airport Permits

#### Van Nuys Airport

#### **EXTERNAL LAWA PARTNERS**

Los Angeles Department of Water and Power

**SoCal Gas** 

LA Sanitation & Environment

**Menzies Aviation/LAXFuel Corp** 

# And thank you to those we might have missed!



# ACRONYMS

ACA	Airport Carbon Accreditation		
АРМ	Automated People Mover		
BOAC	Board of Airport Commissioners		
C&D	Construction and Demolition		
CEO	Chief Executive Officer		
СТА	Central Terminal Area		
CUP	Central Utility Plant		
DVBE	Disabled Veteran Business Enterprise		
eGSE	Electric Ground Support Equipment		
EPD	Environmental Product Declaration		
EV	Electric Vehicle		

FAA	Federal Aviation Administration		
FBO	Fixed Based Operators		
GHG	Greenhouse Gas		
GSE	Ground Support Equipment		
нс	Hydrocarbons		
kBtu	Thousand British Thermal Units		
kW	Kilowatt		
LADWP	Los Angeles Department of Water and Power		
LAMP	Landside Access Modernization Program		
LAWA	Los Angeles World Airports		
LAX	Los Angeles International Airport		
LBE	Local Business Enterprise		
LEED	Leadership in Energy and Environmental Design		

LSBE	Local Small Business Enterprise		
ΜΑΤΟΟ	Multiple Award Task Order Contract		
MTCO <sub>2</sub> e	Metric Tons of Carbon Dioxide Equivalent		
MW	Megawatt		
NOx	Nitrogen Oxides		
PV	Photovoltaic		
RSI	Residential Sound Insulation		
SAF	Synthetic Aviation Fuel		
SAP	Sustainable Action Plan		
SBE	Small Business Enterprise		
TBIT	Tom Bradley International Terminal		
VIP	Volunteer Information Professionals		
VNY	Van Nuys Airport		



The Automated People Mover track loops around the Air Traffic Control Tower

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# **EXECUTIVE SUMMARY**

In 2024, LAWA continued to build on its leadership in sustainability excellence. This report highlights LAWA's progress towards the goals outlined in its 2019 Sustainability Action Plan (SAP) and the broad range of initiatives that underscore LAWA's commitment to a greener and more inclusive future.



#### **2024 LAWA Airport Statistics** LAX

- **76.6 million** passengers
- **513,260** flight operations
- **2.4 million** tons of cargo

#### VNY

**340,061** flight operations

**IN 2024,** LAWA made considerable progress in energy management, with per-passenger energy consumption at LAX achieving a 19% reduction since 2011. VNY also demonstrated a 16% reduction in total energy consumption since 2011 and received a \$1.5 million grant for a decarbonization study to guide future emission reductions.

LAX and VNY demonstrated leadership in air emissions management by upgrading to Airport Carbon Accreditation Level 4 and moving closer to the SAP goal of carbon neutrality by 2045. Pioneering programs like the LAX Zero-Emission Ground Support Equipment Policy underscore the tangible progress toward the airport's SAP goals.

LAWA continued to enhance its material resource management by launching a passenger-facing organics collection program at LAX food courts. New streams and standardized waste bin labels supported a 33% overall operational waste diversion rate. Water conservation measures have been pivotal at both airports and VNY recorded a 34% reduction in potable water usage since 2017. LAX is poised to realize significant increases in reclaimed water use in LAX facilities through a landmark 30-year memorandum of understanding with the Los Angeles Department of Water and Power.

In 2024, LAWA removed 146,000 pounds (73 tons) of non-native plant material from the LAX Dunes, preparing the Dunes for future installation of native plant species to support LAWA's habitat restoration goals.

LAWA also maintained a strong focus on community impact, continuing sound mitigation for homes in El Segundo and Los Angeles impacted by aircraft noise through the LAX Residential Sound Insulation Program. At the same time, LAWA recommitted to being a good employer with groundbreaking inclusivity requirements in the Multiple Award Task Order Contract for Capital Programs ratified by the Los Angeles City Council in April 2024.

The 2024 Annual Sustainability Report affirms LAWA's commitment to exceeding sustainability goals through strategic partnerships, innovative policies, and strong community engagement. This past year marked a period of significant progress and momentum, laying the foundation for a more resilient, efficient, and environmentally responsible future. Looking ahead, LAWA is poised to advance these efforts even further and push even more boldly towards zero, setting a transformative path for the years to come.

#### Key Successes in 2024 include:

- LAX achieved its 2031 ground support equipment emission factor reduction target seven years early
- Increased FlyAway ridership 5.6% from 2023 and saved over 29.5 million vehicle miles traveled
- Increased Synthetic Aviation Fuel use at LAX over 400% from 2023
- Exceeded 2025 SAP goal for energy use per passenger ahead of schedule
- Decreased the proportion of gas consumed compared to electricity at LAX by 26% since 2011
- Increased organic waste diversion 48% from 2023
- Exceeded 2025 SAP goal for waste diversion for the third year in a row
- Completed sound insulation for 288 homes as part of the Residential Sound Insulation Program
- Recognized nine airlines through the LAX Fly Quieter Program and 26 operators through the VNY Quieter Nights Program

# **SUSTAINABILITY ACTION PLAN UPDATE**

The SAP is the foundation on which sustainability actions are applied and tracked throughout LAWA's business practices, operations, community engagement, and environmental conservation. The SAP focuses on seven sustainability categories, each with goals and initiatives to guide LAWA through continuous implementation. The following lists LAWA's seven sustainability categories, the corresponding SAP goals, and identifies the 2024 status of those goals.

For more detailed information on progress toward achieving subgoals, see the category chapters.

#### **ENERGY MANAGEMENT**

Achieve **100%** renewable electricity by 2045

Reduce energy use per passenger 15% by 2025, 30% by 2035, and **65%** by 2045 over 2011 levels

# WATER MANAGEMENT Reduce potable water use by 2045 Eliminate potable water

- consumption for non-potable uses such as landscaping and the cooling towers
- Additional **25%** reduction in potable water use per passenger by 2025; **30%** by 2035
- Increase recycled water use as a
- percentage of total water use **30%** by 2035

#### Status Indicators:









Making progress toward goal

On track to achieve goal by goal date

Goal achieved and ongoing





Carbon neutrality by 2045

- Reduce greenhouse gas emissions 55% by 2025 and 65% by 2035
- Upgrade to higher Airport Carbon Accreditation level by 2023



Reduce fossil fuel emissions from airport-related vehicles and equipment from vehicle conversion and operational change

- Stronger ground support equipment targets
- Zero-emission bus fleet by 2030
- **100%** compliance with LAX Alternative Fuel Vehicle Policy

#### Status Indicators:

Making progress toward goal

On track to achieve goal by goal date

Goal achieved and ongoing

#### MATERIAL RESOURCES MANAGEMENT

Improve waste reduction and recycling programs

- Develop a zero waste plan by 2020
- Achieve an operational waste diversion rate of 25% by 2025 and 50% by 2035

Achieve construction waste diversion of **90%** by 2025; **95%** by 2035

#### **NOISE MANAGEMENT**





VNY Quieter Nights programs Launch web-based noise portals for LAX and VNY

Implement the LAX Fly Quieter and

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Continue with the Sound Insulation Grant Program as funds are identified

#### NATURAL RESOURCES MANAGEMENT



Restore the natural habitat of the LAX Dunes to support native flora and fauna, including threatened and endangered species, by:

- Striving for the natural addition of flora and fauna with no net loss of biodiversity
- Implementing invasive plant management in the El Segundo Blue Butterfly Habitat Restoration Area
- Continuing to improve the Coastal Dunes Improvement Project
- Continuing weeding and restoration activities
- Secure grants that will benefit the LAX Dunes





#### **CORPORATE RESPONSIBILITY**



Continue to implement inclusivity requirements in LAWA contracts and monitor compliance



and monitor compliance Develop and expand partnerships to promote a sustainable local

to promote a sustainable local workforce for the airport and airport-related projects As one of the world's busiest airports, LAX has a significant energy footprint, making energy stewardship essential to its operations and long-term sustainability goals. LAWA is advancing energy efficiency, integrating renewable sources, and modernizing infrastructure to reduce emissions and improve resilience. Our focus on energy reflects a commitment to operational excellence, climate action, and leadership in sustainable airport management.

#### GOAL 1

 $\checkmark$ 

 $\checkmark$ 

 $\checkmark$ 



100% renewable energy by 2045

#### GOAL 2



Reduce energy use per passenger 15% by 2025, 30% by 2035, and 65% by 2045\*

### **2024 ACHIEVEMENTS**

LAWA (LAX and VNY) electricity mix is 39.5% renewably sourced energy

The proportion of LAX's energy consumption from natural gas decreased by over 26% since 2011

The Consolidated Rent-A-Car Facility (ConRAC) has 4 Megawatt (MW) of rooftop solar

\*2011 baseline

Status Indicators

LAX Receiving Station X



On track to

achieve by

aoal date

 $\checkmark$ 

LAX reduced per passenger energy use by 19%, exceeding the 2025 goal\*



Goal achieved and ongoing



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## LAWA

ENERGY MANAGEMENT

# LAX

#### LADWP POWER GRID

The Los Angeles Department of Water and Power (LADWP) power grid supplies electricity to both LAX and VNY. LADWP is working to decarbonize LA's power supply by 2035.

As of publishing this report, LADWP sourced its electricity from the following:





#### LAX Passenger Energy Consumption



#### In 2024, energy consumption per passenger decreased 19.1% since 2011, achieving the 2025 target ahead of schedule.

LAX Total Energy Consumption

(MMBtu)

Consumpti



Since 2011, the proportion of gas consumed compared to electricity has decreased by **+26.6%** 

Gas consumption accounted for less than half of total energy consumption at LAX in 2024. LAWA expects this trend will continue as LAWA decarbonizes its buildings and shifts towards electrification.

LAWA 2024 SUSTAINABILITY REPORT

#### LADWP DEMAND RESPONSE PROGRAM

LAWA received the **1st Place Leadership Award in Demand Response** for LADWP's Sustainability Awards Program, **curtailing** 

LAWA received \$ \$155,721 in rebates for participation

**5,721 kilowatts (kW) of electricity** in 2024. LAWA's participation in LADWP's Demand Response Program aids in peak demand management and supports grid stability.

#### UTILITY STRATEGIC PLAN

In 2024, LAWA began updating its **Utility Strategic Plan** to guide future investments and energy strategy. This plan will lay out a 20-year roadmap to increase resilience, including the integration of microgrids and battery storage and explore electrification of the Central Utility Plant (CUP).

#### **RECEIVING STATION X**

In 2024, LAWA achieved a major energy use milestone with the completion of electrical **Receiving Station X**. Construction of a new receiving station will allow LAX to receive power from an on-site station separate from the existing power grid. The station is scheduled to go online in 2025, **adding significant capacity and redundancy to LAX's energy infrastructure.** 

# VNY

Total energy consumption:increased**21.1%**since 2023

Sumption: Gas consumption increased significantly
from 2023 to 2024 due to equipment
malfunctions, contributing to the increase in
overall energy consumption in 2024. LAWA is
actively addressing the malfunctions.

#### VNY Total Energy Consumption





#### VNY DECARBONIZATION STUDY

In 2024, LAWA received a **\$1.5 million dollar grant** from the Federal Aviation Administration (FAA) to prepare a Decarbonization Roadmap for VNY. The anticipated study will assess VNY's current energy consumption patterns and identify strategies to reduce consumption and VNY's overall carbon footprint.

#### SOLAR CAPACITY



Pacific Aviation completed construction of a **4.53 MW** photovoltaic (PV) system.

In 2024, LAWA's Board of Airport Commissioners (BOAC) approved agreements with Current Energy for the development and operation of rooftop and parking canopy solar at three locations at VNY.

# WATE MANAGEMENT

In 2024, LAWA's environmental team toured Hyperion's Advanced Water **Purification Facility** 

As a major hub in an arid region, LAWA recognizes the critical importance of water conservation. LAWA integrates innovative water-saving techniques and technologies to ensure resilience, reduce environmental impact, and support a sustainable future. Our focus on water not only aligns with LAWA's environmental goals but also exemplifies our commitment to stewardship and leadership in sustainable practices.

GOAL 2

### GOAL 1



#### Reduce Potable Water Use by 2045



Eliminating potable water consumption for nonpotable uses, such as landscaping and cooling towers



 $\checkmark$ 

Reducing potable water per passenger 25% by 2025 and 30% by 2035\*

#### **2024 ACHIEVEMENTS**

- VNY reduced potable water usage by 34%\*
- LAWA replaced almost 3,000  $\checkmark$ square feet of turf with drought-tolerant and no water use landscaping

#### \*2017 baseline

Status Indicators







 $\bigotimes$ 



achieved and

Increase Recycled Water Use to 30% of Total Water Usage by 2035

> LAWA and LADWP revised their agreement to provide high quality recycled water to LAX for 30 years



# LAX

WATER MANAGEMENT

#### WATER CONSUMPTION AT LAX

Total potable water consumption per passenger at LAX increased 11.9% from 2023 and increased 15.5% compared to the 2017 baseline. Increases are attributable to significant construction activities to support the modernization of LAX in 2024 and previous years.

### Reclaimed water use has remained steady since 2017, accounting for between 5% to 7% of total water use at LAX.

LAWA conducts annual benchmarking, building audits, and retro-commissioning to identify areas of opportunity within buildings systems to improve water efficiency.



#### - - 25% Reduction from 2017 Baseline by 2025 - - 30% Reduction from 2017 Baseline by 2035





#### LAX Total Water Consumption



WATER MANAGEMENT

#### SUSTAINABLE LANDSCAPING

LAWA continues to replace water-intensive landscaping across the airport with hardscape and drought-tolerant plants. Educational signage accompanies these redesigned areas, informing visitors about the sustainable practices employed and the environmental benefits of such landscaping.

#### BEFORE



# RECYCLED AND RECLAIMED WATER EXPANSION

LAWA expects to see significant increases in reclaimed water use when the Hyperion Advanced Water Purification Facility comes online, which is expected to supply up to 1.5 million gallons of recycled water daily to LAX.

In 2024, LAWA updated their agreement with LADWP to supply recycled water to LAX for 30 years. This will facilitate a shift from potable to recycled water for the CUP and for nonpotable uses in dual-plumbed facilities.

# VNY

Total potable water consumption has decreased 3% from 2023 and **↓34%** from 12.4 million gallons in 2017 to 8.2 million gallons in 2024.







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**Bradley International Terminal** 

LAWA continued to expand groundbreaking emissions reduction programs at LAX and push the boundaries of emissions reductions at one of the world's busiest general aviation airports at VNY.





**Carbon Neutrality by 2045** 



**Reduce greenhouse gas** (GHG) emissions 55% by 2025 and 65% by 2035\*

**Upgrade to higher Airport Carbon Accreditation (ACA)** by 2023

#### GOAL 2



Reduce fossil fuel emissions from airport-related vehicles and equipment



Stronger ground support equipment (GSE) emissions reduction targets



Zero-emission bus fleet by 2030



**Compliance with LAX Alternative Fuel Vehicle** Policv

#### 2024 ACHIEVEMENTS

- $\checkmark$ 
  - **GHG** emission reductions are pending and will be updated upon verification
  - LAX and VNY upgraded to ACA Level 4

 $\checkmark$ 

 $\checkmark$ 

LAX achieved its 2031 GSE emission factor reduction target seven years early

**BOAC approved the LAX Zero Emission GSE Policy** 

#### \*2010 baseline (updated from 1990 for LAWA's Level 4 ACA)

Indicators







 $\checkmark$ 

## LAWA

AIR EMISSIONS MANAGEMENT

### RIDESHARE PROGRAM



LAWA's award winning Rideshare Program resulted in **68,628 fewer trips** to and from the airport for fiscal year 2024.

Through commuting via alternative modes of transportation, in 2024 LAWA employees:

### saved a total of **160,060** gallons of gasoline

## reduced **3,460,497** vehicle miles traveled (VMT)

reduced **1,435** metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e)

Which is equivalent to carbon sequestered by

**1,439** acres of U.S. forest per year



#### FLYAWAY PROGRAM

The FlyAway Program served **1.8 million** riders in 2024, up **5.6%** from 2023. Since 2020, ridership has

steadily increased to nearly pre-COVID levels



The program provides nonstop transportation between Union Station, VNY, and LAX. The program reduced personal vehicle travel by **29.5 million VMT** and **reduced GHG emissions by 3,521 MTCO<sub>2</sub>e**.



#### COMMUTELAX

CommuteLAX is the airport's transportation management organization for airport employers and employees. It supports a wide range of commuting options, from rideshare and vanpools to dedicated shuttle services and transit planning.

Since inception in November 2022, **96 employees** have joined the program, eliminating **178,500 VMT** to LAX.

The LAWA iRide program operates a 100% electric shuttle fleet and transports airport employees from Inglewood and Lennox to and from the airport, **averaging 102 highly satisfied riders each weekday.** 

# LAX

AIR EMISSIONS MANAGEMENT

#### **GHG EMISSIONS**

In 2024, LAWA continued its progress toward achieving carbon neutral operations by 2045.

- Scope 1 and 2 emissions at LAX have been trending down (actual 2024 emission reductions are pending verification).
- While emissions may increase slightly yearover-year due to increased demand from new facilities and expanded operations, overall emissions are declining thanks to energy efficiency improvements, increased electrification, and continued decarbonization of the grid.

In 2024, LAWA upgraded to ACA Level 4 for LAX, accomplishing the SAP goal. ACA Level 4 requires airports to:

- Set absolute emission reduction goals for Scope 1 and 2 sources that align with global climate goals.
- Develop a Carbon Management Plan to achieve those goals.
- Develop a Stakeholder Participation Plan that outlines how the airport actively encourages third parties operating at the airport to achieve emissions reductions, either by implementing their own reduction strategies or by participating in initiatives led by the airport operator.

#### LAX ALTERNATIVE FUEL VEHICLE POLICY

This policy requires operators of medium- and heavy-duty vehicles at LAX to use clean fuels and ensures that vehicles are no more than 13 years old.

For the 7th straight year, 100% of operators are in compliance.

#### LAX VEHICLE FLEET

LAX's vehicle fleet in 2024 was comprised of approximately 56% alternatively fueled vehicles, including 260 fully electric vehicles (EVs).

LAX's sedan fleet is 67% electric, on track to achieving its goal of 100% electric sedans by 2031 as outlined in the EV Purchasing Policy.

#### ZERO EMISSION BUS FLEET

50% of the LAWA-owned bus fleet is electric.

LAWA received a \$9.9 million grant from the

FAA to purchase additional electric buses,

which will support LAWA's goal of a 100% electric bus fleet by 2030. As well, design is underway for a bus charging facility.

119,824,278 GALLONS of SAF Blend 22,501,449 GALLONS of SAF Blend \*\*\*\*\*\*\* 2023 2024

#### SYNTHETIC AVIATION FUEL (SAF)

5% Other

In 2024, LAX Airlines increased the use of blended 30% SAF/70% Jet-A by more than 400% from 2023.

SAF, formerly known as Sustainable Aviation Fuel, is a biofuel made from renewable feedstock, making it a more sustainable alternative to conventional jet fuel. SAF has the potential to reduce lifecycle carbon emissions by up to 80% compared to conventional jet fuel.



Compressed

23% Natural Gas

28% Electric



#### **EV CHARGING STATIONS**

In 2024, the total number of publicly available EV chargers increased 7.6% from 2023, totaling **1,272 chargers**. This avoided 43  $MTCO_2e$ , 4,859 gallons of gasoline, and provided an estimated 108,505 electric VMT.

#### GSE

In 2019, LAWA's SAP established the following LAX GSE Emission Goals: [emission factor = grams/horsepower-hour (g/hp-hr) of Nitrogen Oxides (NOx) + Hydrocarbons (HC)]

#### **1.8 g/hp-hr** of NOx+HC by 2023

**1.0 g/hp-hr** of NOx+HC by 2031

In 2024, the LAX GSE emission factor dropped to **0.96 g/hp-hr**, exceeding the 2031 target **seven** years early.

In January 2024, LAX adopted the Zero-Emission GSE Policy requiring all commercially available and operationally feasible GSE to be zero-emission by 2033.

In 2023, LAWA launched the **LAX Electric GSE (eGSE) Incentive Program** to encourage operators to purchase new, eGSE. As of 2024, LAWA has committed 100% of the \$500,000 program.

# VNY

AIR EMISSIONS MANAGEMENT

#### **GHG EMISSIONS**

Scope 1 and 2 emissions at VNY **have been trending down** (actual 2024 emission reductions are pending verification).

In 2024, **VNY upgraded to ACA Level 4**, making it the only general aviation airport in the Americas with this achievement.



VNY FLEET

**37.5%** of VNY's vehicle fleet uses alternative fuels.

#### UNLEADED AVIATION FUEL

The shift to unleaded aviation fuel, like UL94, is driven by environmental and health concerns associated with lead emissions. The FAA's goal is to eliminate lead from aviation fuel by 2030.

Deliveries of UL94 to VNY **increased 311%** since the first deliveries in 2022.



#### SAF



VNY fixed base operators (FBOs) continue to lead general aviation airports in the use of SAF.

In 2024, **2.6 million gallons of SAF** were delivered to VNY FBOs- a **186% increase since 2021**.

# MATERIAL RESOURCES MANAGEMENT

LAWA is committed to reducing waste and maximizing resource reuse across a diverse range of materials, from construction debris to food scraps. In 2024, LAWA introduced standardized labeling across all terminals to increase waste sorting accuracy and divert recyclables and compostables from landfill.







Achieve 90% construction waste diversion rate by 2025 and 95% by 2035

Improve waste reduction and recycling programs

GOAL 1

Develop a zero waste plan bv 2020

Achieve an operational waste diversion rate of 25% by 2025 and 50% by 2035

#### **2024 ACHIEVEMENTS**

 $\checkmark$ 

LAWA achieved a 33% operational waste diversion rate, exceeding the 2025 target ahead of schedule

LAWA launched passenger- $\checkmark$ facing organics composting at LAX

 $\checkmark$ 

Four major capital projects at LAX achieved a minimum of 89% construction waste diversion rate

Status Paired trash and recycling bins with standardized labels at LAX's Terminal 1.5 Connector

trash











Goal achieved and

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#### **OPERATIONAL WASTE**

LAX had a diversion rate of **33%** for its operations at LAX excluding Construction and Demolition (C&D) waste

LAX's diversion rate **exceeded** the SAP goal for 2025 of over 25% of materials diverted **for the 3rd year in a row** 

The commingled recycling rate increased by 34% when compared to 2023

Organic waste collection at LAX increased by almost 48% since 2023

LAX Monthly Organics Diversion (2024)

#### 

#### STANDARDIZED WASTE BIN LABELING

In 2024, LAWA deployed standardized waste bin labels across all passenger-facing areas of the LAX Terminals to improve waste sorting accuracy. This effort, featuring clear and visible instructions on each bin, educates and encourages proper disposal of waste, thereby reducing contamination and increasing the effectiveness of recycling processes.





#### PASSENGER-FACING ORGANICS COLLECTION

In September 2024, LAWA launched the rollout of **passenger-facing organics collection** in the Central Terminal Area (CTA) food courts, which led to a substantial increase in landfill diversion.

Food scraps are now turned into compost, which can be used in lieu of fertilizer.



#### **C&D WASTE DIVERSION**

# A minimum C&D waste diversion rate of **89%** was achieved from four major capital projects tracked at LAX, which include:

- North Terminal Improvement Project: 90%
- Terminal 4 Modernization Program: 91%
- Terminal 5/ Tom Bradley International Terminal (TBIT) Vertical Cores: 94%
- Automated People Mover: 89%

LAX operates its own batch plant, which recycles construction materials on-site to produce concrete and minimize the need for off-site material hauling.

In 2024, LAX Batch Plant operations **increased over 75% from 2023**, reusing construction debris for the North Airfield Exit Taxiway Project.

#### SINGLE-USE PLASTIC WATER BOTTLE BAN

Since the ban's inception in 2023, LAX has avoided approximately **10 million** single-use plastic water bottles.



#### Loader at the LAX Batch Plant





High pressure water spray nozzles suppress dust emissions

#### FOOD DONATION POLICY

In 2024, LAWA tenants **donated over 32 tons** of edible food through LAX's Food Donation Policy, **3x more** than what was donated in 2023.

Edible food donations not only divert organic waste from landfills, they also support local communities in need.

#### Mandatory pre-operation environmental compliance inspection



#### LA SANITATION AND ENVIRONMENT DONATION DRIVES

In 2024, LAWA partnered with LA Sanitation and Environment on **six separate donation drives** to collect clothing, non-perishable food, toiletries, toys, condiments and utensils, and blankets and socks to be distributed to those in need in LA.

MATERIAL RESOURCES MANAGEMENT

21

# NOISE MANAGEMENT

130

LAWA continued to make significant progress in reducing noise impacts in communities surrounding both LAX and VNY. Hundreds of property owners are actively participating in the LAX Residential Sound Insulation (RSI) Program and Noise Portals remain in use. In their fourth year, the LAX Fly Quieter and VNY Quieter Nights programs continue to recognize airlines and aircraft operators for their efforts to operate more quietly.

#### GOAL 1



Implement the LAX Fly Quieter and VNY Quieter Night programs



Launch web-based noise portals for LAX and VNY

### GOAL 3



Continue the Sound Insulation Grant Program as funds are identified

### **2024 ACHIEVEMENTS**

- The LAX Fly Quieter and VNY Quieter Nights programs are in their fourth year
- LAX and VNY noise portals are in use and fully functional for public use

The LAX RSI Program successfully completed 288 homes in 2024





Status Indicators









Goal achieved and ongoing

# LAX

#### RSI

NOISE MANAGEMENT The LAX RSI Program supports the soundproofing of homes in the City of El Segundo and City of Los Angeles.

Through 2024, the program mitigated **88 homes** in the City of Los Angeles and City of El Segundo, with 289 in process. Additionally, **288 homes** were soundproofed in the City of Inglewood and Los Angeles County, for a total of

22,441 homes fraction completed to date.

In 2024, LAX received a **\$15.8 million grant** from the FAA to support sound insulation treatments in select homes.

#### **FLIGHT PROCEDURES**

In 2024, the STHBY and KYLOW departure procedures were modified following two years of collaboration between LAWA and the FAA. These modifications intend to minimize early turns before the shoreline and reduce noise impacts.

Since implementation, LAWA has observed aircraft flying farther offshore and a noticeable decrease in the number of early turns during nighttime hours.



### VNY

#### QUIETER NIGHTS PROGRAM

The VNY Quieter Nights Program is a voluntary initiative encouraging jet aircraft operators to avoid arrivals and departures between 11 p.m. and 7 a.m.

#### Operators have **committed to reducing** maintenance and repositioning flights during quiet hours.

	Nighttime Jets		% of Nighttime vs. Total Jets
2019	4,514	53,759	7.7%
2020	2,797	44,063	6.0%
2021	4,097	65,810	5.9%
2022	4,361	65,192	6.3%
2023	4,521	60,357	7.0%
2024	4,377	58,858	6.9%

#### VNY FRIENDLY FLYER AWARD WINNERS

In 2024, 26 operators earned the Friendly Flyer Award with **4 first-time winners, and 22 repeat winners**. The program publicly recognizes jet aircraft operators who do an exemplary job following all VNY noise abatement policies and programs.

To learn more about noise issues in your community, please find the LAX & VNY Noise Portal QR codes here:



# 23

#### FLY QUIETER PROGRAM

LAWA recognized **nine airlines as winners** of the 2024 LAX Fly Quieter Program in three different categories.

The initiative encourages commercial airlines at LAX to comply with noise abatement programs and procedures as well as implement voluntary measures to reduce LAX's noise footprint.

	CATEGORY 1	CATEGORY 2	CATEGORY 3
	100+ Operations daily	5-99 Operations Daily	1-4 Operations Daily
Gold	United Airlines	Volaris Airlines	Breeze Airways
Silver	American Airlines	Frontier Airlines	ITA Airways
Bronze	Southwest Airlines	Spirit Airlines	Fiji Airways

# NATURAL RESOURCES MANAGEMENT

View of the Pacific Ocean from the LAX Coastal Dunes Habitat

LAWA owns and manages a 300-acre coastal dune system that provides habitat for federally endangered species such as the El Segundo Blue Butterfly. LAWA is committed to preserving biodiversity and restoring this ecosystem. In 2024, LAWA focused on invasive plant removal as the first step in a 50-acre restoration project.

GOAL 2

LAX Dunes

Secure grants that will benefit the

#### GOAL 1



Restore the natural habitat of the LAX Dunes to support native flora and fauna by:

Striving for the natural addition of native flora and fauna with no net loss of biodiversity

Implementing invasive plant management in El Segundo Blue Butterfly Habitat Restoration Area

Continuing to improve the Coastal Dunes Improvement Project

Continuing weeding and restoration activities

### **2024 ACHIEVEMENTS**

Removed over 146,000 pounds of non-native plant species in the Dunes Ø

In 2024, LAWA made significant strides in completing restoration work for a \$500,000 grant from the California Natural Resources Agency received in 2023

Status Indicators

 $\checkmark$ 









Goal achieved and ongoing

© LAWA

NATURAL RESOURCES MANAGEMENT LAX

#### **INVASIVE SPECIES REMOVAL**

In 2024, crews and volunteers removed approximately 88,000 pounds of acacia along with 58,000 pounds of other invasive and nonnative vegetation for a combined

# 146,000 pounds

removed across the Northern and Southern Dunes. Clearing these weeds is vital to prepare for planting and for the recovery of native ecosystems.

#### LAX DUNES RESTORATION EVENTS

To support the restoration of the LAX Dunes habitat, in 2024 LAWA hosted

11 events with a total of 136 volunteers working 311 hours

#### **COMMUNITY VOLUNTEER DAYS**

LAWA has published a public events calendar. More information on upcoming dunes events can be found from the QR code here:



#### PARTNERSHIP WITH LA ZOO



In 2024, LAWA's partnership with LA Zoo successfully repurposed **all 88,000 pounds** of non-native Acacia removed from the LAX Dunes. The invasive shrub is native to the Australian continent and used as feed and bedding for a variety of animals in their enclosures.

### The Marine Blue Butterfly and the Seacliff Buckwheat



© Kenneth Winfrey

#### NATIVE PLANT INSTALLATION

While restoration was primarily focused on weed removal, LAWA performed some targeted planting work with the assistance of volunteers. 144 Seacliff Buckwheat plants were installed with the support of Delta Airlines volunteers. Seacliff Buckwheat is the sole host plant for the El Segundo Blue Butterfly.

© Tad Motoyama



preparing visitors for the 2024 El Segundo Blue Butterfly Tour



In 2024, LAWA continued to be a driver of inclusivity requirements in its contracts supporting local, small, and diverse businesses and workforce development in aviation and construction.

#### **GOAL1**

CORPORAT

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RESPONSIBILITY



Continue to implement inclusivity requirements in LAWA contracts and monitor compliance

## GOAL 2



Develop and expand partnerships to promote a sustainable local workforce

### **2024 ACHIEVEMENTS**

- 104 active contracts with  $\checkmark$ inclusivity requirements at a total value of more than \$3 billion
  - **Ratification of the Multiple Award Task Order Contract** (MATOC) for LAWA's Capital **Improvement Program with** new inclusivity requirements



**Aviation Career Days at LAX** and VNY welcomed students from 34 local area schools









Goal achieved and onaoina

Passengers queuing at Tom

**Bradley International Terminal** 

 $\checkmark$ 





## LAWA

#### INCLUSIVITY

#### IN 2024, LAWA **EXCEEDED** ITS PLEDGED LOCAL BUSINESS ENTERPRISE (LBE) AND DISADVANTAGED BUSINESS ENTERPRISE (DBE) COMMITMENTS.

The **MATOC** for LAWA's Capital Improvement Program broke records for inclusivity requirements and set new standards that are larger and more far-reaching than any previous LAWA contract, totaling:

- **30%** for Small Business Enterprises (SBEs)
- 14% for LBEs
- 11% for Local Small Business Enterprises (LSBEs)
- 2% for Disabled Veteran's Business Enterprises (DVBEs)

These categories are collectively know as XBEs.

This MATOC represents nearly **\$1 billion** in contracting value for four large firms, five medium firms, and six small firms. Six of them are first-time prime contractors and two are joint-venture XBE firms that are new to LAWA's pool of qualified vendors.

The award of these 15 firms includes the participation of 230 subconsultants of which 147 are XBE firms and 73 are micro small businesses.

# **2024 COMMUNITY EVENTS**

In 2024, LAWA Staff...

On October 16th, 2024, LAWA held

airlines, businesses, and community organizations. Students from over

20 local schools explored careers in aviation and engaged with aviation

experts and professionals from more

than 40 agencies, including airlines, law enforcement, and construction

• On October 24, 2024, students were able

to see the renowned firefighting Super

Scoopers and other aircraft at the VNY

airfield tours for an in-depth look at

In June, VNY hosted the Condor

Aviation Career Day. Attendees received

Squadron's "Keep 'em Flying" event. The Condor Squadron works to honor our

veterans and preserve aviation history.

its 9th Annual Aviation Career

**Day** at LAX in partnership with

LAX

firms.

airport activities.

**VNY** 

425 community meetings

attended

community events

attended

community

relations events

hosted

community tours

led

Students gathering around aircraft at LAX's Aviation Career Day





#### HIRELAX APPRENTICESHIP READINESS PROGRAM

LAX

HireLAX is an 8-week program that provides local residents access to a comprehensive construction apprenticeship preparation program.

#### Since its inception in 2017, the program has supported **591** local residents in starting construction careers, of which **346** of them graduated from the HireLAX program





#### **GUEST EXPERIENCE**

LAWA takes the guest experience very seriously and administers a multitude of programs to ensure a positive experience at LAX. Programs, including iCare, Volunteer Information Professionals (VIPs), and LAXceeders have employees and volunteers support the traveling public in terminals by providing information and guest assistance.

- The iCare program provides frontline, curbside guest assistance at the CTA. In 2024, iCare staff worked **8,261 hours** and provided service to **408,000 passengers**.
- VIPs assist travelers by providing directions, giving information about airport amenities, ground transportation, local accomodations and attractions. In 2024, VIP staff members spent approximately 9,725 hours in the terminals and served 388,000 travelers.
- LAXceeders introduces college bound students interested in aviation careers to the airport environment and trains them in guest assistance techniques. In 2024, 14 LAXceeders spent 685 hours in the terminals serving 17,000 travelers.



# SUSTAINABLE CONSTRUCTION AND GREEN BONDS

At LAWA, sustainability is embedded into the design and construction of major capital improvement projects. From energy-efficient buildings to environmentally responsible infrastructure, LAWA integrates green building standards and innovative financing to drive long-term environmental and operational benefits. Green Bonds partially finance several projects at LAX that conform with International Capital Markets Association Green Bonds Principles.

Green Bonds are any type of bond instrument where proceeds will be exclusively applied to finance or refinance eligible Green Projects that are aligned with the four core components of International Capital Markets Association Green Bond Principles: Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds, and Reporting.



#### CONSOLIDATED RENT-A-CAR FACILITY (2022 SERIES A)

This project consolidates rental car operations to reduce traffic congestion and emissions. The project consists of over 200 EV charging stations with future capacity to exceed 300 and includes efficient lighting, droughttolerant landscaping, employee amenities and a solar array that will meet 60% of the building's energy demand.

- Status: Completed Q1 2024, won't be fully operational until the Automated People Mover (APM) begins operations.
- Leadership in Energy and Environmental Design (LEED)
  Certification Status: Achieved LEED Gold in 2023.



#### NORTH TERMINAL IMPROVEMENT PROJECT (2022 SERIES G)

This project includes the replacement and associated improvements of Terminal 3 in partnership with Delta Airlines. It includes a walkway connection to TBIT, access to the APM, new gates, and other passenger amenities. The project includes energy saving technologies incorporated in the escalators, high-efficiency lighting with motion sensors, low-flow water fixtures, and uses 20% recycled content and 20% regional content materials in construction.

- Status: Anticipated completion Q1 2025.
- Energy Performance: Will improve energy use by 7.4% and reduce costs by 26.3% from the baseline.
- Waste Diversion: 90% of construction waste has been diverted to date.
- LEED Certification Status: On track for LEED Gold.

#### TERMINAL 5 AND TOM BRADLEY INTERNATIONAL TERMINAL VERTICAL CORE PROJECTS (2022 SERIES G)

These projects aim to enhance mobility and connectivity between terminals with the APM. These projects include implementation of energy efficient designs, sustainable building materials, energy metering, low-flow fixtures, and consist of 40+ LEED Environmental Product Declarations (EPDs) and 20+ LEED Material Ingredient Products.

- Status: T5.5- Completed Q3 2023; TBIT-Completed in Q2 of 2024.
- Energy Performance: T5.5- 8.5% energy reduction and 8.5% energy cost savings from baselines. TBIT- 7.8% energy reduction and 7.8% energy cost savings from baseline.
- Waste Diversion: More than 93.7% of construction waste diverted to date.
- LEED Certification Status: T5.5- On track for LEED Silver; TBIT- On track for LEED Silver.





#### AUTOMATED PEOPLE MOVER (2022 SERIES I)

A component of LAX's Landside Access Modernization Program (LAMP), this fully electric train system provides connectivity to regional public transit, the Consolidated Rent-A-Car Facility, and the CTA.

- Status: Anticipated completion Q2 2026.
- Energy Performance: On-site PV array will supply just under 44% of the APM's operational needs.
- Waste Diversion: 89% construction waste diversion.
- LEED Certification Status: Maintenance and Storage Facility achieved LEED Platinum in 2024. APM achieved Envision Gold in 2022.



#### TERMINAL 4 MODERNIZATION PROGRAM (2022 SERIES G)

This project consists of activities within Terminal 4 and includes the consolidation of 30 gates to improve passenger mobility, a new connection to Terminal 5, and connections to the APM, offices, central areas for ticketing, security, and baggage claim. This project will reduce indoor water use and utilize the purchase of renewable energy credits.

• Status: T4- Anticipated completion Q1 of 2028; T4.5- Completed Q4 2022.

#### Energy Performance:

- T4- Anticipated to reduce energy use intensity (EUI) by
  7.6% and energy cost savings 13.7% over baseline conditions.
- T4.5- Heat Island Reduction benefits were achieved through specialized roughing and advanced energy meters were installed.

#### Water Savings:

 T4- Anticipated to reduce indoor water use 42.3% when compared to baseline by installing lowflow fixtures. Once reclaimed water is activated, indoor potable water use will be reduced 75.5% from the baseline.

 T4.5- Indoor water use will be reduced 41.1% from baseline by installing low-flow fixtures.

#### • Waste Diversion:

- T4- Waste diversion is tracking at 91%.
- T4.5- Final waste diversion was 91.9%.
- LEED Certification Status:
  - T4- On track for LEED Gold.
  - T4.5- Achieved LEED Gold in 2023.



SUSTAINABILITY REPORT 2024

> Front and back cover photos courtesy of: *Brandon Tseng, LAWA Operations*