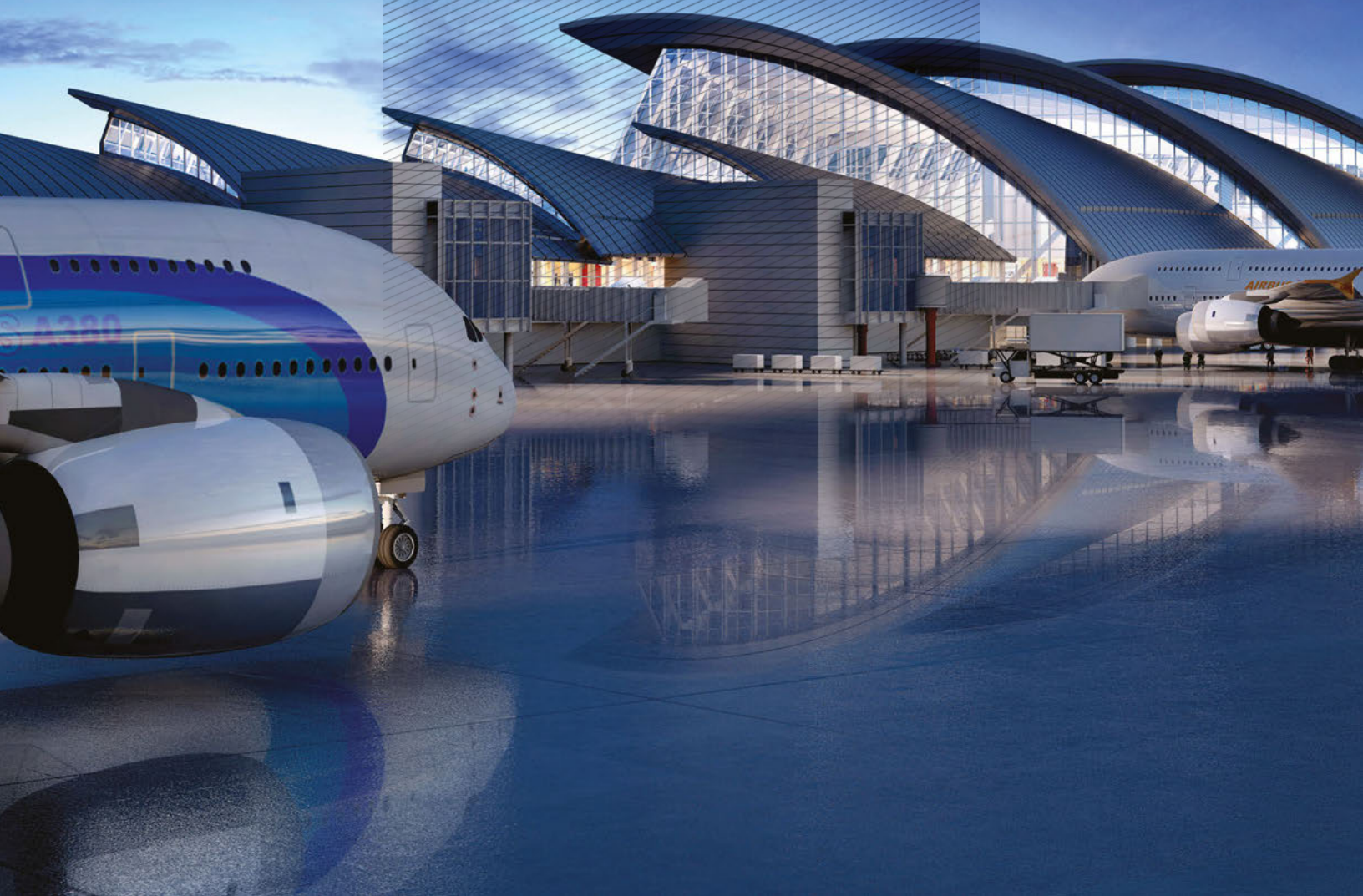
Los Angeles
World Airports

SUSTAINABILITY REPORT

2014



Message from the Chief Executive Officer

Advancing Mayor Eric Garcetti's Sustainability program at our airports is one of my highest priorities as the new Chief Executive Officer (CEO) of Los Angeles World Airports (LAWA). The Mayor's Sustainable City pLAn sets the course for a cleaner environment and a stronger economy, with a commitment to equity as its foundation. I am proud that LAWA's sustainability mission has a long history and continues to make significant strides in moving this organization, the City of Los Angeles, and the aviation industry into the future. This report demonstrates LAWA's commitment to reduce its environmental footprint and promote energy efficient design requirements, construction and infrastructure upgrades such as the new LAX Central Utility Plant, water conservation and water quality improvement projects, natural resource protection efforts, waste reduction and recycling, and numerous air quality emissions reduction policies and programs. LAX serves as a major economic engine for travel and tourism in the Southern California region. This report also demonstrates LAWA's corporate values for our local communities, employees, and passengers. Looking back to what was achieved in 2014 is invigorating as it is a building block on the path to a sustainable, value driven, world class airport.

DEBORAH FLINT

Acknowledgments

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LOS ANGELES WORLD AIRPORTS (LAWA)

Deborah Flint, Chief Executive Officer

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David Shuter, Deputy General Manger Airports II, Facilities Maintenance & Utility Group

Jess Romo, Manager of LA/Ontario and Van Nuys Airports

Lisa Trifiletti, Director Environmental and Land Use Planning Division

Environment and Land Use Planning (ELUP) Division Staff: Erica Blyther, Bob Burlingham, Lisa Dugas, Steve Durkee, Robert Freeman, Norene Hastings, Mansoor Ishfaq, Genevieve Lahey, Carolyn Lin, Rebecca Liu, Tamara McCrossen-Orr, Daniel Osztreicher, Greg Nagy, Peggy Nguyen, Lauren Paladino, Jigna Pandya, Kathryn Pantoja, Marjorie Phan, Nancy Price, Eileen Schoetzow, Georgianna Streeter, Scott Tatro, Alfred Tong, Jai Vaswani, and May Wong

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Executive Summary

Los Angeles World Airports' (LAWA's) 2014 Sustainability Report summarizes progress in the areas of economic, social, and environmental stewardship across the full range of capital and operating programs at its airports and landholdings. The report focuses first on Los Angeles International Airport (LAX), which is the largest airport LAWA operates. The subsequent sections cover LA/Ontario International Airport (ONT), Van Nuys Airport (VNY), and LAWA's landholdings in Palmdale (PMD).

LAWA embraces the Airport Council International-North America's definition of sustainability, which is "a holistic approach to managing an airport so as to ensure the integrity of the [e]conomic viability, [o]perational efficiency, [n]atural resource conservation, and [s]ocial responsibility of the airport." LAWA strives to improve sustainability performance across all areas, including the sustainable design of new facilities, ensuring emission controls for construction vehicles, vigilance concerning water conservation, innovative energy efficiency, and actively supporting surrounding communities, tenants, and employees.

Highlights of LAWA's actions and accomplishments at LAX in 2014 include:

- LAX passenger traffic reached a new high of 70.7 million passengers. That number represents a 6 percent increase over 2013 and is more than double the U.S. national growth rate in air traffic of 2.6 percent.
- LAWA initiated the LAX Landside Access Modernization Program (LAMP), which will deliver a number of sustainability benefits including reduced vehicle congestion and lower emissions.
- The new Bradley West international terminal achieved LEED Gold certification.
- LAX passengers consumed an average of 7.1 gallons of potable water in 2014, which represents a 3 percent improvement compared with 2013.
- LAX's electricity and natural gas efficiency increased, and LAX consumed 18 percent less energy in 2014 compared with 2013. These efficiencies represent a savings of $16 million in annual utility costs when compared with 2010 energy use.
- LAX generated 88,700 metric tons of carbon dioxide equivalent from on-site energy consumption in 2014, a 40 percent reduction compared with 2011.
- LAX's waste reduction successes include reusing more than 150,000 tons of concrete, avoiding the purchase of virgin pavement materials. Recycling this material also saved production energy and averted the generation of greenhouse gases at levels greater than the airport's total annual generation.
- State-of-the-art pollution control equipment at the new Central Utility Plant, which became fully operational in 2015, along with operational efficiencies, will reduce annual carbon dioxide emissions from LAX by almost 5,000 tons.
- LAWA initiated a Ground Run-up Enclosure study to identify the best location for engine testing at LAX to minimize noise impacts to neighboring communities.
- LAWA completed the LAX Residential Soundproofing Program, which ran for more than 17 years and resulted in the sound insulation of 7,327 dwelling units in parts of Westchester, Playa del Rey, and South Los Angeles. The program, which cost approximately $160 million, was funded entirely by Passenger Facility Charges.
- Airports Going Green recognized LAWA with an award for habitat protection of the federally endangered El Segundo Blue Butterfly in the LAX/El Segundo Dunes area.

Highlights of LAWA's achievements at its other airports and landholdings include:

- ONT's passenger numbers increased to 4.1 million, a 4 percent increase over 2013.
- ONT earned a North American Top 20 rating for the volume of air cargo handled.
- With dramatic reduction in noise levels at ONT over the past several years, LAWA was able to decommission six of the 15 noise monitors necessary to measure the noise impact boundary.
- Clay Lacy, a local aviation entrepreneur, donated two corporate jets that will be used as learning tools in VNY's aircraft maintenance school.
- LAWA secured an agreement with Kinkisharyo to manufacture transit rail cars at the Palmdale property, which is expected to yield at least $33 million in local labor wages.

LAWA released its first sustainability plan in 2008 to fulfill the vision created by the Board of Airport Commissioners' sustainability policy. Since then, LAWA has implemented many initiatives to advance sustainability outcomes. In 2014, LAWA worked with City of Los Angeles Mayor Eric Garcetti's office to align its 2014 sustainability activities with the Mayor's Sustainable City pLAn.

In 2014, LAWA continued the modernization of LAX, including the $2 billion expansion of the Tom Bradley International Terminal, overhauls of aging domestic terminals, completion of the new Central Utility Plant, and planning for future improvements including all elements of the LAMP. Going forward, LAX's $8+ billion capital improvement program includes construction of the midfield satellite concourse, completion of the Tom Bradley International Terminal renovation, and the $4 billion ground transportation program.

LAWA is proud to share its sustainability accomplishments in this report. Sustainability is a process involving continual improvement, and LAWA looks forward to future initiatives that will increase renewable energy generation on site and reconfigure land access to reduce congestion in and around LAX and in the CTA. LAWA welcomes your participation in its current and future activities.

Awards and Notable Achievements

LAWA earned a number of awards in 2014 reflecting service excellence, superior facilities, and sustainability achievements. A selection of these awards is shown below:

LOS ANGELES INTERNATIONAL AIRPORT

- Business Traveler Magazine ranked LAX as the "Best Airport in North America."
- World Travel Awards recognized LAX as one of 11 finalists for North America's "Leading Airport" category from 2009 to 2014.
- Airport-technology.com ranked LAX as one of the 10 best airports for pets in the United States.

Capital Improvement

- Awards for the LAX Curbside Enhancement Project include:
  - Architectural Lighting Magazine Achievement Award
  - SPARK Product Gold Award
- Awards for the Integrated Environmental Media System at LAX's Tom Bradley International Terminal include:
  - American Advertising Federation Los Angeles "Best in Show" Addy Award
  - Society for Experiential Graphic Design "Best of Show" Honor Award
  - Annual Communications Arts Design Award of Excellence in Environmental Graphics
  - One Club "Silver Pencil" Award for Spatial Design/Indoor Space
  - Concours Numix Winner for "Production Culturelle—Experientielle" (Experiential Cultural Production)
  - FITC (Future. Innovation. Technology. Creativity.) Award in "Generative" category and Finalist in Digital Installation category
- Engineering News Record Magazine selected LAWA for the "Best Projects" Award for Westfield Interiors/Tenant Improvement Project at Tom Bradley International Terminal.
- Public Relations Society of America gave the "LAX is Happening" Modernization Campaign a PRism Award for Excellence in Creative Tactics.
- Engineering News Record Magazine recognized Roger Johnson, LAWA Deputy Executive Director and Program Director for the Airports Development Group, as a "Top 25 Newsmaker."

Concessions

- Airports Council International–North America (ACI-NA) ranked LAX First Place for Best Food and Beverage Program–Large Airport category in the annual Excellence in Airport Concessions Awards.
- Physicians Committee for Responsible Medicine recognized LAX as Third Best among US airports in providing healthy food options.

Environmental Sustainability

- LAWA's Rideshare Program won two 2014 Rideshare Diamond Awards:
  - Kay Gonzales, LAWA IT Administration (long-time transit rider and distributor of monthly transit passes) received the Ambassador Award for Transit Rider
  - The Innovator Award for implementing an online interactive vanpool map
- Airports Going Green recognized the El Segundo Blue Butterfly Habitat Restoration Project with an Environmental Achievement Award.
- ACI-NA gave LAWA two Environmental Achievement Awards:
  - Runner-up in the "Mitigation" category for the El Segundo Blue Butterfly Habitat Restoration Project
  - Runner-up in "Outreach, Education, Community Involvement" category for LAX Air Quality and Source Apportionment Study
- The Cooperative Endangered Species Conservation Fund awarded the El Segundo Blue Butterfly Habitat Restoration Project a Federal Endangered Species Act Traditional Section 6 Grant.
- The California Energy Commission awarded LAWA, in partnership with Los Angeles Department of Water and Power, a $500,000 "Recharge in LA" grant under the Alternative and Renewable Fuel and Vehicle Technology Program.
- US EPA recognized LAWA as a top 30 Local Government Green Power Purchaser in 2014 (#15-16).
- LA Green Business Certifications were issued to 53 LAWA offices at LAX and VNY and 3 tenant offices.

LA/ONTARIO INTERNATIONAL AIRPORT

- Air Cargo World Magazine awarded ONT a North American Airports 2015 Air Cargo Excellence Award for handling between 400,000 to 999,000 tons of cargo in 2014.

VAN NUYS AIRPORT

- The National Air Transportation Association awarded Jess Romo, VNY Airport Manager, an Airport Executive Partnership Award.
- The American Association of Airport Executives selected VNY for a National Award for Airport Training Excellence.

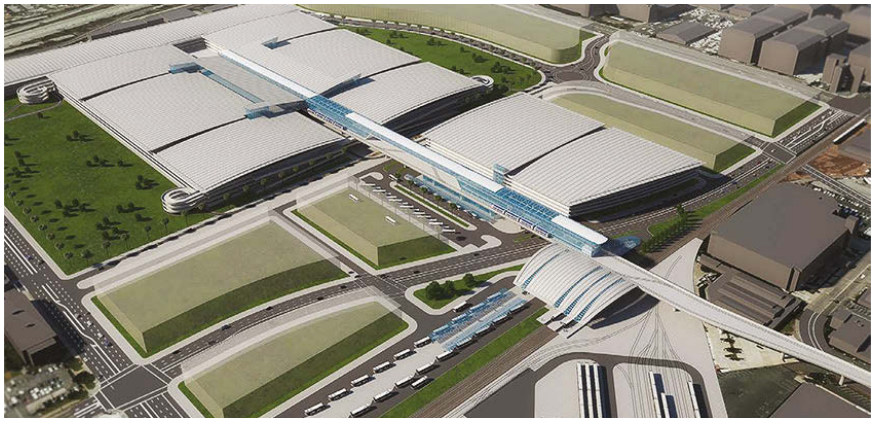
The LAX Landside Access Modernization Program

The Landside Access Modernization Program (LAMP) will provide an array of new and convenient transportation options, including dedicated areas for passenger pick-up/drop-off and parking facilities with direct access to the CTA, car rental opportunities located in one centralized location near the 405 freeway, and a convenient connection to the regional Metro rail and bus transit system.

The Project consists of 4 primary components:

Automated People Mover System

At the centerpiece of the Project is the Automated People Mover (APM) system, which will be an above ground airport transport system connecting passengers to the airline terminals, a state-of-the-art Consolidated Rent-A-Car Facility (ConRAC), new passenger pick-up and drop-off locations (Intermodal Transportation Facilities) with airport parking facilities, roadway improvements, and Metro's regional transit system.



The primary APM features include:

- Free, convenient, & reliable 24-hour access to the CTA
- 2-3 minute wait times at each APM station
- 6 APM stations connecting passengers to key LAX locations
- Above ground system, 2-1/4 miles in length
- Ability to transport up to 6,000 passengers per hour

Consolidated Rent-A-Car Facility

Currently, rental car agencies are located in approximately 23 different properties in the LAX vicinity within 2 different jurisdictions. The Consolidated Rent-A-Car Facility (ConRAC) will be designed to accommodate rental car agencies serving LAX at one conveniently centralized location. Primary ConRAC features include:

- Access to a variety of centrally located rental car options
- Direct access to airline terminals & regional freeway system
- Reduced congestion by eliminating rental car shuttles currently operating in the CTA & on local roadways

Intermodal Transportation Facilities

The Intermodal Transportation Facilities (ITFs) will offer facilities close to the 405 freeway and Sepulveda Boulevard to allow for pick-up and drop-off of passengers, check-in kiosks, parking, connections to shuttles and transit, and direct access to the CTA via the APM system. ITF features include:

- Direct access to the airline terminals
- Flight check-in, boarding passes, information kiosks, and other amenities
- Access to shuttles and other transit services
- Convenient pick-up and drop-off, and public parking

Roadway Improvements

Proposed roadway improvements are designed to reduce congestion and vehicle emissions, and enable passengers to access LAX more efficiently and directly without the need for their vehicles to enter the CTA. Roadway improvement features include:

- Improved access in/out of the CTA & to the LAX region
- Bicycle & pedestrian improvements
- Additional street lanes & new freeway ramps

Metro Transit Connection

The APM will allow for a convenient connection to Metro's regional rail and bus system, including the Airport Metro Connector transit station located at Aviation Boulevard/96th Street. The Airport Metro Connector transit station project is being planned by Metro as an independent project, separate from the LAX Landside Access Modernization Program.

Los Angeles Mayor's Office: Sustainable City pLAn Alignment

In 2014, Mayor Eric Garcetti launched the first-ever Sustainable City pLAn for Los Angeles, a comprehensive and actionable policy roadmap. The Sustainable City pLAn prepares Los Angeles for an environmentally healthy, economically prosperous, and equitable future. The Mayor's pLAn lays out ambitious short- and long-term targets (2017, 2025, and 2035) in 14 categories related to environment, economy, and equity. The pLAn encompasses water conservation, clean energy, waste, green jobs, transportation, housing, and neighborhood livability. Mayor Garcetti released the pLAn in April 2015 and a corresponding Executive Directive that incorporates the plan into city management.

The pLAn's targets will make L.A. a national leader in solar power, electric vehicle infrastructure, water conservation, and green jobs. The pLAn also breaks new ground by committing the City of Los Angeles to an 80 percent reduction in greenhouse gas (GHG) emissions by 2050 (compared with a 1990 baseline), and a first-ever pledge to reduce per-capita vehicle miles traveled.

LAWA collaborated with the Mayor's Office to identify initiatives in the pLAn where LAWA can assume the lead, such as developing the airport's connection to the LA Metro's light rail system and improving air quality around LAX, and on initiatives where LAWA can contribute to the Mayor's goals, such as reducing municipal building energy consumption and water consumption.

LAWA continues to partner with the Mayor's Office of Sustainability on the Sustainable City pLAn initiatives. A tool to monitor progress toward the pLAn's goals is located within a dedicated Sustainability segment of the Mayor's performance metrics dashboard. The Mayor's Office will release the first Sustainable City pLAn annual report in 2016.

LAX

LOS ANGELES INTERNATIONAL AIRPORT

LAX/Economic Viability

In 2014, LAX surpassed its 14-year peak for passengers, making it the second busiest commercial airport in the nation while remaining the world's busiest origin and destination airport. LAX handled 70.7 million annual passengers, representing a 6 percent increase over 2013 and exceeding the previous record of 67.3 million annual passengers set in 2000. Of this total, 19 million passengers were international, fueling a resurgence in tourism and business travel for the City of Los Angeles and the region.

In 2014, LAX served 113 domestic and 71 international destinations, an increase of 19 domestic and 5 international destinations over the previous year. Passenger traffic at LAX continues to increase steadily, at an average annual rate of 4.6 percent since 2009. See Figure 1.

While passenger traffic hit record levels, aircraft operations were down slightly in 2014, to 603,352, making it the fourth busiest airport in the world in terms of aircraft movements. Aircraft operations at LAX have increased at an overall average annual rate of 2.1 percent since 2009. Operations increased more slowly than passenger traffic, mirroring a trend seen at other major airports across the country due to the use of larger aircraft, higher passenger load factors, and consolidated routes. See Figure 2.

LAX handled 2.0 million tons of cargo in 2014, an increase of 4.8 percent over 2013, and currently ranks 15th in the world and fifth in the nation in terms of air cargo tonnage processed. The value of cargo processed at LAX was more than $96.3 billion. See Figure 3.

IN 2014, LAX HANDLED 70.7 MILLION ANNUAL PASSENGERS, EXCEEDING THE PREVIOUS RECORD OF 67.3 MILLION SET IN 2000.

FIG 1 Total Passengers at LAX *(millions)*

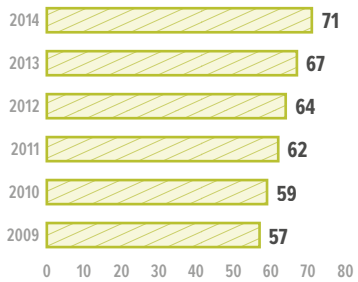
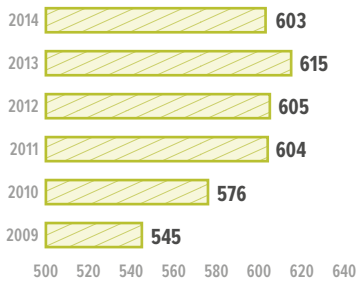


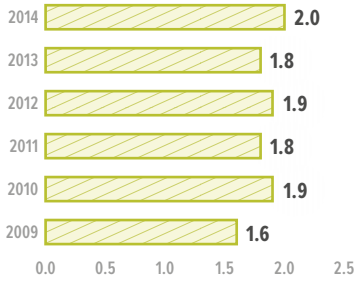
FIG 2 Aircraft Operations at LAX *(thousands)*



Operating revenues exceeded $1 billion in 2014, a first for LAX as it experienced record levels of landing fees due to increased passenger traffic, increased building and land rentals, and in-terminal and off-terminal concession revenue. Operating profit before interest and depreciation was $527 million, a 19 percent increase over 2013.

FIG 3

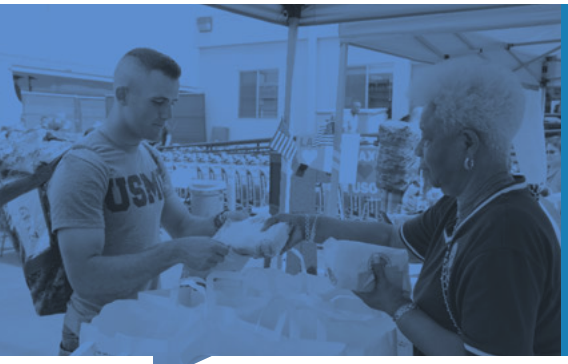
Cargo Volume at LAX *(million tons)*



LAX MODERNIZATION PROGRAM

In 2014, LAWA moved forward with the LAX Modernization Program, an $8+ billion capital program that includes construction of new terminals, renovation of old terminals, and a complete overhaul of the ground transportation system at LAX, known as the LAX Landside Access Modernization Program (LAMP). The Los Angeles Economic Development Council estimates that the $4.1 billion in completed and ongoing projects has created nearly 40,000 well-paying local jobs and contributed $6.89 billion to the local economy—with more to come over the next several years. LAX is an economic engine for the region and is directly responsible for 294,000 jobs in Los Angeles county and an additional 19,400 jobs in neighboring Southern California counties.

In 2014, LAWA started construction of the West Area Maintenance Facility, and continued planning for construction of the Midfield Satellite Concourse and the LAMP. The LAMP will include an automated people mover system, off-airport intermodal transportation facilities, a consolidated rental car facility, and a connection to the Los Angeles County Metrorail system, the first major new ground access facilities and improvements to LAX's transportation system since 1984.



LAX/Social Responsibility

LAWA recognizes the importance of social responsibility in a sustainable organization. LAWA's commitment to advancing the well-being of all airport stakeholders, including employees, businesses, passengers, and surrounding communities, is evident from the broad range of social programs implemented and maintained by LAWA. Examples of these programs are described below.

LAWA EMPLOYEES ARE DEDICATED TO THE BETTERMENT OF THE COMMUNITIES IN WHICH THEY LIVE.

Customer Service

LAWA improves the travel experience at LAX by building high-quality facilities, developing passenger assistance programs, featuring exhibits from local artists, and improving its dissemination of public information.

Local Economic Development

LAWA engages and empowers local communities through youth outreach programs, aviation education, community participation programs, and private industry partnerships. LAWA provides employment and educational outreach services to local community-based organizations and residents through the Business and Job Resources Center (BJRC). LAWA's local economic development efforts are supported by several well-established programs. See Table 1.

LAWA, in partnership with the Port of Los Angeles and federal, state, local government, and private agencies, hosted five seminars on international trade in 2014. The seminars served as a platform for stakeholders to provide information about industry trends, access to capital, employment opportunities, and regulatory initiatives.

First Source Hiring Program

All LAWA contracts are subject to the First Source Hiring Program, which LAWA established in 2005. The program screens job applicants, creates a database, makes referrals, and provides early access to targeted applicants for jobs at LAX. Prospective employers receive prompt, cost-free referrals of pre-screened, qualified, and trained applicants.

Table 1. LAWA Economic Development Programs

PROGRAM NAME	2010	2011	2012	2013	2014	TO DATE
Job Training Program (referrals)	505	132	57	75	69	838
Job Training Program (completed training)	321	48	27	48	44	488
First Source Hiring (hiring)	790	13	193	141	180	1317
First Source Hiring (referrals)	3360	2781	2932	2549	2150	13772
Gateways Internship	37	70	17	53	75	252
Job Shadow Day	N/A	25	75	73	140	313
Aviation Career Education	75	45	45	22	45	232

PETS UNSTRESSING PASSENGERS

The LAX Pets Unstressing Passengers, fondly known as the "PUP" program, provides stress relief and comfort to passengers through interaction with pets. In 2014, 39 volunteers and 38 therapy dogs logged 1,800 hours creating a friendly, "PAWSitive" experience at LAX.

Therapy dogs and handlers roam the departures levels in the gate areas of each terminal, visiting passengers awaiting flights and providing comfort along with airport information.

PUP volunteers have at least one year of experience working with a recognized dog therapy organization. All PUP volunteers and dogs must be registered with Therapy Dogs, Inc., a national organization that registers, insures, and supports members who are involved in volunteer animal-assisted activities.

Each volunteer undergoes classroom and in-terminal training to learn about LAX and how to assist passengers. Volunteers and their dogs complete a walk-through to make sure the PUP program is a good fit for both volunteer and dog. Handlers are fingerprinted and badged.

The program made 2,150 referrals to companies doing business at LAX in 2014. Of these referrals, 180 individuals were hired. The First Source Hiring Program works with America's Job Centers, local colleges, non-profit groups, and faith-based organizations to provide job notifications, host job fairs, and offer job preparedness workshops.

Job Training Program

The BJRC has partnered with over 16 different agencies, such as the Los Angeles Community College District and the City of Los Angeles, to provide job training opportunities to residents living in the communities impacted by airport operations. Participants are provided training on customer service, retail sales, auto mechanics, computer use, hospitality, and leadership skills. The center opened in 2007. In 2014, the program referred 69 participants of which 44 completed their training.

BizConnect Database

The BJRC maintains the BizConnect database, which provides information on all businesses that have made contact with LAWA's BJRC. In 2014, the database included more than 6,000 businesses that expressed an interest in doing business with LAWA.

Gateways Internship

LAWA provides paid and non-paid internships to high school and college students primarily from Los Angeles area schools, but also from out-of-state and international schools. Interns receive on-the-job practical experience in the aviation field through education, training, and mentoring. The program helps LAWA fill positions with qualified employees throughout the organization. In 2014, 75 students interned in LAWA offices.

Since its inception, the Gateways Program has placed more than 1,212 students in a wide range of internship positions, including in Accounting, Administration, Airport Operations, Airports Development Group, City Attorney Office, Commercial Development Group, Community Relations, Human Resources, Information Management and Technology Group, Planning and Engineering, Facilities Maintenance and Utilities, Environmental and Land Use Planning, Office of Regulatory Compliance & Standards, Public Relations, and Federal Aviation Administration (FAA) related.

Job Shadow Days

LAWA employees volunteer their time to meet with students to talk about their work and give tours of LAWA facilities. In 2014, LAWA hosted approximately 140 middle school and high schools students from the Westchester neighborhood and the Cities of Los Angeles and Inglewood.

Aviation Career Education Academy

The Aviation Career Education Academy is a free, week-long summer program that provides students with a basic understanding of career opportunities within the aviation industry and general knowledge about LAX. Program participants attend site visits and presentations by organizations such as the FAA, the National Aeronautics and Space Administration's Jet Propulsion Laboratory, the Transportation Security Administration, airlines, the Encore Flight Academy, the Los Angeles Airport Police, and LAX Airport Operations. In 2014, 45 middle school and high school students from communities surrounding LAX airport participated in the program.

Small Business Procurement

LAWA ensures that small businesses have an equitable opportunity to participate in LAWA's procurement activities. Doing business with LAWA increases the competitiveness of small businesses in the local community. During 2014, LAWA procured $67.1 million in goods and services from local and small business enterprises. This represents more than 11 percent of total business procurement at LAWA. See Figure 4.

Terminal Art Program

LAWA has partnered with the Los Angeles Department of Cultural Affairs to display art exhibits in the terminals for several years. The art installations explore the natural and built environments of Southern California and the City of Los Angeles through sculpture, painting, photography, drawing, and other mixed-media works. The LAX Art Program works to enhance and humanize the travel experience by providing a diverse and memorable art experience throughout the airport.

In 2014, LAWA and the Department of Cultural Affairs celebrated the completion of three major public art commissions in the newly redesigned Tom Bradley International Terminal at LAX:

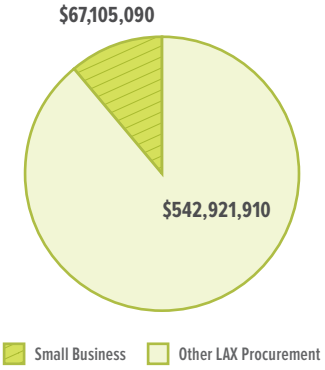
- ∑LAX1 by Pae White
- Bell Tower by Mark Bradford
- Air Garden by Ball-Nogues Studio

Created by critically renowned Los Angeles-based artists, these new permanent artworks are the largest public art commissions for both LAX and the City of Los Angeles.

Community Service

LAWA employees are not only dedicated to their work, they are also dedicated to the betterment of the communities in which they live. LAWA is always seeking opportunities to partner with airport tenants and airlines on giving back to local communities. Additional social responsibility programs are listed in Table 2.

FIG 4 **LAX Small Business Procurement 2014***



*Note: New program took effect on October 1, 2012, switching from Minority and Women owned to Local and Small Business Enterprises.

Table 2. LAWA Social Responsibility Programs

Customer Service	
Holiday Entertainment Program. In-terminal entertainment and activities include musical performances by local schools, universities, and community choirs; visits and photos with Santa Claus and LAX's popular PUPs (Pets Unstressing Passengers) therapy dogs; and children's arts-and-crafts activities at designated "Holiday Hangars" locations. Airline terminals are decorated with red banners designed with "snowflakes" made of airplanes and with poinsettias placed on baggage-claim carousels, while wreaths are hung on LAX shuttle buses.	*300 participants*
Holiday Passenger Assistance. Wearing red vests, airport employees assist passengers in the Upper/Departures Level in all terminals during LAX's busiest days (the Wednesday and Monday around Thanksgiving weekend, and the day before Christmas Eve). This is in addition to the Volunteer Information Professionals and Guest Experience Representatives regularly assigned to assist passengers in the terminals.	*100 LAWA volunteers*
Volunteer Information Professional (VIP) Program. VIPs assist passengers with way-finding, finding accommodations, and flight information. LAX has 1 VIP booth located in the baggage claim area of each terminal except TBIT. International passengers clear customs and pick bags up on a different level. At TBIT, the VIP is located on the north end of the arrival level.	*300 LAWA volunteers*
Local Economic Development	
Flight Path Flyer. Flight simulation program that trains participants in basic flying skills and aircraft operating techniques utilizing a simulator during six Saturday sessions at LAX's Flight Path Museum.	*65 participants*
Passport to Success. An innovative family engagement initiative launched by the Families in Schools non-profit organization to reduce learning loss during summer break. LAWA hosts students from kindergarten to high school at the Flight Path Learning Museum at LAX to promote aviation-related careers and introduce the rich history of LAX and aviation in Southern California. See page 44 of the linked file.	*76 students*
Community Service	
Blood Drives. LAWA participates in the American Red Cross' "Live. Give. Life." program by hosting employee blood drives.	*3 blood drives*
Bob Hope USO - LAX. One of the few stand-alone USOs in the country. Provides food, beverages, and a place to shower, relax, and rest while at LAX. Volunteers operate the facility 7 days/week, 24 hrs/day.	*74,000 military served*

table continued on next page


ΣLAX1 BY PAE WHITE


BELL TOWER BY MARK BRADFORD


AIR GARDEN BY BALL-NOGUES STUDIO.

Table 2 (cont.)

Community Service (cont.)	
#Hashtag Lunch Bag. LAWA employees volunteered during their lunch time to pack 300 lunches for the homeless.	*25 LAWA employees*
Holiday - Santa's Fly-In Event. Community outreach effort where local students are invited to meet Santa at the Flight Path Museum.	*100 students*
Team LAWA. Team members volunteer their time to provide community service in activities such as beach clean-ups, L.A. Marathon, March of Dimes, Friends of the LAX Dunes, decorating floats for the New Year's Day Rose Parade, and many other community activities.	*75 LAWA volunteers*
Employee Wellness & Staff Development	
Employee Training. LAWA's Human Resources Division offered 146 classes on varied topics such as the Family and Medical Leave Act, effective communication, harassment-free workplaces, sexual harassment, and more.	*2,677 LAWA employees*
Wellness Fitness Program. The six week program, started in 2013, consists of a one-week orientation and physical training twice a week over the remaining five weeks.	*134 LAWA employees*

LAX/Water Conservation

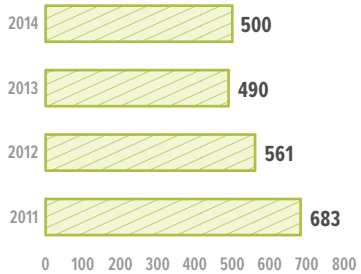
LAWA has proactively improved its water use efficiency over the past several years, resulting in a steady decline of potable water use per passenger (see Figure 5). In 2014, LAWA aggressively implemented actions to further reduce potable water consumption, including discontinuing irrigation in non-public areas, developing plans to install 2,800 feet of pipeline for reclaimed water, and using recycled water for dust control during construction. LAWA continues to identify sites for conversion to reclaimed water and to evaluate aggressive water conservation options.

Potable Water and Reclaimed Water Use

LAWA implemented water conservation measures between 2011 and 2014 that resulted in a 32 percent decrease in potable water use. Total water use, including potable and reclaimed water, dropped from 11.7 gallons/passenger to 7.9 gallons/passenger during this period.

LAX consumed 500 million gallons of potable water in 2014 compared with 490 million gallons in 2013. This equates to 7.1 potable gallons/passenger in 2014

FIG 5 LAX Total Potable Water Use*
(million gallons)



*Note: Data for 2011 to 2013 have been revised from previous report

LAWA HAS PROACTIVELY IMPROVED ITS WATER USE EFFICIENCY OVER THE PAST SEVERAL YEARS, RESULTING IN A STEADY DECLINE OF POTABLE WATER USE PER PASSENGER.

compared with 7.3 potable gallons/passenger in 2013, a 3 percent improvement in water use efficiency. See Figure 6.

During 2014, LAX used 57 million gallons of reclaimed water for landscape irrigation. Reclaimed water use offset potable water use and represents 10 percent of the total water consumed by LAX.

Landscaping

LAX has 81 acres of landscaped areas. In 2014, LAWA used reclaimed water to irrigate 63 percent of this area, a significant improvement from 35 percent in 2013. LAX also decreased watering frequencies to twice per week, and developed plans for replacing turf and increasing the use of drought-tolerant landscaping around the LAX campus.

Terminals

In addition to terminal renovations and construction activities, in 2014 LAX continued retrofitting bathrooms in existing terminals with low- and ultra-low-flow systems. On average, older fixtures consume 1.6 or more gallons per flush compared with new fixtures. LAWA estimates that installation of new fixtures has improved potable water use efficiency in the terminals by saving an average 1.25 gallons per flush. This translates to a 22 percent reduction of potable water use per unit.

Construction Practices

Several large construction programs were underway at LAX in 2014. Where practical, LAWA used reclaimed water for dust control and washing equipment during construction activities, resulting in the conservation of potable water.

Water Costs

While LAX decreased potable water use per passenger in 2014, the total volume of potable water used at LAX increased slightly because more passengers visited the airport. Water costs increased from $3 million in 2013 to $5.6 million in 2014 (see Figure 7). The primary factor for the cost increase was a 106 percent rate hike between 2013 and 2014. The potable water cost for 1,000 gallons in 2014 rose to $11.23 from $5.46 in 2013.

Nevertheless, On a per-passenger basis, LAWA estimates that LAX saved over $3.6 million in annual water costs in 2014 compared with those in 2011.

Reclaimed water costs roughly 75 percent less than potable water. As a result, the 57 million gallons of reclaimed water LAX used for irrigation in 2014 generated an estimated cost savings of $480,000.

Projected Improvements

LAWA continues to improve water efficiencies to the highest practical extent, while working to enhance the guest experience at its airport properties. Use of reclaimed water at LAX is expected to increase as additional "purple pipe" (designated and color-coded for reclaimed water) is installed.

In 2016, LAWA, in partnership with the Los Angeles Department of Water and Power (LADWP), will install 2,800 feet of reclaimed water piping along Imperial Highway to the south of LAX. Design plans for were submitted to CalTrans for approval in 2015 and construction is scheduled to begin in 2016.

FIG 6 **LAX Potable Water Use Intensity** *(gallons per passenger)*

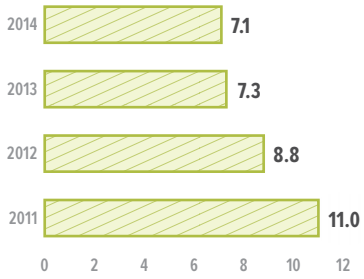
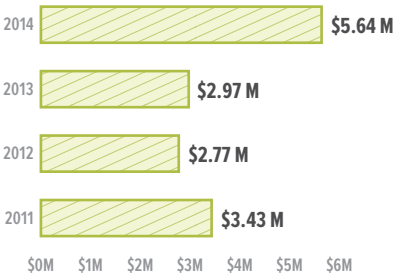


FIG 7 **LAX Water Costs**

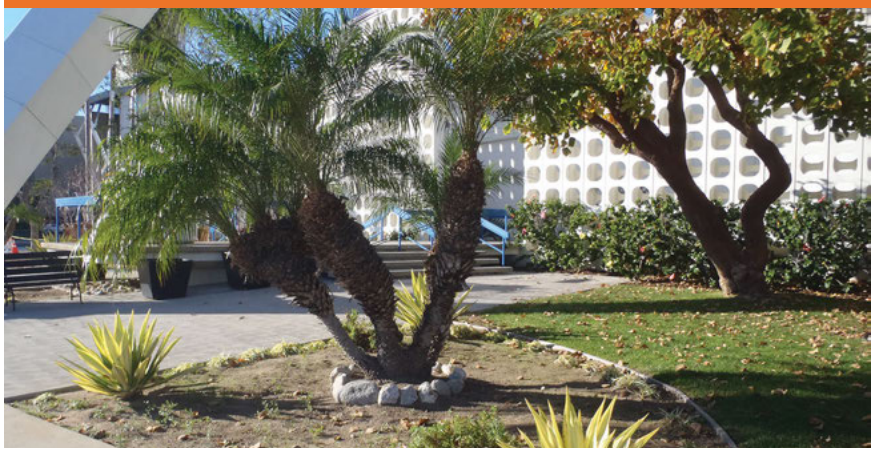


EMERGENCY DROUGHT RESPONSE

During 2014, California experienced the third consecutive year of a prolonged drought. LAX received just 8.3 inches of annual rainfall, which is approximately 55 percent of the normal amount for the area.

On October 14, 2014, City of Los Angeles Mayor Eric Garcetti issued Executive Directive #5 (ED5) in response to the drought. Under ED5, LAWA took the following actions:

- Reset its potable water irrigation controllers from 5 days per week to 2 days per week
- Developed plans for turf replacement
- Accelerated the replacement of restroom fixtures in terminals with low-flow and ultra-low-flow fixtures
- Developed signage and conducted outreach activities to encourage water conservation



Argo Drain Sub-Basin Water Infiltration Facility

In 2014, LAWA and the Los Angeles Bureau of Sanitation (BOS) entered into a Memorandum of Understanding documenting potential drainage basin solutions to be used in developing the Argo Drain Sub-Basin Water Infiltration Facility. The Facility will be located on LAWA property, north of Westchester Parkway, between Falmouth Avenue and Pershing Drive. The facility will accommodate a watershed area of approximately 2,200 acres. The Argo Drainage Channel will transport storm water via gravity to a detention/retention basin. The flow will be pumped into underground infiltration galleries to recharge the groundwater basin. The facility will improve water quality in the Santa Monica Bay by diverting polluted water that would normally flow into the bay. LAWA and the BOS worked in close collaboration to select the appropriate site, obtain funds, and plan for the project.

LAX/Energy Stewardship

LAWA is committed to maximizing the energy efficiency of its building systems. Continued improvements in equipment technology, fuel efficiency, building controls, and operational practices offer opportunities to reduce energy costs and air emissions.

Over the past several years, LAX has modernized its terminals to improve their aesthetics and offer customers a more pleasurable traveling experience. LAWA incorporates energy efficiency improvements into buildings by installing advanced heating, ventilation, and air conditioning (HVAC) equipment, putting in building automation systems, and upgrading building envelopes.

LAX uses both electricity and natural gas to power its buildings and airfield. To report its energy use in standard terms, LAWA converts total energy use (kilowatt-hours of electricity plus therms of natural gas) to a general energy unit (thousand British Thermal Units, or kBTUs).

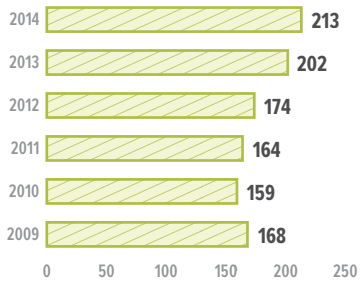
Energy Efficiency

LAX has achieved significant energy savings over the years through increased efficiencies, such as the use of LED lights, upgrades to air-handling units, the use of variable-speed drives, and construction of a new Central Utility Plant (CUP). In 2014, LAX consumed 966 million kBTUs of total energy. This is 33 percent lower than the amount of total energy consumed in 2010. From 2010 through 2014, energy use decreased by 44 percent on a per-passenger basis. See Figures 8 and 9.

LAWA IS COMMITTED TO MAXIMIZING THE ENERGY EFFICIENCY OF ITS BUILDING SYSTEMS TO REDUCE ENERGY COSTS AND AIR EMISSIONS.

FIG 8

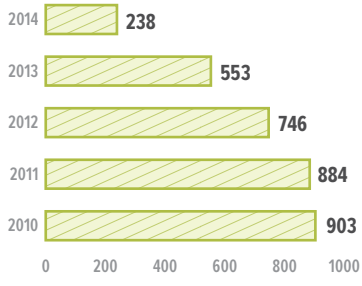
LAX Total Electricity Usage*
(thousands MWh)



*Note: Data for 2011 to 2013 have been revised from previous report

FIG 9

LAX Building Natural Gas Use*
(10,000 therms)



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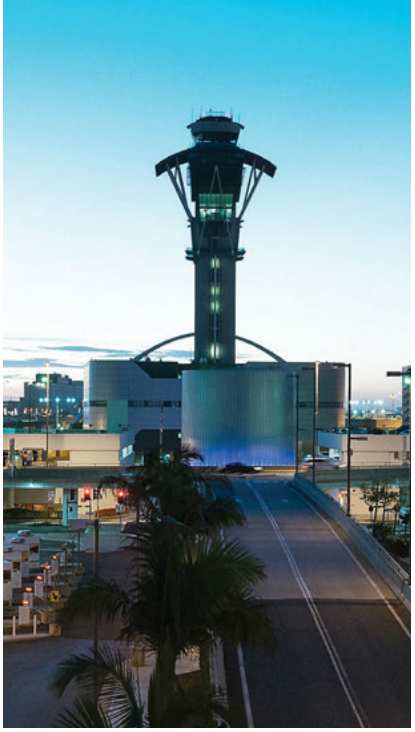


Energy Costs

LAX's total energy costs for buildings and the airfield totaled $31 million in 2014. Although this is an increase of $4 million over 2013, the cost per passenger decreased. If LAX had not achieved any energy efficiency improvements since 2010, its energy costs in 2014 would have been $47.5 million. LAX mitigated the impact of increasing utility rates, which rose by 8.4 percent on a per BTU basis, by significantly reducing natural gas consumption.

Central Utility Plant

In 2010, LAWA began work to replace its 50-year old Central Utility Plant (CUP) with a new, $438 million, state-of-the-art computerized plant to provide efficient heating and cooling for the entire Central Terminal Area (CTA). The electricity and natural-gas cost savings from the new facility are estimated at $7 million for a typical year. The new plant, which received Leadership in Energy & Environmental Design (LEED) Gold certification, incorporates a number of efficiencies into its systems, including the following:

Motors, Pumps, and Flow Meters: LAWA changed the pumping system for chilled and heated water from constant flow to variable flow, allowing the system to respond to meet actual demand load. LAWA added flow meters to measure heated or cooled water flow in the system and to each terminal, allowing the automated controls to adjust to actual conditions and save energy. The engineering team also reduced the heating hot water system temperature from 280°F, a set point that is based on outdated engineering practices, to 220°F. The CUP's use of high-efficiency motors and variable-frequency drives reduces electricity use by half—saving $240,000 and 1.6 million kilowatt-hours annually—enough to power 200 typical homes for a year.

Turbines: LAWA replaced its old natural gas turbine generators with new ones. The new turbines are significantly more efficient, using a regenerative cycle that allows them to generate the same amount of power as the old generators while burning significantly less fuel.

Controls: LAWA installed building automation and facility monitoring control systems, which allow the plant operators to more closely monitor and adjust the operating system to improve efficiency.

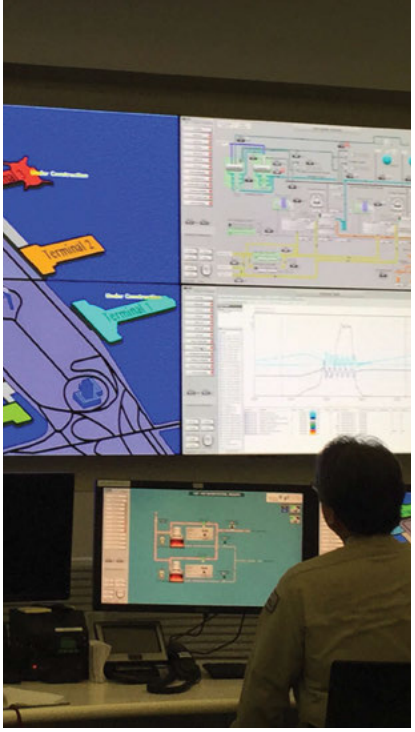
Efficient Cooling: LAWA's new electric chillers are 20 percent more efficient than the old ones, saving $740,000 in electrical costs and an estimated 5 million kilowatt-hours a year—enough to power 685 homes.

Energy Storage: The plant's thermal-energy storage (TES) tank holds 1.6 million gallons of chilled water that is produced at night when

VETERAN OPERATORS AID IN NEW CENTRAL UTILITY PLANT START-UP

To ensure reliable operation of the existing central utility plant, LAWA officials invited retired plant engineers to return and help run the old heating and cooling facility while LAWA's engineers were being trained to operate the new $438-million plant. "We needed a transition team," said Bob Johnson, a senior engineer with LAX. "These guys know the [former] plant inside and out." The transition team not only allowed LAWA engineers to focus entirely on the new facility during the critical training and start-up phase, but was also a cost effective and reliable means to ensure continued operation of LAX's heating and cooling systems.

The retirees were on hand when 79-year-old former chief building operating engineer Walt Garrick flipped the switch to shut down the old plant. Garrick was the senior engineer in charge of running the heating and air conditioning plant when it first opened in 1961. He retired in 2002 after spending 42 years running the plant. The old circular-shaped central utility plant serves as the site of the new 1.6-million-gallon thermal storage tank, which holds chilled water to cool airport terminals during the day.



electrical costs are lowest, and then stored until the hottest hours of the next day to cool passenger terminals and other buildings in the CTA. LAWA predicts that shifting 2.4 megawatts of electric-driven cooling equipment to off-peak hours will save more than $150,000 annually. On top of the annual savings, LADWP offered a one-time up to $2 million rebate for construction of the TES.

Aircraft Energy

LAWA equipped all LAX passenger gates with plug-in power and pre-conditioned air. Parked planes do not need to use auxiliary power units, which consume jet fuel. This improvement is more energy efficient and minimizes air quality impacts at LAX.

Fleet Energy Use

LAX uses gasoline, diesel, propane, liquidized natural gas, compressed natural gas, and electricity as fuel sources for its fleet, which include cars, vans, SUVs, trucks, buses, and miscellaneous equipment such as pressure washers, man lifts, forklifts, and changeable message signs. Although more than 7 percent of LAX's fleet is electric, chargers for this equipment are not metered separately. Therefore, electricity consumption of the electric fleet equipment cannot be reported.

Gasoline, diesel, propane, liquidized natural gas, and compressed natural gas quantities, converted to kBTUs, indicate that fleet energy consumption has remained relatively consistent at approximately 170 million kBTUs. Gasoline provided 21 percent of the kBTUs consumed by the fleet. At 58 percent, compressed natural gas is the largest kBTU alternative fuel consumed by the fleet. Propane and LNG represent 5 percent and 12 percent, respectively. See Figure 10.

Green Power Purchase

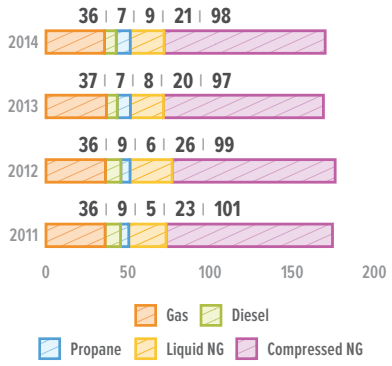
LAWA is a voluntary partner in LADWP's Green Power Program. In 2014, LAWA purchased 20.9 million kWh of green power for $628,000. This represents 9.8 percent of LAX's electrical use. According to LADWP's 2014 annual report, the Green Power Program provided electricity generated through the combustion of 100 percent certified biomass (renewable energy) purchased from the open market. See Figure 11.

Earth Hour Participation

Earth Hour is a coordinated worldwide effort to raise public awareness of climate change and the need for energy conservation. It began in 2007 and is sponsored by the World Wildlife Fund. Continuing a tradition of conservation, in 2014 LAX participated for the fifth consecutive year, by turning the 100-foot-tall LAX Gateway pylons solid green for one hour prior to Earth Hour on Saturday, March 29, 2014. The pylons were turned off during Earth Hour, between 8:30 p.m. and 9:30 p.m. The pylons resumed their color changing display at the conclusion of Earth Hour.

FIG 10

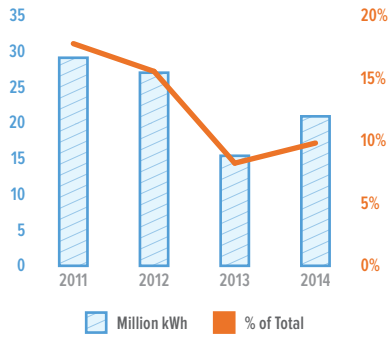
LAX Vehicle Energy Use*
(million kBTUs)



*Note: Data for 2011 to 2013 have been revised from previous report

FIG 11

LAX Voluntary Green Power Purchased*



*Note: Data for 2011 to 2013 have been revised from previous report

LAX/ Air Quality and Emissions Reduction

LAWA is committed to enhancing air quality and reducing emissions. Recent successes include significant reductions in direct and indirect greenhouse gas (GHG) emissions. The Landside Access Modernization Program (LAMP) will result in significant air quality benefits. These new benefits will supplement a range of well-established emission reduction programs.

LAWA IS COMMITTED TO ENHANCING AIR QUALITY AND REDUCING DIRECT AND INDIRECT GREENHOUSE GAS EMISSIONS.

Ground Transportation and Landside Access Modernization Program

In 2014, LAWA conducted an extensive alternatives analysis of the automated people mover (APM) system. The study examined alignment alternatives, the number of APM stations, and type of APM system that would best meet the existing and projected passenger demand at LAX. LAWA also embarked on a planning process with the car rental agencies operating at LAX to determine facility requirements and sizing for the proposed consolidated rental car facility. LAWA continued coordination efforts with LA Metro to plan the proposed Airport Metro Connector Station. Finally, LAWA initiated the environmental review process of the LAMP under the California Environmental Quality Act.

Construction of the LAMP is expected to begin in 2017, with initial operations commencing in 2024. The main features of LAMP are a new APM, off-airport intermodal transportation facilities (ITF) which includes a connection to the LA Metro system, and a consolidated rental car facility (ConRAC), improvements in the CTA, and comprehensive roadway improvements that will provide improved access to existing and planned facilities.

The APM system will be a driverless, elevated, light-rail system that will transport passengers to and from the CTA, the two ITFs, the Metro light rail station, and the ConRAC. The intermodal transportation facilities will be multi-modal transportation hubs that will serve as LAX's new off-airport arrival and departure centers. The new facilities will provide passengers with a direct connection to the airline terminals via the APM and a variety of passenger amenities, including direct access to parking and commercial transit services.

The ConRAC will relocate up to 20 rental car operations into a single off-airport location adjacent to the I-405 freeway. The ConRAC will eliminate the need for rental car shuttles by providing direct access to passenger terminals via the APM, resulting in a projected 18 percent reduction in the number of vehicles entering the CTA.

The APM, ITF, and ConRAC are expected to decrease traffic congestion in the CTA by 30 to 40 percent and decrease vehicle recirculation and idle times, resulting in reduced emissions. The APM station connecting to the Metro transit system is expected to increase transit ridership for travelers and employees to and from LAX.

LAWA will include sustainability elements in the design, construction, and operation of the LAMP facilities. Potential initiatives

include roof-mounted solar panels on the parking facilities and ConRAC, electric vehicle charging stations, as well as charging infrastructure to support zero-emission rental vehicles.

Central Utility Plant

In 2014, LAWA continued transitioning to LAX's new Central Utility Plant (CUP). The new, state-of-the-art plant is more environmentally friendly than the 50-year-old facility it replaced (see the previous section on energy use). LAWA anticipates that the new CUP will reduce energy consumption and related emissions, including a projected 6 percent lifetime reduction in operational GHG emissions.

Airfield Electrification Program

LAWA has reduced pollutants from jet fuel use by expanding the airfield electrification program and providing plug-in power and pre-conditioned air to all passenger gates at LAX. With an estimated one percent of aircraft jet fuel burned by the aircraft's auxiliary power units, this airfield electrification program helps avoid the need to run those units and reduces emissions. LAWA encourages all airlines to use plug-in power at the gate, but does not currently collect information on the number of aircraft that use plug-in power. Assuming that 50 percent of flights use plug-in power and the pre-conditioned air supplied at the gate, annual emissions would be reduced by 30 tons of NOx and 10,000 tons of CO_2.

In 2014, LAWA completed the proposed design for electrification of nine of the West Remain-Over-Night aircraft parking positions at LAX. LAWA continues to work on plans for electrification of all remaining cargo, maintenance, and remote aircraft parking positions.

Ground Service Equipment Emissions Reduction Policy

In 2014, LAWA completed a comprehensive inventory of the ground support equipment (GSE) in use at the airport in 2013 and a feasibility analysis for the increased use of extremely low emission technology in GSE to reduce emissions at LAX. Extremely low emission technology includes, but is not limited to, GSE powered by electricity, fuel cells, hydrogen, and/or future technologies.

LAWA worked with the airlines and other GSE operators to develop the Ground Support Equipment Emissions Reduction Policy for LAX, which requires operators to achieve a GSE fleet-wide average emission rate of no more than 2.65 grams per brake-horsepower hour (gm/bhp-hr) for hydrocarbon emissions plus nitrogen oxide (NOx) per entity operating GSE at LAX by December 31, 2021. The policy and goals are based on the California Air Resources Board's existing fleet regulations for GSE in California. These statewide rules require operators to achieve improved emissions performance from GSE through retirement, replacement, or retrofit of older, higher-emitting equipment. The policy also requires annual reporting on GSE in use at the airport. The LAWA GSE Emission Reduction Policy is the first of its kind in the country. The LAWA Board adopted the policy in 2015.

LAX's Clean Fleet Program

LAWA has been committed to using alternative fuels since 1993, when it introduced the technology to its vehicle fleet. Today, LAWA boasts one of the largest alternative-fuel airport vehicle fleets in the nation, consisting primarily of compressed natural gas, liquefied natural gas, propane, and hybrid and full-electric vehicles. The LAX fleet consisted of 1,004 vehicles in 2014, with alternative fuel vehicles comprising approximately 61 percent of the total fleet at LAX. See Figure 12.

Alternative Fuel Vehicle Program

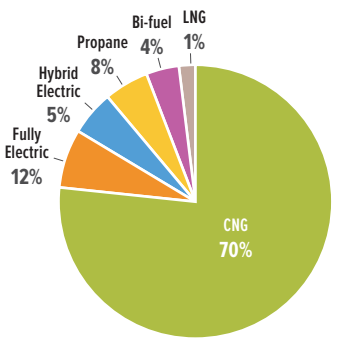
LAWA's Alternative Fuel Vehicle Requirement Program requires rental car shuttles, trucks, and other large commercial vehicles in use at LAX to be converted to alternative-fuel vehicles. The program applies to all on-road vehicles with a gross vehicle weight rating of 8,500 pounds or greater.

Clean Construction Program

LAWA has implemented a wide range of actions designed to reduce emissions from its ongoing construction program. LAWA mandates that contractors use the cleanest off-road construction equipment on the market, including Model Year 2010+ haul trucks and Tier IV diesel equipment. LAWA also requires the recycling of construction and demolition debris, and uses an on-site batch plant and on-site rock crusher for construction and demolition debris from projects at LAX. Processing the material on site eliminates the need for hauling and reduces emissions.

Strategic placement of laydown yards, on-site concrete mixers, and other equipment minimizes the number of trips to and from the site for LAWA contractors. LAWA requires

FIG 12 **LAX Alternative Vehicle Fleet Composition 2014**



contractor compliance with mandatory construction vehicle haul routes.

LAWA retains an Independent Third Party Monitor to evaluate compliance. The Third Party Monitor tracks, verifies, and reports on the use of clean construction equipment and other construction mitigations, and quantifies emissions benefits. The Third Party Monitor's report can be found at http://www.lawa.org/uploadedFiles/OurLAX/pdf/CBA/CBAStatusReport2014.pdf.

In 2014, enforcement of LAWA's Clean Construction policy for the Taxiway T and TBIT-East Aprons projects resulted in a 3.5-ton reduction in ozone precursor NOx emissions and avoided more than 2,141,269 pounds of greenhouse gas emissions. See Table 3.

Electric Vehicle Charging Stations

LAWA installed 14 Level 2 electric vehicle (EV) charging stations in Long Term Parking Lot C at LAX in 2014. LADWP provided the equipment through the "Charge Up LA!" rebate program. LAX currently has a total of 60 EV chargers, including 53 for public use. See Table 4 for a breakdown of EV charger locations.

LAWA is evaluating locations for 26 additional Level 2 EV chargers that the California Energy Commission awarded to the City of Los Angeles through a grant. Once installed, LAX will have a total of 86 EV chargers, including 79 for public use.

FlyAway® Buses

FlyAway buses provide direct service to and from LAX terminals to reduce vehicle congestion and air emissions in the region. The current program includes six locations: Expo/La Brea, Union Station, Van Nuys, Westwood, Santa Monica, and Hollywood.

LAX added the Santa Monica and Hollywood routes in 2014. The Santa Monica FlyAway buses provide non-stop service to LAX, picking up passengers from the Santa Monica Civic Center. The Hollywood service stops at the corner of Selma Avenue and Argyle Avenue, a block from Hollywood Boulevard and the Hollywood/Vine Metro Rail Station. See Figure 13 for trip reductions and Figure 14 for GHG emissions avoidance from the FlyAway program.

Table 3. Emissions reductions from LAWA's Clean Construction policy

(in pounds, except where otherwise noted)

STRATEGY / PERFORMANCE MEASURE	PM10	PM2.5	CO	CO_2	ROG*	NOx	SO_2
Diesel Engine Retrofits	1.1	0.93	N/A	N/A	N/A	N/A	N/A
Engine Idling Restrictions	1.16	1.07	N/A	4,653	17	87	N/A
On-site Material Recycling	14	13	5,740	2,141,269	232	6,934	20
Total (lbs.):	**16.3**	**15.0**	**5,740**	**2,145,92**	**249**	**7,021**	**20.0**
Total (tons):	**0.0076**	**0.007**	**2.87**	**1,073**	**0.12**	**3.51**	**0.01**

**ROG = reactive organic gas*

Table 4. EV Charger locations at LAX

LOCATION	LEVEL 2, EV CHARGER	DIRECT CURRENT FAST CHARGER
Parking Garage 1 (P-1)	15	1
Parking Garage 6 (P-6)	15	
Long Term Parking Lot C	14	
Van Nuys FlyAway Terminal Parking at LAX	8	
Admin West Building, LAWA fleet	4	
Maintenance Services, LAWA fleet	3	
TOTAL	**59**	**1**

Employee Rideshare Program

LAWA offers a multi-faceted rideshare program that benefits employees, tenants, the community, and the environment. LAWA's Rideshare Program began in 1990 with the purchase of four vans for employees to use as vanpool vehicles. LAWA now has 70 vanpools and more than 500 vanpoolers, as well as over 200 transit riders and more than 85 carpool program participants.

Based on a 2012 study by the National Academy of Sciences, LAWA's voluntary program is the largest and most comprehensive airport employee rideshare program in the nation. LAWA Rideshare was an inaugural member of the U.S. Environmental Protection Agency's Best Workplaces for Commuters Program—a mark of excellence in environmental leadership. The program's immense success reduces traffic congestion and pollution, supports local air quality goals, and provides employees with the benefits of ridesharing.

Multi-modal travel helps employees avoid sitting in traffic, reduce the stress of daily commuting, improve air quality, and live healthier lives. Sharing vehicles saves money on gas, vehicle wear and tear, and parking. The goal of LAWA Rideshare is to reduce vehicle trips to LAX by providing top-quality transportation benefits to LAWA employees, while also improving transportation options for LAX tenant company employees and the local community. As part of the LAMP, LAWA is developing a Transportation Management Organization, which will expand LAWA's Employee Rideshare program to include employees of tenants and concessionaires at LAX.

In 2014, 42 percent of LAX employees used alternative methods to get to work. Rideshare participants used vanpools, carpools, public transit, bicycles, electric vehicles, or walked to work. Seven percent of LAX employees participated in a compressed work week schedule, thereby reducing the number of days they commute to work. See Figure 15.

2014 GHG Emissions

LAX reports its GHG performance to the California Air Resources Board on an annual basis to comply with California Assembly Bill 32, local regulations, and directives. GHG emissions are grouped into three categories:

- Scope 1 - emissions from direct fuel consumption in LAX-owned-and-operated buildings and vehicles
- Scope 2 - emissions from energy generated offsite but consumed at the airport, such as grid-supplied electricity
- Scope 3 - indirect emissions associated with airport-related actions or contracts, such as tenant operations, aircraft, and commuter travel

LAWA prepared its preliminary 2014 GHG emissions inventory using aggregated data for Scope 1 and Scope 2 sources. LAWA is preparing a more detailed inventory, including capturing Scope 3 emissions, in the near future.

Scope 1 and 2 emissions at LAX amounted to approximately 88,700 metric tons of CO_2e in 2014. LAX's largest source of emissions is associated with purchased electricity, which accounts for nearly three-quarters of the Scope 1 and 2 emissions. This represents a 21 percent decrease from 1990 levels.

Fleet vehicles accounted for 11,175 metric tons of CO_2e and comprised the largest source of Scope 1 emissions. The use of natural gas in buildings accounted for 14,123 metric tons of CO_2e. Scope 2 GHG emissions, from purchased electricity, were down to 63,099 metric tons of CO_2e in 2014 from 100,000 metric tons of CO_2e in 2011. Table 5 lists 2014 Scope 1 and 2 emissions for LAX.

LAX's single largest source of energy use, and thus GHG emissions, is associated with aircraft. Aircraft are categorized as Scope 3 emissions for most commercial service airports. LAWA does not own aircraft and has no authority to control them. However, LAWA is working to exert greater influence over aircraft emissions through the operational efficiency of LAX's airfield and terminal space to the extent permissible by Federal Law. As a result, many of the emission reduction actions that LAWA has implemented and continues to implement are anticipated to generate emission reduction benefits to Scope 3 sources.

Aircraft Bio-fuels

Biofuel converts sustainable feedstocks, such as non-edible natural oils and agricultural wastes, into low-carbon renewable jet fuel. This fuel is price-competitive with traditional, petroleum-based jet fuel but achieves a 50 percent reduction in CO_2 emissions.

As a leader in advancing alternative fuels in the airline industry, United Airlines is actively working with strategic partners to generate sustainable aviation biofuels capable of reducing carbon emissions and providing energy diversification. One of these partners, AltAir Fuels, signed a three-year contract and will begin regularly scheduled deliveries of sustainable biofuel to LAX. United Airlines is scheduled to begin using the AltAir biofuel on select flights operating out of its LAX hub in early 2016.

FIG 13 **Individual Trips Saved by LAX FlyAWAY Program** *(millions)*

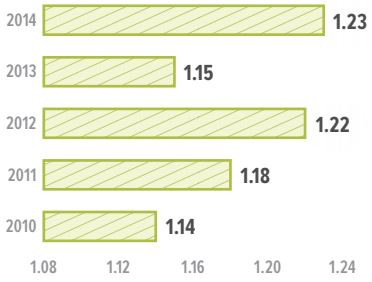


FIG 14 **Greenhouse Gas Avoided by LAX FlyAWAY Program** *(metric tonnes CO_2e)*

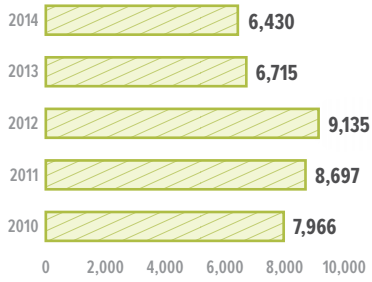


FIG 15 **LAX Rideshare Participation 2014**

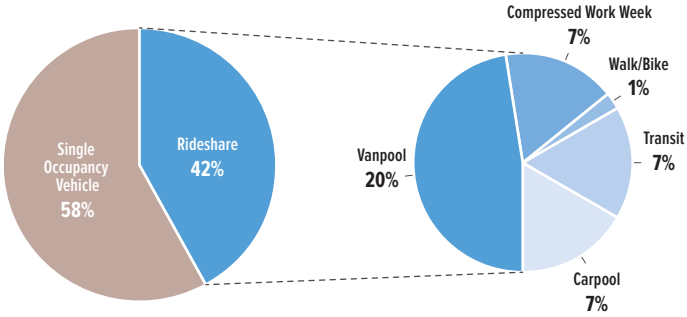


Table 5. Summary of 2014 Scope 1 and 2 GHG Emissions at LAX

SOURCE	EMISSIONS (CO_2E, METRIC TONS)	SCOPE 1 AND 2 EMISSIONS (%)
Scope 1		
Fleet Vehicles/Rolling Stock	11,175	12.6
Buildings (natural gas)	14,123	15.9
Emergency Generators	301	0.3
Scope 2		
Purchased Electricity	63,099	71.1
Total Scope 1 plus 2	**88,698**	**100**

Source: Synergy Consultants, using ACERT, November 2015

LAX/Noise Management

LAX continues to minimize aircraft noise affecting communities by implementing noise abatement programs, finding opportunities to enhance these programs, and seeking partnership-based solutions as LAWA works with stakeholders in a cooperative and collaborative manner. LAWA supports the largest residential sound insulation program in the nation and is evaluating the success of, and identifying potential improvements to, the Preferential Runway Use Program.

LAWA SUPPORTS THE LARGEST RESIDENTIAL SOUND INSULATION PROGRAM IN THE NATION.

City of Los Angles' Sound Insulation Programs

LAWA established the LAX Residential Soundproofing Program in 1997. More than 8,700 units were eligible for sound insulation in parts of Westchester, Playa del Rey, and South Los Angeles. The last construction group under the program was completed in 2014 reaching a total of 7,327 dwellings that received sound insulation treatment over the 17-year program.

The total program cost approximately $160 million, and was funded entirely with FAA Passenger Facility Charges. The average per unit cost was just under $22,000, representing the lowest cost for any sound insulation work in Southern California. See Table 6.

Other LAX Residential Sound Insulation Programs

City of Inglewood

- The City of Inglewood's Residential Sound Insulation Program has 9,569 units eligible for sound insulation; to date 7,057 units have been treated. Total funding for the program from 1991 to 2015 was $296 million, of which $166 million was from FAA funds and $130 million from LAWA funds.
- In 2014/2015 LAWA awarded $62,720,000 to the City to treat over 1800 homes.

City of El Segundo

- The City of El Segundo's Residential Sound Insulation Program has 4,537 eligible units; to date 1,943 units have been completed. Total funding for the program from 1984 to 2015 was $101 million, of which $55 million was from FAA funds and $46 million from LAWA funds.

Table 6. City of Los Angeles Sound Insulation Program

Total Units Eligible	8,710
Total Units Treated	7,327
Total Funds	$160,000,000
Construction Cost	$125,186,293
Administrative Cost	$34,813,707
Average Cost per Unit	$21,843

- In 2014/2015 LAWA awarded a total of $9,225,000 to the City to treat over 346 homes.

County of Los Angeles

- The County of Los Angeles Residential Sound Insulation Program has 6,200 eligible units. To date 3,719 units have been completed. Total funding for the program from 1992 to 2015 was 149 million, of which $66.5 million was from FAA funds and $82.5 million from LAWA funds.
- In 2014/2015 LAWA awarded a total of $18,400,000 to the County to treat 695 homes.

LAX Community Noise Roundtable

Proposed Runway Use Restriction

In 2004, LAWA initiated an FAA Regulations Part 161 Study seeking approval for the City of Los Angeles to adopt a new ordinance that would require all aircraft operators to comply with the prevailing flows whenever LAX is in Over Ocean or Westerly Operations from midnight to 6:30 a.m. The runway use restriction, if approved by FAA, would eliminate non-conforming easterly departure operations and associated noise complaints.

LAWA completed the study and submitted the application to the FAA in early 2013. In June 2014, the FAA determined that LAWA's application was administratively complete. The study culminated a 10-year effort to make the case to FAA that this restriction is in the best interest of the community while having minimal impacts on operators at LAX. The FAA reviewed the application over several months and ultimately disapproved the proposed restriction, based on its interpretation that required statutory conditions were unmet. LAWA continues to push for voluntary compliance from non-conforming operators, including sending them notifications and requesting that they comply with the prevailing traffic flows whenever the airport is operating with westerly departures.

Figure 16 depicts a several-day sample of radar tracks superimposed on each other to show typical nighttime traffic flows at LAX when the airport is in Over Ocean Operations (arrivals in green and departures in orange). Non-conforming departures occurring during these nighttime hours are shown in purple.

Report on Implementation of LAX Preferential Runway Use Policy

In April 2014, LAWA completed a report on the implementation of its longstanding "Preferential Runway Use Policy," which included an examination of the policy's effectiveness and potential areas for improvement. The policy states that between 10:00 p.m. and 7:00 a.m., aircraft operators shall maximize use of the inboard runways 06R/24L and 07L/25R, which are farthest from the communities north and south of the airport, and at all times the inboard runways shall be preferred to the outboard runways for departures.

Overall adherence to the LAX Preferential Runway Use Policy remains high and provides communities surrounding LAX with measurable relief from aircraft noise. Challenges remain due to air traffic volumes, safety considerations, and runway closures for required maintenance. Aircraft design and separation standards also prohibit certain types of aircraft from departing from Runway 25R. Nonetheless, LAWA will continue to seek ways to further improve adherence to the policy.

SCHOOLS SOUND INSULATION PROGRAM

Felton Elementary and Lennox Middle Schools, located in the heart of the 75 decibel noise contour, were retrofitted with state- of-the-art aircraft sound insulation features, including new doors, windows, insulation, and new air conditioning.

The Lennox School District is located in an unincorporated area of Los Angeles County, just east of LAX, adjacent to and under the flight path to the south runway complexes (runways (25R/7L and 25L/7R).

Two other schools, Delores Huerta Elementary (2008) and Animo Green Dot Leadership Academy (2012), have already been sound insulated. Both of these schools were new construction projects.

Additional Sound mitigation work continued in 2014 and 2015 with work at Buford Elementary School and Jefferson Elementary School. The approved budget for these projects is $9.6 million.

FIG 16 **Typical Nighttime Traffic Flows at LAX When the Airport Is in Over Ocean Operations**

LAX GROUND RUN-UP ENCLOSURE SITING STUDY

In March 2014, LAWA initiated the LAX Ground Run-Up Enclosure (GRE) Siting Study to identify and evaluate potential sites at LAX where the installation of a GRE would provide a noise reduction benefit to noise-sensitive communities nearest to the airport. A GRE is a facility consisting of tall acoustic barriers and a blast fence with aerodynamic features to allow engine testing while reducing the noise exposure to surrounding areas. The most common GRE configuration is a three-sided facility without a roof.

The study identified possible locations for the development of a GRE. The study also concluded that conducting aircraft high-power ground run-ups in a GRE facility potentially reduces the associated noise exposure impacts on surrounding communities when compared to existing conditions.

RENDERING FROM GRE SITING STUDY

To implement the non-binding Preferential Runway Use Policy, LAWA coordinates with the FAA Air Traffic Control, which is responsible for assigning runways to aircraft arriving at and departing from LAX. FAA air traffic controllers, in conjunction with the pilots in command of the aircraft, shall use the preferred runways when possible but have the discretion to use other runways at LAX as they deem appropriate to ensure safe operations. In order to continue improving the already high adherence rate, LAWA is examining a variety of ways in which to better inform, track, respond, and report on operations. Ongoing efforts include consolidating maintenance work at lowest traffic periods and working closely with operators. The April 2014 report's recommendations for improvement include developing additional outreach to both operators and the community, and increasing coordination with FAA air traffic controllers to ensure that aircraft are directed in a manner consistent with the policy to the greatest extent feasible.

LAX Early Turn Notification Program

LAWA policy requests pilots of westerly departing aircraft to maintain runway heading (fly straight) until reaching the shoreline before initiating any turns, unless specifically directed by the LAX FAA air traffic control tower. An "early turn" occurs when an aircraft departs to the west and turns before reaching the shoreline, thereby flying over communities adjacent to the airport. There are circumstances in which an early turn must be performed for safety reasons. Every effort is made to reduce this type of noise disturbance over the residential communities. The ongoing Early Turn Notification Program investigates early turns using Air Traffic Control recordings and radar flight track data to determine if the tower instructed the early turn for aircraft safety. In instances where the tower did not instruct the turn, a notification email is sent to the appropriate operator requesting that they review the departure and provide an explanation for the deviation. A monthly report is generated for local communities, the FAA, and other interested parties and is available online at http://www.lawa.org/LAXEarlyTurnMR.aspx. See Table 7.

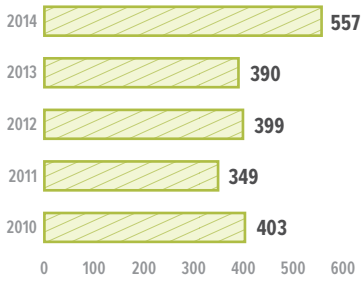
Noise Complaint Investigation and Reporting

Complaints related to LAX operations come from residents living well outside the noise impact area, including parts of Los Angeles County, San Bernardino, Riverside, and Ventura counties. Figures 17 and 18 below depict the number of individuals who submit noise complaints and the cities in which they live, which provides the most accurate picture of where aircraft noise disturbances occur.

Table 7. LAX Early Turn Counts

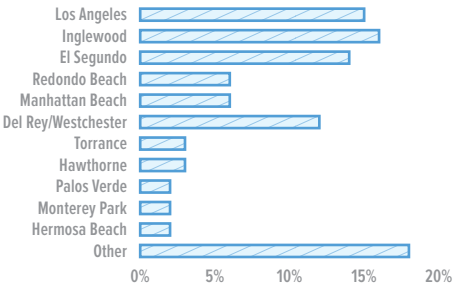
YEAR	SOUTH	NORTH
1999	2291	767
2004	2508	530
2009	1906	85
2014	1916	79

FIG 17 **LAX Unique Individual Noise Complainants***



*Note: Data for 2011 to 2013 have been revised from previous report

FIG 18 **Total Noise Complaints by City 2010-2014**



LAX Noise Exposure Map Update

In 2014, LAWA initiated the process of updating the LAX Noise Exposure Map under the U.S. Code of Federal Regulations, Title 14 Part 150, to ensure that ongoing noise mitigation programs (sound insulation and property acquisition) managed by the Cities of Inglewood and El Segundo, and the County of Los Angeles, can continue to receive FAA grant funding. The update reflects current conditions and forecast aircraft operational activity at the airport to produce a noise contour map that shows the noise exposure from aircraft operations during the year of submittal (2015) and a five-year forecast (2020) as mandated by the FAA. LAWA held public workshops in May 2014 in two locations near LAX to introduce the project's objective and process to the public and other stakeholders. The remaining activity in 2014 consisted of data gathering, analysis, forecasting, and modeling. The LAX Noise Exposure Map Update document was submitted to the FAA for acceptance in 2015.

LAX/Materials Conservation and Resource Efficiency

LAWA practices materials conservation and recovery to reduce waste headed to the landfill or incinerator. Materials stewardship includes reducing the purchase of new products, reusing existing resources, and recycling material for future use. LAWA continues to work closely with other City departments and airport stakeholders to improve, expand, and develop recycling and waste reduction activities to help the City of Los Angeles achieve the new citywide goal of zero waste by 2035.

Waste Recycling

In 2007, the LAWA Board of Airport Commissioners committed the airport to achieving 70 percent waste diversion by 2015. The LAWA Recycling Program involves a range of activities and initiatives:

In-house Collection Operations

- Collection of recyclable materials from common-use recycling containers and bins in airport terminals, airfield areas, and offices
- Collection of recyclable materials from airlines and airport tenants through individual agreements at no cost to participants from corporate offices, retail and dining areas, and airline lounges
- Sorting and separation of recyclable materials on the airfield for collection and processing

Airport Tenant Coordination

- Specific language is incorporated into tenant lease agreements and construction bid documents to ensure that every tenant or contractor has a recycling and waste reduction program at LAX
- LAWA collects data from airlines and tenants for their own recycling programs, particularly with concessionaires and restaurant management companies, such as HMSHost, Hudson Group, and Westfield
- LAWA offers education and outreach for airport tenants on existing and upcoming recycling and waste diversion rules and regulations
- LAWA expanded in-flight recycling programs for five major airlines: Alaska, America, Delta, United, and Southwest

LAWA PRACTICES MATERIALS CONSERVATION AND RECOVERY TO REDUCE WASTE HEADED TO THE LANDFILL OR INCINERATOR.

LAX HARVEST FOOD DONATION PROGRAM

Food waste makes up a large percentage of LAX restaurants' and concessionaires' waste stream. In late 2013, LAWA worked with HMSHost to expand the food donation program started by HMSHost in 2012. LAWA approached the other major concessionaires at LAX and visited each dining establishment to promote the program. In 2014, Hudson Group joined HMSHost as a member of the LAX Harvest Food Donation Program.

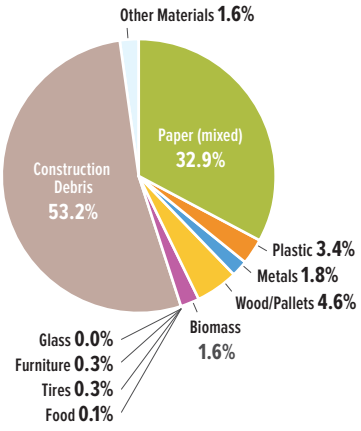
In 2014, both concessionaires provided high quality, unsold, grab-and-go food to the program, generously donating 86,697 individual pieces, amounting to 42,482 pounds (21 tons) of food items including salads, sandwiches, wraps, yogurt, parfaits, and fresh fruit. Outside organizations used the donated food, which otherwise would have gone to landfills, to feed those in need. LAWA is working to expand the program to airline lounges and other dining places in the near future.

LAWA's Recycling Program achieved a 67 percent waste diversion rate at LAX in 2014. This equates to more than 25,000 tons of material that—through reduction, reuse, and recycling—was not sent to landfills or incinerators. See Figure 19 for a breakdown by recycled material waste streams.

Food Waste Diversion Feasibility Study

LAWA and the City of Los Angeles recognize that effective food waste management is necessary to achieve zero waste and reductions in GHG emissions. In 2014, LAWA participated in a feasibility study commissioned by the Bureau of Sanitation to assess food waste diversion opportunities at the airport. The study found that most food and beverage concessionaires would consider a food diversion program at LAX. Their primary concerns were limited space, complex logistics, and the cost-effectiveness of procuring new containers and liners. The study recommended a range of short- and long-term actions, which will be used to inform the future planning and development of food waste diversion activities at LAX.

FIG 19 LAX Recycled Materials 2014



Materials Reuse

Diverting materials from the landfill or incinerator through the LAWA Recycling Program is a labor-intensive operation. Sorting, processing, and remanufacturing of recyclable materials into new products requires energy and labor. The reuse of materials maximizes the use of existing resources and requires less energy, water, labor, and other resources than does recycling. Through partnerships with various airport tenants and City departments, LAWA has successfully implemented several materials reuse programs at very little or no cost to the department and beneficiaries. LAWA continues to seek reuse opportunities wherever possible.

Furniture and electronics: LAWA collects office furniture and electronics for the City of Los Angeles General Services Department (GSD) for reuse and donation to local non-profit organizations and schools. GSD also maintains a website where City employees can post office furniture and electronics available for reuse and coordinate transactions. In 2014, LAX reused or donated 78 tons of furniture and donated 5 tons of electronics to GSD.

Organic waste stewardship: In partnership with the LA Zoo, LAWA removes invasive Acacia and Ficus plant material from the LAX Dunes to feed animals at the Los Angeles Zoo. More information on this program is provided in the Natural Resources Management section of this report. In 2014, LAX donated 47 tons of Acacia and Ficus plant material.

Pavement Reuse

LAWA has an on-site rock crushing facility that processes concrete, rock, and asphalt materials for reuse in future construction projects at the airport. Concrete is crushed and used in the batch plant for new concrete. Asphalt grindings are placed around the site for dust control and wet weather preparation. The on-site batch plant and crusher have also prevented a significant amount of landfill fees and off-site trucking, reducing traffic and air quality impacts.

Since 2007, LAX has performed extensive renovation of its facilities—resulting in the generation of large amounts of construction and demolition debris, with significant amounts being recycled by the LAneXt™ modernization program. In 2014 alone, construction and demolition debris and processed miscellaneous base recycling totaled 13,282 tons, and concrete recycling associated with construction under the LAX Master Plan projects totaled 155,383 tons. Recycling and reusing this material prevented the hauling of approximately 7,800 end-dump truck loads.

When the full life cycle of the pavement materials is assessed, recycling and reuse saves approximately 109,214 million BTUs. For context, this amount of energy is greater

than LAX's total annual consumption of electricity and natural gas. The CO_2 avoided by this material reuse exceeds 89,000 tons, which is roughly equivalent to the total Scope 1 and Scope 2 GHGs produced by all of LAX's annual on-site energy consumption. See Table 8.

Other Source Reduction

Reducing waste at its source by avoiding the initial purchase or creation of products is the most cost-effective and least resource-intensive waste reduction strategy. Annually, LAWA purchases over $500 million in supplies to operate its facilities. LAWA's significant purchasing power makes it a model purchaser of "green" products that are made from recycled or sustainably sourced materials, made locally and responsibly and meeting or exceeding performance standards. LAWA is also in the forefront of adopting new technologies that reduce paper use while increasing work productivity.

Environmentally Preferable Purchasing

In 2014, 54 percent of custodial products purchased by LAX were environmentally preferable products. During the reporting period, LAWA continued working to develop a department-wide Environmentally Preferable Purchasing policy. LAWA also created a cross-divisional Environmentally Preferable Purchasing Green Team to improve the department's practices by developing and implementing procedures for selecting, procuring, and validating products and services as well as enhancing data collection and reporting. The team initiated an educational product giveaway contest to stimulate EPP interest and publicize the existence of the group.

LAWA actively pursued procurement opportunities for environmentally preferable IT equipment by incorporating sustainability clauses in procurement contracts. In 2014, 67 percent of LAWA's IT-related procurement contracts included sustainability clauses.

Going Paperless

In 2014, LAWA cut down on paper use and increased workflow efficiency for key administrative processes. LAWA implemented several electronic document management systems, along with training programs and surveys to collect feedback for continual improvement. Paperless systems implemented in 2014, including training for staff, included:

- LAWA-wide document sharing and storage
- Facility Maintenance Work Order tracking and processing
- Vendor invoice processing
- Document repository for Board of Airport Commissioners report materials

Double-sided Printing

In 2014, LAWA began changing the default setting of all printers/copiers contracted under the Managed Print Services program at LAWA offices to double-sided printing. By the end of 2014, LAWA had 305 printers set to the default setting.

Table 8. LAX Pavement Reuse Benefits 2011-2014

	2011	2012	2013	2014
LAX Pavement Reuse (tons)	245,000	50,000	10,000	155,000
Material cost savings ($)*	$3,675,000	$750,000	$150,000	$2,325,000
CO_2 avoided(metric tons)*	140,900	28,800	5,800	89,100
Energy saved (Million BTUs)*	172,629	35,230	7,046	109,214

Calculations obtained via UC Berkeley Pavement Life-cycle Assessment Tool for Environmental and Economic Effects (PaLATE)

ON-SITE CONCRETE BATCH PLANT

RENDERING OF TERMINAL 4 CONNECTOR

LAX/Sustainable Design and Construction Practices

LAWA recognizes the many benefits of facilities that are designed and constructed according to sustainable practices. This section provides details on LAWA's stewardship of water, energy, and material resources as well as other performance areas related to the design and construction of buildings and infrastructure. These practices conserve resources, reduce traffic impacts, and minimize air quality impacts. Sustainable practices include requirements for contractors to use low-emission equipment and coordinated schedules to eliminate non-essential trips.

LAWA- AND TENANT-INITIATED PROJECTS CONSISTENTLY MEET OR EXCEED SOME OF THE MOST RIGOROUS SUSTAINABILITY REQUIREMENTS IN THE WORLD.

LAX is Happening Campaign

The "LAX is Happening" campaign launched a mobile-friendly website in May 2014 to take a coordinated approach to information sharing. The website offers the latest updates on traffic conditions and construction, travel tips, and restaurant guides. Travelers can peruse the website to prepare for their airport visit and look for *"LAX is Happening"* signage for guidance when they arrive. Access to the website from the LAX Wi-Fi hotspot increased through 2014 and 2015. Over 78,000 visitors have accessed the site since it was launched.

Notable LAWA-Managed Projects

LAWA- and tenant-initiated projects consistently meet or exceed some of the most rigorous sustainability requirements in the world, including LEED, Los Angeles Green Building Code, and LAWA's own sustainability requirements. For example, TBIT achieved LEED Gold certification, making the 1,250,000-square-foot facility the largest LEED Gold airport terminal in the United States.

TBIT Renovation

TBIT includes a 15-gate terminal and concourse, an international arrivals facility, passenger security checkpoints, an inline baggage screening system, and more than 100,000 square feet of concessions. TBIT is not only sustainable, it is the United States' most technologically advanced terminal to date. The new terminal's interior architecture comprises seven large media features with more than 12,000 square feet of LED tiles and hundreds of LCD screens. Sophisticated multimedia productions display stories from around the world to entertain arriving and departing passengers.

The new terminal is bright and airy, with abundant natural daylight and ventilation to minimize energy use. LAWA installed low-E glass along the airside concourse to minimize heat gain, and lighting controls reduce energy use. Other environmental measures undertaken include:

- Low-flow water fixtures that have reduced water use by 47 percent compared with baseline predictions;
- The building structure and finishes utilized regional and recycled materials;

- The project recycled or salvaged more than 80 percent of construction and demolition waste;
- The terminal includes efficient lighting fixtures and controls with occupancy sensors to reduce lighting costs and save energy during off-peak hours;
- The terminal has heating, ventilation, and air conditioning controls that reset temperatures to maximum efficiency without sacrificing occupant comfort; and
- The terminal's interior uses materials made of recycled content, and low-emitting paints, adhesives, carpets, and sealants.

The Bradley West Project tasks that began in 2013 included demolition of the former TBIT concourse and work on the east aprons. Some portions were ready for operation in 2014.

Central Utility Plant

The CUP Replacement Project (described in the Energy Stewardship section) was a major achievement for LAWA sustainability. Additional sustainable construction benefits were recognized beyond energy efficiency and waste reduction. The new plant's roof is heat-reflective to decrease the facility's air-conditioning load and electricity use. Site landscaping design and plant species are drought-tolerant. The lighting and air-conditioning equipment in the plant are all automatically controlled to minimize energy use. Turbines and boilers use natural gas and state-of-the-art pollution-control equipment, reducing annual CO_2 emissions by 4,890 tons—equivalent to removing 1,000 cars from the road. Heat-recovery steam generators recover exhaust heat from the natural-gas turbines to heat water for domestic use and for heating the passenger terminals.

Tenant-Initiated Projects

LAWA is proud of its airline partners and their commitment to shared sustainability outcomes. This section highlights two of the many impressive green construction projects initiated by airlines at LAX.

American Airlines Terminal 4 Connector

This $115 million project consists of the design and construction of a multi-use, multi-level facility providing a secure connection between TBIT and Terminal 4. Connecting the two terminals will allow passengers easier access to connecting flights, with the added convenience of not having to recheck their baggage. The new 104,170 square foot Bradley West T4 Connector is LAWA's newest addition to the LAX CTA and is the City of Los Angeles' first non-residential building certified to LAGBC Tier 2 standards. The building beats the already tough California Title 24 energy use requirements by over 37 percent, through the use of a number of green features, including:

- **Cool roof:** reflects almost 80 percent of the sun's radiant energy so that less energy is needed to cool the building.
- **Innovative ventilation system:** used in the Baggage Screening area to take advantage of local climate conditions to cool baggage equipment.
- **Renewable energy infrastructure:** provided for installation of photovoltaic and other emerging technologies at a later date to further reduce energy consumption.
- **Highly efficient motors:** used to reduce the baggage system's power consumption by 40 percent.

Terminals 7 and 8 Terminal Redevelopment Program

United Airlines is implementing a comprehensive terminal redevelopment program for its facilities at Terminals 7 and 8 under a joint agreement with LAWA. The program is intended to extend the useful life of the terminals, upgrade the baggage and passenger security screening facilities, and modernize the customer service facilities.

The program commenced in September 2013 and will conclude in December 2017. The program will be certified as CALGreen Tier 1. Final sign-off will be received prior

to issuance of the Certificate of Occupancy. Sustainable features include the following:

- **Cool Roof:** used over the new security screening check point and United Club; features high solar reflectance and thermal emissivity.
- **Storm Water Design/Low Impact Design:** poor soil conditions required using a single filter system instead of conventional infiltration to treat storm water from the 7.3-acre catchment area.
- **Energy Performance Standard:** the building energy budget for indoor lighting and mechanical systems is lower than the 90 percent performance Title 24 requirements.
- **Indoor Potable Water Reduction:** the use of low-flow fixtures reduces the overall consumption of potable water in the building by 25.3 percent, exceeding CALGreen Tier 1 requirements.
- **Recycled Content:** the use of building materials with a recycled content value of not less than 10 percent reduces consumption of virgin materials in favor of materials with pre- or post-consumer recycled content.
- **Commissioning and Indoor Air Quality (IAQ):** includes building commissioning and meeting IAQ standards during construction as set forth by CALGreen Tier 1.

Organizational Coordination Construction and Logistics Management Program

The Construction and Logistics Management (CALM) Team's mission is "to minimize construction-related impacts to our customers by utilizing CALM as a central point of communication and collaboration."

The CALM team is responsible for developing and implementing an integrated, harmonious process to ensure that all projects are completed and operational while maintaining high customer service and operational performance standards. The CALM team has three task groups: the Program Controls/GIS team, the Construction Logistics team, and the Construction Communications team.

The CALM Program Controls Geographic Information System (GIS) team tracks construction projects throughout LAX through the use of a GIS database and master schedule. The intranet-based tool enables LAWA project managers and employees to evaluate construction projects at LAX to avoid passenger and tenant disruptions.

INDEPENDENT THIRD PARTY MONITOR

LAWA retains an Independent Third Party Monitor to evaluate compliance with its Clean Construction Equipment policy. The Third Party Monitor tracks, verifies, and reports on the use of clean construction equipment and other construction mitigations, and quantifies emissions benefits. The reports can be found at http://www.lawa.org/uploadedFiles/OurLAX/pdf/CBA/CBAStatusReport2014.pdf. LAWA plans to expand the requirement for an Independent Third Party Monitor to include all LAWA construction projects. The mandate currently does not apply to tenants.

The Construction Logistics team supervises all construction activity at LAX. Area Resident Managers work with Project Managers/Element representatives, Shutdown Control Center, and other airport officials to alert parties of major disruptions to tenants and passengers throughout the roadways, terminals, and airside/landside areas.

The Construction Communications team ensures that airport passengers and tenants receive consistent, clear, and concise construction communications, and that effective temporary way-finding signage is used throughout the construction process.

Clean Construction Equipment

LAWA Policy requires contractors to use the lowest-emitting available construction equipment and clean trucks, including California Air Resources Board verified Level 3 Diesel Emissions Control Strategies requirements.

- On-road trucks used on LAX construction projects with a gross vehicle weight rating of at least 19,500 pounds have to comply with U.S. Environmental Protection Agency (EPA) 2010 on-road emissions standards for particulate matter up to 10 micrometers in size (PM10) and nitrogen oxides (NOx). Contractors are required to use compatible on-road haul trucks or the next cleanest-burning vehicle available.
- Prior to January 1, 2015, all off-road diesel-powered construction equipment greater than 50 horsepower was required to meet, at a minimum, EPA Tier 3 off-road emission standards. As of January 1, 2015, this equipment is required to meet the new EPA Tier 4 (final) off-road emissions standards.

LAWA LEED Projects

A number of recent projects have registered with LEED or achieved LEED certification. A comprehensive list is provided in Table 9.

Table 9. LAX LEED Building Projects

PROJECT NAME	DESCRIPTION	LEED VERSION	SQUARE FOOTAGE	LEED STATUS	COMPLETION DATE	LEED LEVEL
AARF	Construction of Air Rescue and Fire Fighting Station 80	NC 2.2	27,500	Certified	Oct 2011	Gold
Bradley Renovations	Renovation of existing Bradley main terminal and demolition of old terminal buildings	CI v2009	277,084	Design Review Complete	In progress	Silver
Bradley West	Design and construction of new terminal building, concourses, gates and surrounding aprons	NC 2.2	1,215,925	Certified	Apr 2015	Gold
CUP	Design and construction of the new plant that replaced the existing facility	CI 2.0	88,814	Certified	Jun 2015	Gold
Interim West Bus Terminal	Renovation of the TBIT bus terminal located on the new north concourse	NC 2.2	42,743	Certified	Mar 2013	Silver
Star Alliance Lounge (TBIT)	Air New Zealand passenger lounge; completed as a tenant project	CI v2009	18,000	Certified	Feb 2016	Gold
Terminal 6 Alaska Board Room	Renovation of Alaska Board Room; completed as a tenant project	CI v2009	4,666	Certified	2012	Gold
TBIT	First renovation of terminal	NC 2.1	993,244	Certified	Mar 2010	Silver

LAX/Natural Resource Management

In 1986, LAWA began the LAX Dunes Restoration Project by voluntarily dedicating 307 acres of sand dunes on the western portion of LAX as a natural wildlife preserve. The Restoration Project and other wildlife conservation programs demonstrate LAWA's commitment to natural resources management.

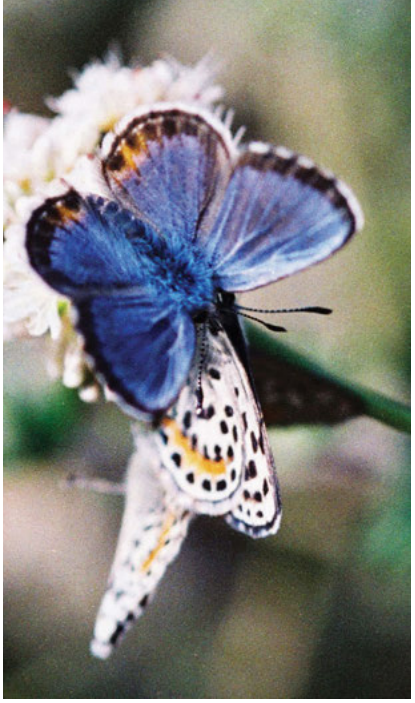
The LAX Dunes are home to more than 900 species of animals and plants. The LAX Dunes contain 43 acres of virtually undisturbed native habitat—the largest remaining coastal dune fragment in Southern California. Among the wildlife species found in the LAX Dunes are the endangered El Segundo Blue Butterfly and two lizards classified as Species of Concern: the San Diego Horned Lizard and the Silvery Legless Lizard.

LAWA provides financial and staff resources to the wildlife and habitat conservation efforts described in this section.

El Segundo Blue Butterfly Habitat Management

The U.S. Department of Fish and Wildlife Service (USFWS) placed the El Segundo Blue Butterfly (ESBB) on the agency's Endangered Species List in June 1976. Almost lost forever, the endangered ESBB found a refuge in the LAX Dunes habitat. In 2014, biologists estimated that the ESBB population was between 26,302 and 27,460 individuals, a decline of approximately 40 percent from the previous year and a historical low over a 17-year period. Declines and increases of this magnitude are not unusual among insects, especially those that have only a single generation per year such as ESBB. This dramatic decrease may be within the "normal" range of population fluctuation given the prolonged drought and the associated

THE LAX DUNES CONTAIN 43 ACRES OF VIRTUALLY UNDISTURBED NATIVE HABITAT—THE LARGEST REMAINING COASTAL DUNE FRAGMENT IN SOUTHERN CALIFORNIA.



AIRPORTS GOING GREEN AWARD

At the Airports Going Green Award in Chicago, Illinois, LAWA received an award for the restoration of the endangered El Segundo Blue Butterfly habitat.

Airports Going Green recognized that restoration of habitat for coastal buckwheat was important because it is the sole food for the El Segundo Blue Butterfly. LAWA, community organizations, and volunteers focused on restoring coastal buckwheat populations by removing non-native plants. The ESBB has made a strong recovery since being placed on the endangered species list in 1976, and the area is a site for community involvement, experiential learning, and restoration.

decline in the ESBB's sole food source, coastal buckwheat, due to the drought.

LAX/Los Angeles Zoo Partnership

The partnership between LAWA and the Los Angeles Zoo continues to be successful on many fronts. Achievements include reducing costs for both LAWA and the LA Zoo, diverting "green waste" from landfills, protecting coastal dunes areas, contributing to sustainability goals, and feeding exotic animals such as rhinoceros, giraffes, and elephants. Invasive plant species, such as Ficus and Acacia, that negatively affect Southern California habitat, actually provide zoo animals with some of their favorite foods from their native homelands. Under this program, LAWA staff remove Ficus and Acacia on a weekly basis from the LAX Dunes and transport it to the LA Zoo as animal feedstock. In 2014, LAWA teams shipped approximately 65 cubic yards, each, of Ficus and Acacia.

LAX Coastal Dunes Improvement

The Coastal Dunes Improvement Project involves removing pavement from abandoned roadways and housing tracts, planting native species, and eliminating invasive species to restore a 48-acre area in the northern portion of the LAX Dunes. In 2014, LAWA removed approximately 32,000 square feet of hardscape, which included abandoned streets, curbs, gutters, sidewalks, retaining walls, foundations, and above-ground utilities from an old residential lot. The area, approximately four acres in the northern 48.25 acres of the LAX Dunes, includes the remnants of the former residential subdivision known as Surfridge. The hardscape areas were replaced with graded soil, resulting in permeable areas for seeding of native plants that will recreate the area's natural habitat. Once completed, California poppies, Jimsonweed, and other native coastal scrub plants will grow along the side of the dunes facing the beach. Yellow Pincushion flowers, native coastal prairie plants, and salt grass will be planted on the adjacent side of the dunes.

Adopt-a-Dune Program

This volunteer program provides an opportunity for organizations and their members to care for and learn about the natural environment of the LAX Dunes. Its popularity has grown since its inception in 2013. After receiving training, participants visit the coastal dunes area 3 to 4 times per year to remove invasive plants, weeds, trash, and rubble. There were 272 volunteers in 2014.

Over the years, LAWA has worked with Boy Scouts and Girl Scouts interested in the environment. During 2014, a Girl Scout from Troop 10975 coordinated three LAX Dunes Volunteer Work Days as her Girl Scout Gold project to improve surrounding communities near LAX. A LAWA staff member worked with and mentored this Girl Scout to help her reach her goal of receiving the Gold Award, which is the highest Girl Scout Award possible.

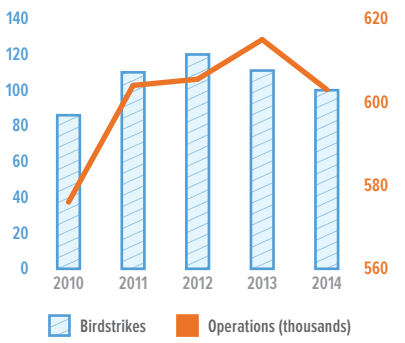
Bird Strikes and Wildlife Hazard Management

The FAA requires airports to maintain a safe operating environment, which includes conducting wildlife hazard assessments and preparing wildlife hazard management plans. To implement the plan, LAWA has contracted with the United States Department of Agriculture since 2000.

Two on-site wildlife biologists conduct operational wildlife damage management and provide recommendations to LAWA on how to mitigate wildlife hazards to aircraft, including insect management strategies. The staff assist LAWA with the depredation permit application, which is required by law to address the removal and potential damages or injuries to wildlife, and reporting takes of birds and other wildlife, along with any aircraft strikes.

Captured raptors are transported to the South Bay Rehabilitation Center for recuperation and/or relocation. See Figure 20 for bird strikes vs. operations.

FIG 20 **LAX Bird Strikes and Aircraft Operations**



ONT

LA/ONTARIO INTERNATIONAL AIRPORT

ONT is located approximately 35 miles east of downtown Los Angeles and 15 miles west of the City of Riverside in San Bernardino County. The airport is the primary airport for the Inland Empire and a frequent gateway for visitors to the Coachella Valley. ONT is currently owned and operated by LAWA. In 2015, LAWA agreed to transfer ownership of ONT to the City of Ontario.

The 1,700-acre airport has two runways. It is a medium-hub, full-service airport with non-stop, commercial flights to 13 major U.S. cities, two cities in Mexico, and service to other international destinations. Southwest Airlines carries more than half of ONT passengers. In 2014, the airport served more than 4.1 million passengers. ONT is a major distribution center for Federal Express and is also the West Coast air and truck hub for United Parcel Service. ONT accounts for the third highest volume of air cargo in California, behind LAX and Oakland International Airport.

Over the last several years, LAWA has been focused on improving the customer experience at ONT. In November 2014, ONT increased the availability of free, high-speed Wi-Fi internet access from 2 hours to 4 hours. In partnership with Pet Prescription of Los Angeles, Orange, and San Diego Counties, ONT plans to launch a "Four Legged Meeter Greeters" program in 2015. Approximately 35 certified therapy dogs and their handlers will be roaming throughout the terminals to meet and greet passengers.

ONT's notable sustainability achievements in 2014 include:

- Converting approximately 10 percent of ONT landscape to drought-tolerant plants.
- Retrofitting airfield lighting systems to use energy-efficient LED lights.
- Installing building automation systems at the Administrative Building and Safety Base.

IN 2014, ONT SERVED MORE THAN 4.1 MILLION PASSENGERS. THE AIRPORT ALSO ACCOUNTS FOR THE THIRD HIGHEST VOLUME OF AIR CARGO IN CALIFORNIA.

ONT/Economic Viability

Over the last 50 years, LAWA has invested more than $500 million to improve ONT's infrastructure and operations. In 2014, LAWA completed two major construction projects, the $4.5 million Runway Safety Area Improvement and the $5 million Taxiway W/S Intersection Rehabilitation.

Passenger numbers increased steadily in 2014, breaking a downward trend for the first time since 2007. The total number of passengers using ONT in 2014 was 4,127,280, representing an increase of almost 4 percent over the number of passengers who used ONT in 2013.

IN 2014, AIRPORTS COUNCIL INTERNATIONAL RANKED ONT AMONG THE TOP 20 LARGEST CARGO AIRPORTS IN NORTH AMERICA.

International service showed strong growth, with two Mexican carriers, AeroMexico and Volaris, serving almost 80,000 passengers—an increase of more than 60 percent over the same period in 2013. In April 2014, Volaris began a twice-weekly service from ONT to Guadalajara. Volaris added a third flight in September 2014.

In 2014, Airports Council International ranked ONT among the Top 20 Largest Cargo Airports in North America, with a total of 474,346 tons of cargo transported in 2014, an increase of 3.0 percent compared with 2013. More than 13 percent of ONT cargo was shipped internationally.

ONT/Social Responsibility

Going beyond improvements to its environmental performance and economic viability, social responsibility is important to LAWA and ONT. ONT hosted a number of fundraising events in 2014 to benefit the USO Ontario and local children from disadvantaged families. Events included:

- Salute to Heroes Night
- Holiday Heroes Celebration
- Pull for Our Heroes

One hundred and fifty LAWA employees and their family members attended the annual ONT Health Fair.

Terminal Art Program

ONT has 24 public art exhibition locations in its terminals. The program, a partnership with the Los Angeles Department of Cultural Affairs, has been providing educational, entertaining, and enriching cultural experiences for the traveling community since 1990. An exhibition at ONT currently showcases a collection of robots that are made from recycled household products.

Water Conservation

In 2014, ONT converted two acres of its landscaped areas with drought-tolerant plants. This area represents approximately 10 percent of ONT's total landscaped areas. In 2014, despite the lack of reclaimed water infrastructure, ONT reduced its potable water consumption by more than 4.5 percent, or 80.5 million gallons, compared with 2013. See Figure 21. Water costs in 2014 totaled $602,000, a $6,000 savings from 2013. See Figure 22.

FIG 21 **ONT Water Use** *(million gallons)*

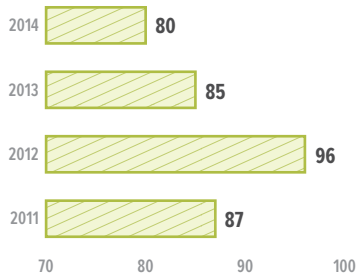


FIG 22 **ONT Water Cost** *(thousand $)*

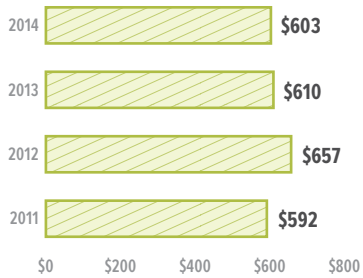


Photo by Stephanie Martinez

"PULL FOR OUR HEROES" EVENT

This fun and competitive team-building exercise pits teams of men and women against a real aircraft. The 2014 event at ONT raised more than $9,500, for the Bob Hope USO-LA/Ontario facility, as well as Travelers Aid of the Inland Empire, Baldy View ROP Foundation, and ONT's educational outreach programs for disadvantaged students.

Each team gets two tries to pull a 120,000 lb. Boeing 727 aircraft 25 feet. Trophies are awarded to the First, Second, and Third Fastest Pull Teams, Slowest Pull Team, Top Fundraising Team, and Most Creative Team Name. Last year 12 teams competed, with first place bragging rights going to the United Parcel Service team "SoCal UPSers" and second place to Frito-Lay Inc./Pepsico team "PepsiCo on the Go!"

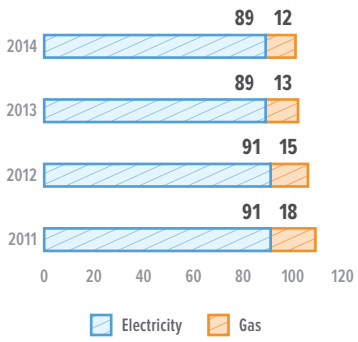
ONT/Energy Stewardship

LAWA completed the installation of building automation systems in the Administration Building and Safety Base, an area of approximately 64,500 square feet, in 2014. These systems enable the control of HVAC remotely and prevent equipment from operating in unoccupied areas. The systems also monitor equipment efficiency and allow operators to make adjustments remotely, resulting in energy conservation and cost savings.

Retrofitting of airfield lighting systems with LEDs also contributed to the energy conservation effort, which included upgrading 35 percent of 851 taxiway edge lights, 20 percent of 344 in-pavement runway guard lights, and 5 percent of 192 airfield signs during 2014. See Figure 23.

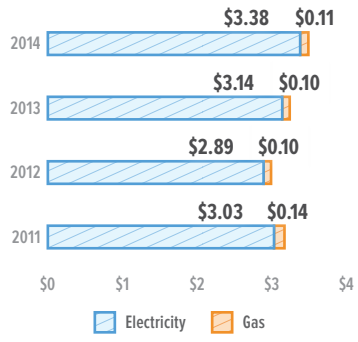
In 2014, the airport's consumption of electricity and natural gas continued to decrease to 26.1 million kWh and 124,803 therms, respectively, despite the net increase in total passenger counts. Utility costs, conversely, increased by about $250,000 in 2014 due to rate increases. See Figure 24.

FIG 23 ONT Total Energy Comsumption* *(MkBtu)*



*Note: Data for 2011 to 2013 have been revised from previous report

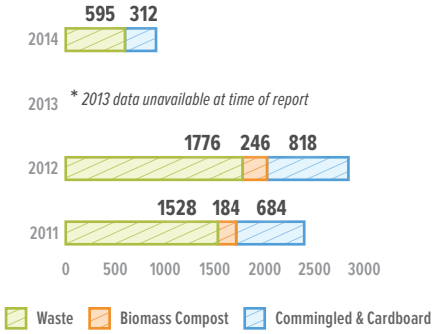
FIG 24 ONT Energy Costs *(million $)*



ONT/Waste Recycling

ONT continues to work with its tenants and concessionaries to recycle plastic, cardboard, aluminum, glass, and other valuable materials. Data provided by the City of Ontario showed that ONT generated more than 907 tons of municipal waste in 2014. Of this total, more than 33 percent was diverted from landfills and recycled. See Figure 25.

FIG 25 ONT Material Diversion *(tons)*



IN 2014, ONT DIVERTED MORE THAN 33% OF ITS MUNICIPAL WASTE FROM LANDFILLS THROUGH RECYCLING.

ONT/Air Quality

In 2014, approximately 27 percent of the ONT fleet vehicles used alternative fuels. This included two CNG trucks and other electrical equipment.

LAWA equipped all 26 gates in the terminal area with pre-conditioned air and power for planes so planes do not have to use their auxiliary power units when parked at the gate. This reduces air quality impacts from ONT.

ONT/Noise Monitoring System

LAWA upgraded the ONT noise and operations system in 2007, including the replacement or relocation of 15 noise monitors. LAWA placed these monitors in areas to measure aircraft noise above and below the 65 decibel Community Noise Equivalent Level to determine the location of the noise impact boundary.

Since then, aircraft noise levels at ONT have declined dramatically. In 2014, LAWA reevaluated the need for each of the 15 noise monitors in establishing the required 65 decibel contour, and based on this assessment decommissioned six of the noise monitors.

SINCE 2007, AIRCRAFT NOISE LEVELS AT ONT HAVE DECLINED DRAMATICALLY.

VNY

VAN NUYS AIRPORT

VNY PLAYS A CRUCIAL ROLE IN THE SOUTHERN CALIFORNIA AIRPORT SYSTEM, SERVING A VARIETY OF PRIVATE, CORPORATE, AND GOVERNMENT AVIATION NEEDS.

Located in the heart of the San Fernando Valley, Van Nuys Airport (VNY) is one of the world's busiest general aviation airports. Dedicated to non-commercial air travel, VNY averages over 238,000 takeoffs and landings annually (see Figure 26). VNY has a rich history with more than 86 years of service, hosting aviation record holders and celebrities.

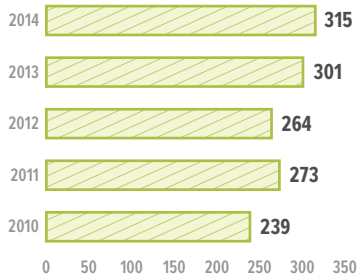
VNY has two parallel runways, one with a full instrument landing system, and an FAA Air Traffic Control tower. The main runway is 8,000 feet in length and the training runway is 4,000 feet long.

More than 100 businesses are located on the 730-acre airport, including three major fixed-base operators: Castle & Cooke Aviation, Clay Lacy Aviation, and Signature Aviation. These operators provide aircraft storage and parking, aviation fuel, aircraft sales, flight instruction, aircraft charters, and aircraft maintenance. They also serve as major leaseholders of airport property, subletting land and buildings to other airport tenants. In addition, VNY is home to many companies that provide aviation support, such as aircraft repairs, avionics, interior work, and other specialized functions.

VNY plays a crucial role in the Southern California airport system, serving a variety of private, corporate, and government aviation needs. By providing an accessible location and a broad range of services encompassing all flying, other than scheduled air carrier service or the military, VNY enhances both safety and efficiency as the region's general aviation airport.

Business travelers and tourists using private, corporate, and charter aircraft benefit from the airport's convenient proximity to city business, recreation, and entertainment centers. The airport also provides a base and maintenance facilities for fire, police, air ambulance, search and rescue, and news media aircraft that serve the region.

FIG 26 **VNY Aircraft Movement Totals** *(thousands)*



VNY/Economic Viability

ANNUALLY, VNY CONTRIBUTES MORE THAN $1.3 BILLION TO THE SOUTHERN CALIFORNIA ECONOMY AND SUPPORTS OVER 12,300 JOBS.

VNY serves as a major economic engine in the San Fernando Valley and the greater Los Angeles region by attracting both aviation and non-aviation-related businesses to the area. Annually, the airport contributes more than $1.3 billion to the Southern California economy, supports over 12,300 jobs, and generates $707 million in revenue.

VNY operates without relying on local tax dollars for its budget, and is financed entirely by revenues from lease, rental, and user fees. LAWA, as owner and operator, leases space to a variety of tenants that provide aviation- and non-aviation-related services. In doing so, the airport generates nearly $80 million in state and local taxes annually.

Several non-aviation-related businesses also are located on airport property, including a hotel, a major home improvement store, a golf course complex, and restaurants.

An estimated 320,000 people visit VNY every year, flying on corporate, private, and charter aircraft. Travelers appreciate VNY's convenient location, and visitors spend approximately $176 million annually on local hotels, attractions, and goods, resulting in 3,142 direct, induced, and indirect visitor industry jobs and an estimated $93 million in personal income, wages, and salaries.

VNY/Social Responsibility

VNY employees are active in the airport's neighboring communities by participating in several events, including:

- Balboa Park Clean-Up
- Big Sunday with the Mayor's Office
- Gault Elementary School Supply Drive
- Greater SFV Chamber of Commerce Annual Clean-Up Day
- Habitat for Humanity
- Mend Donations Drive
- Mission Hospital
- Operation Gratitude
- Relay for Life
- SOVA Food Drive
- Theodore Payne Foundation
- Walk on the Horizon
- YMCA Healthy Kids Day
- YMCA Pancake Breakfast Fundraiser

Other activities in which VNY participates, related to local student education, are listed below:

Adopt-A-School Program

In 2014, 411 participants attended Adopt-A-School activities including speaking engagements, participation in student career days, and involvement in school functions. On December 18, 2014, the Van Nuys' Public and Community Relations Division hosted its annual Adopt-a-school Holiday Celebration for 500 underprivileged students at Gault Elementary School. The event featured a visit by Santa, Rudolph, and Frosty!

School Reading Program

Through this program, VNY Public and Community Relations employees tutor local elementary school students in reading, with an emphasis on aviation history.

Free Aviation Careers Education Academy

LAWA's Aviation Careers Education Academy is open to all middle school and high school students, with priority given to students in the neighboring areas of VNY. Students are selected based on their desire to learn about aviation. This weeklong motivational program is designed to educate students about airport operations, as well as career and technical opportunities in the aviation industry.

Job Shadow Day

Job Shadow Day is an annual program that enables local high school students to observe or "shadow" a workplace mentor. The VNY Public and Community Relations team partners with Junior Achievement to match 30–50 students with airport staff and businesses to experience the variety of careers available in aviation.

North Valley Occupational Center-Aviation

Housed at VNY, the Los Angeles Unified School District's Aircraft Mechanics Program (a branch of the North Valley Occupational Center-Aviation Center) enables students to earn certification in general airframe and power plant mechanics. The program curriculum, which is approved by the FAA, consists of 47 subject areas to prepare students for a wide array of jobs in the aviation-aerospace industry. In 2014, the program had 110 participants.

Tour and DVD Presentations Programs

VNY offers free, guided, bus tours and DVD presentations to school, civic, and community groups on weekdays and select Saturdays. Airports Council International rated VNY's tour program as among the top in the country. In 2014, LAWA gave 39 tours and presentations and hundreds of adults and children participated.

VNY Young Achievers

Through this program, VNY recognizes and rewards exceptional area middle school students who excel in academics, athletics, the arts, or community service, culminating with an awards luncheon at the end of the school year. During 2014, 34 students and 12 teachers participated in the VNY Young Achievers program.

Also in 2014, VNY awarded mini-grants to three teachers for employing aviation and community service in their curriculum. Awardees are selected based on submission of a concise proposal, including a statement describing their program, goals, methodology, evaluation mechanism, and budget. The 2014 grant winners were teachers from Alternative Magnet, $200; Hale Charter Academy, $300; and Van Nuys Middle School, $500.

Aviation Career Day

"The Sky is the Limit" on Aviation Career Day. Each year in the spring, approximately 1,400 high school students come to VNY to learn from experts in the aviation and aerospace industries. There are presentations, demonstrations, and exhibits, as well as airport tours.

Career Fairs

Through this program, VNY staff attend career fairs for students to promote aviation and aviation-related careers.

- Frost Middle School – 1,225 participants
- Boys and Girls Club – 250 participants
- Pacoima Middle School – 1,240 participants
- Simi High School – 1,550 participants
- Granada High School – 500 participants

CLAY LACY DONATES JETS TO AVIATION SCHOOL

During 2014, Clay Lacy, a veteran pilot and business aviation pioneer, made the single largest donation to VNY by donating two retired corporate jets—a Learjet 24 and Gulfstream GIISP—to increase training opportunities for students enrolled in the aircraft mechanics school.

Operated by the North Valley Occupational Center-Aviation, the adult education program has prepared individuals for highly skilled, well-paying careers as airframe and power plant mechanics for over 40 years.

"Aircraft maintenance is one of the most important jobs in the aviation industry to protect the safety of air crew and passengers," Lacy said. "Currently, there's a global shortage of qualified, entry-level mechanics. This program is ranked among the top in the nation and enables graduates to land great jobs working on private, commercial and military aircraft. I know because we hire them!"

The donation holds special meaning to Lacy, who landed the first Learjet at Van Nuys Airport, and in 1968 founded Clay Lacy Aviation, the first jet charter company on the West Coast. Today, the company is the airport's longest-standing tenant. "Our community needs the support of business leaders such as Clay Lacy for young people to succeed in today's workforce and keep our country competitive," said U.S. Congressman Tony Cárdenas at a ceremony honoring Lacy for his contributions.

VNY/Water Conservation

2014 was the third consecutive year of a prolonged drought in California. As covered in the previous section on water conservation measures at LAX, the state experienced its hottest and driest weather in 120 years. Even though water efficiencies that VNY had implemented over the years were in effect, water use increased in 2014 to 15.5 million gallons of potable water. This was an increase of 16 percent over 2013's 13.4 million gallons consumed. See Figure 27.

VNY has been working on decreasing its water use by removing grass, moving to drought-tolerant plants, and installing drip irrigation. This work started in 2014 and continued into 2015.

VNY replaced nearly half an acre of grass with drought-tolerant landscaping, rockscape, drip irrigation, and water-saving sprinklers to increase future water savings. Van Nuys Golf Course, a LAWA tenant, started using reclaimed water in 2011 to irrigate its greens, thereby saving potable water. The golf course's irrigation needs are related to rainfall and temperatures. See Figure 28.

FIG 27 **VNY Potable Water Use**
(million gallons)

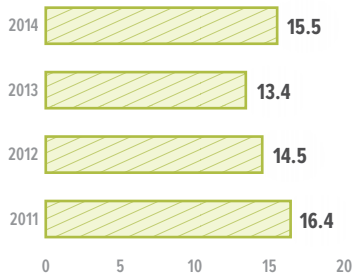
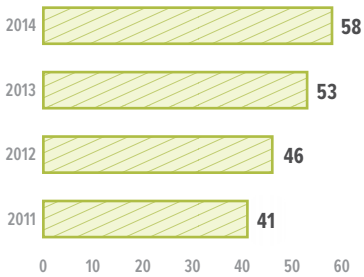


FIG 28 **Van Nuys Golf Course Reclaimed Water Use**
(million gallons)



VNY/Energy Stewardship

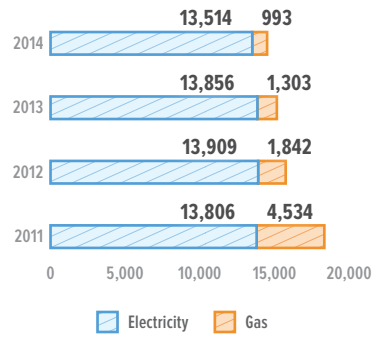
VNY has made several energy-saving improvements to its operation over the past several years. These include changing the runway and taxiway lighting to LEDs and switching nighttime airfield lighting to an on-demand system. Total energy use, as shown below, continues to trend downward.

VNY consumed approximately 4.0 million kWh of electricity in 2014, a 2.5 percent decrease from the airport's energy consumption in 2013. See Figure 29.

VNY's consumption of natural gas has trended downward dramatically over the past few years. In 2014 the airport used less than 25 percent of its total consumption in 2013.

VNY has a total of 41 vehicles, of which 18 use alternative fuels. The alternative fuel vehicles include 12 CNG, four electric, one propane, and one hybrid-electric.

FIG 29 VNY Total Total Energy Use *(MkBTU)*



*Note: Data for 2011 to 2013 have been revised from previous report

VNY/Waste Diversion

IN 2014, ABOUT 21 PERCENT OF THE MUNICIPAL SOLID WASTE COLLECTED BY VNY WAS DIVERTED FROM THE LANDFILL THROUGH RECYCLING.

VNY collected 107 tons of municipal solid waste in 2014. Of this total, LAWA sent 85 tons to the landfill. LAWA diverted the remaining 22 tons, approximately 21 percent of the total collected municipal solid waste, from the landfill through recycling.

VNY/Noise Monitoring System at VNY

LAWA upgraded the VNY noise and operations system in 2007, a project that included the replacement or relocation of seven existing noise monitors and installation of seven new noise monitors. These monitors were placed in areas to measure aircraft noise above and below the 65 decibel Community Noise Equivalent Level to determine the location of the noise impact boundary. Since then, aircraft noise levels at VNY decreased noticeably.

No Early Turns Program

To enhance pilot awareness and outreach efforts, LAWA adopted a resolution to formalize VNY's "No Early Turn" procedure on June 18, 2015. This latest initiative is yet another example of how VNY partners with its tenants and operators to promote the programs VNY has in place to be friendly neighbors.

Since the 1980s, LAWA has distributed pilot information brochures and informally encouraged pilots to adhere to the VNY No Early Turn procedures on a voluntary basis for fixed-wing aircraft.

The current procedure requests that pilots departing VNY to the south from Runways 16R and 16L fly to the Sepulveda Flood Control Basin before initiating any turns, thereby avoid flying over homes in adjacent areas southwest and southeast of VNY. For departures to the north from Runways 34R and 34L, the policy requests that pilots reach an altitude of 1,800 feet above mean sea level before initiating any turns in an effort to reduce the noise level for residences under the flight path.

VNY Friendly Flyer Awards

LAWA established the Friendly Flyer Awards in 2012 to identify and formally recognize jet operators that achieved the highest levels of compliance with mandatory noise regulations and voluntary noise abatement programs at VNY. This annual award is presented to jet operators that meet or exceed the following criteria during the award year:

- Minimum of 60 southbound jet departures
- No violations of the following:
  - Noise Abatement and Curfew Regulation
  - Non-Additional Rule
  - Noisier Jet Phase-out
- 99 percent or greater compliance with the No Early Turn and the Quiet Jet Departure Programs.

VNY FRIENDLY FLYER AWARD WINNERS AND LAWA STAFF 2014

Since the program's inception, the number of operators that have received the award has increased by 70 percent. In 2012, the inaugural year, there were 20 winners, increasing to 26 winners in 2013, and 34 winners in 2014. This growth in operator compliance with the VNY Noise Abatement Policies is a direct result of ongoing outreach to operators conducted by the VNY Noise Office.

PMD

PALMDALE LANDHOLDINGS

LAWA owns approximately 17,750 acres of land located east of Air Force Plant 42 in the City of Palmdale, in unincorporated Los Angeles County, and retains the rights for future development of the property. Under a lease agreement with the United States Air Force, LAWA operated an airport in Palmdale (PMD) until February 2009. Subsequent to discontinuance of operations of PMD, LAWA returned its certification to operate the airport to the FAA. In March 2013, the Board of Airport Commissioners terminated the joint use agreement with the United States Air Force and reassigned the lease to the City of Palmdale.

Much of the current property is undeveloped. Tenants located on the landholdings include the National Aeronautics and Space Administration, the County of Los Angeles Sanitation District #20, a golf course, and farming entities that raise pistachios, alfalfa, onions, carrots, and sod.

During its April 2014 meeting, the Board of Airport Commissioners approved a five-year lease with Kinkisharyo International, LLC for use of hangar and building space to assemble 78 rail cars for Los Angeles County Metrorail (Metro) system for use on the Expo and Foothill Rail Lines. Although the shells of the rail cars will be manufactured in Japan, Kinkisharyo has agreed to assemble the cars in Los Angeles County to create jobs within the United States and local area.

Kinkisharyo is contractually committed to generate $33.9 million in wages and benefits from new jobs in the United States. Metro reported that the exercise of all contract options under its rail car contract with Kinkisharyo would produce up to $97.9 million in wages and benefits. Most of the jobs created by Kinkisharyo for this project will be in Palmdale.

IN 2014, KINKISHARYO INTERNATIONAL, LLC ENTERED INTO A LEASING CONTRACT THAT COMMITS THE COMPANY TO GENERATE $33.9 MILLION IN WAGES AND BENEFITS FROM NEW JOBS IN THE UNITED STATES.

Appendix: LAWA by the Numbers

LAX

Economic Viability

Passenger Activity

YEAR	PASSENGER TOTAL
2004	60,704,568
2005	61,489,398
2006	61,041,066
2007	62,438,583
2008	59,815,646
2009	56,520,843
2010	59,069,409
2011	61,862,052
2012	63,688,121
2013	66,667,619
2014	70,663,519

Cargo Activity

YEAR	CARGO (TONS)
2004	2,022,911
2005	2,048,817
2006	2,022,687
2007	2,010,820
2008	1,723,038
2009	1,599,782
2010	1,852,791
2011	1,789,204
2012	1,867,155
2013	1,848,764
2014	2,002,910

Aircraft Operations

YEAR	AIRCRAFT
2004	655,097
2005	650,629
2006	656,842
2007	680,954
2008	622,506
2009	544,833
2010	575,835
2011	603,912
2012	605,480
2013	614,917
2014	603,352

2014 US Airport Ranking by Operations

RANK	AIRPORT		2014 OPERATIONS
1	ORD	Chicago, IL	849,142
2	ATL	Atlanta, GA	876,268
3	DFW	Dallas, TX	673,830
4	**LAX**	**Los Angeles, CA**	**603,352**
5	DEN	Denver, CO	578,950
6	CLT	Charlotte, NC	546,874
7	LAS	Las Vegas, NV	522,714
8	IAH	Houston, TX	503,902
9	SFO	San Francisco, CA	431,870
10	PHX	Phoenix, AZ	430,471

RANK	AIRPORT		2014 OPERATIONS
11	JFK	New York, NY	425,620
12	PHL	Philadelphia, PA	420,217
13	MSP	Minneapolis, MI	417,892
14	EWR	Newark, NJ	403,712
15	MIA	Miami, FL	400,822
16	DTW	Detroit, MI	399,896
17	LGA	New York, NY	370,375
18	BOS	Boston, MA	368,526
19	SEA	Seattle, WA	332,463
20	SLC	Salt Lake City, UT	325,115

Water and Energy Consumption

Water Use

YEAR	WATER USE*, millions of gallons	POTABLE WATER USE, millions of gallons	RECLAIMED WATER USE, millions of gallons	WATER USE PER PASSENGER*, gallons/passenger	POTABLE WATER USE PER PASSENGER, gallons/passenger
2011	723	683	40	11.7	11.0
2012	601	561	40	9.4	8.8
2013	544	490	54	8.2	7.3
2014	557	500	57	7.9	7.1

**Combined potable and reclaimed water*

Electricity Consumption and Associated GHG Emissions[1]

YEAR	ELECTRICITY CONSUMPTION, kWh	ELECTRICITY CONSUMPTION PER PASSENGER, kWh	GHG EMISSION, metric tons
2010	159,217,299	2.7	44,291
2011	163,880,003	2.6	45,588
2012	173,832,037	2.7	51,466
2013	201,771,511	3.0	59,738
2014	213,121,793	3.0	63,099

[1] *The USEPA's eGrid model, specific to the Western Electrical Coordinating Council (WECC) California Subregion (CAMX), was used to calculate GHG emissions. The current eGrid emission factor for CAMX is 652.72 lbs of CO_2e per MWh electricity, which converts to the ACERT input (required as g/kWh) of 296, which is substantially lower than the national average.*

Natural Gas Consumption and Associated GHG Emissions

YEAR	NATURAL GAS CONSUMPTION, therms	NATURAL GAS CONSUMPTION PER PASSENGER, therms	GHG EMISSION, metric tons
2010	9,030,000	0.15	53,484
2011	8,840,000	0.14	52,359
2012	7,464,636	0.11	44,213
2013	3,366,255	0.05	19,938
2014	2,384,451	0.03	14,123

Recycling

YEAR	IT EQUIPMENT, tons	TIRES, tons	FOOD (GREASE RENDERING), tons	OTHER, tons
2010	10.4	76.9	14.3	617.4
2011	30.7	376.9	132.9	996.2
2012	0.2	85.2	13.1	440.0
2013	10.4	376.9	14.3	996.2
2014	10.0	85.2	28.1	1031.0

Vehicles

FlyAway

YEAR	RIDERSHIP	VEHICLE TRIPS SAVED	REDUCTION IN MILES TRAVELED, millions of miles	EMISSIONS REDUCED, tons of CO2e
2010	1,342,200	1,140,791	23.0	7,966.0
2011	1,383,350	1,175,709	23.9	8,697.0
2012	1,435,180	1,223,282	24.9	9,134.8
2013	1,477,885	1,154,682	23.2	6,715.3
2014	1,576,945	1,232,480	25.0	7,073.0

Employee Rideshare Participation

YEAR	CARPOOL PARTICIPANTS, (2-3 Passengers)	VANPOOL PARTICIPANTS, (4-8 Passengers)	WEEKLY TRIPS SAVED
2010	615	1323	2592.41
2011	652	1447	2772.83
2012	630	1355	2720.6
2013	584	1373	2619.36
2014	491	1411	2492.59

LAX Alternative Fuel Vehicle Fleet

YEAR	NUMBER OF ALTERNATIVE FUEL VEHICLES	PERCENTAGE OF TOTAL
2010	597	63
2011	597	63
2012	597	57
2013	600	59
2014	607	61

Vehicle Fuel

YEAR	GASOLINE, gallons	DIESEL, gallons	PROPANE, therms	LNG, gallons	CNG, gasoline gallon equivalent
2011	298,698	68,456	50,175	274,692	888,989
2012	300,364	68,381	55,771	310,416	870,820
2013	305,248	48,044	80,178	243,460	854,456
2014	295,868	51,764	85,444	248,998	860,831

Noise

Total Noise Complaints

YEAR	# OF COMPLAINTS
2010	2,997
2011	1,797
2012	1,778
2013	1,488
2014	8,062

Preferential Runway Usage

YEAR	DEPARTURES INBOARD	DEPARTURES OUTBOARD
2010	95%	5%
2011	95%	5%
2012	94%	6%
2013	94%	6%
2014	95%	5%

Early Turns Counts

YEAR	NORTH	SOUTH
2010	124	1516
2011	155	2281
2012	158	2217
2013	96	2224
2014	79	1916

Unique Individual Noise Complainants

YEAR	# OF COMPLAINANTS
2010	403
2011	349
2012	399
2013	390
2014	557

Non-Conforming Easterly Departures (00:00- 06:30)

YEAR	# OF OPERATIONS
2010	55
2011	44
2012	56
2013	54
2014	23

Residential Sound Insulation

YEAR	# OF HOMES COMPLETED, El Segundo	# OF HOMES COMPLETED, City of Los Angeles	# OF HOMES COMPLETED, County of Los Angeles	# OF HOMES COMPLETED, Inglewood
2010	112	215	193	195
2011	0	390	323	332
2012	142	320	187	238
2013	172	312	316	580
2014	50	2[2]	373	691

[2] *Residential Sound Insulation Program was completed in 2014.*

ONT

Economic Viability

Passenger Activity

YEAR	PASSENGER TOTAL
2004	6,937,337
2005	7,213,528
2006	7,049,904
2007	7,207,150
2008	6,232,761
2009	4,886,695
2010	4,808,241
2011	4,551,875
2012	4,305,426
2013	3,969,974
2014	4,127,280

Cargo Activity

YEAR	CARGO (TONS)
2004	605,132
2005	575,369
2006	544,600
2007	532,865
2008	481,284
2009	390,932
2010	392,427
2011	417,476
2012	454,880
2013	460,535
2014	474,346

Aircraft Operations

YEAR	AIRCRAFT
2004	152,870
2005	143,249
2006	136,261
2007	147,678
2008	124,242
2009	98,332
2010	93,717
2011	90,753
2012	83,352
2013	83,087
2014	83,766

Water and Energy Consumption

Water Use

YEAR	POTABLE WATER USE, millions of gallons	WATER USE PER PASSENGER*, gallons/passenger
2010	82.0	17.1
2011	86.9	19.1
2012	95.7	22.2
2013	84.5	21.3
2014	80.5	19.5

**Combined potable and reclaimed water*

Natural Gas Consumption and Associated GHG Emissions

YEAR	NATURAL GAS CONSUMPTION, therms	NATURAL GAS CONSUMPTION PER PASSENGER, therms	GHG EMISSION, metric tons
2010	237,996	0.05	1,410
2011	184,742	0.04	1,094
2012	148,344	0.03	879
2013	131,058	0.03	776
2014	124,803	0.03	739

Electricity Consumption and Associated GHG Emissions[3]

YEAR	ELECTRICITY CONSUMPTION, kWh	ELECTRICITY CONSUMPTION PER PASSENGER, kWh	GHG EMISSION, metric tons
2010	27,484,350	5.7	7,646
2011	26,584,655	5.8	7,395
2012	26,511,939	6.2	7,849
2013	26,136,522	6.5	7,738
2014	26,128,765	6.3	7,736

[3] *The USEPA's eGrid model, specific to the Western Electrical Coordinating Council (WECC) California Subregion (CAMX), was used to calculate GHG emissions. The current eGrid emission factor for CAMX is 652.72 lbs of CO2e per MWh electricity, which converts to the ACERT input (required as g/kWh) of 296, which is substantially lower than the national average.*

Noise

Total Noise Complaints

YEAR	# OF COMPLAINTS
2010	78
2011	104
2012	87
2013	69
2014	169

Unique Individual Noise Complainants

YEAR	# OF COMPLAINANTS
2010	43
2011	27
2012	71
2013	19
2014	26

Residential Sound Insulation

YEAR	# OF HOMES COMPLETED
2010	32
2011	100
2012	148
2013	106
2014	66

VNY

Economic Viability

Aircraft Activity

YEAR	AIRCRAFT
2008	386,706
2009	351,233
2010	238,624
2011	273,173
2012	263,948
2013	300,833
2014	315,287

Water and Energy Consumption

Water Use

YEAR	POTABLE WATER USE, millions of gallons
2011	16.5
2012	14.5
2013	13.4
2014	15.5

**Combined potable and reclaimed water*

Electricity Consumption and Associated GHG Emissions[4]

YEAR	ELECTRICITY CONSUMPTION, kWh	GHG EMISSION, metric tons
2010	3,996,633	1,102
2011	4,046,261	1,125
2012	4,076,544	1,207
2013	4,061,023	1,202
2014	3,960,424	1,173

[4] *The USEPA's eGrid model, specific to the Western Electrical Coordinating Council (WECC) California Subregion (CAMX), was used to calculate GHG emissions. The current eGrid emission factor for CAMX is 652.72 lbs of CO2e per MWh electricity, which converts to the ACERT input (required as g/kWh) of 296, which is substantially lower than the national average.*

Natural Gas Consumption and Associated GHG Emissions

YEAR	NATURAL GAS CONSUMPTION, therms	GHG EMISSION, metric tons
2011	45,336	269
2012	18,417	109
2013	13,030	77
2014	9,929	59

Noise

Total Noise Complaints

YEAR	# OF COMPLAINTS
2010	368
2011	760
2012	16,408
2013	18,268
2014	14,803

Unique Individual Noise Complainants

YEAR	# OF COMPLAINANTS
2010	125
2011	111
2012	106
2013	78
2014	136

No-Early-Turn Compliance

YEAR	EARLY TURNS	TOTAL SOUTHBOUND JETS	COMPLIANCE %
2010	12	15156	99.92
2011	10	15478	99.94
2012	7	15300	99.95
2013	5	1584	99.97
2014	3	17554	99.98

Quiet Jet Departures

YEAR	TOTAL SOUTHBOUND JETS	DEPARTURES EXCEEDING TARGET	COMPLIANCE %
2010	15156	855	94.36
2011	15478	591	96.18
2012	15300	323	97.89
2013	1584	209	98.64
2014	17554	240	98.63

Photo Credits

OUTSIDE LAWA

- **Blast Deflectors, Inc. (BDI)** – "Rendering from GRE Siting Study" (page 22)
- **Fentress Architects** –"Bradley West Rendering" (front cover)
- **Flickr user: fredcamino/CC 2.0** - "Ticketing area in LA/ONT Airport Terminal B" (page 31)
- **HNTB Architecture** - Rendering of Terminal 4 Connector (page 26)
- **MapLAX Joint Venture** – "Overview Map of the Landside Access Modernization Program" (page 5), "Rendering of inside an Automated People Mover station" (page 5), "Rendering of aerial view of the Consolidated Rental Car Facility", "Another rendering of inside an Automated People Mover Station", "Rendering of new curbside passenger loading area", "Rendering of new bus station", and "Rendering of aerial view of Automated People Mover system in CTA" (page 6)
- **NASA** – "Aerial view of NASA hangar" and "Aircrafts inside NASA hangar" (Robert M. Garcia and Sandy Meske, page 39)
- **Office of Los Angeles Mayor Eric Garcetti** – "Front cover of Sustainable City pLAn" (page 4)
- **Panic Studio LA** – Ball-Nogues Studio's "Air Garden" installation, Pae White's "ΣLAX1" installation, and Mark Bradford 's "Bell Tower" installation (page 11) and "Terminal Art in LA/ONT" (Kelly Barrie, page 32)
- **Walsh Austin** – "World Way Loop at night" (page 7)

LAWA

- **Airports Development Group** - "Aircraft Nose" (Tim Ihle, inside cover), "New CUP at night" (Lorne Leufven, page 14), "International carriers at TBIT" (Tim Ihle, page 20), and "Close up of batch plant", "Conveyor belt of batch plant", and "Clean construction equipment in use at Terminal 4" (page 25)
- **Capital Programming, Planning and Engineering Group** - "Close-up of LAX runways" (Michael Siregar, page 20)
- **Community Relations Division** – "Bradley West at night" (Jay Berkowitz, page 7), "USO event" (Jay Berkowitz, page 8), "Green pylons" (Jay Berkowitz, page 15), "Close up of FlyAway bus" (Jay Berkowitz, page 17), "Aircraft arriving at LAX" (Jay Berkowitz, page 23), "Pavement construction" (Jay Berkowitz, page 26), "Demolition of old TBIT building" (Jay Berkowitz, page 28), "LA/ONT curbside area" (Jay Berkowitz, page 31), "Annual airplane pull event at LA/ONT" (Stephanie Martinez, page 33), and "Vintage plane at VNY" (Jay Berkowitz, page 35)
- **Environmental and Land Use Planning Division** - "Recycled Water in Use signage" (Nancy Price, page 11), "Drought-tolerant landscaping at Theme Building" (Erica Blyther, page 12), "New CUP control panels" (Erica Blyther, page 13), "Close up of new CUP control panels" (Erica Blyther, page 15), "Natural gas station on Arbor Vitae Street" (Nancy Price, page 16) , "Electric vehicle chargers in Terminal 1" (Alfred Tong, page 17), "Flight tracks from ANOMS" (page 21), "Recycling Bins inside the CTA" (Nancy Price, page 23), "Ready-to-eat meals for donation" (Nancy Price, page 24), "LAX Coastal Dunes" (Peggy Nguyen, page 29) and "LAX Coastal Dunes during sunset" (Peggy Nguyen, page 30), "Small jet on VNY airfield" (page 35), and "2014 winners of VNY Annual Friendly Flyer Award with LAWA staff" (page 38)
- **Facilities & Technical Services Division** – "Demolition of old TBIT building" (Daniel Campbell, page 27)
- **Maintenance Services Division** - "Electric LAWA fleet vehicles" (page 14), "Natural gas LAWA fleet vehicles" (page 16), "LAWA staff doing maintenance work at LA/ONT" (Edwin Flores, page 33), and "Clean courtesy shuttles at LA/ONT" (page 34)
- **Public Relations Division** - "Headshot of Deborah Flint" (page i), "Petrossian Caviar and Champagne Bar at TBIT" (Harold Johnson, page 27), and "El Segundo Blue Butterfly on buckwheat plant" (Albert Rodriguez, page 30)

CONTRIBUTING CONSULTANTS

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Disclaimer: LAWA obtained data from a wide variety of sources to generate this report. The report team was not able to verify available data sets by fully reviewing each individual primary document. It is possible that certain numbers may not be accurate. Lacking full verification of performance data numbers cited within this LAWA 2014 LAWA Sustainability Report should not over-ride or replace any previously published findings such as LA Economic Impact Analysis documents, LAX Community Benefits Agreement (CBA) progress reports, and LAX Mitigation Monitoring & Reporting Program (MMRP) reports.

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