

AIRPORT MODERNIZATION PLAN SUMMARY



New Passenger Concourse

A new passenger concourse has been designed to accommodate the Airport's 3 million plus passengers. Amenities include a new state-of-the-art consolidated security screening area, boarding lounge with improved seating, and quality concessions to evoke a relaxed, resort-like atmosphere. Enhanced features include an atrium and a garden walkway. Solar and green technology will be integrated throughout the project.

TIMELINE & DETAILS

April 2010: Approved by Planning and Cultural Heritage Commissions

June 2010: City Council review

December 2010: Groundbreaking

December 2010 - 2013: Construction

Jobs: Supports 340 jobs

Cost and Funding: \$45 million, General Airport Revenue Bond (GARB) and Passenger Facility Charges (PFC)

New Parking Structure

A new 1,989-space structure and 247-space surface parking area, as well as utility and roadway improvements and a new exit to Lakewood Boulevard, was completed in July 2011. Infrastructure for solar technology will be integrated throughout the project.

TIMELINE & DETAILS

December 2009 - July 2011: Construction

Jobs: Supports 450 jobs in over 50 different construction trades

Cost and Funding: \$58.6 million, GARB, Federal Build America Bond (BAB) and PFC



Air Carrier Ramp

The air carrier ramp project consists of aircraft parking pad redesign and upgrade from asphalt to concrete, electrification of all pads, new high mast lighting and realignment of parking pads to accommodate all aircraft.

TIMELINE & DETAILS

Ongoing through Fall 2012: Four phases

Jobs: Supports 100 - 120 jobs per phase

Cost and Funding: \$33 million, American Improvement Program (AIP) and PFC

Historic Terminal Modernization

General rehabilitation of the historic terminal will include new interior and exterior paint, new furnishings, enhanced lighting, restoration of historic exhibit, modernizing infrastructure and upgrading architectural features. Repainting of the existing parking structure was part of the project.

TIMELINE & DETAILS

Ongoing

Jobs: Supports 80 jobs

Cost and Funding: \$2 million



NEW PASSENGER CONCOURSE



Project Overview

The new passenger concourse will be modern, comfortable and inviting, offering a variety of new amenities that will include local retail outlets and eateries. Passengers will enjoy the convenience of working and relaxing in an environment that reflects the urban, coastal lifestyle of Southern California.

The concourse will be comprised of 35,000 square feet of new construction, housing north and south holdrooms with a peaceful garden court. This project includes over 26,000 square feet of new holdrooms with improved restrooms, more than 8,000 square feet of new concession space and a consolidated passenger screening checkpoint utilizing 6,500 square feet of existing space. The garden will be home to a variety of vibrant, native plant life as well as an extensive array of exhibits highlighting LGB's history and impact on the aviation industry. This project will bring the overall terminal area to 74,000 square feet, while accentuating the historic terminal building.

Design completion and final approval of the project started in the fall of 2010, with construction expected to conclude in December 2012. The concourse project will support 340 jobs and provide modern waiting areas and concessions designed to exceed customer expectations. The estimated budget is \$45 million and is funded through Passenger Facility Charges (PFC) and General Airport Revenue Bond (GARB) funds.

Noteworthy concourse components include:

- Consolidated security screening
- Spacious new holdrooms
- New enhanced concessions
- Garden and palm court

Consolidated Security Screening

Currently, passengers enter holdrooms via two separate (north and south) screening areas. The concourse will consolidate all Transportation Security Administration (TSA) screening into the permanent screening location.

Spacious Holdrooms

The concourse will boast modern and comfortable holdrooms to accommodate passengers awaiting departure. Passengers will encounter a bright and airy space with expansive views of the airfield to the west.

Enhanced Concessions

The concourse will house a variety of healthy, interesting concessions with a distinct Long Beach flavor. New retail locations will provide reading material, postcards, and sundries.



Garden and Palm Court

Passengers will exit the screening area into a peaceful and inviting garden with protective canopies and bench seating to allow for the reorganizing of belongings. A garden and palm court separates the main waiting rooms. This garden is designed to be a signature amenity for the Airport, showcasing native plant life and creating an identity in line with Long Beach's temperate climate.

Traveler Benefits

The combination of ample seating, an assortment of concessions and free Wi-Fi will ensure a higher level of customer service.

Green Components

LGB is applying for the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) certification for the new passenger concourse. The building is being designed to include a rooftop solar array that will offset 13 percent of its power demand.



Economic Impact

Concourse construction will support 340 jobs in addition to providing modern concessions and waiting areas to exceed customer expectations.

Project Cost

The estimated budget for Phase I is \$45 million. It will be funded through Passenger Facility Charges (PFC) and General Airport Revenue Bond (GARB) funds.

HISTORIC TERMINAL MODERNIZATION



Project Overview

The Historic Terminal Modernization project will consist of improvements to the historic elements and infrastructure of the Airport's 1941 terminal building, a registered City Historical Landmark. The improvements will enhance modern functionality while remaining true to the building's Streamline Moderne architecture.

This investment is essential to ensure that Long Beach Airport (LGB) continues to provide the best customer experience and exceed customer expectations. Terminal modernization began, with a budget of \$2 million, in summer 2009 and is scheduled to be completed by fall 2013.

Key modernization elements include:

- Refurbished historic exhibit
- Upgraded infrastructure and lighting
- Upgraded signage
- Interior and exterior paint
- New interior furnishings
- Expanded Wi-Fi coverage

Traveler Benefits

Terminal modernization will result in a more convenient, comfortable and attractive point of entry to the Airport. The building frontage, lobby, and ticketing area will include upgrades to LGB's signage to ensure passengers are able to quickly and easily navigate the terminal.

Green Components

Modernization of the historic terminal entails equipping all bathrooms with low-flow toilets and waterless urinals to reduce the Airport's water consumption, installing energy efficient lighting, and new roofing which will provide for better climate control, thereby lowering energy consumption.

Economic Impact

Rehabilitating the Airport's historic terminal building will support approximately 80 jobs.

Project Details

- **Refurbished Aviation Historic Exhibit**
Located throughout the terminal, the exhibits include artifacts, news clippings, photos, and correspondence from famous Long Beach aviators which highlight Long Beach's important role in American aviation history.
- **Upgraded Infrastructure and Lighting**
All interior lighting at Baggage Claim 1 will be converted to LEDs, which will last 10 to 12 years compared to incandescent bulbs that must be changed every few months. The transition was completed in summer 2010. All plumbing, sewer, water, and electrical infrastructure will be upgraded, as well as historically appropriate windows.
- **Upgraded Signage**
Airline ticket counter signage upgrades are underway and the new signs will be easier to read, yet remain historically appropriate.
- **Interior and Exterior Paint**
The building interior was freshly painted in fall 2009. The terminal exterior was painted in spring 2010.
- **New Interior Furnishings**
All interior furnishings were replaced in spring 2010.
- **Expanded Wi-Fi Coverage**
The Airport began offering free Wi-Fi for passengers in 2008. Modernization entails expanding the signal strength and coverage areas to reach the entire terminal and baggage claim areas.
- **Terminal Concessions**
The existing terminal concessions, which include Legend's of Aviation Restaurant, the snack kiosks and the gift and news shop, have been completely remodeled.



GREEN AIRPORT INITIATIVES



The Long Beach Airport's (LGB) Green Initiatives build upon existing efforts and implements new guidelines, projects and programs through the Airport Modernization Plan (AMP).

The following green initiatives have been incorporated into the AMP:

New Passenger Concourse

LGB is applying for the U.S. Green Building Council's Leadership in Energy and Environmental Design certification for the new passenger concourse. The concourse was designed to the Gold Standard and will include a rooftop solar array to offset 13 percent of its power demand.

- Energy efficient fixtures and lighting
- Glazed windows to ensure maximized lighting
- Heat and cooling retention
- Energy management system, including controlled lighting, to take advantage of natural sunlight
- Low-flow toilets and water faucets
- Dual-purpose polished concrete floor
- Use of local and recycled construction

New Parking Structure

The parking structure roof is designed to support solar panels. Consolidating all parking within walking distance of the terminal reduced emissions from shuttles to remote lots.

Air Carrier Ramp

Improvements to the air carrier ramp consist of the installation of preconditioned air and electrical power at each aircraft parking position. These additions allow pilots to shut off auxiliary power units while waiting at the gate, thus reducing aircraft emissions. Additionally, a substantial amount of existing pavement will be reused.



Historic Terminal Modernization

Modernization of the historic terminal entails equipping all bathrooms with low-flow toilets and waterless urinals to reduce the Airport's water consumption, installing energy efficient lighting, and installing new roofing that will provide for better climate control, thereby lowering energy consumption.



Sustainability And Reuse Efforts

- All airfield construction material is reused or recycled at LGB.
- Five quick-charge electric Ground Support Equipment (GSE) charging stations have enabled LGB and airlines to charge up to 10 electric vehicles simultaneously.
- Electric GSE equipment in use on the commercial ramps lowers greenhouse gas emissions.
- Electric GSE program is supported by six solar trees.
- 50 percent of taxiway lights have been converted from traditional incandescent light bulbs to LED, using 50 percent less electricity.
- All public-use LGB vehicles are electric.
- All airfield signage recently was upgraded and replaced with energy efficient florescent bulbs.

Projects In Planning

- Solar panels to cover the roofs of the existing baggage claim areas and parking structure (Lot A)
- Estimated to provide enough energy to power the baggage claim belts
- Change remaining taxiway lights to LED for continued airfield energy reduction

AIR CARRIER RAMP



Project Overview

The air carrier ramp (ramp) at Long Beach Airport is used to park commercial aircraft for the loading and unloading of passengers and baggage. Improvements to the ramp include the replacement of deteriorated pavement with concrete that will extend the life of the surface. The current ramp is composed of asphalt, which lasts 15 to 20 years. The new concrete ramp will last for 50 years or more. Additional ramp work will entail drainage improvements, as well as installing the electrical infrastructure for pre-conditioned air and power at each aircraft parking position. The installation of these utilities will allow boarding and servicing of aircraft without the need to run the aircraft auxiliary power units, thus reducing harmful air emissions and fuel consumption. Ramp improvements will be phased over a multiyear period based on the need to maintain the functionality of the existing airline ramp during construction.

The project will be constructed in phases. Reconstruction of 10 aircraft parking positions has been completed. Installation of the electrical infrastructure for preconditioned air and power at each parking position has been completed for one through five, and six through 10 are underway.

Project Benefits

- Upgrading the air carrier ramp helps travelers and residents alike by improving air quality.
- Replacing the current asphalt ramp with concrete will increase its useful life by 50 years.
- Improving ramp drainage removes standing water, which protects our passengers from trodding through puddles while boarding aircraft.

Economic Impact

Improving the Airport's air carrier ramp will support approximately 100 to 120 jobs per phase.

Construction Plan

The project will be constructed in phases. Phase I includes the reconstruction of 10 aircraft parking positions. Phases II and IV will be spread over multiple years to utilize the same funding sources as the first phase.



Green Components

Improvements to the air carrier ramp consist of the installation of preconditioned air and electrical power at each aircraft parking position. These additions will allow pilots to shut off auxiliary power units while waiting at the gate, which will reduce aircraft emissions. Additionally, a substantial amount of existing pavement will be reused.

Project Cost

The budget for Phase I is \$6.9 million, funded via FAA Airport Improvement Program dollars, PFC, and Airport revenue. Phases II through IV are budgeted at \$26 million and will be spread over multiple years to utilize the same funding sources as the first phase.

NEW PARKING STRUCTURE



Project Overview

Construction of the Long Beach Airport Parking Structure includes a new 1,989-space parking structure, a 247-space surface parking lot, as well as utility and roadway improvements. The parking structure was built on the existing surface of Parking Lot B and a portion of Lot C. This project was critical to the Long Beach Airport. Previously, nearly 50 percent of the Airport's vehicle parking was on leased land off Airport property. This new structure enables customers to park on site and within walking distance of the terminal.

Project site-work began in December 2009 and resulted in an Airport access loop, beginning and ending at Lakewood Boulevard immediately north of the Long Beach Fire Department headquarters. The extended road improves traffic circulation around the terminal and parking facilities.

The parking structure, designed by Watry Design, complements the historic terminal building, with curved corners and graduated frontage that maintain a line of sight to the terminal. The new structure also features glazed stairwells, decorative glass panels, and a stand-alone glass elevator intended to reduce the horizontal impact on the street.

A peaceful, tree-lined outdoor courtyard with drought resistant landscaping is a key feature of the design. The structural system consists of cast-in-place post-tensioned beams and columns with a movement resistant frame lateral system to maintain an open facade.

The parking structure was budgeted at \$58.6 million and funded through a federal Build America Bond, General Airport Revenue Bond (GARB), and Passenger Facility Charges (PFC). Approximately \$4 million of the project cost was eligible for PFC Funds.

The entire new parking structure project was completed in July 2011 with maintenance occurring regularly.

Green Components

The parking structure roof is designed to support solar panels. Additionally, the existing pavement was reused as select fill for the project.

Economic Impact

This project included over 50 different construction trades. Airport engineering staff estimate the project supported 450 jobs through both the design and construction phases. The contractor was required to comply with Section 3 of the Housing and Urban Development Act of 1968 and worked to provide job training and employment opportunities for low and very low-income Long Beach residents.

