

## Application for Federal Assistance SF-424

\*1. Type of Submission:

- ☐ Preapplication  
☒ Application  
☐ Changed/Corrected Application

\*2. Type of Application

- ☒ New  
☐ Continuation  
☐ Revision

\* If Revision, select appropriate letter(s):

\* Other (Specify)

\*3. Date Received:

4. Applicant Identifier:

5a. Federal Entity Identifier:

\*5b. Federal Award Identifier:

### State Use Only:

6. Date Received by State:

7. State Application Identifier:

### 8. APPLICANT INFORMATION:

\*a. Legal Name: CITY OF LOS ANGELES

\*b. Employer/Taxpayer Identification Number (EIN/TIN):  
95-2675093

\*c. UEI:  
MYREWLVR75F7

### d. Address:

\*Street 1: 1 WORLD WAY

Street 2:

\*City: LOS ANGELES

County/Parish:

\*State: Province: CA

\*Country: USA: United States

\*Zip / Postal Code 90045

### e. Organizational Unit:

Department Name:  
LOS ANGELES WORLD AIRPORTS

Division Name:

### f. Name and contact information of person to be contacted on matters involving this application:

Prefix: \*First Name: ZINA

Middle Name:

\*Last Name: CHENG

Suffix:

Title: GRANTS & PFC MANAGER

Organizational Affiliation:

\*Telephone Number: 424-646-5479

Fax Number:

\*Email: ZCHENG@LAWA.ORG

**Application for Federal Assistance SF-424****\*9. Type of Applicant 1: Select Applicant Type:**

C: City or Township Government

Type of Applicant 2: Select Applicant Type:

Pick an applicant type

Type of Applicant 3: Select Applicant Type:

Pick an applicant type

\*Other (Specify)

**\*10. Name of Federal Agency:**

Federal Aviation Administration

**11. Catalog of Federal Domestic Assistance Number:**

20.205

CFDA Title:

PROTECT Program

**\*12. Funding Opportunity Number:**

\*Title:

**13. Competition Identification Number:**

Title:

**14. Areas Affected by Project (Cities, Counties, States, etc.):****\*15. Descriptive Title of Applicant's Project:**

Landside Resiliency Plan for improvements associated with the Landside Access Modernization Project at Los Angeles International Airport

Attach supporting documents as specified in agency instructions.

**Application for Federal Assistance SF-424****16. Congressional Districts Of:**

\*a. Applicant: 43

\*b. Program/Project: 43

Attach an additional list of Program/Project Congressional Districts if needed.

**17. Proposed Project:**

\*a. Start Date: 11/1/2023

\*b. End Date: 9/30/2024

**18. Estimated Funding (\$):**

*a. Federal	\$ 200,006
*b. Applicant	\$ 0
*c. State	\$ 0
*d. Local	\$ 0
*e. Other	\$ 0
*f. Program Income	\$ 0
*g. TOTAL	\$ 200,006

**\*19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on \_\_\_\_\_.
- ☒ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☐ c. Program is not covered by E.O. 12372.

**\*20. Is the Applicant Delinquent On Any Federal Debt?**☐ Yes ☒ No

If "Yes", explain:

21. \*By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U. S. Code, Title 218, Section 1001)

☒ \*\* I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix: \_\_\_\_\_ \*First Name: TATIANA \_\_\_\_\_

Middle Name: \_\_\_\_\_

\*Last Name: STAROSTINA \_\_\_\_\_

Suffix: \_\_\_\_\_

\*Title: CHIEF FINANCIAL OFFICER

\*Telephone Number: 424-646-5251

Fax Number:

\* Email: 424-646-5251

\*Signature of Authorized Representative:

\*Date Signed:



# Los Angeles World Airports

U.S. Department of Transportation  
PROTECT Planning Grant Application:  
Landside Resiliency Plan

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August 18, 2023

ROVOLUS

5014 Airline Road | Dallas, TX 75205

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# BASIC PROJECT INFORMATION

## PROJECT DESCRIPTION

Los Angeles World Airports (LAWA) is seeking a planning grant under the United States (U.S.) Department of Transportation's Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) program to develop a Landside Resiliency Plan for improvements associated with LAWA's Landside Access Modernization Project (LAMP) at Los Angeles International Airport (LAX or the Airport). Major infrastructural elements of the LAMP project to be covered under the Landside Resiliency Plan include the upcoming Automated People Mover (APM) system, the under-construction consolidated Rent-A-Car Center (CONRAC), and two Intermodal Transportation Facilities (ITFs) to facilitate passenger transit connections and passenger drop-offs/pick-ups. Additional enabling projects, such as (a) roadway additions and improvements intended to alleviate traffic congestion in and around the Airport and (b) electrical upgrades to support the additional infrastructure are also included under LAMP.

These infrastructure projects are all required to serve the public 24 hours per day, seven days per week and any downtime for these systems can have considerable impacts on not only LAX itself, but potentially the entire National Airspace System (NAS) due to the Airport's role as a critical link in that larger system. In particular, a failure of the APM could have cascading effects on both landside and airside operations at the Airport, and result in critical failures throughout the NAS, potentially resulting in significant operational disruptions across the country. This potential for failures and disruptions to affect systems well outside of the Airport's borders highlights the critical need to plan for resilience in these systems and enable local, state, and Federal stakeholders to respond to potential failures in the most effective manner possible.

## HISTORY AND BENEFITS OF LAMP AND ASSOCIATED PROJECTS

The LAMP project consists of the construction of four major elements, the APM, the CONRAC, the ITFs, and the roadway improvements. Additionally, enabling projects throughout the Airport area, such as utilities and Central Terminal Area (CTA) modifications are within the scope of LAMP.

The genesis of the LAMP effort is related to longstanding issues in landside access in the CTA. Currently, the CTA drop-off and pick-up infrastructure is often overwhelmed by significant traffic congestion that can be encountered at any time of day. As the world's busiest origin-destination airport, approximately 88% of all LAX passengers utilize the Airport as their origin or final destination, and thus landside drop-off and pick-up facilities are heavily used.<sup>1</sup> Extreme traffic congestion often results in extended door-to-door times for Airport users, often culminating in missed flights, particularly for those unfamiliar with the challenges associated with accessing the CTA. Additionally, this congestion results in unnecessary automobile emissions at the Airport, and is incompatible with the City of Los Angeles' goal of decreasing local emissions.

LAMP is intended to provide a significant reduction in traffic volume using the CTA drop-off and pick-up areas by moving much of that traffic to the ITFs and building the APM to connect the ITFs (including parking and transit connections) and the Los Angeles Metro LAX/Crenshaw rail line to the CTA directly. The completion of the CONRAC is another critical factor in congestion reduction due to the elimination of rental car shuttles from the CTA roadway system, as Airport users will be able to access the CONRAC directly via the APM. These projects will significantly increase landside efficiency, enabling a more reliable trip to the CTA for Airport users and reducing congestion and emissions associated with automobile traffic at the Airport.

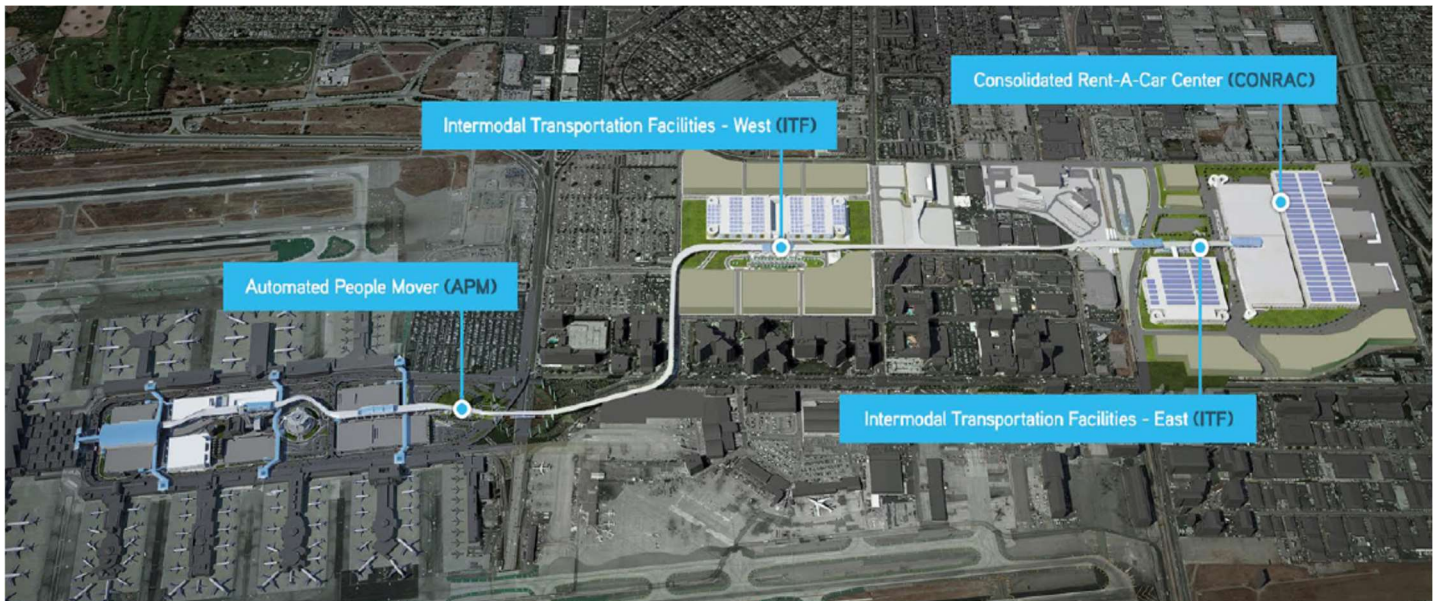
The LAMP project has been funded by a combination of local and federal funds and the total cost is estimated at \$5.5 billion.<sup>2</sup> Construction on the CONRAC and the western ITF began in 2019, while construction on the eastern ITF and the

<sup>1</sup> <https://www.lawa.org/history/lax-history/just-the-facts>

<sup>2</sup> <https://www.lawa.org/transforminglax/projects>

APM began in 2021. The western ITF was completed in 2021 and the CONRAC is nearing completion as of August 2023. All of the referenced LAMP projects are anticipated to be complete and operational by the end of 2024. A diagram of these facilities is shown in context in Figure 1.

Figure 1 – New LAMP facilities



Source: Los Angeles World Airports, August 2023

### DESCRIPTION OF MAJOR LAMP ELEMENTS

The three major LAMP elements that will be covered by the Landside Resiliency Plan are described in detail below:

**Automated People Mover** – The APM is a driverless, elevated, rubber-tired train system that serves as a critical central piece of the LAMP effort as a whole. Upon completion, this 2.25-mile system will connect passengers to six stations – three within the CTA (CTA West, CTA Center, and CTA East), and three outside of the CTA (ITF West, ITF East, and CONRAC). Provisions to accommodate a seventh station to be connected to the future Terminal 9 at the Airport will be built into the APM. The APM will have a system capacity of approximately 5,500 passengers per hour, and during peak hours nine trains of four cars each will be capable of carrying up to 200 passengers per train. Trains will be capable of a top speed of nearly 50 mph and will provide a headway of two minutes during peak times. The APM ties together the entire LAMP project by connecting the future landside facilities with the CTA, enabling the replacement of surface vehicles as the primary method for passengers and workers to access the CTA. Figure 2 shows a rendering of an APM train.

Figure 2 – Automated People Mover Vehicle



Source: Los Angeles World Airports, August 2023

**Consolidated Rent-A-Car Facility:** – the CONRAC is a 6.4 million square foot facility that will consolidate all rental car facilities at the Airport under a single roof and provide more than 18,000 total parking spaces. It will be connected to the APM to allow customers to travel to and from the CTA without using shuttle buses, resulting in decreased traffic



congestion on CTA roadways, reduced local vehicle emissions, and decreased operational costs for rental car agencies. The CONRAC will also feature a Quick Turn Around building, which accommodates light maintenance for vehicles and keeps most rental car-related operations within the footprint of the CONRAC.

**Intermodal Transportation Facilities:** the two ITFs (ITF-West and ITF-East) comprise intermodal transit hubs that facilitate transfers to the CTA and the CONRAC for passengers and other Airport users. ITF-West opened in 2021 and currently serves primarily as an economy parking at this time, while ITF-East is currently under construction. Upon the completion of the APM, ITF West will serve as the APM connection to hotel shuttles, bicycles, rideshare vehicles, taxis and personally-owned vehicles. ITF-East will serve as the connection to the APM from the future Los Angeles Metro LAX/Crenshaw line station. An architectural rendering of the ITF-West station is shown in Figure 3.

Figure 3 – Rendering of Proposed ITF-West Station



Source: Los Angeles World Airports, August 2023

### **DESCRIPTION OF PROPOSED LANDSIDE RESILIENCY PLAN DEVELOPMENT PROCESS AND TASKS**

LAWA has two primary goals in developing a Landside Resiliency Plan for LAX. First, LAWA seeks to identify current weaknesses in infrastructure and gaps in processes that need to be strengthened to adequately respond to a disaster. Meeting this goal will require significant collaboration between LAWA and LAX stakeholders. For the purposes of developing the Landside Resiliency Plan, LAWA intends to coordinate with critical stakeholders, such as the Los Angeles Airport Police Department (APD), the Los Angeles Fire Department, and airport emergency management personnel to determine the current level of preparedness and determine a framework for addressing any areas of improvement within the context of the Landside Resiliency Plan.

Secondly, LAWA must ensure that there are reasonable contingencies in place in order to operate (or supplement) critical landside infrastructure in the event of a disaster at the Airport. LAX operates much as a city-within-a-city, and has many external agencies, companies, and other stakeholders that operate in and on the Airport. As a result, the successful continuation of landside operations after a disaster relies on not only the ability of LAWA to anticipate and prepare for disasters (as well as successfully respond to one), but also the agency's ability to communicate with relevant partners and stakeholders operating within the Airport and critical to the response to any potential disaster.



LAWA intends to hire an experienced contractor to work with LAWA emergency management and infrastructure personnel to develop the Landside Resiliency Plan--henceforth collectively referred to as the LAWA project team. The plan development process is anticipated to be comprised of the following tasks:

### **Task 1 – Inventory of Risks, Hazards, and Threats**

Task 1 involves the LAWA project team assessing current and future risks, hazards, and threats to the airside operation at the Airport. This assessment should examine the totality of potential disasters (both natural and man-made) based on the likelihood of any particular type of disaster occurring over a period of time as well as the magnitude of disaster impacts. This assessment should take into account future weather/climactic events that may be more likely than they are currently (e.g., flooding and fire).

In the context of the local region, potential disasters that should be evaluated include (but are not limited to):

- Natural disasters (earthquake, tsunami, fire, pandemic)
- Civil disasters (civil disturbance/protest)
- Terrorism/attacks (bombing, biological attack, mass shooter, sabotage, hijacking)
- Accidents (aircraft incident/accident, APM accident, hazardous materials spill)
- Operational (mass power outage, airside ground stop, water outage)

### **Task 2 – Identification of Infrastructural Weaknesses and Process Gaps**

Task 2 involves the LAWA project team evaluating current emergency management processes associated with landside infrastructure to evaluate potential areas of improvement and gaps in process that either increase the risk of a disaster or increase the likelihood that a disaster resulting in the unavailability of landside infrastructure could not be adequately mitigated and would likely result in significant impacts to the landside operation.

### **Task 3 – Identification of Relevant Corresponding Parties**

Task 3 involves the LAWA project team identifying and contacting relevant stakeholders that should be involved in the resiliency planning process. These stakeholders will include entities who are anticipated to have a role in either adaptation and mitigation of risks or the execution of any potential disaster response. In the development of the Landside Resiliency Plan, the array of stakeholders is expected to be particularly large due to the multiple modes of transportation, the domestic and international aspects of operations, and the broad economic and operational impacts. This would include stakeholders such as law enforcement and fire agencies as well as relevant investigative and regulatory agencies. These parties would become a part of the LAWA project team and would work collaboratively with LAWA personnel and contractors.

### **Task 4 – Evaluation of Potential Adaptation and Mitigation Activities**

Once the risks, hazards, and threats to landside operations have been assessed, potential adaptation and mitigation activities should be evaluated to determine methods to reduce risk via adaptation and mitigate risk where possible. This includes potential improvements to processes and coordination that were identified as weaknesses in Task 1. A key part of this task is establishing goals – it is impossible to eliminate every risk so determining acceptable levels of risk (generally tied to probability and consequence) is an important aspect of determining what is included in the Landside Resiliency Plan.

### **Task 5 – Assembly and Review of Draft Landside Resiliency Plan**

After evaluating adaptation and mitigation activities, the Landside Resiliency Plan would be prepared. The plan would include at least four sections, as follows:

- Overview of Current and Future Landside Operations – a summary of the current landside operations, landside operations after Phase I of the LAMP is complete in 2026, and planned landside operations in 2035 (post-Terminal 9 completion).

- Assessment of Risks, Hazards, and Threats – evaluation of risks, hazards and threats to future landside operations, including assessment of increased future disaster risk.
- Evaluation of Potential Adaptation and Mitigation Activities – assessment of potential adaptation/mitigation activities.
- Disaster Response Plans – plans for disaster response for each evaluated disaster type.

Task 5 includes two rounds of review between the contractor and a document review team identified by LAWA.

### **Task 6 – Stakeholder Engagement**

Task 6 involves the coordination with the broad array of cooperating agencies and developing a framework for regular ongoing reviews. The Landside Resiliency Plan is expected to adopt a philosophy of continuous improvement and rely on the Plan-Do-Check-Act model. Constant engagement of the cooperating agencies is essential to identify and respond to new threats while also seeking to refine and improve the response to existing threats.

### **Task 7 – Final Landside Resiliency Plan**

Task 7 involves the final completion of the Landside Resiliency Plan, including any relevant appendices. This task includes two additional rounds of final review by LAWA prior to document finalization.

## **LOCATION**

The Airport is located in Los Angeles County, California, approximately eighteen miles southwest of downtown Los Angeles in the Westchester neighborhood of the city. The 3,200-acre Airport abuts the cities of El Segundo (to the south) and Inglewood (to the east) and contributes to more than 600,000 jobs in southern California, representing an annual economic impact exceeding \$100 billion.<sup>3</sup> The Airport is the busiest international airport on the West Coast, serving over 55 international airlines, as well as the 5<sup>th</sup> busiest airport overall (by passengers) in the United States (U.S.).<sup>4</sup>

The Airport does not have any permanent resident population within its borders and thus is not a Transportation Disadvantaged Census Tract. However, of the fifteen neighboring Census Tracts to LAX that include residential populations, seven (47%) are defined as Transportation Disadvantaged Census Tracts. The City of Los Angeles/LAWA owns a significant amount of land within many of these tracts, particularly those located east of the Airport (where most of the Transportation Disadvantaged Census Tracts are located) and has an interest in increasing transportation access to these areas - an intended effect of LAMP.

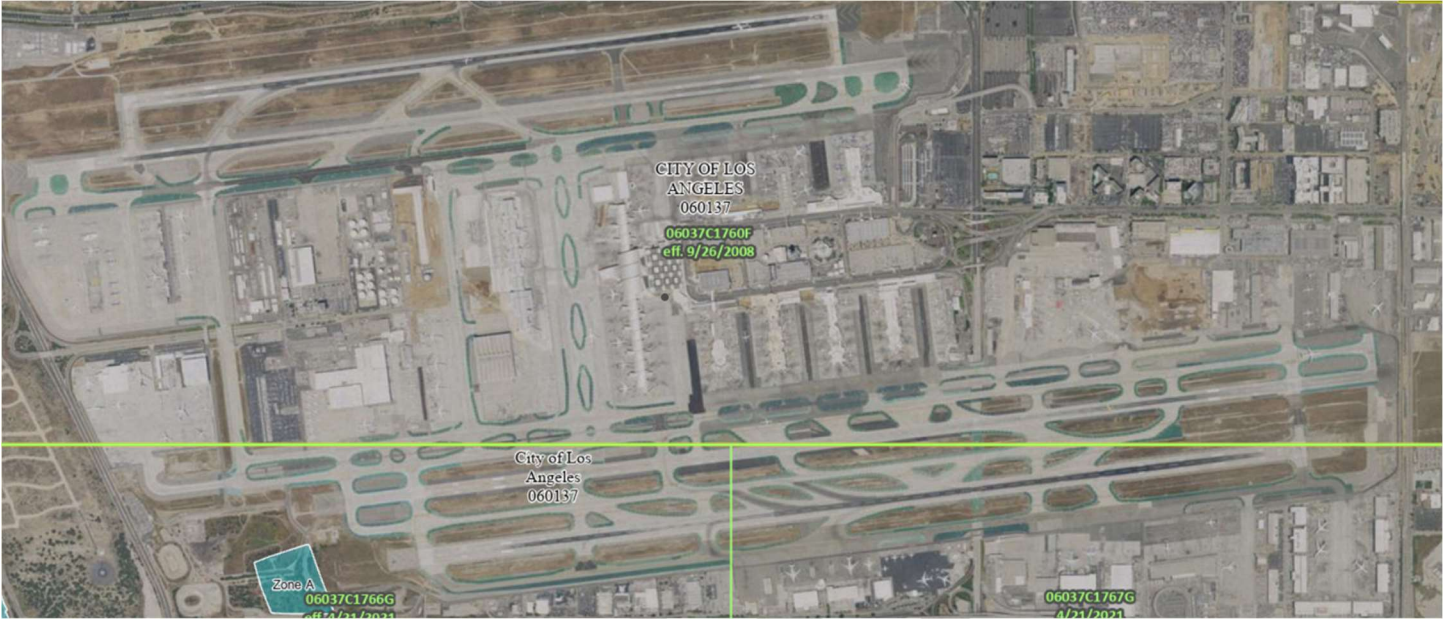
As the Airport does not currently have an applicable Resilience Improvement Plan under 23 U.S.C. § 176(e)(2), LAWA intends to use funding provided by the PROTECT grant to develop this plan.

The Airport does not sit within a floodplain as defined by the Federal Emergency Management Agency (FEMA). However, there is a small Special Flood Hazard Area (SFHA) southwest of the Runway 7R threshold that contains forested and open space and is bisected by an Airport access road. This area does not have any current development and none is planned at this time. None of the LAMP projects that this planning grant application references will result in impacts to this SFHA, nor are the LAMP projects anticipated to result in negative impacts to flood resiliency at the Airport. The SFHA is shown in Figure 4, with the corresponding label of “Zone A”.

<sup>3</sup> [https://www.flylax.com/-/media/flylax/media-center/pdfs/fs---at-a-glance-feb\\_2021](https://www.flylax.com/-/media/flylax/media-center/pdfs/fs---at-a-glance-feb_2021)

<sup>4</sup> <https://www.faa.gov/sites/faa.gov/files/2023-06/preliminary-cy22-commercial-service-enplanements.pdf>

Figure 4 – LAX On-Airport Special Flood Hazard Area



Source: Federal Emergency Management Agency, August 2023

## PARTIES

LAWA is a department of the City of Los Angeles that is responsible for the operation of LAX and Van Nuys Airport. LAWA coordinates planning, funding, and construction at these airports, and is the primary proponent of this PROTECT planning grant application.

RoVolus, LLC (RoVolus) is assisting LAWA in the preparation of this grant application, and specializes in management consulting and environmental engineering that is focused on environmental, financial, transportation and policy issues affecting the aviation sector.

# GRANT FUNDS, SOURCES, AND USES OF PROJECT FUNDING

## NON-FEDERAL FUNDING

As LAWA is seeking a grant for planning activities under PROTECT, a local match is not required and the Federal share of this activity is 100% as specified by 23 USC 176(d)(5)(E)(i). As a result, LAWA does not expect to seek any non-federal funding for activities associated with developing a Landside Resiliency Plan for LAMP improvements.

## PROTECT DISCRETIONARY GRANT FUNDING

LAWA expects that PROTECT discretionary grant funding will comprise 100% of funds required to complete this Landside Resiliency Plan.

## OTHER FEDERAL FUNDING

No other federal funding is expected to be required for LAWLA to complete the Landside Resiliency Plan that would be funded utilizing PROTECT discretionary grant funding.

## DETAILED PROJECT BUDGET

An estimated project budget is contained in the table below. Each task is associated with an estimated number of person-hours, which have been multiplied by a notional \$75.76 per hour time and materials cost to develop a reasonable budget.

Task	Person-Hours	Estimated Cost
Task 1 – Inventory of Risks, Hazards, and Threats	240	\$18,182
Task 2 – Identification of Infrastructural Weaknesses and Process Gaps	160	12,122
Task 3 – Identification of Relevant Corresponding Parties	120	9,091
Task 4 – Evaluation of Potential Adaptation and Mitigation Activities	920	69,699
Task 5 – Assembly and Review of Draft Landside Resiliency Plan	240	18,182
Task 6 – Stakeholder Engagement	720	54,547
Task 7 – Final Landside Resiliency Plan	240	18,182
<b>TOTAL</b>	<b>2,640</b>	<b>\$200,006</b>

# MERIT CRITERIA

## PROGRAM ALIGNMENT

The acquisition of a planning grant to assist in the development of a Landside Resiliency Plan for LAMP infrastructure projects at the Airport is well aligned with the requirements associated with the Resilience Improvement Plan planning activity. The plan is expected to address tactical as well as strategic threats.

Tactical incidents are essentially about ensuring a coordinated response to a threat or situation. This could be anything from an active shooter to a power loss affecting the APM. In responding to incidents, it is important to have plans on how to respond, points of coordination with cooperating agencies, and detailed information on the affected systems.

Responding to strategic threats is about reducing the probability of an event occurring, or reducing the impact of the threat if it were to occur. This could range from having an available “bus bridge” that could be quickly deployed in the event of a train failure, to determining if vehicle screening should be performed during periods of elevated national security.

The Landside Resiliency Planning process will follow this structure. Short-term planning activities will focus on tactical incidents, including identification of cooperating agencies and development of response plans to reduce those risks. Long-term planning activities include the evaluation of hazards and threats to current and future landside infrastructure, as well as corresponding adaptation and mitigation that can be used to reduce those hazards and threats. The entire array of risks will be considered from climate change, to mechanical failure, to global terrorism. The Airport is one of the most complex transportation facilities in the nation and likewise, the threats are also exceptionally complex.

Local governments, such as representatives from the neighboring cities of El Segundo and Inglewood, are critical partners in the resiliency planning process and will be included in the LAWA project team. As with the Los Angeles neighborhoods east and north of the Airport, these cities are at risk from some Airport-related disasters and while LAMP improvements will not have as much of a daily impact on these cities as they will on the western Los Angeles neighborhoods, they still have an interest in this process due to their proximity and potential for impacts from potential disasters. Other local government agencies that operate inside the Airport, such as the Los Angeles Fire Department and Los Angeles County Health Department will also be heavily involved in the development of the Landside Resiliency Plan, due to their critical role in disaster response.

This planning process represents a systemic approach to transportation system resilience in a variety of ways. First, Task 1 requires the LAWA project team to evaluate vulnerabilities associated with both current and future landside infrastructure, as well as methods of adaptation and mitigation. This is a risk-based assessment that takes into account current and future weather as well as potential future threats that are minimal or do not exist today (such as flooding).

## SCHEDULE AND BUDGET

LAWA plans to undertake the following activities in support of developing a Landside Resiliency Plan for infrastructure constructed under LAMP, as detailed in the schedule below:

Task	Task Start Date (from project start)	Estimated Duration
Task 1 – Inventory of Risks, Hazards, and Threats	11/1/2023	30
Task 2 – Identification of Infrastructural Weaknesses and Process Gaps	12/1/2023	20
Task 3 – Identification of Relevant Corresponding Parties	12/21/2023	15
Task 4 – Evaluation of Potential Adaptation and Mitigation Activities	1/5/2024	115
Task 5 – Assembly and Review of Draft Landside Resiliency Plan	4/29/2024	30
Task 6 – Stakeholder Engagement	5/29/2024	90
Task 7 – Final Landside Resiliency Plan	8/27/2024	30

The proposed budget of \$200,006 is modest since much of the resources required to develop the plan will be provided by internal staff and the staff of cooperating agencies. The funding being sought will only cover the cost of external consultants. This is a reasonable investment in protecting one of the nation's most critical aviation facilities, and costs associated with completing this Landside Resiliency Plan represent only a fraction of the costs of planning and building the landside infrastructure itself. In this manner, a good Landside Resiliency Plan represents something of an insurance policy and could potentially pay for itself in the form of reduced damages, injuries, and deaths in the event of a disaster disrupting landside operations.

## PUBLIC ENGAGEMENT, PARTNERSHIPS, AND COLLABORATION

In addition to the utility that LAMP projects such as the APM, CONRAC, and the ITFs provide to the airport and its users, these projects are also intended to offer benefits to the community via improved transportation options in the area as well as congestion reduction. The following table identifies the benefits of each LAMP component for the local community.

Component	Community Benefits
<b>Automated People Mover</b>	<ul style="list-style-type: none"> <li>• New intermodal connection with Los Angeles Metro LAX/Crenshaw line</li> <li>• Enables reduction in traffic accessing CTA, resulting in decrease in area traffic congestion</li> </ul>
<b>Consolidated Rent-A-Car Facility</b>	<ul style="list-style-type: none"> <li>• Enables reduction in traffic accessing CTA, resulting in decrease in area traffic congestion</li> <li>• Allows area residents to access rental cars without having to go to CTA, increasing convenience and usability of Airport rental car agencies</li> </ul>



<b>Intermodal Transportation Facilities</b>	<ul style="list-style-type: none"> <li>• Enables public transit access to rental car facilities</li> <li>• Allows area residents simpler, more convenient Airport transfers including check-in at the ITF</li> <li>• Facilitates area residents accessing the CTA via public transit</li> <li>• Relocates parking facilities conveniently closer to area neighborhoods</li> </ul>
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Local neighborhoods have always been a key part of LAWA's community engagement process. The Landside Resiliency Plan will engage the public by coordinating with their local governments and first responders. It is expected that much of the analysis will feature sensitive security information and would not be suitable for public dissemination. However, there are portions of the Plan that will describe potential impacts to the community should a disaster affecting landside operations take place. These portions will be made available for sharing with the community. For example, damage to the APM guideway system rendering the APM temporarily inoperable would require buses to be run between the off-Airport stations and the CTA. This could result to temporary, localized traffic impacts to the community that would cause increased noise and emissions for the duration of the event.

As part of Task 6 of the Landside Resiliency Planning effort, LAWA intends to hold a workshop with the community detailing relevant pieces of the Plan once a draft has been completed. The purpose of this workshop would be to communicate those relevant pieces of the Plan as well as promote preparedness planning within the community, focused on the pieces of the Plan that would potentially affect residents and businesses in the event of a disaster.

Existing partnerships with agencies operating at the Airport will be leveraged and strengthened to ensure that there are sufficient resources available to respond to any incident.

## INNOVATION

This project is truly unique as rarely does a single resiliency plan affect aviation, rail transit, bus transit, bike, ride-for-hire, and commercial vehicle traffic. LAMP is a transformative project that has a direct impact on each mode of transportation. Looking just at the impacts on the aviation system, on any given day, 7.6% of all airline passengers in the U.S. either boarded or deplaned an aircraft at LAX. Any incident at LAX that delays pilots, flight attendants, ramp crews, or passengers from getting to the Airport in a timely manner will quickly ripple across the NAS. A brief shutdown of the APM is highly likely to cause flight cancellations and delays around the country. It is hard to imagine for the person in Detroit whose flight was cancelled because there was a problem with LAMP at LAX, but that illustrates the national importance of this plan.

While many other airports feature an APM or mass transit connections, what makes this system and this resiliency plan unique is the number of passengers that are served by the APM as well as the comprehensive nature of the intermodal connections the APM enables. The APM will serve tens of thousands of passengers every day traveling to hotels/motels, rental car companies, mass transit, taxis/rides-for-hire, remote parking, and biking/walking. Unquestionably, LAMP is the one of the most ambitious multimodal projects in the U.S., also making it one of the most sensitive to any disruption.

The Landside Resiliency Plan will also be innovative because it will cover an exceptionally broad range of threats. This range is illustrated by several threats that LAX has recently addressed: As an example, the lack of voltage stability of the electric grid in Southern California causes hundreds of passenger conveyances (elevators, escalators, etc.) to lock out thousands of times a year, requiring manual resets. To counter this issue, LAWA has recently invested \$160 million in a new receiving station for electricity that will reduce the risk of power disruption. Another example of the breadth of threats is a terrorist shooting in the landside of Terminal 3. That event also illustrates how the landside of an airport is typically the point where the airport first encounters threats.

# BENEFIT-COST ANALYSIS



Based on guidance provided in Section 2, Subsection IV of the PROTECT Program Notice of Funding Opportunity for Fiscal Years 2022 and 2023, a benefit-cost analysis (BCA) is not required as a part of the application for a planning grant.

## FHWA PRIORITY CONSIDERATIONS

As an airport operator, LAWA is in a unique position—it owns both the land upon which the Airport sits as well as significant off-airport land. This off-airport land is primarily located just north and east of the Airport in the Westchester neighborhood and comprises a portion of the greater Westchester community. Additionally, APD has patrol responsibility for the majority of this LAWA-owned land, as well as other portions of western Los Angeles located near the Airport. The majority of large airports in the nation have agencies that exclusively operate on airport grounds, and interactions with airport personnel (in this case, primarily members of APD) are rare outside of the airport. As a result, businesses and residents located near LAX are more integrated with the Airport than in most similar cases elsewhere, and high levels of collaboration are necessary to ensure balance between needs of the Airport and its stakeholders with those of the neighboring community.

The development of a Landside Resiliency Plan as described in this grant application has the ability to further integrate the community with the Airport by enhancing communication about how disasters potentially affecting nearby businesses and residents would be responded to by LAWA's Airport personnel. This would create shared understanding between both parties, and result in fewer surprises in the event of an actual disaster and required response. This could result in a reduction in injuries, deaths, and property damage in neighboring communities should a disaster take place.

Unlike many large international airports, LAX is located in a densely populated area and has more neighbors than most airports. The sheer scale of the benefits that could be unlocked if the community is well-integrated into the Landside Resiliency Planning process exceeds most airports due to that high number of nearby residents and businesses.

Additionally, LAX must work with a very large number of other entities in order to coordinate all aspects of disaster response. The resilience planning process as described incorporates these entities at a very early stage of the planning process and requires their involvement throughout the process, enhancing their buy-in and acceptance of the Plan and requiring they take ownership of their piece(s) of required adaptation activities, mitigation activities, or disaster response. This increases the likelihood that the Plan will be adhered to if it is required to be put into action and lessens the likelihood of an unsatisfactory disaster response.

These benefits are exceptional for a planning project and reflect a project that is well aligned with FHWA's considerations for priority for planning grants under the Public Engagements, Collaboration, and Partnerships criteria (criteria #3).

LAWA is committed to ensure successful continuation of LAX landside operations after a disaster or major event, however the development of the Landside Resiliency Plan is currently unbudgeted. Upon review of the development agreements between LAWA and the developers of the various landside assets, LAWA has determined that the development of a plan was not included in the scopes of work for the developers contracted to build the various LAX landside assets. Federal funding for this planning project is needed to address present and future gaps in disaster response and resiliency at LAX.