# TRAFFIC GENERATION Los Angeles International Airport / August 2021



# **Executive Summary:**

As part of the LAX Specific Plan, Appendix A, Monitoring and Reporting, states: "LAWA shall prepare and submit annual reports [including a Traffic Generation Report] to the Board of Airport Commissioners, the Department of City Planning, Los Angeles Department of Transportation and Los Angeles City Council." This report is intended to assist in fulfilling this commitment for 2021.

The typical design day used for LAX planning is a Friday in August. The results of the August 2021 traffic volume study reveal that there were **11,948** trips recorded at LAX during the 8 am to 9 am peak hour, **14,021** trips in the 11 am to 12 pm airport peak hour and **11,797** trips in the 5 pm to 6 pm peak hour.

Through the majority of the year 2021, the COVID-19 global pandemic continued to impact all travel. The aviation industry was heavily impacted as varying levels of international and domestic travel restrictions were set in place to reduce transmission. At the time of data collection in August 2021 and the first weekend in September 2021, LAX vehicle traffic levels were 74 to 92 percent greater than the levels in 2020, and 20 to 26 percent less than the pre-COVID-19 levels in 2019. In addition, certain facilities/services were closed and/or suspended until further notice in response to COVID-19's impact to passenger traffic. These changes will be reflected or addressed in the appropriate sections under Methodology. While 2021 traffic levels are substantially greater than 2020, a full recovery from the pandemic has not been realized yet at LAX. According to the Transportation Security Agency (TSA) data, passenger screening during the months of August through October 2021 was approximately 65% of 2019 levels for the same months. The highest passenger screening was recorded during the 2021 Labor Day weekend at 73% of that at 2019.

Prior to the COVID-19 pandemic, LAX also underwent major operational changes for its ground transportation providers. Major changes included: the construction and opening of LAX-it, a new passenger pickup facility located just east of Terminal 1 that is dedicated to only Taxi and Transportation Network Companies (TNC) or "Ride-App" pickups; the installation of curb extensions along the arrivals median island to accommodate passenger queuing; dedicating the inner roadway on the lower level to only LAWA shuttles; and reallocating commercial vehicle passenger loading zones along the entirety of the CTA curbside. These facility and operational changes went into effect at the end of October 2019. It should be noted that these facilities did not create additional airport trips, but rather reallocated existing trips to different areas within the CTA.

# Methodology:

The following methodology was used in calculating the overall traffic volumes accessing and egressing LAX. The Land Use and Development Section of the Los Angeles Department of Transportation (LADOT) approved this methodology, which has been used consistently for the annual LAX Traffic Generation reports since 2005.

# LAX Central Terminal Area (CTA) Roadways:

All traffic entering and exiting the LAX CTA is recorded by LAWA's Traffic and Automated Vehicle Identification System (TRAVIS), with the exception of TNC and Taxi pickups at LAX-it after October 2019. TRAVIS includes electro-magnetic loop detectors imbedded in each travel lane of entry and exit roadways. Traffic information is continuously recorded on this database and is retrievable by LAWA staff for a variety of time intervals, including hourly counts. Vehicle type is not distinguished by the loop sensors; therefore, each vehicle regardless of size is considered as a single trip either into or out of the LAX CTA. A "trip" is defined as the entrance or exit of a vehicle from the airport or airport-related property. Traffic entering LAX-it is recorded via video detection at the entry points into the facility and is reported to a separate database that is also accessible by LAWA staff, and is currently not connected to TRAVIS.

Database traffic counts and video counts for LAX CTA for Fridays in August 2021 were retrieved and averaged for the morning (8 am to 9 am), airport (11 am to 12 pm) and evening (5 pm to 6 pm) peak hours. **Table 1** shows the number of inbound and outbound trips for the three peak hours, along with the average number of trips for each peak hour.

LAX Central Terminal Area - Traffic Volumes by Direction

		Inbound		Outbound					
Date	8-9 AM	11AM-12PM	5-6 PM	8-9 AM	11AM-12PM	5-6 PM			
8/06/21	4,171	4,820	4,024	4,449	4,463	4,296			
8/13/21	4,105	4,914	4,075	3,965	4,700	4,011			
8/20/21	4,278	5,096	4,065	4,188	4,848	4,425			
8/27/21	4,116	5,078	3,740	4,011	4,698	4,188			
Average	4,168	4,977	3,976	4,153	4,677	4,230			

Table 1

The total number of trips into <u>and</u> out of the LAX CTA on each of the Fridays in August 2021, along with their averages, is summarized in **Table 2**.

# LAX Central Terminal Area - Total Traffic Volumes

		Total	
Date	8-9 AM	11AM-12PM	5-6 PM
8/06/21	8,620	9,283	8,320
8/13/21	8,070	9,614	8,086
8/20/21	8,466	9,944	8,490
8/27/21	8,127	9,776	7,928
Average	8,321	9,655	8,206

Table 2

# World Way West:

Traffic counts for eastbound and westbound movements on World Way West, east of Pershing Drive, were recorded by LADOT and Metro Traffic Data, a privately owned and operated traffic data collection company under contract by LAWA. The volumes recorded on World Way West account for traffic heading to and leaving airport facilities on the west side of LAX. A summary of the volumes are included in **Table 8**.

# <u>Driveways</u>

Traffic during the three peak hours was counted at over 54 airport-related driveways. The counts were conducted by Metro Traffic Data. Individual counts were required at these locations because traffic volumes are not recorded by the automated, loop-detector system. Traffic entering and exiting a roadway or driveway was counted using three vehicular categories – cars, trucks and shuttles. See **Figure 1** for a map of the facilities at which driveway counts were recorded and see **Table 8** for the Trip Generation Table for these facilities.

# Cargo/Ancillary Facilities:

Metro Traffic Data recorded traffic at the following cargo facility driveways on Friday, August 13<sup>th</sup> and 20<sup>th</sup>, 2021. The traffic counts are shown in Table 8.

Aviation Boulevard (west leg of intersection) locations:

- 104<sup>th</sup> Street
- 111<sup>th</sup> Street

Century Boulevard (south leg of intersection) locations:

- Avion Drive
- Airport Blvd
- Postal Road
- International Road

Imperial Highway (north leg of intersection) locations:

- Imperial Terminal
- California Street
- Hughes Way
- Unsignalized driveway east of Hughes Way
- Kilroy Center Drive
- Douglas Street
- Unsignalized driveway between Douglas Street and Aviation Boulevard

Five driveways along the north side of Imperial Highway and one driveway along the south side of Century Blvd have very limited traffic volumes throughout the day. For the purposes of this study, a total of 50 vehicles were added to the cargo/ancillary traffic volumes recorded for each peak hour to account for the traffic using these six driveways. Because traffic entering and exiting these minor driveways is infrequent, this estimate represents a conservatively high volume of traffic for these six driveways.

# Airport Operated Public Parking Lots

In response to COVID-19 and lower passenger traffic numbers, the public parking lot known as Economy Lot E was closed in 2020 and its shuttle service was suspended.

# Airport Operated Employee Parking Lots

Traffic counts were conducted by Metro Traffic Data at the LAWA-operated Employee Lots East, West and South. The individual driveway locations for these three parking lots are as follows:

- Employee Lot West Entrance/Exit Driveway on Westchester Parkway
- Employee Lot East Entrance/Exit Driveway on Jenny Avenue north of Westchester Parkway
- Employee Lot South Entrance/Exit Driveway on Jetway Boulevard south of Westchester Parkway
- Employee Lot South Entrance/Exit Driveway on 96<sup>th</sup> Street east of Sepulveda Boulevard

## Rental Car Locations:

In total, there are ten car rental companies that are allowed to provide shuttle service between the LAX CTA and their individual facilities. The number of autos and shuttles entering and exiting the following locations were recorded at the following locations on two Fridays in August 2021.

Avis – Airport Boulevard/Westchester Parkway/Jetway Boulevard:

- Two driveways on Airport Blvd south of Westchester Parkway
- Driveway on Jetway Boulevard south of Westchester Parkway

Budget – Airport Boulevard and 98th Street, NW corner:

- Driveway on Airport Boulevard between 96<sup>th</sup> Place and 98<sup>th</sup> Street
- Driveway on 96<sup>th</sup> Place west of Airport Boulevard
- Driveway on 98<sup>th</sup> Street west of Airport Boulevard

Enterprise, Alamo and National – Aviation Boulevard between Hillcrest Boulevard and Arbor Vitae Street:

- Three driveways on Aviation Boulevard south of Hillcrest Boulevard
- Driveway on Hillcrest Boulevard east of Aviation Boulevard
- Two driveways on Isis Avenue east of Hillcrest Boulevard

Fox – Century Boulevard, south side, between Aviation Boulevard and Concourse Way:

- Driveway at 5500 West Century Boulevard
- Exit driveway on 102<sup>nd</sup> Street

Hertz, Dollar and Thrifty – Airport Boulevard between Interceptor Street and Arbor Vitae Street:

- Shuttle entrance driveway on Airport Boulevard between Interceptor Street and Arbor Vitae Street
- Driveway on Interceptor Street east of Airport Boulevard
- Two exit driveways on Arbor Vitae Street east of Airport Boulevard

Sixt Rental Car – Bellanca Avenue between Arbor Vitae Street and Manchester Boulevard

• Three driveways at 9000 Bellanca Avenue

# Off-Airport Rental Car Company Lot:

Off-airport car rental companies are not permitted to drop-off or pickup customers in the CTA. Instead, a pick-up and drop-off location for the patrons of these companies is located at the southeast corner of Airport Boulevard and Century Boulevard. This facility is used only by a few off-airport rental car companies. Driveway counts were not recorded at this facility since the driveways are shared with the US Postal Facility. Therefore, for purposes of this report, six (6) rental car trips per direction per peak hour were added to the rental car facilities trip generation totals. This is considered a conservatively high number that would account for the rental car shuttles using this facility.

# Cell Phone Waiting Lot:

The LAX Cell Phone Waiting Lot is located on the northwest corner of 96<sup>th</sup> Street and Vicksburg Avenue. Drivers in private vehicles are permitted to wait in this lot before coming into the CTA to pick up passengers. Driveway counts were <u>not</u> recorded at this facility since this traffic is counted when they enter and exit the CTA to pick up their party at the terminal.

# Private Airport Parking Facilities:

Traffic was recorded at the following private parking facility driveways. These facilities are exclusively used for parking and are not affiliated with a hotel or office building. It was conservatively assumed that all traffic entering or exiting these facilities is airport related. Since these facilities cater to customers unrelated to the airport, the traffic volumes used in this report are likely to be somewhat inflated.

### 2021 Traffic Generation Report for LAX

During the August 2021 collection period, a number of facilities previously recorded were either not operational or mixed with hotel shuttle operations. These facilities were omitted from the Private Airport Parking list.

The Parking Spot (Century) – Bellanca Avenue from Century Boulevard to 98<sup>th</sup> Street:

- Two driveways on Bellanca Ave south of 96<sup>th</sup> Street
- Driveway on 98<sup>th</sup> Street west of Bellanca Avenue
- Car entrance driveway on Century Blvd west of Bellanca

The Parking Spot (Sepulveda) – Sepulveda Boulevard/Westchester Parkway/Sepulveda Westway:

- Driveway on Sepulveda Westway south of Westchester Parkway
- Driveway on Westchester Parkway west of Sepulveda Boulevard

Wally Park – Bellanca Avenue, east side, north of 98th Street:

• Two driveways on Bellanca Avenue north of 98<sup>th</sup> Street

Sunrise Parking – 98th Street east of Vicksburg Avenue

• Three driveways on 98th Street east of Vicksburg Avenue

405 Airport Parking – La Cienega Boulevard north of Century Boulevard

Driveway on La Cienega Boulevard, east side, north of Century Boulevard



# **Traffic Count Map**



Figure 1

## Other Private Airport Parking Facilities:

Similar to the private parking facilities referenced above, other off-airport, private parking operators also provide shuttle service for their customers to and from LAX terminals. However, these parking operators also cater to customers who park in their facilities but who are not going to the airport. Therefore, the following methodology was established to estimate the volume of airport trips at these joint-use parking facilities where manual traffic counts were not conducted.

Using the volume of car trips and the volume of shuttle trips manually recorded at the driveways of The Parking Spot (Century), The Parking Spot (Sepulveda), Wally Park, Sunrise Parking and 405 Airport Parking, the following trip generation factors were calculated:

# **Private Parking Car Trips per Inbound Shuttle**

ΑM	225 trips/ 41 shuttles = 5.49 trips/shuttle
ΑP	112 trips/ 33 shuttles = 3.39 trips/shuttle
PM	65 trips/ 45 shuttles = 1.44 trips/shuttle

# **Private Parking Car Trips per Outbound Shuttle**

AM	47 trips/36 shuttles = 1.30 trips/shuttle
AP	53 trips/ 32 shuttles = 1.66 trips/shuttle
PM	89 trips/45 shuttles = 1.98 trips/shuttle

The number of shuttles recorded in the LAX CTA on the four Fridays in August 2021 by the joint-use parking businesses was obtained from the TRAVIS (Commercial Vehicle Count) database. It is assumed that the same number of car trips per shuttle trip made by facilities such as The Parking Spot or Wally Park would also be generated by other off-airport parking facilities. The total number of shuttle trips made during each peak hour on Fridays in August 2021 by the joint-use, off-airport parking facilities is shown in **Table 3.** 

# In/Out Shuttle Trips by Other Off-Airport Parking Facilities

	Peak Hour							
Date	AM	AP	PM					
8/06/21	42	33	55					
8/13/21	34	34	49					
8/20/21	35	34	49					
8/27/21	31	41	45					
Rounded Average	36	36	50					

Table 3

In January 2017, private parking shuttles began operating exclusively on the upper (departures) level roadway of the CTA. Hotel shuttles began operating exclusively on the lower (arrivals) level roadway. Providers who had previously operated both as a dual purpose (private parking and hotel) shuttle were forced to choose to operate as either a hotel or a private parking shuttle. All the previously dual-branded shuttles chose to operate as a hotel shuttle on the lower level.

In August, 2018, the private parking shuttle operators relocated from the upper level to the lower level roadway. Passengers were dropped off and picked up at the same lower level commercial curb as the hotel shuttles.

In October 2019, private parking, hotel, and dual-branded shuttle operators were relocated from the lower level commercial curb to the upper level roadway with zones designated between terminal buildings.

Multiplying the calculated trips-per-shuttle ratios with the average number of shuttle trips attributable to the off-airport private parking facilities where driveways were not manually recorded results in the totals shown in **Table 4** below. This provides an estimate of the number of inbound and outbound car trips generated at the remaining parking facilities that are related to LAX.

# Inbound Car Trips for Off-Airport Parking Facilities Where Driveways Were Not Counted

Peak	Adjustment Factor	Number of		No. of	
Hour	(Trips per Shuttle)	Shuttles		Trips	
AM	5.49	Χ	36	=	198
Airport	3.39	Χ	36	=	123
PM	1.44	Χ	50	=	72

# Outbound Car Trips for Off-Airport Parking Facilities Where Driveways Were Not Counted

Peak	Adjustment Factor		Number of		No. of
Hour	(Trips per Shuttle)		Shuttles		Trips
AM	1.30	Χ	36	=	47
Airport	1.66	Χ	36	=	60
PM	1.98	Χ	50	=	99

Table 4

To avoid "double counting," shuttle trips from private parking facilities and from rental car facilities are only counted as they enter and exit the CTA. For example, a shuttle that exits the Wally Park facility and enters the CTA is counted as a single trip. The same shuttle exiting the CTA is counted as another single trip, but is not counted again as it enters the Wally Park driveway.

# **Projects Currently Under Construction:**

The following airport-related projects are currently under construction:

# • United Airlines Hangar

United Airlines is constructing a new aircraft hangar on the south side of Century Blvd and Avion Drive located east of the CTA. A new bypass road was built just south of Lot F and construction limits neighbor active cargo facilities along Avion Dr. Peak hour trips to and from this construction site would have been included in the traffic counts taken at cargo driveways.

# • Airport Police Facility – Westchester

The new Airport Police Facility (APF) will be a purpose-built structure, consolidating 1,180 Airport Police staff from eight different locations into one central facility. The APF will be designed to accommodate the operations of critical police functions with the infrastructure to support the next generation of law enforcement technologies and best practices. The APF was not fully completed and occupied until October 2021 and therefore the facility was not included in August counts.

### Terminal 2 & 3 Modernization

The \$1.86 billion project (which includes the cost of an earlier terminal swap) will see complete reconstruction of Terminal 3 as well as additional work in Terminal 2, where LAWA had completed \$194 million in upgrades in 2017. When completed, the modern facility will offer more security screening capacity with automated security lanes, more gate-area seating, and a world-class concession program. The 27-gate complex will include a secure connection to the Tom Bradley International Terminal. It will also feature a brand new headhouse with centralized lobby, security screening checkpoint, and baggage claim. A convenient bridge will connect Terminals 2, 3, and Bradley on the secure side of the airport. The work will also include the terminal vertical core to connect to the people mover.

### Terminal 4 Modernization

American Airlines has plans for \$1.6 billion in renovations continuing into the mid-2020s. The work will create a 28-gate complex, along with a unified departure hall. LAWA completed a \$114 million connector between Tom Bradley International Terminal and Terminal 4 in 2016, and \$271 million in renovation took place at Terminal 5 between 2012 and 2015. Construction has begun on a terminal vertical core to connect to the future APM walkway between Terminals 4 and 5. From there, the project will continue in a carefully planned, phased approach that will move from curbside to gate areas.

### Terminal 6 Renovation

As part of an earlier CIP, \$318.5 million in improvements took place, culminating in new concessions and gate areas in 2016. A \$197.5 million project scheduled to start later in 2020 and continue through 2025 will add one to two gates, develop additional square footage for gate area hold rooms and lounges, realign or replace passenger boarding bridges, develop a bus gate and a connector to the terminal vertical core between Terminals 5 and 6, and upgrade security checkpoints

### Terminal Vertical Cores

In addition to the work being done at Terminals 1.5, 2/3 and 4/5 to build Terminal Cores, which include elevators and escalators to connect to to the Automated People Mover's walkways, LAWA will spend \$336.5 million to build cores at Tom Bradley and between Terminals 5 and 6, as well as upgrade earlier improvements to create a core at Terminal 7.

# • ITF-West – LAX Economy Parking

Intermodal Transportation Facility West (ITF-W) also known as LAX Economy Parking is constructing a new parking structure located at the southeast corner of Jetway Boulevard and 94<sup>th</sup> Street. The facility and the roadways are project elements of the Landside Access Modernization Program (LAMP). This project will provide over 4,000 new parking stalls and is currently programed to house a new Security Badging Office. This facility was partially opened in October 2021 and therefore was not included in August counts.

# Landside Access Modernization Program (LAMP)

The Landside Access Modernization Program (LAMP) is a multi-billion dollar capital improvement project that seeks to enrich passenger experience, relieve congestion, and enhance LAX's status as a world-class airport. Key components of LAMP include the construction of an Automated People Mover (APM) system, Intermodal Transportation Facilities (ITFs), a Consolidated Rental Car Facility (ConRAC), and associated roadway improvements.

# **Summary of Peak Hour Counts:**

While Subsection C, *Project Trip Generation*, of Section 12, *Transportation Regulations*, of the <u>LAX Specific Plan</u><sup>1</sup> uses the airport peak hour as its basis for trip generation reporting, a summary of the final traffic datum is presented for all three peak hours: **Table 5** (AM Peak), **Table 6** (Airport Peak) and **Table 7** (PM Peak). The Airport Peak Hour traffic volumes for the last fifteen years are shown on **Figure 2**.

As expected, the Airport Peak Hour traffic count total of 14,021 trips is higher than the counts recorded for the AM and PM peak hours. The August 2021 AM peak hour volume is 11,948 trips and the August 2021 PM peak hour volume is 11,797 trips. The traffic counts show that August 2021 AM and PM trips were 184-192% of 2020 August trips and 74-79% of 2019 August trips, and the 2021 Airport peak hour, noon trips, were 174% of trips recorded at the same time last year and 80% of those in 2019.

<sup>&</sup>lt;sup>1</sup> Ordinance Amendment: 185164, 9/8/17

# 2021 TRIP GENERATION SUMMARY FOR LAX - 8 AM TO 9 AM

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Airport Facility	Traffic															
	Counts															
CTA	7,750	6,771	6,383	6,229	6,274	6,295	6,388	6,174	7,273	7,782	9,104	9,225	9,421	10,129	3,975	8,321
RAC/Rental Car Facilities (1)	1,342	1,261	1,239	956	1,011	1,038	1,273	1,042	1,208	1,419	1,429	1,528	1,768	1,584	489	811
LAX Public Parking Lots (5)	149	145	165	145	100	87	68	84	150	106	112	118	52	49	0	0
Employee Parking	493	534	524	446	393	387	417	436	570	549	507	506	438	390	0	325
Private Parking (2)	389	427	388	359	331	294	285	360	437	462	379	374	583	569	96	517
World Way West	649	580	648	598	503	490	559	544	520	611	496	547	568	518	324	330
Cargo and Ancillary (3)	1,891	2,036	1,971	1,641	1,733	2,031	1,914	1,765	1,831	1,649	1,827	1,888	1,915	1,858	1,313	1,624
LAX Northside (4)	0	0	20	20	20	20	20	20	20	20	20	20	20	20	20	20
													•	•	•	
TOTAL	12,663	11,754	11,338	10,394	10,365	10,642	10,924	10,425	12,009	12,598	13,874	14,206	14,765	15,117	6,217	11,948

<sup>(1) 6</sup> vehicle trips per direction were added to the 2016 through 2021 rental car facility counts to account for shuttles to/from the off-airport rental car facility at the southeast corner of Airport and Century Boulevards

<sup>(2)</sup> Per Table 4, 198 inbound and 47 outbound car trips were added to the 2021 counts to account for parking facilities where traffic counts were not recorded manually. (3) 50 total vehicle trips were added to each annual count total to account for traffic at 6 minor driveways (5 of which are on Imperial Hwy)

<sup>(4) 20</sup> total vehicle trips were added to the 2008 through 2021 counts to account for traffic at the fire station on Emerson Avenue n/o Westchester Parkway

<sup>(5)</sup> Lot E was closed on April 30, 2020 due to Covid-19.

# 2021 TRIP GENERATION SUMMARY FOR LAX - 11 AM TO 12 PM

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Airport Facility	Traffic															
	Counts															
CTA	9,841	9,346	9,419	9,021	9,312	9,000	9,046	9,035	9,800	10,559	11,434	11,592	11,582	11,184	5,215	9,655
RAC/Rental Car Facilities (1)	1,890	1,829	1,727	1,559	1,605	1,781	1,761	1,886	1,989	2,183	2,203	2,320	2,662	2,302	801	1,274
LAX Public Parking Lots (5)	177	226	172	172	122	68	77	72	137	81	118	117	55	56	0	0
Employee Parking	394	384	548	508	409	862	480	511	642	649	602	617	534	624	0	413
Private Parking (2)	294	461	405	373	449	520	314	436	398	470	364	317	475	590	106	348
World Way West	668	737	833	628	607	648	708	578	602	614	577	695	812	701	435	428
Cargo and Ancillary (3)	1,993	2,094	1,983	1,636	1,739	1,802	1,875	1,865	1,857	1,810	1,899	2,376	2,415	2,020	1,489	1,883
LAX Northside (4)	0	0	20	20	20	20	20	20	20	20	20	20	20	20	20	20
TOTAL	15,257	15,077	15,107	13,917	14,263	14,701	14,281	14,403	15,445	16,386	17,217	18,054	18,555	17,497	8,066	14,021

<sup>(1) 6</sup> vehicle trips per direction were added to the 2016 through 2020 rental car facility counts to account for shuttles to/from the off-airport rental car facility at the southeast corner of Airport and Century Boulevards (2) Per Table 4, 123 inbound and 60 outbound car trips were added to the 2021 counts to account for parking facilities where traffic counts were not recorded manually.

<sup>(3) 50</sup> total vehicle trips were added each annual count to account for traffic at 6 minor driveways (5 of which are on Imperial Hwy)

<sup>(4) 20</sup> total vehicle trips were added to the 2008 through 2021 counts to account for traffic at the fire station on Emerson Avenue n/o Westchester Parkway

<sup>(5)</sup> Lot E was closed on April 30, 2020 due to Covid-19.

# 2021 TRIP GENERATION SUMMARY FOR LAX - 5 PM TO 6 PM

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Airport Facility	Traffic															
	Counts															
CTA	8,714	8,120	8,052	7,300	7,431	7,478	7,153	7,562	8,328	8,839	10,231	10,522	9,945	10,108	4,029	8,206
RAC/Rental Car Facilities (1)	1,242	1,172	1,120	938	981	1,319	1,478	1,263	1,214	1,491	1,390	1,782	1,817	1,557	661	863
LAX Public Parking Lots (5)	180	257	206	220	164	108	92	112	144	120	133	137	37	49	0	0
Employee Parking	548	591	637	633	612	597	613	533	629	723	663	699	584	569	0	396
Private Parking (2)	395	601	423	424	483	562	439	457	344	503	392	337	373	538	77	325
World Way West	451	373	506	356	307	284	327	306	352	323	287	353	401	395	212	278
Cargo and Ancillary (3)	2,359	2,411	2,128	2,152	2,137	2,029	2,339	1,965	2,131	2,231	2,817	2,870	2,836	2,739	1,429	1,709
LAX Northside (4)	0	0	20	20	20	20	20	20	20	20	20	20	20	20	20	20
TOTAL	13,889	13,525	13,092	12,043	12,135	12,397	12,461	12,218	13,162	14,250	15,933	16,720	16,013	15,975	6,428	11,797

<sup>(1) 6</sup> vehicle trips per direction were added to the 2016 through 2020 rental car facility counts to account for shuttles to/from the off-airport rental car facility at the southeast corner of Airport and Century Boulevards (2) Per Table 4, 72 inbound and 99 outbound car trips were added to the 2021 counts to account for parking facilities where traffic counts were not recorded manually.

<sup>(3) 50</sup> total vehicle trips were added to the 2005 through 2021 counts to account for traffic at 6 minor driveways (5 of which are on Imperial Hwy)

<sup>(4) 20</sup> total vehicle trips were added to the 2008 through 2021 counts to account for traffic at the fire station on Emerson Avenue n/o Westchester Parkway

<sup>(5)</sup> Lot E was closed on April 30, 2020 due to Covid-19.

# Airport Peak Hour (11 AM - Noon) Traffic Volumes

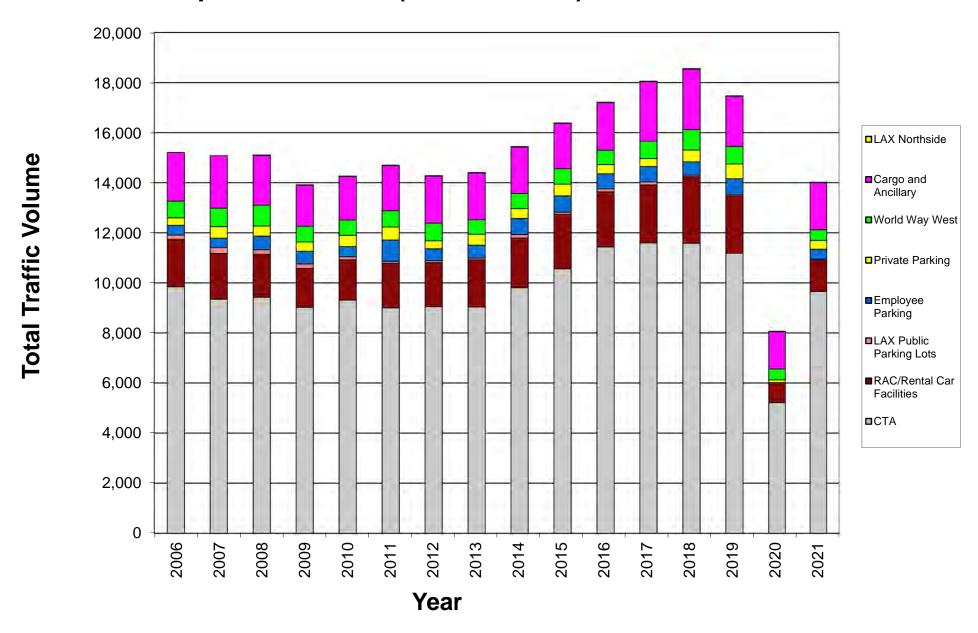


Figure 2

# FlyAway Program:

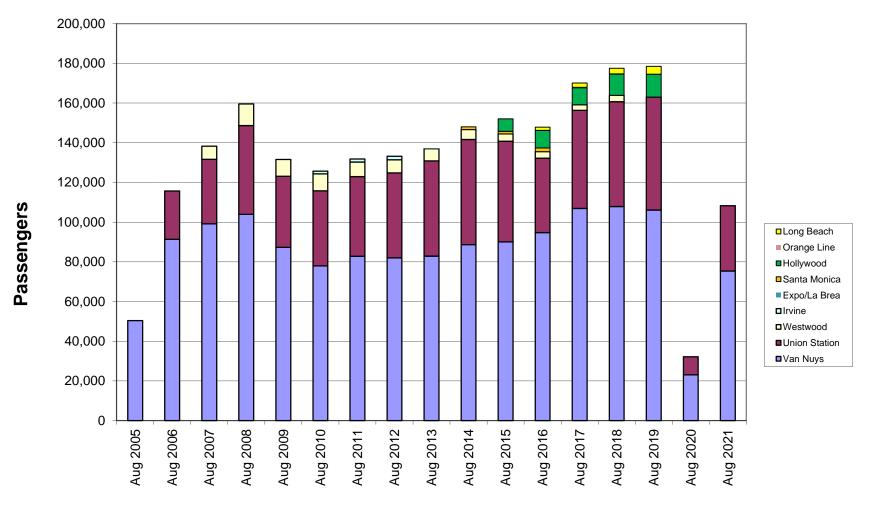
The LAX FlyAway is a low-cost shuttle service operating between a remote parking facility and LAX. While nine FlyAway sites started in 1975, four remain in operation. Two sites were closed this year due to impacts of COVID-19.

# FlyAway Service History

	Start of Service	End of Service	Operating
Van Nuys	1975		Yes
Union Station	March 2006		Yes
Westwood/UCLA	June 2007	June 2019	
Irvine Transp. Ctr.	November 2009	Summer 2012	
Exposition Light Rail	Spring 2013	September 2014	
Santa Monica	July 2014	September 2016	
Hollywood	September 2014	March 2020	
Long Beach	December 2015	March 2020	
Orange Light Rail Line	December 2015	Jan 2019	

The ridership totals for the month of August during the last sixteen years are shown in **Figure 3**. The FlyAway program has helped to reduce the number of private vehicles into and out of the LAX CTA. At the time of data collection in August 2021, the Hollywood and Long Beach routes were suspended due to impacts of COVID-19. Figure 3 shows a dramatic increase in Union Station and Van Nuys services, over 336%, in 2021 FlyAway passenger ridership compared to 2020, but ~61% of 2019 pre-COVID-19 levels.

# **Annual FlyAway Ridership**



Year

Figure 3

# **2021 LAX Trip Generation Table**

			Traffic Volumes Inbound			Traffic Volumes Outbound	
		AM (8 AM - 9 AM)	AP (11 AM - 12 PM )	PM ( 5 PM - 6 PM )	AM (8 AM - 9 AM)	AP ( 11 AM - 12 PM )	PM ( 5 PM - 6 PM )
LOCATION	Date Recorded Day	Cars Trucks Shuttles Total	Cars Trucks Shuttles Total	Cars Trucks Shuttles Total	Cars Trucks Shuttles Total	Cars Trucks Shuttles Total	Cars Trucks Shuttles Total
Airport Employee Parking	0/0/0004	45 1 0 1 0 1 45			40 10 10 10		
Employee Lot West - Entry/Exit on Westchester Pkwy Employee Lot East - Entry/Exit on Jenny Ave n/o Westchester Pkwy Employee Lot South - Entry/Exit on Jetway Blvd w/o Westchester Pkwy Employee Lot South - Entry/Exit on 96th St e/o Sepulveda Bl Airport Police Parking - Entry/Exit on Alverstone Ave west side, n/o 96th St Airport Police Parking - Entry/Exit on Alverstone Ave east side, n/o 96th St Airport Police Parking - Entry/Exit s/o 96th St west side (Rolling gate)	8/6/2021 FRI 8/6/2021 FRI 8/6/2021 FRI 8/13/2021 FRI 8/13/2021 FRI 8/13/2021 FRI 8/13/2021 FRI 8/13/2021 FRI	45         0         0         45           90         0         0         90           110         0         23         133           38         1         0         39           1         0         0         1           1         0         0         1           1         0         0         1           1         0         0         1	38         0         0         38           63         0         0         63           89         0         17         106           55         0         0         55           0         0         0         0           3         0         0         3           0         0         0         0	22         0         0         22           28         0         0         28           56         0         24         80           32         0         0         32           1         0         0         1           1         0         0         1           1         0         0         1	12         0         0         12           7         0         0         7           10         0         0         10           4         0         0         4           4         0         0         4           1         0         0         1           0         0         0         0	28         0         0         28           45         0         0         45           37         0         0         37           50         0         0         50           2         0         0         2           3         0         0         3           0         0         0         0	46         0         0         46           64         0         0         64           82         0         0         82           57         0         0         57           2         0         0         2           3         0         0         3           1         0         0         1
Suk World Way West	ototal	286 1 23 310	248 0 17 265	141 0 24 165	38 0 0 38	165 0 0 165	255 0 0 255
World Way West Sub	8/20/2021 FRI stotal	182     7     0     189       182     7     0     189	220         5         0         225           220         5         0         225	118     5     0     123       118     5     0     123	134 7 0 141 134 7 0 141	195         8         0         203           195         8         0         203	145     5     0     150       145     5     0     150
Cargo Facilities			·	F			
Cargo Facilities - Aviation Blvd and 104th St (West Leg) Cargo Facilities - Aviation Blvd and 111th St (West Leg)	8/13/2021 FRI 8/13/2021 FRI	63         26         0         89           73         40         0         113	77 36 0 113 86 56 2 144	36     35     0     71       49     37     2     88	40     21     0     61       63     42     0     105	70 33 1 104 78 49 0 127	76         23         0         99           91         63         0         154
Cargo Facilities - Century Blvd and Avion Drive (South Leg) Cargo Facilities - Century Blvd and Airport Blvd (South Leg)	8/20/2021 FRI 8/20/2021 FRI	75 13 0 88 57 18 1 76	89 10 3 102 83 11 1 95	49         8         0         57           35         22         0         57	50 16 0 66 57 11 1 69	78 24 3 105 72 18 2 92	56         20         0         76           32         24         0         56
Cargo Facilities - Century Blvd and Postal Road (South Leg) Cargo Facilities - Century Blvd and International Rd (South Leg)	8/20/2021 FRI 8/20/2021 FRI	42 10 0 52 34 6 0 40	26 9 0 35 45 8 0 53	26 13 0 39 44 15 0 59	21         7         0         28           17         1         0         18	16 11 0 27 24 4 0 28	28 10 0 38 19 4 0 23
Cargo Facilities - Imperial Hwy and Imperial Terminal (North Leg)	8/13/2021 FRI	41 6 0 47	33 6 0 39	28 6 0 34	28 9 0 37	43 6 0 49	41 13 1 55
Cargo Facilities - Imperial Hwy and California St (North Leg) Cargo Facilities - Imperial Hwy and Hughes Way (North Leg)	8/13/2021 FRI 8/13/2021 FRI	74 10 2 86 83 20 0 103	65 10 1 76 94 24 2 120	30         16         2         48           75         29         0         104	64 4 2 70 56 32 0 88	60         12         1         73           77         30         0         107	69 12 2 83 90 27 1 118
Cargo Facilities - Imperial Hwy and unsignalized dwy e/o Hughes Way (North Leg)	8/13/2021 FRI	30 18 0 48	35 17 0 52	83 28 0 111	29 15 0 44	27 12 1 40	24 7 0 31
Cargo Facilities - Imperial Hwy and Kilroy Center Dr (North Leg) Cargo Facilities - Imperial Hwy and Douglas St (North Leg)	8/13/2021 FRI 8/13/2021 FRI	3         2         0         5           81         31         0         112	3         0         0         3           57         27         0         84	2 5 0 7 44 24 0 68	3 0 1 4 37 28 4 69	8         5         0         13           53         36         0         89	12         4         0         16           70         27         0         97
Cargo Facilities - Imperial Hwy and unsignalized dwy btwn Douglas St and Aviation BI (North		28 10 0 38 684 210 3 897	22   14   0   36	29 13 0 42	480 189 8 677	627 246 8 881	632 238 4 874
	total	684 210 3 897	715 228 9 952	530 251 4 785	480 189 8 677	627 246 8 881	632 238 4 874
Rental Car Facilities  Avis Rental Car - Airport Blvd s/o Westchester Pkwy (Rental Car Entrance)	8/6/2021 FRI	52 0 0 52	73 0 0 73	36 0 0 36	0 0 0 0	2 0 0 2	1 0 0 1
Avis Rental Car - Airport Blvd s/o Westchester Pkwy (Employee Entrance/Exit)	8/6/2021 FRI	21 0 0 21 0 0 0 0	15 0 0 15 0 0 0 0	4 0 0 4 0 0 0 0	9 0 0 9 48 0 0 48	16 0 0 16 83 0 0 83	23 0 0 23 54 0 0 54
Avis Rental Car - Jetway Blvd east side, s/o Westchester Pkwy (Rental Car Exit)  Budget Rental Car - Airport Blvd btwn 96th PI and 98th St (Rental Car Entrance)	8/6/2021 FRI 8/13/202 FRI	0         0         0         0           72         0         0         72	0         0         0         0           71         0         0         71	0 0 0 0 35 0 0 35	48         0         0         48           0         0         0         0	83 0 0 83 0 0 0 0	54         0         0         54           1         0         0         1
Budget Rental Car - 98th St w/o Airport Blvd (Visitor Entrance/Exit)  Budget Rental Car - 96th Pl w/o Airport Blvd (Rental Car Exit)	8/13/2021 FRI 8/13/2021 FRI	14 0 0 14 0 0 0 0	9 0 0 9 0	11 0 0 11 0 0 0 0	13 0 0 13 44 2 0 46	11 0 0 11 92 0 0 92	10 0 0 10 30 0 6 36
Enterprise/Alamo/National Rental Car - Three dwys on Aviation Blvd s/o Hillcrest Blvd	8/6/2021 FRI	24 0 20 44	35 0 19 54	44 0 23 67	31 0 0 31	47 0 0 47	27 0 0 27
Enterprise/Alamo/National Rental Car - Entry dwy on Hillcrest Blvd e/o Aviation Blvd Enterprise/Alamo/National Rental Car - Exit dwys on Isis Ave s/o Hillcrest Blvd	8/6/2021 FRI 8/6/2021 FRI	111 0 0 111 4 0 0 4	165         0         0         165           1         1         0         2	162         0         0         162           3         0         0         3	0         0         0         0           76         0         0         76	0 0 0 0 131 0 0 131	0         0         0         0           79         0         0         79
Fox Rental Car - Century Blvd btwn Aviation Blvd and Concourse Way (at 5500 W. Century E	8/13/2021 FRI	24 0 0 24	24 0 0 24	16 0 0 16	0 0 0 0	0 0 0 0	0 0 0 0
Fox Rental Car - Exit dwy on 102nd St  Hertz/Dollar/Thrifty Rental Car - Airport Blvd btwn Interceptor St and Arbor Vitae St	8/13/2021 FRI 8/6/2021 FRI	0 0 0 0 0 0 20 20	0 0 0 0 0 23 23	1 0 0 1 0 0 21 21	20         0         0         20           0         0         0         0	28         0         0         28           0         0         0         0	15 0 0 15 0 0 0 0
Hertz/Dollar/Thrifty Rental Car - Arbor Vitae St e/o Airport Blvd	8/6/2021 FRI 8/6/2021 FRI	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	50         0         0         50           0         0         20         20	127 0 0 127 0 0 25 25	98         0         0         98           0         0         20         20
Hertz/Dollar/Thrifty Rental Car - Arbor Vitae St e/o Airport Blvd Hertz/Dollar/Thrifty Rental Car - Interceptor St e/o Airport Blvd	8/6/2021 FRI	112 1 0 113	191 0 1 192	128 0 0 128	30 1 0 31	81 0 1 82	46 0 1 47
Sixt Rental Car - Three dwys at 9000 Bellanca Ave	8/6/2021 FRI	456 4 51 511	32         0         10         42           616         1         53         670	451 0 53 504	15         0         10         25           336         3         30         369	645 0 36 681	16 0 9 25 400 0 36 436
	iolai	TOU 4 01 011	010 1 00 070	<del>1</del> 01 0 00 004	330 3 30 309	0+0 0 30 001	<del>1</del> 00 0 30 430
Off Airport Parking Facilities The Parking Spot (Century) - Bellanca Ave s/o 98th St	8/6/2021 FRI	4 0 15 19	4 0 10 14	3 0 13 16	1 0 13 14	0 0 10 10	1 0 14 15
The Parking Spot (Century) - Bellanca Ave s/o 98th St	8/6/2021 FRI	0 0 0 0	0 0 0 0	0 0 0 0	11 0 0 11	12 0 0 12	14 0 0 14
The Parking Spot (Century) - 98th St w/o Bellanca Ave The Parking Spot (Century) - Century Blvd w/o Bellanca Ave	8/13/2021 FRI 8/20/2021 FRI	0         0         0         0           43         0         0         43	0         0         0         0           38         0         0         38	0         0         0         0           23         0         0         23	0 0 0 0 3 0 0 3	0         0         0         0           3         0         0         3	0         0         0         0           3         0         0         3
Wally Park - Bellanca Ave n/o 98th St Wally Park - Bellanca Ave n/o 98th St	8/6/2021 FRI 8/6/2021 FRI	50         0         8         58           0         0         0         0	31 0 6 37 0 0 0 0	15 0 10 25 0 0 0 0	19 0 8 27 0 0 0 0	17 0 5 22 0 0 0 0	16         0         10         26           1         0         0         1
The Parking Spot (Sepulveda) - Sepulveda Westway s/o Westchester Pkwy	8/13/2021 FRI	39 0 0 39	17 0 0 17	16 0 0 16	6 0 0 6	9 0 1 10	24 0 0 24
The Parking Spot (Sepulveda) - Westchester Pkwy w/o Sepulveda Blvd  *Park One - Entry dwy north side of "Little" Century Blvd w/o Sepulveda Blvd	8/13/2021 FRI 8/20/2021 FRI	7 0 11 18 172 0 0 172	0 0 10 10 246 0 0 246	0 0 16 16 236 0 0 236	1 0 8 9 5 0 0 5	0 0 9 9	0 0 15 15 1 0 0 1
*Park One - Alley s/o 96th St w/o Alverstone Ave (Exit)	8/13/2021 FRI	0 0 0 0	0 0 0 0	0 0 0 0	216 0 2 218	317 0 0 317	342 0 1 343
Sunrise Parking - 98th St e/o Vicksburg Ave 405 Airport Parking - La Cienega Bl east side, n/o Century Blvc	8/13/2021 FRI 8/13/2021 FRI	13         0         3         16           69         0         4         73	2 0 2 4 20 0 5 25	2 0 2 4 6 0 4 10	3         0         4         7           3         0         3         6	2 0 1 3 10 0 6 16	3 0 3 6 27 0 3 30
Suk	total	225 0 41 266	112 0 33 145	65 0 45 110	47 0 36 83	53 0 32 85	89 0 45 134

<sup>\*</sup>Omitted due to service suspension