TRAFFIC GENERATION REPORT Los Angeles International Airport / August 2023



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 2023.

The typical design day used for LAX planning is a Friday in August. The results of the August 2023 traffic volume study reveal that there were **13,574** trips recorded at LAX during the 8 am to 9 am peak hour, **15,596** trips in the 11 am to 12 pm airport peak hour and **13,301** trips in the 5 pm to 6 pm peak hour.

Through most of 2023, the impact of the 2020 COVID-19 global pandemic tapered off yielding to a mild and noticeable increase in travel. At the time of data collection in August 2023, LAX vehicle traffic levels were 3 to 11 percent greater than those in 2022, but still 10 to 17 percent below pre-COVID-19 levels from 2019. While 2023 traffic levels are substantially greater than the pandemic year, 2020, a full recovery from the pandemic has not yet been realized at LAX. According to Transportation Security Agency (TSA) data, 2023 average peak passenger screening is still approximately at 85% of 2019 peak.

Similar to previous years and since 2019, LAX-it continued to provide the same service facilitating Transportation Network Companies (TNC) and Taxi to operate and pick up passengers in a lot that is just east of Terminal 1. As a reminder LAX-it included 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) except for TNC and Taxi pickups at LAX-it after October 2019. TRAVIS includes electro-magnetic loop detectors embedded in each travel lane of entry and exit roadways. Traffic information is continuously recorded in 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. These counts are currently not connected to TRAVIS. However, to be included in this reporting, LAX-it volumes were added to CTA traffic counts in Tables 5, 6 and 7.

Database traffic counts and video counts for LAX CTA for Fridays in August 2023 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 | | | |
| 8/04/23 | 5,068 | 6,042 | 4,552 | 4,909 | 6,038 | 4,739 | | | |
| 8/11/23 | 5,088 | 5,538 | 4,530 | 4,980 | 5,543 | 4,913 | | | |
| 8/18/23 | 5,309 | 5,412 | 4,331 | 5,088 | 5,463 | 4,605 | | | |
| 8/25/23 | 5,021 | 5,152 | 4,612 | 4,874 | 5,351 | 4,989 | | | |
| Average | 5,122 | 5,536 | 4,506 | 4,963 | 5,599 | 4,812 | | | |

Table 1

The total number of trips into <u>and</u> out of the LAX CTA on each of the Fridays in August 2023, 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 |
| 8/04/23 | 9,977 | 12,080 | 9,291 |
| 8/11/23 | 10,068 | 11,081 | 9,443 |
| 8/18/23 | 10,397 | 10,875 | 8,936 |
| 8/25/23 | 9,895 | 10,503 | 9,601 |
| Average | 10,084 | 11,135 | 9,318 |

Table 2

World Way West:

Traffic counts for eastbound and westbound movements on World Way West, east of Pershing Drive, were recorded by LADOT. 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 is included in **Table 8**.

<u>Driveways</u>

Traffic during the three peak hours was counted at 70 airport-related driveways. The counts were conducted by National Data & Surveying Services (NDS), under a contract by LAWA. 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 4th, 2023. The traffic counts are shown in Table 8.

Aviation Boulevard (west leg of intersection) locations:

- 104th Street
- 111th 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 was 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. In November 2021 a new airport public car park, LAX Economy Parking (ITF West), was fully opened to the public utilizing airport shuttles to transfer passengers to and from the CTA. The new facility traffic volumes were captured in August 2023 counts and are shown in Table 8. Only the car volumes are reported in Tables 5, 6 & 7 as the facility shuttles were captured by the CTA TRAVIS system.

Airport Operated Employee Parking Lots

Traffic counts were conducted by National Data & Surveying (NDS) at the LAWAoperated 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 96th 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 three Fridays in August 2023.

Avis – Airport Boulevard/Westchester Parkway/Jetway Boulevard:

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

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

- Two driveways on Airport Boulevard between 96th Place and 98th Street
- Two driveways on 96th Place west of Airport Boulevard
- Driveway on 98th 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 102nd 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 pick up 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 96th 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.

During the August 2023 collection period, several facilities previously recorded were either not operational or mixed with hotel shuttle operations. These facilities were omitted from the Private Airport Parking list. The following is a list of operating airport private parking facilities that were counted.

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

- Two driveways on Bellanca Ave south of 96th Street
- Driveway on 98th Street west of Bellanca Avenue
- Car entrance driveway on Century Blvd west of Bellanca
- Driveway in alley 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 98th Street



Traffic Count Map



Figure 1

Other Private Airport Parking Facilities:

Like 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) and Wally Park, the following trip generation factors were calculated:

Private Parking Car Trips per Inbound Shuttle

| AM | 83 trips/ 35 shuttles = 2.37 trips/shuttle |
|----|--|
| AP | 50 trips/ 32 shuttles = 1.56 trips/shuttle |
| PM | 33 trips/ 36 shuttles = 0.92 trips/shuttle |

Private Parking Car Trips per Outbound Shuttle

| ΑM | 26 trips/ 31 shuttles = 0.84 trips/shuttle |
|----|--|
| AP | 37 trips/ 28 shuttles = 1.32 trips/shuttle |
| PM | 57 trips/ 42 shuttles = 1.36 trips/shuttle |

The number of shuttles recorded in the LAX CTA on the four Fridays in August 2023 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 2023 by the joint-use, off-airport parking facilities is shown in **Table 3**.

In and Out Shuttle Trips by Other Off-Airport Parking Facilities

| | F | Peak Ho | ur |
|-----------------|----|---------|-----|
| Date | AM | AP | PM |
| 8/04/23 | 77 | 60 | 128 |
| 8/11/23 | 70 | 62 | 96 |
| 8/18/23 | 67 | 67 | 98 |
| 8/25/23 | 62 | 65 | 76 |
| Rounded Average | 69 | 64 | 100 |

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 | | Average Number of | | No. of |
|---------|---------------------|---|----------------------|---|-----------|
| Hour | (Trips per Shuttle) | | Shuttles | | Trips |
| AM | 2.37 | Х | 31 | = | 74 |
| Airport | 1.56 | Х | 31 | = | 48 |
| PM | 0.92 | Х | 50 | = | 46 |

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

| | | | Average | | No. |
|---------|---------------------|---|-----------|---|-------|
| Peak | Adjustment Factor | | Number of | | of |
| Hour | (Trips per Shuttle) | | Shuttles | | Trips |
| AM | 0.84 | Χ | 38 | = | 32 |
| Airport | 1.32 | Χ | 33 | = | 44 |
| PM | 1.36 | Х | 50 | = | 68 |

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:

• 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. The work on terminal cores has all been completed. However, access to the pedestrian bridge is still under construction.

• 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 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.

Midfield Satellite Concourse (MSC) South

Midfield Satellite Concourse (MSC) South is a part of Los Angeles International Airport (LAX)'s multi-billion-dollar Capital Improvement Program (CIP). The project is an extension of the West Gates at Tom Bradley International Terminal and will add approximately 150,000 square feet and eight gates for narrowbody aircraft. The new MSC South Terminal will serve group III aircraft, including the

Boeing 737 and Airbus 320. The entire MSC (North and South) Terminal will be accessed by tunnel from Tom Bradley International Terminal or by bus from a number of domestic Terminals. This critical piece of infrastructure will further support the airport's capacity-building goals in advance of the 2026 World Cup and 2028 Olympic and Paralympic games. Construction on this project started in 2023 and scheduled completion date August 2025.

• 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.

o ITF-West – LAX Economy Parking/ Security Badging Office

One of LAMP components is the Intermodal Transportation Facility West (ITF-W), also known as LAX Economy Parking has constructed a new parking structure located at the southeast corner of Jetway Boulevard and 94th Street. Currently, this facility is fully operational. However, and until the Automated People Mover is completed, passengers are being transported to and from the CTA by the facility airport shuttles. LAX-Economy provides over 4,000 parking stalls and currently accommodates the Security Badging Office (SBO). This facility was opened for public in November 2021 and driveway directional volumes were captured in August counts.

Roadways, Utilities & Enabling (RUE)

Roadways, Utilities & Enabling program is in the process of constructing several key individual projects that are directly related to the Landside Access Modernization Program (LAMP) or will provide a utility service or enabling work for a LAMP related project or facility. RUE provides the next phase of enabling for LAMP, focusing on high priority projects necessary to support the Automated People Mover (APM), Consolidated Rental Car Facility (ConRAC) and Intermodal Transportation Facility West (ITFW) and ITF East. The Project also addresses several Capital Improvement Plans (CIP) utility projects. Some of the projects that are currently under construction include:

- Roadway Wayfinding for the overall LAMP area
- I-405 On/Off ramp improvements at La Cienega BI
- 98th Street Civil Packages
- Aviation BI Roadway Improvements
- Concourse Way Civil Packages
- Arbor Vitae Street Roadway Improvements
- Installation of Utilities through the CTA and within City of Los Angeles and Inglewood right of way.

Summary of Peak Hour Counts:

While Subsection C, *Project Trip Generation*, of Section 12, *Transportation Regulations*, of the <u>LAX Specific Plan</u>¹ 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 in **Figure 2**.

As expected, the Airport Peak Hour traffic count total of 15,596 trips is higher than the counts recorded for the AM and PM peak hours. The August 2023 AM peak hour volume is 13,574 trips and the August 2023 PM peak hour volume is 13,301 trips. The traffic counts show that August 2023 AM and PM trips were 10-11% higher than 2022 August trips and 83-90% of 2019 August trips, and the 2023 Airport peak hour, noon trips, were 3% higher than trips recorded at the same time last year and 89% of those in 2019.

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¹ Ordinance Amendment: 185164, 9/8/17

2023 TRIP GENERATION SUMMARY FOR LAX - 8 AM TO 9 AM

| Airport Facility | 2008 Traffic | 2009 Traffic | 2010 Traffic | 2011 Traffic | 2012 Traffic | 2013 Traffic | 2014 Traffic | 2015 Traffic | 2016 Traffic | 2017 Traffic | 2018 Traffic | 2019 Traffic | 2020 Traffic | 2021 Traffic | 2022 Traffic | 2023 Traffic |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | Counts |
| | | | | | | | | | | | | | | | | |
| CTA | 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 | 8,688 | 10,084 |
| RAC/Rental Car Facilities (1) | 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 | 1,053 | 1,002 |
| LAX Public Parking Lots | 165 | 145 | 100 | 87 | 68 | 84 | 150 | 106 | 112 | 118 | 52 | 49 | 0 | 0 | 72 | 47 |
| Employee Parking | 524 | 446 | 393 | 387 | 417 | 436 | 570 | 549 | 507 | 506 | 438 | 390 | 0 | 325 | 390 | 435 |
| Private Parking (2) | 388 | 359 | 331 | 294 | 285 | 360 | 437 | 462 | 379 | 374 | 583 | 569 | 96 | 517 | 427 | 215 |
| World Way West | 648 | 598 | 503 | 490 | 559 | 544 | 520 | 611 | 496 | 547 | 568 | 518 | 324 | 330 | 307 | 251 |
| Cargo and Ancillary (3) | 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 | 1,391 | 1,520 |
| LAX Northside (4) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | | | | | | | | | | | | | | | | |
| TOTAL | 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 | 12,348 | 13,574 |

^{(1) 6} vehicle trips per direction were added to the 2016 through 2023 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, 74 inbound and 32 outbound car trips were added to the 2023 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)

^{(4) 20} total vehicle trips were added to each annual count total to account for traffic at the fire station on Emerson Avenue n/o Westchester Parkway

2023 TRIP GENERATION SUMMARY FOR LAX - 11 AM TO 12 PM

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Airport Facility | Traffic |
| | Counts |
| | | | | | | | | | | | | | | | | |
| CTA | 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 | 10,301 | 11,135 |
| RAC/Rental Car Facilities (1) | 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 | 1,569 | 1,530 |
| LAX Public Parking Lots | 172 | 172 | 122 | 68 | 77 | 72 | 137 | 81 | 118 | 117 | 55 | 56 | 0 | 0 | 80 | 43 |
| Employee Parking | 548 | 508 | 409 | 862 | 480 | 511 | 642 | 649 | 602 | 617 | 534 | 624 | 0 | 413 | 605 | 676 |
| Private Parking (2) | 405 | 373 | 449 | 520 | 314 | 436 | 398 | 470 | 364 | 317 | 475 | 590 | 106 | 348 | 338 | 179 |
| World Way West | 833 | 628 | 607 | 648 | 708 | 578 | 602 | 614 | 577 | 695 | 812 | 701 | 435 | 428 | 411 | 342 |
| Cargo and Ancillary (3) | 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 | 1,809 | 1,671 |
| LAX Northside (4) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | | - | _ | _ | | | | | | | | | | - | - | |
| TOTAL | 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 | 15,133 | 15,596 |

^{(1) 6} vehicle trips per direction were added to the 2016 through 2023 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, 48 inbound and 44 outbound car trips were added to the 2023 counts to account for parking facilities where traffic counts were not recorded manually.

^{(3) 50} total vehicle trips were added each annual count to account for traffic at 6 minor driveways (5 of which are on Imperial Hwy)

^{(4) 20} total vehicle trips were added to each annual count total to account for traffic at the fire station on Emerson Avenue n/o Westchester Parkway

2023 TRIP GENERATION SUMMARY FOR LAX - 5 PM TO 6 PM

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Airport Facility | Traffic |
| | Counts |
| | | | | | | | | | | | | | | | | |
| CTA | 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 | 8,103 | 9,318 |
| RAC/Rental Car Facilities (1) | 1,120 | 938 | 981 | 1,319 | 1,478 | 1,263 | 1,214 | 1,491 | 1,390 | 1,782 | 1,817 | 1,557 | 661 | 863 | 852 | 957 |
| LAX Public Parking Lots | 206 | 220 | 164 | 108 | 92 | 112 | 144 | 120 | 133 | 137 | 37 | 49 | 0 | 0 | 71 | 65 |
| Employee Parking | 637 | 633 | 612 | 597 | 613 | 533 | 629 | 723 | 663 | 699 | 584 | 569 | 0 | 396 | 529 | 606 |
| Private Parking (2) | 423 | 424 | 483 | 562 | 439 | 457 | 344 | 503 | 392 | 337 | 373 | 538 | 77 | 325 | 269 | 204 |
| World Way West | 506 | 356 | 307 | 284 | 327 | 306 | 352 | 323 | 287 | 353 | 401 | 395 | 212 | 278 | 242 | 267 |
| Cargo and Ancillary (3) | 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 | 1,911 | 1,864 |
| LAX Northside (4) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | | | | | | | | | | | | | | | | |
| TOTAL | 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 | 11,997 | 13,301 |

^{(1) 6} vehicle trips per direction were added to the 2016 through 2023 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, 46 inbound and 68 outbound car trips were added to the 2023 counts to account for parking facilities where traffic counts were not recorded manually.

^{(3) 50} total vehicle trips were added each annual count to account for traffic at 6 minor driveways (5 of which are on Imperial Hwy)

^{(4) 20} total vehicle trips were added to each annual count total to account for traffic at the fire station on Emerson Avenue n/o Westchester Parkway

Airport Peak Hour (11 AM - Noon) Traffic Volumes

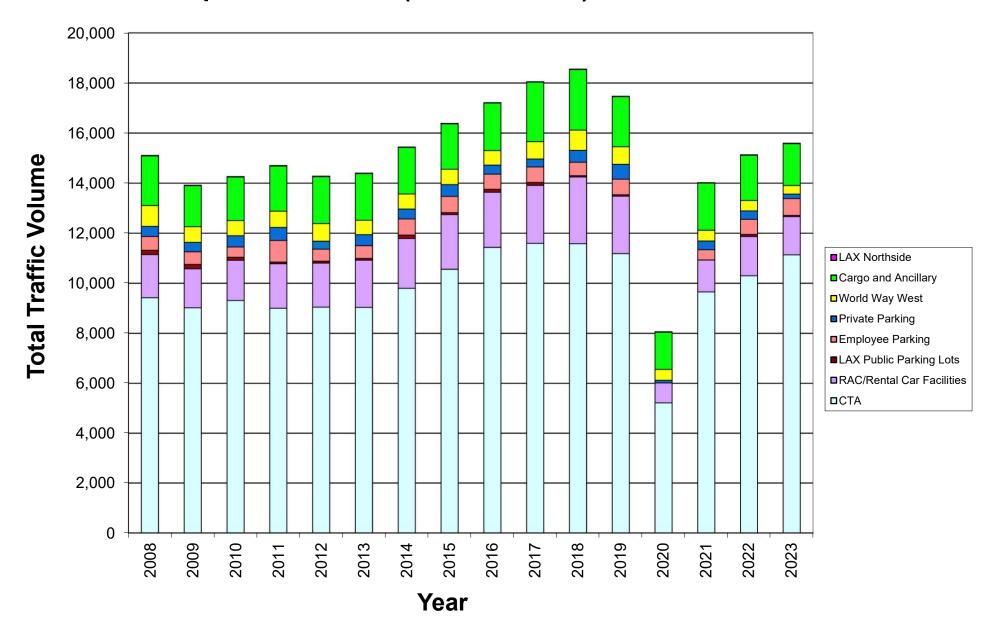


Figure 2

FlyAway Program:

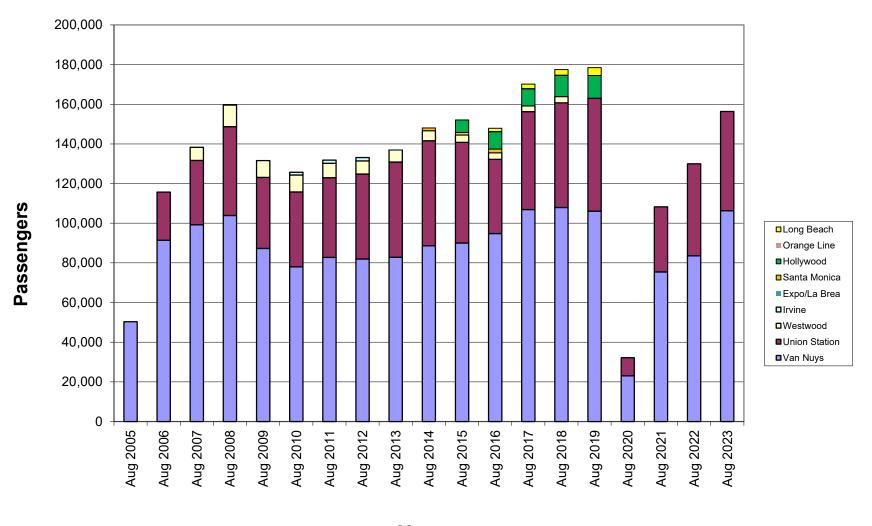
The LAX FlyAway is a low-cost shuttle service operating between a remote parking facility and LAX. While nine FlyAway sites started in 1975, two remain in operation.

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 seventeen 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. Figure 3 shows a 20% increase in Union Station and Van Nuys service in 2023 FlyAway passenger ridership compared to 2022, but still approximately 96% of 2019 pre-COVID-19 levels.

Annual FlyAway Ridership



Year

Figure 3

2023 LAX Trip Generation Table

Traffic Volumes Inbound

Traffic Volumes Outbound

| AP (11 AM -12 PM) PM (5 PM -6 PM | Cars Trucks Shuttles Total Cars Trucks Shuttles | 1 0 0 7 7 0 0 13 11 0 0 11 44 0 0 11 0 7 18 44 0 13 | 52 0 0 52 64 0 57 1 0 58 151 0 59 1 0 60 100 0 54 0 54 79 0 19 1 0 20 11 0 260 3 0 263 422 0 | 173 0 0 173 161 0 173 0 0 173 161 0 | 73 22 1 96 120 39 0 71 55 1 127 93 56 1 74 35 0 109 75 20 0 31 16 0 20 47 49 12 0 32 8 1 41 24 6 0 29 10 0 39 47 5 0 65 24 0 73 64 37 0 27 8 0 35 24 4 0 61 28 0 89 65 25 0 61 28 0 89 65 25 0 65 24 0 89 65 25 0 61 28 0 20 23 6 0 51 29 3 783 715 223 | 0 | 3 0 8 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
|----------------------------------|---|---|---|---|---|--|---|
| AM (8 AM - 9 AM) | Cars Trucks Shuttles Total | 0 0 7 7 12 0 0 7 12 0 0 12 12 0 7 19 | 19 0 0 19 16 0 0 16 12 0 0 12 15 0 0 15 22 0 0 22 11 1 0 12 95 1 0 96 | 77 0 0 0 77 77 0 0 0 77 | 66 29 0 95 51 33 3 87 48 21 0 69 30 23 0 53 7 0 0 7 44 7 0 61 29 11 0 40 61 26 0 87 14 2 0 6 5 0 0 5 38 22 0 60 445 181 3 629 | 0 0 0 0 10 0 0 10 60 0 0 10 13 0 0 13 0 2 17 19 0 0 0 13 6 0 0 0 6 44 0 0 0 0 27 0 34 61 0 0 0 0 0 0 0 0 0 0 0 17 0 0 0 0 17 0 0 0 0 0 0 0 0 0 17 0 0 0 0 0 0 0 0 0 0 0 0 0 0 24 0 0 25 25 33 33 33 | 0 0 12 12 0 0 0 7 0 0 0 0 0 0 0 0 0 1 0 0 0 1 1 0 0 0 0 0 0 0 0 |
| PM (5 PM - 6 PM) | Cars Trucks Shuttles Total | 0 3 13 16 18 0 0 18 18 3 13 34 | 35 0 0 35 48 0 0 48 49 3 20 72 26 0 26 14 0 0 14 9 0 9 181 3 20 204 | 106 0 0 106 106 0 0 106 | 46 43 0 89 66 35 1 102 39 14 0 53 37 11 0 48 31 11 0 48 62 9 0 71 70 10 0 80 50 17 0 144 9 10 0 19 47 32 0 79 31 14 0 45 622 254 1 877 | 63 0 0 63 10 0 0 10 0 0 0 18 18 20 0 0 0 0 40 0 0 0 0 9 0 0 0 9 0 0 0 0 9 0 0 0 0 9 0 0 0 0 122 7 0 0 0 0 7 7 0 0 0 121 1 0 24 24 0 0 24 0 0 0 0 0 0 0 0 122 24 0 0 0 0 0 1 22 24 0 0 0 0 0 1 22 24 0 0 0 0 0 1 22 24 0 0 0 0 0 1 24 24 0 0 0 0 0 1 26 0 1 27 0 1 27 0 1 28 0 0 0 1 27 0 1 28 0 0 0 1 28 0 1 29 0 1 20 0 1 2 | 0 0 0 0 11 15 15 15 15 15 15 15 15 15 15 15 15 |
| AP (11 AM - 12 PM) | Cars Trucks Shuttles Total | 0 4 10 14 28 0 0 28 28 4 10 42 | 73 0 0 73 118 0 0 118 102 3 16 121 74 0 74 35 0 0 35 8 0 0 8 410 3 16 429 | 169 0 0 169 169 0 0 169 | 77 27 1 105 68 49 2 119 59 20 0 79 56 20 0 76 26 10 0 81 70 11 0 81 41 5 0 46 68 11 0 79 63 11 0 74 6 1 0 6 63 21 0 84 12 10 0 84 624 217 3 844 | 110 0 0 110 17 0 0 17 0 0 0 17 0 0 0 0 22 1 0 2 91 0 0 0 10 0 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 190 2 0 0 190 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 3 0 2 5 0 0 0 0 12 0 0 9 9 2 0 0 12 11 0 9 20 0 0 0 0 2 |
| AM (8 AM -9 AM) | Cars Trucks Shuttles Total | 0 2 7 9 33 0 0 33 33 2 7 42 | 67 0 0 67 113 0 0 113 85 5 23 113 40 0 0 40 22 0 0 22 7 0 0 7 334 5 23 362 | 174 0 0 174 174 0 0 174 | 79 36 0 115 80 36 1 117 54 16 0 70 32 20 0 52 18 8 0 26 41 10 0 51 54 8 0 62 66 14 0 80 70 24 0 94 35 17 0 3 69 18 0 87 27 9 0 36 627 217 1 845 | 74 0 0 74 25 0 0 25 0 0 0 0 13 0 0 13 0 0 0 0 82 1 0 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 168 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 5 0 3 8 0 0 0 0 1 0 12 13 22 0 0 22 1 0 0 0 1 12 0 8 20 0 0 0 0 0 |
| | LOCATION Becorded Day | Airport Public Parking Lots ny Parking (TF-W) - 94th Stelo Jetway Blvd (Passenger Vehicle Entry/Exit) Subtotal | Employee Lot West - Entry/Exit on Westchester Pkwy 8/4/2023 FRI Employee Lot West - Entry/Exit on Jenny Ave n/o Westchester Pkwy 8/4/2023 FRI Employee Lot East - Entry/Exit on Jenny Ave n/o Westchester Pkwy 8/4/2023 FRI Employee Lot South - Entry/Exit on Jetway Blvd w/o Westchester Pkwy 8/4/2023 FRI Employee Lot South - Entry/Exit on Jetway Blvd w/o Westchester Pkwy 8/4/2023 FRI Airport Police Facility - Entry/Exit on Loyola Blvd east side, s/o Lincoin Blvd 8/4/2023 FRI Airport Police Facility - Entry/Exit on 94th St, e/o Lincoin Blvd Subtotal | World Way West Subtotal Subtotal | Cargo Facilities (Nest Leg) 8/4/2023 FRI Cargo Facilities - Aviation Blvd and 104th St (West Leg) 8/4/2023 FRI Cargo Facilities - Aviation Blvd and Alizon Drive (South Leg) 8/4/2023 FRI Cargo Facilities - Century Blvd and Alizon Blvd (South Leg) 8/4/2023 FRI Cargo Facilities - Century Blvd and Alizon Blvd (South Leg) 8/4/2023 FRI Cargo Facilities - Century Blvd and International Rd (South Leg) 8/4/2023 FRI Cargo Facilities - Imperial Hwy and Imperial Terminal (North Leg) 8/4/2023 FRI Cargo Facilities - Imperial Hwy and Luginalized dwy elv (Horth Leg) 8/4/2023 FRI Cargo Facilities - Imperial Hwy and Milroy Center Dr (North Leg) 8/4/2023 FRI Cargo Facilities - Imperial Hwy and Milroy Center Dr (North Leg) 8/4/2023 FRI Cargo Facilities - Imperial Hwy and Milroy Center Dr (North Leg) 8/4/2023 FRI Cargo Facilities - Imperial Hwy and Douglas St (North Leg) 8/4/2023 FRI Cargo Facilities - Imperial Hwy and bouglas St (North Leg) 8/4/2023 FRI Cargo Facilities - Imperial Hwy and unsignalized dwy blvwn Douglas St and Aviation Blvd (North Leg) 8/4/2023 FRI </th <th>Avis Rental Car - Airport Blvd s/o Westchester Pkwy (Rental Car Entrance) Avis Rental Car - Airport Blvd s/o Westchester Pkwy (Rental Car Entrance/Exit) Avis Rental Car - Jetway Blvd deast side, s/o Westchester Pkwy (Rental Car Exit) Avis Rental Car - Jetway Blvd (Bus Entrance Only and Exit) Avis Rental Car - Jetway Blvd (Bus Entrance Only and Exit) Budget Rental Car - Airport Blvd bkw 96th Pl and 98th St (Shuttle Exit) Budget Rental Car - Airport Blvd bkw 96th Pl and 98th St (Shuttle Exit) Budget Rental Car - Airport Blvd bkw 96th Pl and 98th St (Shuttle Exit) Budget Rental Car - Selth St w/o Airport Blvd (Rental Car Exit) Budget Rental Car - 96th Pl w/o Airport Blvd (Rental Car Exit) Budget Rental Car - 96th Pl w/o Airport Blvd (Rental Car Exit) Budget Rental Car - 96th Pl w/o Airport Blvd (Rental Car Exit) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 86th Pl w/o Airport Blvd and Concourse Way (at 5500 W. Century Blvd) Budget Rental Car - Exit dwy on 102nd St Hertz/Dollar/Thrifty Rental Car - Airbor Vitae St e/o Airport Blvd Budget Rental Car - Airbor Vitae St e/o Airport Blvd Budget Rental Car - Three dwys at 9000 Bellanca Ave Skxt Rental Car - Three dwys at 9000 Bellanca Ave Skxt Rental Car - Three dwys at 9000 Bellanca Ave Subtotal</th> <th>Off Airport Parking Facilities The Parking Spot (Century) - Bellanca Ave s/o 98th St 84/12023 FRI The Parking Spot (Century) - Bellanca Ave s/o 98th St 84/12023 FRI The Parking Spot (Century) - 98th St w/o Bellanca Ave 84/12023 FRI The Parking Spot (Century) - Dwy in Alley w/o Bellanca Ave 84/12023 FRI The Parking Spot (Century) - Dwy in Alley w/o Bellanca Ave 84/12023 FRI Wally Park - Bellanca Ave n/o 98th St 84/12023 FRI Wally Park - Bellanca Ave n/o 98th St 84/12023 FRI The Devine Spot (Century) - Century British Aversacker Blown 84/12023 FRI</th> | Avis Rental Car - Airport Blvd s/o Westchester Pkwy (Rental Car Entrance) Avis Rental Car - Airport Blvd s/o Westchester Pkwy (Rental Car Entrance/Exit) Avis Rental Car - Jetway Blvd deast side, s/o Westchester Pkwy (Rental Car Exit) Avis Rental Car - Jetway Blvd (Bus Entrance Only and Exit) Avis Rental Car - Jetway Blvd (Bus Entrance Only and Exit) Budget Rental Car - Airport Blvd bkw 96th Pl and 98th St (Shuttle Exit) Budget Rental Car - Airport Blvd bkw 96th Pl and 98th St (Shuttle Exit) Budget Rental Car - Airport Blvd bkw 96th Pl and 98th St (Shuttle Exit) Budget Rental Car - Selth St w/o Airport Blvd (Rental Car Exit) Budget Rental Car - 96th Pl w/o Airport Blvd (Rental Car Exit) Budget Rental Car - 96th Pl w/o Airport Blvd (Rental Car Exit) Budget Rental Car - 96th Pl w/o Airport Blvd (Rental Car Exit) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 96th Pl w/o Airport Blvd (Shuttle Entrance) Budget Rental Car - 86th Pl w/o Airport Blvd and Concourse Way (at 5500 W. Century Blvd) Budget Rental Car - Exit dwy on 102nd St Hertz/Dollar/Thrifty Rental Car - Airbor Vitae St e/o Airport Blvd Budget Rental Car - Airbor Vitae St e/o Airport Blvd Budget Rental Car - Three dwys at 9000 Bellanca Ave Skxt Rental Car - Three dwys at 9000 Bellanca Ave Skxt Rental Car - Three dwys at 9000 Bellanca Ave Subtotal | Off Airport Parking Facilities The Parking Spot (Century) - Bellanca Ave s/o 98th St 84/12023 FRI The Parking Spot (Century) - Bellanca Ave s/o 98th St 84/12023 FRI The Parking Spot (Century) - 98th St w/o Bellanca Ave 84/12023 FRI The Parking Spot (Century) - Dwy in Alley w/o Bellanca Ave 84/12023 FRI The Parking Spot (Century) - Dwy in Alley w/o Bellanca Ave 84/12023 FRI Wally Park - Bellanca Ave n/o 98th St 84/12023 FRI Wally Park - Bellanca Ave n/o 98th St 84/12023 FRI The Devine Spot (Century) - Century British Aversacker Blown 84/12023 FRI |