

May 2019



# LOS ANGELES INTERNATIONAL AIRPORT (LAX)

AIRCRAFT EARLY TURN MONTHLY REPORT



*Los Angeles  
World Airports*

## Background

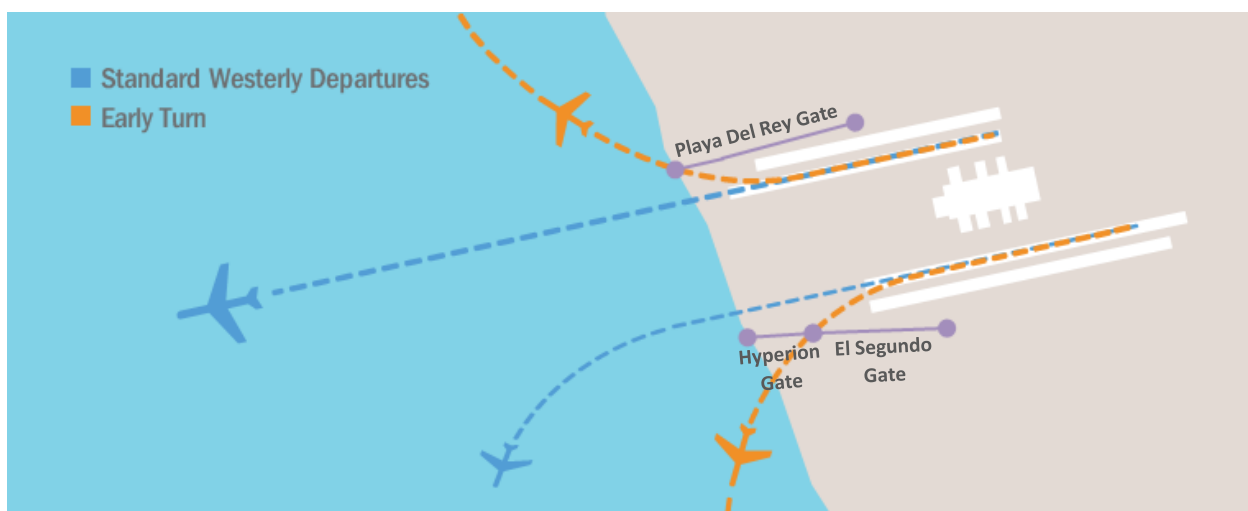
Los Angeles World Airports (LAWA) is the City of Los Angeles department that owns and operates Los Angeles International (LAX) and Van Nuys (VNY) airports and is committed to minimizing noise impacts from aircraft operations. Since 1959, LAWA has worked with the Federal Aviation Administration (FAA) and in partnership with adjacent communities to implement noise abatement programs.

While all aircraft generate noise, technological advancements have produced quieter aircraft and airports have implemented programs and procedures to reduce the effects of aircraft noise on surrounding communities. [LAWA noise abatement policies and programs](#) include no early turn policies, runway use procedures, over-ocean flight procedures, helicopter operating procedures, maintenance and engine run-up restrictions, and residential sound insulations programs within communities neighboring LAX and VNY.

The purpose of this report is to provide information regarding compliance with the LAX No Early Turn Policy, which requires pilots to refrain from turning prior to the shoreline when departing to the west unless otherwise instructed by FAA air traffic control. Early turns prior to the shoreline are discouraged as they result in noise impacts for adjacent neighborhoods to the north and south of the airport. Previous months' Early Turn data is also included in this report for context.

## WHAT IS AN EARLY TURN?

LAX aircraft generally depart to the west due to prevailing westerly winds. Pilots comply with the voluntary LAX No Early Turn policy by flying a straight path out over the shoreline, before making any turns. However, there are times when pilots may turn north or south prior to reaching the shoreline, resulting in an "early turn." To identify early turns, three virtual gates (Playa Del Rey to the north, El Segundo and Hyperion to the south) are used to monitor flight tracks. Any flight tracks that penetrate these gates are considered early turns.



## HOW DOES LAWA CONTINUE TO MONITOR AND MINIMIZE EARLY TURNS?

LAWA staff uses radar flight track data from the FAA in our noise monitoring system to identify and report early turns. While staff monitor and report all early turns, additional steps are taken to investigate early turns that fly over communities (El Segundo and Playa Del Rey gates) by listening to recordings of communications between pilots and air traffic controllers to determine the reason for the early turns. Hyperion gate early turns fly over Hyperion Treatment Plant and are generally higher in number due to the convergence of this gate with the departure paths from the south runways.

LAWA issues notifications, with supporting graphics, to aircraft operators that deviate from this policy and requests they investigate those early turns not initiated by the FAA. LAWA requests that aircraft operators respond to the noise management team with an explanation of why the incident occurred and what efforts will be made to improve compliance with this policy. LAWA also communicates with the FAA regarding this procedure to minimize FAA-directed early turns.

LAWA regularly provides this information to the local jurisdictions affected by the early turns and seeks improvement in performance from the airlines and pilots.

## REASONS FOR AN EARLY TURN?

LAWA's LAX Noise Management staff reviews early turns to identify the reasons for deviations from the policy, which are grouped into three (3) primary categories:

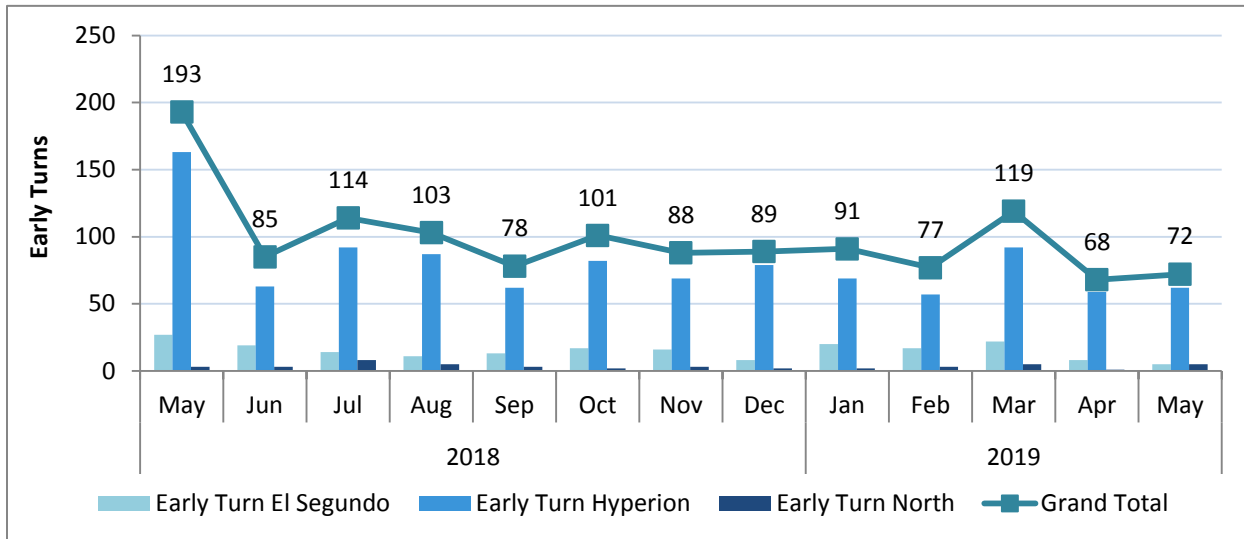
A **pilot-initiated** early turn generally occurs when a pilot executes a turn prior to the shoreline without specific instruction from FAA.

An **FAA-directed** early turn occurs when the FAA air traffic control instructs the pilot of the aircraft to turn early for reasons including safety (e.g. separation of aircraft) or for operational efficiencies when a runway may be closed for maintenance/construction.

An early turn as a result of **wind drift** occurs when the wind pushes an aircraft slightly off course/off heading to either the north or south before reaching the shoreline.

On those rare occasions when LAWA Noise Management staff does not have the information available to determine the reason for an early turn, the deviation is categorized as **unknown** and will not be depicted in the following graphs.

## TOTAL EARLY TURNS



The graph above shows the total early turns through Playa Del Rey gate on the North, and El Segundo and Hyperion gates on the South. In addition to capturing the total number of early turns, LAVA conducts investigation for those that fly over communities.

**72**

TOTAL EARLY TURNS THIS MONTH

**6%**

CHANGE IN EARLY TURNS FROM PREVIOUS MONTH

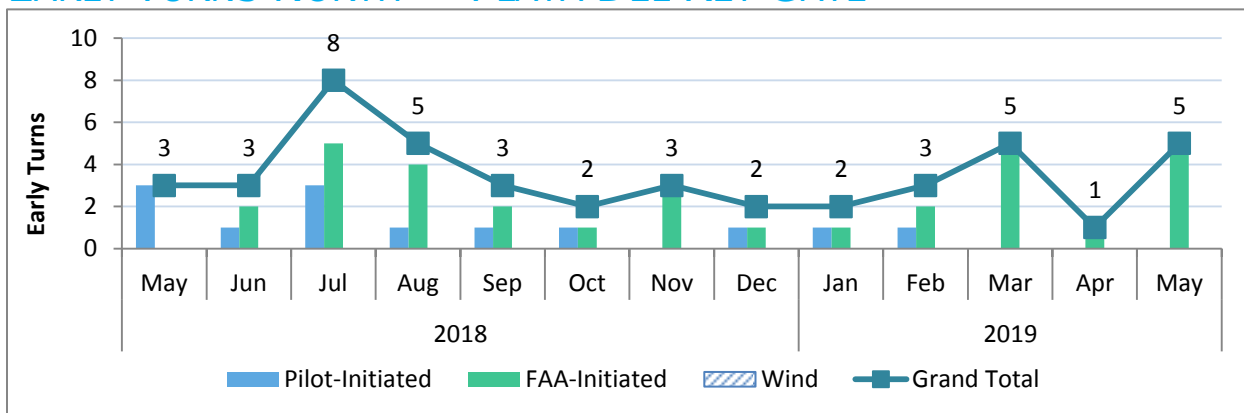
**99.75%**

COMPLIANT WITH POLICY

**28,958**

TOTAL WEST FLOW DEPARTURES THIS MONTH

## EARLY TURNS NORTH — PLAYA DEL REY GATE



The graph above shows the total early turns through the Playa Del Rey gate, including reasons for the turns.

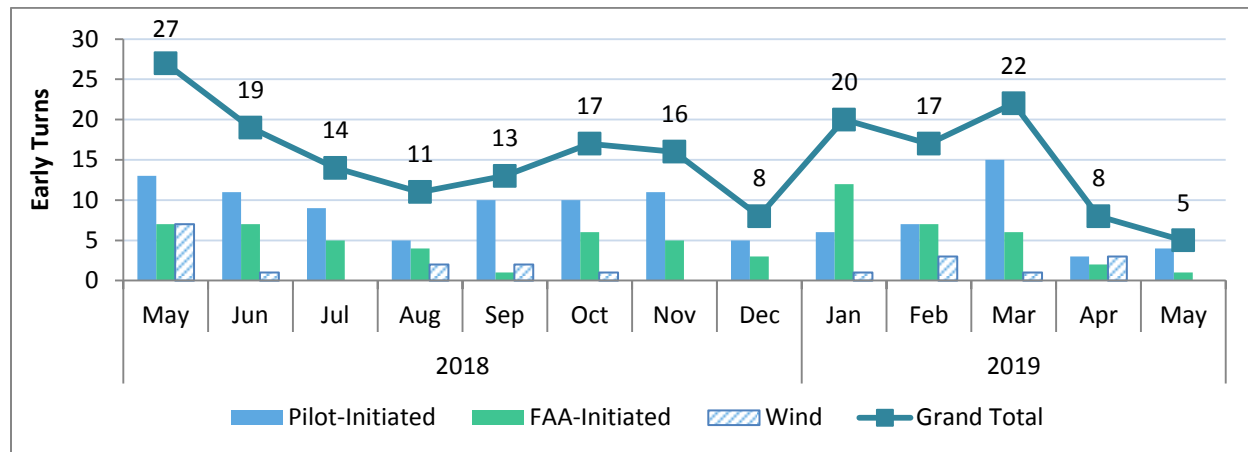
**5**

EARLY TURNS THIS MONTH

**99.98%**

COMPLIANT WITH POLICY

### EARLY TURNS SOUTH – EL SEGUNDO GATE

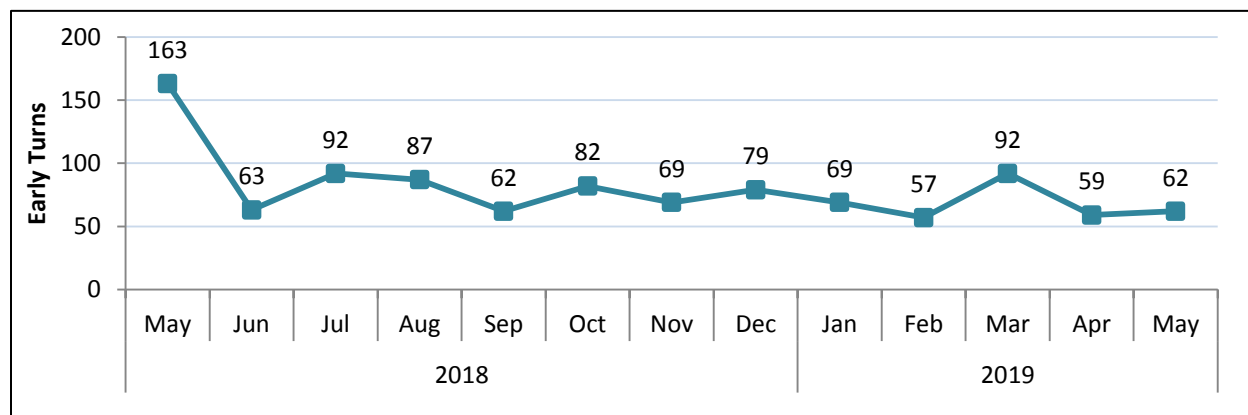


The graph above shows the total early turns through the El Segundo gate including reasons.

**5**  
EARLY TURNS THIS MONTH

**99.98%**  
COMPLIANT WITH POLICY

### EARLY TURNS SOUTH – HYPERION GATE



The graph above shows the total early turns through the Hyperion gate (over Hyperion Treatment Plant).

**62**  
EARLY TURNS THIS MONTH

**99.79%**  
COMPLIANT WITH POLICY

### WHAT IS CAUSING THE CHANGE IN EARLY TURNS?

Specific to this month, the total number of early turns increased by 4 compared to the previous month. This slight increase was primarily due to more FAA-initiated early turns to the north.