PREVIEW OF PRESENTATION TO

JOINT AIRPORT TASK FORCE

Existing Radar Tracks

- One Day of Operations (24 Hours)
- September 28th, 2018

Existing Arrival Tracks

Existing Departure Tracks

Existing Overflight Tracks

VNY

BUR

SMO

LAX

SFV AIRSPACE ONE OF BUSIEST IN NATION

WHY FLIGHT TRACKS HAVE SHIFTED SOUTH

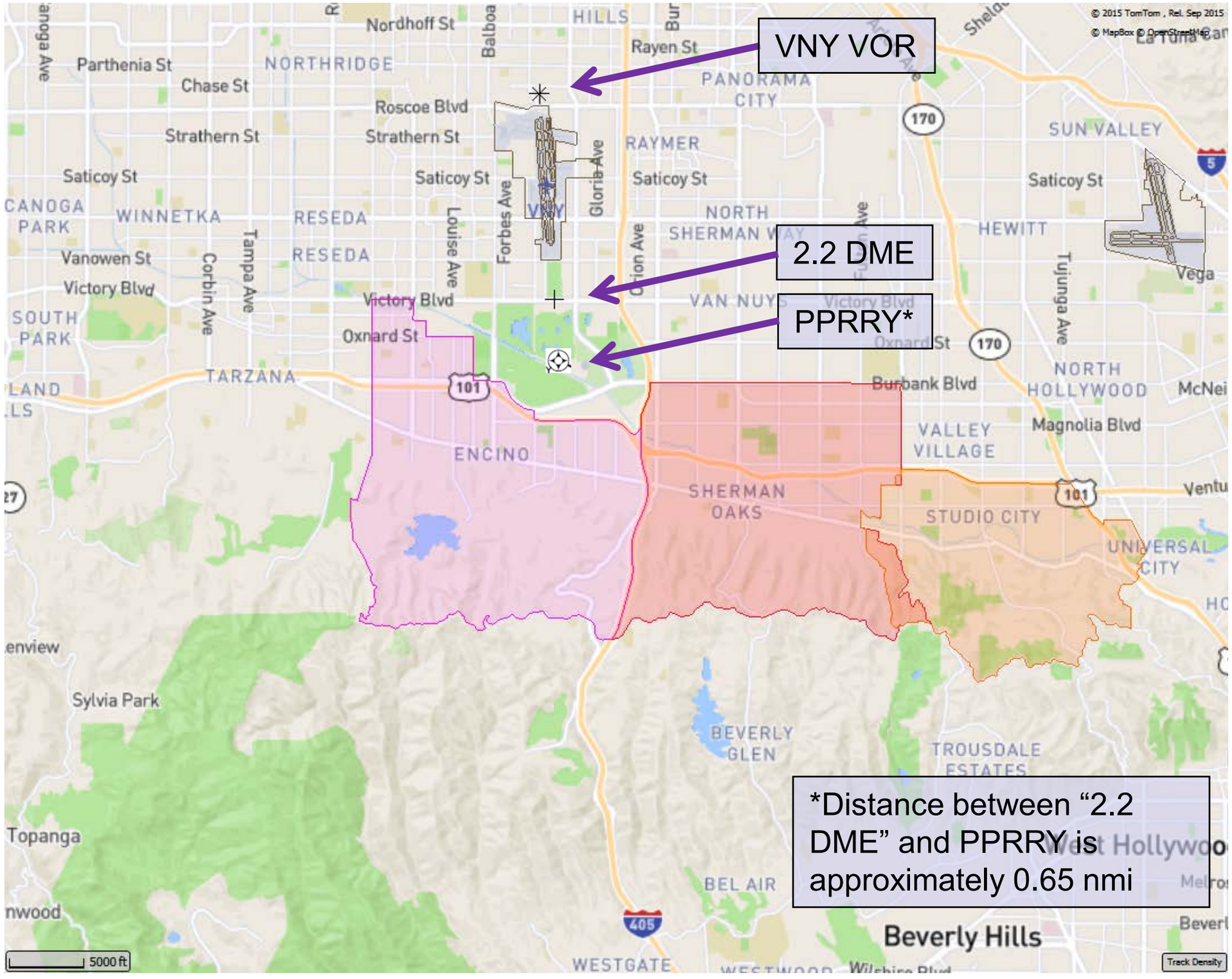
- 1. Due to increased operations more congested airspace over SF Valley
- 2. Change in mix of aircraft towards larger jets at both VNY and BUR
- 3. Relocation of where planes at VNY began turns from 2.2 DME to PPRRY
- 4. Relocation of GMN to OROSZ and PMD to SLAPP
- 5. RNAV procedures do not take advantage FMS technology

Above factors have made it more difficult for ATCs to vector departures to the north without planes traveling farther along initial departure headings and subsequent headings until cleared to proceed to northern waypoints

VAN NUYS AIRPORT

Navigation Points - 2.2 DME and PPRRY

Van Nuys
Los Angeles World Airports

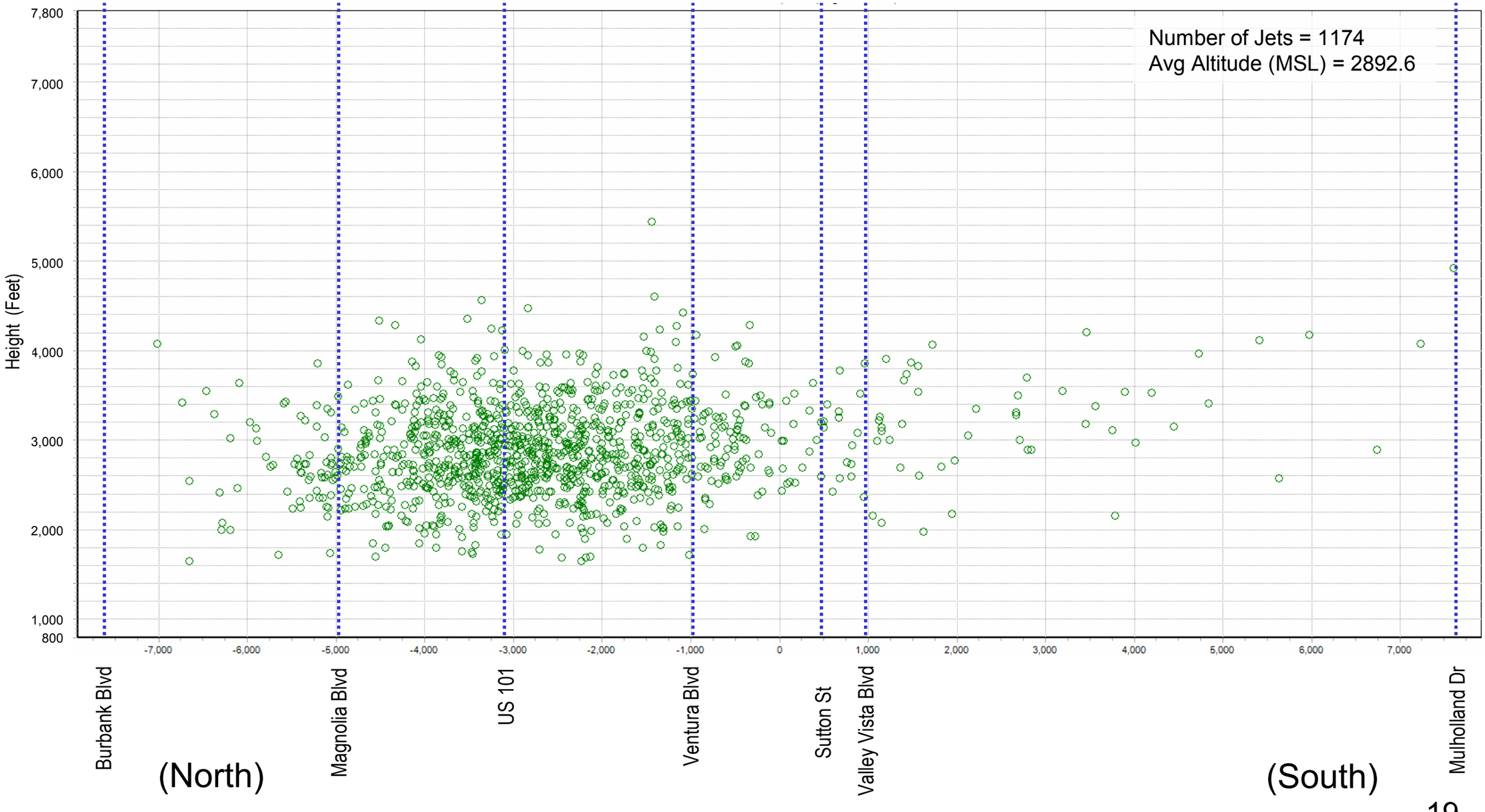


*Distance between “2.2 DME” and PPRRY is approximately 0.65 nmi

ANOMS Gate Penetration

Van Nuys
Los Angeles World Airports

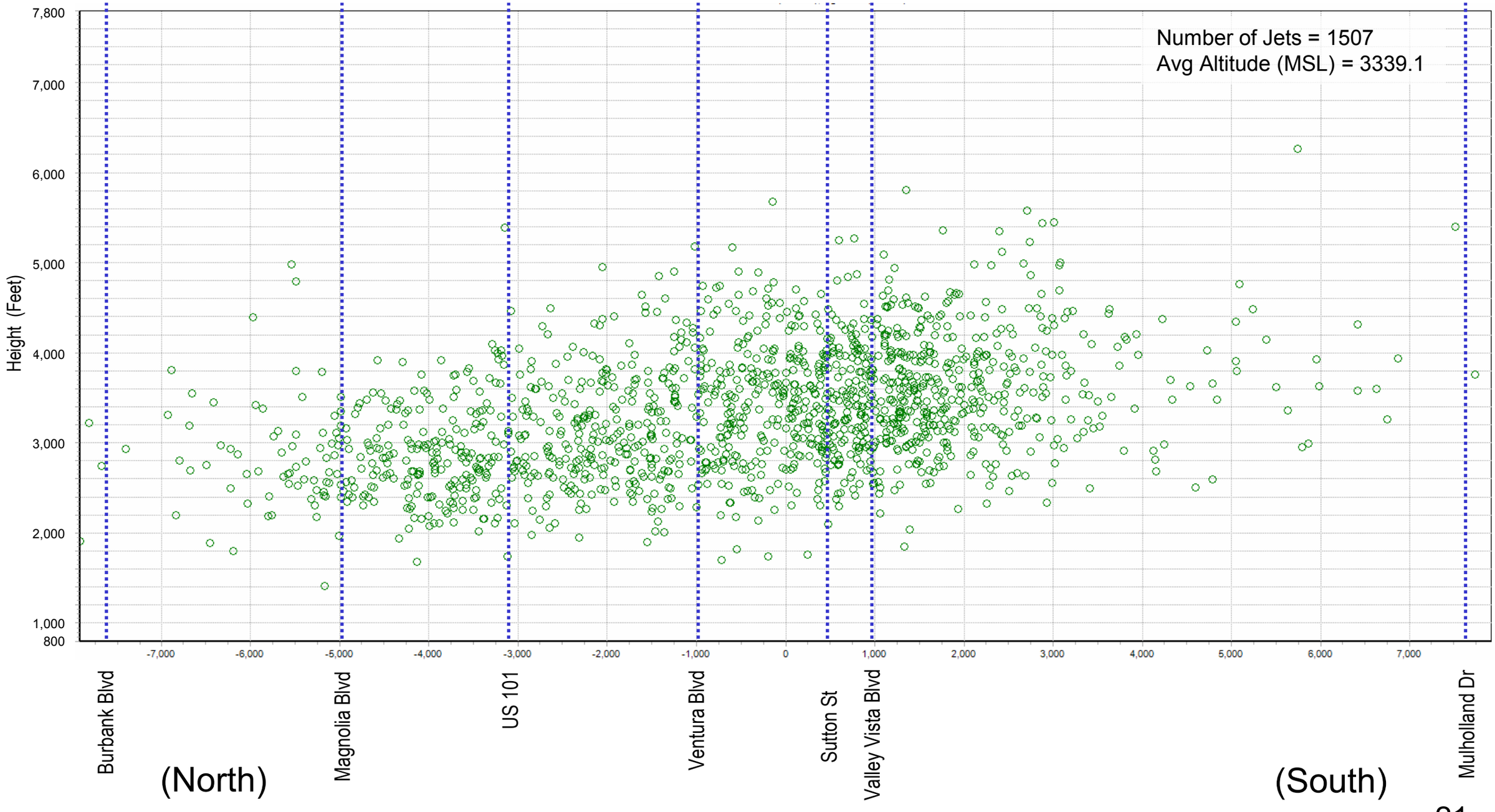
Sherman Oaks– September 2016



ANOMS Gate Penetration

Van Nuys
Los Angeles World Airports

Sherman Oaks– September 2018



To HARYS/ROSCOE

Van Nuys Airport

Fly-by WP

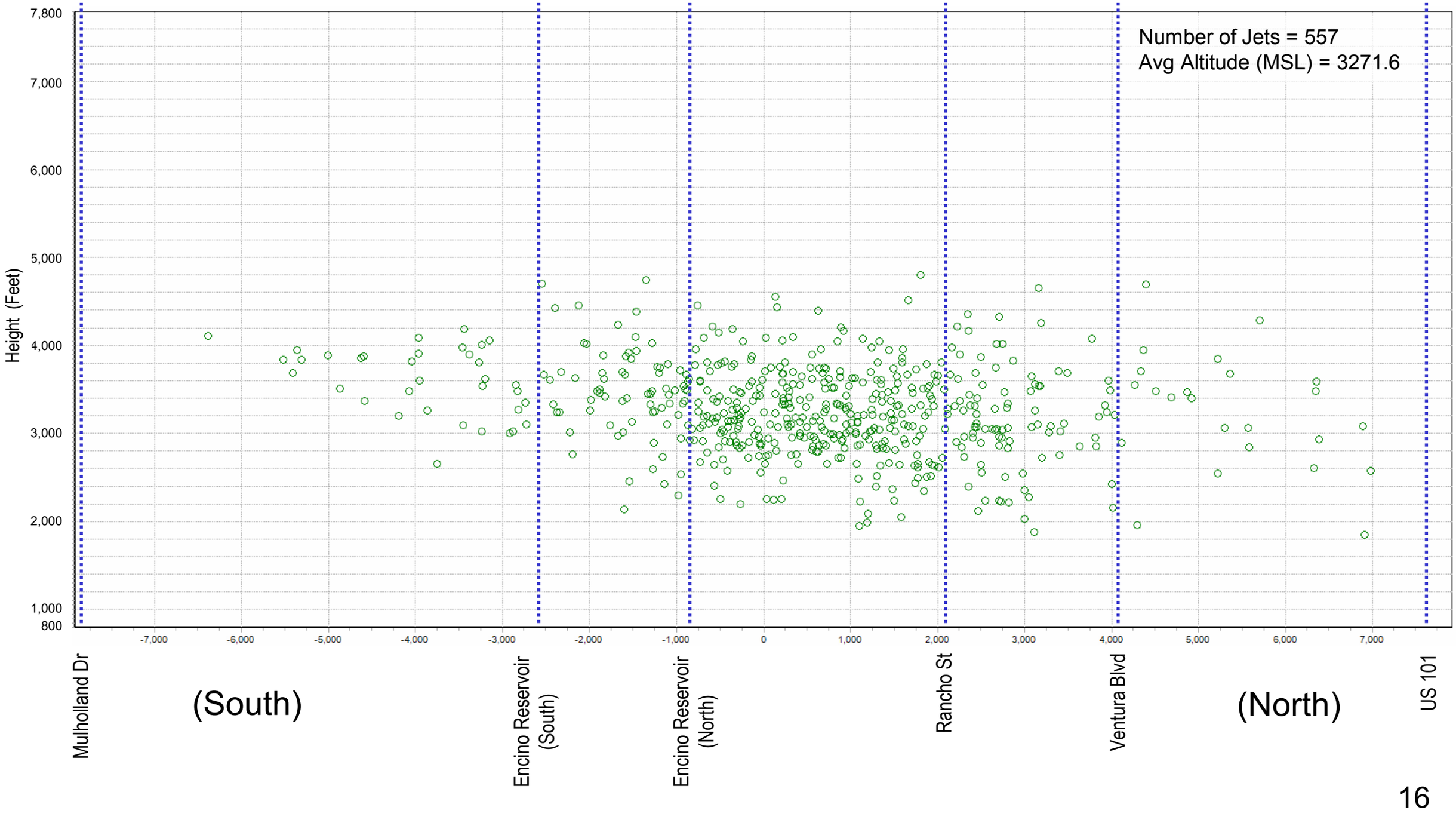
Fly-over WP

PROPOSED EAST DEPARTURE RNAV

ANOMS Gate Penetration

Van Nuys
Los Angeles World Airports

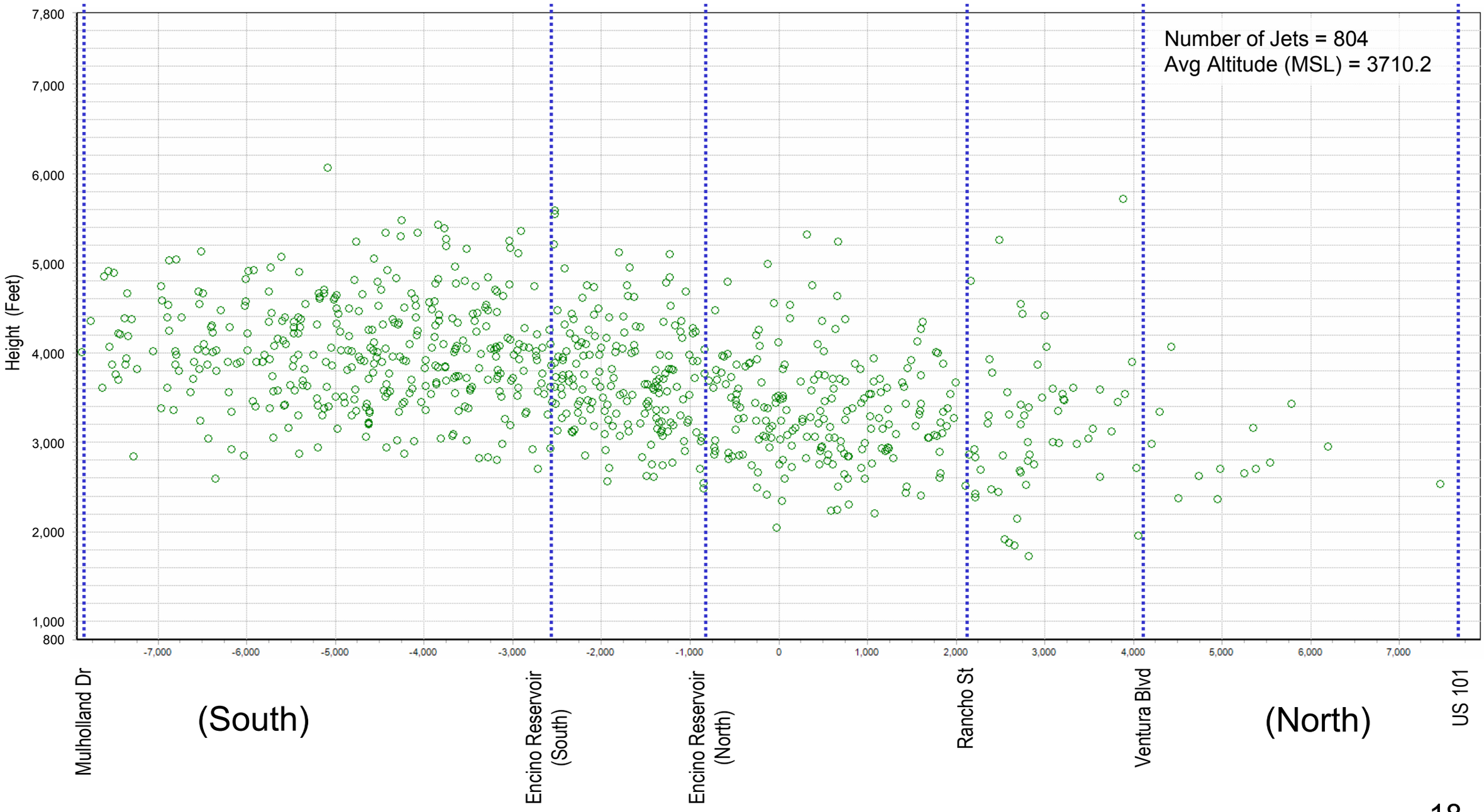
Encino Gate – September 2016

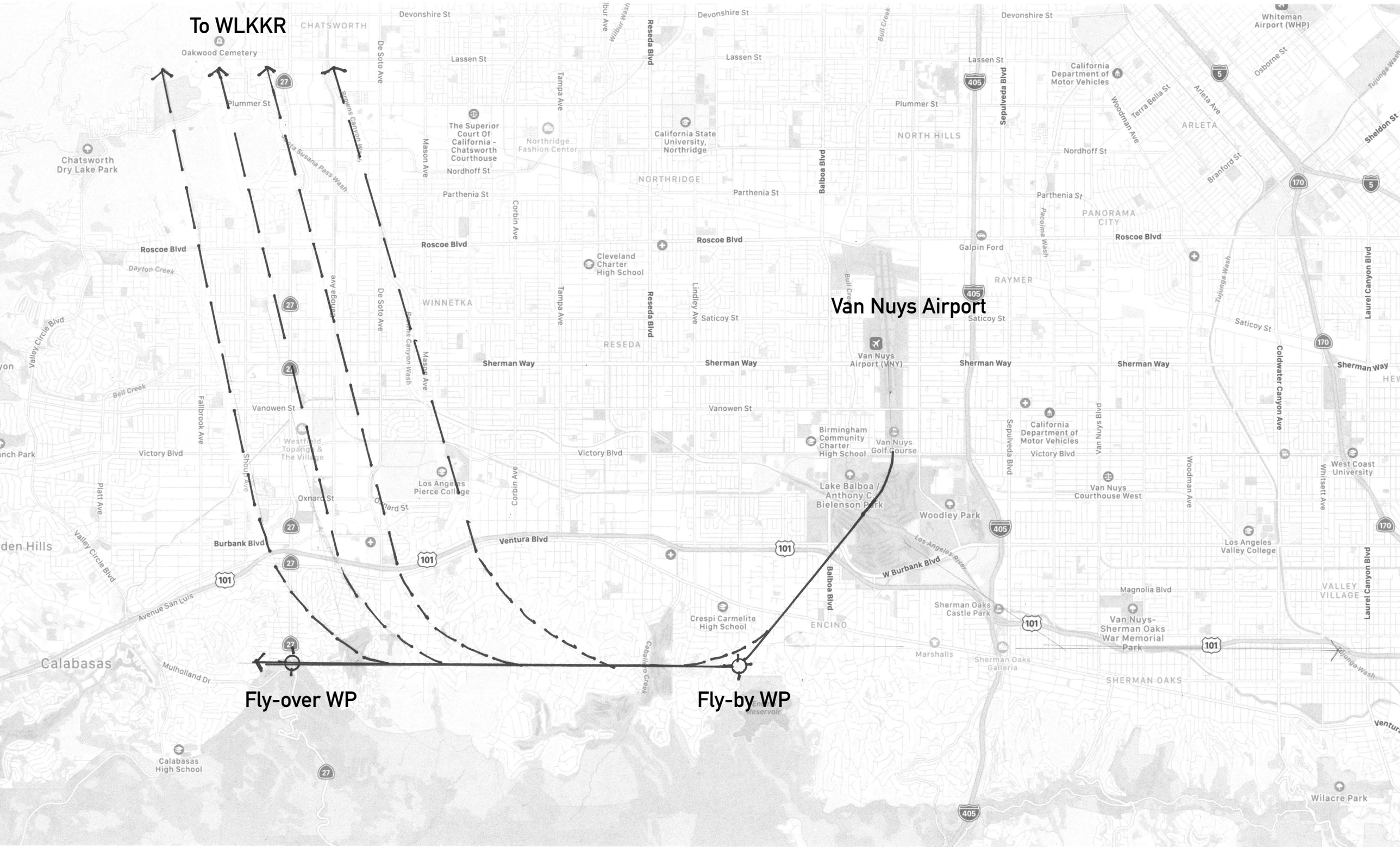


ANOMS Gate Penetration

Van Nuys
Los Angeles World Airports

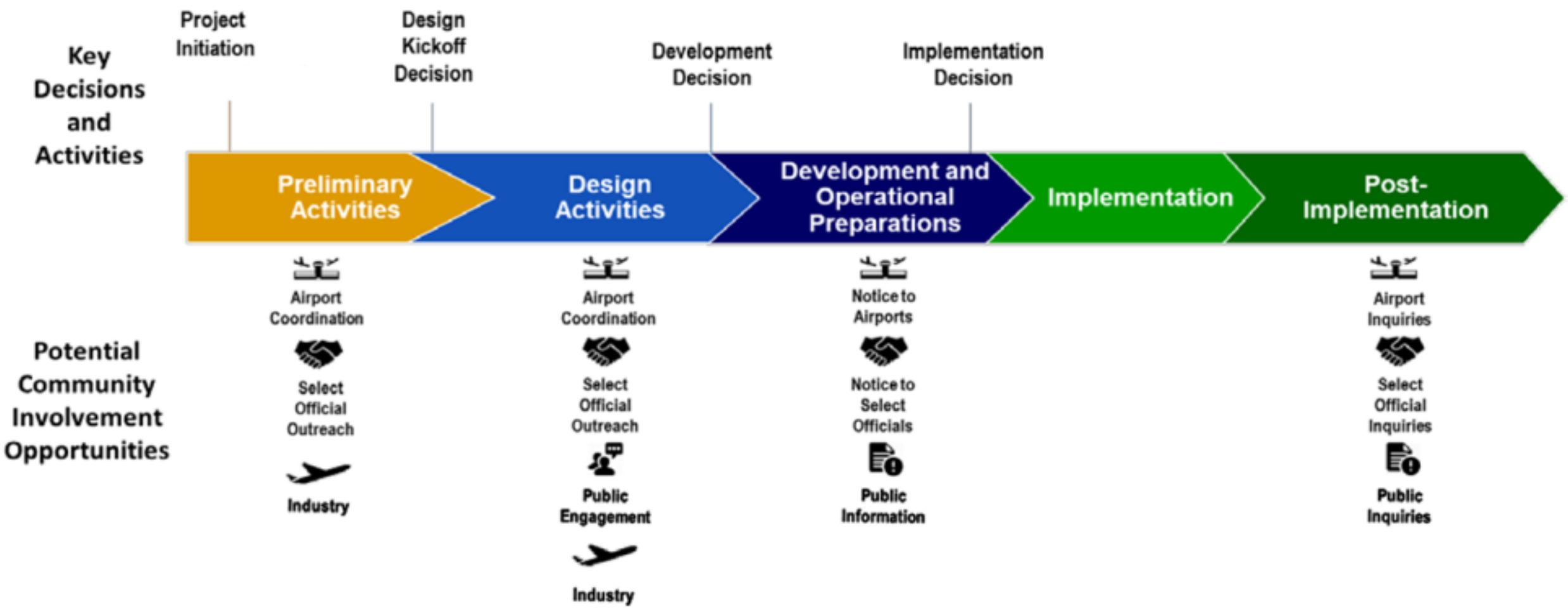
Encino Gate – September 2018





PROPOSED WEST DEPARTURE RNAV

Performance Based Navigation Process Timeline



Note: The need for and level of engagement will vary based on project circumstances

PROPOSED NEAR TERM SOLUTION AT VNY

- 1(a) Replace PPRRY in current RNAVs with 2.2 DME,

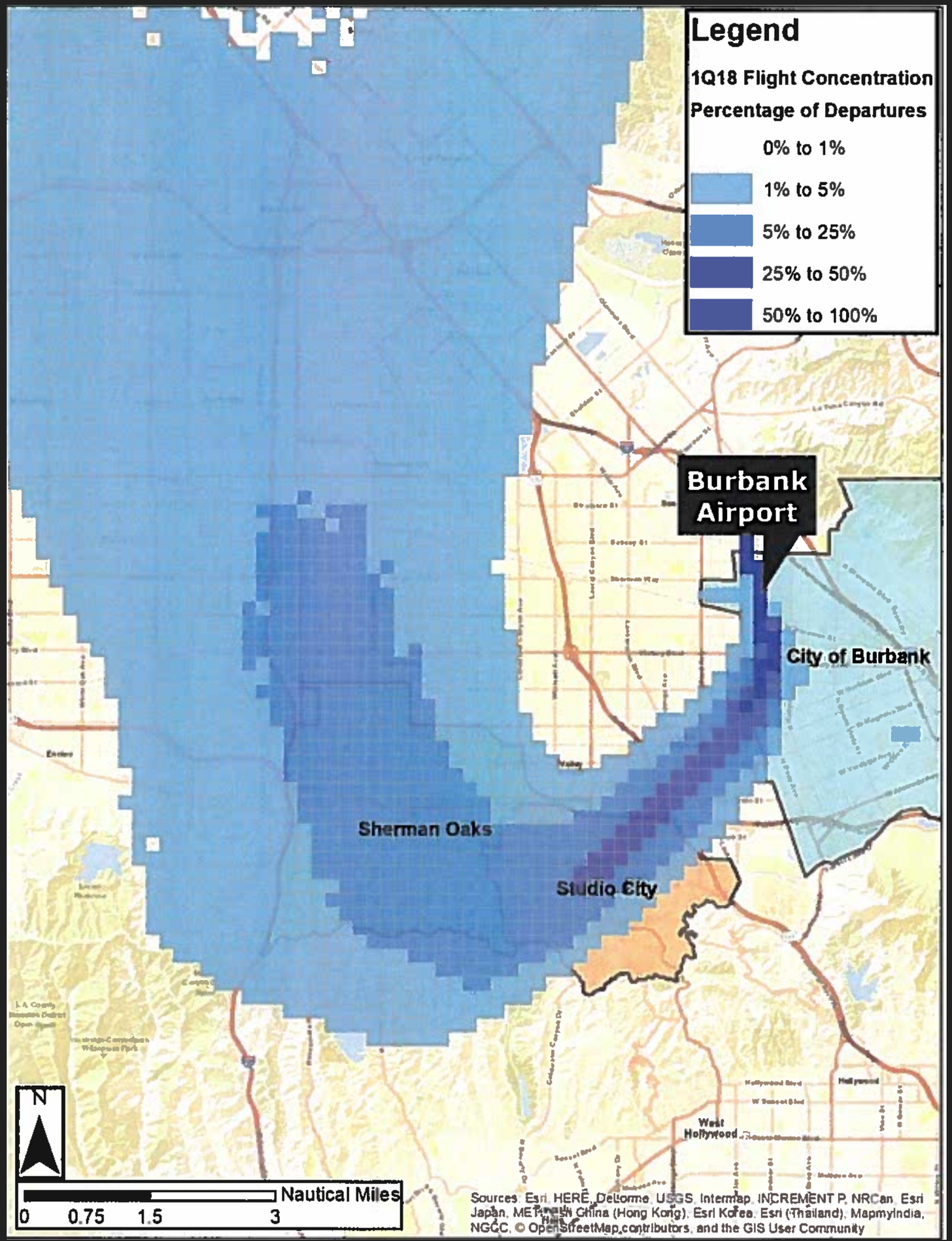
  or

- 1(b) Suspend RNAVs in interim by having all planes use Conventional procedures

- 2. Increase Min. Climb Gradient

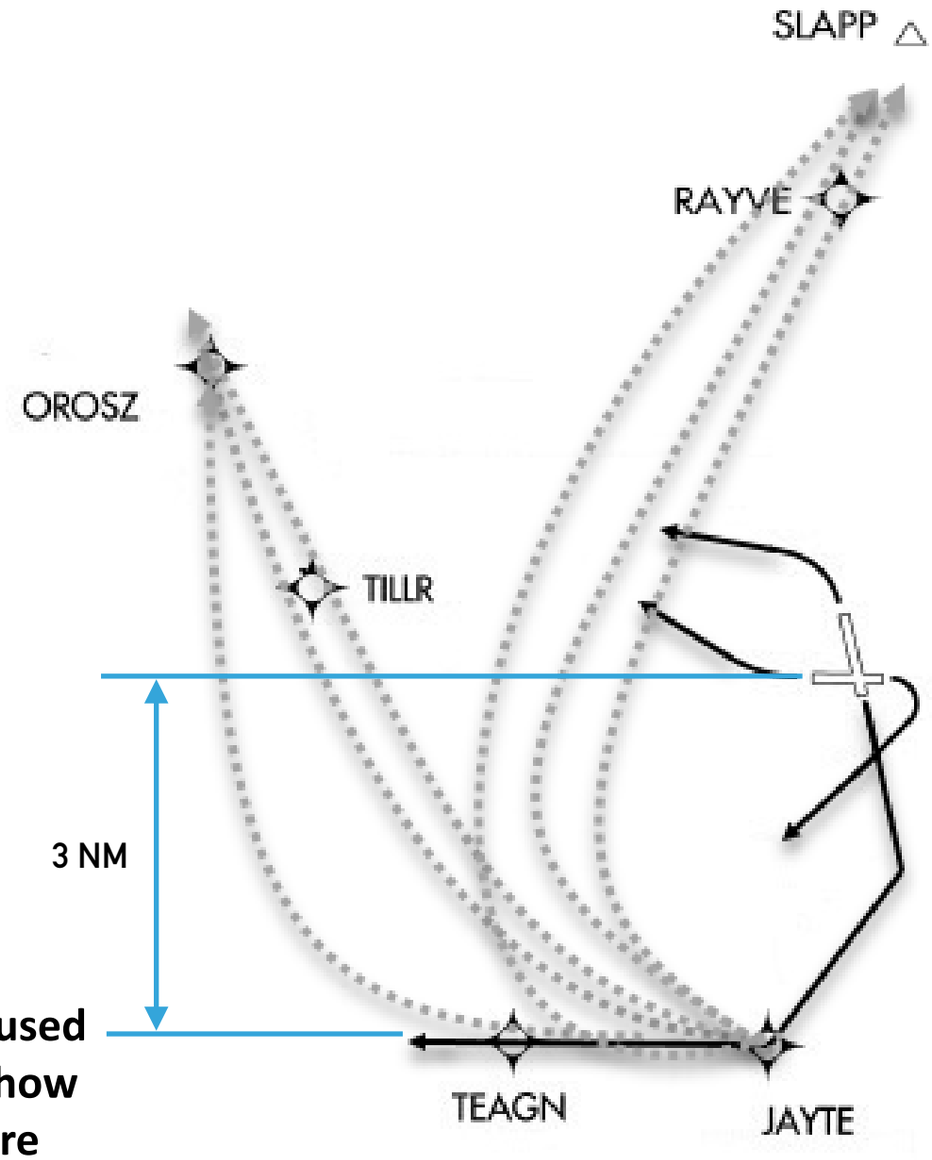
HOLLYWOOD BURBANK AIRPORT

1Q 2018 FLIGHT CONCENTRATION



What is an Open Departure Procedure?

Minimum Vectoring Altitude is 3,300 Feet Mean Sea Level



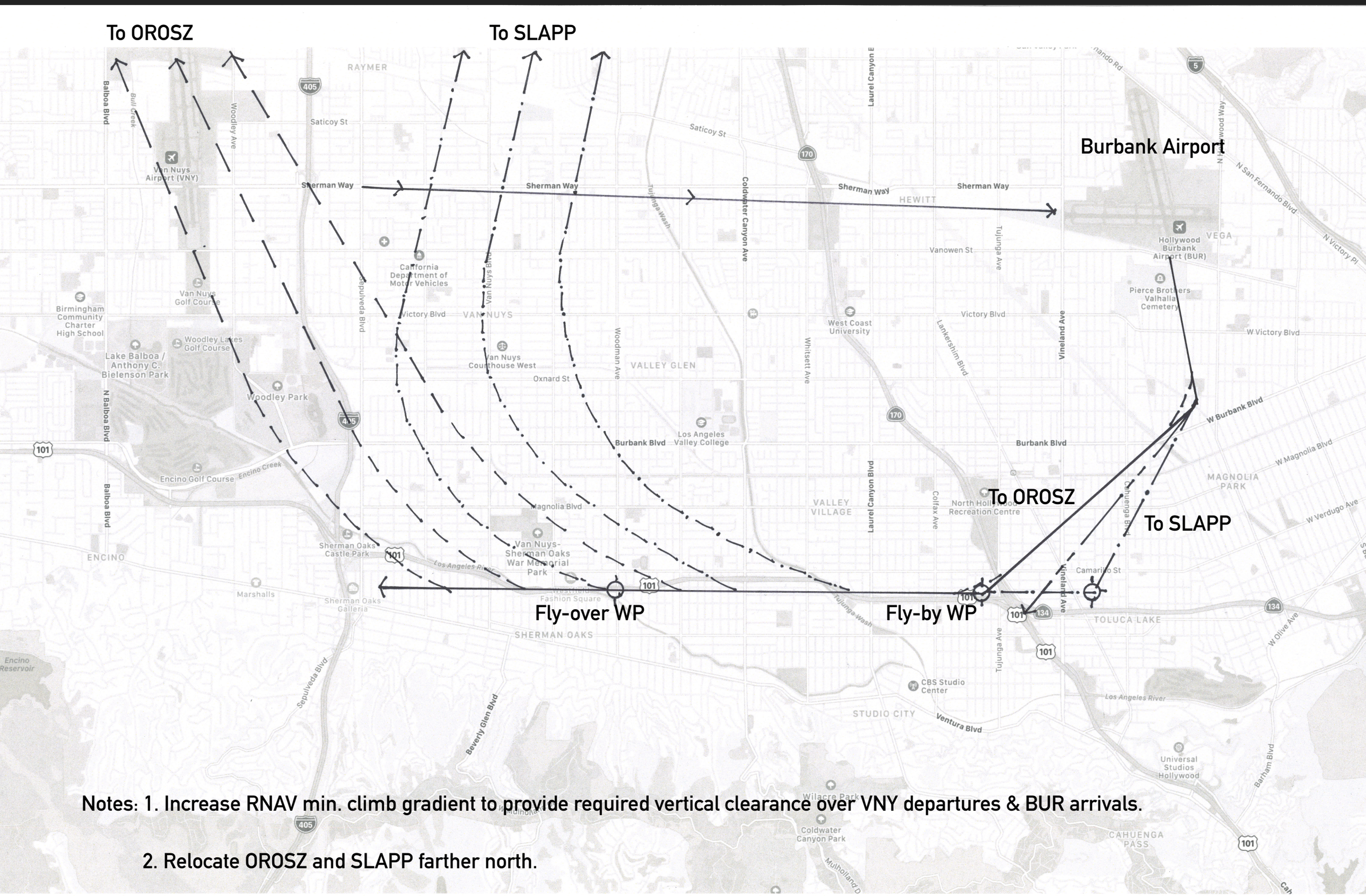
**** This depiction is used to aid in explaining how the "Open" departure works and how aircraft may fly the procedure.****

*Depiction not to scale

- **Because of the airspace complexity and congestion around Burbank, the FAA determined that Burbank would benefit from a new, hybrid departure route known as an "open" departure. An open departure begins with a satellite-based navigation segment, then transitions to a segment where air traffic controllers can dynamically maneuver aircraft through certain congested areas, and then connects with another satellite-based segment.**

- **To this extent, the proposed "open" departures would formalize how air traffic controllers generally handle Burbank departures today. However, the proposed "open" departures would provide more precise and predictable flight paths than the procedures that are currently in use.**

- **Today, the initial route is defined simply by a compass heading, which can be affected by factors including wind, temperature, and aircraft performance characteristics. By contrast, the initial route for the proposed "open" departures would be a satellite-based segment with a defined flight path. This would reduce the dispersion that occurs due to the above-mentioned factors.**



Notes: 1. Increase RNAV min. climb gradient to provide required vertical clearance over VNY departures & BUR arrivals.

2. Relocate OROSZ and SLAPP farther north.

3. Use 3 different initial departure headings

BUR ALTERNATIVE ‘A’ - VERTICAL SEPARATION

To OROSZ

To SLAPP

Burbank Airport

3NM SEPARATION

RNP Procedure

RNAV Procedure

Fly-over WP

Fly-by WP

Fly-by WP

Notes: 1. Relocate OROSZ and SLAPP farther north

2. Use 3 different initial departure headings

BUR ALTERNATIVE ‘B’ - LATERAL SEPARATION

PROPOSED NEAR TERM SOLUTIONS FOR BUR

1. Different Departure Headings for
    a. OROSZ RNAV
    b. SLAPP RNAV
    c. Conventional Procedure
2. Increase Climb Gradients

Questions?