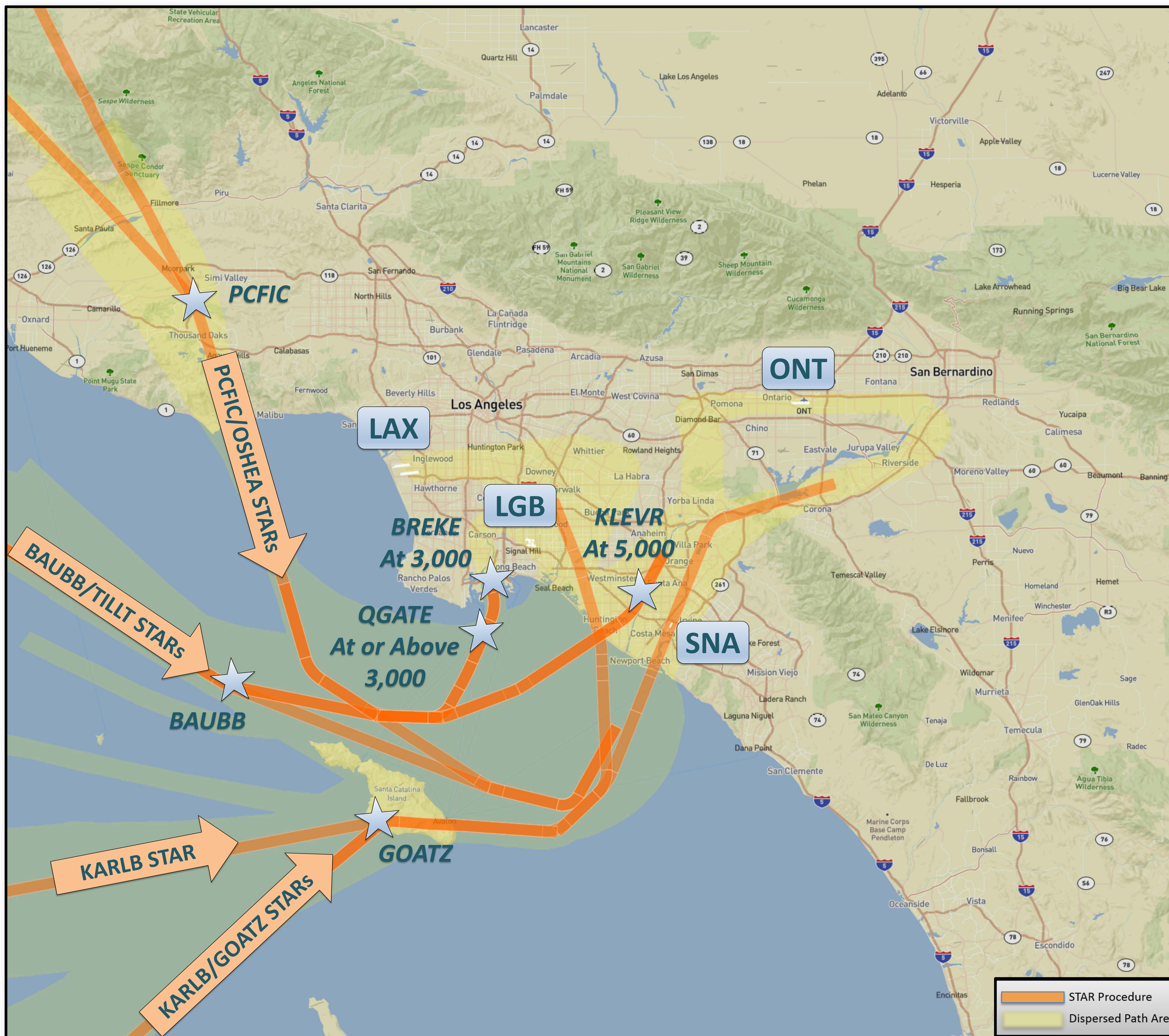


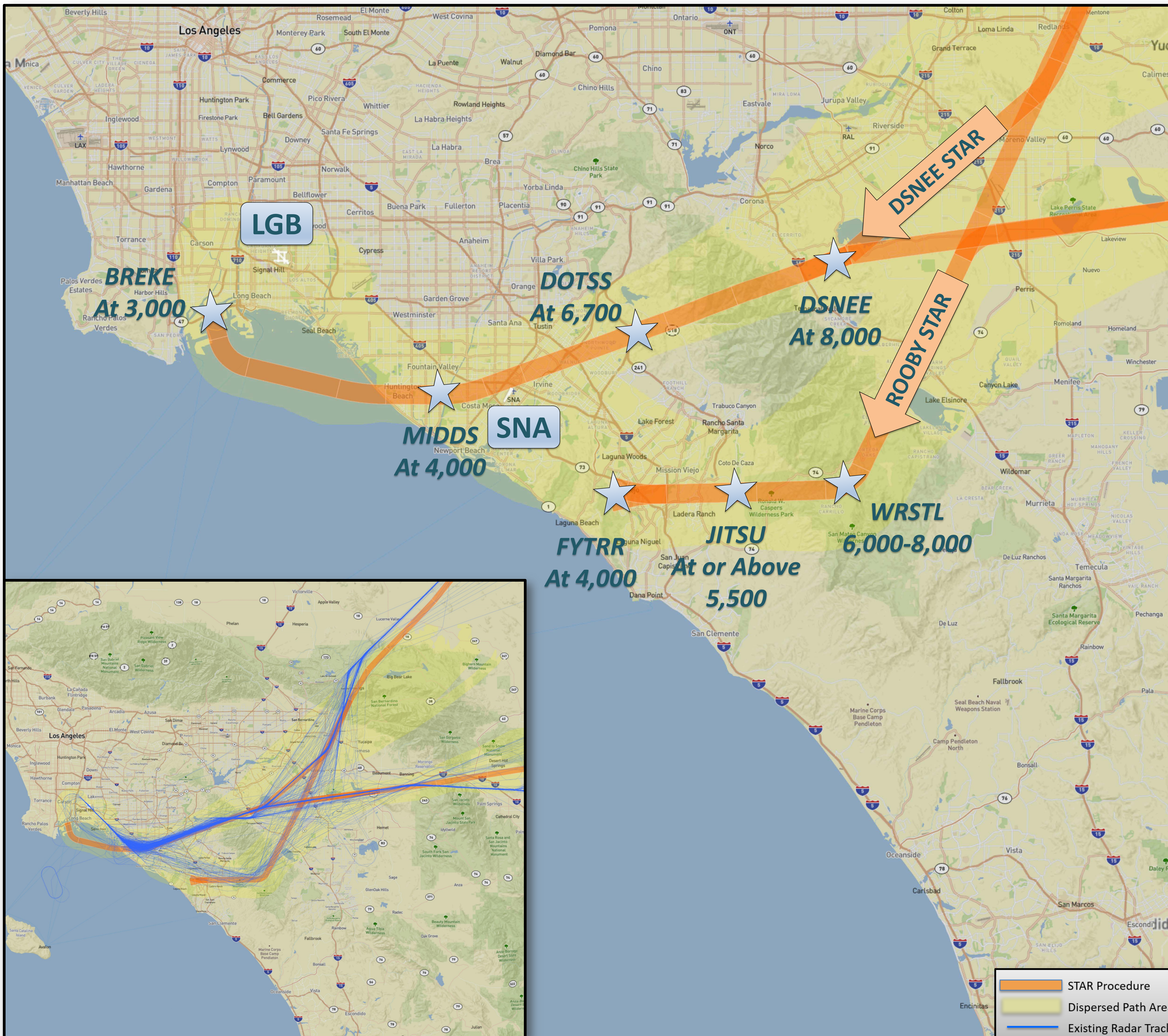
- LAX** Los Angeles International Airport
- LGB** Long Beach Airport (Daugherty Field)
- ONT** Ontario International Airport
- SNA** John Wayne-Orange County Airport

**STAR (Arrival)**  
 LAX GOATZ ONE RNAV STAR  
 LGB BAUBB ONE RNAV STAR  
 LGB PCIFC ONE RNAV STAR  
 SNA OHSEA ONE RNAV STAR  
 SNA TILLT ONE RNAV STAR

- New STAR designs for LAX, LGB, ONT, and SNA arrivals from over the ocean
- Designed to limit interactions with other departure and arrival procedures in the Southern California area
- GOATZ and KARLB allow aircraft to be as much as 7,000 feet higher over Catalina Island
- GOATZ, PCIFC, OHSEA, and TILLT STARs tie into new RNP approaches







**LGB** Long Beach Airport  
(Daugherty Field)

**SNA** John Wayne-Orange  
County Airport

**STAR (Arrival)**  
LGB/SNA DSNEE ONE RNAV STAR  
LGB/SNA ROOBY ONE RNAV STAR

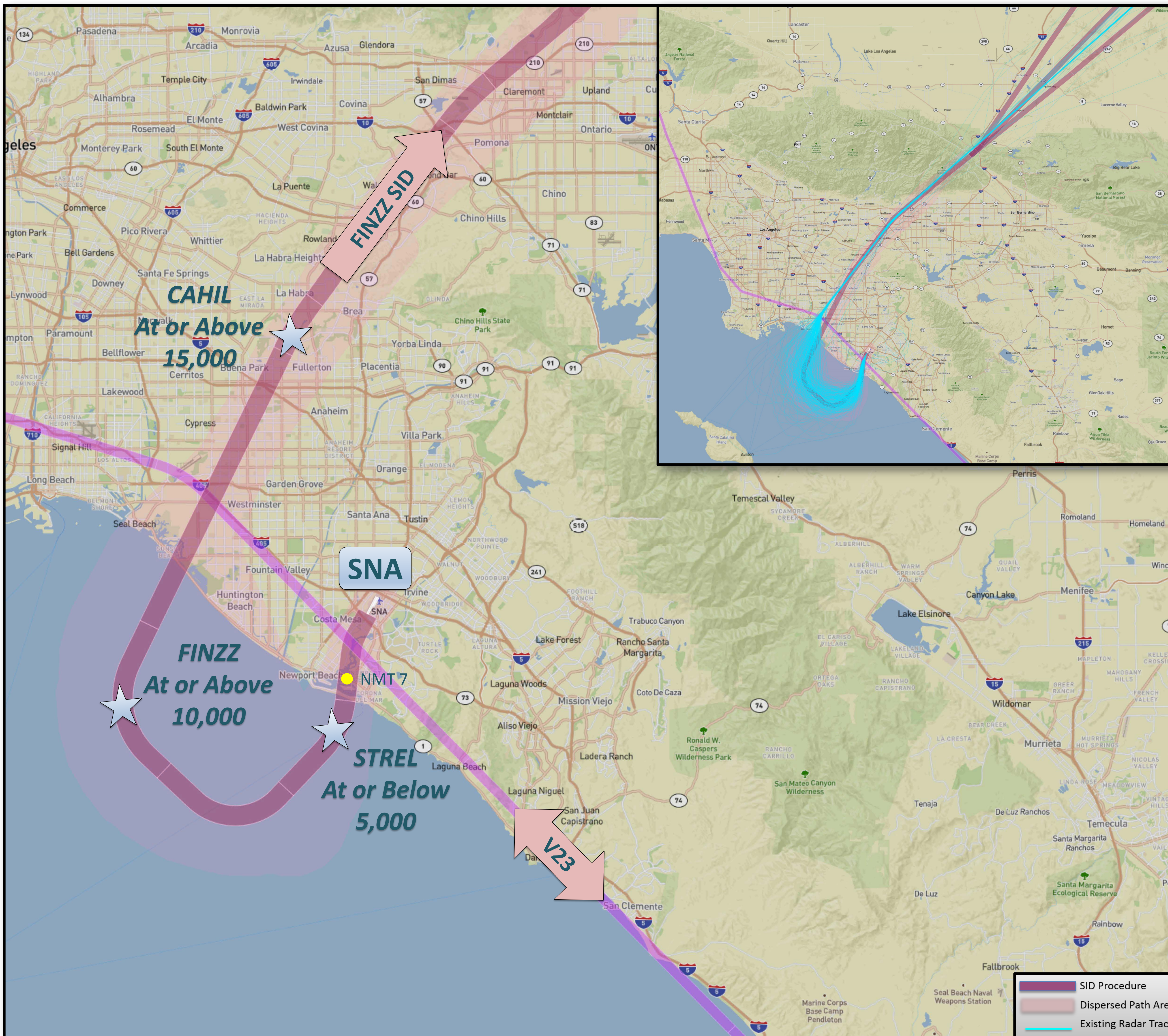
## DSNEE ONE

- Replaces the LGB/SNA KEFFR STAR with OPD benefits for SNA south flow arrivals landing Runway 20R and LGB arrivals
- Deconflicted from the BUR/VNY THRNE and the ONT EAGLZ and SCBBY STARS
- Vertical restrictions were added to deconflict from other STARS and SIDs including the LAX ANJLL STAR

## ROOBY ONE

- Replaces the LGB/SNA KEFFR STAR with OPD benefits for SNA north flow arrivals landing Runway 02L and LGB arrivals
- Deconflicted from the BUR/VNY THRNE and the ONT EAGLZ and SCBBY STARS
- Altitude restrictions were added to deconflict from other STARS and SIDs including the LAX ANJLL STAR





**SNA** John Wayne-Orange County Airport

**SID (Departure)**  
SNA FINZZ ONE RNAV SID

## FINZZ ONE

- The current MUSEL SID is a conventional procedure relying on ground based navigation
- Serves SNA Runway 20R departures to the northeast
- Deconflicted from overflight traffic on V23



**SNA** John Wayne-Orange  
County Airport

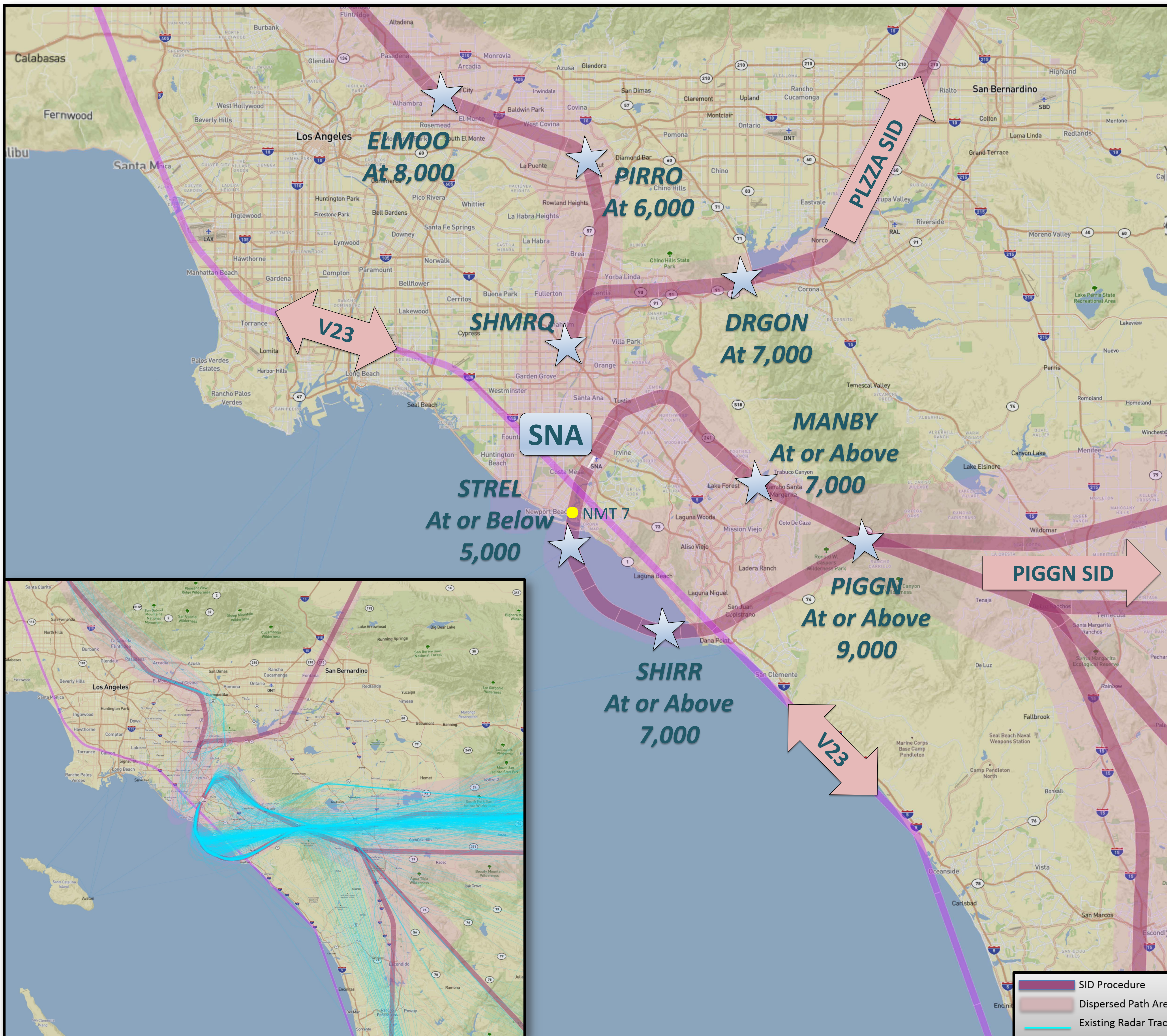
**SID (Departure)**  
**SNA HHERO ONE RNAV SID**

## HHERO ONE

- The current CHANL SID is a conventional procedure relying on ground based navigation
- Serves Runway 20R departures to the north
- Deconflicted from the LAX GOATZ, LGB BAUBB, and SNA TILLT STARs
- Deconflicted from overflight traffic on V23











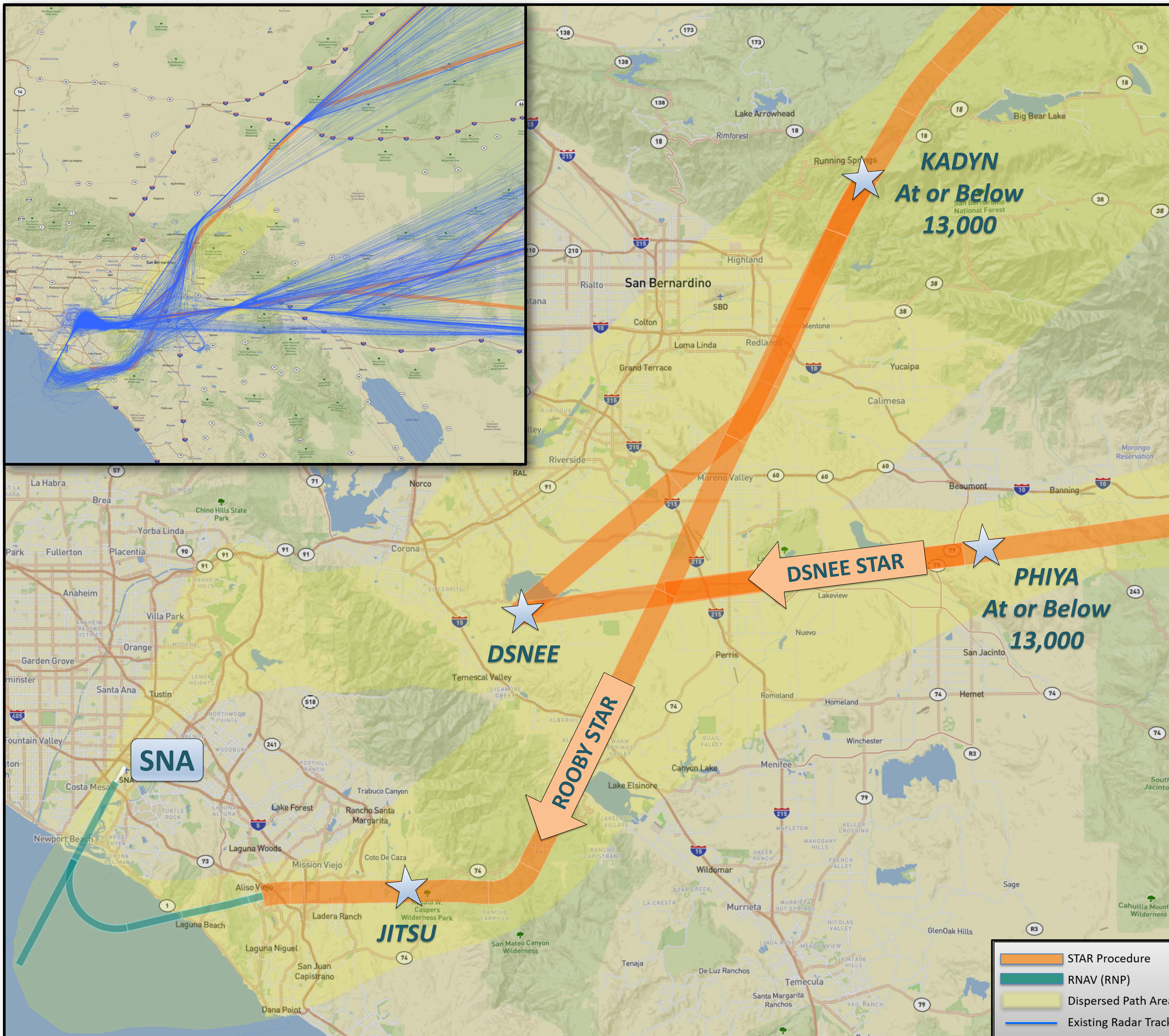
## SNA John Wayne-Orange County Airport

## SID (Departure)

### SNA Runway 20R RNAV SIDs

- Current Runway 20R RNAV SID is designed to overfly Noise Monitor 7 (NM7/TOING waypoint)
- Currently, aircraft have difficulty navigating directly over NM7/TOING waypoint
- Metroplex Team developed a procedure that joins a course to STREL that flies over NM7 without TOING waypoint
  - SID provides a more repeatable ability to overfly NM7
- NOTE: Some aircraft may be radar vectored for separation purposes
- Procedure will be monitored and examined post-implementation





**SNA** John Wayne-Orange County Airport

**STAR (Arrival)**  
SNA DSNEE ONE RNAV STAR  
SNA ROOBY ONE RNAV STAR

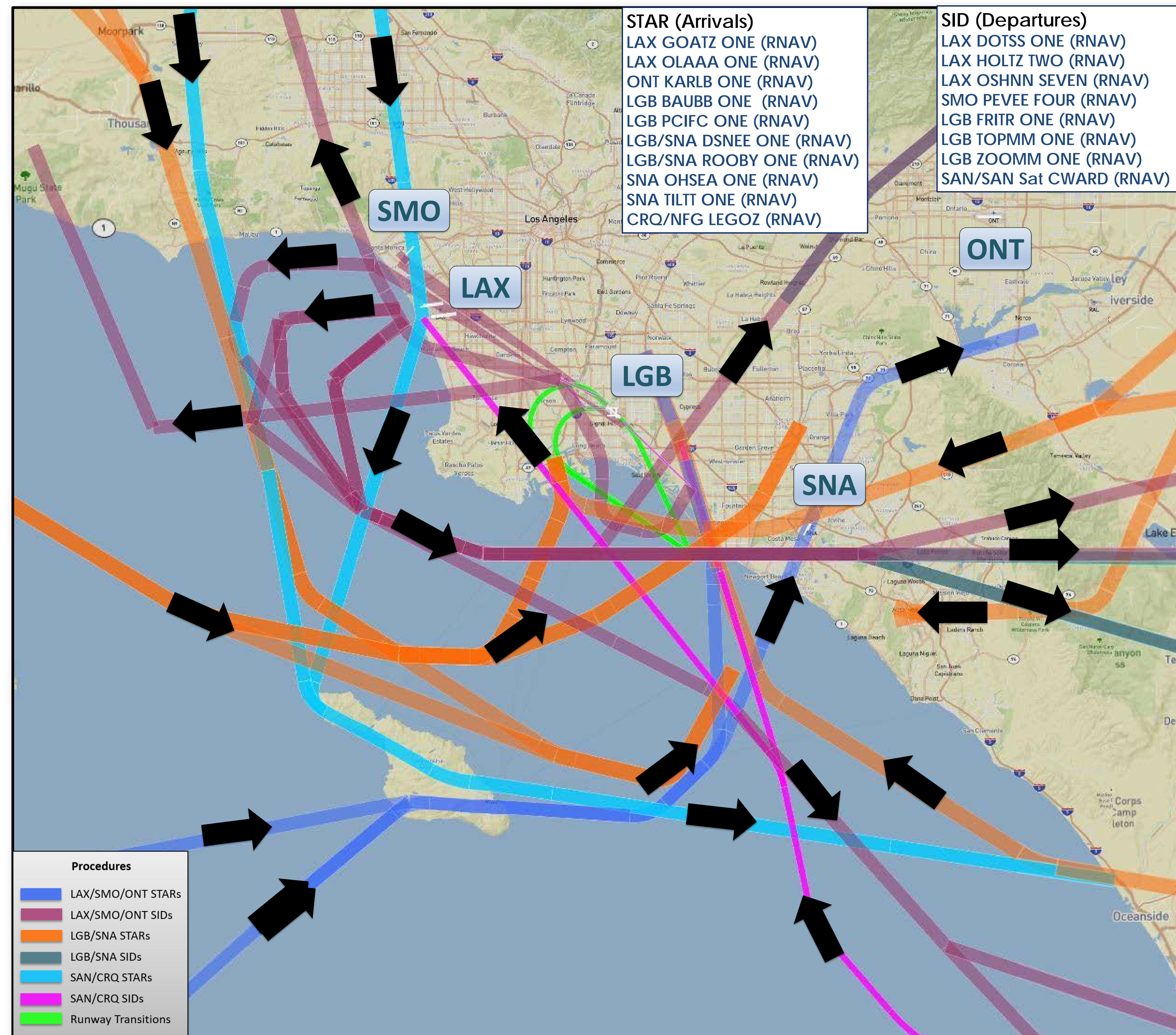
## DSNEE ONE

- Replaces the SNA/LGB KEFFR STAR with OPD benefits for SNA south flow arrivals landing Runway 20R and LGB arrivals
- Deconflicted from the BUR/VNY THRNE, and the ONT EAGLZ and SCBBY STARS
- Vertical restrictions were added to deconflict from other STARS and SIDs including the LAX ANJLL STAR

## ROOBY ONE

- Replaces the SNA/LGB KEFFR STAR with OPD benefits for SNA north flow arrivals landing Runway 02L and LGB arrivals
- Deconflicted from the BUR/VNY THRNE, and the ONT EAGLZ and SCBBY STARS
- Altitude restrictions were added to deconflict from other STARS and SIDs including the LAX ANJLL STAR





**LAX** Los Angeles International Airport

**ONT** Ontario International Airport

**SMO** Santa Monica Municipal Airport

**LGB** Long Beach Airport (Daugherty Field)

**SNA** John Wayne – Orange County Airport

**SAN** San Diego International Airport

**CRQ** Mc Clellan-Palomar Airport

The Design of all procedures into and out of Southern California airports was affected by many factors including:

- Traffic flows into and out of other airports
- Military and special use airspace restrictions
- Aircraft performance
- Terrain
- Class B airspace
- Existing noise procedures