

San Diego International Airport East County Working Group - Aircraft Noise Concerns

Meeting #3

PRESENTED TO:
SDIA East County Working Group

PRESENTED BY:
Stephen C. Smith

PRESENTED ON:
May 28, 2019

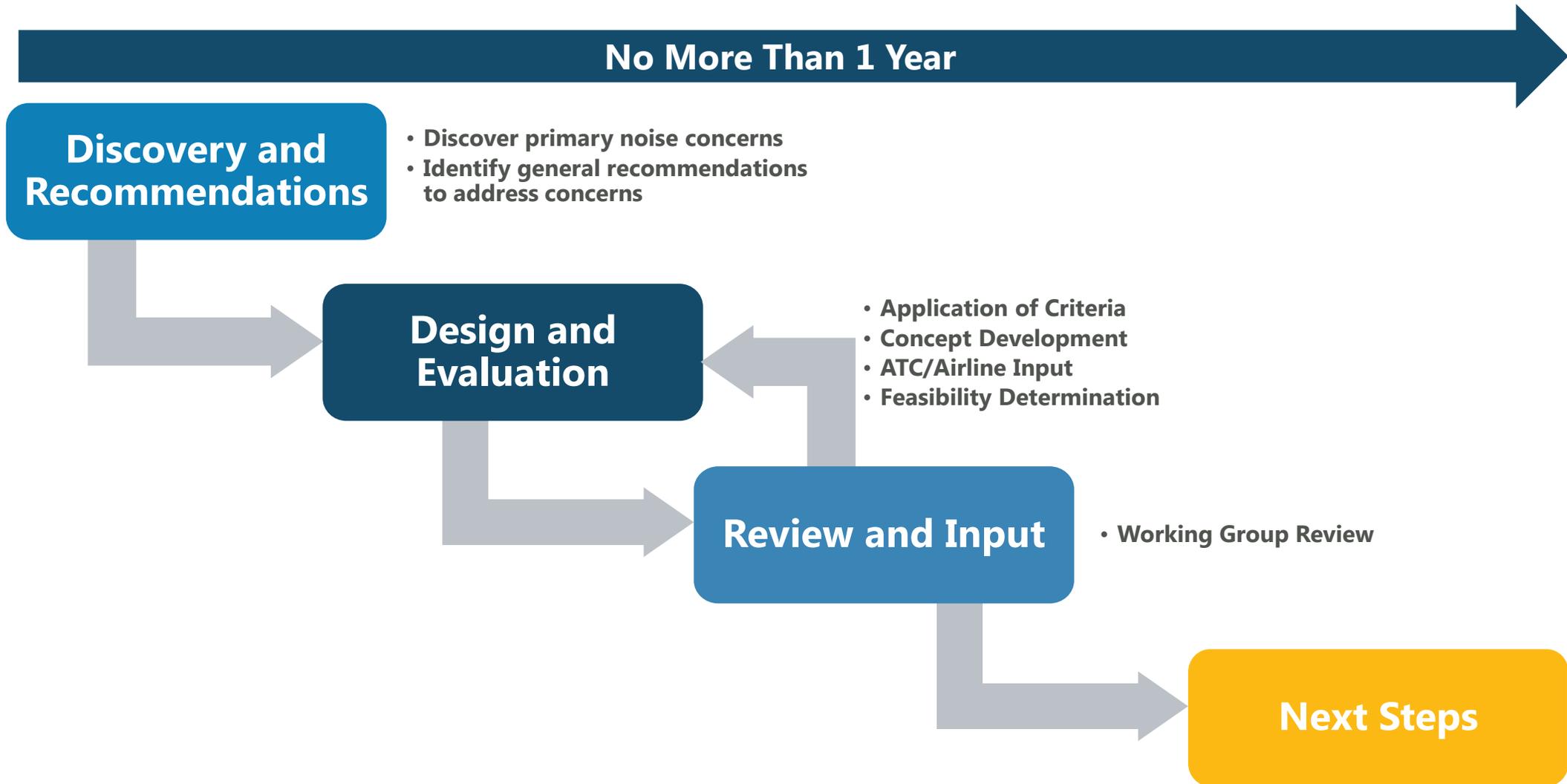
Agenda

- Introductions
- Process Overview Refresher
- Meeting Objective
- Ideas/Suggestions to Address Concerns
- High Level Concept Review
- Next Steps

Introductions

-  East County Working Group Facilitator
 - Ms. Heidi Gantwerk
-  San Diego County Regional Airport Authority (Airport Authority)
 - Owns and operates the airport
 - Main Contact: Ms. Sjohnna Knack, Program Manager
-  Flight Procedure Analysis Consultant Team
 - Project Lead: Mr. Stephen Smith
 - Ricondo & Associates, Inc.
-  East County Working Group Members

Process Overview Refresher



SOURCE: : Ricondo and Associates, Inc., November 2018.

Meeting Objective



Review ideas to address concerns



Review high-level concepts

Ideas/Suggestions to Address Concerns

Ideas/Suggestions to Address Concerns

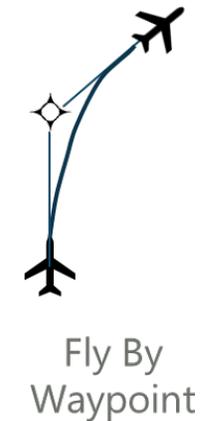
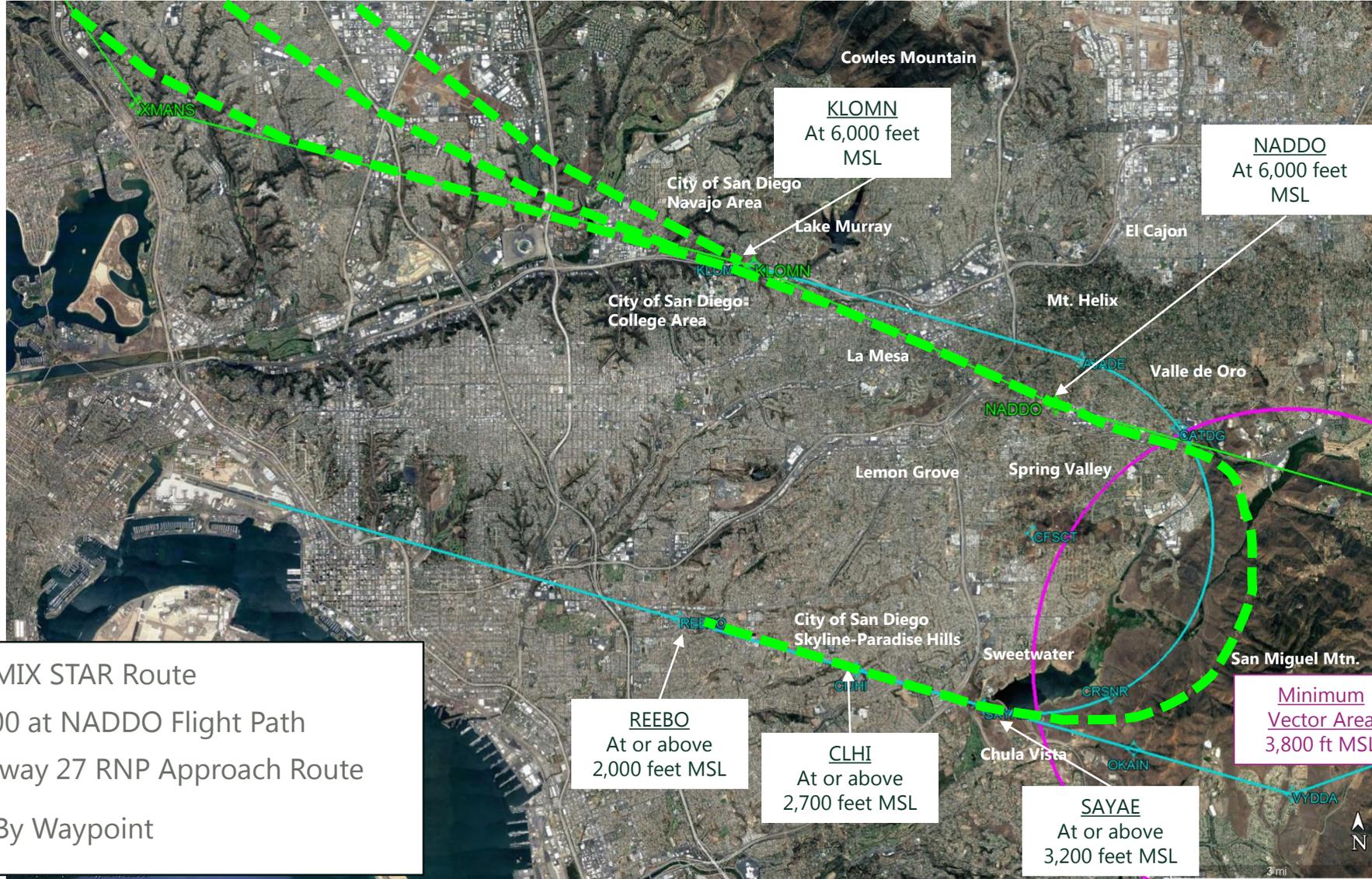
-  Keep arrivals at 6,000 feet until the NADDO waypoint
-  Emphasize use of the current Runway 27 Required Navigation Performance (RNP) Approach
-  Design an Area Navigation (RNAV) visual approach that mimics Runway 27 RNP Approach
-  Design an RNAV Runway Transition to Runway 27 Final Approach
-  Remove flight path between KLOMN and NADDO waypoints

High Level Concept Review

Parameters

-  Do not change aircraft flight paths that affect area exposed to CNEL 65 or higher
-  Do not impact safety
-  Meet FAA design criteria and air traffic control requirements
-  Fit within existing airspace
-  Do not adversely impact capacity of SDIA
-  Do not move noise to new non-compatible areas

Keep Arrivals at 6,000 ft up to NADDO



- COMIX STAR Route
- 6,000 at NADDO Flight Path
- Runway 27 RNP Approach Route
- Fly By Waypoint

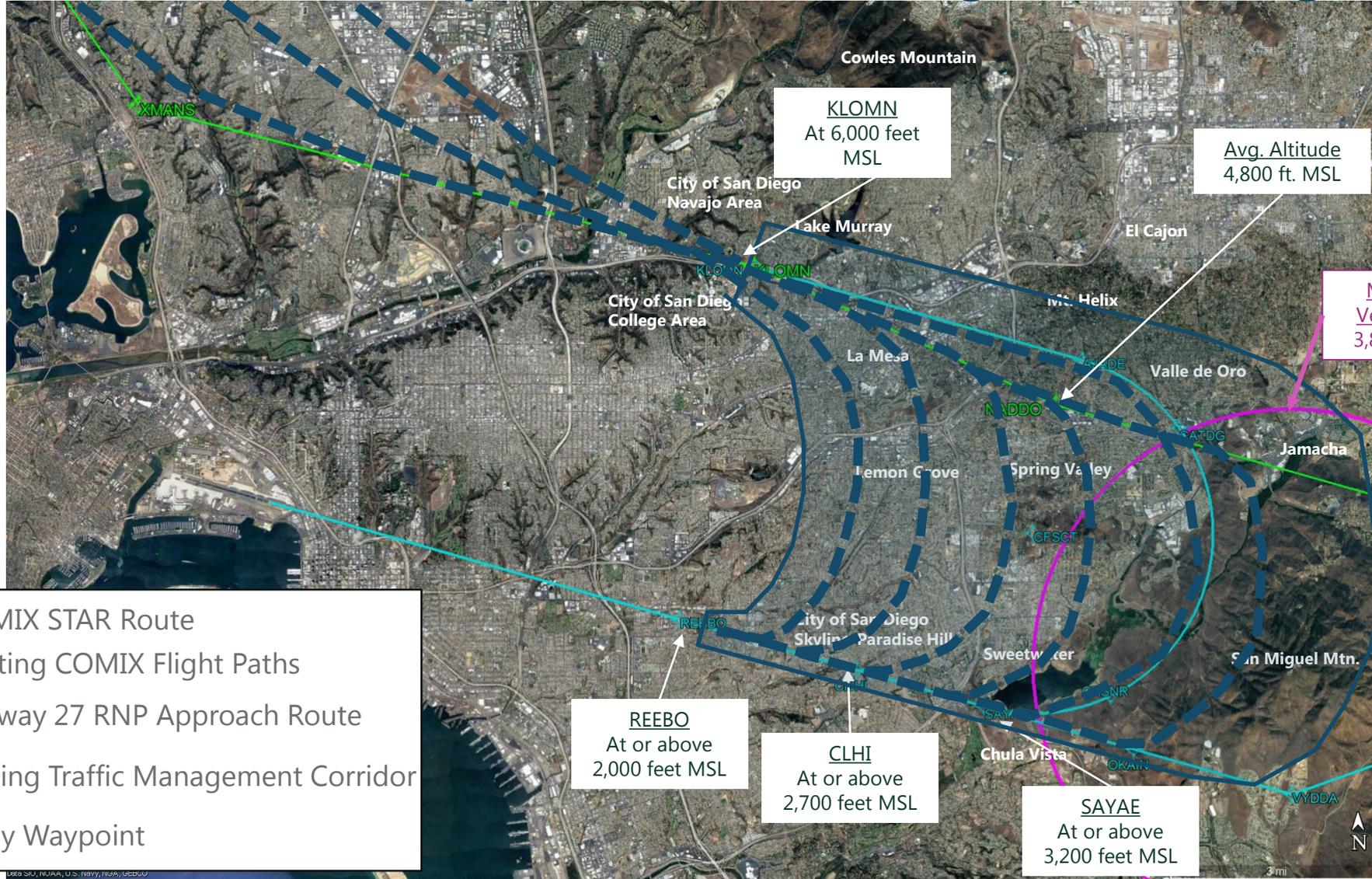
Intent: Reduce noise levels by raising jet arrival altitude

Concept: Keep jet arrival altitude between KLOMN and NADDO waypoints at 6,000 ft. MSL, thence descend to join final approach

Concerns: Limits area for FAA ATC to manage traffic to join the final approach and moves jet traffic closer to arrivals from the east

NOTE: Mean Sea Level (MSL) – height above sea level; Above Ground Level (AGL) – height above the ground
SOURCE: Google Earth, April 2019 (aerial photograph); Federal Aviation Administration, November 2018 (COMIX STAR route, Runway 27 RNP Approach route, Minimum Vector Area); Ricondo & Associates, Inc., April 2019 (NADDO at 6,000 ft MSL concept).

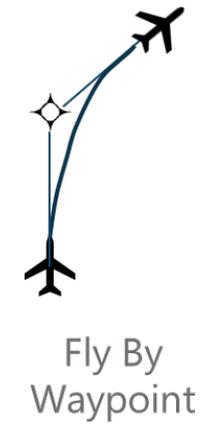
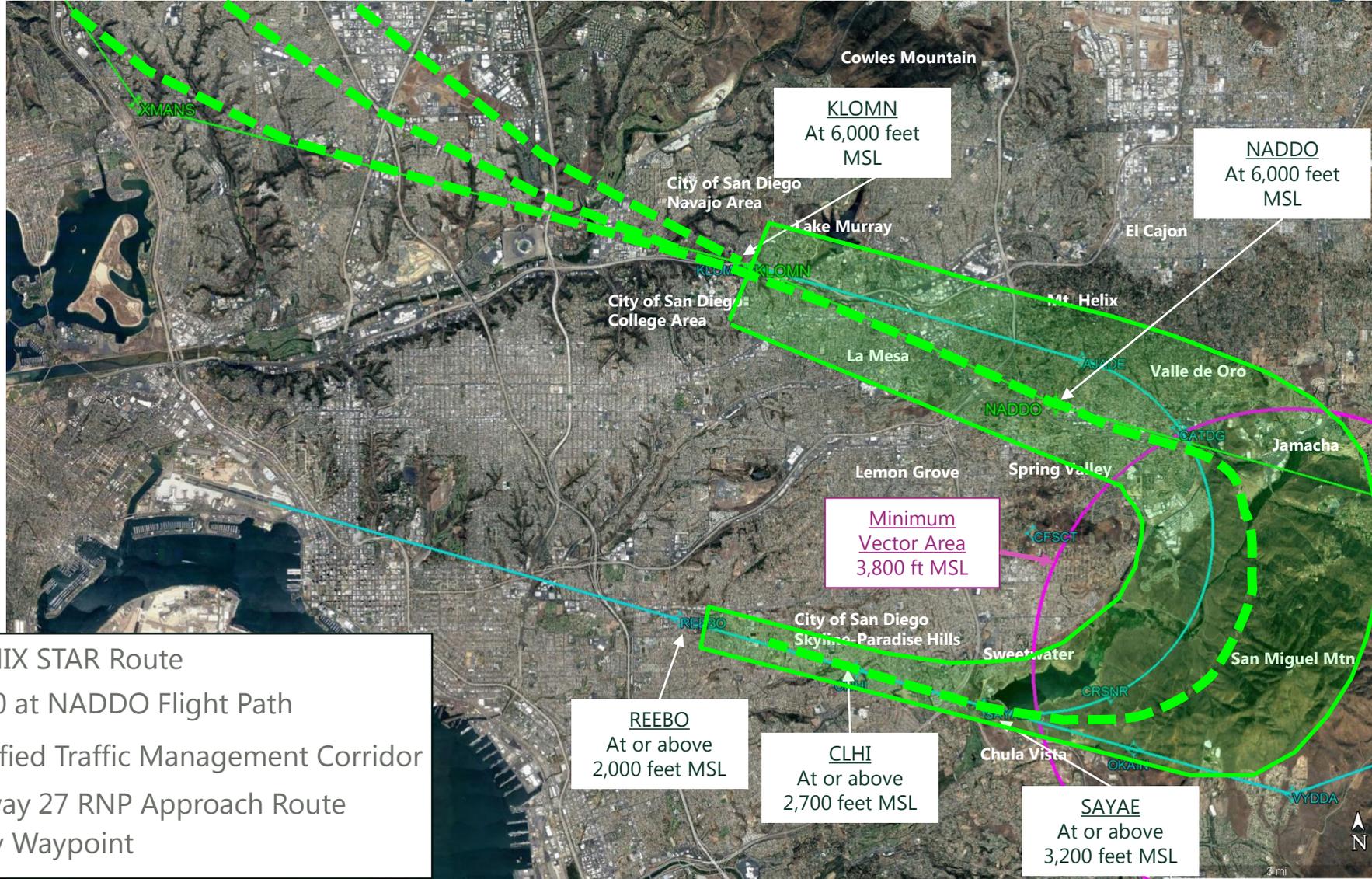
Keep Arrivals at 6,000 ft up to NADDO – Existing Traffic Management Corridor



Current width of area where FAA ATC manages traffic to join final approach is approximately 8 nautical miles

NOTE: Mean Sea Level (MSL) – height above sea level; Above Ground Level (AGL) – height above the ground
 SOURCE: Google Earth, April 2019 (aerial photograph); Federal Aviation Administration, November 2018 (COMIX STAR route, Runway 27 RNP Approach route, Minimum Vector Area); Ricondo & Associates, Inc., April 2019 (existing paths and traffic management corridor).

Keep Arrivals at 6,000 ft up to NADDO – Modified Traffic Management Corridor



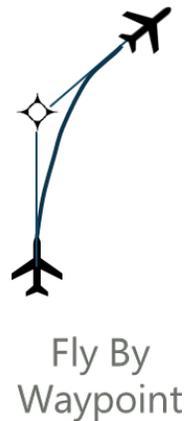
- COMIX STAR Route
- - - 6,000 at NADDO Flight Path
- Modified Traffic Management Corridor
- Runway 27 RNP Approach Route
- ◆ Fly By Waypoint

Concept would require aircraft to proceed further east after NADDO waypoint to get the necessary flight path distance needed to descend and slow down prior to joining the final approach.

Width of area where FAA ATC could manage traffic to join final approach may reduce from 8 to approximately 3 nautical miles. The limited area to manage traffic may be considered infeasible by FAA

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 SOURCE: Google Earth, April 2019 (aerial photograph); Federal Aviation Administration, November 2018 (COMIX STAR route, Runway 27 RNP Approach route, Minimum Vector Area); Ricondo & Associates, Inc., April 2019 (6,000 ft. at NADDO flight path; modified traffic management corridor).

Emphasize Use of Runway 27 RNP Approach



- COMIX STAR Route
- Runway 27 RNP Approach Route
- - - Runway 27 RNP Approach Flight Path
- Fly By Waypoint

Intent: Reduce noise levels by locating arrivals over more compatible areas

Concept: Emphasize increased use of the Runway 27 RNP approach

Concerns: RNP approach is limited to aircraft with required equipment and pilots authorized to fly the approach

Would concentrate more arrivals over areas underneath the RNP flight path

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 SOURCE: Google Earth, April 2019 (aerial photograph); Federal Aviation Administration, November 2018 (COMIX STAR route, Runway 27 RNP Approach route); Ricondo & Associates, Inc., April 2019 (RNP approach flight path).

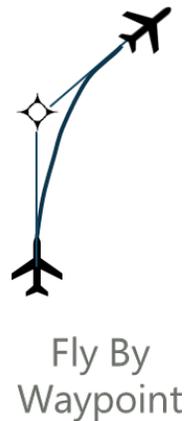
Runway 27 RNAV Visual Approach



Intent: Reduce noise levels by locating arrivals over more compatible areas with some dispersion

Concept: Keep jet arrivals a visual approach along an eastbound path at RNP approach altitudes and turn south over more compatible area

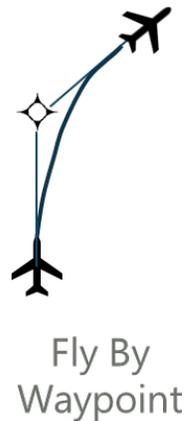
Concerns: Requires pilots to request approach and FAA may not be able to accommodate visual approach during peak arrival demand periods



- RNAV Visual Approach Flight Corridor
- Runway Visual Approach Route
- Runway 27 RNP Approach Route
- Minimum Vector Area
- Fly By Waypoint

NOTE: Mean Sea Level (MSL) – height above sea level; Above Ground Level (AGL) – height above the ground
 SOURCE: Google Earth, April 2019 (aerial photograph); Federal Aviation Administration, November 2018 (Runway 27 RNP Approach route, Minimum Vector Area); Ricondo & Associates, Inc., April 2019 (RNAV Visual approach concept route and corridor).

Develop RNAV Runway Transition to Runway 27 Final Approach



- RNAV Transition Design Area
- RNAV Transition Preferred Path
- Runway 27 RNP Approach Route
- Minimum Vector Area
- Fly By Waypoint

Intent: Reduce noise levels by locating arrivals over more compatible areas

Concept: Provide RNAV runway transition that mimics Runway 27 RNP approach and does not require additional navigation equipment and pilot authorization

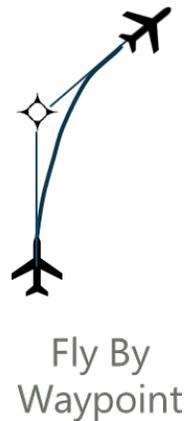
Concerns: May not be able to meet terrain and obstruction clearance requirements

May include aircraft performance concerns by users.

Would concentrate more arrivals over areas underneath the proposed flight path

NOTE: Mean Sea Level (MSL) – height above sea level; Above Ground Level (AGL) – height above the ground
 SOURCE: Google Earth, April 2019 (aerial photograph); Federal Aviation Administration, November 2018 (Runway 27 RNP Approach route; Minimum Vector Area); Ricondo & Associates, Inc., April 2019 (RNAV Runway Transition concept flight path).

Remove Route Between KLOMN and NADDO Waypoint (after Class B Change)



- Modified COMIX STAR Route
- - - Modified COMIX STAR Flight Path
- - - COMIX STAR KLOMN-NADDO Route
- Runway 27 RNP Approach Route
- Fly By Waypoint

Intent: Reduce noise by increasing dispersion as aircraft turn south to join the final approach

Concept: Discontinue use of the route between the KLOMN and NADDO waypoints and keep jet arrivals on an easterly heading until directed to turn south to join final approach

Concerns: The KLOMN to NADDO route was designed to provide pilots a predictable route that will keep the aircraft in the Class B airspace. FAA may require the proposed Class B airspace be implemented prior to removing the KLOMN to NADDO route.

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 SOURCE: Google Earth, April 2019 (aerial photograph); Federal Aviation Administration, November 2018 (COMIX STAR route, Runway 27 RNP Approach route); Ricondo & Associates, Inc., April 2019 (modified COMIX STAR concept and flight path).

Next Steps

Next Steps

- Conduct design on potentially feasible concepts
- Meet with FAA Southern California Terminal Radar Approach Control to gather feedback on concepts
- Review findings with Working Group