



# Welcome

Technical Advisory Committee Meeting #1

April 5, 2018

# Agenda

- Introductions
- Technical Advisory Committee (TAC)
- Study Overview:
  - Part 150 Study
  - Flight Procedure Evaluation
- Anticipated Meeting Schedule
- Questions
- Next Meeting

# Introductions

## **San Diego County Regional Airport Authority (SCRAA)**

- Owns and operates the airport
- Main Contact: Ms. Sjohnna Knack, Program Manager

## **14 CFR Part 150 Consultant Team** – In Procurement Process

### Part 150 focus:

- Areas exposed to CNEL levels at or higher than 65 dBA
- FAA will only fund abatement/mitigation at or higher than CNEL 65 dBA

### Several flight procedure recommendations to reduce noise outside CNEL 65 dBA

### SDCRAA to conduct flight procedure evaluation outside the 150 Study process

# Introductions (cont.)

## Flight Procedure Evaluation Consultant Team



- Ricondo & Associates, Inc.
- Mead & Hunt
- Project Lead: Mr. Stephen Smith






## Technical Advisory Committee

- Formation
  - Role
- Responsibilities
- Conduct and Logistics







# Technical Advisory Committee (TAC)

-  Purpose: Provide input on technical process and policy/regulation for the Part 150 Noise Compatibility Study and the Flight Procedures Evaluation Study
-  Represents San Diego International Airport (SAN) stakeholder groups
  - Federal Aviation Administration (FAA) Airports and Air Traffic Organization (ATO)
  - Users: Airline, Commuter and Corporate General Aviation
  - SDCRAA Airport (various departments)
  - Local government jurisdictions
  - Community representatives around SAN: Airport Noise Advisory Committee (ANAC) and Citizen Advisory Committee (CAC)

# TAC's Advisory Role - Flight Procedure Evaluation






-  Provide technical input to Airport Authority and consultant
-  Input on concept procedure designs
  - Safety feedback
  - Operational feedback
  - Benefit/cost feedback
-  Represent your stakeholder group.

# TAC Member Responsibilities

-  Attend every meeting.
-  Come to meeting with open-mind.
-  Conduct discussions in a professional and respectful manner.
-  Respect other committee members views and opinions.
-  Ask questions as a means to reach a better understanding on a topic.
-  Provide meaningful input.



# TAC Meeting Conduct and Logistics




-  Operated on a consensus basis.
-  Conducted in a professional and respectful manner.
-  Facilitated by an experienced meeting facilitator.
  - Stay on agenda
  - Be sensitive to meeting time
  - Let every committee member share their thoughts
-  TAC meetings will be open to the public to observe.
-  Statements to the press can only represent the individual not the committee.



## Flight Procedure Evaluation

- ANAC Sub-Committee Recommendations
  - Purpose
  - Process
- Important Factors

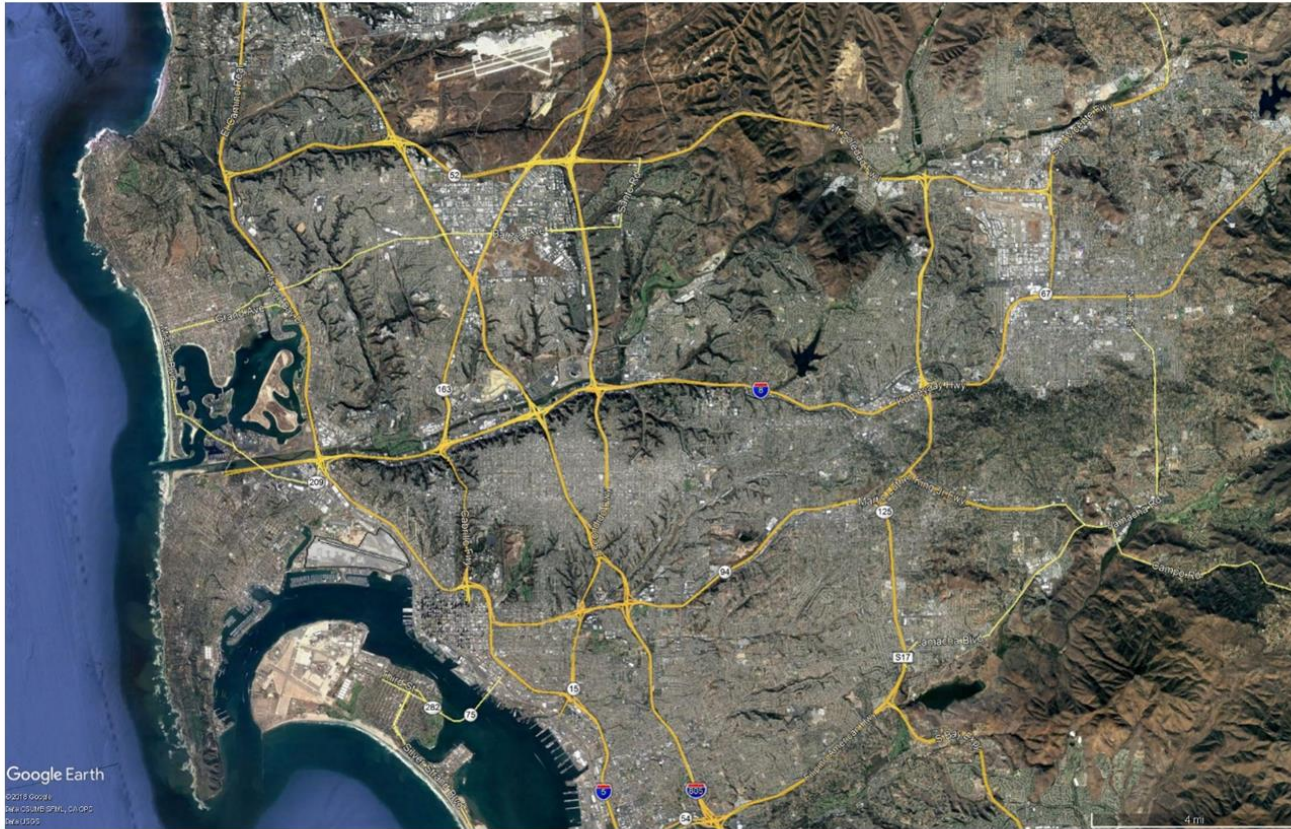
# Flight Procedure Evaluation

-  The Airport Noise Advisory Committee (ANAC) proposed multiple flight procedure recommendations to reduce aircraft noise.
-  In Dec 2017, Airport Authority Board accepted the Action Plan to assess ANAC recommendations.
-  Flight Procedure Evaluation Purpose:
  - Evaluate flight procedures affecting areas outside 65 CNEL.
  - Flight procedures closer to the airport will be evaluated in the Part 150 study.
  - Gather community input on these procedures.

***FAA has ultimate control over implementing flight procedure changes***



# ANAC Recommendations - Flight Procedures



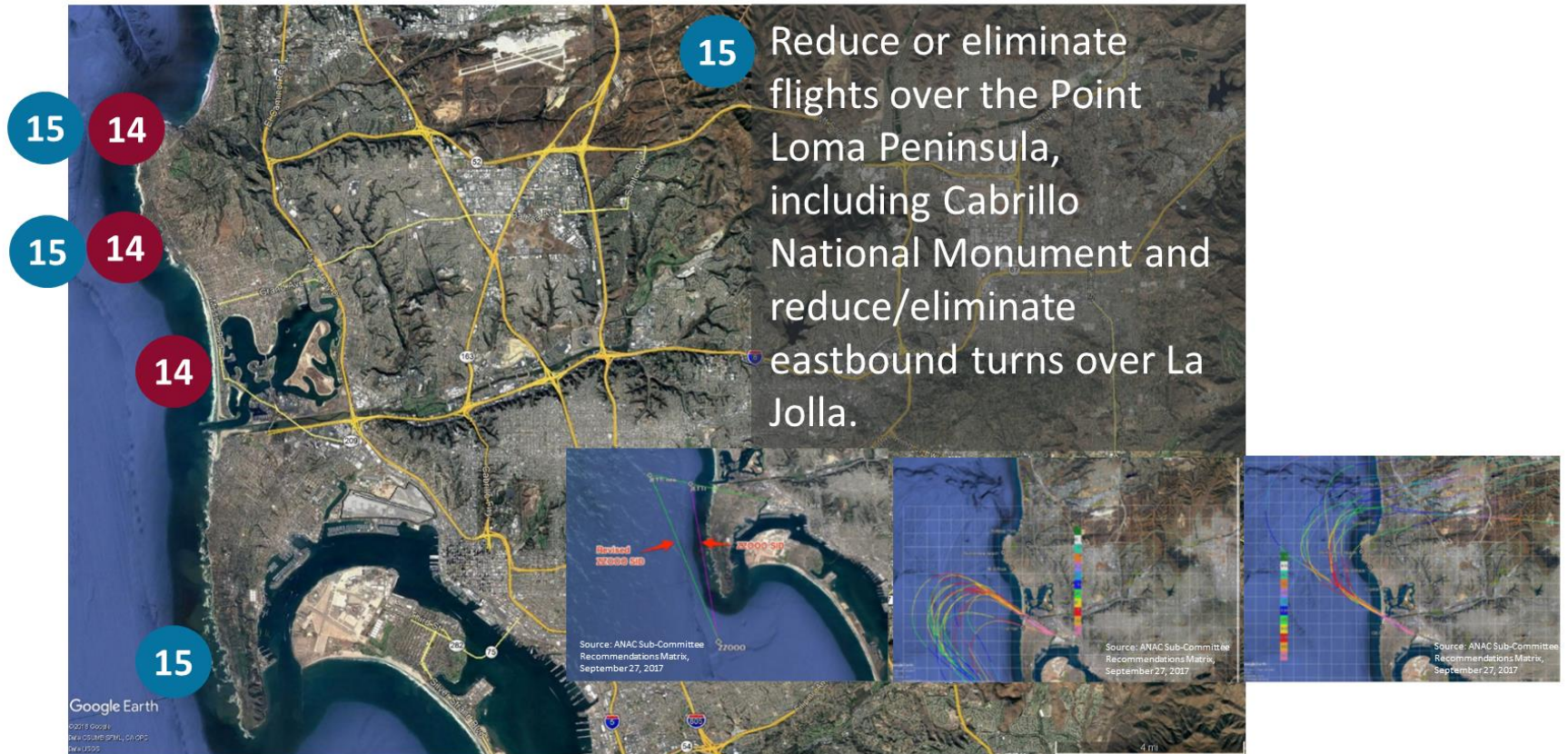


# ANAC Recommendations - Flight Procedures



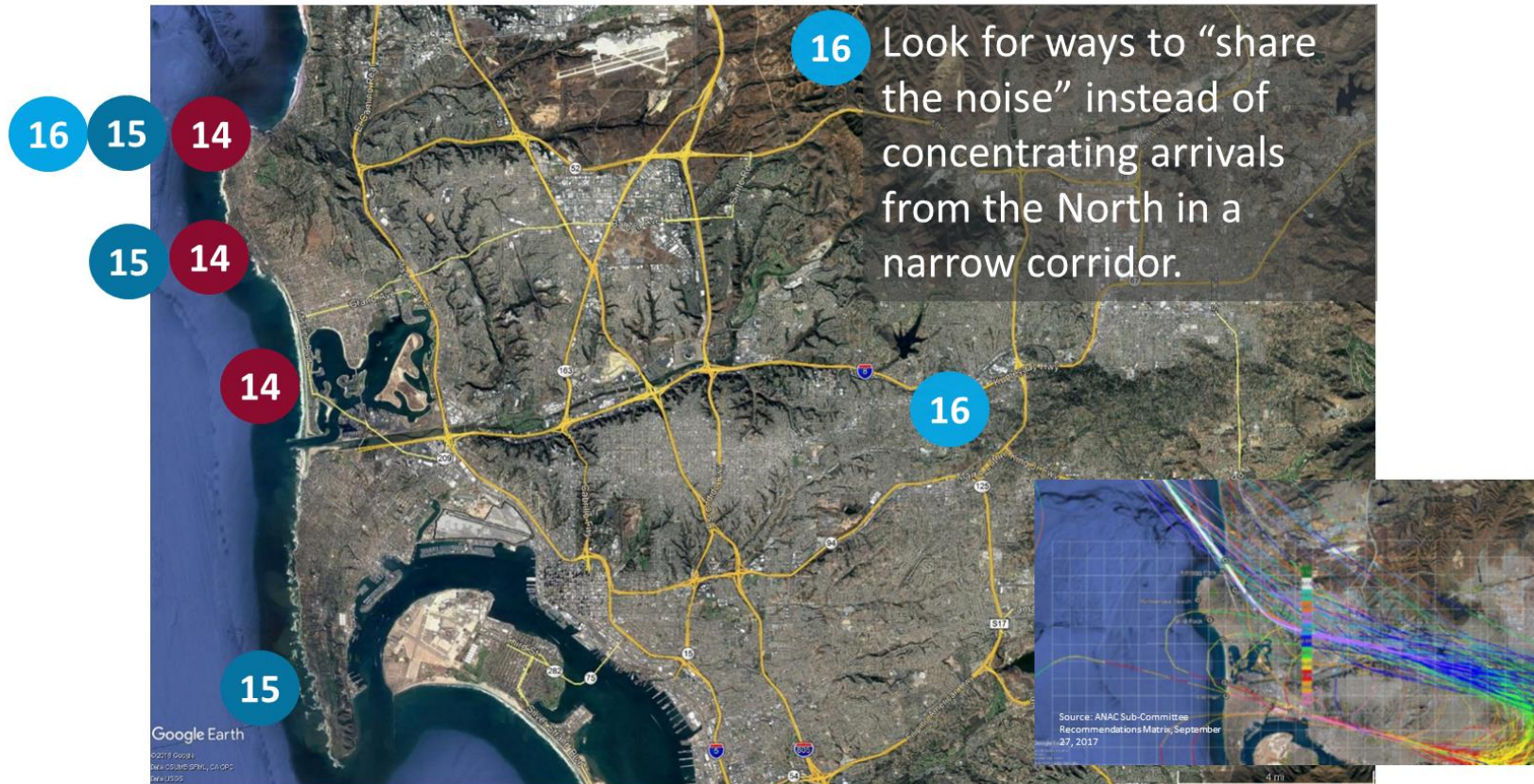


# ANAC Recommendations - Flight Procedures



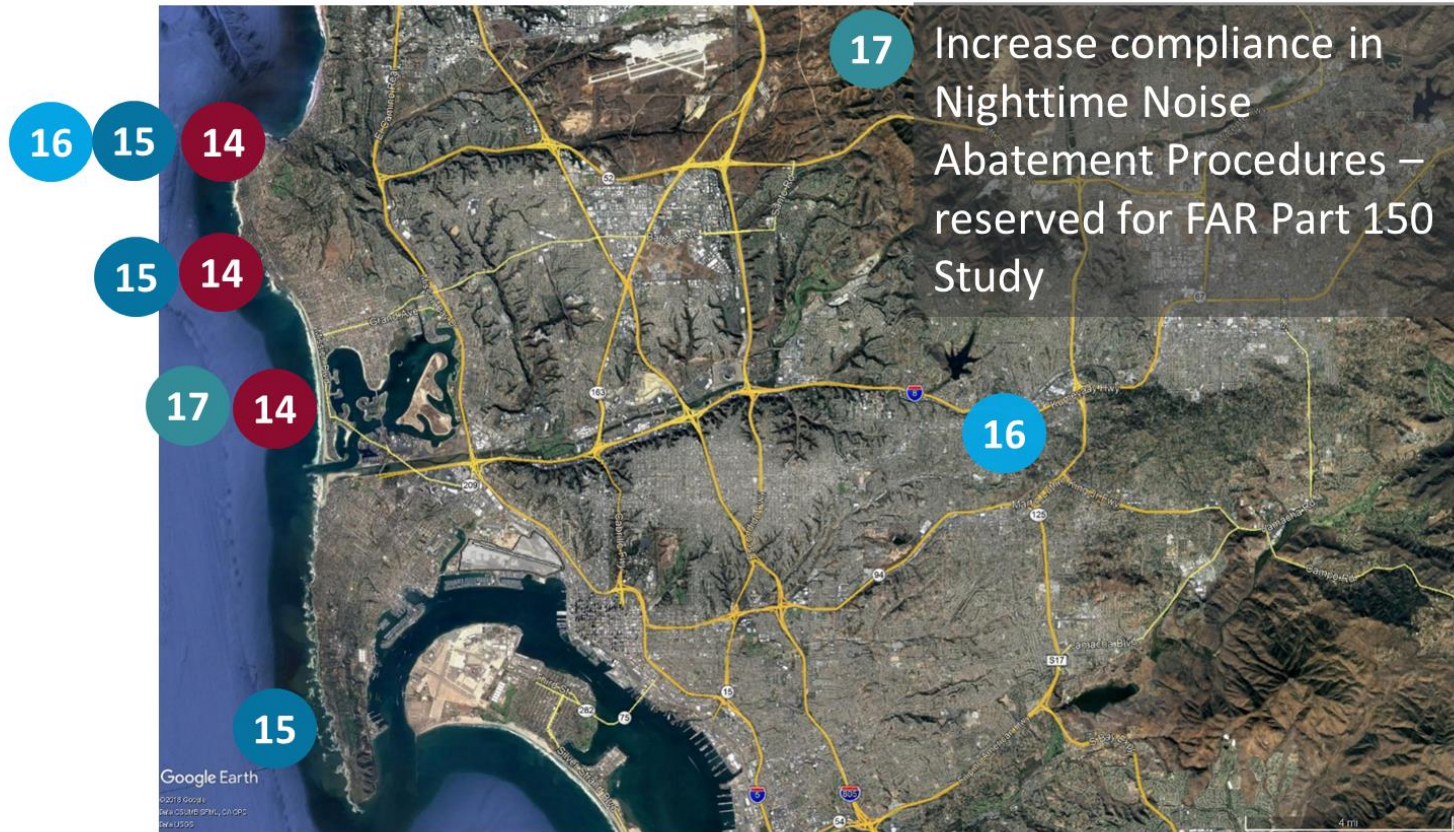


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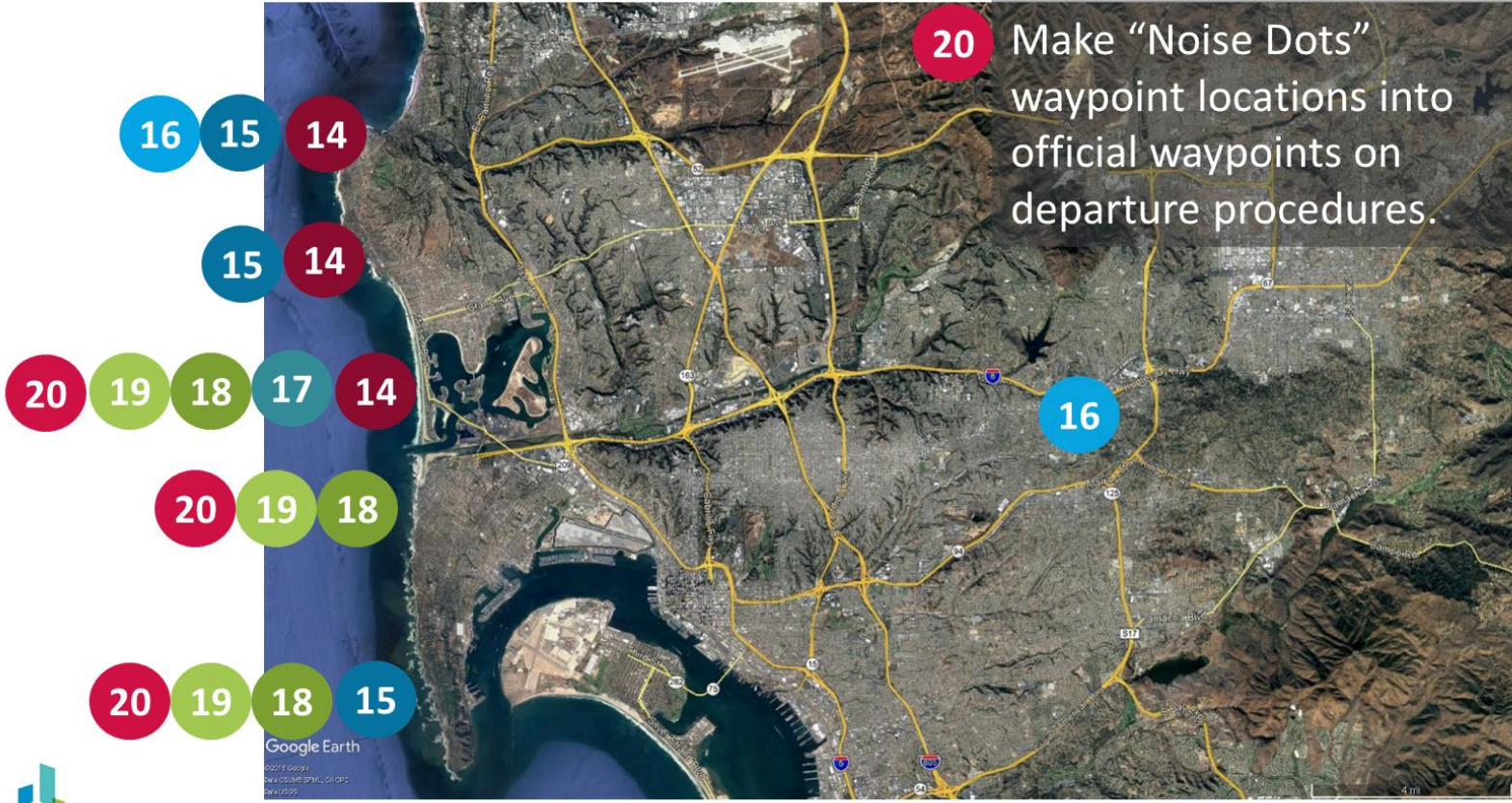
# ANAC Recommendations - Flight Procedures





# ANAC Recommendations - Flight Procedures

20 Make "Noise Dots" waypoint locations into official waypoints on departure procedures.



# SDIA Conceptual Flight Procedure Analysis Processes

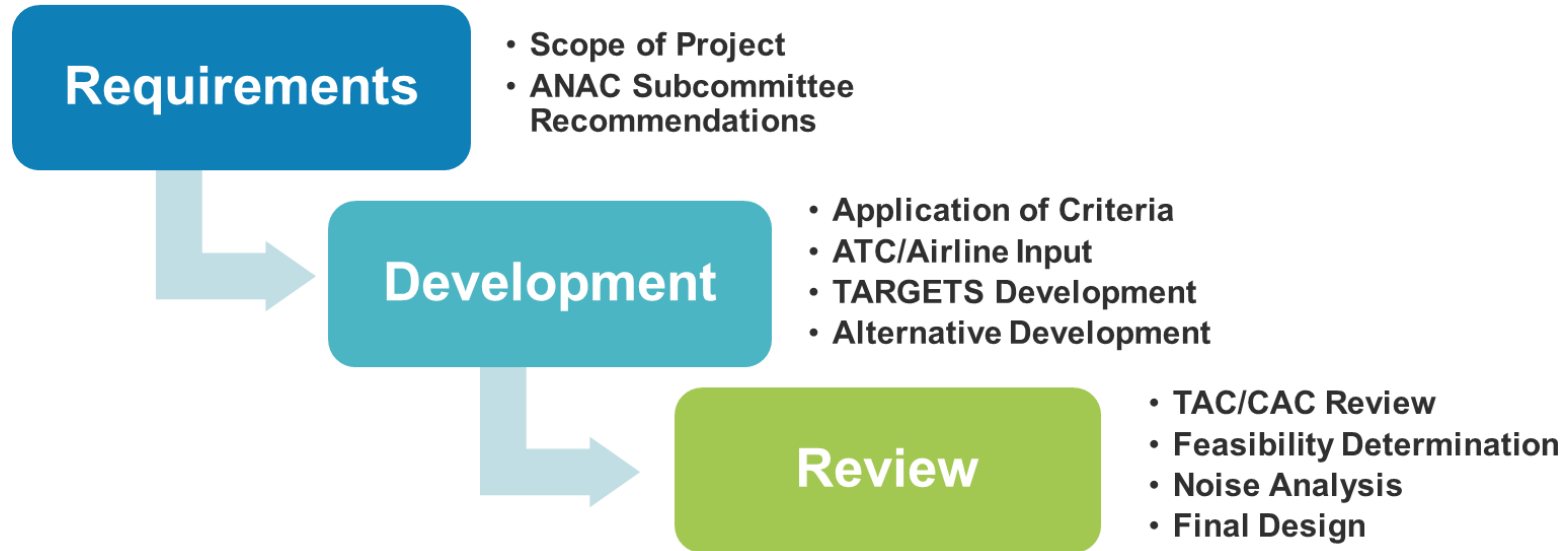
## Requirements

- Scope of Project
- ANAC Subcommittee Recommendations

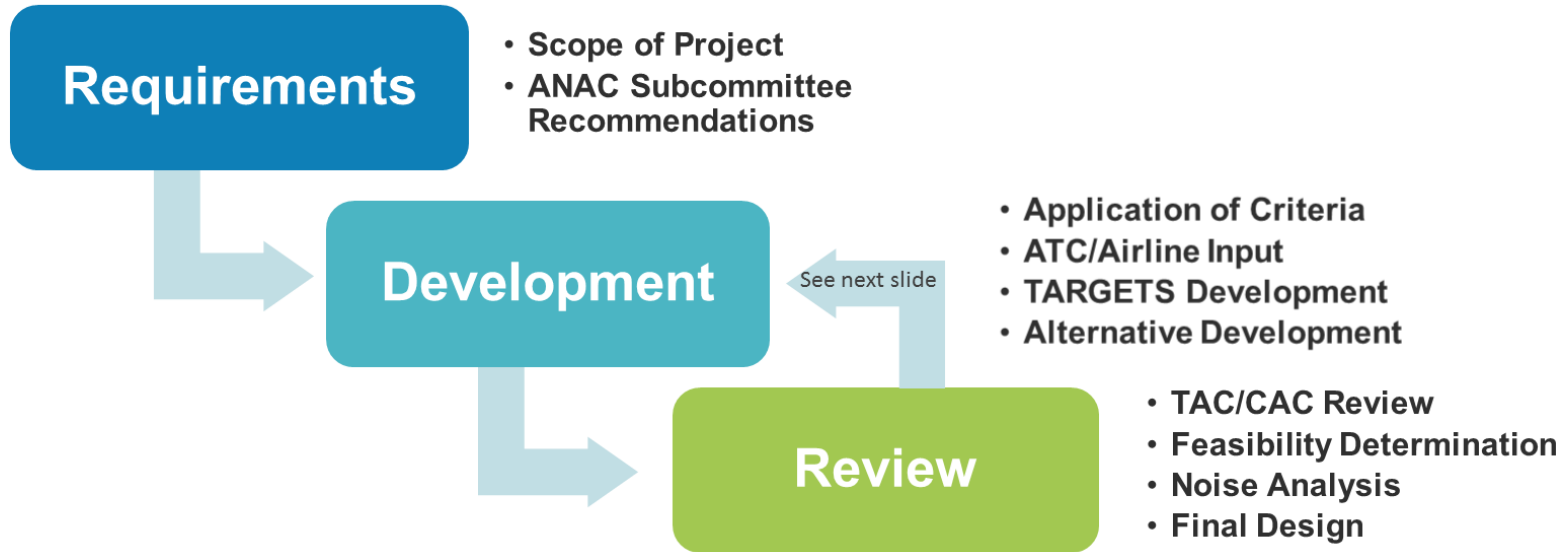
# SDIA Conceptual Flight Procedure Analysis Processes



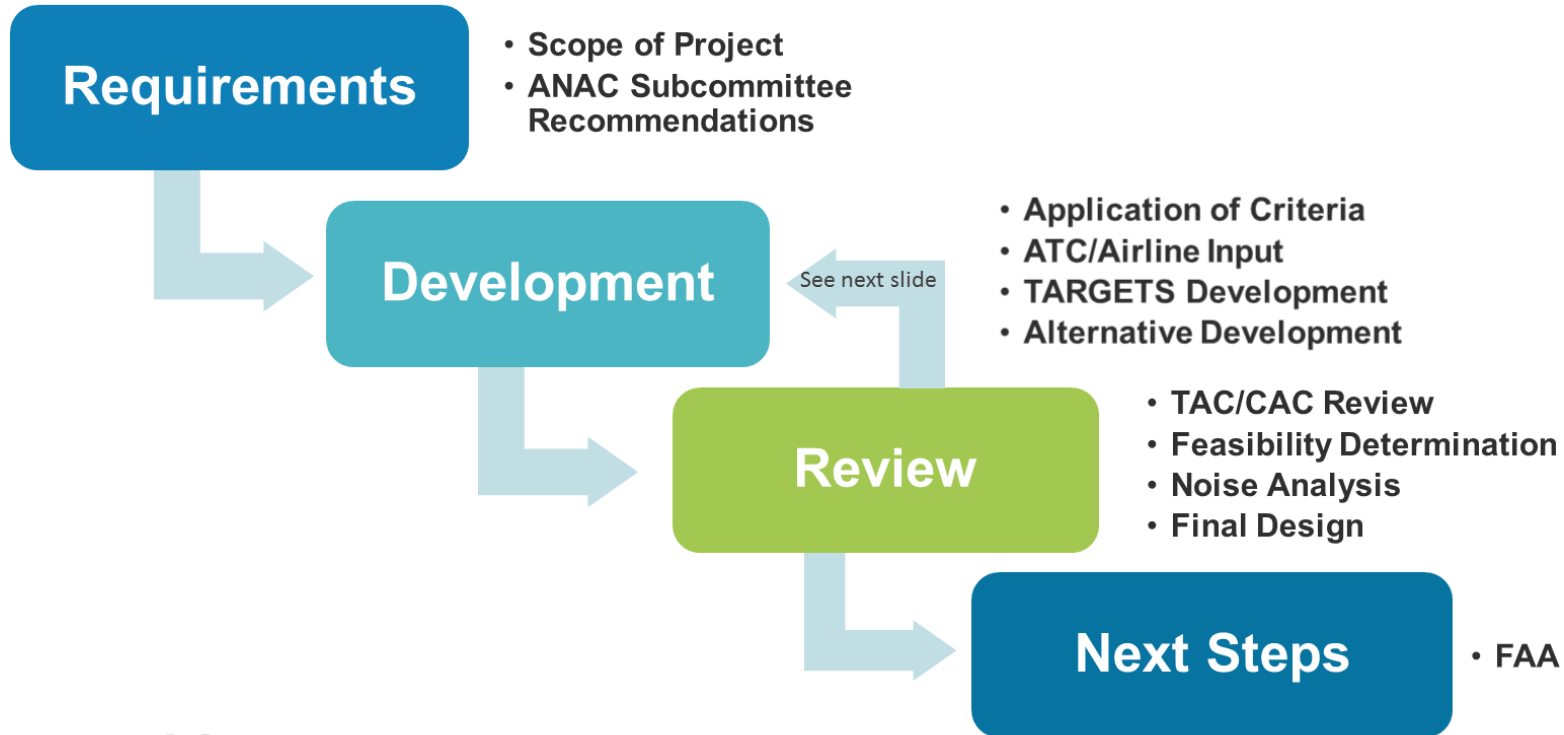
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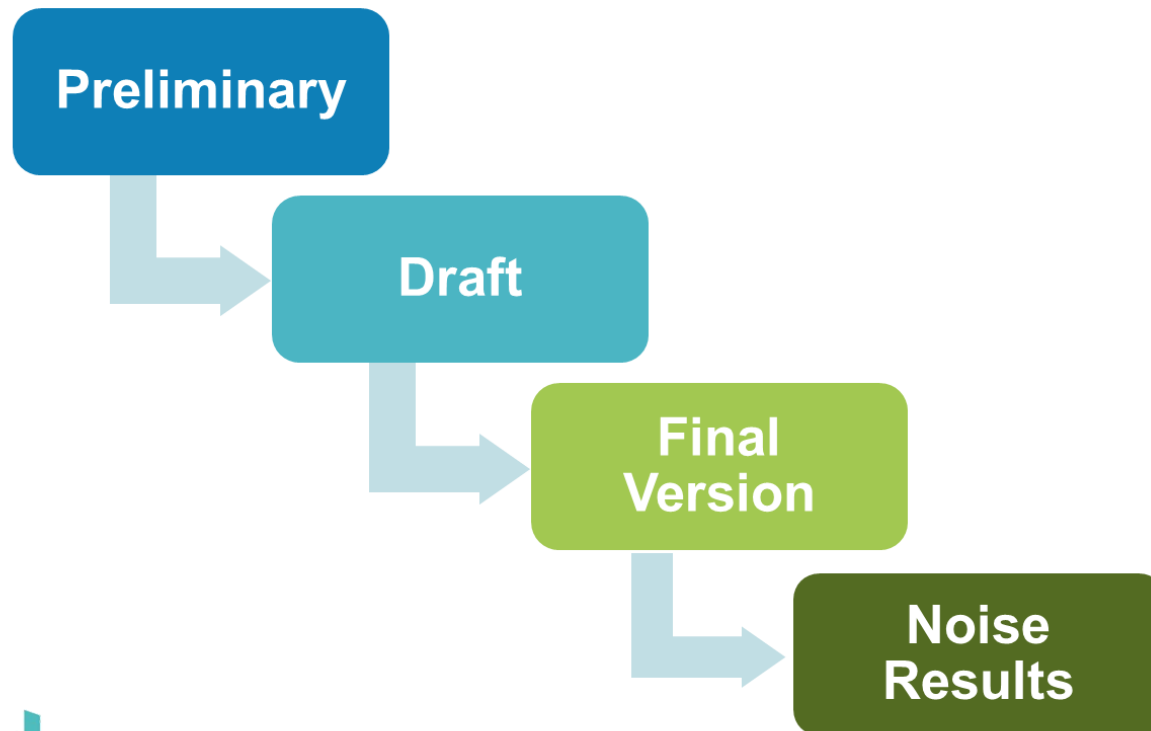


# SDIA Conceptual Flight Procedure Analysis Processes





# Development/Review Steps



## Preliminary

Design concept procedures within parameters that meet intent of ANAC recommendations. If a design is not possible to address a recommendation, reasons will be documented.

## Draft

Consider input from TAC on Version 1 designs and adjust where possible. Reasons for input that cannot be accommodated will be documented.

## Final

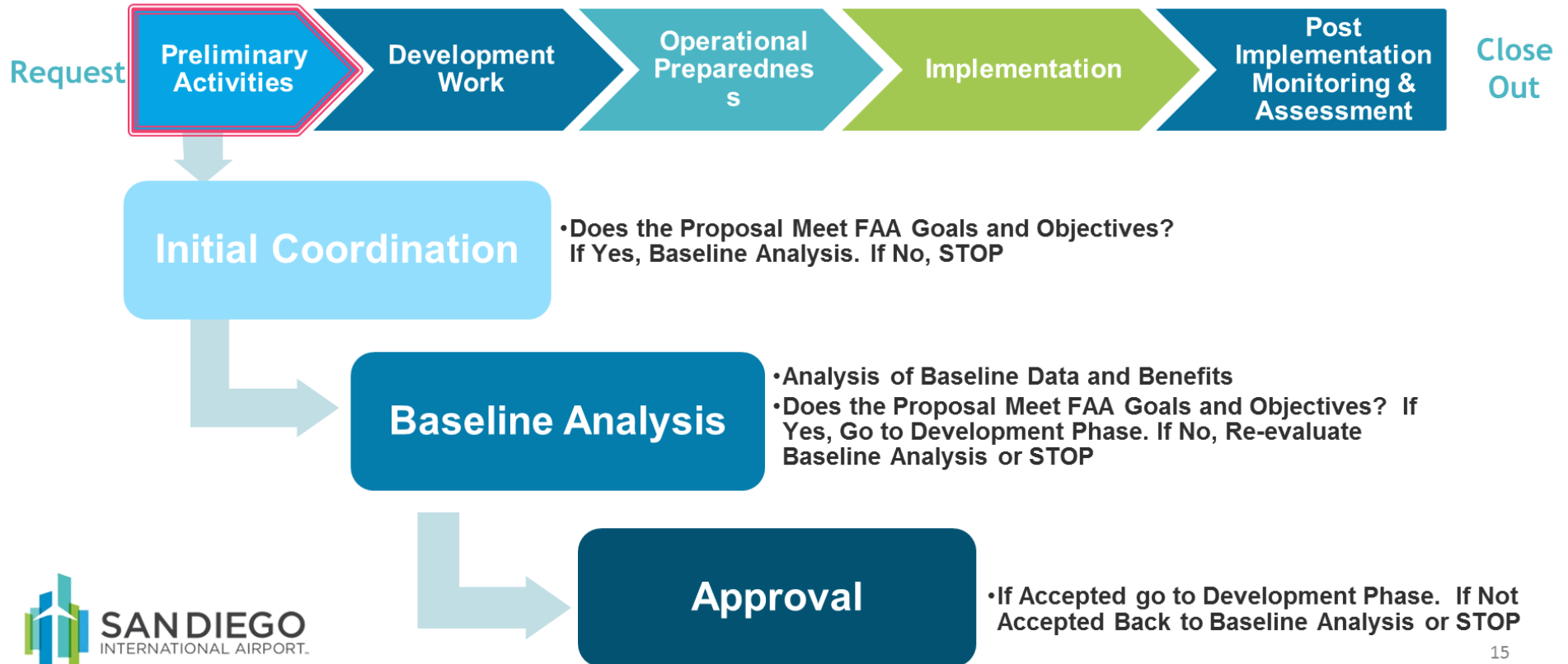
Consider input from CAC and TAC on Version 2 designs and adjust where possible. Reasons for input that cannot be accommodated will be documented.

## Noise Results

Calculate noise on Final Version designs and compare with Baseline levels to determine potential change. Review final designs and noise changes with CAC and TAC.

# 7100.41 Phase 1 - Preliminary Activities

A Process to Evaluate Safety, Risk, Benefit, Feasibility, Readiness, and Performance



# Process - Concept Design



## Design Parameters

- Do not change aircraft flight paths over areas exposed to CNEL 65 or higher
- Do not impact safety
- Meet FAA design criteria
- Fit within existing airspace and maintain existing airspace hand-off areas
- Do not impact capacity of SDIA
- Do not move noise to new non-compatible areas



## Operations Data and Design Tool

- Evaluate post-Metroplex operations
- Use FAA's Terminal Area Route Generation, Evaluation and Traffic Simulation (TARGETS) design tool to design concept procedures.

# Process - Aircraft Noise Analysis



## Methodology: Use Aviation Environmental Design Tool (AEDT)

- Use FAA ATO methodology to assess potential impacts
- Calculate noise levels for closely-spaced grid points
- Analyze difference between alternative and baseline



## Flight Track and Operation Patterns

- Develop AEDT flight tracks and altitude profiles for traffic flows based on best radar and flight operations data



## Noise Model Outputs

- Calculate Community Noise Equivalent Noise Level (CNEL)
- Calculate change in DNL and CNEL between an alternative and the baseline.

# Important Factors

## ✓ Will:

- Propose designs compatible with existing air traffic environment
- Gather critical input from CAC and TAC during design process
- Coordinate with FAA ATO staff during concept design process
- Develop required information for FAA consideration the “Preliminary Activities” phase of the FAA Order 7100.41a process, if necessary
- Calculate change in noise levels for specific procedures

# Important Factors

## ✘ Will not:

- Evaluate recommendations to reduce noise at or higher than CNEL 65 dBA – reserved for Part 150 Study
- Propose designs that require FAA waivers
- Propose designs that will negatively impact SDIA capacity
- Conduct all steps in FAA Order 7100.41A
- Evaluate non-SDIA traffic overflights
- Evaluate “restriction” type proposals that require 14 CFR Part 161 study

# Process - Stakeholder Input



## Citizen Advisory Committee (CAC)

- Input on ANAC recommendations and related goals
- At least two meetings to review draft/final concepts
- One meeting to review conclusions



## Technical Advisory Committee (TAC)

- Broader stakeholder group: Airline(s), commuter carrier(s), corporate operator(s) and FAA ATO.
- Input to confirm procedures are operationally viable and identify potential issues
- At least three meetings to review iterative/draft/final concepts
- One meeting to review conclusions





## Anticipated Meeting Schedule



# TAC Flight Procedure Analysis Meeting Timeline



★ = Citizen Advisory Committee Meetings



TAC Q&A and Comments  
Next Meeting