



Airport Noise Advisory Committee

April 17, 2019

Agenda

1. Welcome and Introductions
2. Presentation Items
 - a. Update on Flight Procedure Analysis
 - b. Update on Part 150 noise study
3. Action Items
 - a. Approval of February 20, 2019 Meeting Summary
 - b. Presentation on Airport Development Plan (ADP) and the Draft Environmental Impact Review (EIR)

Speakers:
Angela Shafer-Payne, SDCRAA, Introduction
Brendan Reed, SDCRAA, Overview of ADP
Nick Johnson, Johnson Aviation, Forecasts/Capacity
Mary Ellen Eagan, HMMH, Noise analysis
4. Public Comment
5. Next Meeting: June 19, 2019
6. Adjourn



Update on Flight Procedure Analysis

[Steve Smith, Director, Ricondo](#)



San Diego County Regional Airport Authority (SDCRAA) Flight Procedure Evaluation Overview to ANAC

San Diego International Airport

April 17, 2019

Evaluation and Analysis of ANAC Recommendations

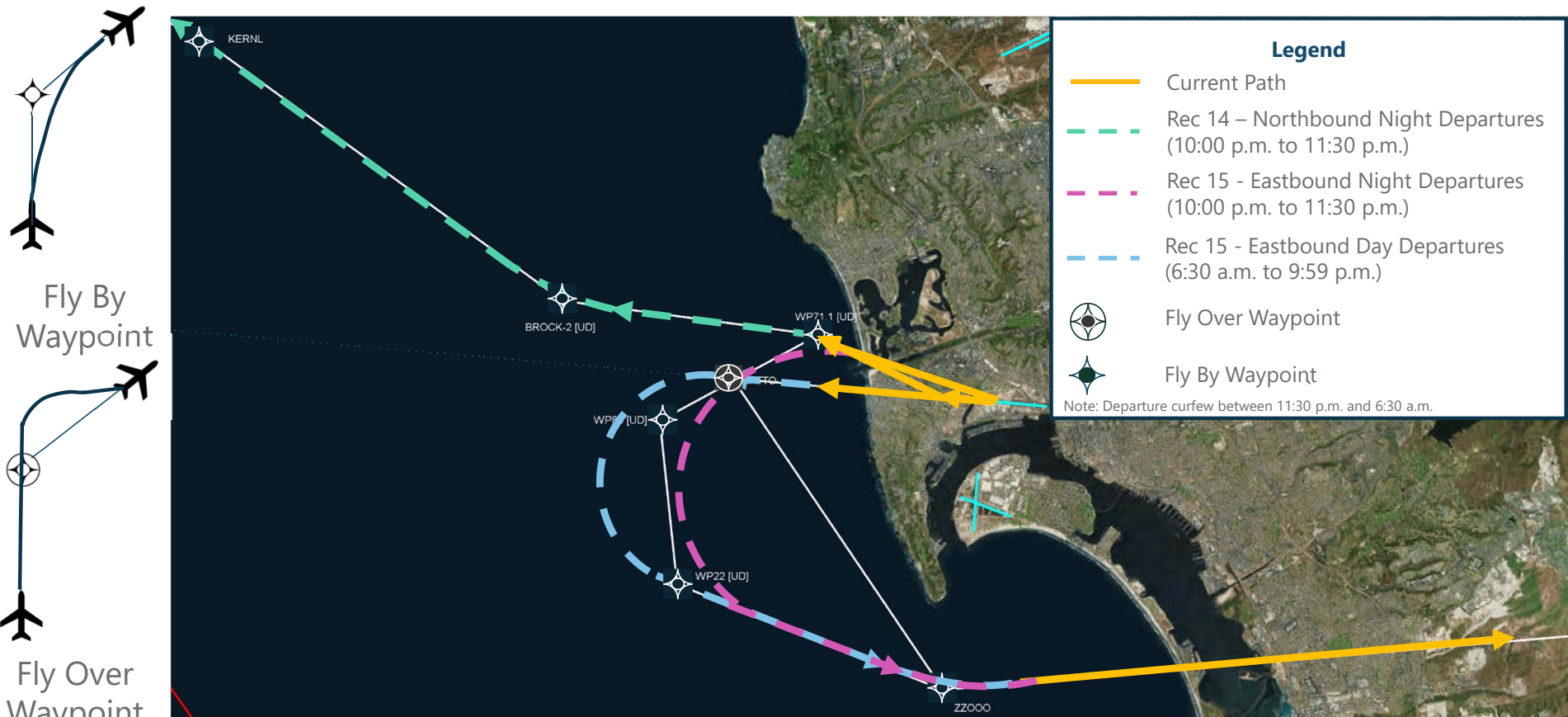
- Evaluate ANAC Subcommittee flight procedure concept designs to address noise in La Jolla, Mission Beach, Pacific Beach, Point Loma, and Ocean Beach.
 - Conduct operational assessments for potential feasibility
 - Procedures that were potentially feasible were modeled for noise
- Separate working group was established in December of 2018 to address noise issues in East County.
- Analysis on existing Airport Authority noise offices practices for identification of and definition of early turn compliance (FAA Noise Dots).
 - Analysis report provided on March 21, 2019

Flight Procedure Evaluation Process

- Three Phases
 - Preliminary Draft
 - Draft
 - Final
- Coordinated with Technical Advisory Committee and Citizen Advisory Committee
 - Conducted 5 meetings to date
 - Provided responses to comments between Preliminary Draft and Draft phases
- Shared information to the public
 - TAC/CAC meetings open for public to observe
 - Shared all presentations with public on the website
- Evaluated 20 different procedure design concepts

DRAFT Deliberative Document – For Discussion Purposes Only

Consultant Team Recommendations



SOURCE: Ricondo & Associates, Inc., April 2019 (procedure design concepts); Federal Aviation Administration, April 2019 (airport runways)

Next Steps

Update on Part 150 Noise Study

[Ryk Dunkelberg, Vice President, Mead & Hunt, Inc.](#)



Mead
& Hunt

14 CFR PART 150 UPDATE ANAC MEETING

APR.17.2019



SAN DIEGO
INTERNATIONAL AIRPORT

What is a CFR Part 150 Study?

Mead
& Hunt

- A voluntary Study to identify aircraft noise and land use compatibility: *Both existing and future conditions.*
- The Study identifies and evaluates two components: *Aircraft noise and land use/population.*
- The Study consists of two distinct, but complementary portions: *Noise Exposure Maps and a Noise Compatibility Program.*
- The Study generally has a five-year planning horizon.

14 CFR
PART 150
UPDATE



What is a CFR Part 150 Study? (CONTINUED)

- The *Noise Exposure Maps (NEMs)* are accepted by the Federal Aviation Administration.
- The *Noise Compatibility Program (NCP)* measures are either approved or disapproved by the FAA. Approved measures contained in the Noise Compatibility Program are eligible for Federal funding.
- Anticipating a 18 month Study process.

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PART 150
UPDATE



Why Update Study?

- Respond to ANAC Recommendations, specifically those that may impact the 65 CNEL contour.
- Changes Over Time
 - Change in Aircraft Fleet Mix
 - Aircraft Noise Levels Reduced
 - Change in Aircraft Activity Levels
 - Updated Noise Model

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PART 150
UPDATE



Study Parameters

- Do Not Shift Noise to new non-compatible areas
- Do Not impact safety
- Do Not impact capacity
- Do Not Modify or Change Existing Curfew
- Do Not Evaluate Alternatives that Would Trigger Part 161
- Try to Reduce the Number of People Affected by Noise

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UPDATE



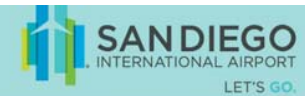
Web Site: www.SANnoisestudy.com



SAN NOISE STUDY



SAN NOISE STUDY



Home » [SAN Noise Study Overview](#)

SAN Noise Study Overview

Airports face many challenging issues. One of these issues is the effect that aircraft noise can have on communities surrounding an airport.

A Code of Federal Regulations (CFR) Part 150 Noise Compatibility Study is a voluntary noise exposure and land use compatibility study prepared by an airport to identify existing and potential future noise exposure, to evaluate various alternatives, and to make recommendations as to viable noise abatement/mitigation measures. Since 1988, we have completed several revisions and updates to our Part 150 Noise Compatibility Study.

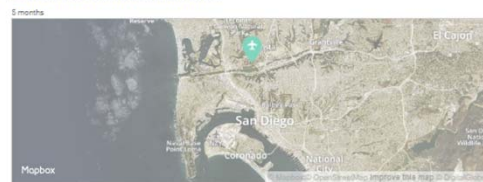
The overall purpose of our study update is to reduce the number of people affected by significant aircraft noise levels within acceptable economic, environmental, and legal parameters. This can be achieved through both aircraft operational measures and land use measures which will be developed with community and stakeholder input. This Study will pay particular attention to Alternatives developed by the Airport Noise Advisory Committee, our community and aviation stakeholder advisory committee on aircraft noise.

For more information on CFR Part 150 Noise Compatibility Studies, read [this](#) document.

Our hope with this website is that you can participate in our study by getting informed about the technical aspects surrounding aircraft noise, provide feedback on your specific aircraft noise concerns, and find ways you can interact either by attending meetings in person or providing your comments on this site. Your feedback will help us formulate potential recommendations.

[SHOW US WHERE YOU HEAR NOISE](#)

Show Us Where You Have Issues with Noise!



Drop a pin based on what type of noise bothers you. Once you've dropped the pin at a location you can also provide additional comments in the comment box.

Pin a Blue Pin for arriving flights

Pin a Green Pin for departing flights

Pin a Pink Pin for overflights

Pin an Orange Pin for other comments

[Go to Map](#)

REGISTER to get involved

Timeline

- October 2018**
Project starts and first meetings with Citizen Advisory Committee and Technical Advisory Committee.
- December 2018**
Consultants will be developing future forecasts of aviation activity for use in the modeling of future conditions.
- April 2019**
ANAC, CAC, and TAC committee meetings to discuss aviation forecasts
- July 2019**
CAC and TAC committee meetings to discuss existing conditions
- September 2019**
CAC and TAC committee meetings to discuss alternatives development
- September 2019**
Public Meeting
- Fall 2019**
Alternatives refinement
- November 2019**
CAC and TAC committee meetings
- November 2019**
Public Meeting
- Winter 2019/2020**
Draft recommendations

Participate in our Noise Study

Welcome to the San Diego International Airport's (SAN) Part 150 Noise Compatibility study website. We understand that communities surrounding SAN may be affected by aircraft noise so this study will review ways to reduce those impacts. This site is setup to allow you an opportunity to participate in this study as little, or as much, as you would like.

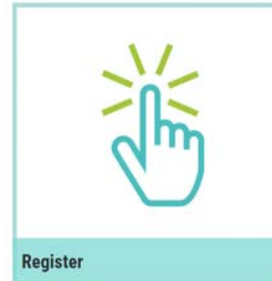


[SAN Noise Study Overview](#)



[Common Misconceptions](#)

Current Noise Program Highlights



[Register](#)



[Existing Noise Program](#)

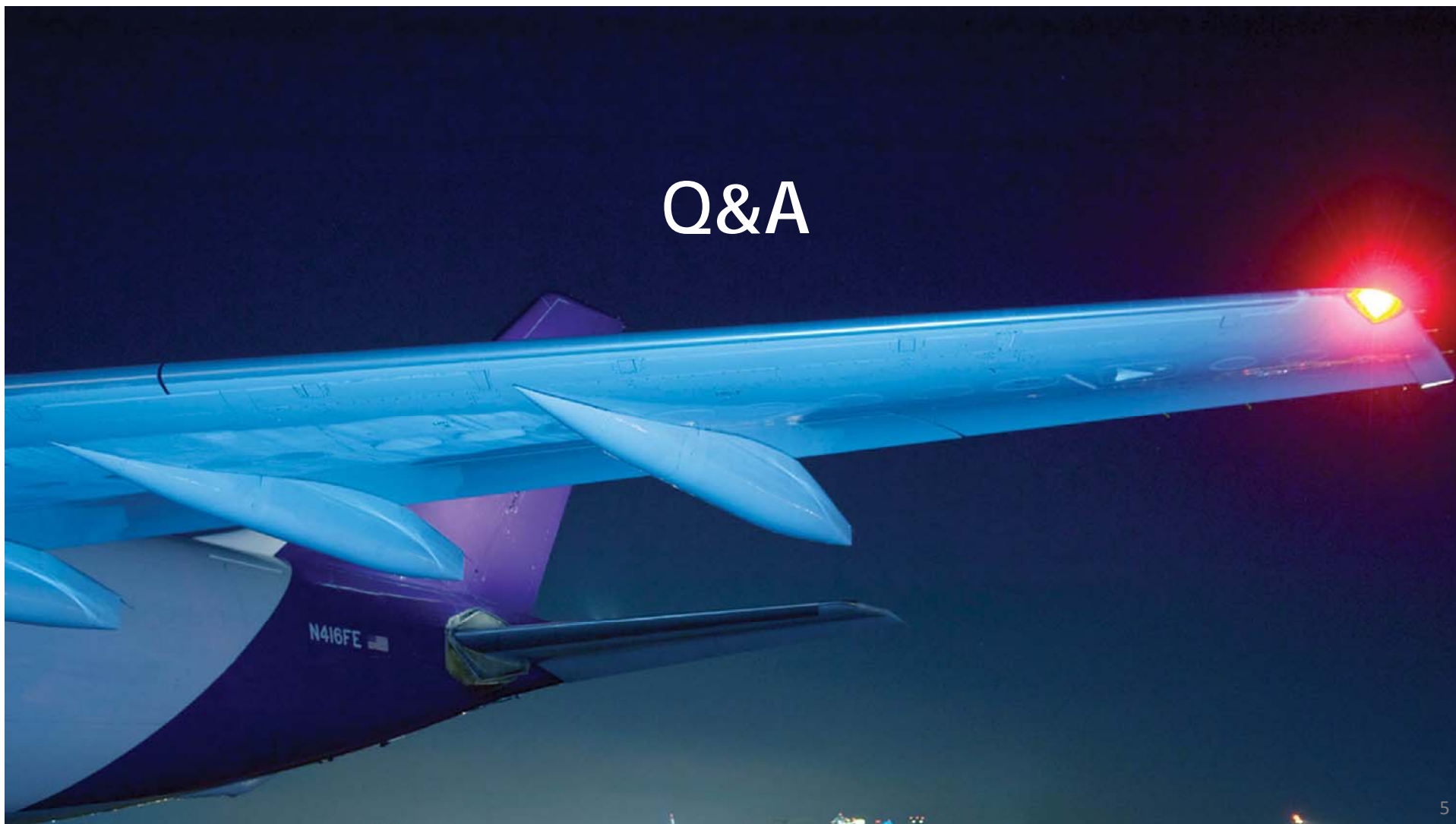
Next Steps

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UPDATE



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Q&A



Introduction - Angela Shafer-Payne

- Aging T1 does not provide an adequate level of passenger services (restrooms, concessions, waiting areas, etc.)
- Single runway is SDIA's limiting factor in the number of hourly operations
- Customer demand will continue with or without a new terminal
- Airport Noise and Capacity Act 1990
 - Curfew
 - Number of Flights
 - Types of Aircraft



Airport Development Plan (ADP) Overview

[Brendan Reed, SDCRAA](#)

Director, Planning & Environmental Affairs





Airport Development Plan

APRIL 2019

Brendan Reed

Director, Planning & Environmental Affairs

Project Context

One of Top 30 US Airports



Critical Economic Contribution



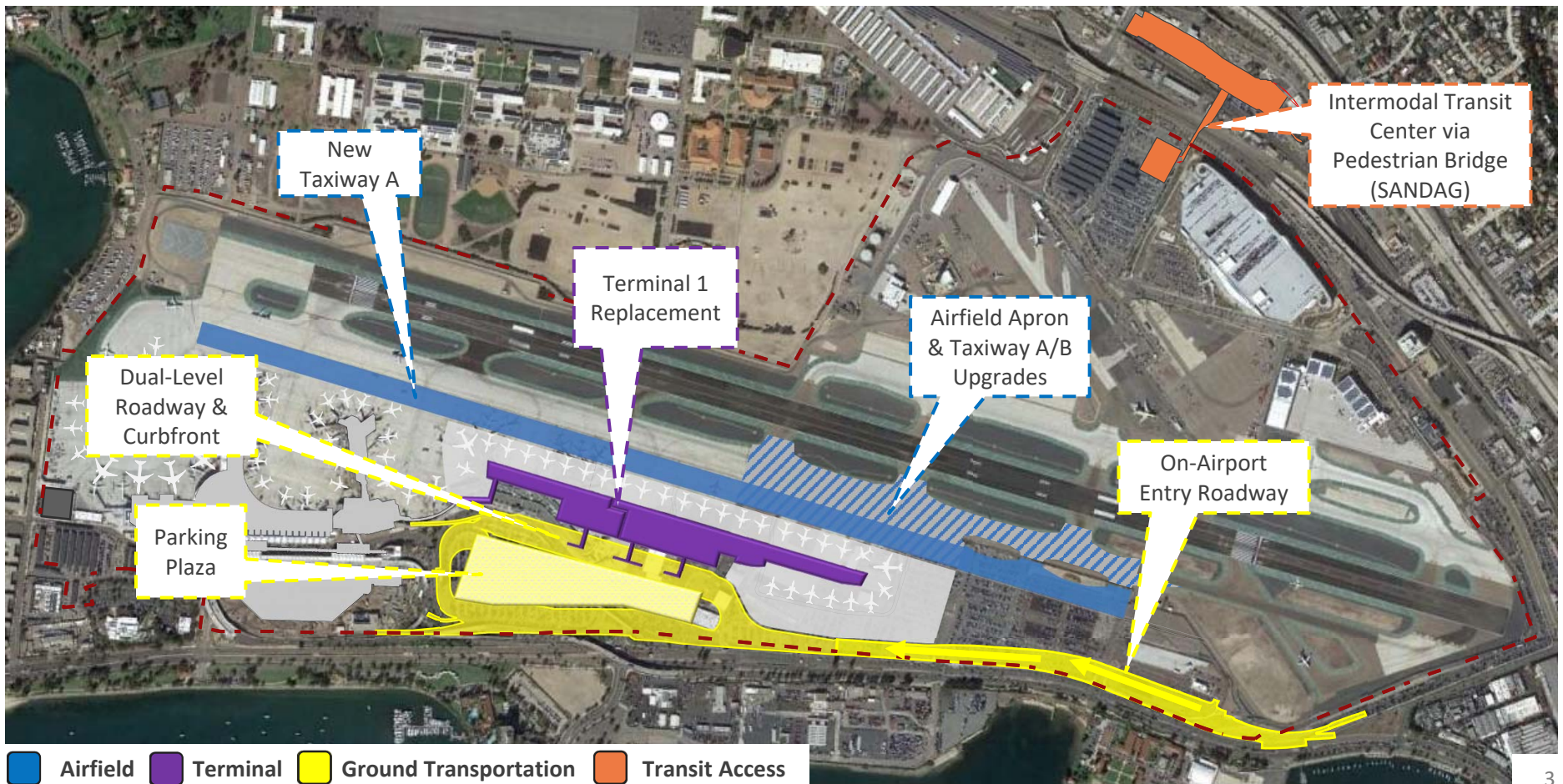
Growing Air Travel Demand



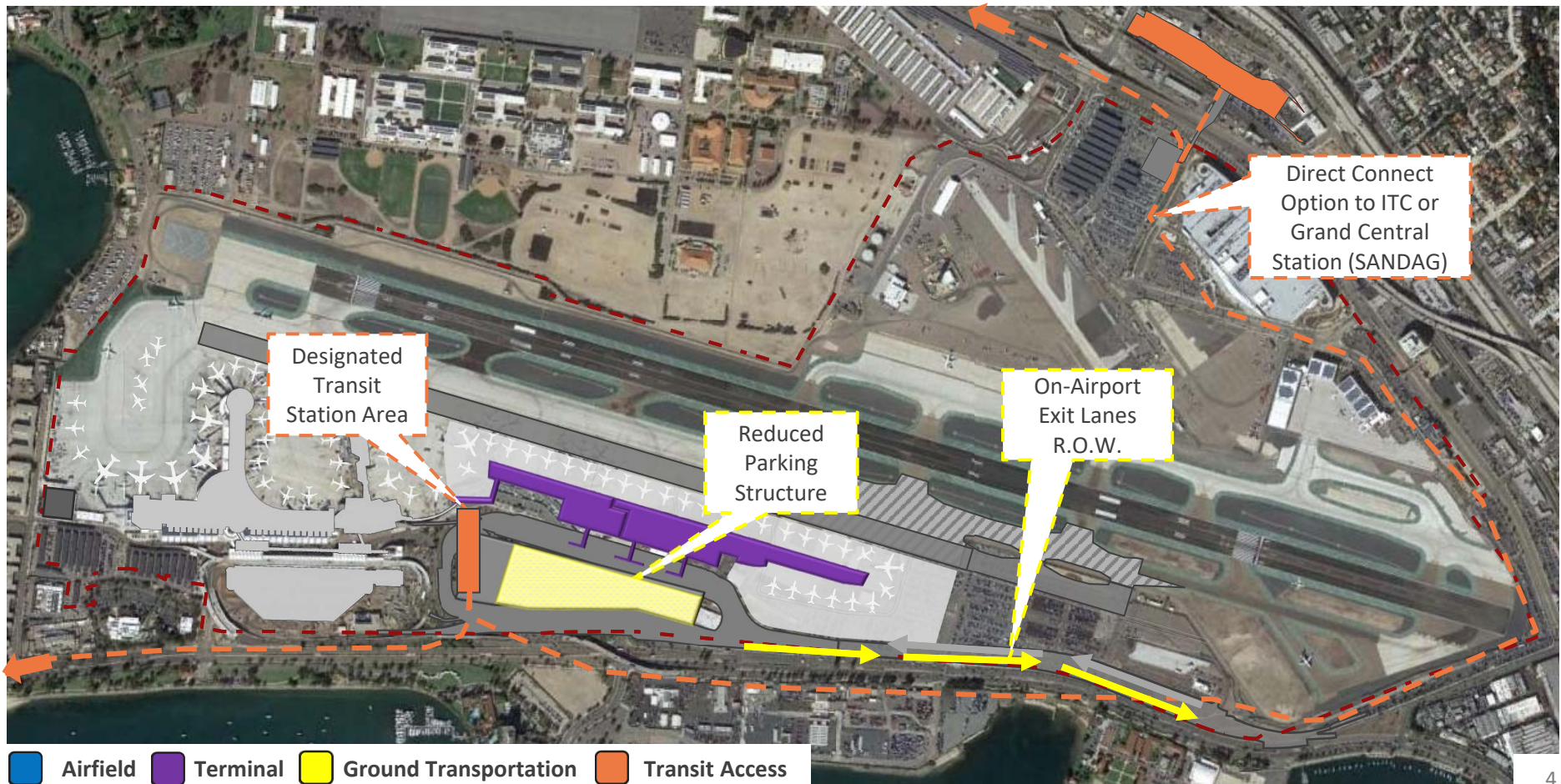
Inefficient Terminal 1



Original ADP Proposal



ADP Project Refinements



Next Steps



Forecasts and Capacity

[Nick Johnson, President, Johnson Aviation](#)





AIRPORT NOISE ADVISORY COMMITTEE

SAN Airport Development Plan - Forecast Update

San Diego, CA

Nick Johnson

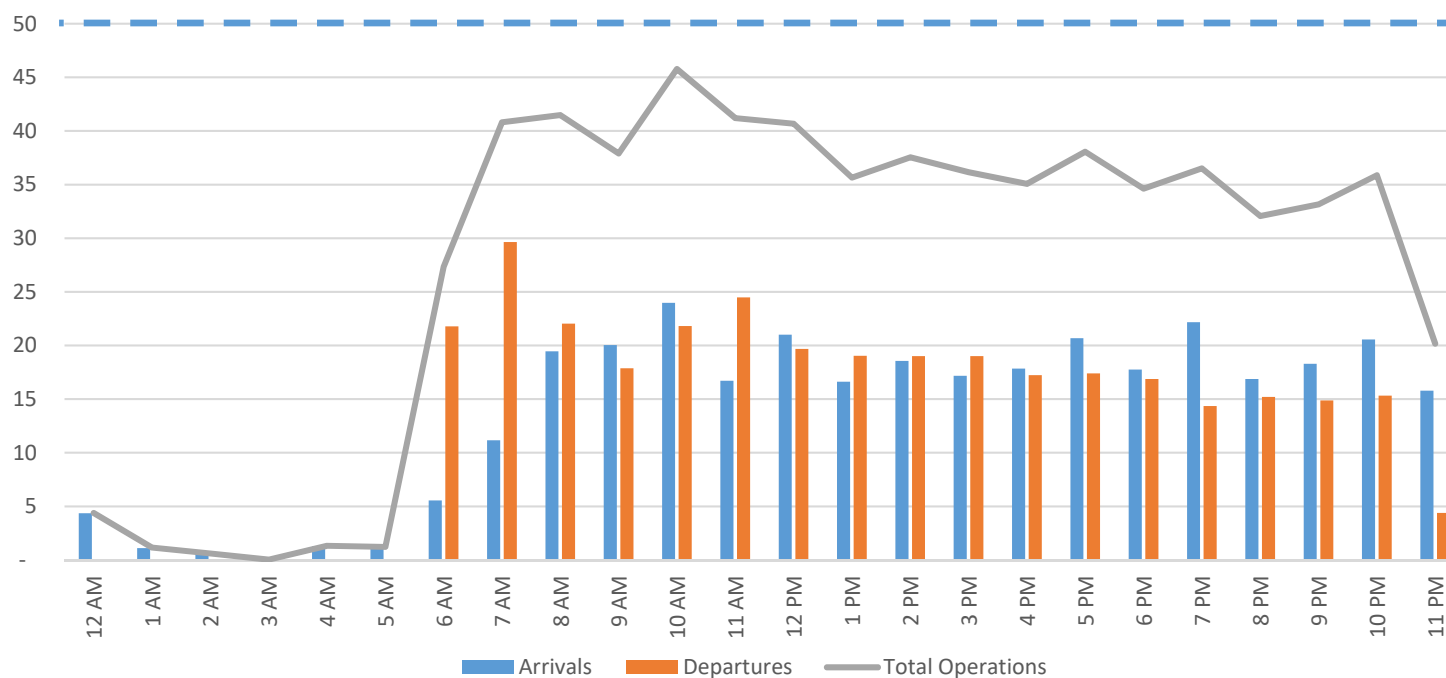


SDIA Single Runway Constrains Operations

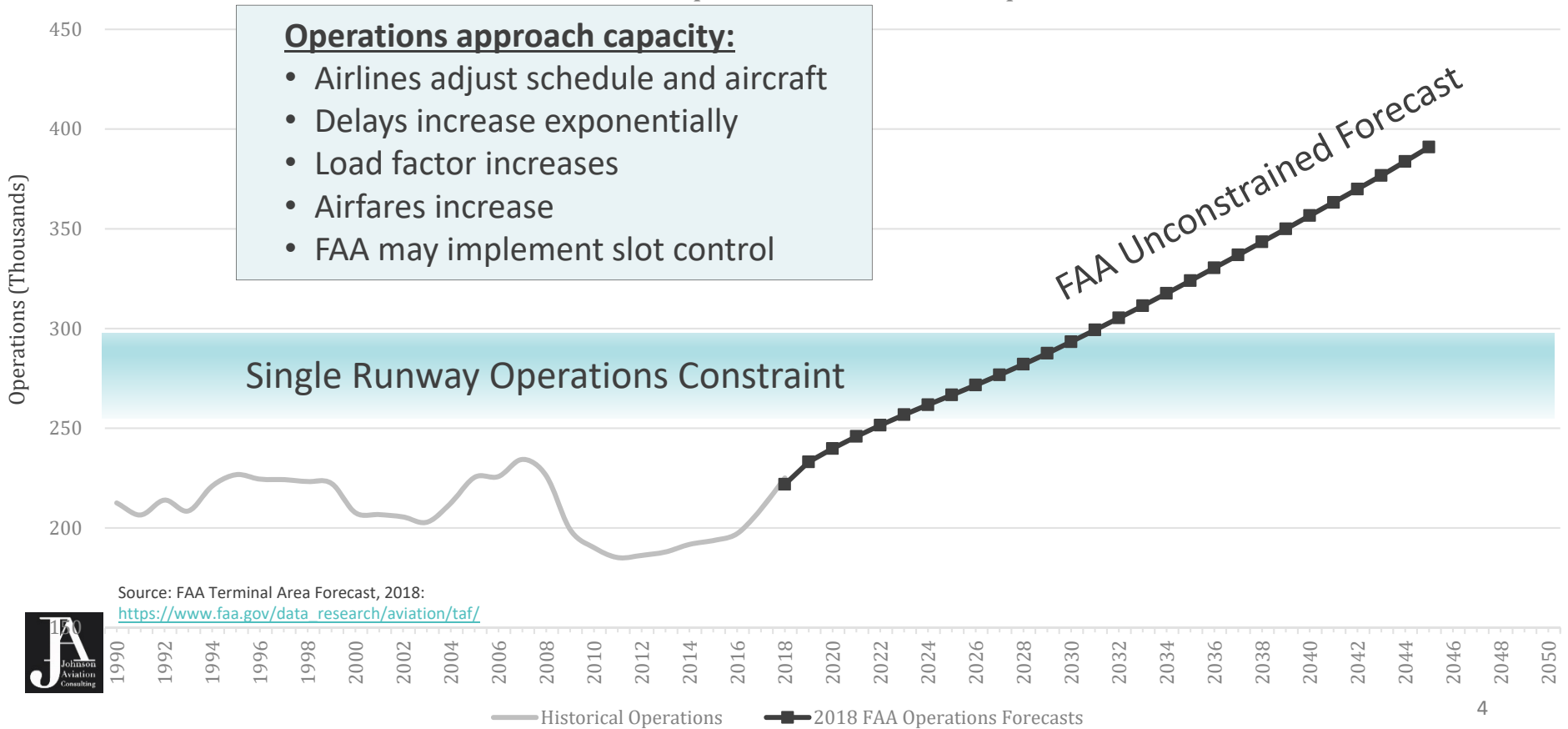


Hourly Operations Nearing Runway Capacity

2018 Peak Month Average Day Hourly Operations



Operations - Demand Versus Capacity



Next Steps

- Submitted draft forecasts to FAA for review and approval
- SIMMOD modeling (what is it and why is it necessary for Noise)
- Use modeling results to develop noise contours



Noise Analysis for EIR

[Mary Ellen Eagan, President, HMMH](#)



ADP EIR – Noise Analysis Process

Presentation to SDIA ANAC

Mary Ellen Eagan

April 17, 2019



Topics

- Noise metrics
- NEPA and CEQA noise impact thresholds
- Noise Analysis Process

Noise Metrics

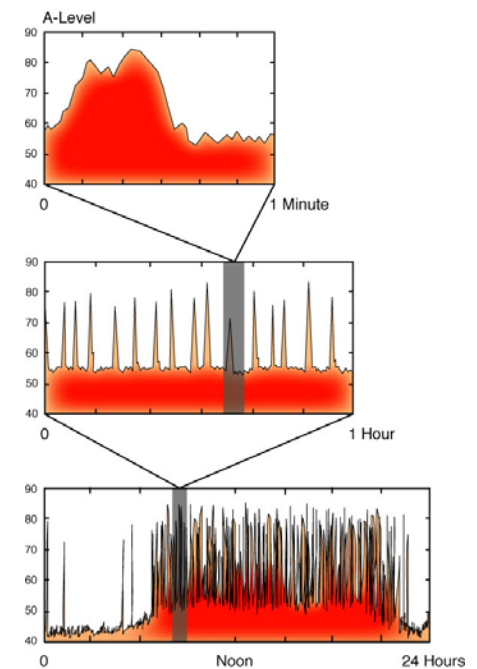
Single Event Noise Equivalent Level, SENEL

A way to describe the “noisiness” of a complete noise event

- Accounts for sound amplitude (A-weighted sound level)
- Accounts for noise event duration

Community Noise Equivalent Level (CNEL)

- A way to describe the noise dose for a 24-hour period
- Accounts for noise event “noisiness” (SENEL)
- Accounts for number of noise events
- Provides an additional weighting factor for evening and night operations



National Environmental Policy Act (NEPA) Noise Considerations

- Governs “federal actions” with possible environmental impacts
- FAA Order 1050.1F, “Policies and Procedures for Considering Environmental Impacts”
- FAA Order 5050.4B, “Airport Environmental Handbook”
- Thresholds defining significant change in noise exposure were identified by the Federal Interagency Committee on Noise (“FICON”), 1992
 - 1.5 dB increase in CNEL within 65 dB CNEL
- Order 1050.1F “Desk Reference” provides detailed guidance

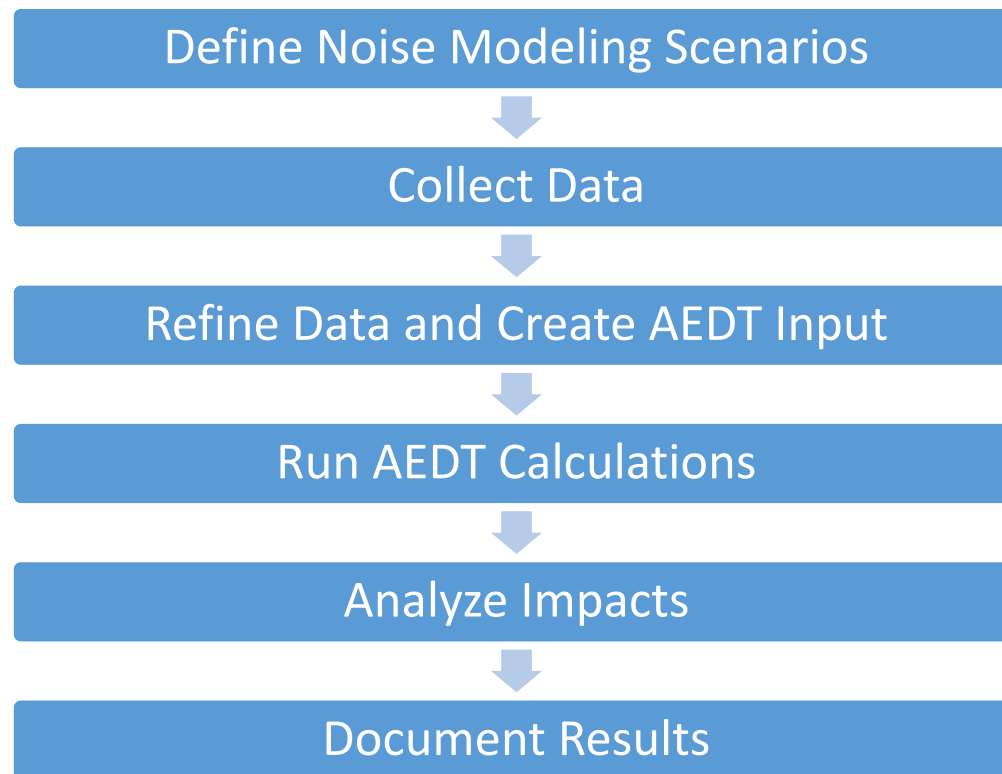
California Environmental Quality Act (CEQA); Enacted in 1970

- Modeled after NEPA
- Purposes:
 - Prevent significant, avoidable damage to the environment
 - Foster informed public decision making
 - Ensure transparency in governmental decision making process
 - Encourage public participation
- Significance:
 - Significant effect on the environment”: a substantial or potentially substantial adverse change in the physical conditions of the area
 - Significance determination based on substantial evidence - scientific and factual data
 - Significance “normally” measured against existing baseline conditions

Analyze Significant Impacts

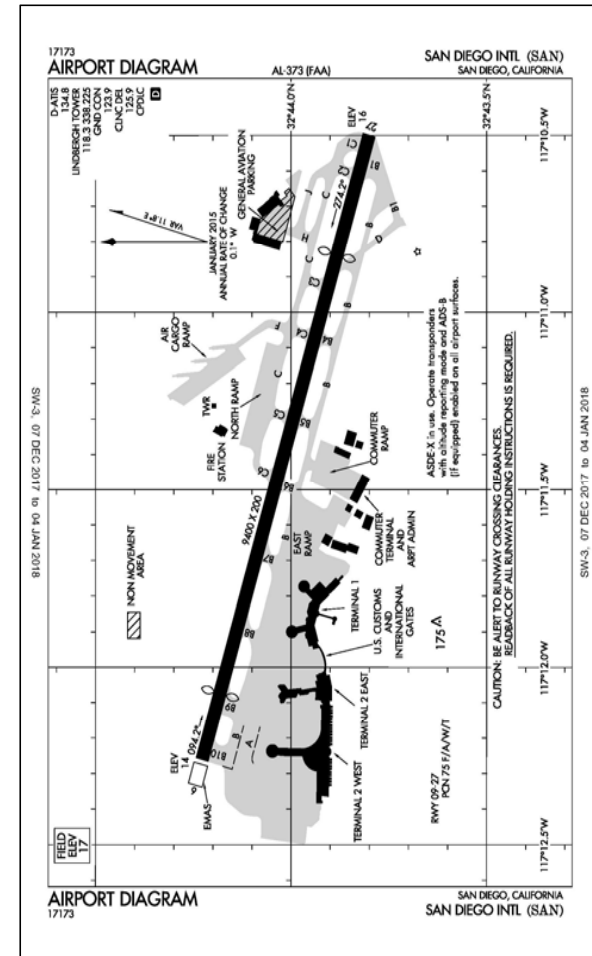
Significant Impacts under NEPA	Significant Impact Under CEQA
	Within 65 CNEL as compared to baseline year, for most noise-sensitive land uses
1.5 dB or more increase in 65 CNEL, for noise sensitive land uses as compared with the No Action Alternative for the same timeframe.	1.5 dB or more increase in 65 CNEL, for noise sensitive land uses, as compared with baseline
	3.0 dB or more increase between 60 and 65 CNEL, for noise-sensitive noise levels, as compared with baseline
	A substantial increase in the amount of time that aircraft-induced noise would affect classroom learning, as compared with baseline
	A substantial increase in the number of nighttime flight operations that produce exterior noise levels sufficient to awaken an increasing proportion of the population, as compared with the baseline.

Aviation Environmental Design Tool (AEDT) NEPA/CEQA Noise Analysis Steps



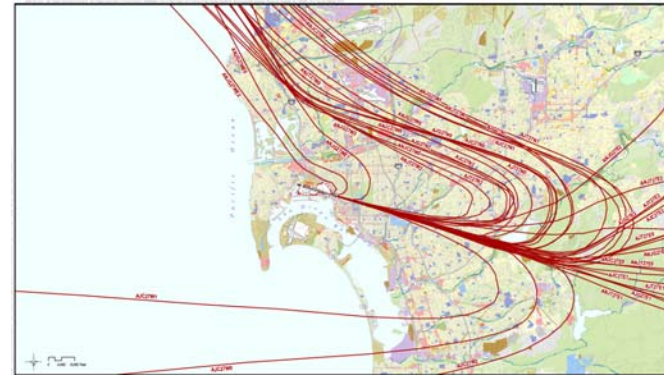
Collect Data

- Physical description of the airport layout
- Aircraft operations
- Aircraft noise and performance characteristics
- Runway utilization
- Flight track geometry and use
- Meteorological conditions
- Terrain data

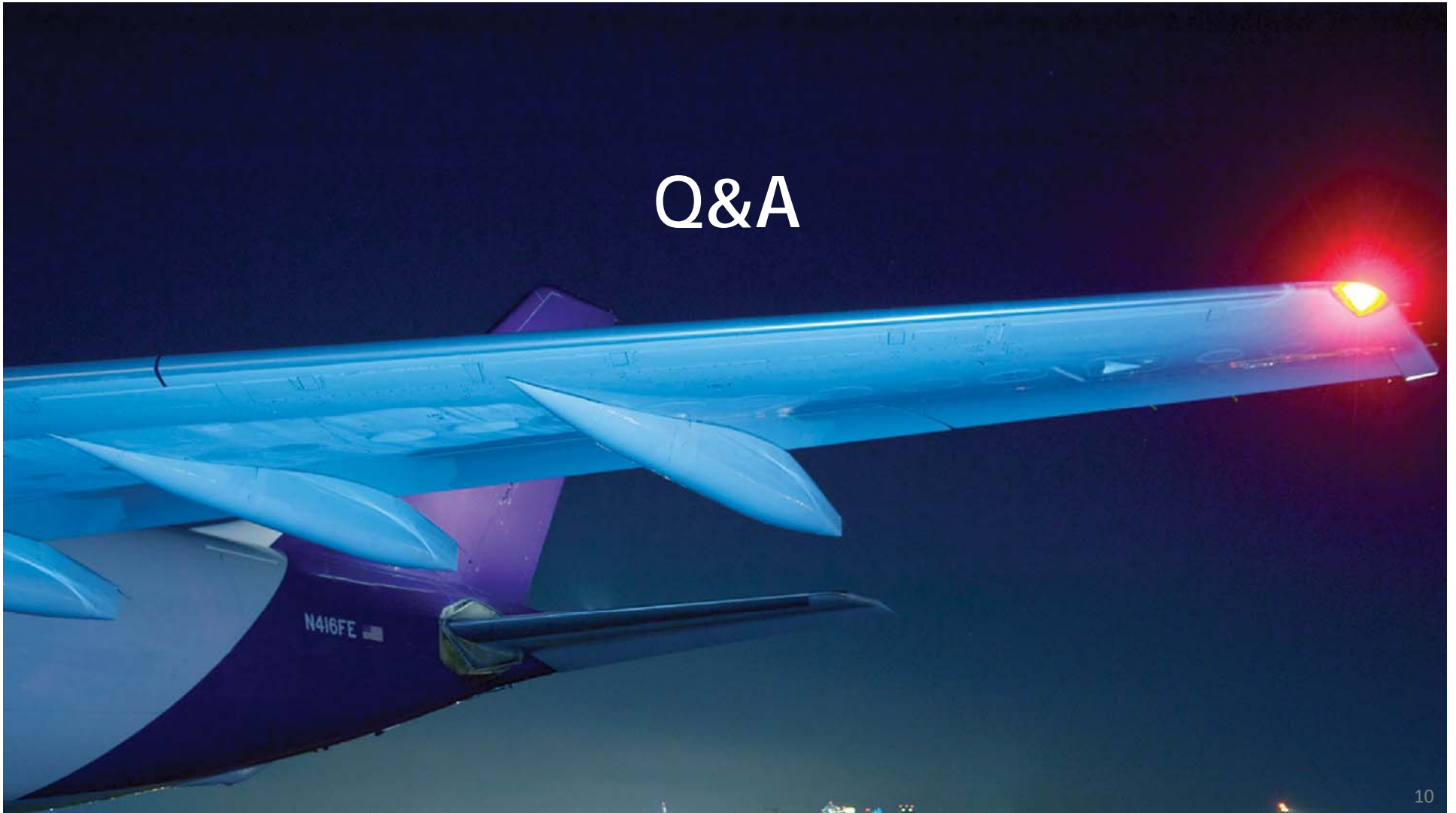


Refine Data and Create AEDT Input

- Create Representative Flight Tracks
- Create Average Annual Day
 - Operations
 - Runway Use
 - Flight Track Use
- Adjust to official FAA tower count or approved forecast to model accurate annual average day



Q&A



Public Comment

