



# McClellan-Palomar Airport

## Master Plan Update



**Public Meeting #5**  
**Master Plan Update and**  
**Draft EIR Overview**  
**January, 30 2018**



# Agenda

1. Staff Presentation
  - a. Project Background
  - b. Master Plan overview
  - c. Draft Program Environmental Impact Report (EIR) findings
2. 30-minute question & answer
3. Break out into open house stations
4. Adjourn at 8:30 pm



*Photo from Public Meeting #3 on April 30, 2015.*



**Overview**

**Master Plan**

**Forecast**

**Design**

**Alternatives**

**Program EIR**

# Overview



- FAA recommends a Master Plan be updated routinely
- Proposal stays within the existing fence line
- Proposes safety improvements
- Continued use of existing airline terminal
- Keeps airport parking area the same size
- Balanced proposed forecasts

# Airport History

Airport Built in 1959



Airport Today



- Aviation gateway to and from San Diego's North County
- Economic driver for vibrant business community
- County of San Diego owns and operates the public airport
- Provides corporate, commercial, and private services for the region

# Public-Use Airport

## FAA Definition:

**Public Use Airport** - available to general public without need for approval from County as owner/operator.

## Services:

- Air Traffic Control Tower, operated by FAA
- Commercial Airline Service
- Aviation Businesses Provide Charter, Corporate Services, & Flight Training
- Emergency Medical Airlifts
- Military & Law Enforcement
- Aircraft Sales, Maintenance & Repair
- Car Rental Companies
- TSA & U.S. Customs and Border Protection



# Regional Economic Benefit



## Projected by 2030

- 4,615 jobs supported
- \$155.2 million in personal income
- \$560.8 million in business revenue
- \$33.4 million in state and local tax revenue

Source: 2009 Economic Vitality Analysis Study, Kimley-Horn





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# Master Plan Update Process



1

Conduct Facilities Inventory, Forecasts of Aviation Demand & Begin Stakeholder Outreach in Early 2014

2

Identify Facility Needs and Develop/ Study Development Alternatives (FAA Standards)

3

Draft Master Plan and Study Environmental Impacts

4 **We Are Here**

Conduct Draft Program Environmental Impact Report (EIR) Public Outreach in Early 2018

5

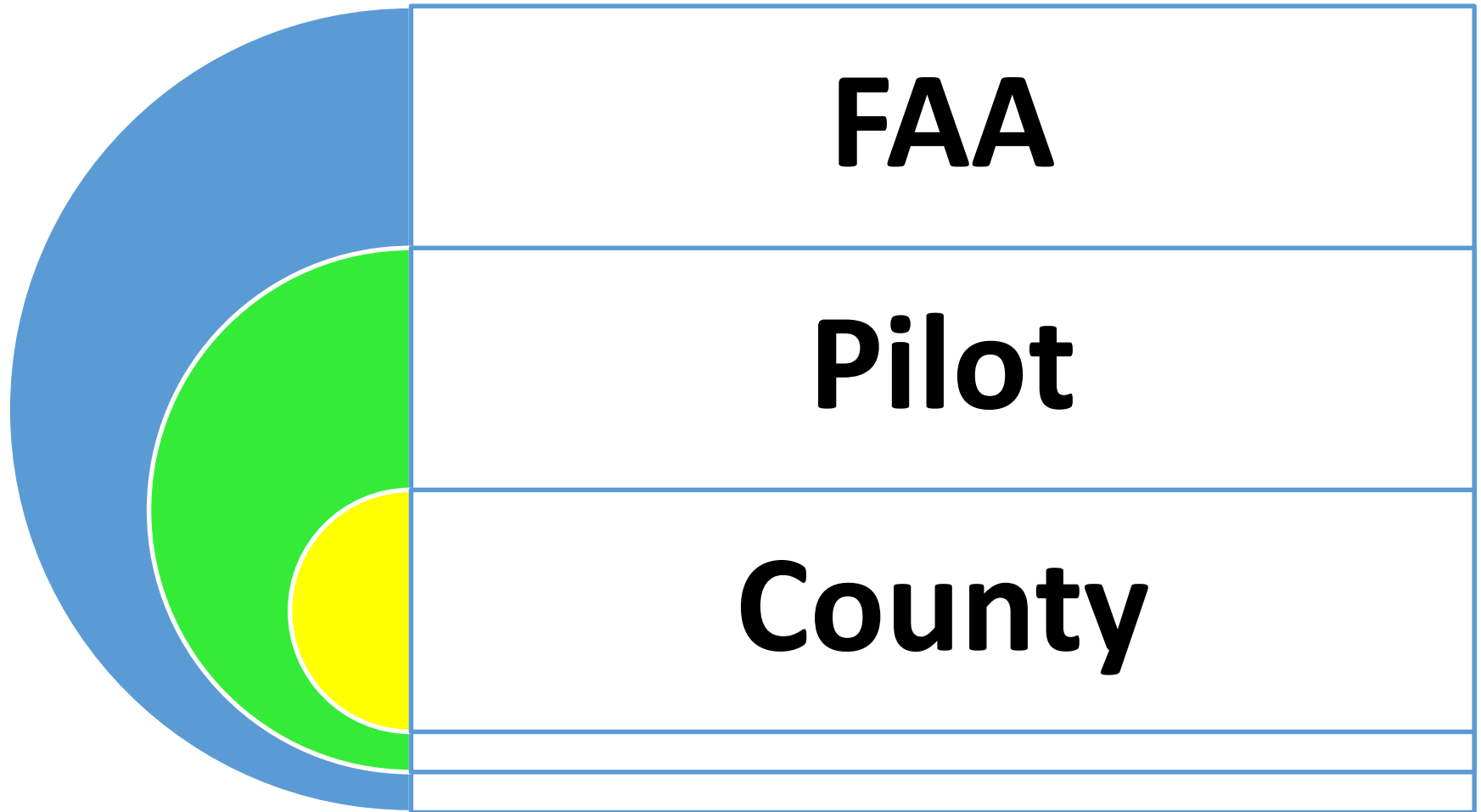
Respond to Public Comment and Finalize Master Plan and Program EIR

6

Present Alternatives at Board of Supervisors Hearing in Mid-2018



# Roles & Responsibilities



# Why is a Master Plan Needed?



## **Master Plan: 20-Year Planning Document**

- Forecast of aviation demand
- Determine FAA-defined facility requirements
- Financial, and Phased Implementation Plans
- Environmental review

## **Establishing the Airport Layout Plan (ALP Map)**

- County obligated to maintain updated ALP
- ALP is illustrated map of current and proposed plans
- FAA reviews for compliance with standards
- Required to apply for federal funding for projects

# Master Plan Objectives

A decorative graphic in the top right corner of the slide. It features a blue and white wireframe globe with several blue arrows pointing upwards and to the right, set against a background of a blue sky with white clouds.

- Enhance Safety
- Remain on-Airport Property
- Financial Feasibility
- Avoid Impacts to Airport Businesses
- Accommodate Existing and Future Demand
- Minimize Environmental & Offsite Impacts
- Adhere to FAA Design Standards



Overview

Master Plan

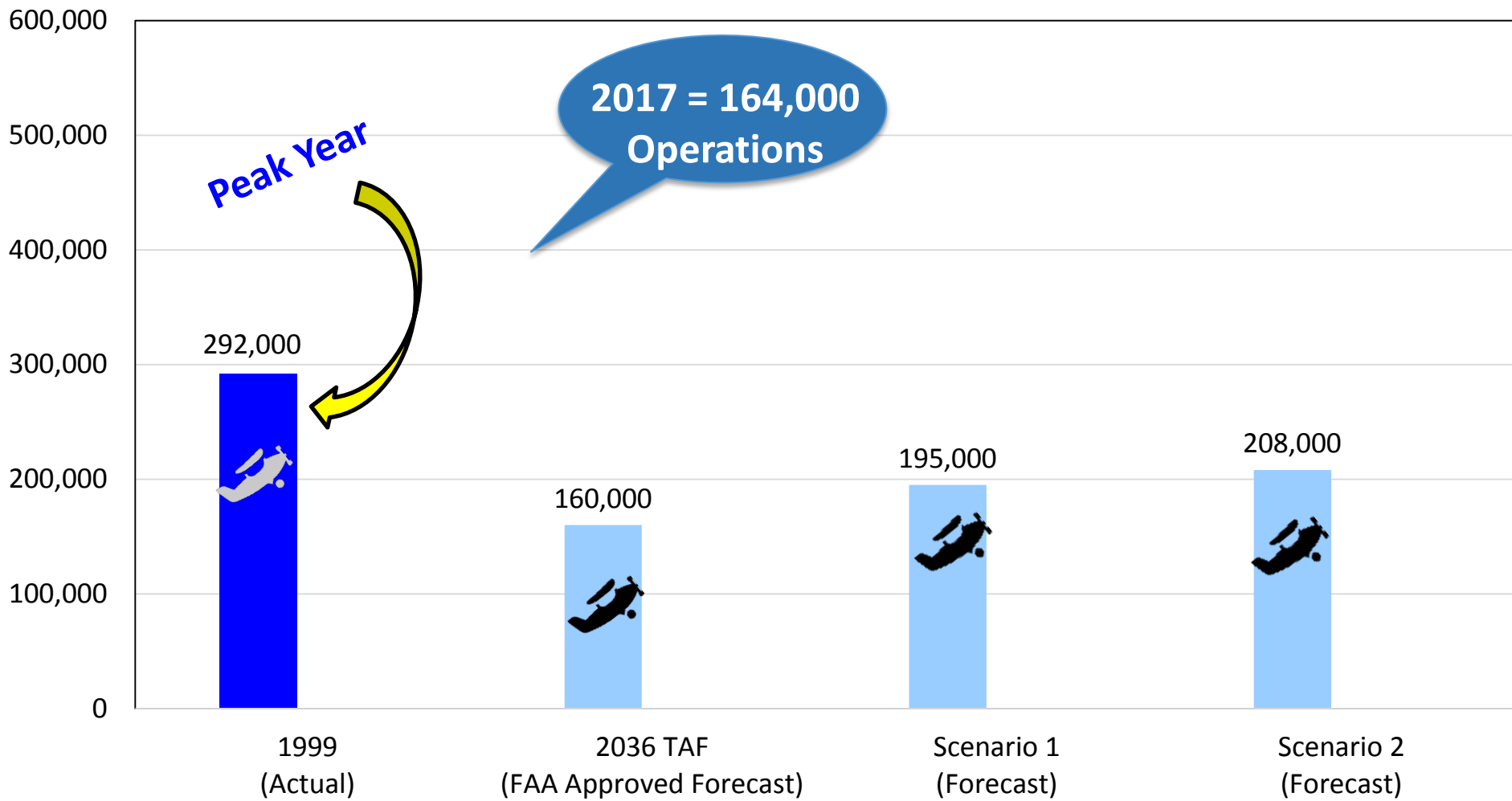
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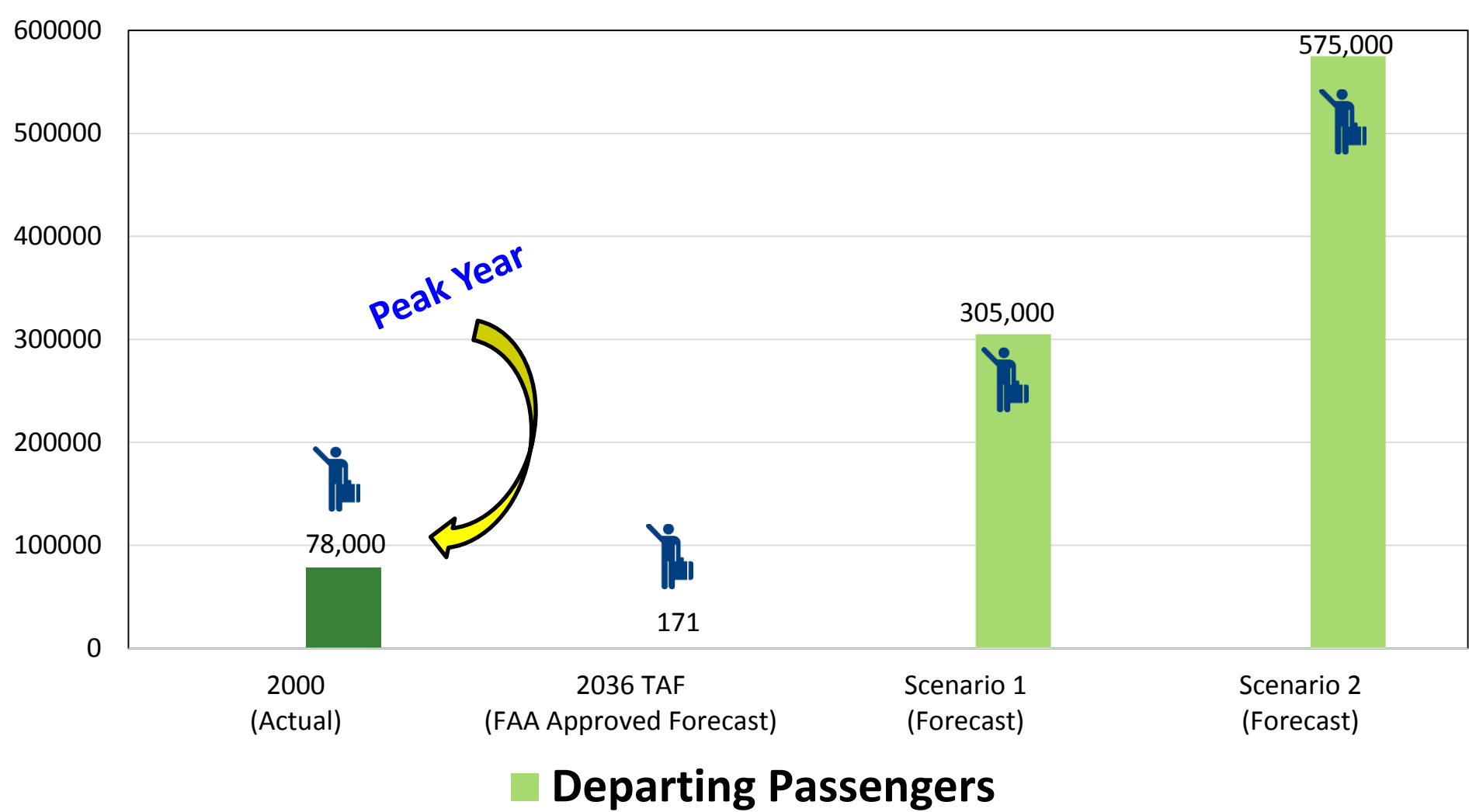
# Historical & 2036 Forecast Operations



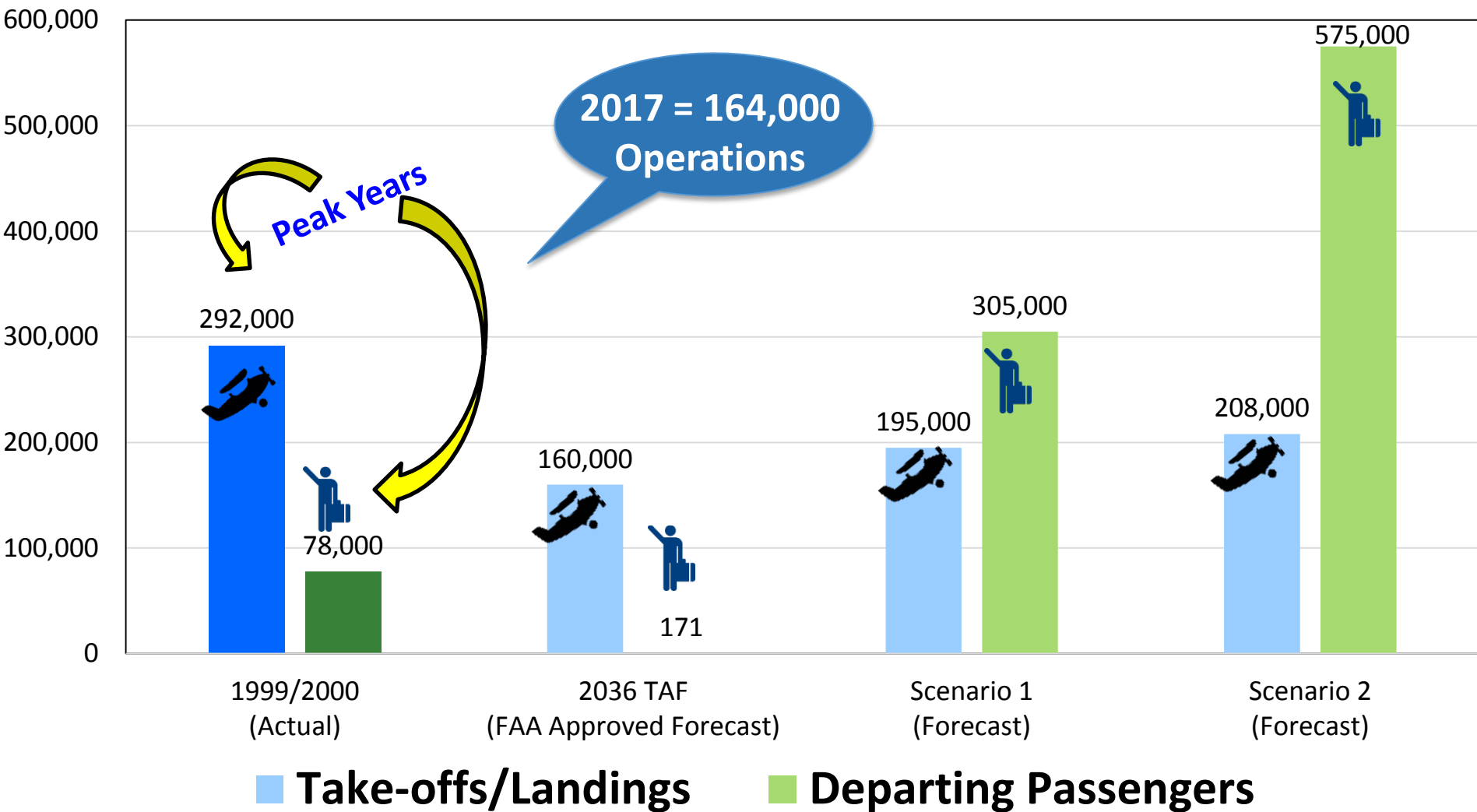
■ Take-offs/Landings = Operations



# Historical & 2036 Forecast Passengers



# Historical & 2036 Forecast Passengers & Operations Totals

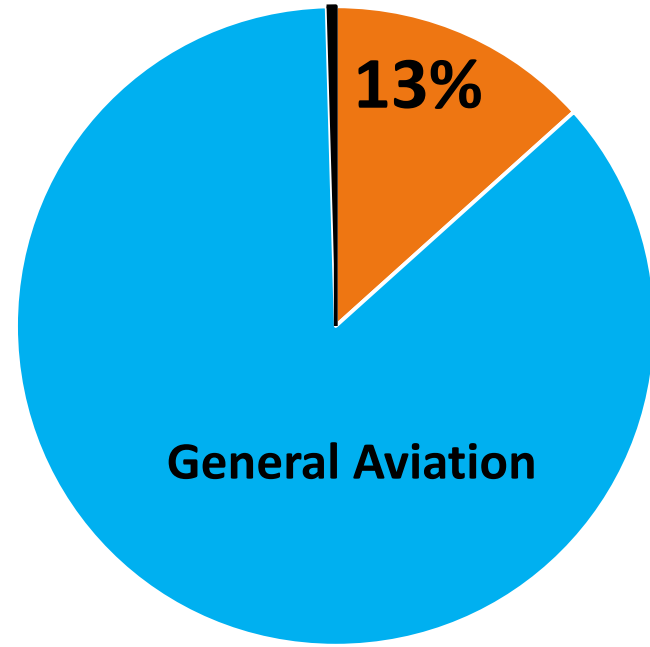
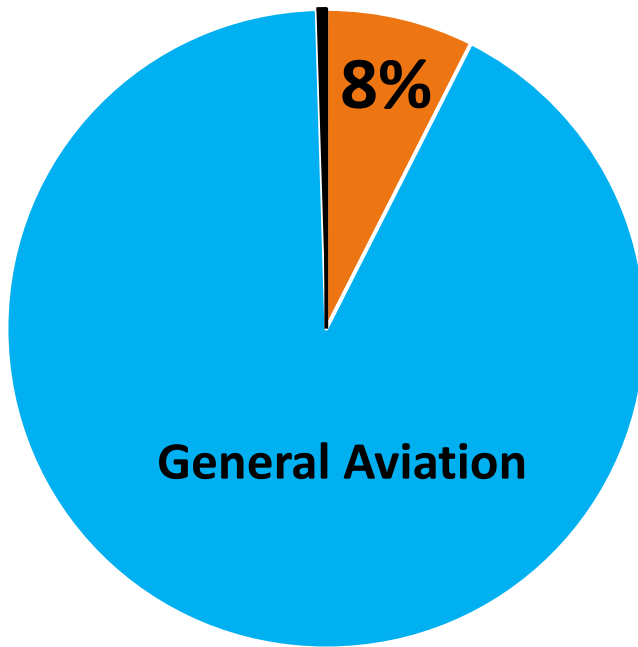




# Total Operations in 2036

**Scenario 1** – 195,000 Operations with 305,000 Outbound Passengers

**Scenario 2** – 208,000 Operations with 575,000 Outbound Passengers



■ Commercial ■ General Aviation ■ Military



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# Airport Design



- Reflect types of airplanes using the airport
- Utilize FAA Guidance on airport design
- Determine “Critical Aircraft”
  - defined as the most demanding aircraft with over 500 annual operations during the planning cycle

# Aircraft Design Criteria

## Primary Characteristics:

- Approach Speed
- Wingspan
- Weight

## Approach Speed:

Aircraft Approach Category	Approach Speed (knots)
A	Less than 91
B	91 to 120
C	121 to 140
D	141 to 165
E (military only)	166 or Greater

## Evolving Capabilities:

- Quicker landing and takeoff ability
- Longer range
- Better fuel efficiency

## Wingspan:

Airplane Design Group	Wingspan (feet)
I	Less than 49
II	49 to 78
III	79 to 117
IV	118 to 170
V	171 to 213
VI	214 up to but less than 262

# Airplane Design Examples

## A-I Aircraft:



- Cessna 172 – Wingspan 36 ft.



- Beech Bonanza – Wingspan 33.4 ft.

## B-II Aircraft:



- Falcon 2000 – Wingspan 63.5 ft.



- EMB-120 – Wingspan 65 ft.

# Airplane Design Examples

## C-II Aircraft:



- Challenger 600 – Wingspan 61.8 ft.



- CRJ-700 – Wingspan 76 ft
- Operated by Cal Jet by Elite Airways

## C-III Aircraft:



- G-550 – Wingspan 93.5 ft.



- Global 7000 – Wingspan 104 ft.

## D-III Aircraft:



- G-650 – Wingspan 100 ft.

# Critical Design Aircraft changing from B-II to D-III

Falcon 2000 – B-II Current  
Critical Design Aircraft



B-II Aircraft – Current Design Standard

- Wingspans up to 79 feet long
- Approach Speed up to 121 knots

Gulfstream G650 – D-III Future  
Critical Design Aircraft



D-III Aircraft – Future Design Standard

- Wingspans up to 118 feet long
- Approach Speed up to 166 knots



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# Reviewing Alternatives

## **BALANCE:**

- Safety
- Community
- Stakeholders
- Environmental
- FAA Guidance
- Objectives
- Forecast
- Demand
- Critical Aircraft



# Potential Alternatives



Alt 1 = Stay B-II

Enhance Safety

Alt 6 = C-III

Change to III Design for Separation  
Distance & Safety, Monitor Operations

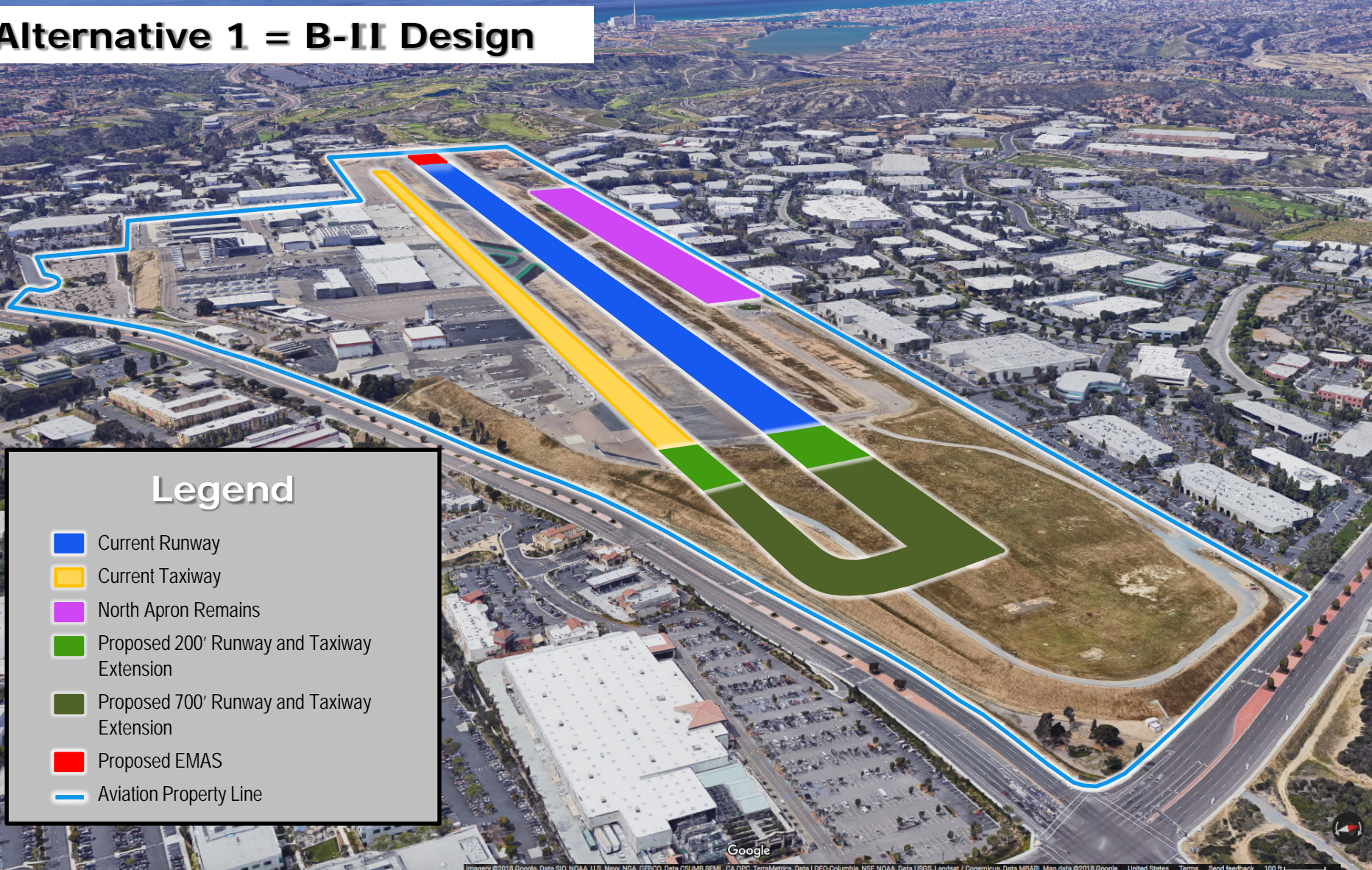
**Preferred**

Alt 5 = D-III




Change to III Design for Separation  
Distances & Safety



## Alternative 1 = B-II Design



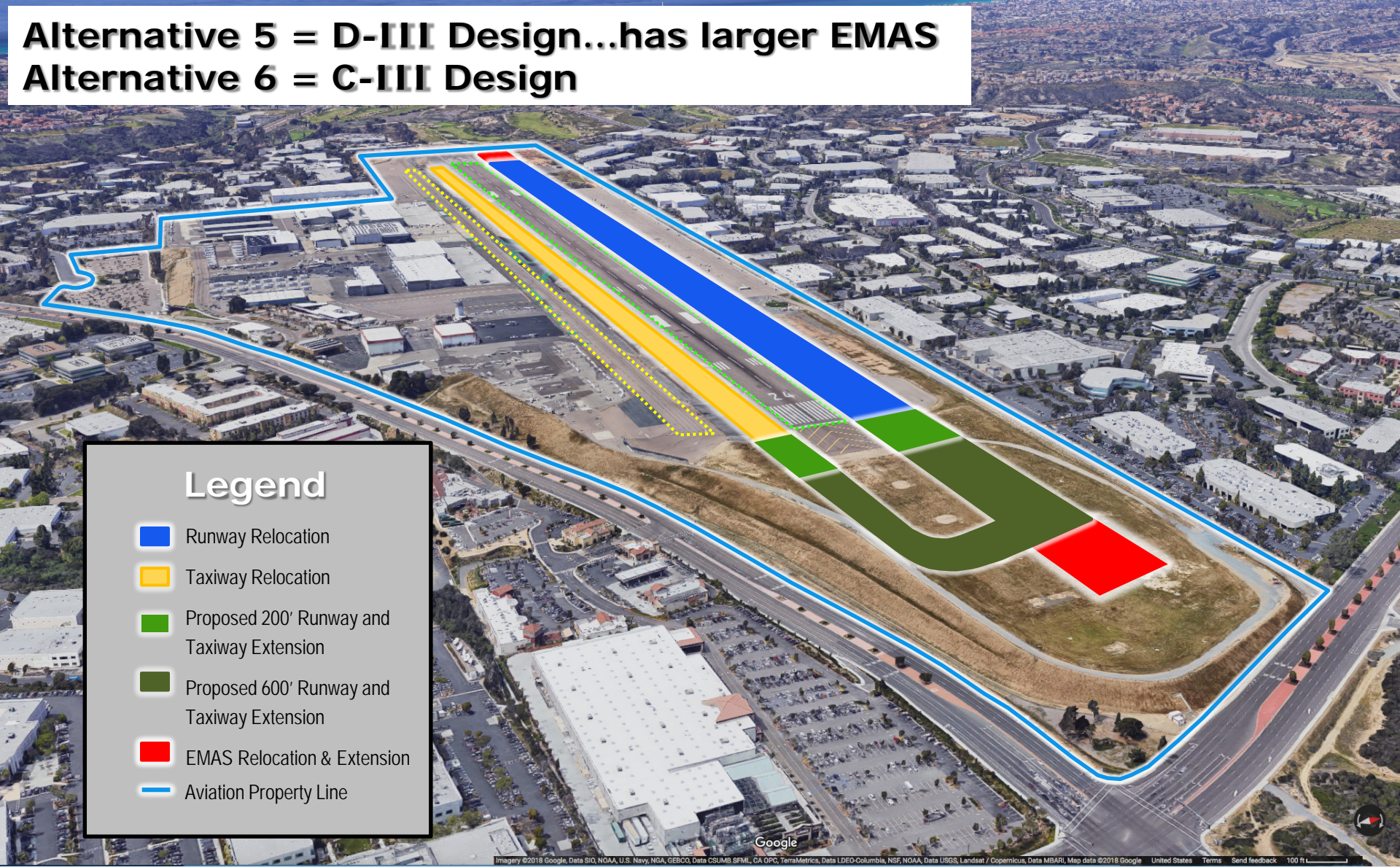
### Legend

-  Current Runway
-  Current Taxiway
-  North Apron Remains
-  Proposed 200' Runway and Taxiway Extension
-  Proposed 700' Runway and Taxiway Extension
-  Proposed EMAS
-  Aviation Property Line

# C-III (Alt. 6) & D-III (Alt. 5) Alternatives



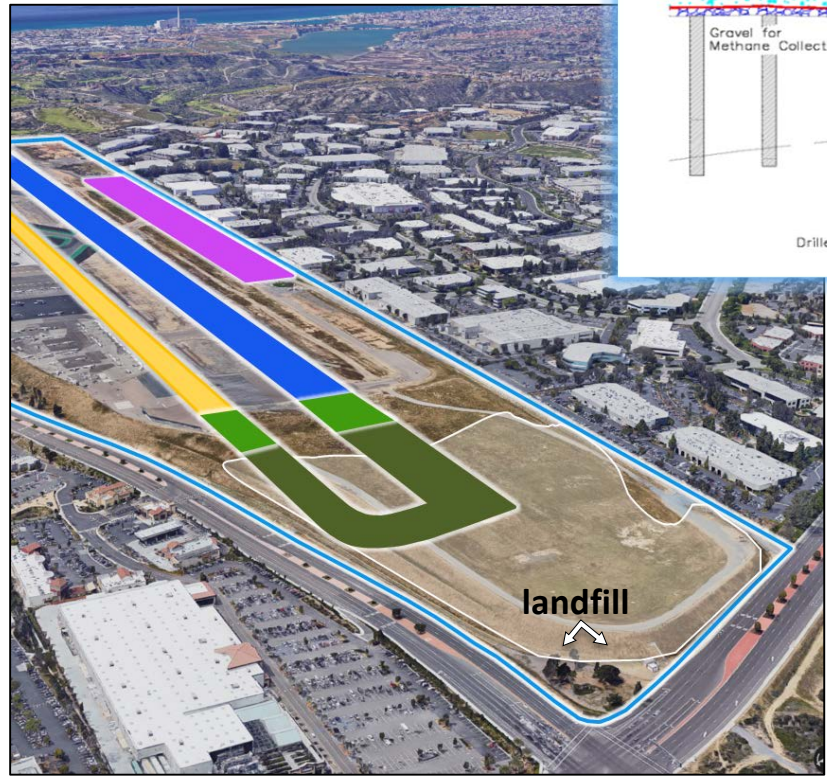
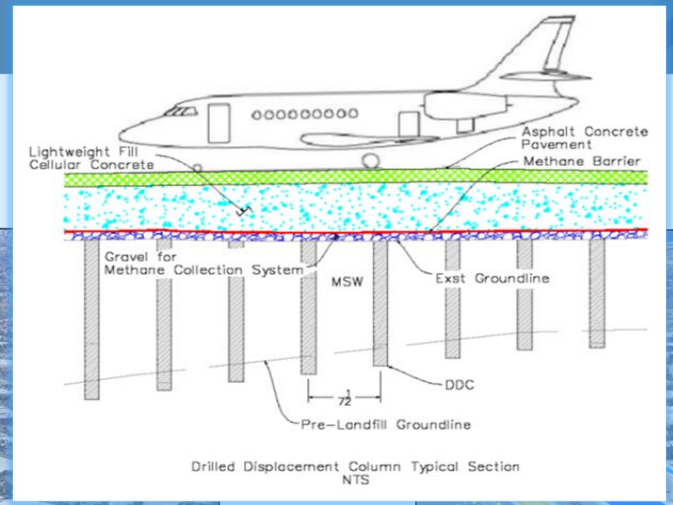
**Alternative 5 = D-III Design...has larger EMAS**  
**Alternative 6 = C-III Design**



**Legend**

- Runway Relocation
- Taxiway Relocation
- Proposed 200' Runway and Taxiway Extension
- Proposed 600' Runway and Taxiway Extension
- EMAS Relocation & Extension
- Aviation Property Line

# Runway Extensions & Landfill



B-II Safety Enhanced Design  
200' and 700' Extensions

C-III & D-III Modified Standards Compliance  
Design with 200' and 600' Extensions



# EMAS Safety Improvement

## Engineered Materials Arresting System (EMAS):

- Safely Stops Planes & Prevents Runway Overruns
- Crushable Concrete
- FAA Approved



**EMAS System**

# Alt. 5 (D-III Design) Install EMAS



# Remove North Parking Ramp & Taxiway





# Shift Runway & Taxiway North to Improve Safety



# Shift EMAS North



# Extend Runway & Taxiway; Add East EMAS



# Alternative Comparison Chart



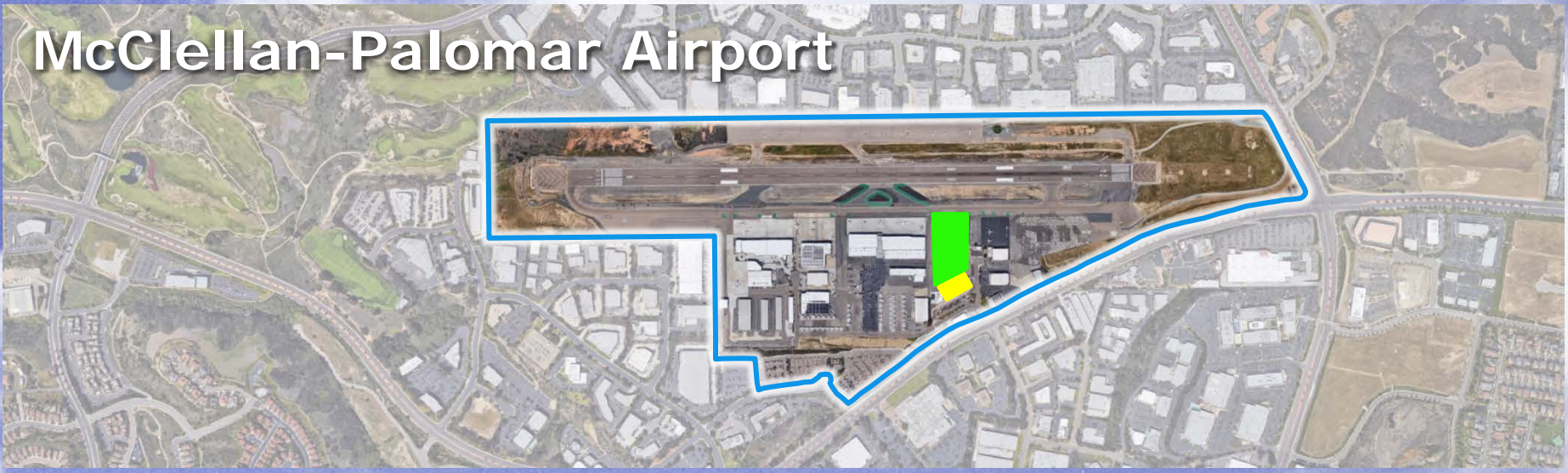
	#1 B-II Alternative	#6 C-III Alternative	#5 (Preferred) D-III Alternative
<b>Design Meets FAA Guidance throughout 20-year Planning Period</b>			
<b>Enhances Safety for Existing Wide-Winged Airplanes</b>			
<b>No Expansion Outside Fence Line</b>			
<b>No Impact to Aviation Business Leaseholds</b>			
<b>Includes Option to Install EMAS</b>			
<b>Includes Options to Extend Runway</b>			

# Existing Footprints

— = 500'



## McClellan-Palomar Airport



## John Wayne Airport



# Palomar vs. John Wayne Airport



**Terminal has 26 gates**

John Wayne Airport  
Terminal and Parking Apron



Imagery ©2017 Google, Map data ©

**John Wayne Airport**

**Terminal has 1 gate**

Palomar Airport  
Terminal and Parking  
Apron



Imagery ©2017 Google, 1

**Palomar Airport**



# Palomar vs. John Wayne Airport Comparison of Commercial Areas



**Terminal has 26 gates**



John Wayne Airport  
Terminal and Parking Apron

**Terminal has 1 gate**



Palomar Airport  
Terminal and Parking  
Apron

**John Wayne Airport**

**Palomar Airport**





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# Master Plan Draft Program EIR – Environmental Review Approach



Master Plan Process  
consists of two main  
elements:

**Facility Improvement  
Alternatives**

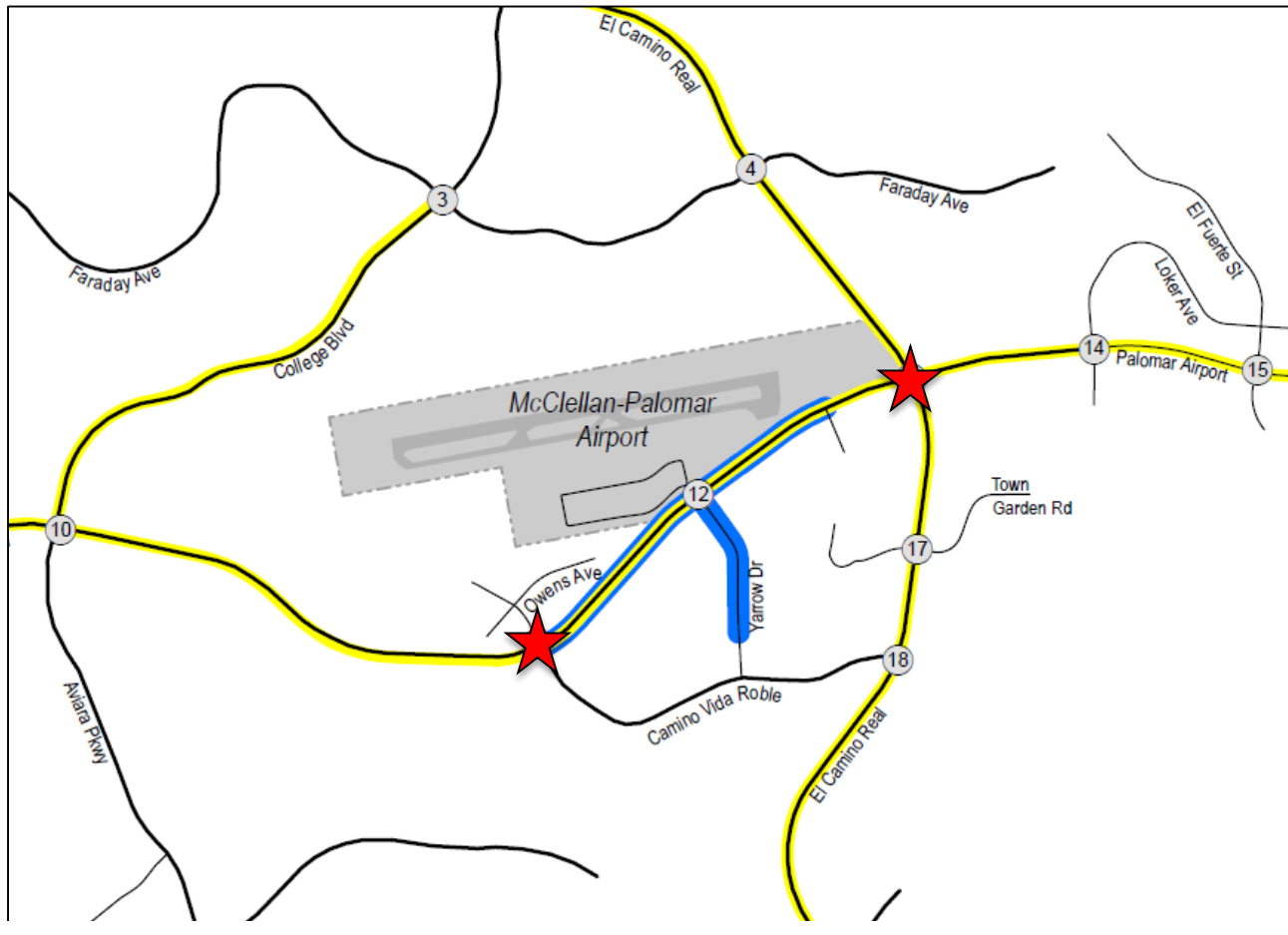
Engineering-based, Airport layout

**Environmental Review**

Existing environmental setting  
Conceptual project footprints



# Traffic



Increased commercial passengers may cause an impact to traffic. Mitigation is proposed.

# Measuring Aircraft Noise



## Factors for determining aircraft noise:

- Flight tracks
- Type of airplanes
- Number of operations

## Community Noise Equivalent Level (CNEL):

- 24 hour average measurement
- 65 CNEL is the reference level for noise impacts and land use compatibility

If residential areas are at or above 65 CNEL, additional analysis is needed.



# Noise



Current & Long-Term Aviation Noise: No Significant Impact

All residential areas are outside the 65 CNEL boundary



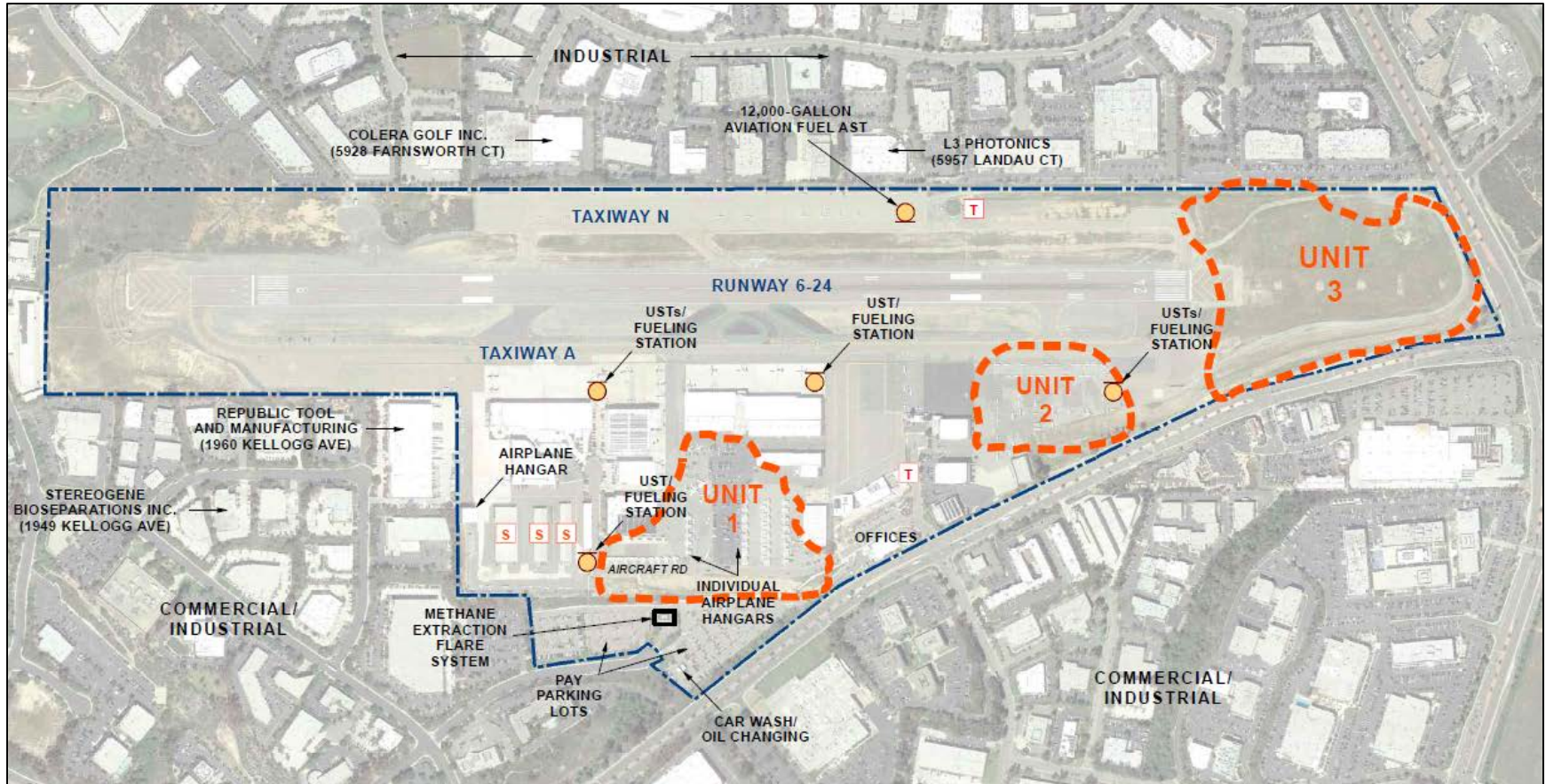
# Aesthetics



Motorists passing through the area may notice a change if a retaining wall is placed along Palomar Airport Road to support an east end EMAS.



# Hazardous Materials



Earthwork in the inactive landfill units requires construction remediation plans in order to mitigate contaminant exposure.



# Biological Resources



Removal of native habitat and impacts to birds are a significant impact and will be fully mitigated prior to construction in those areas.

# Other Environmental Resource Areas





# Draft Master Plan & Program EIR— 60-day Public Review



Documents available at:  
[www.PalomarAirportMP.com](http://www.PalomarAirportMP.com)

**Public Review Period:**  
January 18-March 19, 2018

**Comment Submittal:**

County of San Diego  
Attn: Cynthia Curtis  
5510 Overland Avenue, Suite 410  
San Diego, CA 92123

[PalomarMP@sdcounty.ca.gov](mailto:PalomarMP@sdcounty.ca.gov)



# Next Steps



1. Develop written responses to Public Review comments on the Draft Program EIR
2. County Board of Supervisors hearing to consider Master Plan and Program EIR

If approved, airport improvements will occur over time if and when construction funding is identified.

## Future Open House and Workshop

Palomar Open House – Feb. 7<sup>th</sup>

Public Workshop – Feb. 13<sup>th</sup>

# Recap

- FAA recommends a Master Plan be updated routinely
- Proposal stays within the existing fence line
- Focus on safety improvements
  - Increase distance between taxiway and runway
  - Add EMAS
- Option to extend runway
- Continued use of existing airline terminal

# Question & Answer



- One question per person
- Respect others and different opinions
- No disruptive behavior or talking over others
- Consider asking in-depth technical questions at stations

***Note – Verbal questions are not considered official comments. All Draft Master Plan and Program EIR comments must be in writing.***

# Questions & Discussion

Thank you

