



Airport Master Plan for  
**Montgomery-Gibbs  
Executive Airport**  
PAC Meeting #3



Airports



# Agenda

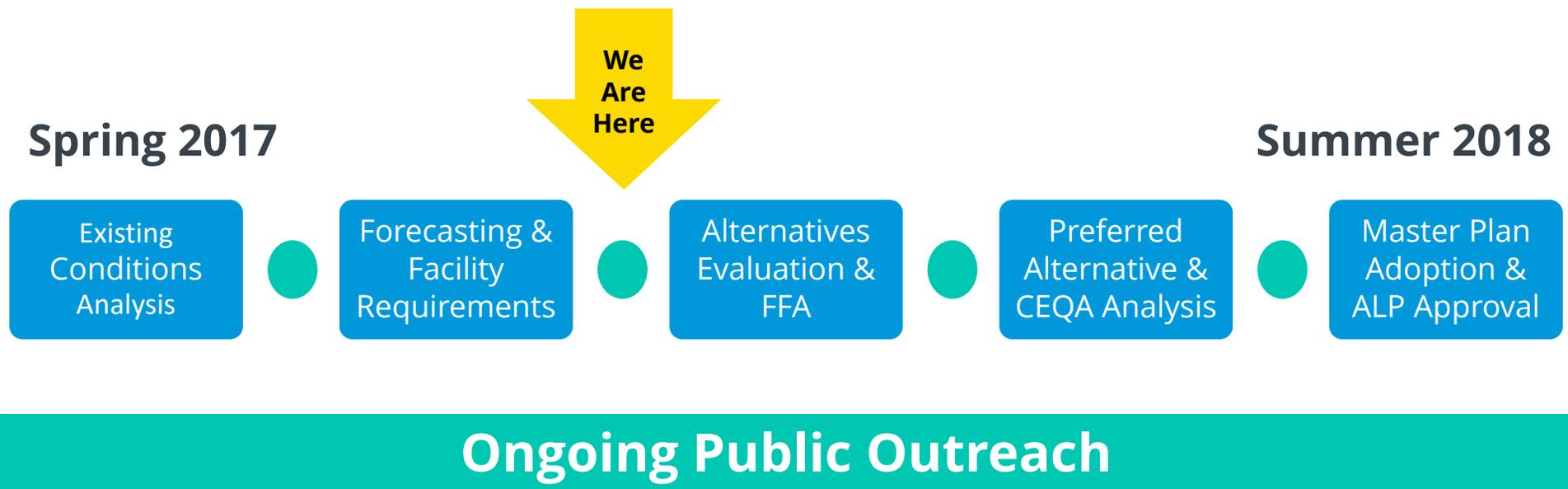
- > Introductions
- > Public Meetings Overview
- > Working Paper 3 - Facility Requirements
- > Working Paper 4 - Environmental Baseline Report
- > Mid-point Check-In
- > Public Comment
- > Next Steps

# Public Meeting #1

- > 8/23/17 from 5:30 to 8:00 pm
- > 37 attendees signed-in
- > Comments:
  - > Noise concerns
  - > Helicopter flights
  - > Focus on General Aviation
  - > Longer runway



# Master Plan Process



ALP – Airport Layout Plan

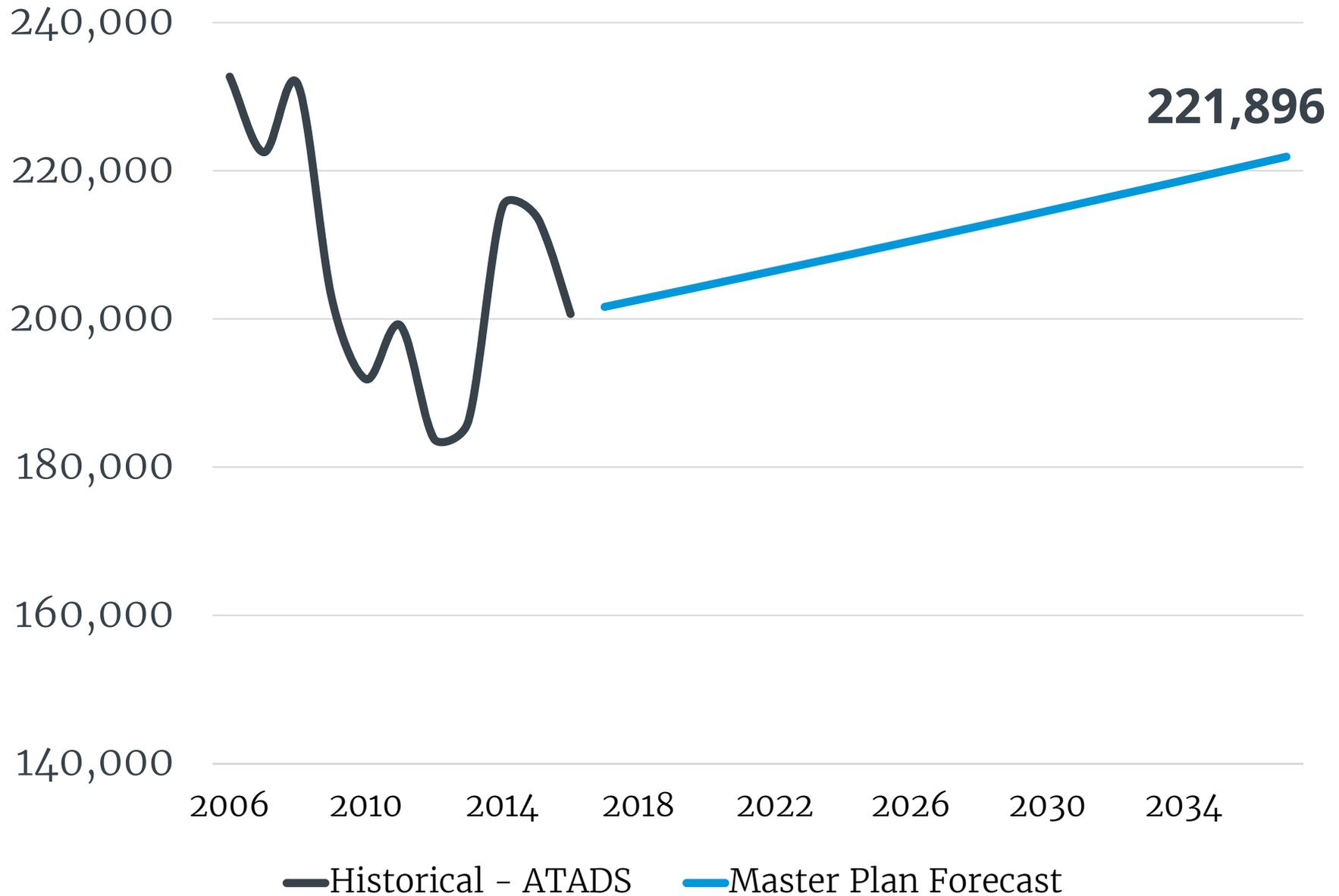
CEQA – California Environmental Quality Act

FFA – Financial Feasibility Analysis

# Working Paper 3 - Facility Requirements

- > Revisiting the Forecast
- > What are Facility Requirements?
- > Airside Facility Requirements
- > Landside Facility Requirements

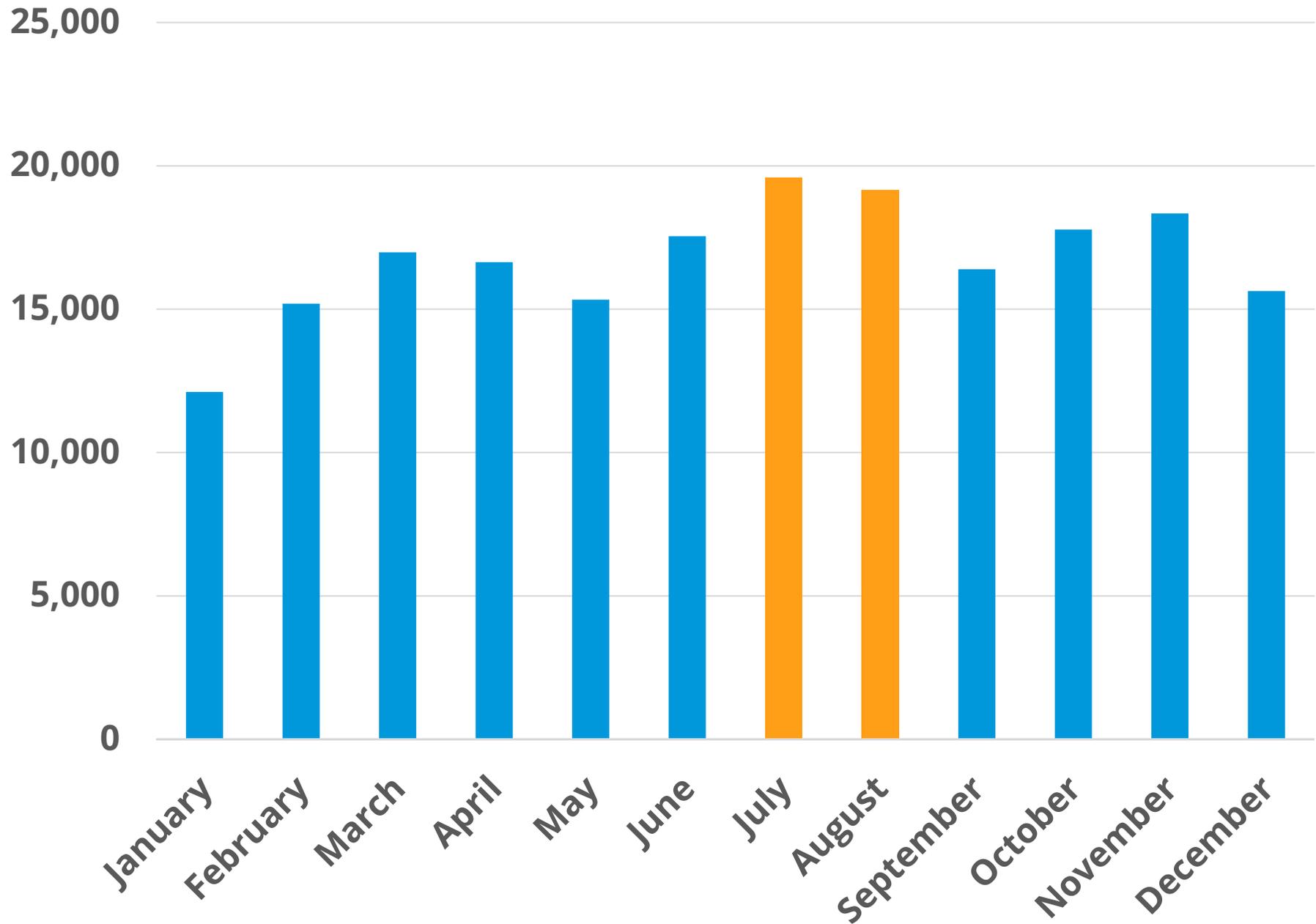
# MYF Historical Activity and Demand Forecast



# MYF Demand Forecast



# Operations Peaking



# Critical Aircraft



**Cessna 421  
Golden Eagle**

**Beechcraft  
King Air 350**



# Working Paper 2 – Forecast of Aviation Demand

> FAA Approved



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Western-Pacific Region  
Airports Division  
Los Angeles Airports District Office

P. O. Box 92007  
Los Angeles, CA 90009-2007

July 26, 2017

Wayne J. Reiter  
Airports Program Manager, City of San Diego  
3750 John J. Montgomery Drive  
San Diego, CA 92123

**Montgomery Gibbs-Executive Airport (MYF)  
Aviation Activity Forecast Approval**

Dear Mr. Reiter,

The Federal Aviation Administration (FAA) has reviewed the aviation forecast for the Montgomery Gibbs-Executive Airport (MYF) dated June 30, 2017. The FAA approves this forecast for airport planning purposes, including Airport Layout Plan development.

It is important to note that the approval of this forecast does not guarantee future funding for capital improvements that you may propose at MYF. Future projects will need to be justified by current activity levels reached at the time the projects are proposed for implementation and will need to be further analyzed for Airport Improvement Program eligibility purposes.

If you have any questions about this forecast approval, please call me at 310-725-3633.

Sincerely,

/s/

Brenda Pérez  
Community Planner

# PAC/Public Input

- > Services
  - > Keep user balance
  - > Become more business friendly
  - > Enhanced FBO services
- > Facilities
  - > Additional hangar space
  - > Viewing area
  - > Aircraft wash racks

# FAA Alignment

## FAA Approvals

- Forecast:  
7/26/17
- ALP: TBD

## Funding Prioritization

- Safety
- Security
- Capacity
- Sustainability

## Purpose & Need Establishment

- NEPA Approval

## Published Guidance

- Specific set of guidelines provided to planners

# Data Sources

Working Paper #1

- Airport Inventory

Working Paper #2

- Forecast of Aviation Demand

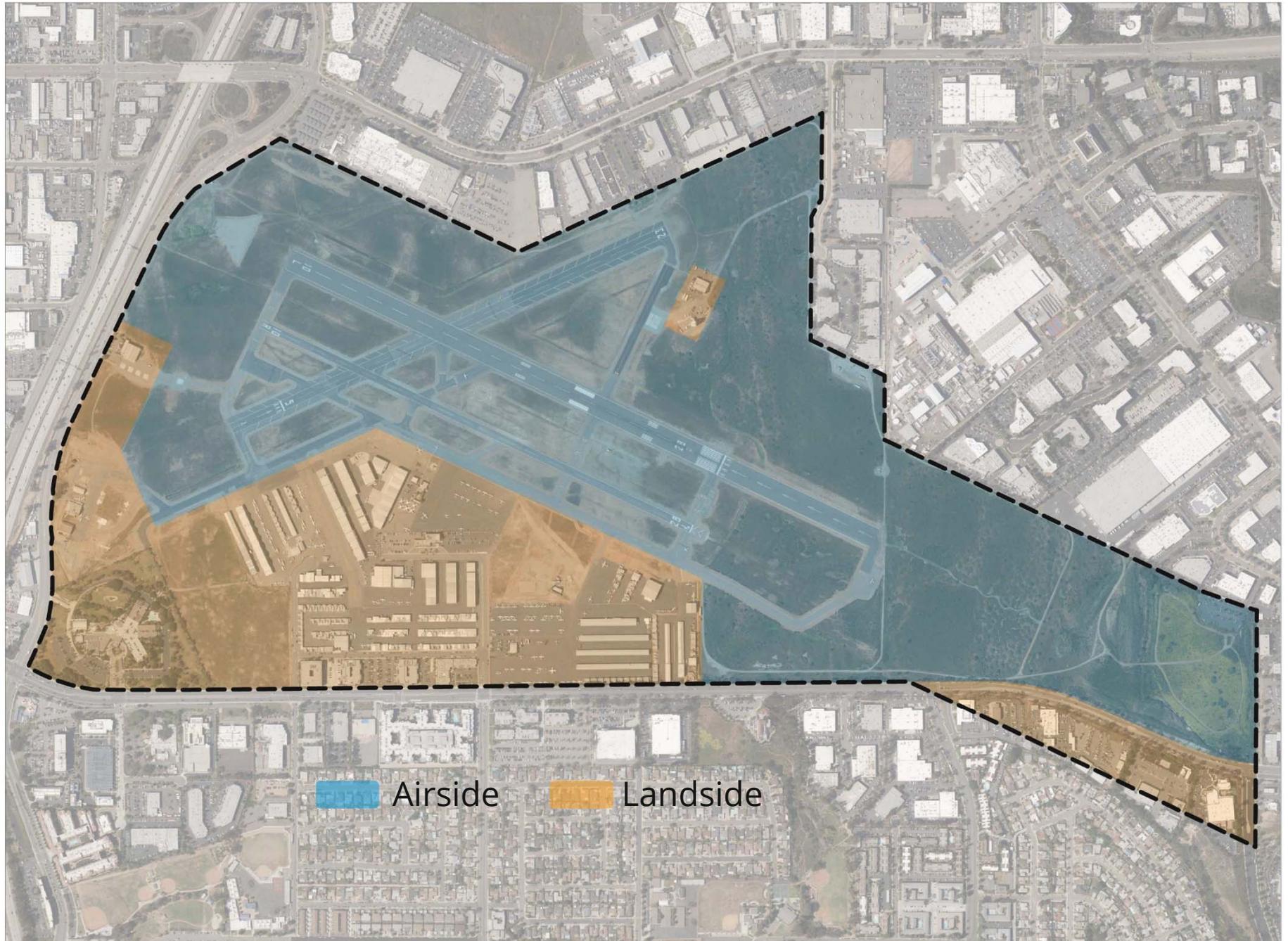
FAA Advisory Circulars

- AC 150/5060-5 Airport Capacity and Delay
- AC 150/5300-13A Airport Design

Airport Cooperative  
Research Program

- ACRP Report 113 Guidebook on General Aviation Facility Planning

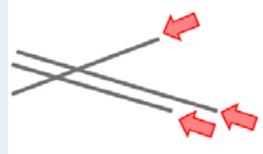
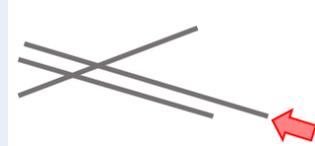
# Airside/Landside





Airside

# Airfield Operating Configurations

	030° through 210°	210° through 030°	210° through 030°	030° through 210°
Arrivals	10L, 10R, 5	28L, 28R, 23*	Runway 28 Only*	No Arrivals
Arrival Traffic Flows				N/A
IFR/VFR	VFR	VFR	IFR	IFR
Occurrence	17.44%	67.15%	11.19%	4.22%

\*Note: Scenario includes calm wind observations

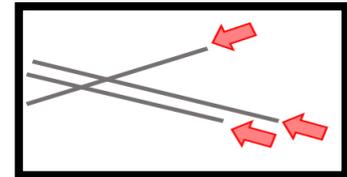
Source: NCDC Wind & Weather Operations, 2017 & Atkins Analysis 2017

# Airfield Capacity

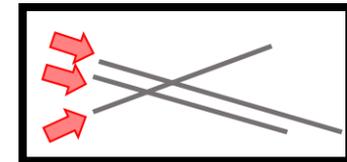
- > **Hourly Capacity** – Number of aircraft operations per hour under VFR/IFR conditions.

- > **VFR Hourly Capacity**

- > Runways 28L / 28R / 23 → 228 operations

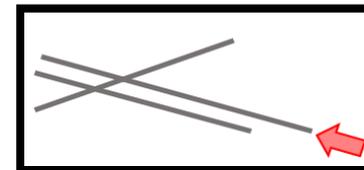


- > Runways 10L / 10R / 5 → 214 operations



- > **IFR Hourly Capacity**

- > Runways 28R\* → 55 operations



\*Note: Only Runway 28R has the equipment for IFR approaches

# Annual Service Volume

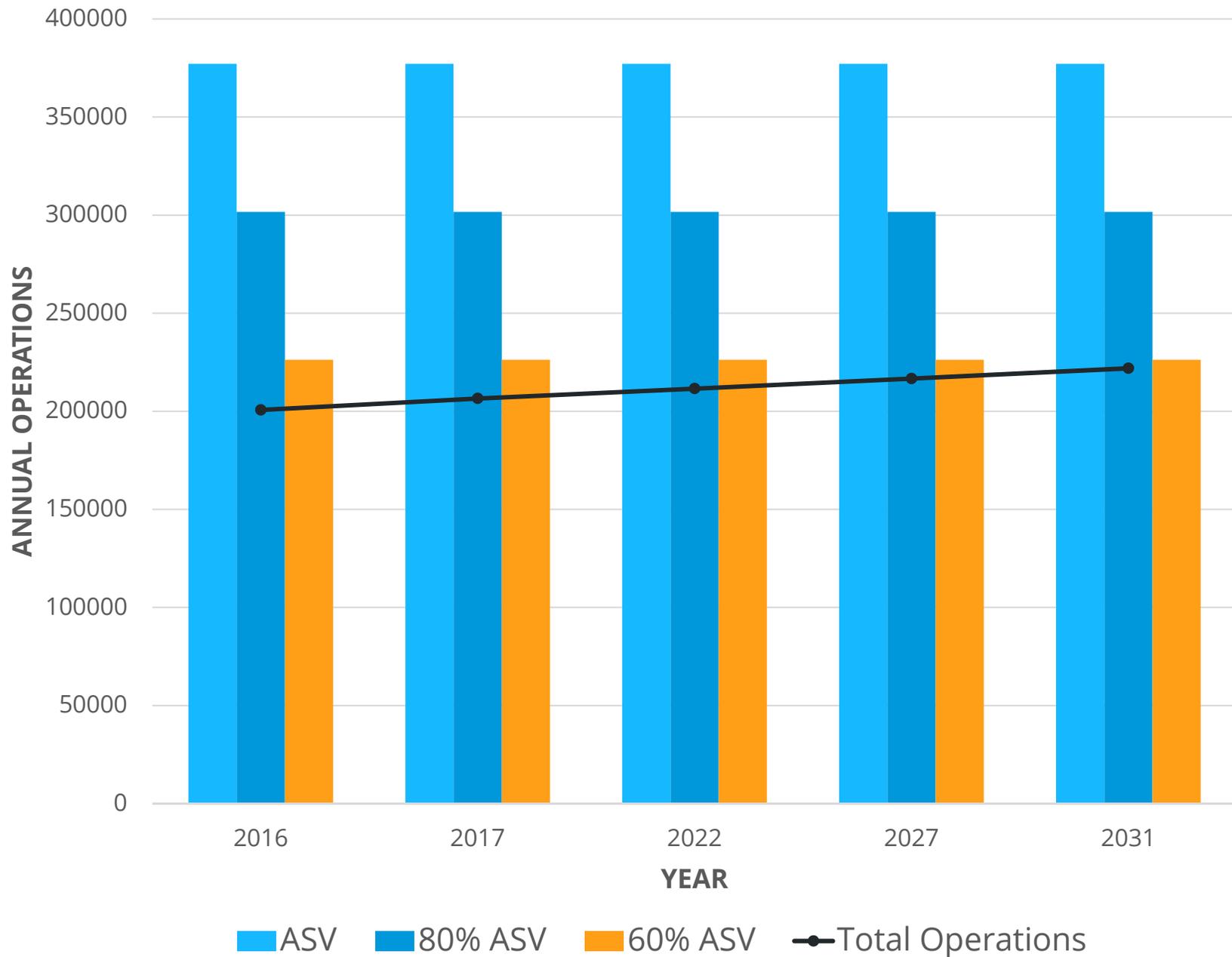
- > **Annual Service Volume (ASV)** - Maximum number of annual operations that can occur at the airport before an assumed maximum operational delay value is encountered
- > **60 percent of ASV** – The threshold at which planning for capacity improvements should begin.
- > **80 percent of ASV** – The threshold at which planning for improvements should be complete and construction should begin.
- > **100 percent of ASV** – The airport has reached the total number of annual operations it can accommodate, and capacity-enhancing improvements should be made to avoid extensive delays.

# Annual Service Volume vs. Annual Demand

Year	Annual Operations	Annual Service Volume	Percent of Annual Service Volume
2016	200,668	377,069	53.22%
2022	206,517	377,069	54.77%
2027	211,521	377,069	56.10%
2032	216,647	377,069	57.46%
2037	221,896	377,069	58.85%

Sources: FAA AC 150.5060-5, Airport Capacity and Delay Analysis by Atkins, 2017

# Annual Service Volume vs. Annual Demand



# Airfield Capabilities

## > **Arrivals vs. Departures**

- > Based on common practice, it is assumed that arrivals and departures are split equally

## > **Instrument Approach**

- > IFR only on Runway 28L
- > Instrument Landing System (ILS) using a localizer
- > Area Navigation (RNAV) using GPS

## > **Full Length Parallel Taxiway**

- > Only Runway 10R/28L has a full-length parallel taxiway
- > Lack of full-length taxiways along highly used runways can possibly cause delays and congestion

# Airfield Capabilities (cont.)

## > **Holding Bays**

- > Four holding bays on the airfield
- > Holding bays have several deficiencies
  - > lack of markings
  - > insufficient taxiway wingtip clearance
  - > insufficient depth
  - > insufficient safety area clearance.

## > **Airfield Lighting**

- > No major lighting deficiencies currently exist
- > Lighting will be analyzed further in future phases
- > Available airfield lighting
  - > Medium Intensity Approach Lighting System (MALSR)
  - > Runway End Identifier Lights (REIL)
  - > Runway edge lighting
  - > Taxiway edge lighting

# Feedback

# Feedback



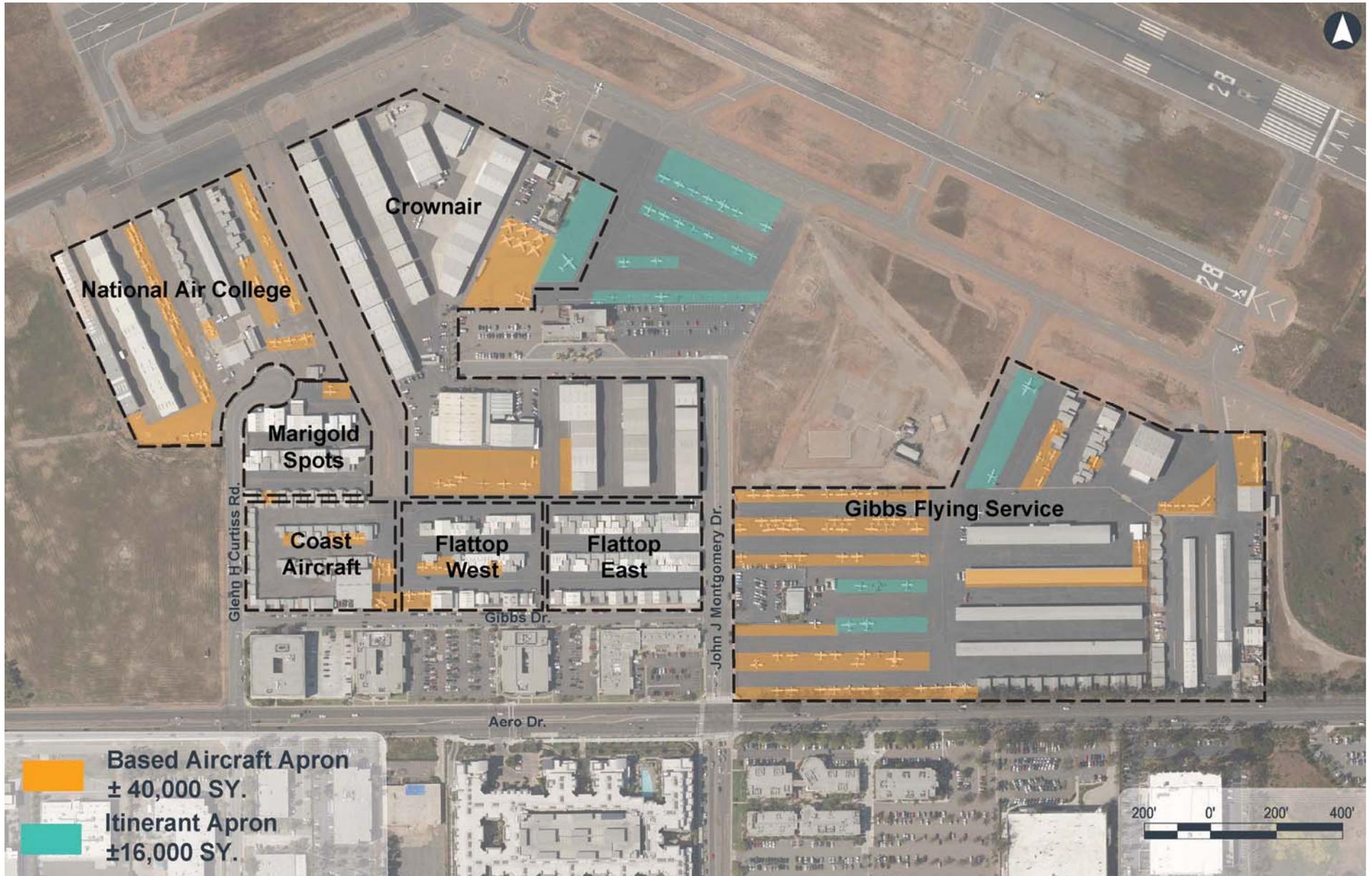
Landside

# Aircraft Hangars

	2017 (Existing)	2022	2027	2032	2037
Conventional/ Box Hangar (SF)	235,000	183,400	184,600	184,600	185,800
T-Hangar (SF)	334,000	364,000	364,000	368,200	369,600
Total Hangar Area (SF)	569,000	547,400	548,600	552,800	555,400

25 additional T-hangars over 20 year planning period

# Apron Area



# Aircraft Parking Apron

	2017 (existing)	2022	2027	2032	2037
Itinerant Apron (SY)	20,000	38,000	38,800	40,000	41,200
Based Apron (SY)	40,000	40,200	40,400	40,600	40,600
Total Apron (SY)	60,000	78,200	79,200	80,600	81,800

# Terminal/Airport Administration Building

Year	Itinerant Design Hour Operations	Peak-Hour Pilot & Passengers	Terminal Size Required (SF)
2017	55	138	16,600 (current) 20,700 (demand)
2022	57	143	21,450
2027	58	145	21,750
2032	60	150	22,500
2037	61	153	22,950

# Support Facilities

Fueling



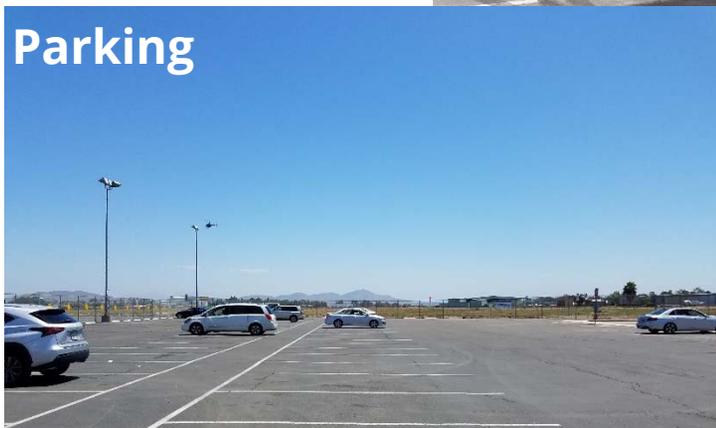
Fencing



Wash Rack



Parking



Restaurant



# Non-Aeronautical Development



# Feedback

# Feedback



Environmental Baseline for  
**Montgomery-Gibbs  
Executive Airport**  
PAC Meeting #3



Airports



# Goals

- > Establish existing conditions to help guide planners and designers to avoid or minimize impact to environmental resources
- > Assess level of review under NEPA
  - > Guided by FAA regulations

# Resources

- > There are 14 resources to be evaluated:
  - > Air quality
  - > Biological resources
  - > Climate
  - > Coastal resources
  - > Section 4(f) (historic and recreation)
  - > Farmlands
  - > Hazardous materials
  - > Cultural resources
  - > Land use
  - > Natural resources and energy supply
  - > Noise
  - > Socioeconomics and environmental justice
  - > Visual effects
  - > Water resources

# Impact Categories

- > Potentially significant impacts
  - > Air quality, Biological resources, HazMat, Land Use, Noise
- > No Significant Impact
  - > Climate, Section 4(f), Cultural resources, Visual, Water resources
- > No impact or resource is not present
  - > Coastal resources, Farmlands, Natural resources and energy supply, Socioeconomics/Enviro Justice/Children's Environmental Health & Safety

Presentation focuses on potentially significant impacts.

# Air quality

## Emissions & aircraft

### On the ground



The main contribution aircraft emissions make to ground level air quality occurs while they are on the ground and operating their engines.



### During take-off



As aircraft take-off the engines generate emissions.

Above 600ft, aircraft emissions have a negligible effect on ground level air quality around the airport.

### During landing



Aircraft produce fewer emissions landing compared to taking-off.

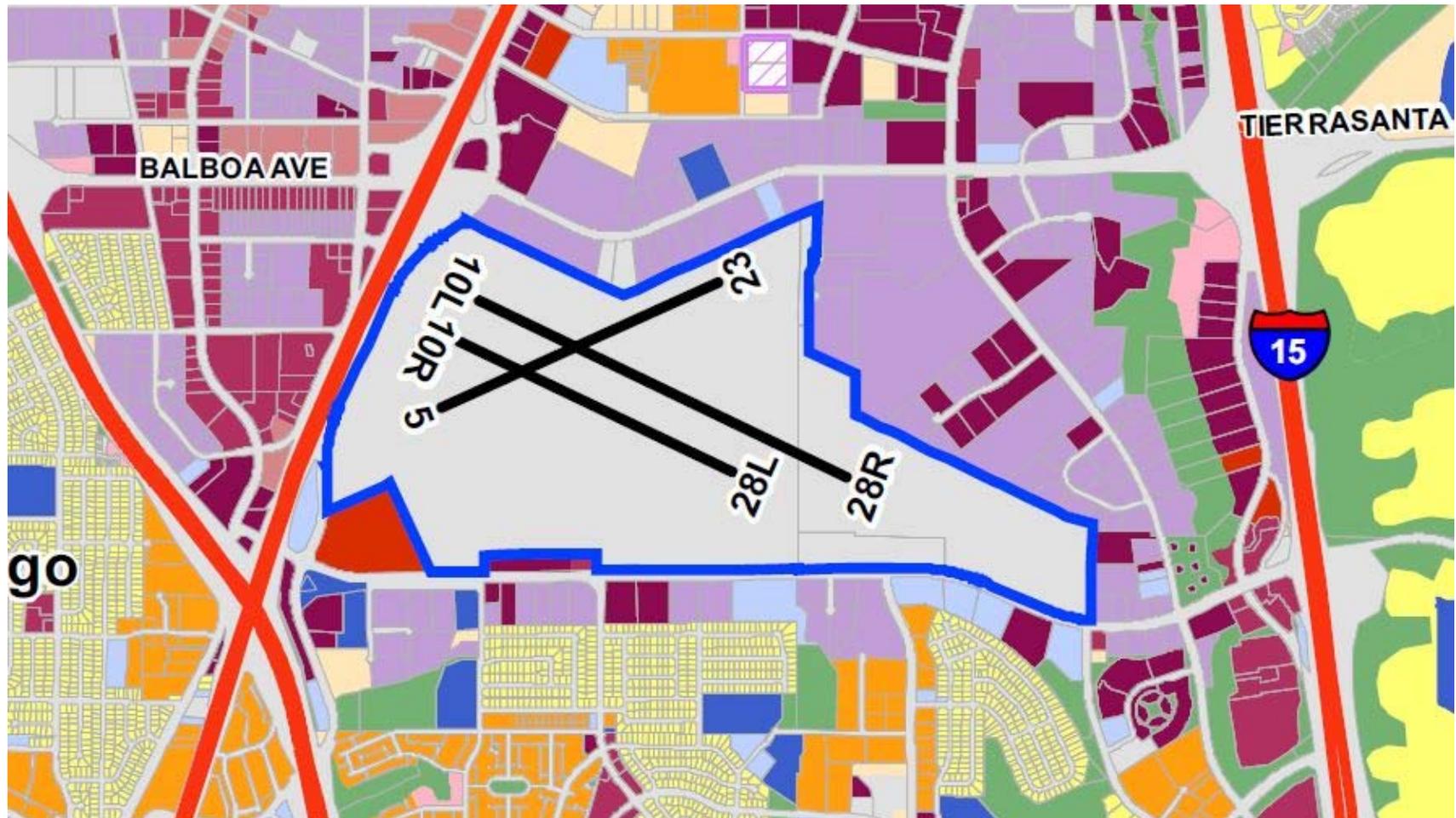
This is due to a combination of using engines less and carrying less weight in fuel.



# Hazardous Materials



# Land Use



# Noise



# Recommendation

- > Potential for significant impact does not mean there is an impact – just that more detailed study and design are necessary
- > Environmental Assessment (EA) under NEPA, in order to better study and disclose impacts
  - > Project dependent
  - > Some projects may qualify for a categorical exclusion
- > Awaiting selection of preferred alternative to determine CEQA requirements

# Next Steps

- > Provide environmental data to planners and designers
- > Coordinate with the airports, city and FAA regarding NEPA and CEQA
- > Determine level of documentation necessary under CEQA

# Feedback

# Feedback



# Public Comment

# Next Steps

- > Incorporate Feedback
- > Finalize Facility Requirements
- > Hold Public Meeting
- > Progress to Alternatives Development