

City of Austin

ABIA 2040 Master Plan

Technical Advisory Committee

June 26, 2017



Austin-Bergstrom
International Airport

A wide-angle photograph of a modern airport terminal. The scene is filled with people walking, many pulling luggage. The architecture features large glass windows and a high ceiling. A prominent blue banner with white text is visible above the entrance. The word 'WELCOME!' is superimposed in large white letters across the center of the image.

WELCOME!

Your success is
Dell gives 98% of Fortune
companies the power to

BARBARA JORDAN TERMINAL

GATES 1-11 GATES 12-25

Purpose

- Educate and inform Stakeholders on ABIA 2040 Master Plan
- Solicit input on the “Vision for the Future” at ABIA

Introductions

- Name
- Affiliation
- At what age did you take your first flight?
- Where did you go on your first flight?



What makes Austin special?

We think ABIA has something to do with that!



Click [here](#) to watch a video on ABIA, or copy and paste the following link into your browser:

<https://www.youtube.com/watch?v=eLdN6WodA1o&t=4s>



Austin-Bergstrom
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Current Project Updates

Perspective
View
Looking NW



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HENSEL PHELPS
Plan. Build. Manage.

ABIA Term/Apron Expansion and Improvements

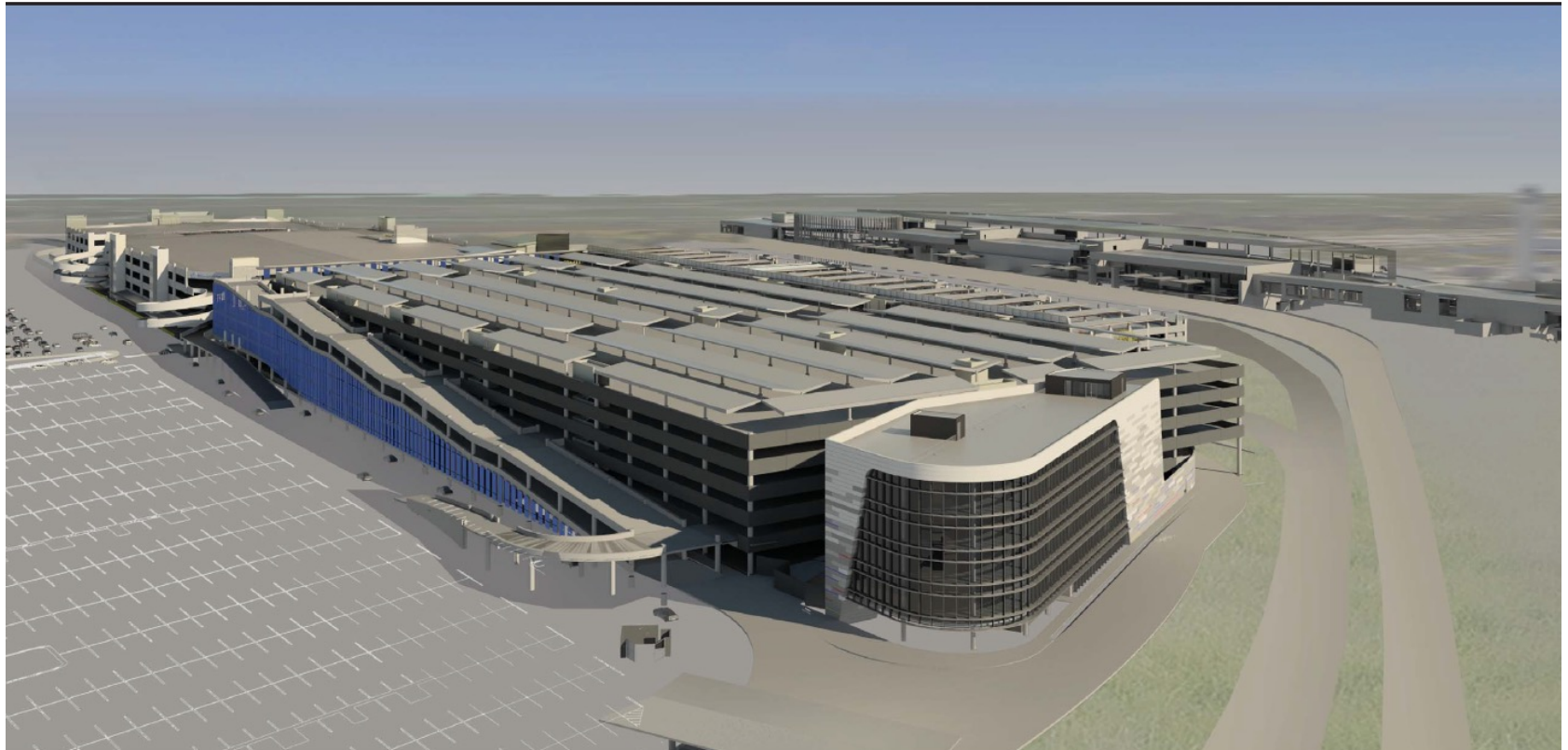
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Date : 05.24.2017
Aero Photo 888.542.0231



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ABIA PARKING GARAGE AND ADMINISTRATION BUILDING PRE-BID MEETING

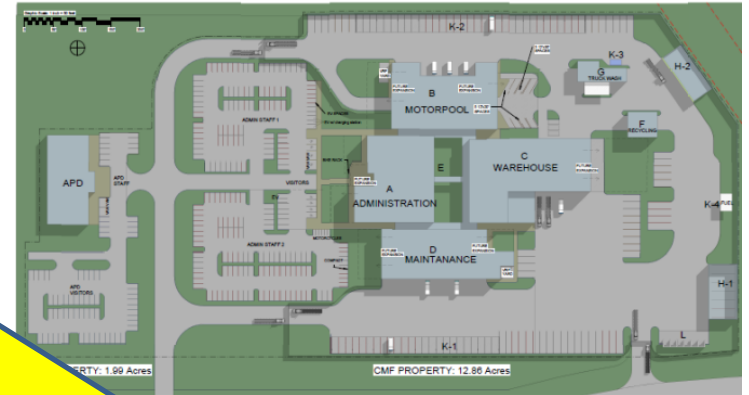
MAY 17, 2017



NORTHWEST



New Consolidated Maintenance Complex



About the ABIA 2040 Master Plan

- Guiding vision for Airport's future, next 20 years
- Address emerging technologies and future growth



Topics

- About the ABIA Master Plan Need and Schedule
- ABIA Critical Issues
- Airport Benchmarking Study (20-30 MAP)
- New Technology
- “Vision for the Future” Discussion

Technical Advisory Committee (TAC) Roles

- Provide input and insight on technical issues
- Exchange information to stakeholders, tenants, and airlines
- Assist in preparation of airport development alternatives
- Technical review and evaluation of the proposed alternatives
- Interact with the planning team members
- Evaluate the technical merit
- Weight the master plan recommendations against community goals, values, and needs
- Provide recommendations on the final airport plan



ABIA 2040 Master Plan is a Strategic Roadmap

- Provides a financially feasible, environmentally compatible, and sustainable development plan.
- Support the financial health of the region's most valuable economic engine.

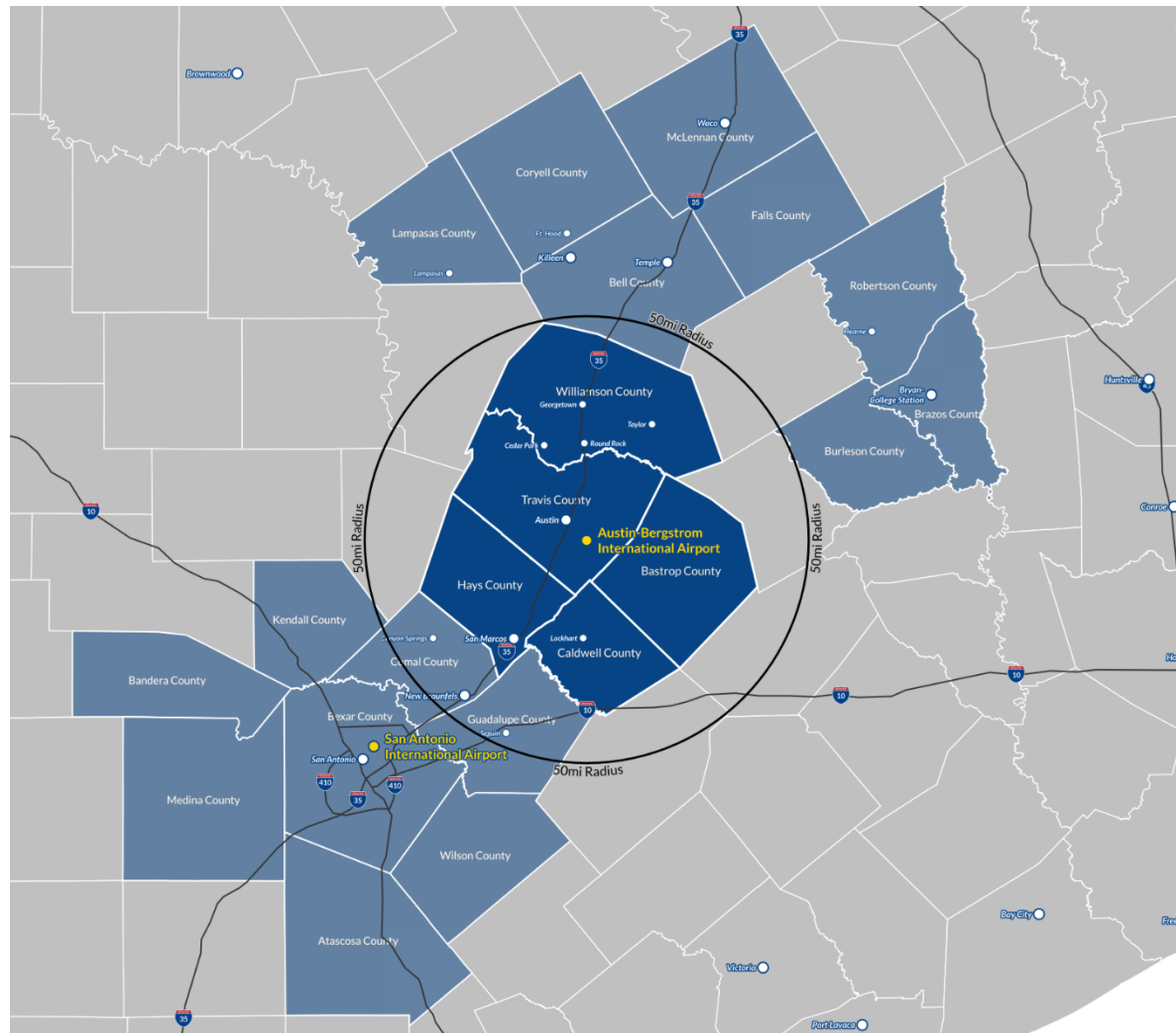


- 4,200 acres
- 2 all-weather runways
- 34 aircraft gates
- 12.4 MAP in 2016
- 13,882 parking spaces
- 2 FBO's (Atlantic & Signature)
- New 49 acre Million Air FBO in 2019
- 27 acre Cargo facility (227,000 s.f. build)



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ABIA Serves 21 Counties



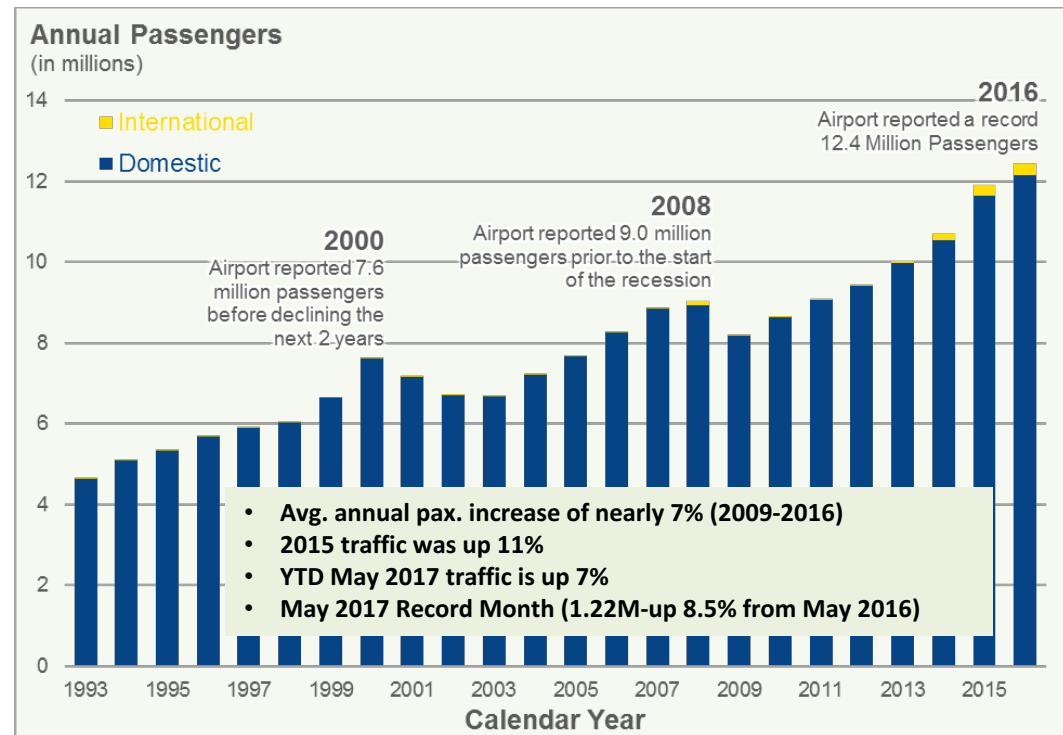
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Why is a Master Plan needed?



Why is the ABIA 2040 Master Plan Needed Now?

- Since 1993 passenger growth has tripled with avg. annual growth rate of 4.4%
- Previous 2003 Master Plan projects completed ahead of schedule due to rapid growth
- Anticipated doubling passenger growth from 12.4 MAP to 20+ MAP over next 20 years



Key Master Plan Issues

- Terminal Development
- Roadway Access
- Vehicle Parking
- Commercial Development
- Land Acquisition
- 3rd Runway
- Safety/Security
- Sustainability



What Does An Airport Serving 20-30 Million Annual Passengers (MAP) Look Like?

- Benchmarking performed to identify key attributes that should be considered in the long-term development of ABIA
 - U.S. hub airports (20-30 MAP)

U.S. Airports

U.S. Airport Benchmark Data	AUS	PHL	SLC	TPA	BWI	DCA	FLL
MAP (2016)	12.4	30.1	23.2	18.9	25.2	23.6	29.2
No. of Runways	2	4	3	3	4	3	2
Parallel Runway Separation (ft.)	6,700	1,400	6,150	4,300	4,670	n.a.	4,000
No. of Terminal Buildings	2	4	1	1	3	2	4
Terminal Footprint (sq. ft.)	70,250	473,795	350,000	259,000	362,450	271,350	451,640
Concourse Footprint (sq. ft.)	374,750	623,446	566,550	680,050	566,105	291,150	397,650
Number of Gates	34	121	75	65	68+6	55	57
Total Terminal Land Area (acres)	102	215	260	245	130	95	126
Total Airport Area (acres)	4,242	2,410	7,700	3,300	3,600	860	1,380






MAP = Million Annual Passengers

SLC data reflects the future terminal layout



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How ABIA Compares to 20-30 MAP US Airports

U.S. Airports	NUMBER OF TERMINALS	2-3 RUNWAYS	SINGLE ROADWAY ACCESS	TERMINALS BETWEEN RUNWAYS	SUPPORT FACILITIES BETWEEN RUNWAYS
 Philadelphia	4	✓	✓		
 Salt Lake City	1	✓	✓	✓	✓
 Tampa	1	✓	✓	✓	✓



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 Baltimore	3	✓	✓	✓	✓
 Washington, DC	2	✓	✓		
 Ft Lauderdale	4	✓	✓	✓	✓

Key Characteristics of 20-30 MAP Airports

- Widely spaced runways
- Single roadway access
- Terminal between runways
- Support facilities between runways

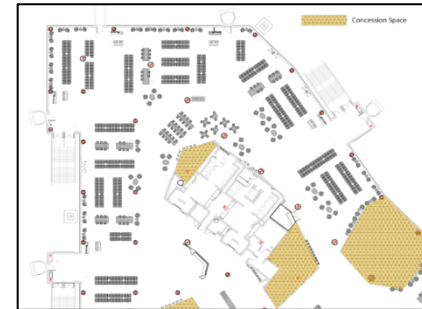


New Technologies – Airport Terminal

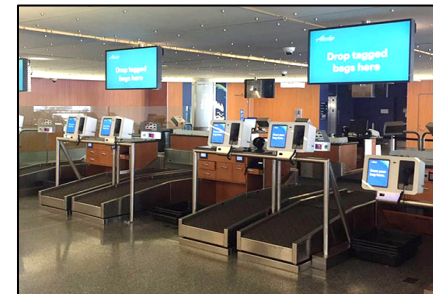
- Pre-Arrival
- Check-in/Ticketing
- Security
- Navigation to Gate
- Holdroom & Concessions
- Restrooms
- Bag Claim/Meet & Greet



Flip Flow – Three Doors - Detection



Co-located Concessions & Holdrooms



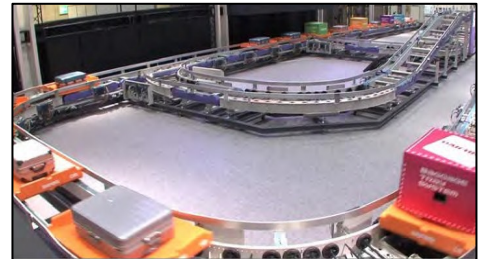
Self-Service Bag Drop Facility



Enhanced Restroom Facilities

New Technologies – Baggage Handling System (BHS)

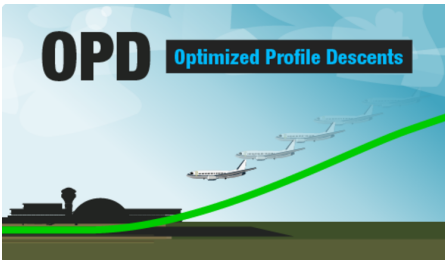
- **Individual Carrier Systems (ICS)** utilize trays and high-speed rails to move bags within and between airport terminals with consistency and reliability
- **Early Baggage Storage (EBS)** systems provide alternatives for retaining checked bags until they are needed for makeup
- **High Speed Explosive Detection Systems (EDS)** offer the ability to minimize the number of machines with higher processing capacity



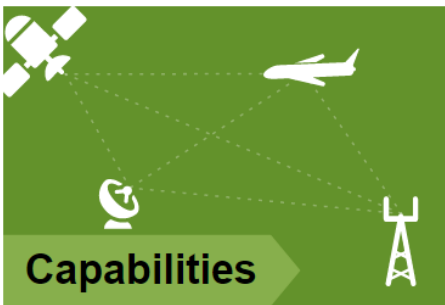
New Technologies – Capacity Improvements



- Increased airfield capacity



- Reduced delays could reduce emissions



- More predictable flight paths

New Technologies –Innovative & Autonomous Ground Transportation

- Potential Automated Transit Networks applications at ABIA includes:
 - Terminal to parking lots
 - Terminal to hotels
 - Terminal to intermodal facilities
 - Terminal to downtown



Modutram



Vectus



2getthere

What new technologies
are you interested in
having at ABIA?



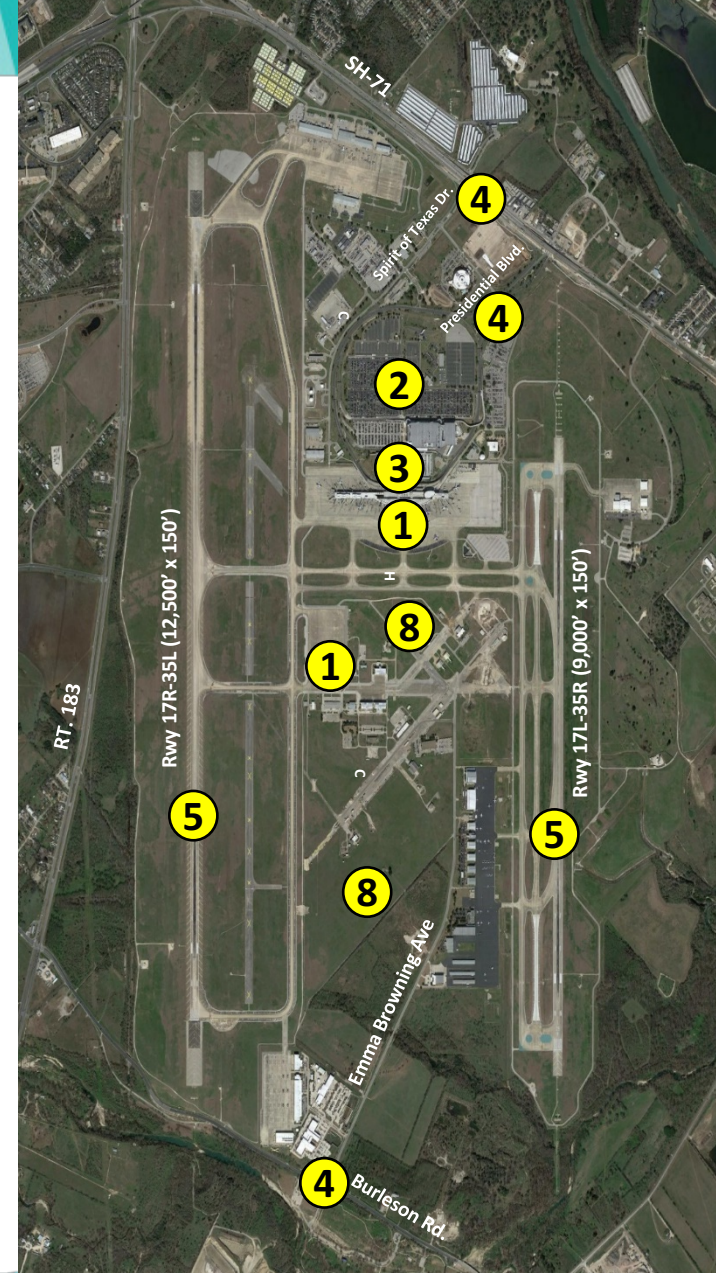
Breakout Groups

- Goal is to solicit feedback on the “Future Long-term Vision” for ABIA through a series of questions
 - Uniqueness
 - Strengths & Weaknesses
 - Competition
 - Values



ABIA Identified Issues

1. Terminal Needs
 - Passengers
 - Baggage
 - Safety/Security
 - Concessions
2. Vehicle Parking
3. Curbside Pick-up/Drop-off
4. Landside Roadways
5. Airfield Operations (NextGen)
6. Sustainability Initiatives
7. Environmental (noise, land acquisition, etc.)
8. Support Facilities Development



Top 5 Highlights of Breakout Group Discussions



Public Information and Education

- www.ABIAMasterPlan.com
- Linked to the Airports website
www.austintexas.gov/departments/airport
- Public access to Master Plan materials and status updates
- Ability for public to provide feedback via form on website
- Interactive



Next Steps

- TAC Meetings
 - Aviation Forecasts – August 17, 2017
 - Facility Requirements & Alternatives Analysis – December 20, 2017
 - Environmental, Financial, Final Implementation Plan – June 20, 2018
- Airport Tour (2-3 hrs.)

Next Steps

- Three more (3) TAC Meetings
- Four (4) Public Workshop Meetings:
 - Visioning and Aviation Forecasts
 - Demand/Capacity, Facility Requirements, and Alternatives Analysis
 - Environmental, Financial, Final Development Implementation Plan
- Provide platform for public feedback and suggestions





THANK YOU!



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