



# MASTER *plan*

2 0 1 1 - 2 0 3 1

## INFORMAL PUBLIC INFORMATION SESSIONS

**JUNE 24, 2014 5:30P.M.-8:30P.M.**

*CFE Arena at the UCF Main Campus, Black & Gold Room  
12777 Gemini Blvd. N, Orlando FL 32816, Park Free at Garage F*

**JUNE 25, 2014 5:30P.M.-8:30P.M.**

*Odyssey Middle School, Media Room  
9290 Lee Vista Blvd., Orlando, FL 32829*

**JUNE 26, 2014 5:30P.M.-8:30P.M.**

*Heritage Park Exhibition Hall, Kissimmee Room A  
1901 Chief Osceola Trail, Kissimmee, FL 34744*

## GREATER ORLANDO AVIATION AUTHORITY

### Dear Community Member,

The Greater Orlando Aviation Authority is updating its Orlando International Airport Master Plan. We invite you to attend our informal public information session to hear about our plans and provide comments.

We look forward to your participation.

Phillip N. Brown, A.A.E.  
Executive Director  
Greater Orlando Aviation Authority



**ORLANDO INTERNATIONAL AIRPORT**

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## What is an Airport Master Plan?

- A planning study conducted by the airport sponsor to guide long-term development of the airport and establish a vision for the airport's future.
- This study projects future aviation activity demand.
- Recommends the necessary aviation facilities to accommodate this demand generally for a twenty-year planning period.
- Establishes an organized and achievable schedule of projects to support airport development.
- Depict proposed Airport development projects (ALP/eALP).

Development of the Master Plan is necessary to obtain Federal and State participation in funding of airport capital improvement projects (CIP).

### **GREATER ORLANDO AVIATION AUTHORITY ~ VISION STATEMENT**

*Advance Orlando and the region as the premier intermodal transportation gateway for global commerce.*

#### **To be successful the Airport Master Plan must focus on GOAA's strategic goals:**

- Exceed the expectations of the Traveling Public with the collaboration of our Airport Partners and the Community
- Foster Economic Development for the Region
- Operate and maintain safe and World-class Facilities
- Act in a fiscally responsible manner



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## SCOPE OF SERVICES

### AVIATION FORECASTS

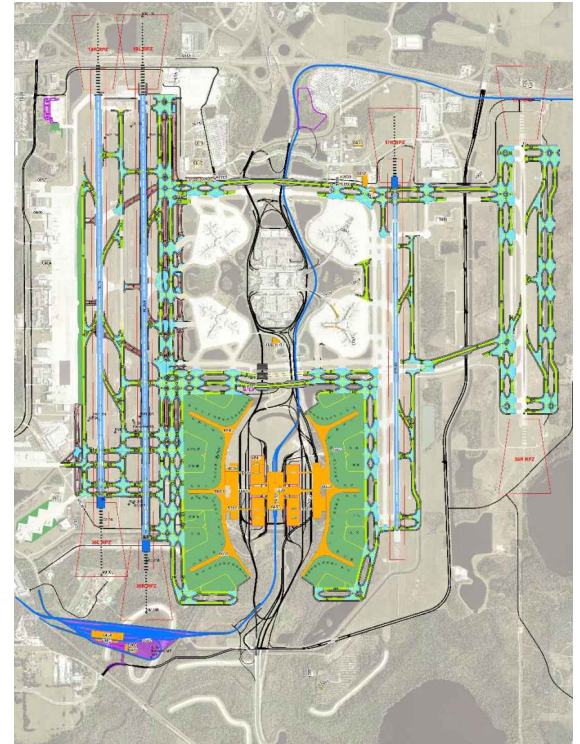
- Passenger Forecast
- Aircraft Forecast

### DEMAND CAPACITY ANALYSIS & FACILITY REQUIREMENTS

- Projected Capacity Impact
- Alternatives Development
- Capital Improvement Program (CIP)

### AIRPORT LAYOUT PLAN (ALP)

- Overall Site Plan with Existing and Proposed Future Facilities



## CAPITAL IMPROVEMENT PROGRAM (CIP)

- Maintain The Orlando Experience®
- Improve facilities to achieve finite NTC Capacity of 45 Million Annual Passengers (MAP)
- Improve International Processing
- Generate non-aviation revenue

MAJOR ELEMENTS OF THE CIP (FY 2013 – 2018)	
MAINTAIN CURRENT FACILITIES	COST (MILLIONS)
Baggage Handling System Improvements and Upgrades	\$148
Ticket Lobby Expansion and Refurbishment	\$113
Automated People Mover (APM) Replacements at Airsides 1 & 3	\$90
Airfield Projects	\$76
Other Terminal Projects	\$60
Ground Transportation Improvements	\$33
SUPPORT CAPACITY GROWTH	
South Airport APM Complex	\$470
Airside 4 International Passenger Processing Improvements	\$114
TOTAL	\$1,104



## RECOMMENDED MAJOR IMPROVEMENTS

Enhance 4 critical Terminal Operational Systems to achieve the finite capacity (45 MAP) of the North Terminal Complex (NTC) and provide a transitional period for incremental phasing of the South Airport Complex.

1. North Terminal Complex Ticket Lobby Expansion and Refurbishment
2. North Terminal Complex Baggage Handling Systems (BHS) Improvements and Upgrades
3. Airside 4 International Passenger Processing and International Gate Expansion
4. South Airport Automated People Mover (APM) Complex & Intermodal Terminal Facility (ITF)



## NEXT STEPS

Conduct 3 Community Outreach Meetings:

June – July, 2014

- City of Orlando and the Metro Area Community Outreach
- Orange County Community Outreach
- Osceola County Community Outreach

July – August, 2014

- Incorporate input from Outreach Meetings into a Draft for Orlando City Council Presentation

August – September, 2014

- Incorporate input from Orlando City Council into a Final Draft of the Airport Master Plan Update
- Greater Orlando Aviation Authority (GOAA) Board Approval
- Orlando City Council Approval
- Submit Final Draft to FAA for review and comment



# MASTER *plan*

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## Orlando International by the Numbers 2014

- 34.8 million passengers CY2013
- 95,000 passengers daily
- 2nd busiest airport in Florida in passenger traffic
- 800 aircraft operations/day
- 36 total airlines, including 4 cargo
- 95% origin and destination traffic (not connecting)
- Collectively 18,000 people work at the airport
- 3rd largest airport landmass in the U.S.
- Largest airport Rental Car market in the U.S.
- Regional economic impact - 26 billion annually

### **GREATER ORLANDO AVIATION AUTHORITY ~ MISSION STATEMENT**

*Provide safe, secure, customer-friendly, affordable services  
and facilities that promote The Orlando Experience™*

[www.orlandoairports.net](http://www.orlandoairports.net)



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## GREATER ORLANDO AVIATION AUTHORITY

Orlando International Airport  
One Jeff Fuqua Boulevard  
Orlando, Florida 32827-4399  
(407) 825-2001

### Meeting Minutes from the Video of the City of Orlando's Workshop Session

**Date and Location:** Monday, August 11, 2014 Council Chambers at City Hall

**Subject:** GOAA Master Plan Workshop

#### Question and Answer Session Post Presentation:

##### **Ms. Patty Sheehan**

Q: How does the people mover get integrated, will it go from the South station to the North?

A: Yes

Q: Will the Master Plan give an opportunity to upgrade the North Terminal?

A: The plan is to upgrade the ticket lobbies in the North as well as expand to the South.

Q: Will there be signage for the North and South to help passengers with way finding?

A: Yes, a portion of the Master Plan is about signage.

##### **Mr. Robert Stuart**

Q: Where is the Greater Orlando Aviation Authority (GOAA) at for the 40Million Annual Passengers (MAP) and the 2MAP triggers?

A: GOAA is at 35MAP so they are 5MAP away from the 40MAP.

Q: Based on projections, will that 5MAP increase happen soon?

A: With the compound growth rate GOAA should hit that point in 5-6 years.

Q: If a passenger takes the Automated People Mover (APM) from the North Terminal to the South Terminal and then takes the APM around the 120 gates in the South Terminal, how would that passenger get from the inner APM to the outer one? The path looks like it is a quarter mile, so is there something to help move those people?

A: To get to the intermodal terminal to the airside there will be a series of moving sidewalks. In Detroit there is an independent internal train system to the terminals; that type of technology has gone into the planning effort.

Q: When GOAA gets to the 120 gates in the South Terminal, where will the airport be capacity wise for the runways?

A: At 120 gates GOAA will be nearing their capacity.

Q: The community has concerns about the increase volume of plane traffic, but GOAA appears to be handling it well. But with this increase in air traffic will GOAA need to buy more land to accommodate it?

A: Out of all the systems looked at, GOAA has the greatest capacity in the airfields.

##### **Mr. Tony Ortiz**

Q: How many employees are currently at the airport?

A: GOAA employs approximately 650, but all badged employees number upwards of 18,000.

Q: Over the next 20 years with the expansion, how will that affect employment? If it does affect employment, will the parking garage have spaces for employees? Will SunRail and Light Rail be an option for employees to come to work?

A: GOAA is planning on enhanced employment. In the near term, there will be an increase in employment due to the construction. In regards to the rail connectivity there is no Light Rail yet; but GOAA does have plans to connect to the north and south (of Orlando). GOAA plans to have connectivity of those areas to and from the airport via train, bus, or any other mode of mass transit.

Q: The City has been working on a similar corridor to bring mass transit to the airport to get employees and the traveling public to and from the airport. Is that a part of GOAA's Master Plan as well?

A: Any and all forms of mass transit have been thought about and are planned for in this Master Plan concept.

**Ms. Regina Hill**

No questions, just wanted to publicly thank and acknowledge the airport for its good intentions with minorities and employees.

**Mr. Samuel B. Tngs**

Q: How will GOAA handle rental cars, taxis, and bus services for this expansion?

A: They will be handled much as they are now. GOAA is planning on how to incorporate rental cars as well as Quick Turn Around areas in the new garage. The idea is to provide those customer service amenities that people expect in the North and handle them in a similar fashion in the South with some enhancements. The core components of how it is currently handled will be incorporated in the South.

Q: There seemed to be a lack of public outreach meetings in south and south west Orlando. Will there be other public meetings to address this expansion?

A: All public meetings that were planned have been held; the three that were outlined where the three that were held.

Q: So for any other public input, they would need to go to the Aviation Authority's Board meetings?

A: The public would need to attend either a City Council meeting or a Board meeting to give additional input.

Q: Will the parking garage in the South have a better connectivity to the terminal than the existing tunnels in the North?

A: The connectivity from the garage to the terminal will be a series of bridges (3 or 4) which will be a much more direct connection than in the North.

Q: Will there be that option in the North for better connectivity?

A: At this time there is not a plan to change the existing conditions in the North.

Q: What type of relationship with TSA does GOAA have to speed up the check point status?

A: GOAA works closely with TSA on a daily basis. When possible they reconfigure the check points. GOAA is very supportive of their recheck program; which is \$85 per 5 years and allows the passengers quicker access through the lines. Part of GOAA's customer service initiative is to work with TSA for baseline training of all employees that deal with passengers, so that they will be more attentive towards the passengers. GOAA is trying to think of more ways to keep passengers on the landside of the check

points and still not affect them making their flights on time. It is a balance of adequate security and being processed quickly.

Q: It appears like passengers get bogged down in the security lines, is it because there is not enough space?

A: There is limited space for both check points. The east side with the Hyatt atrium has more space than the older west side. GOAA has looked at ways to expand, but in order to do that they would have to remove concessions (Disney and Universal) which are large revenue generators. The focus is now on the technology side to get passengers processed quicker, and to let TSA know in advance of large groups so they can appropriately staff the area. The first thing is to monitor how long it really takes to go through the line and to give the passengers that information so they can be better prepared.

Q: When coming onto the airport how does one access Terminals C and D?

A: The signage and directional signage is part of the Master Plan. Similar signage as what is in the north will be on South Access Road for the South. GOAA will also be signing in the North to keep passengers on that main access road for Terminals C and D. The general picture is all that GOAA has right now since the specifics have not been detailed yet. It is being thought of and is a critical piece of the Master Plan.

Q: What is the schedule of the initial build out after all the approvals are in?

A: GOAA is looking at a 3 to 4 year construction period for the initial phase of construction of the APM complex.

Q: for that build out, minority participation is always a concern. What are the efforts to improve upon that?

A: GOAA has a pretty robust program already, but one thing that was done differently this time was to break up the work. GOAA picked the lead architect as well as the four subs for the major disciplines (civil, electrical, structural, and mechanical) to get better participation from the community. The programs have so far exceeded the standard 20-25% goal, and are reaching the high 20% into the mid 30% range. GOAA also has two CMs. One is a joint venture between Turner-Kiewit, who will be doing the intermodal terminal; and the other is Hensel Phelps, who will be doing the APM terminal. By doing this GOAA is able to further break down the work into smaller projects, versus having larger projects that only large out of town firms would be able to handle.

#### **Mr. Jim Gray**

Q: This question is slightly off topic, but on the toll plaza renovations for the Beachline, where is GOAA with that project?

A: There is an agreement with the Expressway Authority to remove the one toll plaza and combine it with the one to the west that the Turnpike uses. There will be some additional ramp plazas, such as at Tradeport Drive and further west. GOAA just executed a Sale of Purchase that is being looked at by the Expressway Authority's Board. They had put the project out to bid, but there was a protest. They will likely kick the projects back off in the fall.

#### **Mr. Robert Stuart**

Q: There are some concerns to the impact to the city with traffic. GOAA will be bringing in more traffic, so what are they doing about the capacity of the roads such as Semoran and Boggy Creek? And has GOAA provided notification of the Master Plan to Metroplan?



A: Everything in the Master Plan is being coordinated with Metroplan and other affected agencies. The impacts mentioned are being taken into consideration and they are being looked into with the growth and expansion of the airport.



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# AIRPORT MASTER PLAN UPDATE EXECUTIVE SUMMARY

City Council Presentation

August 11, 2014



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# GOAA STRATEGIC GOALS

To be successful the Airport Master Plan must focus on GOAA's strategic goals:

- Exceed the expectations of the Traveling Public with the collaboration of our Airport Partners and the Community
- Foster Economic Development for the Region
- Operate and maintain safe and World-class Facilities
- Act in a fiscally responsible manner

# AIRPORT MASTER PLAN

## PLANNING HORIZON – 20 YRS

## AVIATION FORECAST

- Passenger Forecast
- Aircraft Forecast

## CAPACITY ANALYSIS & FACILITY IMPACTS

- Projected Capacity Impact
- Capital Improvement Program (CIP)

## AIRPORT LAYOUT PLAN (ALP)

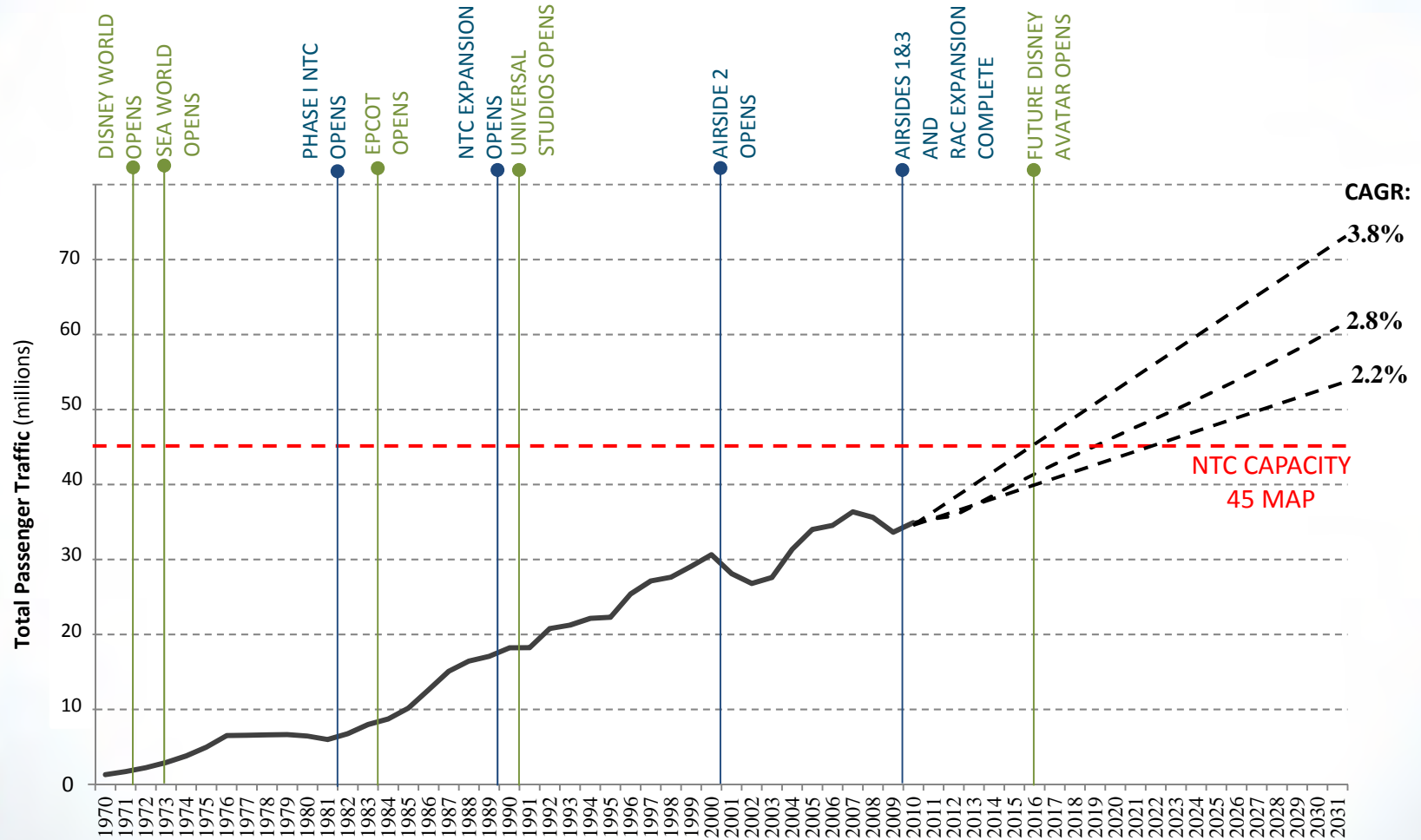
- Airport Site Plan with Existing and Future Facilities



# PASSENGER FORECAST

## RESPONSE TO CHANGES IN PASSENGER GROWTH

Aviation Demand Forecast (FAA Approved June 14, 2012)





# TERMINAL CAPACITY ANALYSIS

## CAPACITY METHODOLOGY

Levels of Service for OIA were established considering Federal and Industry Guidelines, qualified with The Orlando Experience® standard.

TERMINAL OPERATIONAL SYSTEMS	LEVEL OF SERVICE MEASURE FACTOR
1. International Gates & Customs and Border Protection (CBP)	Arrival/Departure Delay Time (Minutes)
2. Terminal Ramps	Traffic Flow (LOS A-F)
3. Passenger Security Checkpoints	Processing Time (Minutes)
4. Parking	Space Availability (Occupancy)
5. Ticketing	Queue and Transaction Time (Minutes)
6. Terminal Curbs	Congestion (LOS A-F)
7. Baggage Handling Systems (BHS)	Bags Processed in 20 Minutes
8. On-Airport Rent-a-Car (RAC)	Transaction Time (Minutes)
9. Baggage Claim	Wait Time (Minutes)
10. Domestic Gates	Arrival/Departure Delay Time (Minutes)
11. Entering and Exiting Road Weaves	Traffic Flow (LOS A-F)
12. Terminal Roads	Traffic Flow (LOS A-F)
13. Airfield	Arrival/Departure Delay Time (Minutes)
14. Automated People Mover (APM)	Wait Time (Minutes)

# RECOMMENDED IMPROVEMENTS



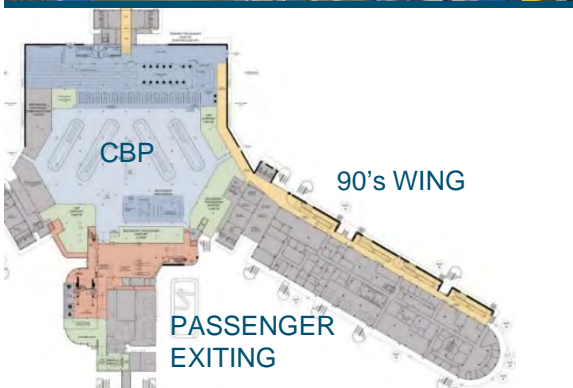
## TICKET LOBBY EXPANSION

- Expand Self-Service Check-In
- Expand Infrastructure for Future Technology
- Interior Refurbishment
- The Orlando Experience®



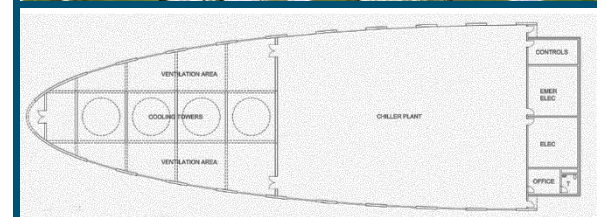
## BAGGAGE HANDLING SYSTEMS

- Upgrade & Convert to:  
"In-Line" Baggage Screening System
- Integrated Security Technology  
(TSA Mandates)

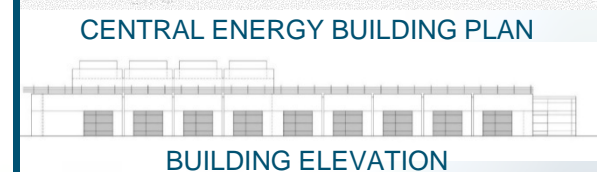


## AIRSIDE 4 EXPANSION

- 4 Additional International Gates (90's wing)
- 10,000 s.f. expansion of CBP
- Interior Refurbishment
- The Orlando Experience®
- New Central Energy Plant



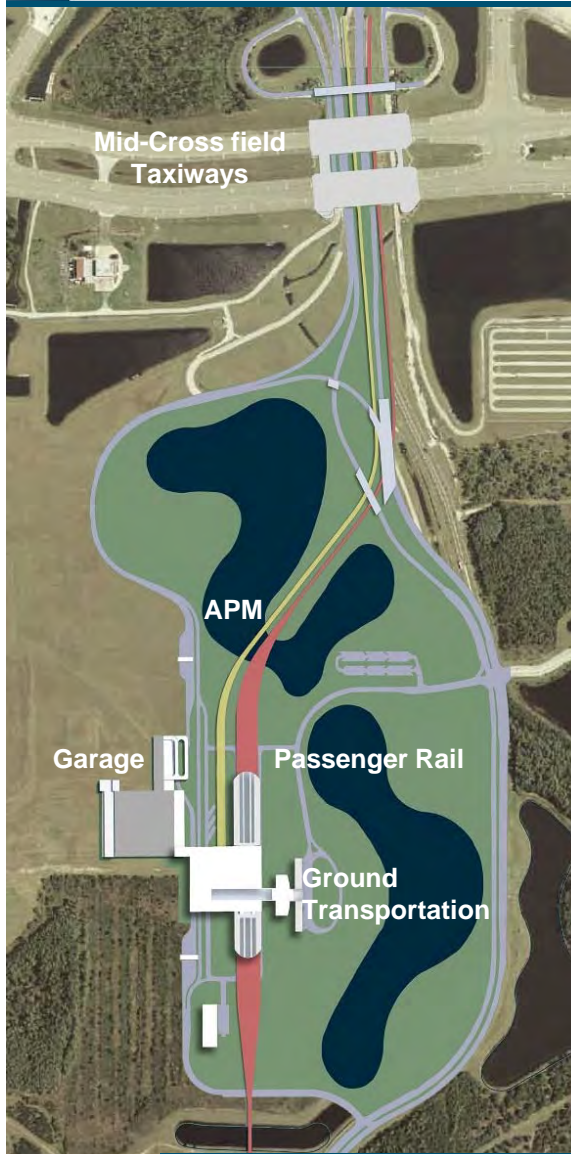
CENTRAL ENERGY BUILDING PLAN



BUILDING ELEVATION



# RECOMMENDED IMPROVEMENTS



## SOUTH AIRPORT APM & ITF COMPLEX

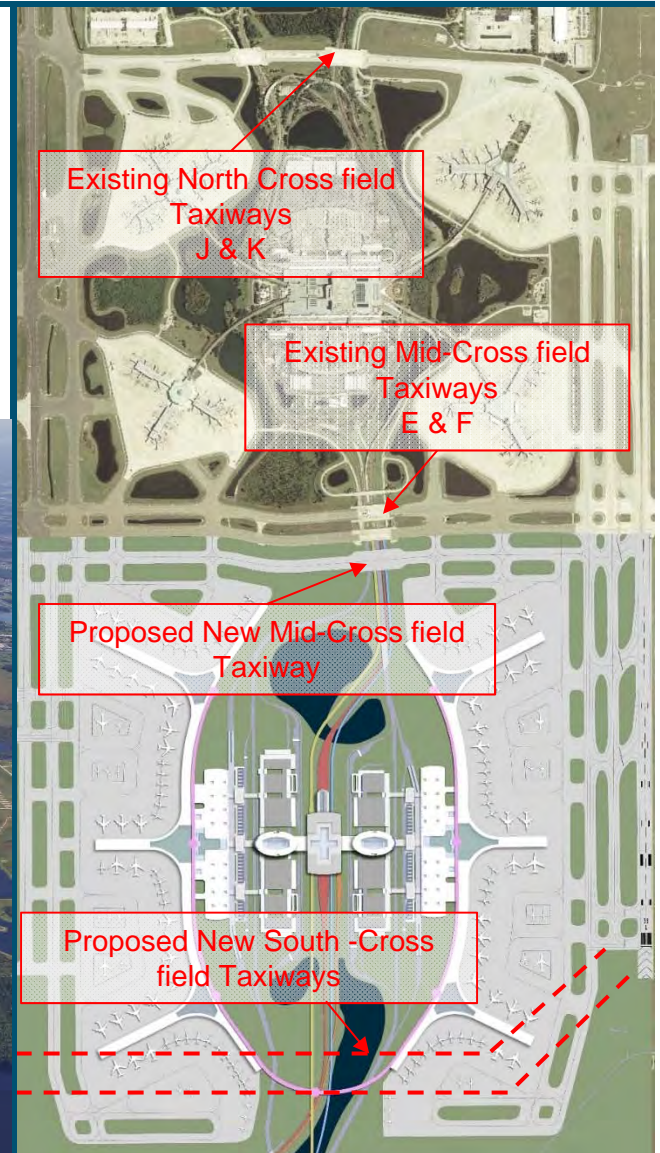
- North Terminal Complex (NTC) Capacity Reliever
- Automated People Mover (APM) System from NTC
- 500,000 s.f. Facility
- 2,400 Car Garage
- Passenger Drop-off Lobby
- Remote Check-In





# AIRFIELD CAPACITY

- Four existing runways accommodate the forecasted traffic growth
- Introduce new South Airport Complex Concept





# AIRPORT LAYOUT PLAN

## Purpose of Airport Layout Plan (ALP)

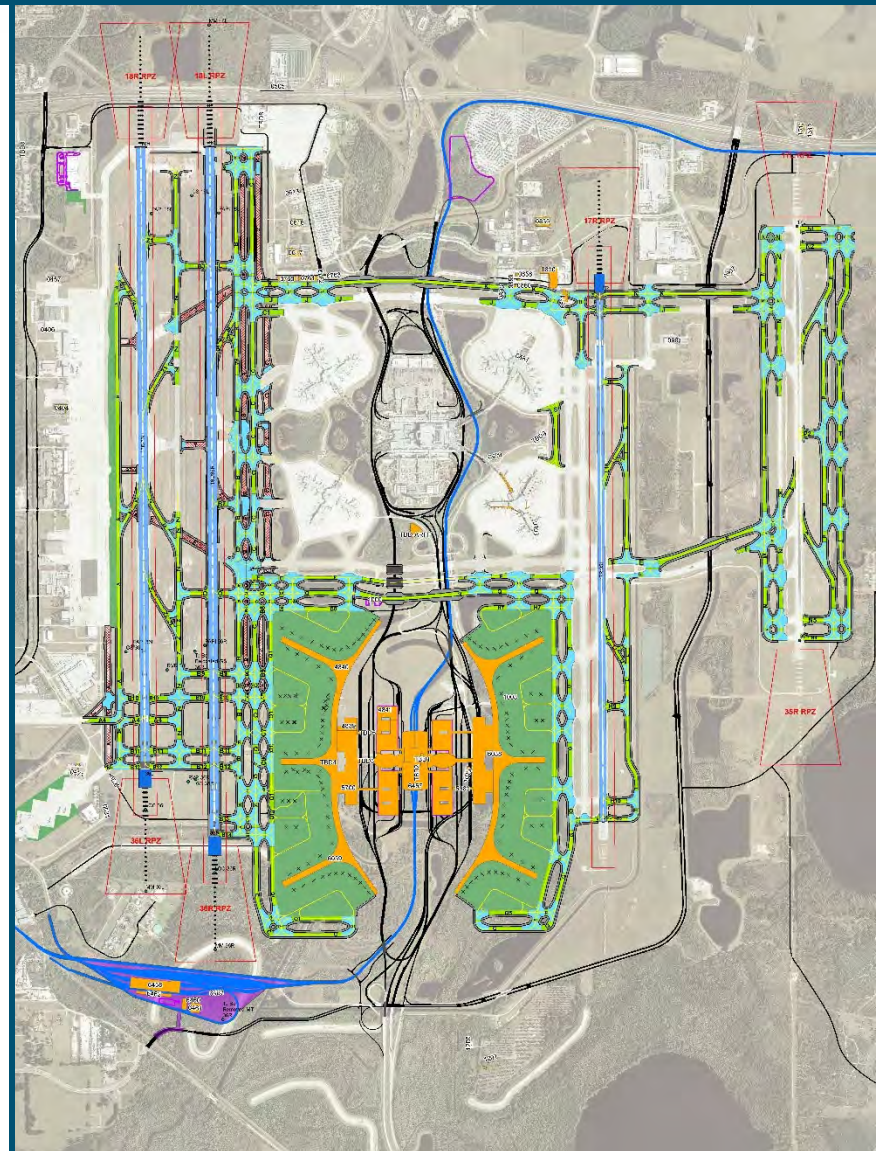
- To depict current and future facilities at the airport for coordination with the Federal Aviation Administration (FAA)

## What does FAA approve and what is its significance?

- FAA approves the Aviation Forecasts and ALP
- The ALP is used to determine which projects are eligible for federal funding

## Primary Changes in ALP

- South Terminal Complex
- Realignment of Rail and Road Corridors





# CAPITAL IMPROVEMENT PLAN (CIP)

## CIP OBJECTIVES

- Maintain The Orlando Experience®
- Improve facilities to achieve finite NTC Capacity of 45 MAP
- Improve International Processing
- Generate non-aviation revenue

### MAJOR ELEMENTS OF THE CIP (FY 2013 – 2018)

MAINTAIN CURRENT FACILITIES	COST (MILLIONS)
Baggage Handling System Improvements and Upgrades	\$148
Ticket Lobby Expansion and Refurbishment	\$113
Automated People Mover (APM) Replacements at Airsides 1 & 3	\$90
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Ground Transportation Improvements	\$33
SUPPORT CAPACITY GROWTH	
South Airport APM Complex	\$470
Airside 4 International Passenger Processing Improvements	\$114
<b>TOTAL</b>	<b>\$1,104</b>

# SOUTH AIRPORT COMPLEX

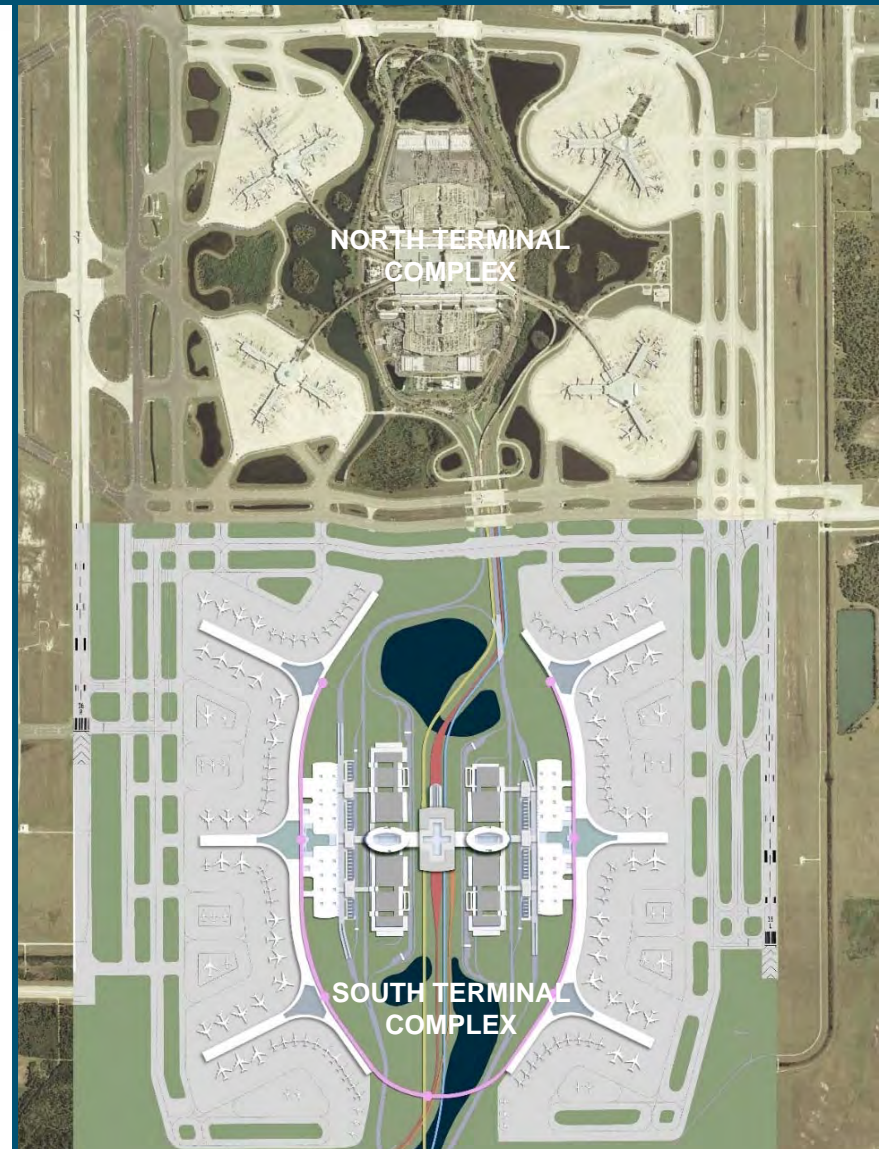
# OIA MASTER PLAN

## North Terminal Complex:

- 45 MAP Capacity
- 78 Domestic / 16 International Gates
- 8,000 Car Parking Garage

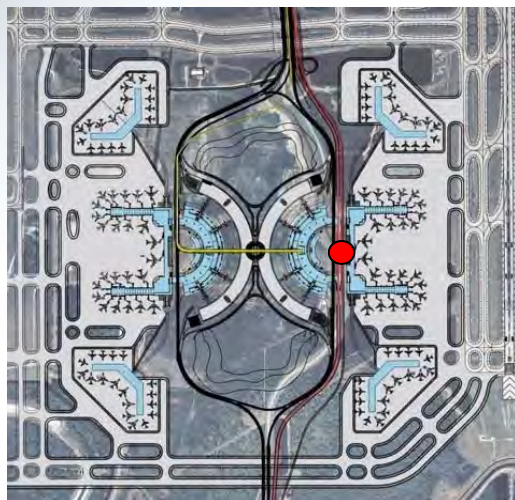
## Future South Terminal Complex:

- 60 MAP Capacity
- 120 International/Domestic “Swing” Gates
- Seamless Multi-Modal Connectivity
- On Demand Incremental Expansion
- 20,000 Car Parking Garage
- Aviation Transit Oriented Development (ATOD)

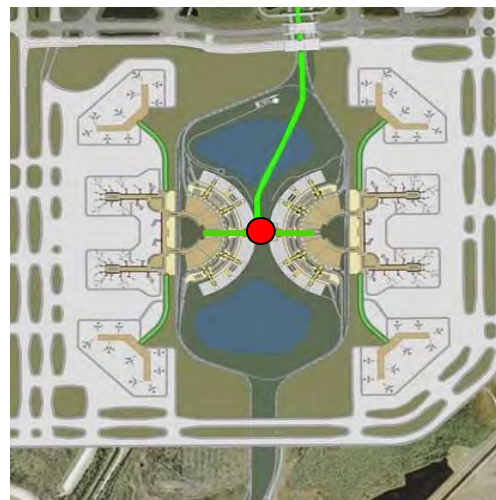




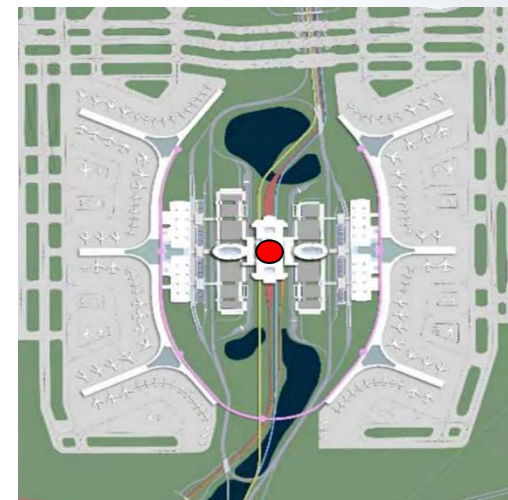
# SOUTH AIRPORT COMPLEX ADVANCEMENTS



2004



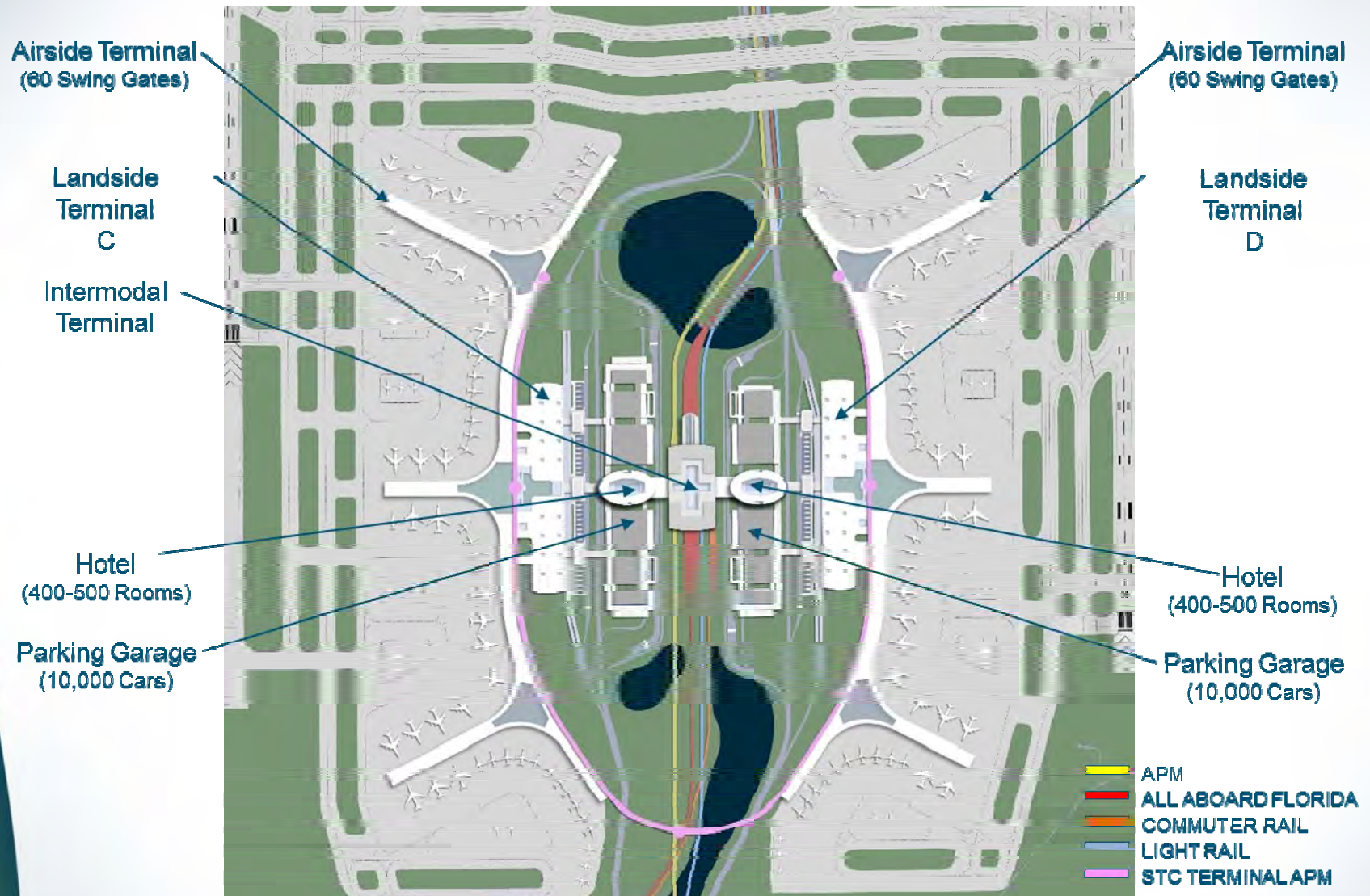
2010



2014

ADVANCEMENTS	2004 MASTER PLAN	2014 MASTER PLAN
Passenger Capacity	40 MAP	60 MAP
International Gates	48 Large Aircraft "Swing" Gates	120 Variable Aircraft Size "Swing" Gates
Domestic Gates	72 Small/Medium Aircraft Gates	
Hotel Rooms	500 Potential	1,000 Potential
Concessions	350,000 S.F.	750,000 S.F.
Aviation Transit Oriented Development	0 SF	1,000,000 S.F.
Parking	8,000 Cars	20,000 Cars
Passenger Secure Automated People Mover	4 Separate Systems	1 System – 120 Gate Connections
Rail Capacity	2 Rail Systems	4 Rail Systems

# SOUTH AIRPORT COMPLEX FEATURES

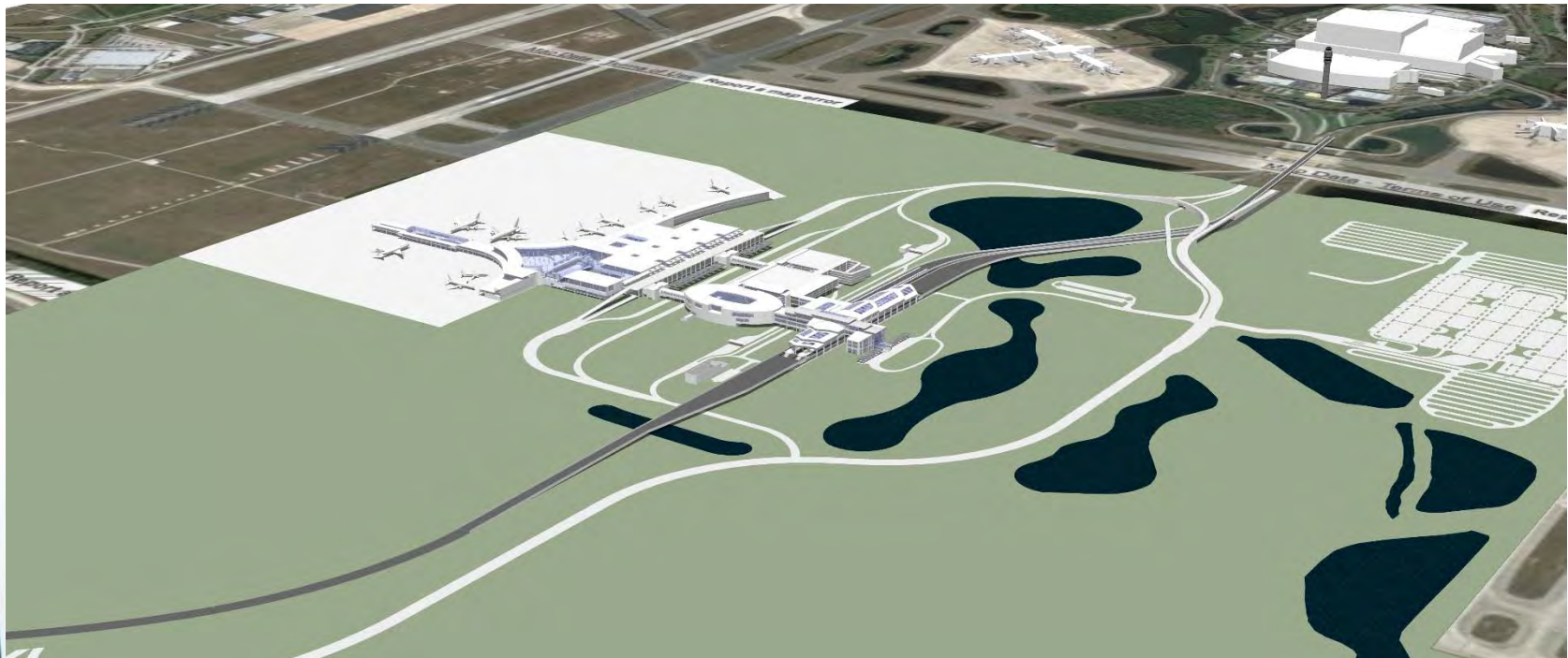




# SOUTH AIRPORT COMPLEX

Demand Driven Trigger Points for South Terminal Complex commence the Design and Construction Process:

- 40 Million Annual Passengers (MAP) at the North Terminal Complex (NTC)
- 2 MAP Arriving International Passengers processed through CBP Facilities



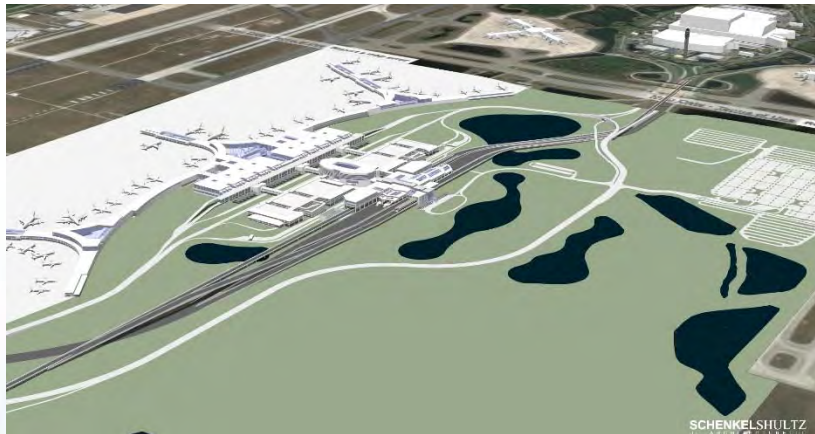
# SOUTH AIRPORT COMPLEX PHASING



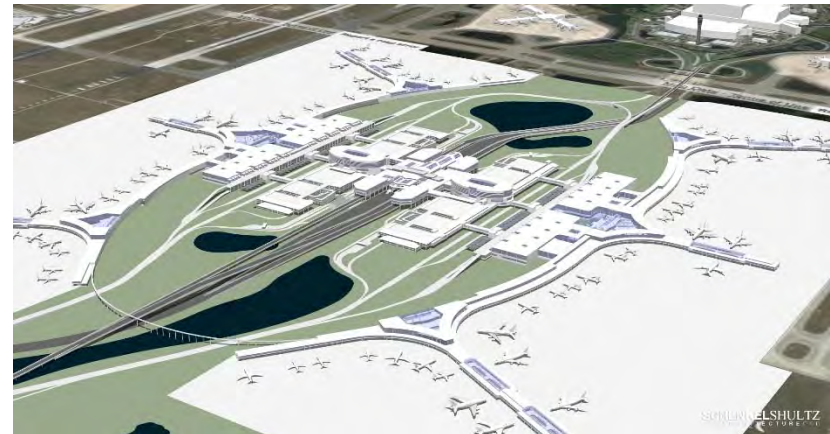
SOUTH TERMINAL, SOUTH AIRPORT APM COMPLEX & ITF  
First Phase of Development  
16 GATES



SOUTH TERMINAL, SOUTH AIRPORT APM COMPLEX & ITF  
Second Phase of Development  
32 GATES



SOUTH TERMINAL, SOUTH AIRPORT APM & ITF COMPLEX  
Third Phase of Development  
60 GATES



SOUTH TERMINAL, SOUTH AIRPORT APM & ITF COMPLEX  
Ultimate Build-Out with STC Terminals C & D  
120 GATES

# SOUTH AIRPORT COMPLEX SUMMARY

## **Seamless integration of multimodal transportation**

- Air, Ground, Rail

## **Improved “On-Demand” facility expansion capabilities**

- Passenger demand
- Aircraft Fleet demand
- Domestic and International capacity demands

## **Expands non-airline revenue opportunity**

- “Post Security” Concessions & Customer Service Focus
- ATOD (Aviation Transit Oriented Development)

## **Improved Passenger Circulation**

- Internal “Automated People Mover System”

## **Customer Service Enhancements**

- Garden Terminal atmosphere
- Family Entertainment areas

## **South Airport Complex: Efficient, Flexible, and Expandable Design**

## **Focused on Comfort, Ease and Speed for the Traveling Public.**



# COMMUNITY OUTREACH



**MASTER plan**  
2011 - 2031

**INFORMAL PUBLIC INFORMATION SESSIONS**

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*Heritage Park Exhibition Hall, Kissimmee Room A  
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Phillip N. Brown, A.A.E.  
Executive Director  
Greater Orlando Aviation Authority

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# NEXT STEPS

September 17<sup>th</sup> GOAA Board Meeting – Airport Master Plan Approval

September 29<sup>th</sup> Approval from Orlando City Council

September 30<sup>th</sup> Submit Final Deliverables to FAA/FDOT

- Technical Report
- Executive Summary
- Traditional Airport Layout Plan – ALP Drawing Set with FAA Checklist





# QUESTIONS