



Raleigh-Durham Airport Authority

Business Opportunity Workshop

Michael J. Landguth, President & CEO
May 8, 2019



Raleigh-Durham Airport Authority



Agenda

- State of RDU
- RDU Vision
- Business Partners



Raleigh-Durham Airport Authority

State of RDU



Raleigh-Durham Airport Authority

RDU in the 1940s



Raleigh-Durham Airport Authority

Economic Impact on the Region



\$12.5 Billion in Economic Output



\$450 Million in State and Local Taxes



Raleigh-Durham Airport Authority

State of RDU

- Since 2011
 - Added five new airlines
 - 29 new non-stop destinations
- Today 11 airlines fly to 66 nonstop destinations
- Enplanements up 42% since 2013
- Record 12.8 million passengers
- Projected seat capacity for next year is exceeding 10%

**BOTTOM LINE: RDU
MUST KEEP PACE
WITH ROBUST
REGIONAL GROWTH**

Air Service



Raleigh-Durham Airport Authority

Airline Portfolio

2007



2018



2019



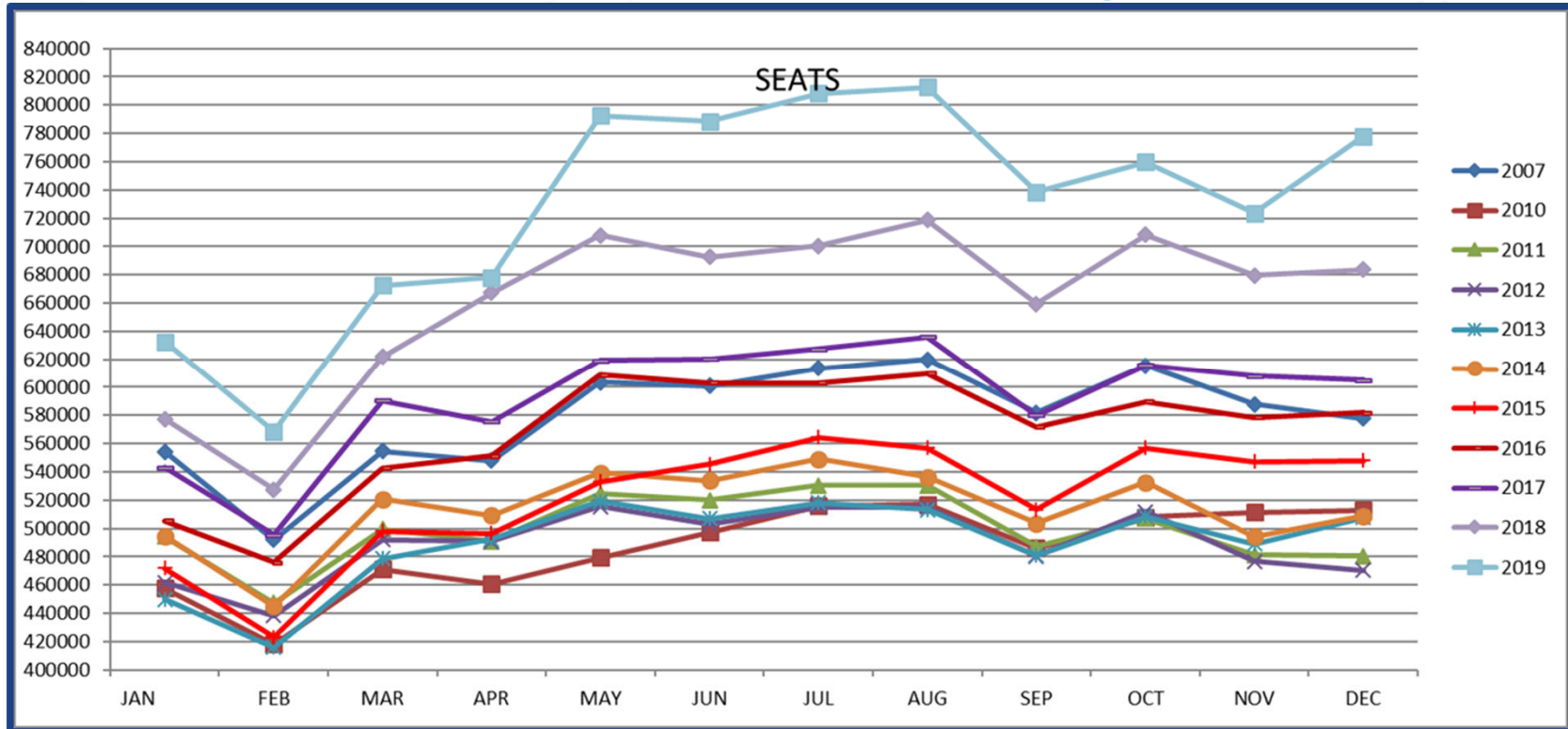
Raleigh-Durham Airport Authority

66 Nonstop Destinations



Raleigh-Durham Airport Authority

2019 Seat Capacity



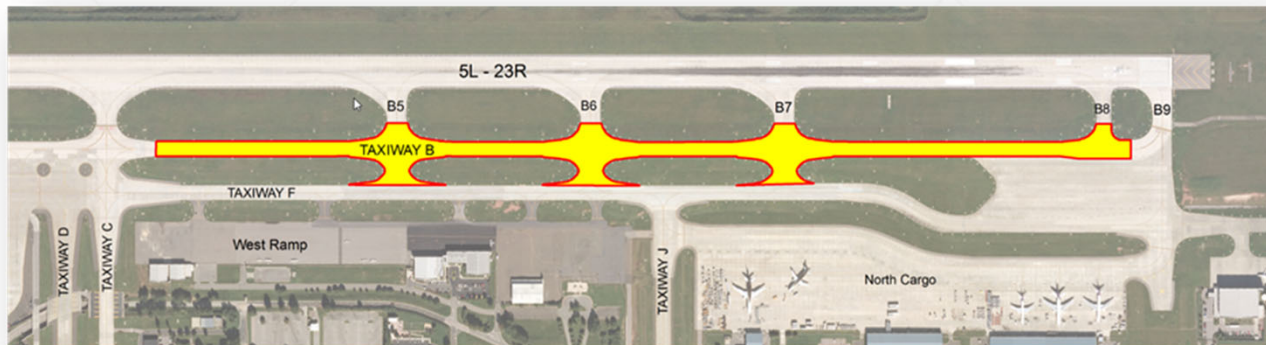


**RDU will invest \$1.9 billion
over the next 10 years**



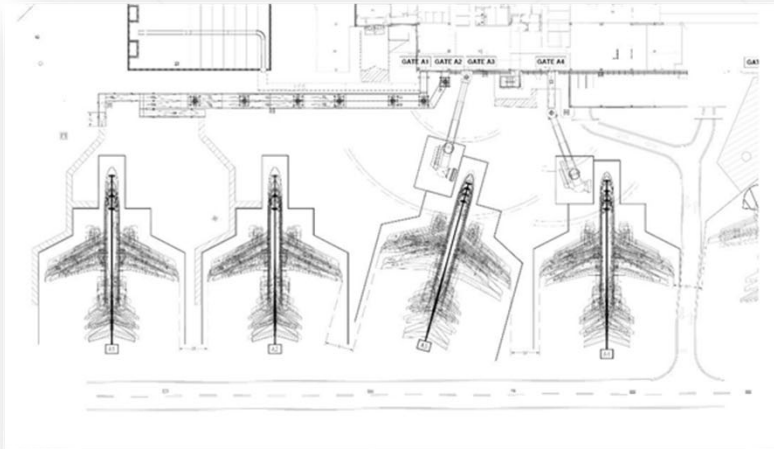
Raleigh-Durham Airport Authority

Airfield Improvements

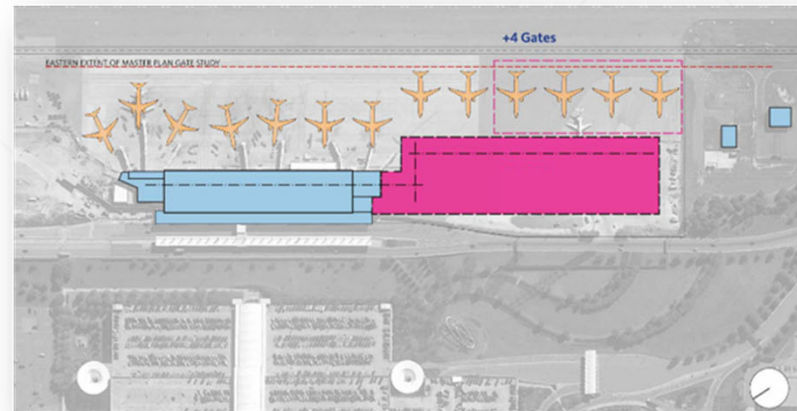


Raleigh-Durham Airport Authority

Terminal Development



Terminal 1 – Four Gate Activation



Terminal 1 – Four Gate Expansion



Raleigh-Durham Airport Authority

Consolidated Rental Car Facility and Ground Transportation Center



Raleigh-Durham Airport Authority



Urgency to Accelerate RDU's Vision 2040 Airport Master Plan

- RDU's Airport Master Plan is eight years ahead of schedule.
- \$862 million in deferred projects now fall within the 25 year plan.
- RDU's Vision 2040 Plan has now grown to \$3.7 billion.
- With a significant financial gap, RDU is trying to create solutions to fund the accelerated Vision 2040 plan.





What we care about: Vision, Mission & Core Values



Raleigh-Durham Airport Authority

Vision, Mission & Core Values



VISION

To deliver a world-class airport experience

MISSION

To deliver excellent airport services, facilities
and unparalleled customer service

CORE VALUES

Learning, Integrity, Team,
Excellence and Respect



Raleigh-Durham Airport Authority

Core Values Propel Our Performance

- **TEAM** – We help each other succeed and are proactive collaborators.
- **INTEGRITY** – We do the right thing for our customers and each other. Every time.
- **RESPECT** – We value what each person brings to the team and appreciate differences in opinions, backgrounds and ideas.
- **EXCELLENCE** – We strive for excellence in everything we do. Our team and our customers deserve nothing less.
- **LEARNING** – We look for and take advantage of every opportunity to become better at what we do, both individually and as a team.



Business Partners



Raleigh-Durham Airport Authority



Expectations for Business Partner

- Good Cultural Fit with RDU
 - RDU's Core Values
- Provide Expertise and Value to help Build World Class Facilities
- Advocate for RDU and Our Mission





Thank You



Raleigh-Durham Airport Authority



Raleigh-Durham Airport Authority

Business Opportunity Workshop

William C. Sandifer, Senior Vice President & COO

May 8, 2019



Raleigh-Durham Airport Authority



Topics

- RDU Staff Introductions
- Workshop Format
- Schedule



Raleigh-Durham Airport Authority



Raleigh-Durham Airport Authority

Business Opportunity Workshop

Ron Jewett, VP Facilities Asset Management
May 8, 2019



Raleigh-Durham Airport Authority

Agenda

- Background Information
- Current Projects
- Current Consultants
- Upcoming RFQ Information
- Questions

**Architects/
Building
Consultants**

**Civil Engineering
Consultants**

Sign Consultant

GIS Consultant





Capital Program Statistics

- \$724M over last 12 yrs. (\$60M/Yr)

Current Contracts

- \$32M Consulting Contracts
- \$201M Construction Contracts





Capital Program Statistics

Current Contracts

- 11 Prime Consultants
- 5 Prime Contractors
- 2 Construction Managers At-Risk
(Building & Civil Work)





Architect/ Building Consultant

- Building & Building Systems Condition Assessments
- Retrofits
- New Construction
- Demolition



Buildings & Building Systems



- - Architectural planning and design services
- - Structural engineering (buildings, foundations, roofs, hangars, etc.)
- - Mechanical, electrical and plumbing (MEP) engineering
- - Heating, ventilation and air conditioning (HVAC) engineering
- - Fire protection engineering
- - Interior and exterior lighting consulting
- - Building management systems consulting
- - Horizontal and vertical circulation and passenger load modeling
- - Horizontal and vertical conveyance systems consulting
- - Baggage handling systems consulting
- - Airport/Emergency Operations center planning and design
- - Aircraft circulation modeling and layout consulting
- - National and local code compliance consulting (building, hangar, fire, electric, etc.)
- - Information technology / communication systems (IT/IS) consulting (Paging, AOIS, FIDS, BIDS, premises network systems, etc.)
- Cost estimating services
- Passenger Boarding Bridge systems
- SAACS and CCTV

The Gensler logo consists of the word 'Gensler' in a white, bold, sans-serif font, centered within a solid red rectangular background.



Raleigh-Durham Airport Authority

Building Condition Assessments




Raleigh-Durham
International Airport

Building 7: South
Cargo 2
1035 Airside Drive

Volume I

Feasibility Study
June 17, 2013



Raleigh-Durham Airport Authority

Building Retrofits – Conference Room



Raleigh-Durham Airport Authority

Building Retrofits – Checkpoint Expansion



Raleigh-Durham Airport Authority

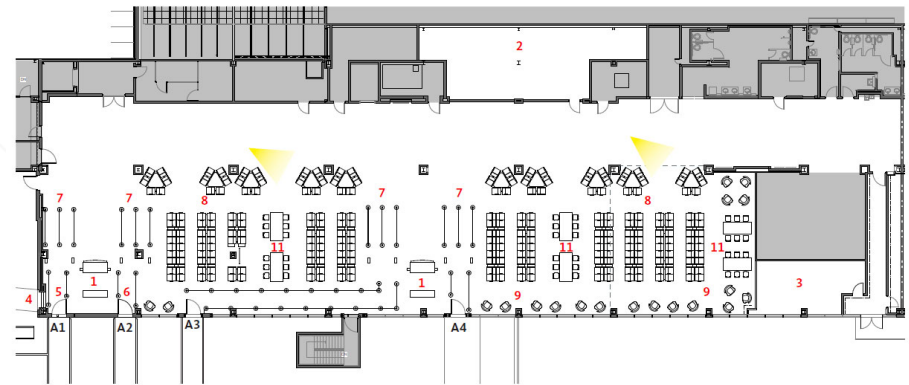
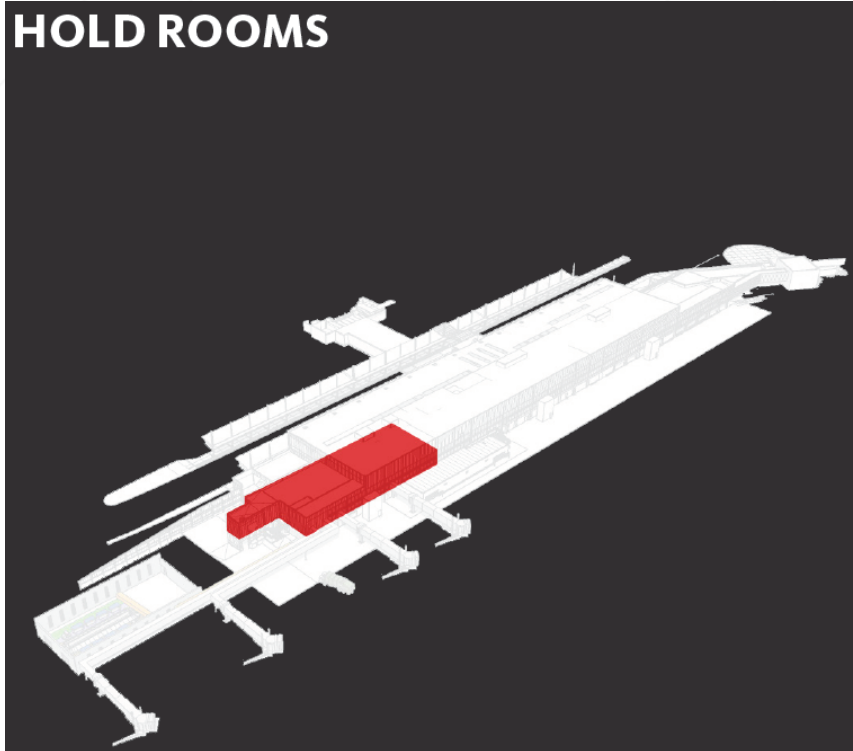
Terminal 1 Four-Gate Activation



Raleigh-Durham Airport Authority

Terminal 1 Four-Gate Activation

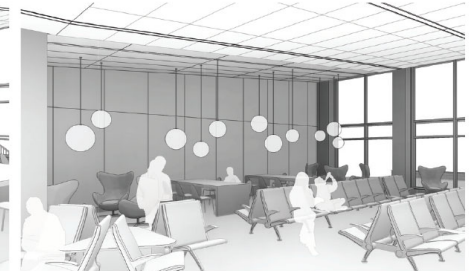
HOLD ROOMS



HOLD ROOMS PLAN



OVERALL HOLD ROOM PERSPECTIVE - FACING PLAN EAST



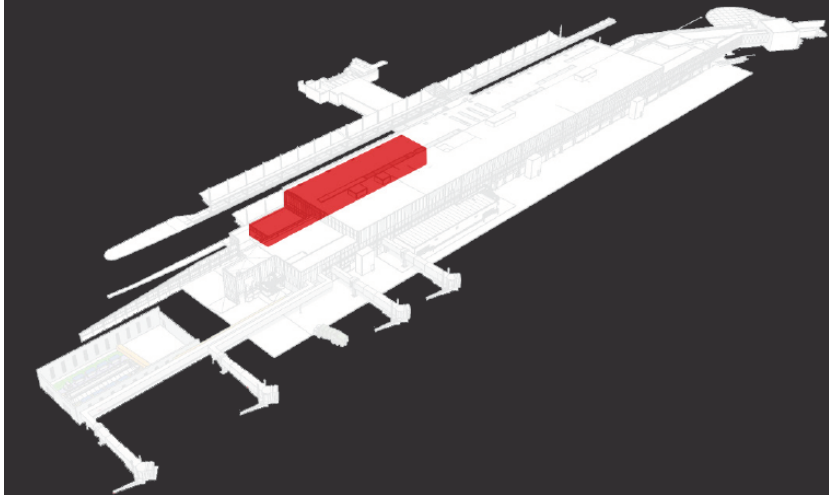
BACK WALL PERSPECTIVE WITH WALL PANELS AND ACCENT LIGHTING - FACING PLAN EAST



Raleigh-Durham Airport Authority

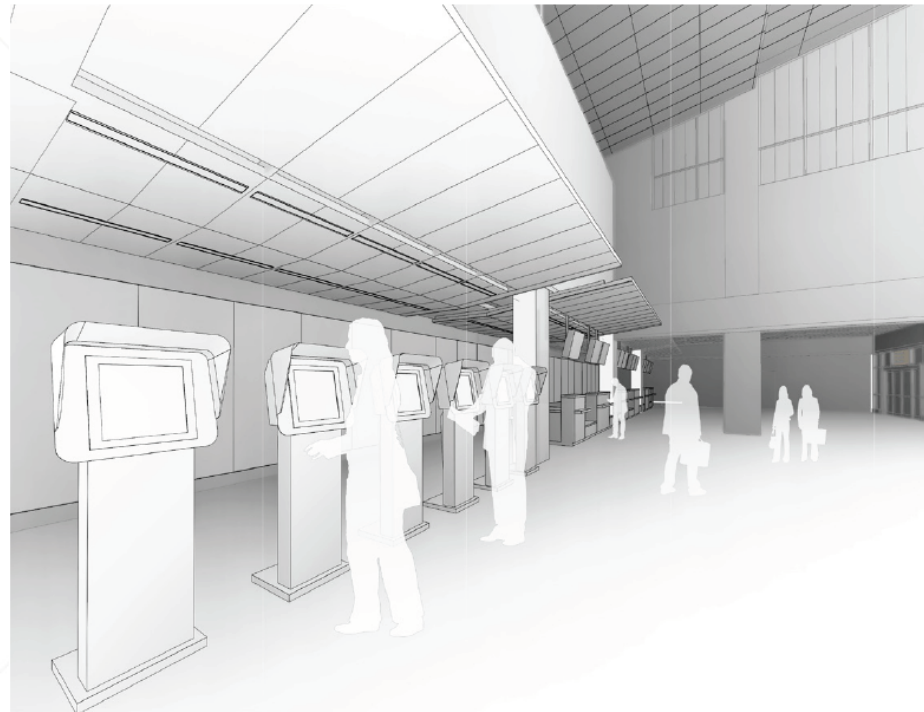
Terminal 1 Four-Gate Activation

TICKETING AND SELF-SERVICE KIOSKS



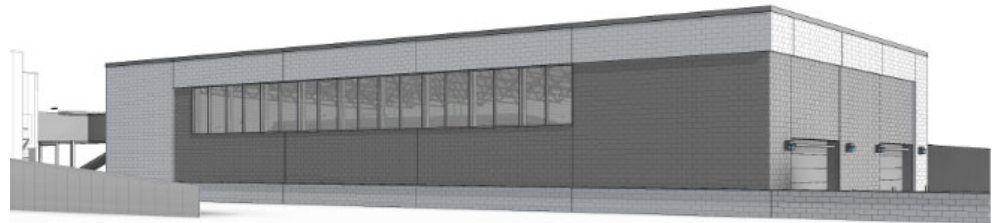
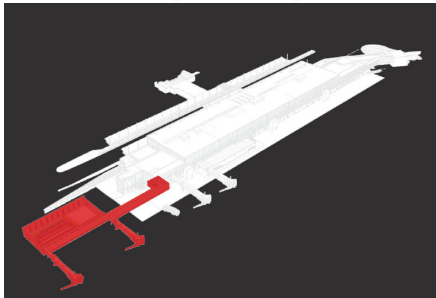
TICKETING

SELF-SERVICE KIOSKS - OPTION 1



Raleigh-Durham Airport Authority

Terminal 1 Baggage Handling Facility



Raleigh-Durham Airport Authority



Civil Engineering

- Taxiway Reconstruction
- Runway Re-paving
- Roadway Re-paving
- Security Gates & Fence
- Utilities
- Parking Garage



Airside/Landside Civil Engineering

AECOM

- Civil engineering including structural, bridges, drainage, pavement, roadway, and traffic control design.
- Landscape architecture and irrigation design.
- Land surveying.
- Geotechnical engineering
- Pavement conditions assessment and pavement management.
- Airfield lighting and guidance systems engineering.
- Roadway lighting and electrical engineering.

RS&H

- Structural engineering (including concrete and metal structures).
- Utility engineering (including water distribution, sewer collection, and communications/information technology infrastructure).
- Mechanical engineering (including fuel storage/distribution facility and hydrant piping system).
- Cost estimating.
- Construction inspection

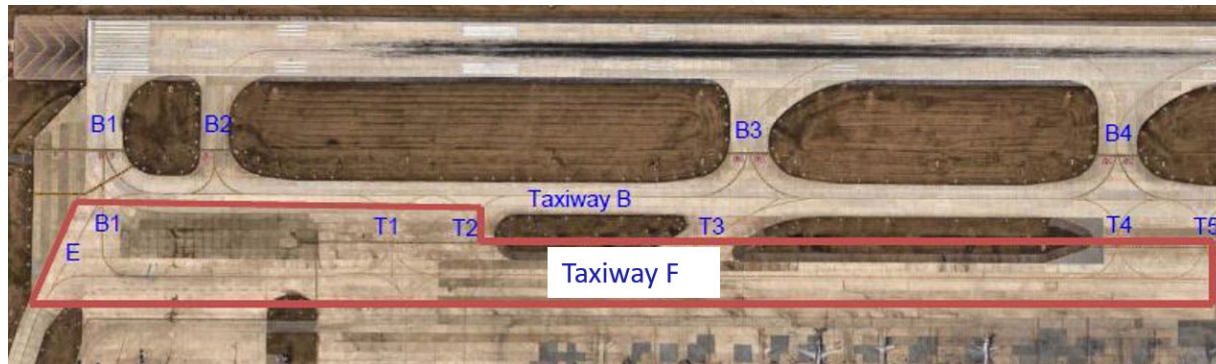
**WK
DICKSON**

**DELTA AIRPORT
CONSULTANTS, INC.**



Raleigh-Durham Airport Authority

Taxiway F Rehabilitation



North End (comp.)

South End (ongoing)



Raleigh-Durham Airport Authority

Taxiway F Rehabilitation

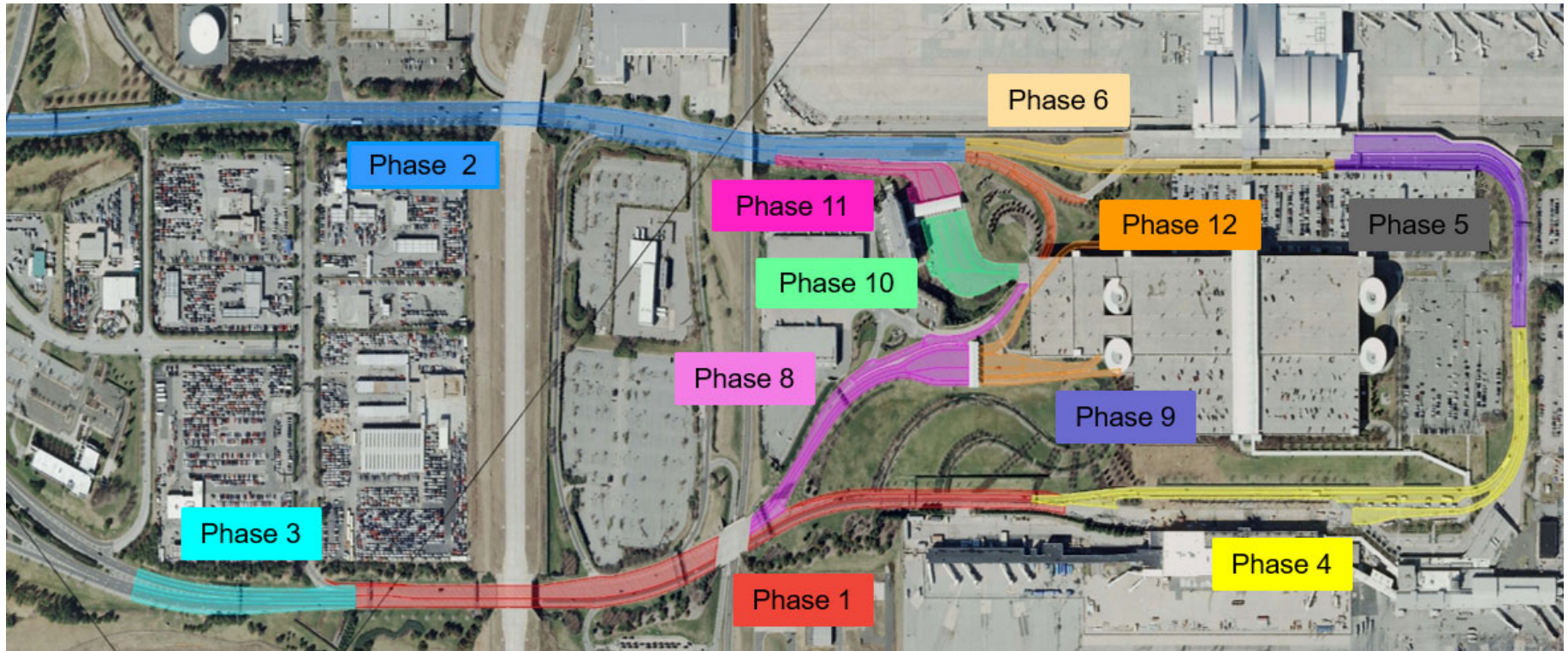


Raleigh-Durham Airport Authority

Runway 14-32 Re-paving



John Brantley Boulevard Rehabilitation



Raleigh-Durham Airport Authority

John Brantley Boulevard Rehabilitation

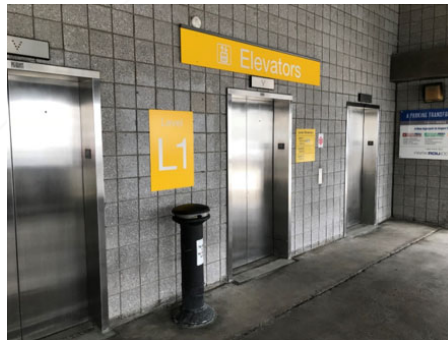


Parking Garage Rehabilitation



Traction Elevators

Hydraulic Elevators



Powered Walks

Escalators



Raleigh-Durham Airport Authority

Airport Signage

- Terminal Signage
- Roadway Signage
- Parking Lot Signage



Terminal Signage



Raleigh-Durham Airport Authority

Terminal Signage



Raleigh-Durham Airport Authority

Roadway Signage



Raleigh-Durham Airport Authority

Signage: Recent Additions

Terminal 2		
Air Canada	Delta	United
Alaska	Frontier	Via
Allegiant	JetBlue	
American	Spirit	

All International Arrivals

← Airport EXIT
Terminal 1 2
P Terminal
Parking
P Express
P Economy 4

P Express
P Economy 4
General Aviation
North Cargo

NEXT RIGHT



Geographic Information Systems

- Serves and Supports Entire Organization
- Robust Database
 - Examples of Data:
 - Basemap Data
 - Utility Networks
 - Infrastructure & Facility Assets
 - Aerial Imagery
 - FAAAGIS Data



GIS at RDU – Primary Functions

- Spatial Analysis
- Height Zoning / Aircraft Noise Analysis
- Bldg. Space Management
- Map Production
- Data Collection/GPS
- CAD Conversion
- Pavement Management
- Constr. Plan Management
- Data Dissemination



Geographic Information Systems

- ESRI based system
- Multi-user Enterprise Geodatabase
 - SQL Server
 - Some Integration with Other Systems
- Custom Applications
 - Tracing & Valve Isolation – Water & Stormwater Networks
- Utilize Portal for ArcGIS & ArcGIS Online platforms



Upcoming RFQ for On-Call Consultants

- Fall 2019
- Example Projects and Types of Services
- Process: Proposals & Interviews
- Initiate Services April 2020
- Contract Duration: 3 yrs. Base, with Two Annual Renewals
- Number of Firms to be Selected



RFQ Requirements

- Letter of Interest/Introduction
- Description of the Lead Firm & Team
- Experience of Key Personnel
- SF 330 – Size & Experience of Lead Firm & Team
- Similar Project Experience
- MWSB Experience & Commitment to Meet Goals





Questions?



Raleigh-Durham Airport Authority



Raleigh-Durham Airport Authority

Business Opportunity Workshop

Thiané Carter
Small Business Program Director
May 8, 2019



Raleigh-Durham Airport Authority

Small Business Programs

- RDUAA has two programs designed to foster the inclusion of minority and women-owned small businesses
 - **Federal** Disadvantaged Business Enterprise (DBE)
 - **RDUAA** Minority and Women-owned Small Business (MWSB)
- RDUAA requires that its business partners make an effort in good faith to achieve MWSB or DBE goals
- Most contracts have MWSB goals; Federally assisted contracts have DBE

What are MWSBs?

- Small businesses owned, operated and controlled by individuals that are:
 - Black American,
 - Hispanic American,
 - Asian American,
 - Native Americans, or
 - Women



MWSB Program Goals

- There are separate goals for the participation of minority-owned small businesses (MB) and women-owned small businesses (WB)
- The goals are determined based on the type of work being performed and the availability of MB and WB firms
- Past goals:
 - Architecture, Engineering, Planning – 10% MB, 5% WB
 - Construction at Risk Services - 10% MB, 5% WB
 - Construction – Varies widely based on scope





MWSB Program Results

- 130 Prime agreements
- \$32 million in consultant fees over 5 years
- \$201 million in construction contracts over 5 years
- 12.5% MB participation
- 13.7% WB participation





MWSB Program Certification

- RDUAA accepts various certifications
 - NCDOT – Disadvantaged Business Enterprise – **DBE**
 - SBA 8(a) Business Development Certification – **SBA 8(a)**
 - Women’s Business Enterprise National Council – Women-Owned Small Business – **WOSB**



MWSB Program Certification

- RDUAA must verify **business size** for these certifications
 - NCDOA – Historically Underutilized Business – **HUB**
 - Minority or women-owned HUBs only
 - Carolinas-Virginia Minority Supplier Development Council – **CVMSDC**



Small Business Contract Compliance System

Log In

Vendor Certification

Search and/or join our database of certified vendors

Search Certified Directory

System Training

Learn how to fully utilize our system with a live trainer

Training List

Business Opportunities

Find a list of current business opportunities available with the Raleigh-Durham Airport Authority.

[View Opportunities](#)

About the System

Learn more about this system and how it works today

Information for Vendors

Account Access

Lookup Vendor accounts or reset user passwords

Account Lookup

Forgot Password

RDUAA Small Business Programs

Find additional information and resources through Raleigh-Durham Airport Authority small business programs webpage.

[RDUAA Small Business Programs](#)



Raleigh-Durham Airport Authority

Locating MWSBs

- RDUAA certified directory:
<https://rdu.diversitycompliance.com>

Proposal Requirements: MWSB Statement

- Proposers must submit a written statement that describes the Proposer's plan to meet or exceed the MWSB Goals or demonstrate a good faith effort to meet the MWSB Goals
 - Describes the MWSB firms that will participate
 - Describes in specific detail, the scope to be performed by the MWSBs
 - Estimated MWSB participation (percentage) based on the scope
 - May also include the methods by which a Proposer will monitor its participation throughout the contract



Proposal Requirements: MWSB Statement

- Must include Proposer's commitment to meet the requirements of the Authority's MWSB Program
- Must include Proposer's commitment to use the MWSB firms listed in the proposal as submitted
- Must include written confirmation from each MWSB stating its scope and intent to participate in the agreement.



MWSB Requirements

- Proposers **must** meet both the MB and WB goals or demonstrate the efforts utilized to achieve the goals.
- RDUAA will determine whether the Proposer has provided sufficient documentation of its efforts to achieve the goals
 - Good faith effort documentation should be submitted with the proposal
 - RDUAA considers the quality, quantity and intensity of efforts



Good Faith Efforts

- Efforts that are merely pro-forma do not meet the MWSB Program requirements.
 - RDUAA considers the quality, quantity and intensity of efforts
- RDUAA reserves the right to reject the proposal of any proposer who fails to make a good faith effort and submit timely, satisfactory evidence of its good faith effort.



Proposal Requirements

- The successful Proposer's MWSB commitment will be incorporated into the contract and will be enforceable under the terms of the contract.
- Proposers shall be solely responsible for confirming experience, capacity, and MWSB eligibility of subconsultants related to this solicitation.





Questions



Raleigh-Durham Airport Authority



Break Meet and Greet RDU Staff



Raleigh-Durham Airport Authority



Raleigh-Durham Airport Authority

Business Opportunity Workshop

Jaymes W. Carter

Director: Buildings & Building Systems

May 8, 2019



Raleigh-Durham Airport Authority

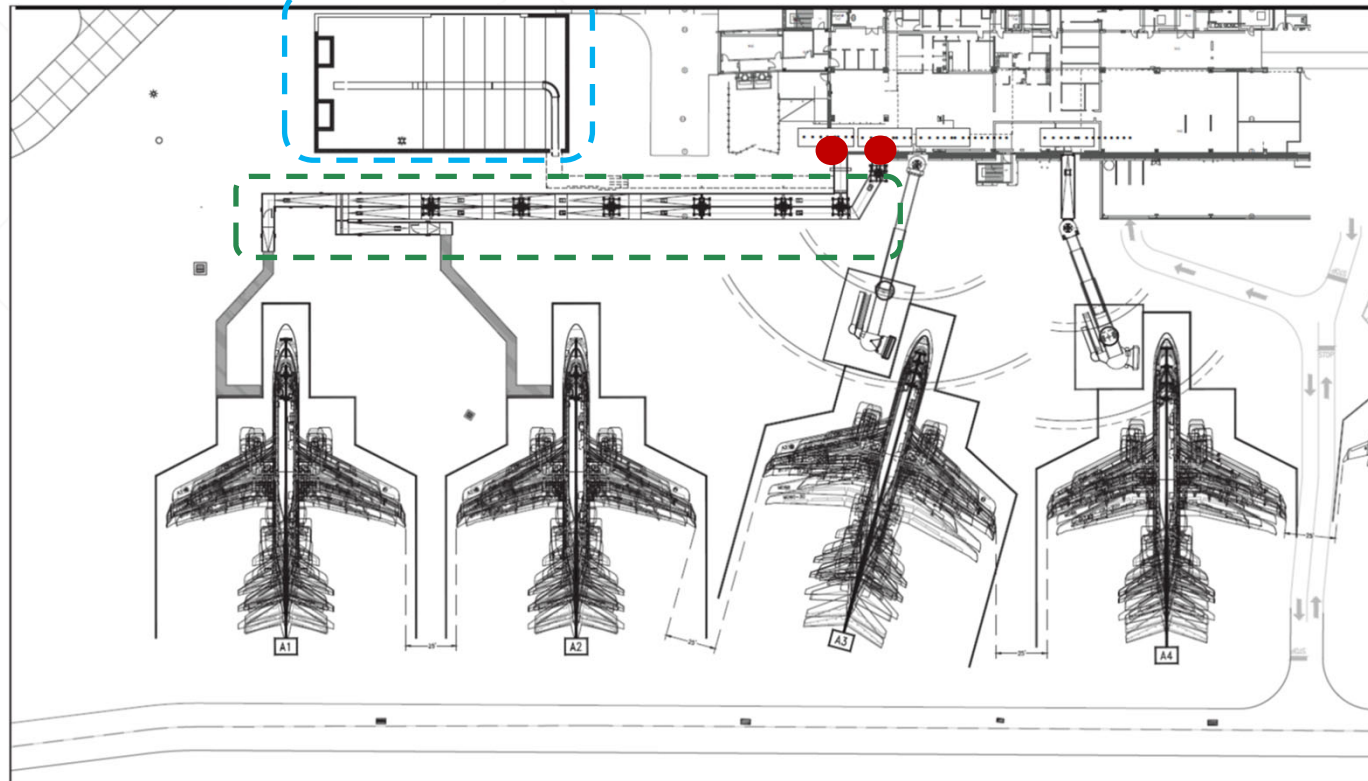


Upcoming Projects

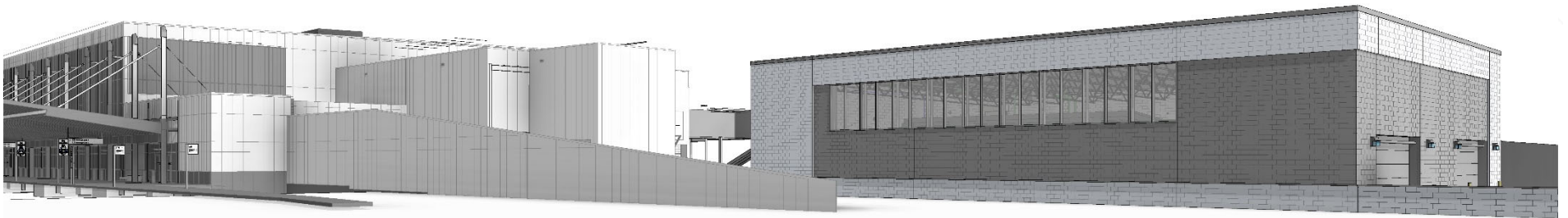
- Terminal 1: Four Gate Expansion
- Terminal 2: FIS Facilities Expansion
- Terminal 2 Expansion
- Maintenance: Snow Equipment Building
- Airport Operations Center
- ARFF Building
- Campus Building Assessment
- Terminal 2: Restaurant Refresh
- GA Campus Development



Terminal 1: Four Gate Activation



Terminal 1: Four Gate Activation



Baggage Make-up Facility



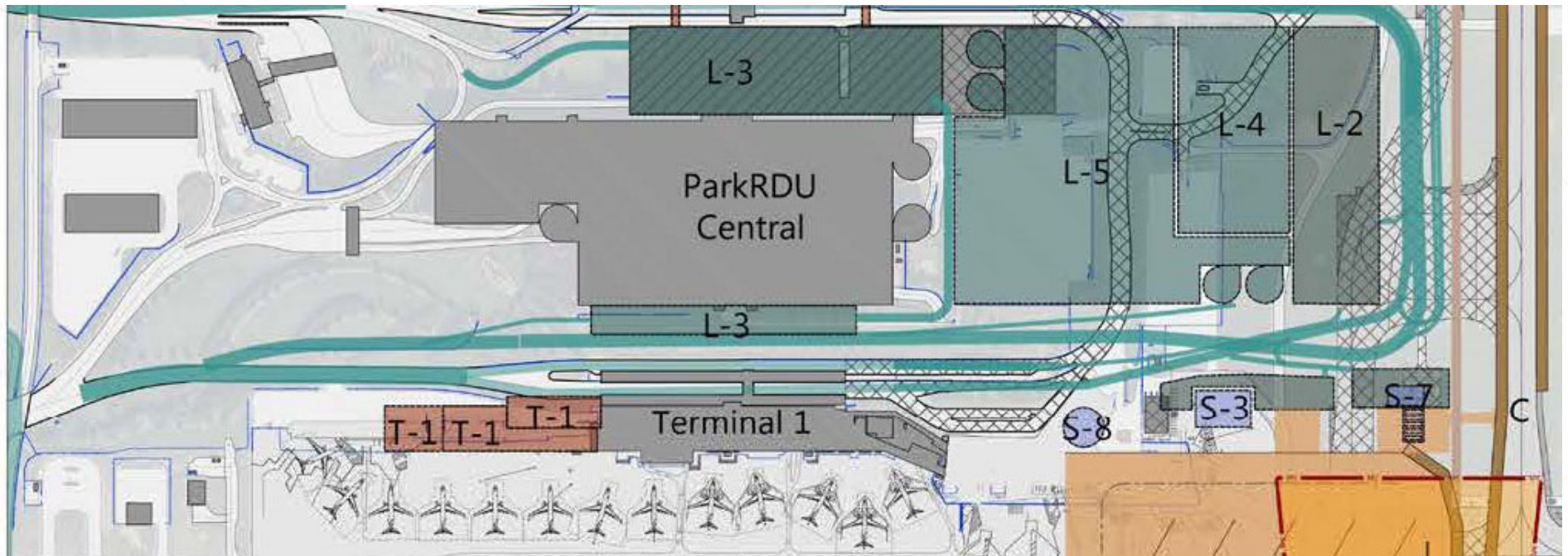
Raleigh-Durham Airport Authority

Terminal 1: Four Gate Expansion



Raleigh-Durham Airport Authority

Terminal 1: Four Gate Expansion

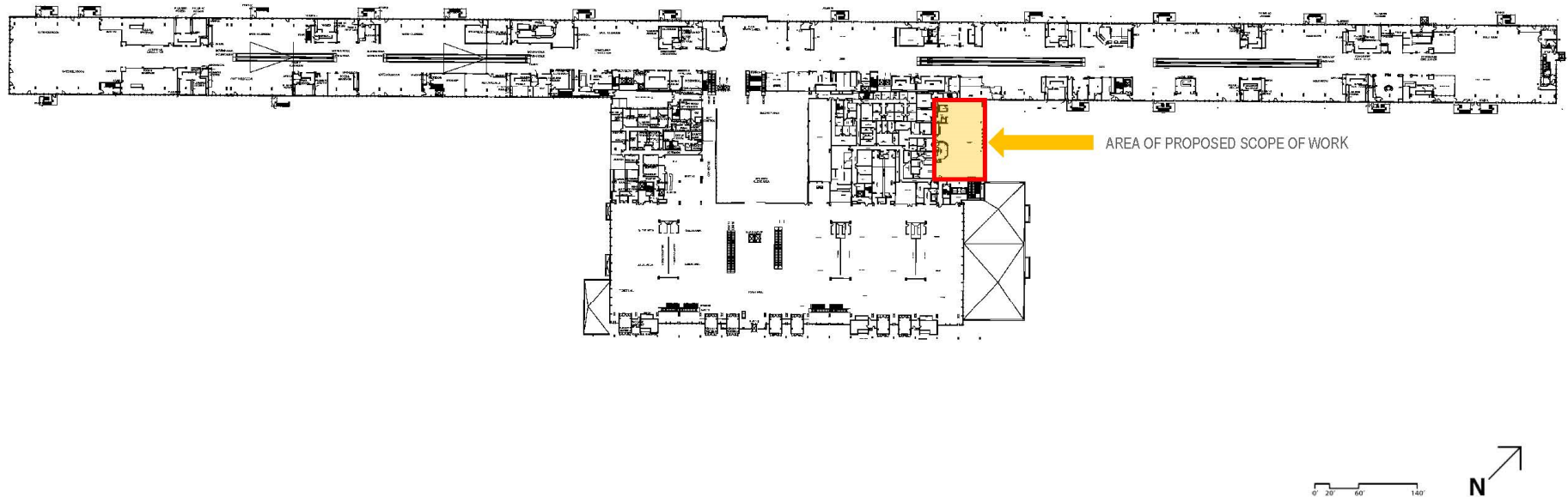


Terminal 2: FIS (Federal Inspections Station) Facilities Expansion

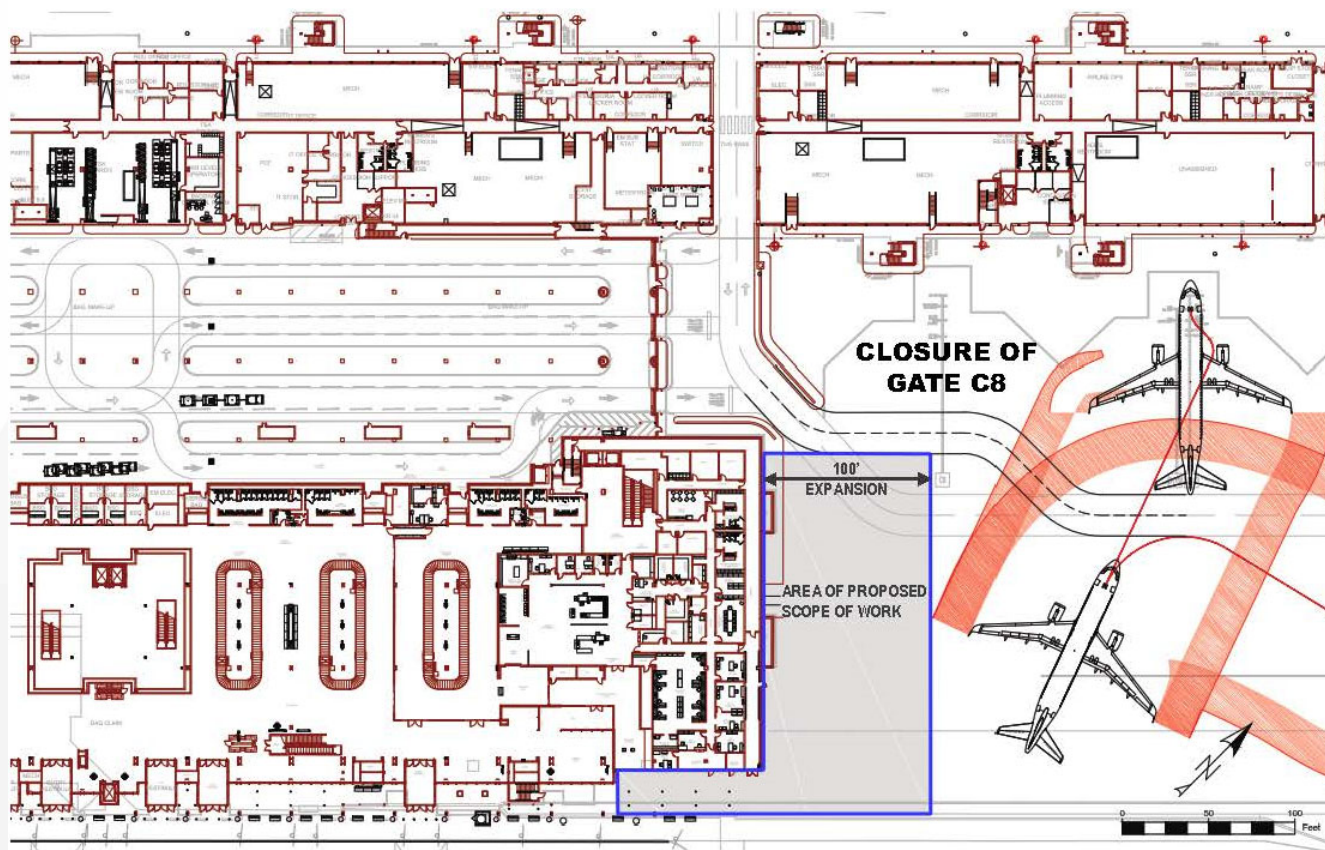


Raleigh-Durham Airport Authority

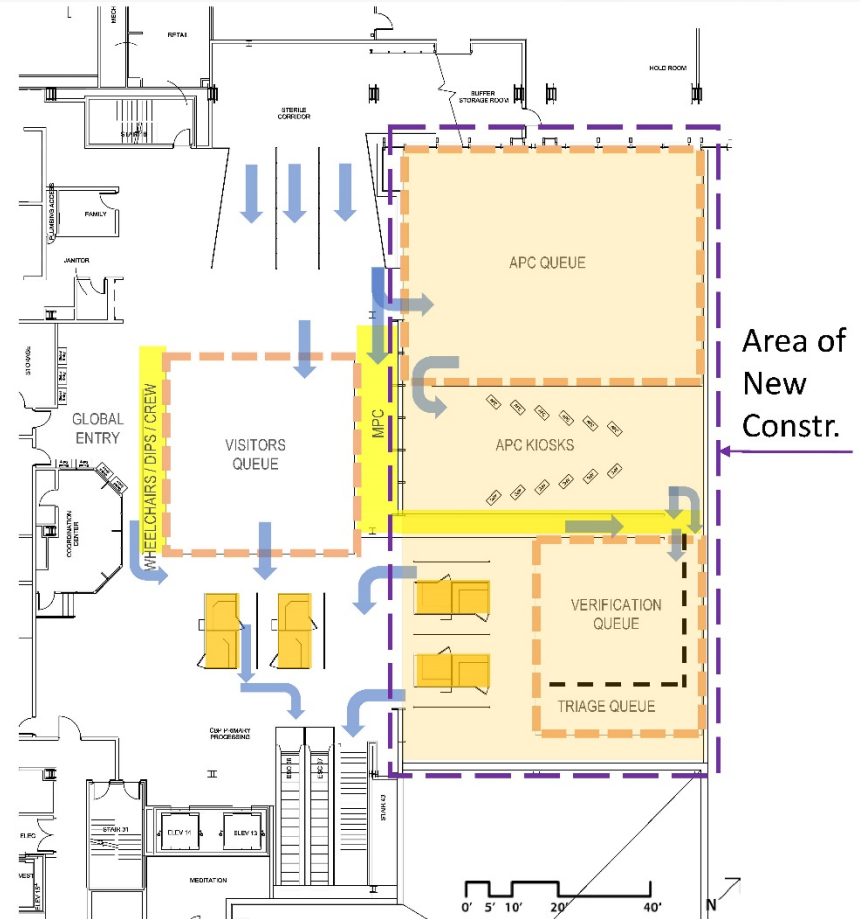
Terminal 2: FIS (Federal Inspections Station) Facilities Expansion



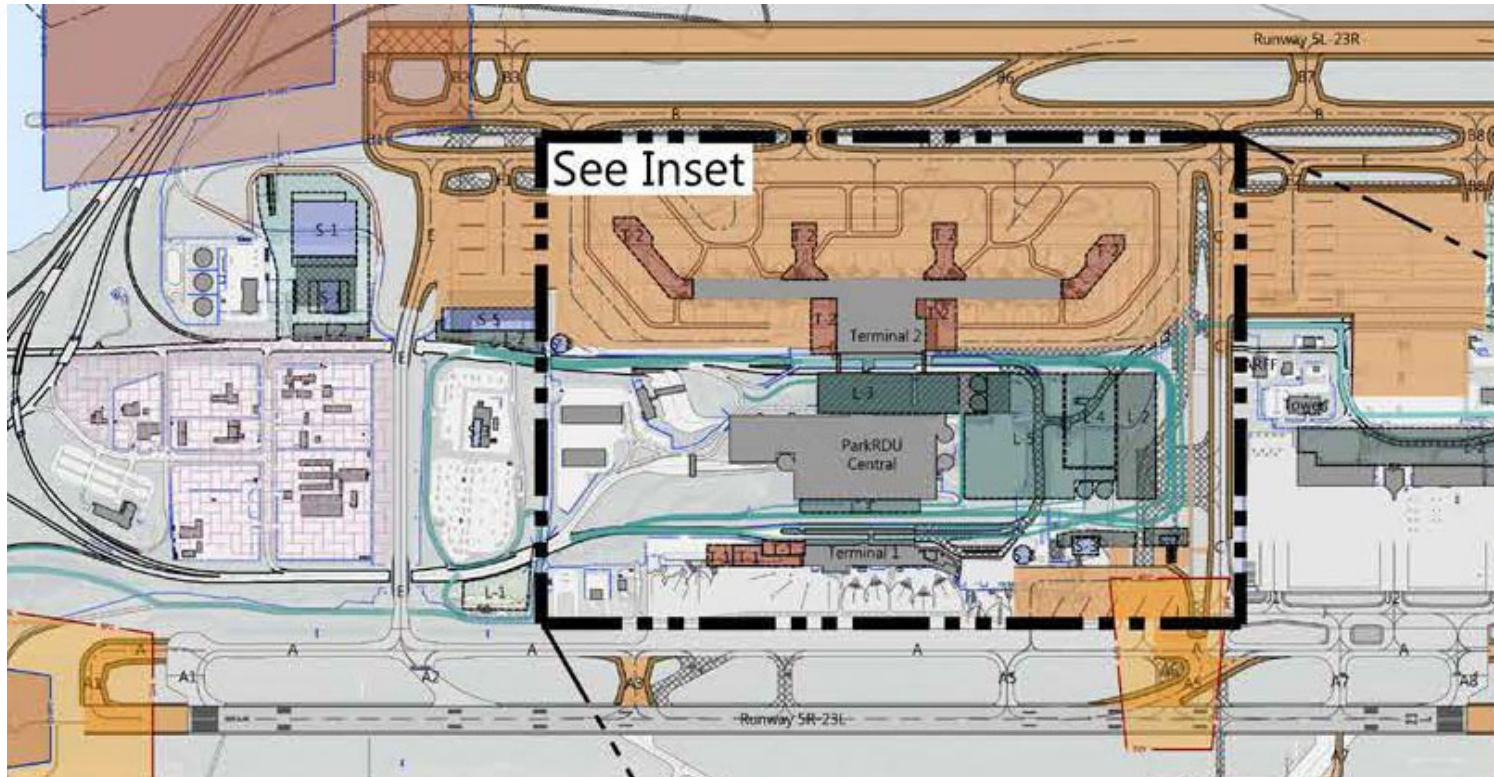
Terminal 2: FIS (Federal Inspections Station) Facilities Expansion



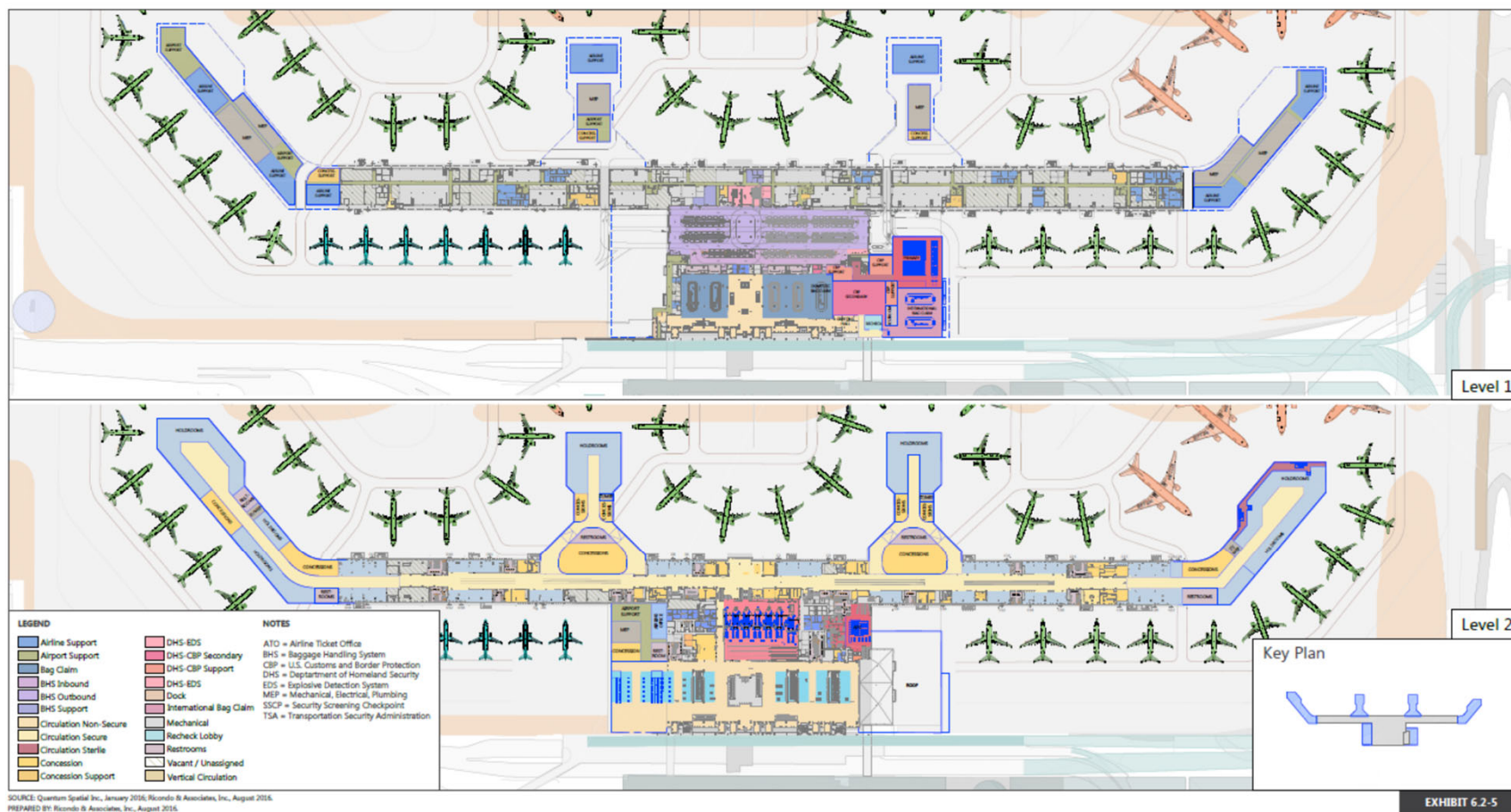
Terminal 2: FIS (Federal Inspections Station) Facilities Expansion



Terminal 2: Expansion



Terminal 2: Expansion



SOURCE: Quantum Spatial Inc., January 2016; Ricardo B Associates, Inc., August 2016.
 PREPARED BY: Ricardo B Associates, Inc., August 2016.

EXHIBIT 6.2-5

Maintenance: Snow Equipment Building



Airport Operations Center



- Communications
- Fire Rescue
- Law Enforcement
- Operations

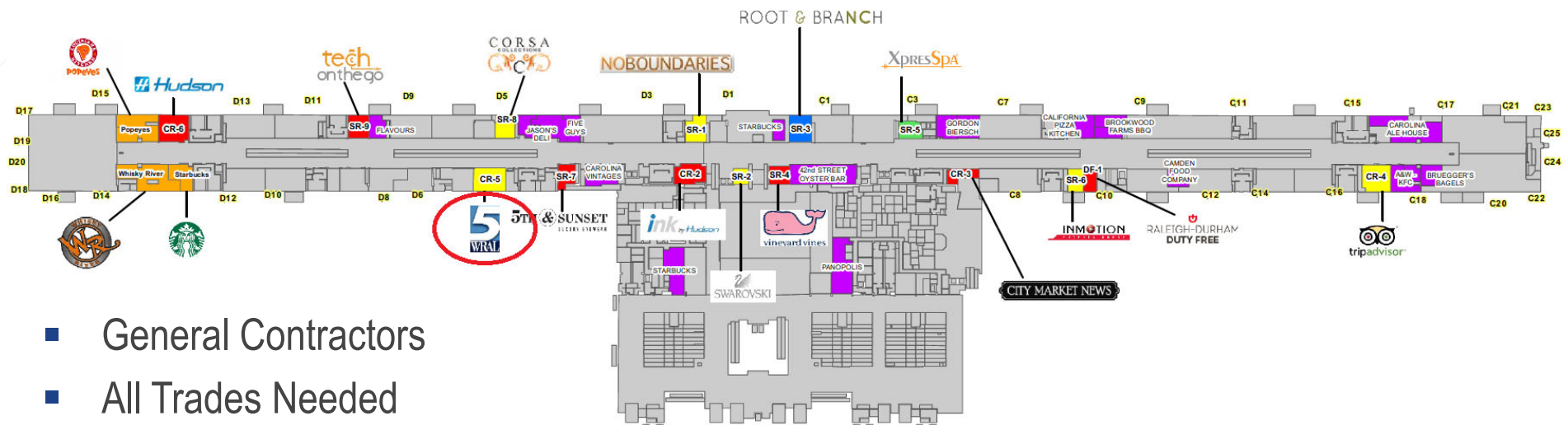


ARFF: Aircraft Rescue & Fire Fighting

- Existing Building Constructed in 1986
- Square Footage: 9,887 SF
- Five Apparatus Bays
- Was Part of the 2013 Building Campus Study



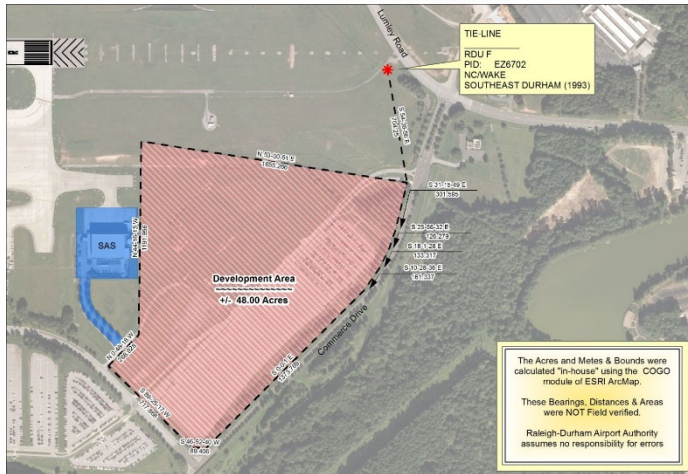
Tenant Projects: Terminal 2: Restaurant Refresh



- General Contractors
- All Trades Needed
- Plumbing, Mechanical, Electrical
- Fire Protection, Drywall, Painting, etc.

<https://www.rdu.com/do-business-with-rdu/>

Tenant Projects: GA Campus Development



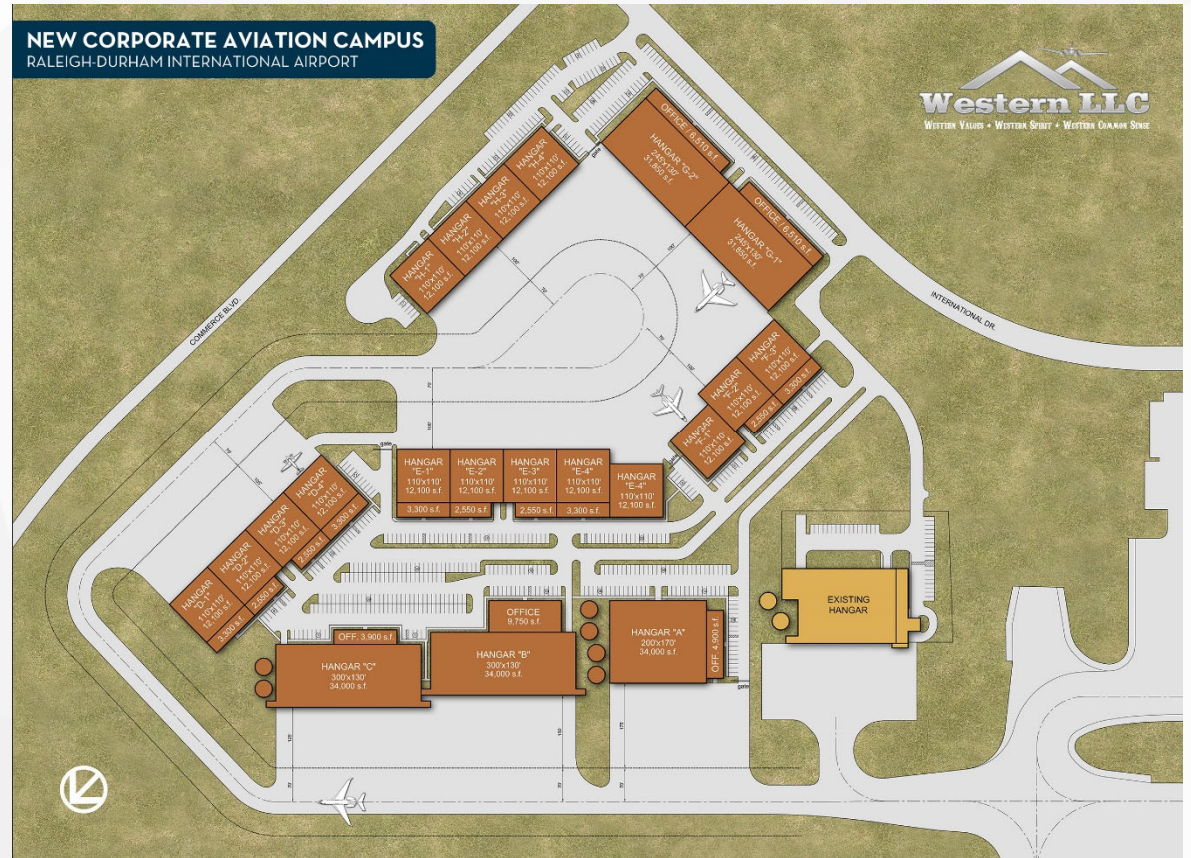
Western LLC

Leah Vaughn: Client Executive

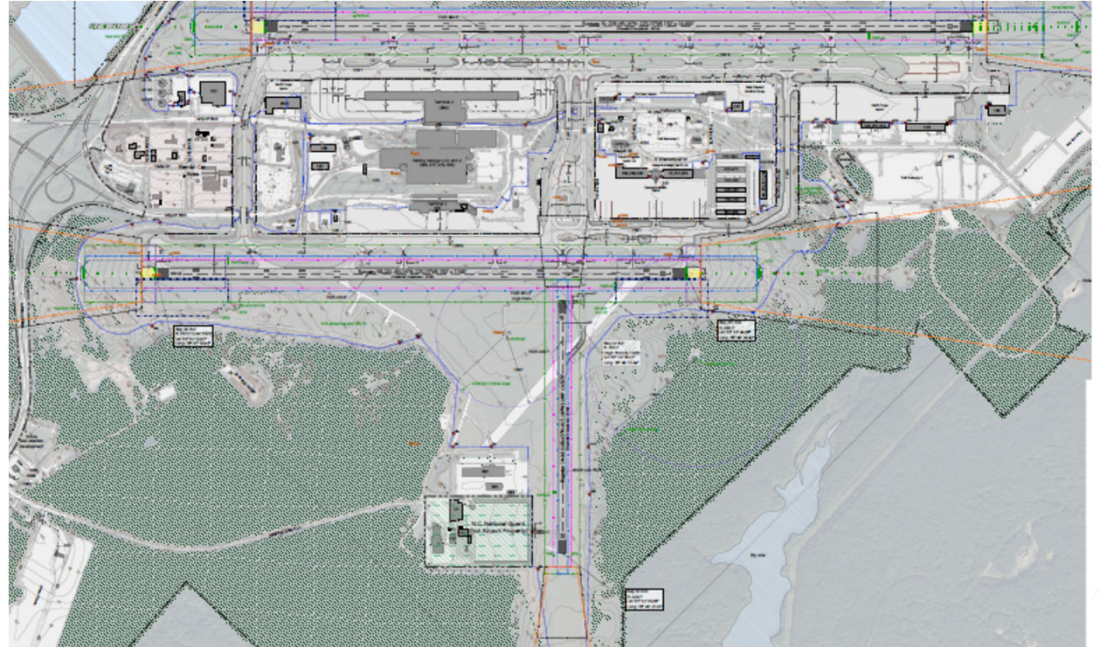
lvaughn@westernllc.net

303.407.3995

www.westernllc.net



Updating the Campus Building Assessment



Raleigh-Durham Airport Authority



Questions?



Raleigh-Durham Airport Authority



Raleigh-Durham Airport Authority

Business Opportunity Workshop

Jim Novak, Director of Facilities Engineering
May 8, 2019



Raleigh-Durham Airport Authority

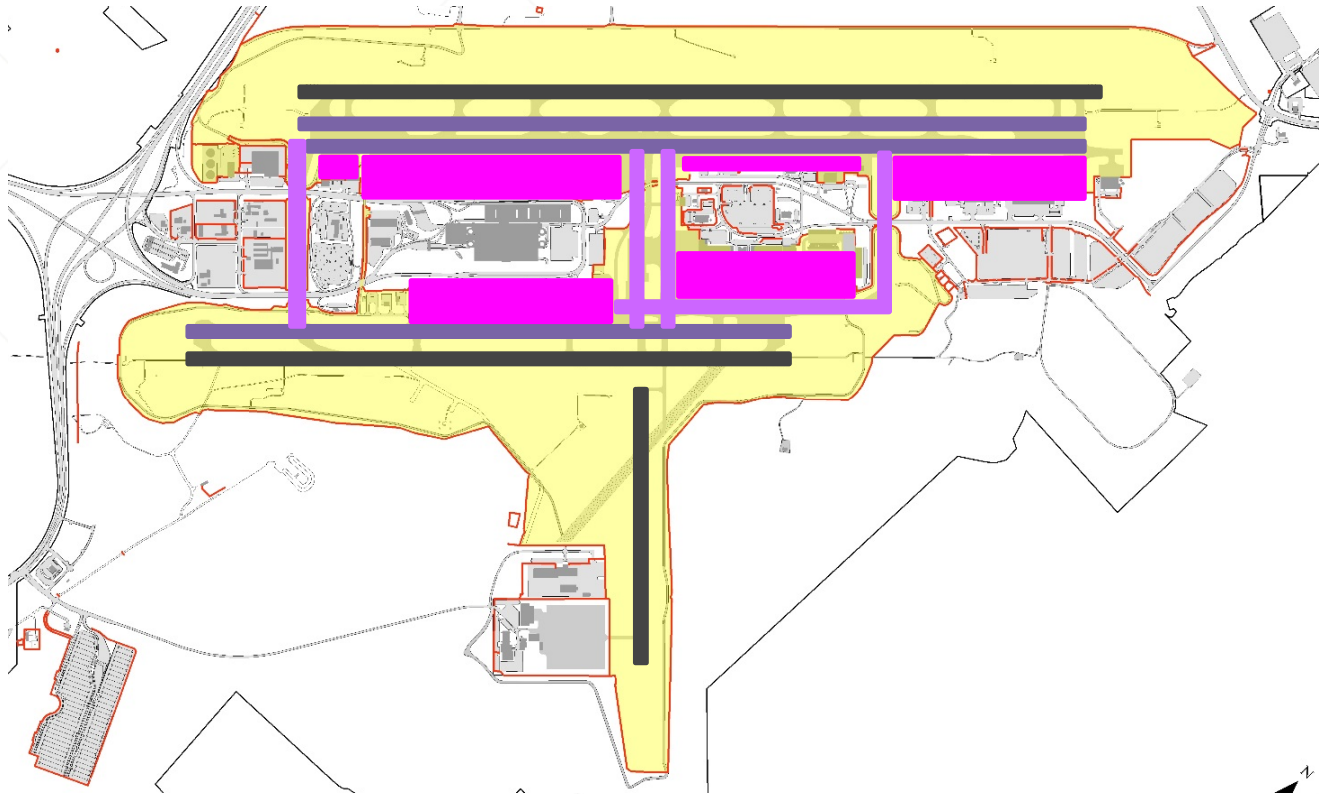
Agenda

- Background Information & Terminology
- Pavement Asset Management
- Current & Upcoming Proposed Projects
 - Airside
 - Landside
- Questions

**Civil Engineering
Consultants and
Contractors**



Airside vs. Landside Civil Projects



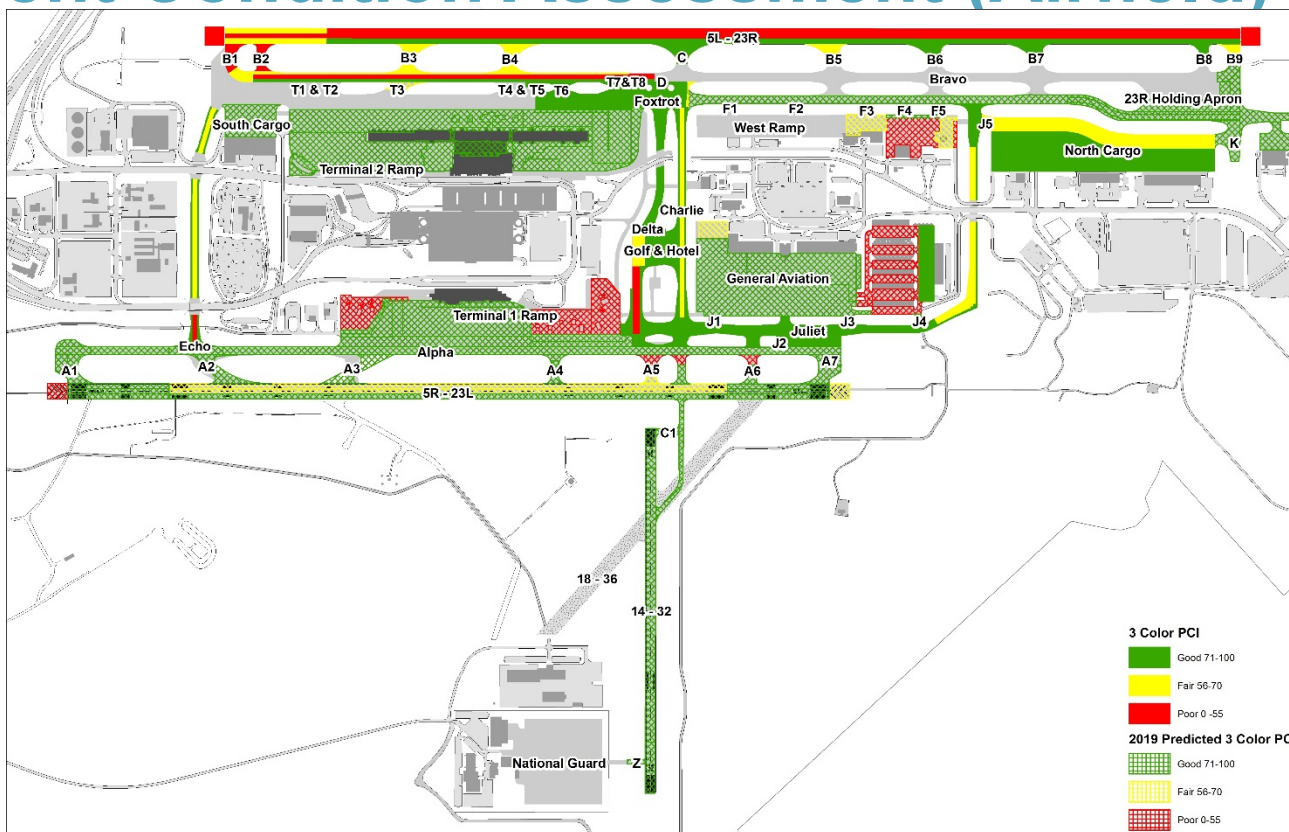


Pavement Management

- Visual Inspection
- NDT Testing
- Pavement Condition Index (PCI)
- Pavement Management Program
- Asset Management



Pavement Condition Assessment (Airfield)



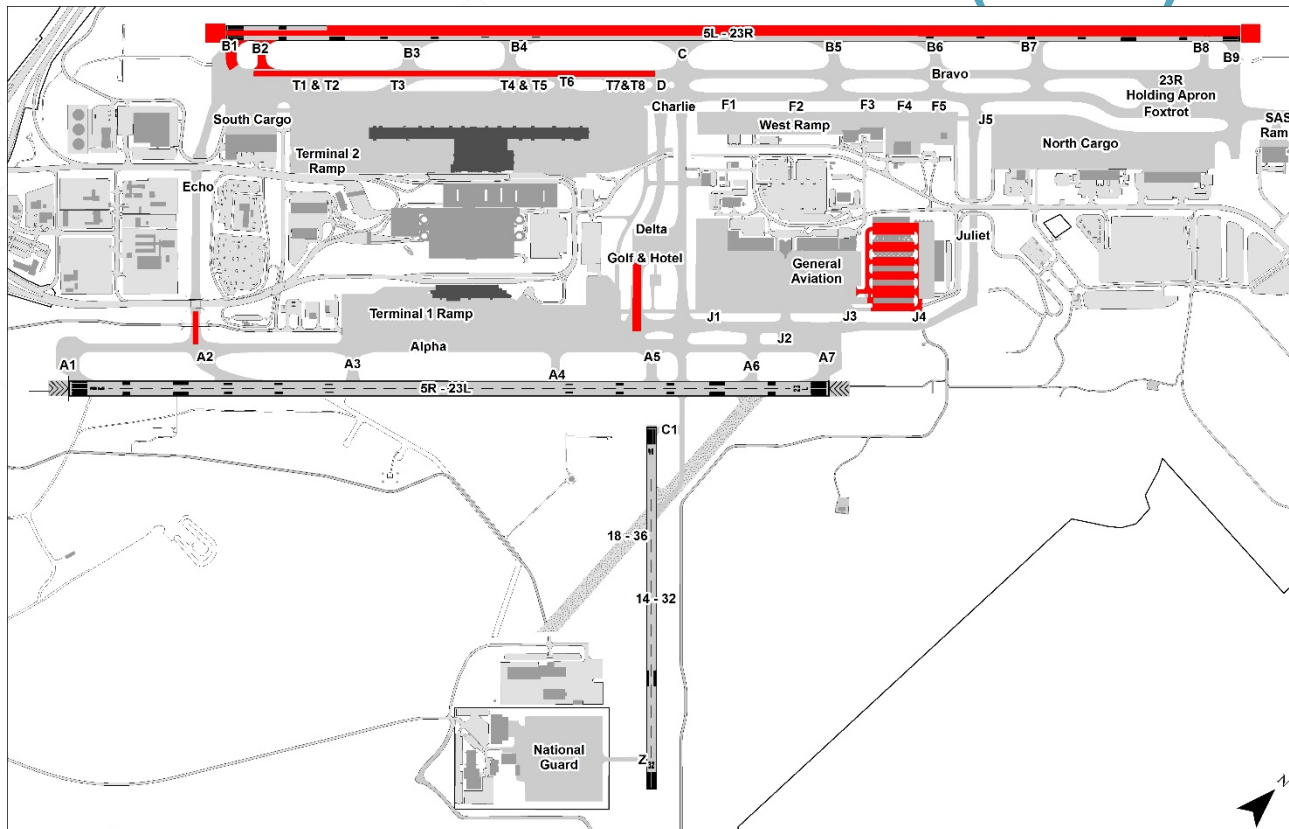


Proposed Airside Civil Projects

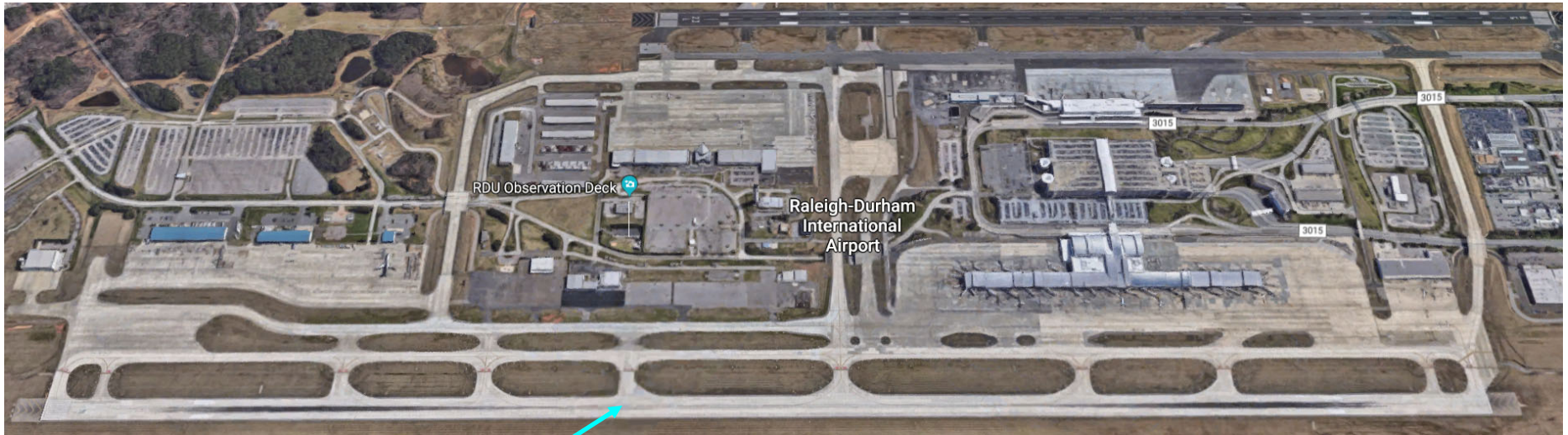
- N. Cargo Apron
- N. Cargo Taxilane
- TW B - (south TW D)
- TW B1 / B2 / B3 / B4 / B5
- TW C
- TW D
- TW E
- TW J
- RW 5L-23R Pavement Preservation
- GA T-hangar Apron Pavement
- Security Gate Improvements



Pavement Condition Assessment (Poor)



Runway 5L-23R Pavement Preservation

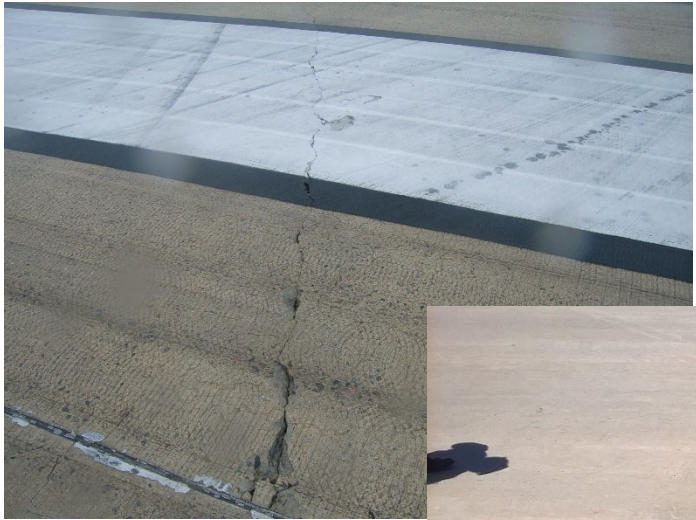


Runway 5L-23R



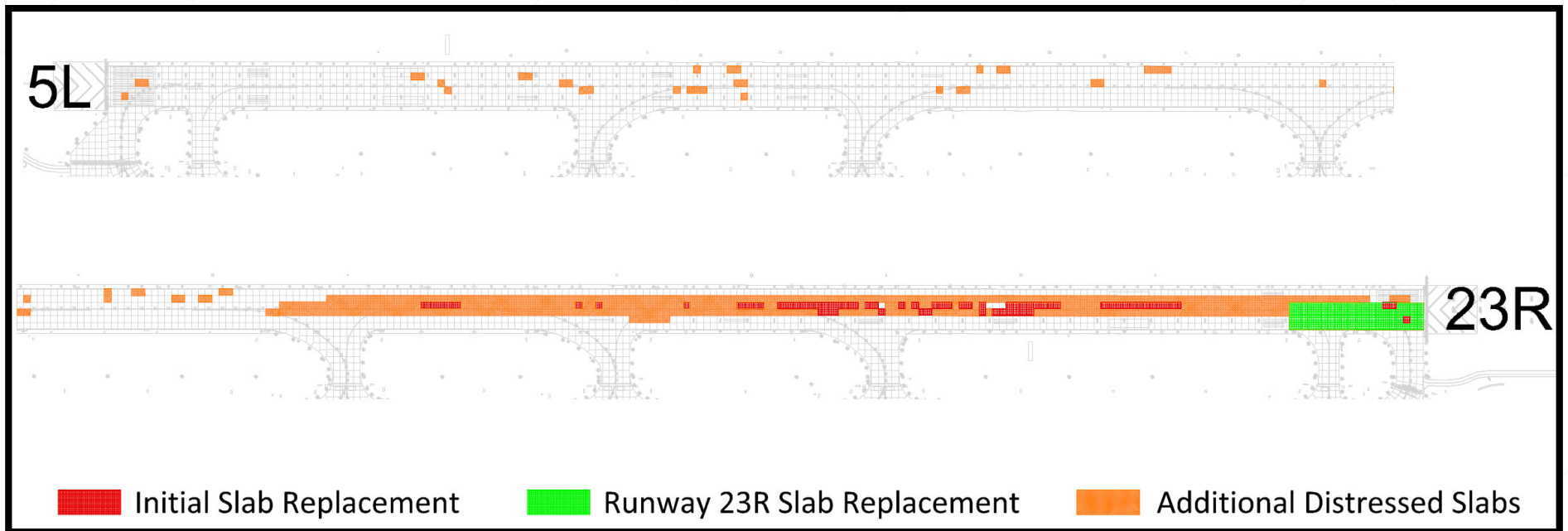
Raleigh-Durham Airport Authority

Runway 5L-23R Pavement Preservation

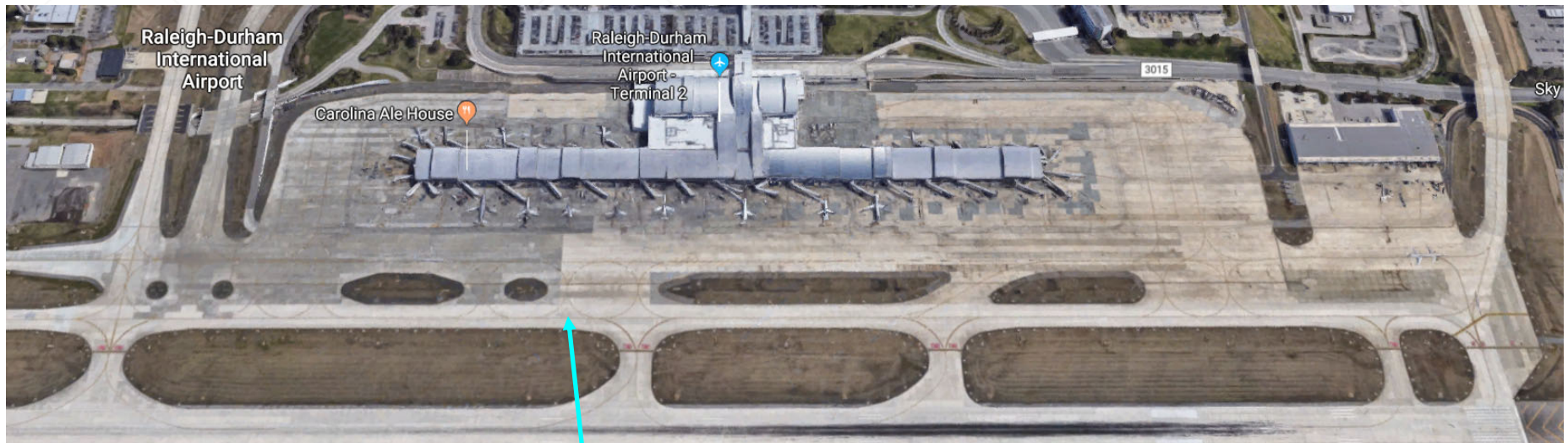


Raleigh-Durham Airport Authority

Runway 5L-23R Pavement Preservation



Taxiway B Rehabilitation



Taxiway B



Raleigh-Durham Airport Authority

Taxiway B Rehabilitation



Raleigh-Durham Airport Authority

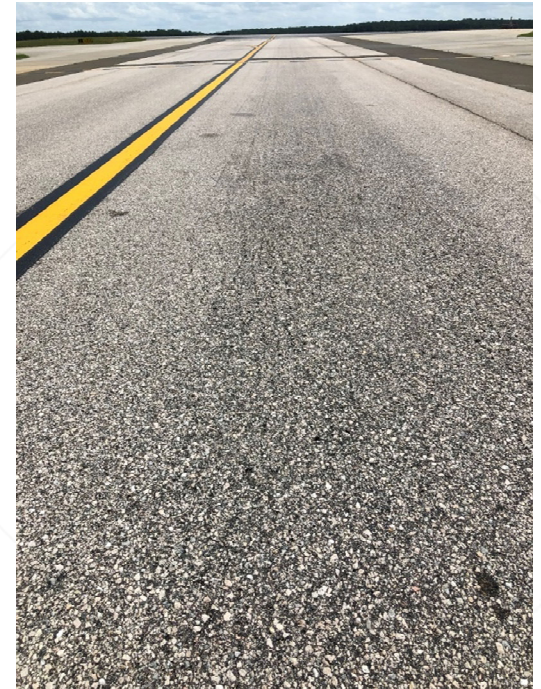
Taxiway D Rehabilitation

Taxiway D



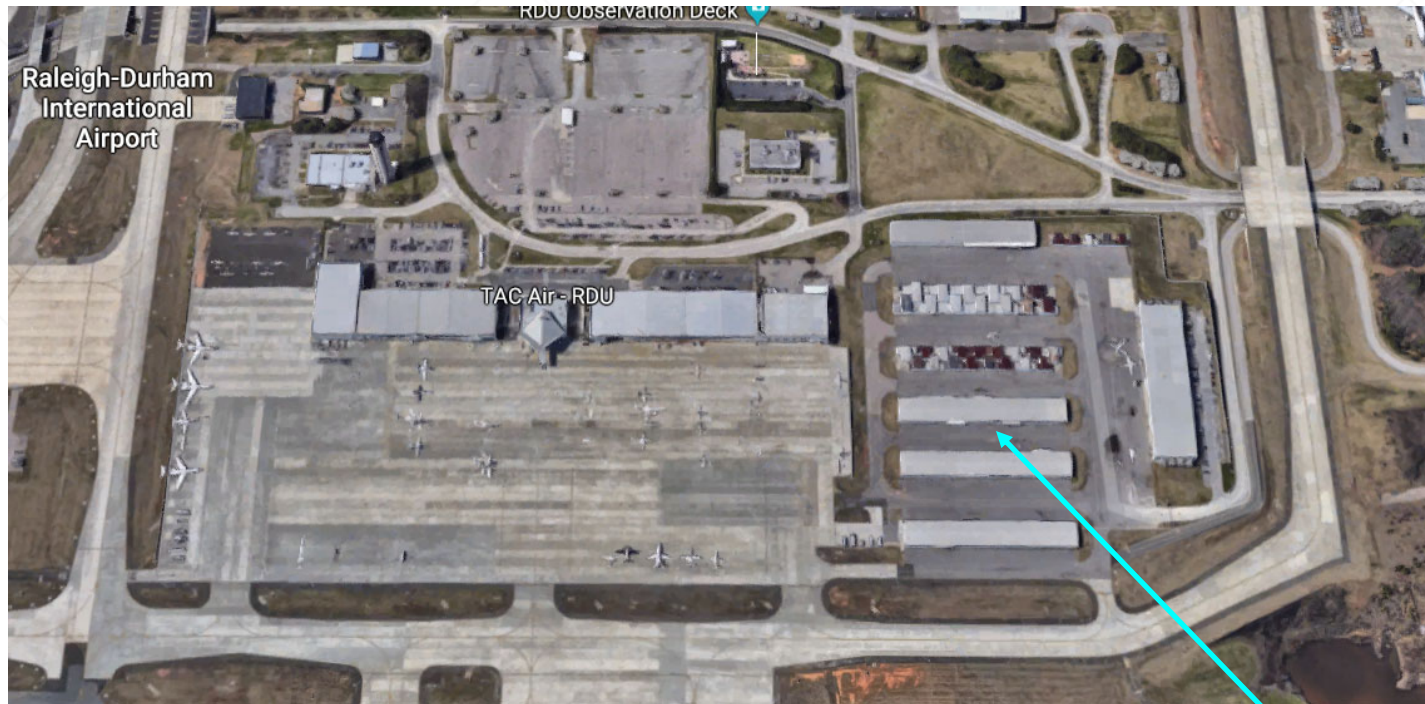
Raleigh-Durham Airport Authority

Taxiway D Rehabilitation



Raleigh-Durham Airport Authority

GA T-Hangar Taxilane Rehabilitation



GA T-Hangar Apron

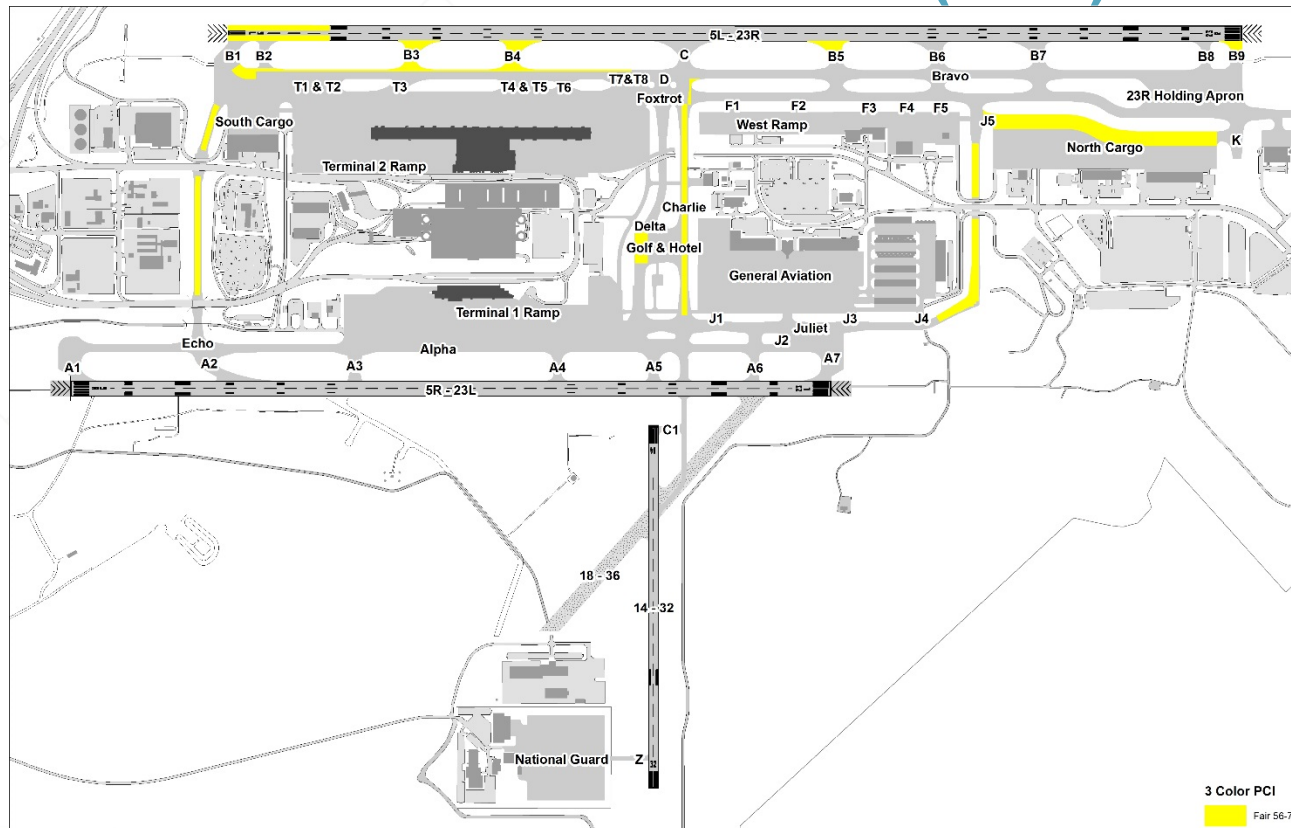


Raleigh-Durham Airport Authority

GA T-Hangar Pavement Rehabilitation



Pavement Condition Assessment (Fair)



North Cargo Apron and Taxilane



Taxilane

Apron



Raleigh-Durham Airport Authority

North Cargo Taxilane



Raleigh-Durham Airport Authority

Taxiway B2 / B3 / B4 / B5 (Connectors)



Taxiway B5

Taxiway B4

Taxiway B3

Taxiway B2



Raleigh-Durham Airport Authority

Taxiway B2 / B3 / B4 / B5



Raleigh-Durham Airport Authority

Taxiway C Rehabilitation

Taxiway C



Raleigh-Durham Airport Authority

Taxiway C Rehabilitation



Raleigh-Durham Airport Authority

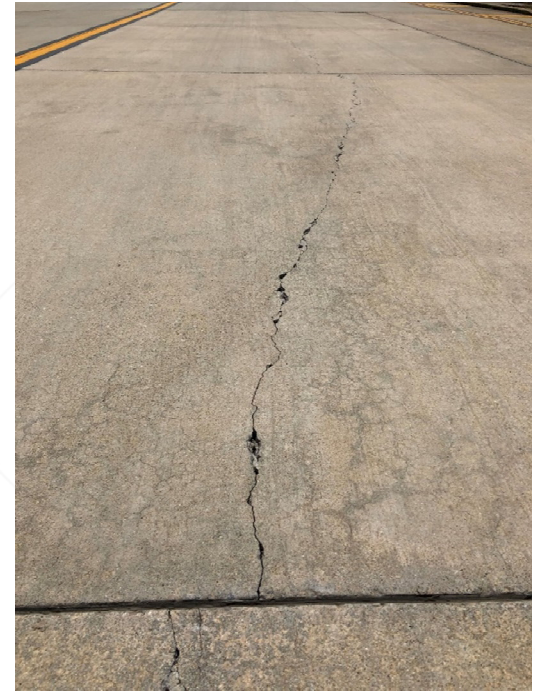
Taxiway E Rehabilitation

Taxiway E



Raleigh-Durham Airport Authority

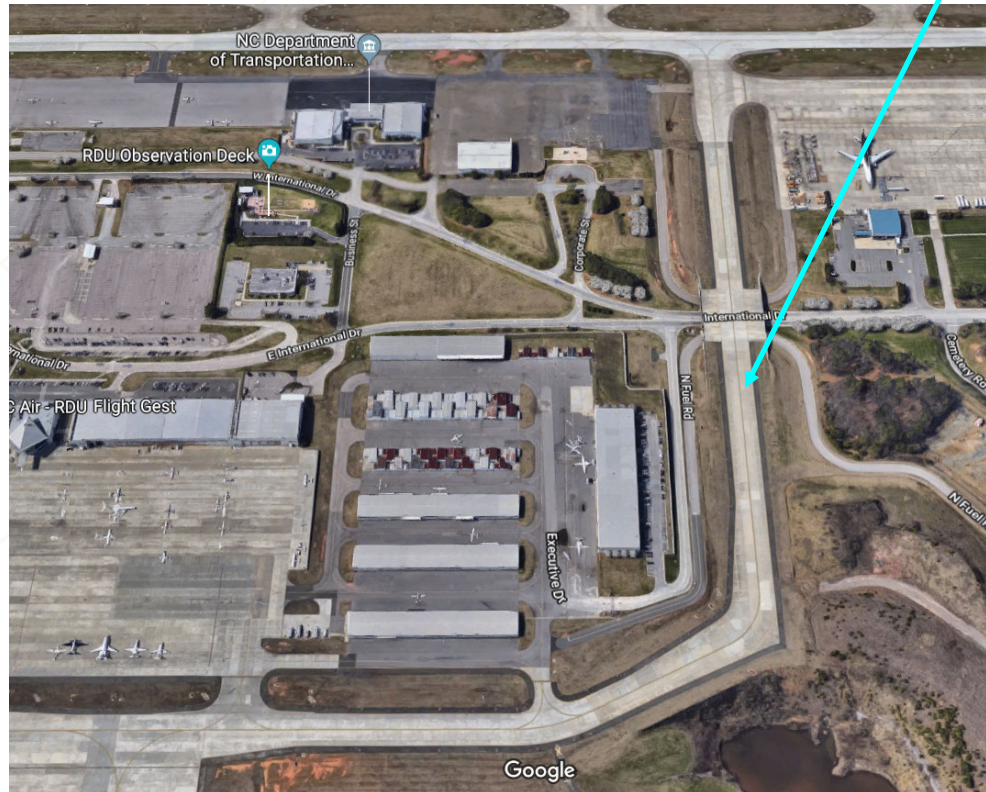
Taxiway E Rehabilitation



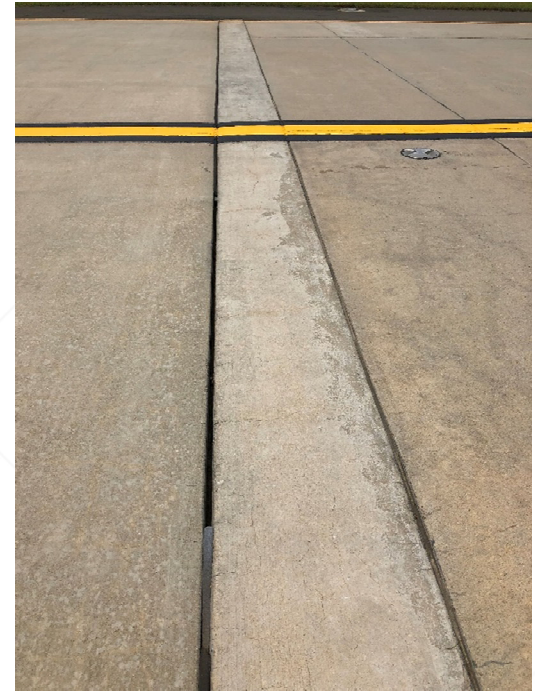
Raleigh-Durham Airport Authority

Taxiway J Rehabilitation

Taxiway J



Taxiway J Rehabilitation



Security Gate Improvements



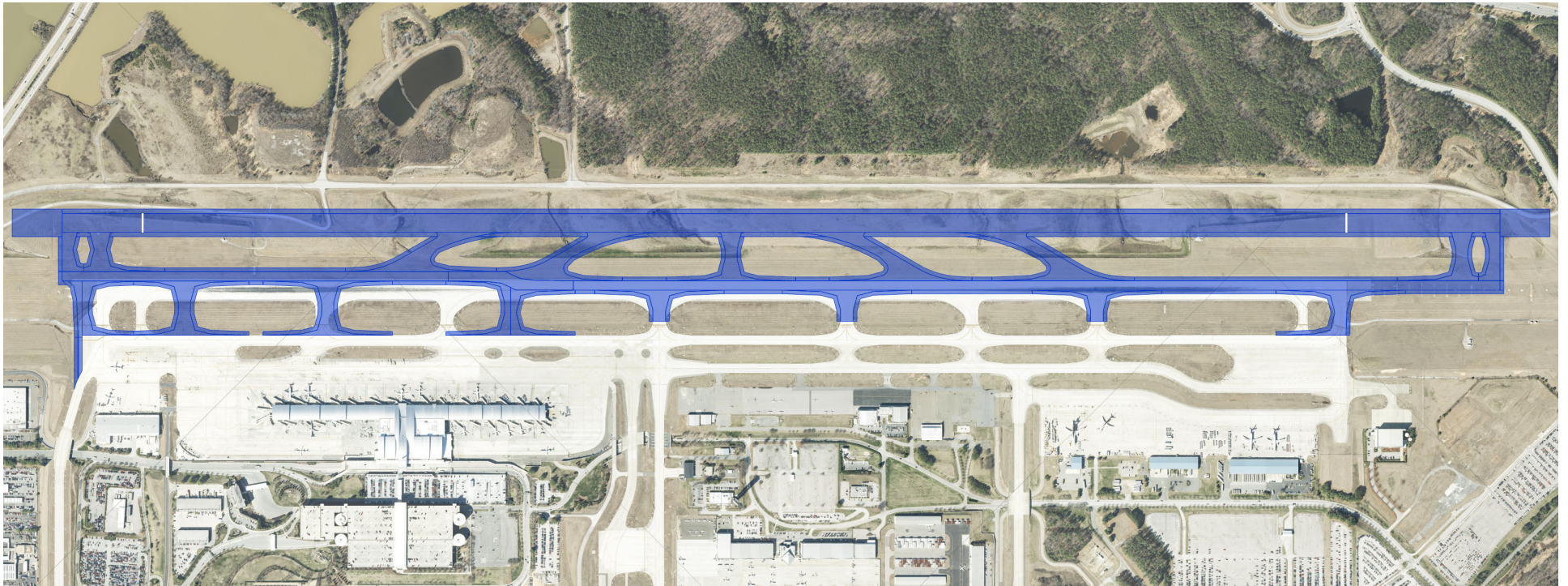


Proposed Airside Master Plan Projects

- RW 5L-23R Replacement
- RW 5L-23R TWW Conversion
- RW 5R-23L High Speed Exit
- TW Y
- RW 5R Extension
- RW 23L Extension

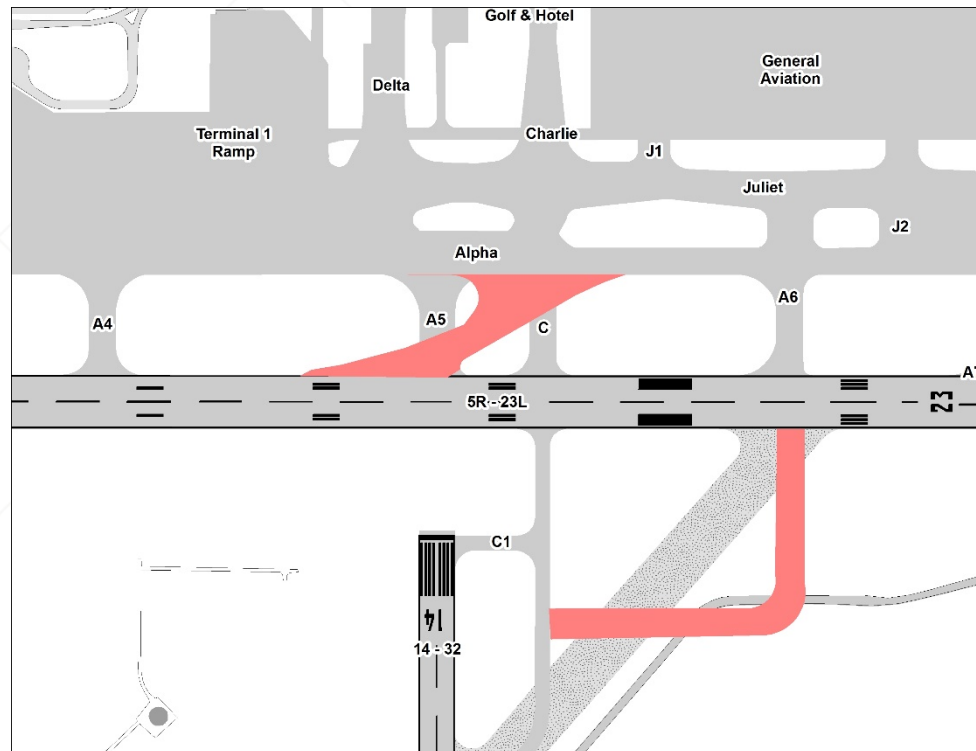


R/W 5L-23R Replacement / RW to T/W Conversion



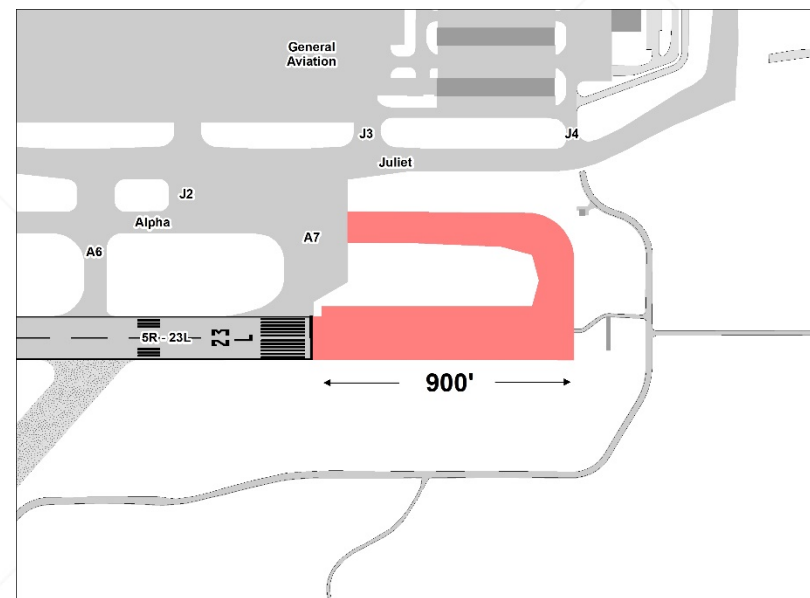
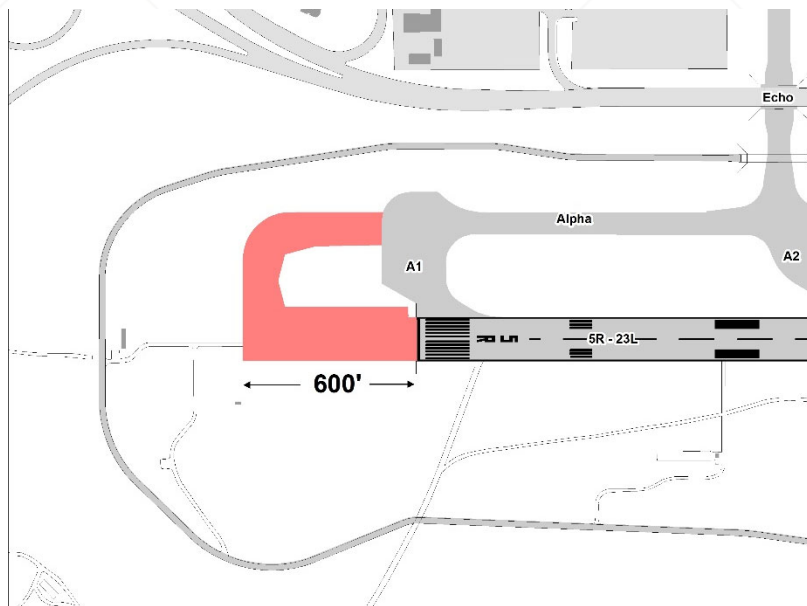
Raleigh-Durham Airport Authority

Runway 5R-23L High Speed Exit and TW Y



Raleigh-Durham Airport Authority

Runway 5R-23L Extension



Raleigh-Durham Airport Authority



Proposed Landside Civil Projects

- International Drive
- National Guard Drive
- Lumley Rd Relocation
- Maintenance Building Parking Lot
- CONRAC
- JBB Realignment
- PE3 Expansion
- Rental Car Lots



International Drive



West and East International Drive

International Drive



Raleigh-Durham Airport Authority

International Drive



Raleigh-Durham Airport Authority

National Guard Drive



National Guard Dr.



Raleigh-Durham Airport Authority

National Guard Drive

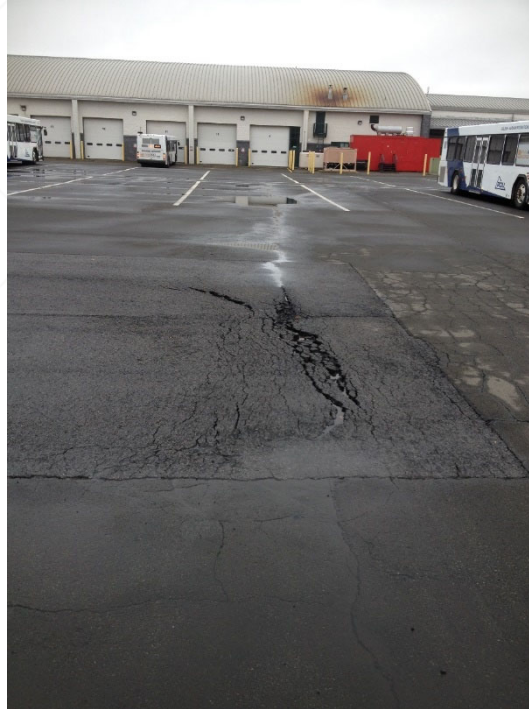


Maintenance Building Parking Lot



Raleigh-Durham Airport Authority

Maintenance Building Parking Lot





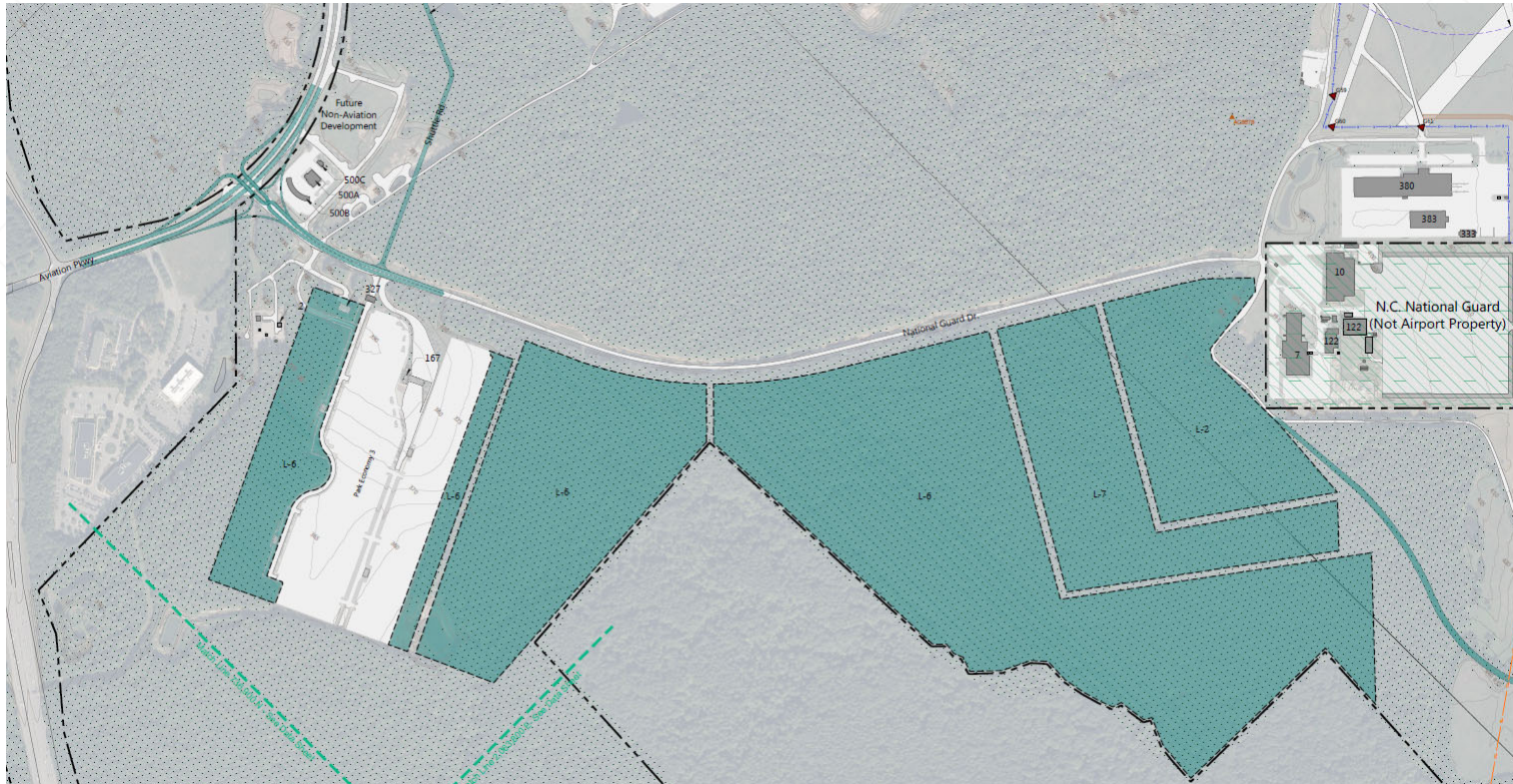
Proposed Landside Master Plan Projects

- PE3 Expansion
- New Rental Car Storage Lots
- CONRAC
- JBB Realignment
- Lumley Rd Relocation

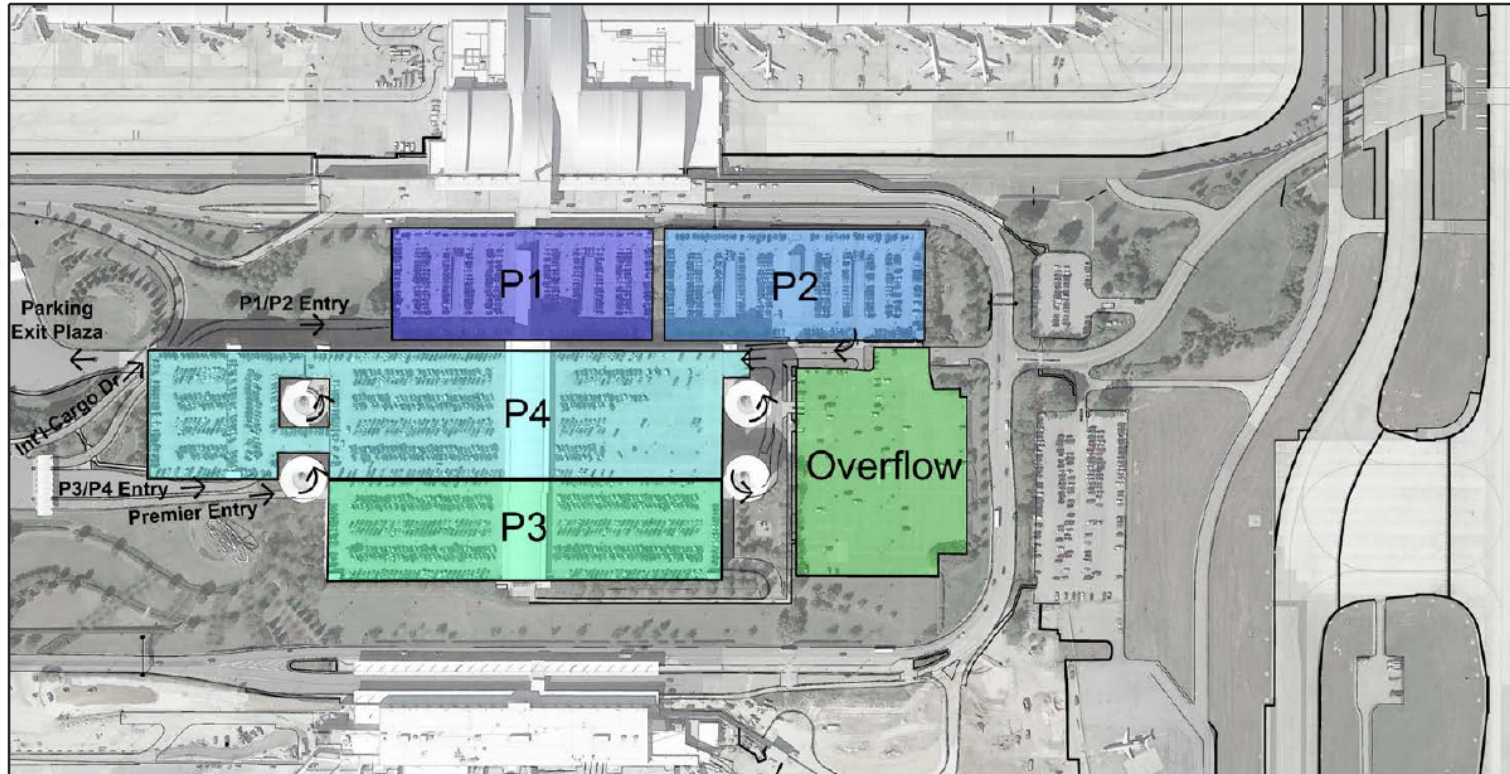


Raleigh-Durham Airport Authority

PE3 & Rental Car Storage Lot Expansion

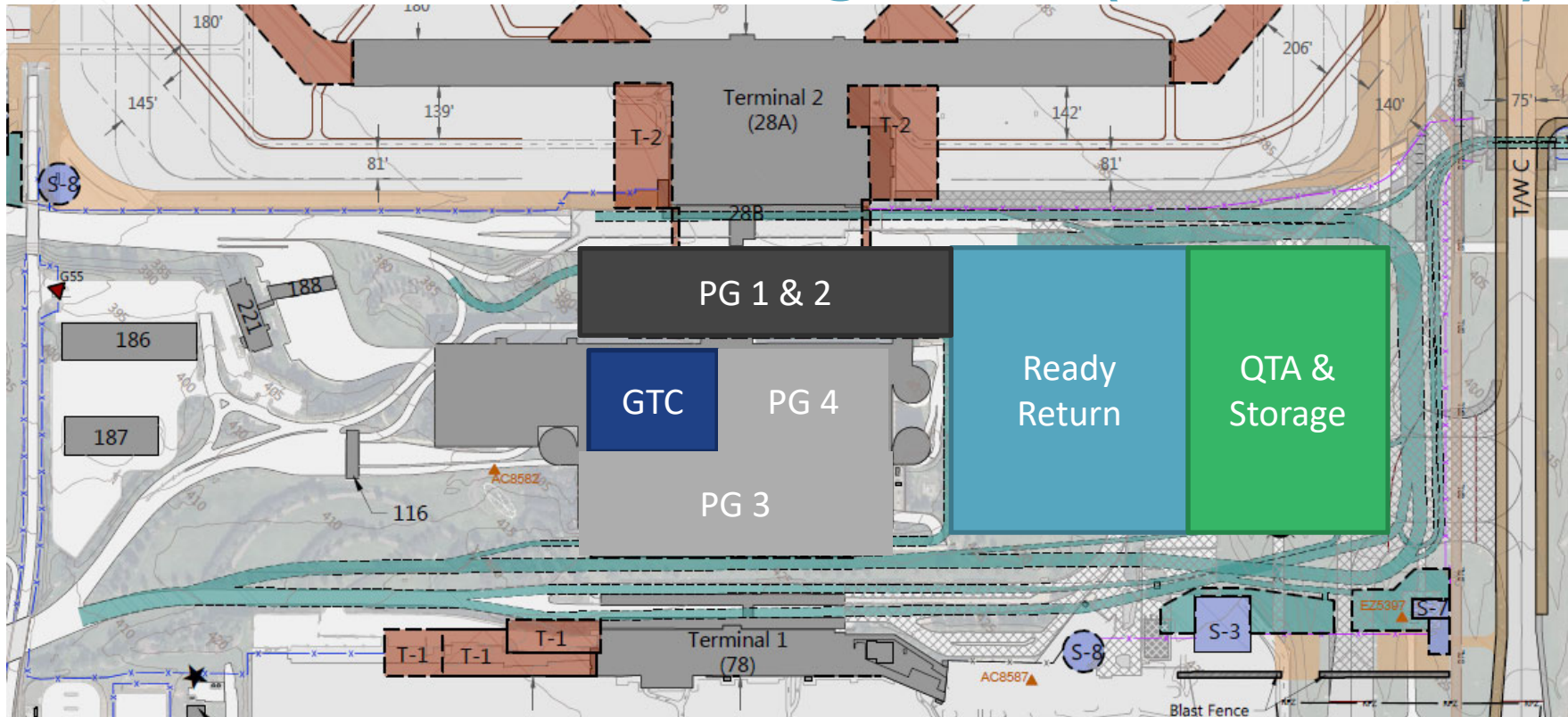


CONRAC and JBB Realignment (Existing)



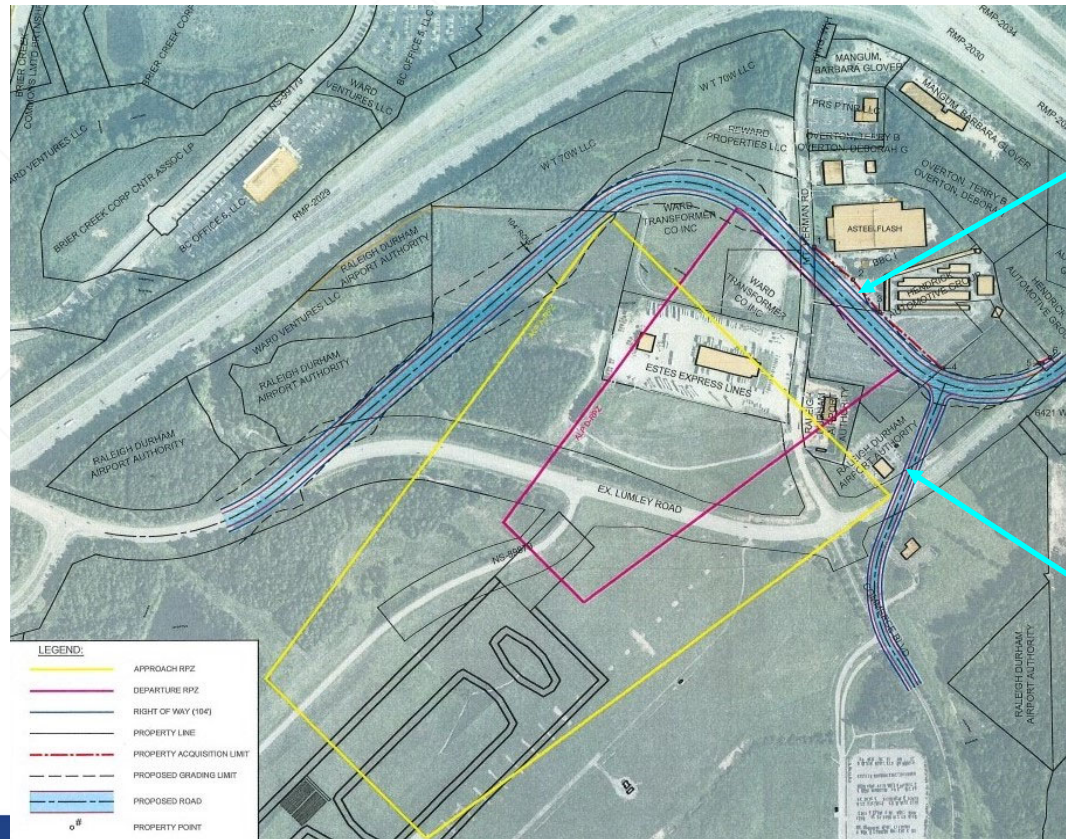
Raleigh-Durham Airport Authority

CONRAC and JBB Realignment (Master Plan)



Raleigh-Durham Airport Authority

Lumley Road Relocation



Relocated
Lumley
Rd.

Relocated
Commerce
Blvd.



Raleigh-Durham Airport Authority



Questions?



Raleigh-Durham Airport Authority



Raleigh-Durham Airport Authority

Business Opportunity Workshop

Ellis Cayton, Director of Planning & Environmental
May 8, 2019



Raleigh-Durham Airport Authority



Planning & Environmental Consultants

- Planning Services
- Environmental Services



Raleigh-Durham Airport Authority

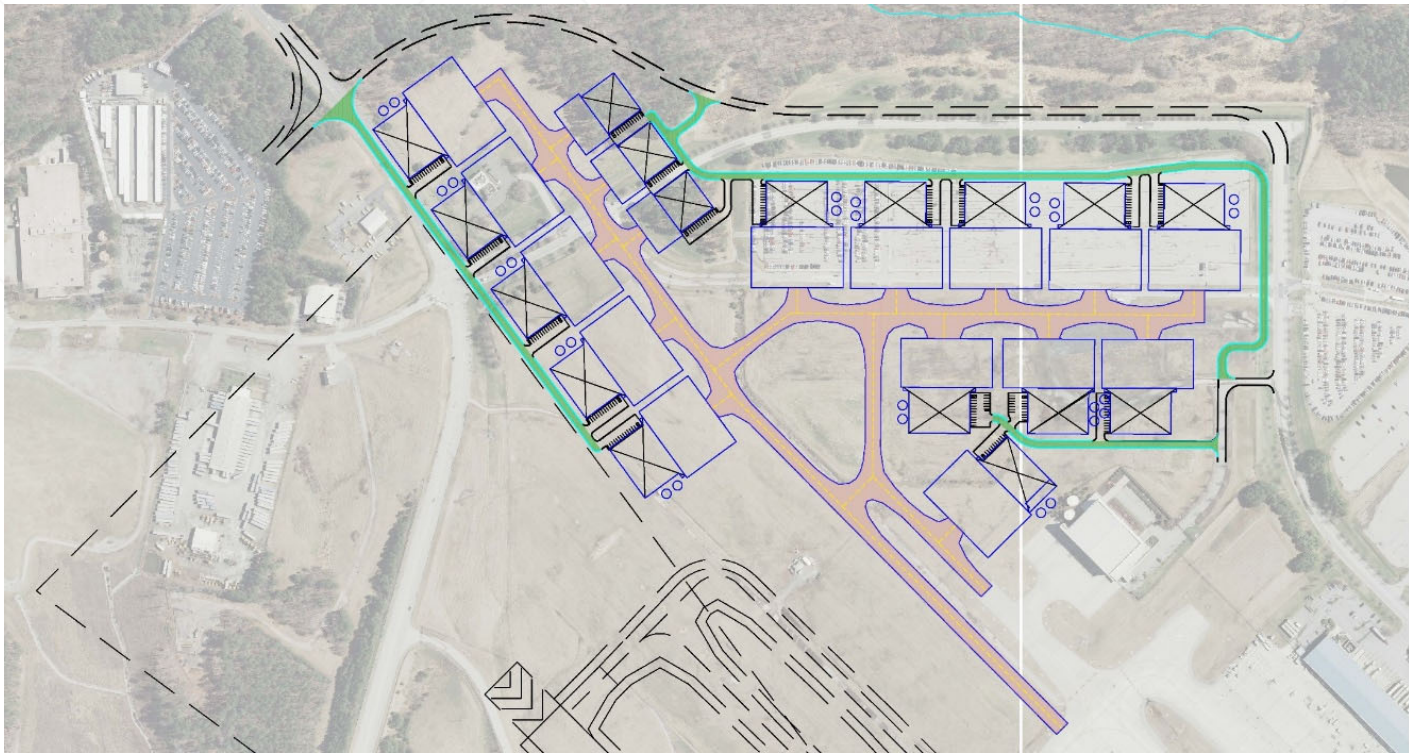


Planning Services

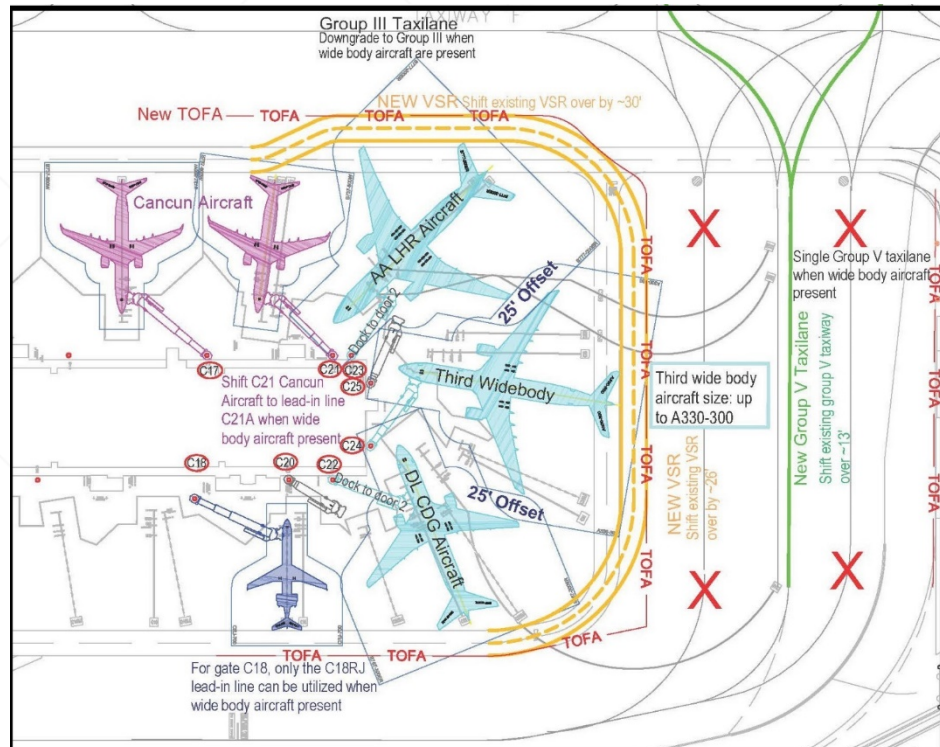
- Apron & Hangar Layout
- Aircraft Parking
- Terminal Planning
- Land Use Planning



Apron & Hangar Layout Planning



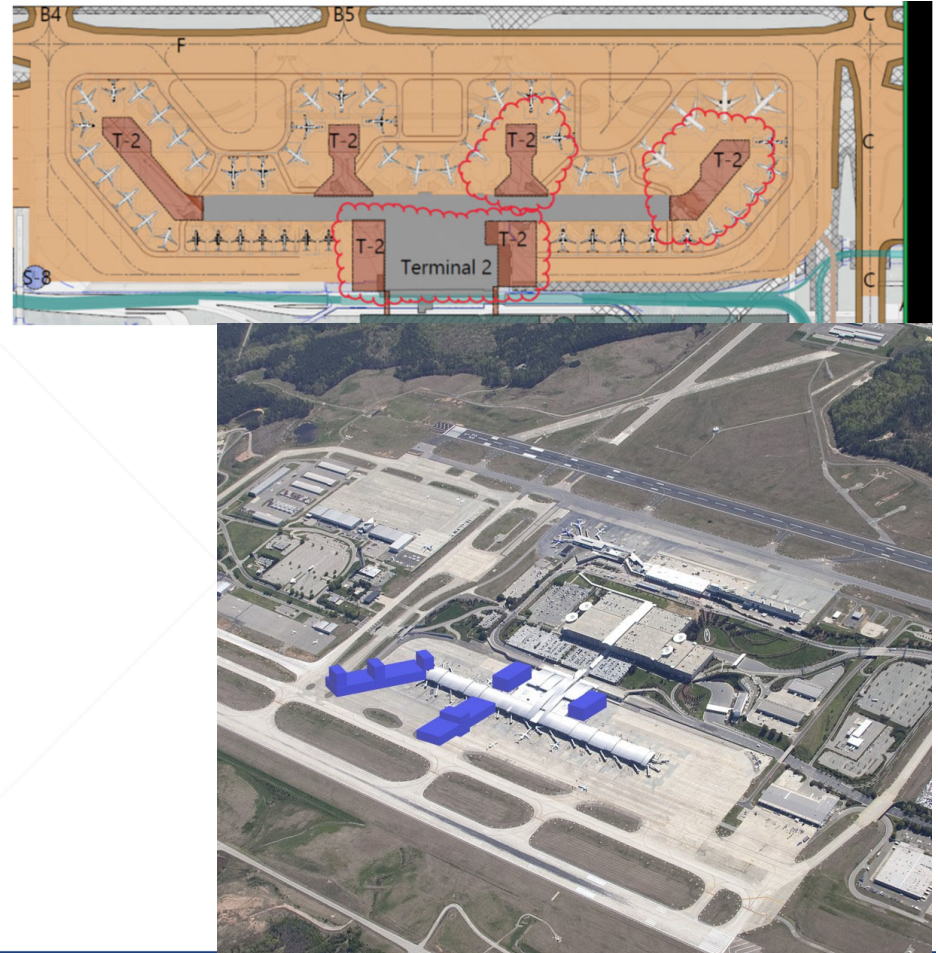
Aircraft Parking Planning



Raleigh-Durham Airport Authority

Terminal Planning

- Passenger Processor Building and Concourse Expansion Planning
 - If current growth rate continues



Terminal Planning

- Ticketing Positions
- Modeling

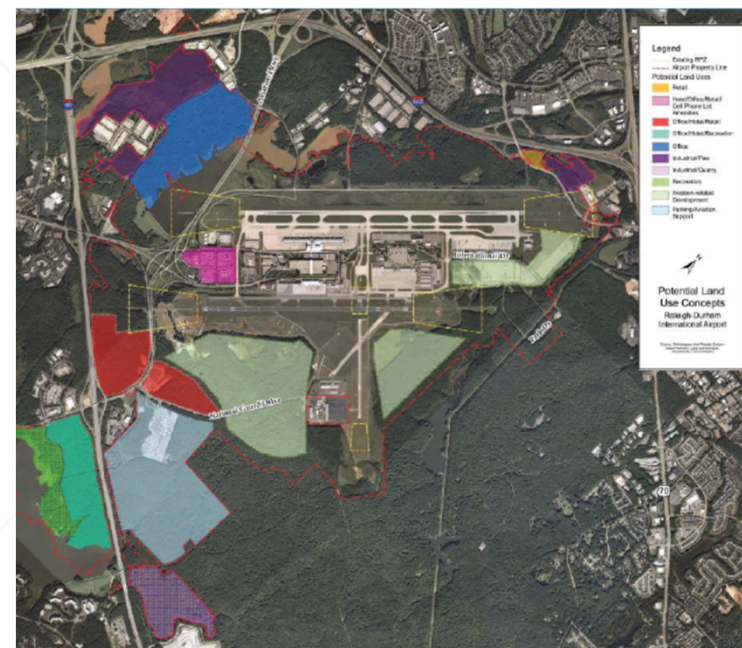
(Summer 2018 Scenarios)

	Saturday (Current Staffing)	Saturday (Target Staffing)
Design Hour Passengers	700	700
% Connecting Passengers	20%	20%
Bags/Passenger	1.3	1.3
Meeters/Greeters per O&D pax	0.20	0.20
% of Design Hour in peak 30 min.	80%	80%
= design 30 min passengers	560	560

Flow modeling for passenger processing ATDS -
August, 2016 90% Draft for support facilities



Potential Land Use Concepts





Environmental Services

- Environmental Planning
- Environmental Permitting
- Sustainability
- Other Environmental Services



Environmental Planning

- NEPA related services
 - No EIS work

Categorical
Exclusions for
Larger projects
(when
applicable)

Environmental
Assessments

Supporting
Surveys, e.g.,
cultural
resources

Stream and
Wetland
Delineations





Environmental Permitting

- Permit Renewal and Plan Updates
 - SPCC and Facility Response Plans
 - Air, Stormwater, and Wastewater
- Project Permits and Approvals
 - Wetland and Neuse Buffer Determinations
- Spill Reports and Laboratory Testing





Sustainability

- Development of Sustainability Management Plan
- Projects Stemming from Sustainability Management Plan





Other Environmental Services

- Compliance Assistance
 - Fats, Oils, and Grease program
 - Remediation System O&M, Sampling
- Emerging Issues
 - PFAS
 - Deicing Management
- Phase 1 and 2 Site Assessments





Questions?



Raleigh-Durham Airport Authority



Raleigh-Durham Airport Authority

Business Opportunity Workshop

William C. Sandifer, Senior Vice President & COO

May 8, 2019



Raleigh-Durham Airport Authority

Topics

- Final Questions
- Afternoon Schedule
- Lunch on your own



Raleigh-Durham Airport Authority



Thank You!



Raleigh-Durham Airport Authority