



Fayetteville Regional Airport
Airport Master Plan Update

Project Presentation to City Council

May 7, 2018



TALBERT & BRIGHT

FAYETTEVILLE REGIONAL AIRPORT MASTER PLAN

- An Airport Master Plan is a 20-year Development Plan
- FAA Requires an Approved Master Plan and Airport Layout Plan
- Last Master Plan Completed in 2005
- Introduction & Study Process
 - Inventory
 - Aviation Demand Forecasts
 - Facility Requirements
 - Alternatives
 - Financial/Implementation Plan
 - Airport Layout Plan



AIRPORT INVENTORY

- Airport Location, Demographics
- Airport Role and Classification
- Airport Service Area and Access
- Airport Zoning
- Historical Activity
- Airport Project History
- Airside Facilities
- Runways
- Taxiways
- Aprons
- Pavement Condition
- Navigational Aids
- Weather Reporting
- Lighting
- Airspace
- Instrumentation/Approaches
- FAR Part 77 Imaginary Surfaces
- Airport Buildings and Infrastructure
- Airport Tenants
- Aircraft Parking and Storage
- Aircraft Rescue and Fire Fighting
- Fuel Storage Facilities
- Airport Maintenance Facilities
- Perimeter Fencing
- Automobile Parking
- Utilities
- Stormwater Management
- Airport Financial Data



AVIATION FORECAST SUMMARY (FAA APPROVED)

| Year | Air Carrier/ Taxi Operations | GA Operations | Military Operations | Total Operations (Preferred) | Total FAA TAF Ops Forecast | Based Aircraft |
|-------|---------------------------------|------------------|------------------------|------------------------------------|-------------------------------------|-------------------|
| 2016* | 10,222 | 17,391 | 7,231 | 34,844 | - | 66 |
| 2021 | 14,386 | 17,952 | 5,775 | 38,113 | 33,434 | 68 |
| 2026 | 15,250 | 18,744 | 5,775 | 39,769 | 34,160 | 71 |
| 2036 | 17,134 | 20,592 | 5,775 | 43,501 | 36,241 | 78 |



CRITICAL AIRCRAFT

| | RUNWAY 10/28 | RUNWAY 4/22 | |
|-------------------------------|---------------------|-------------------------|--------------|
| | EXISTING & PROPOSED | EXISTING | PROPOSED |
| | CESSNA CITATION II | MCDONNELL DOUGLAS MD-88 | AIRBUS A-321 |
| Reference Code (ARC) | B-II | D-III | C-III |
| Runway Critical Aircraft | 10/28 | 4/22 | 4/22 |
| Propulsion | Jet | Jet | Jet |
| Wingspan | 52' | 107.9' | 117.5' |
| Length | 47' | 147.8' | 146' |
| Height | 15' | 30.5' | 38.6' |
| Maximum Takeoff Weight (MTOW) | 15,100 lbs. | 160,000 lbs. | 196,200 lbs. |
| Seating Capacity | 7 | 149 | 192 |
| Range | 2,104 nm | 2,500 nm | 3,700 nm |



FACILITY REQUIREMENTS & ALTERNATIVES

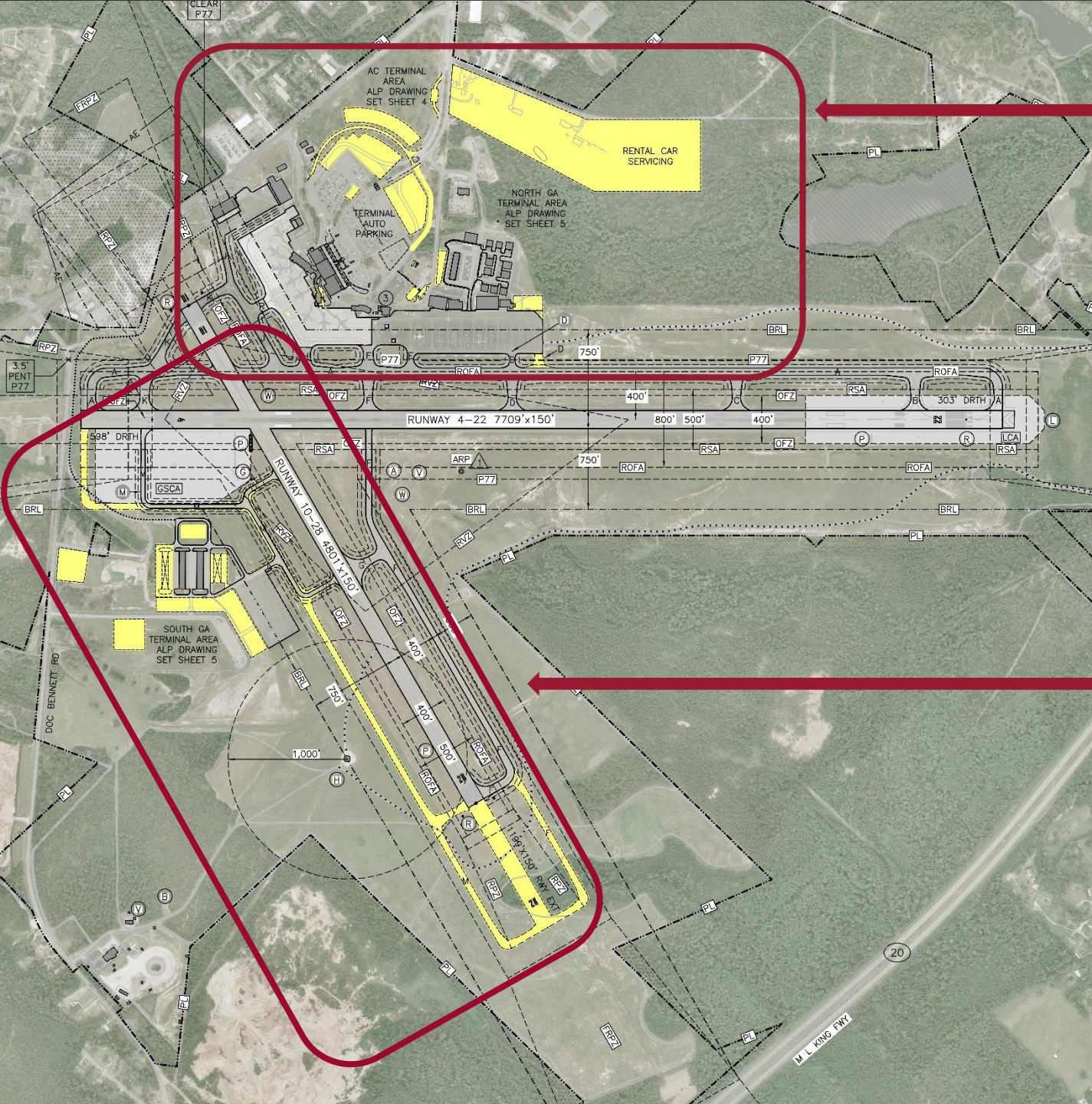
Purpose of the Facility Requirements are to:

- Determine Capacity;
- Determine Airport needs to accommodate aviation forecasts
- Identify existing non-conforming conditions

Analyzed:

- Runways
- Taxiways
- Aprons
- Geometry
- Aircraft Storage
- Support Facilities (Fueling Facilities/Auto Parking/Airport Maintenance/Rental Car Servicing)





NEW RENTAL CAR
SERVICING FACILITY

EXPANDED TERMINAL
AUTO PARKING

EXPANDED NORTH GA
AUTO PARKING

NEW CONCOURSE A

CONVENTIONAL/
CORPORATE HANGAR
DEVELOPMENT

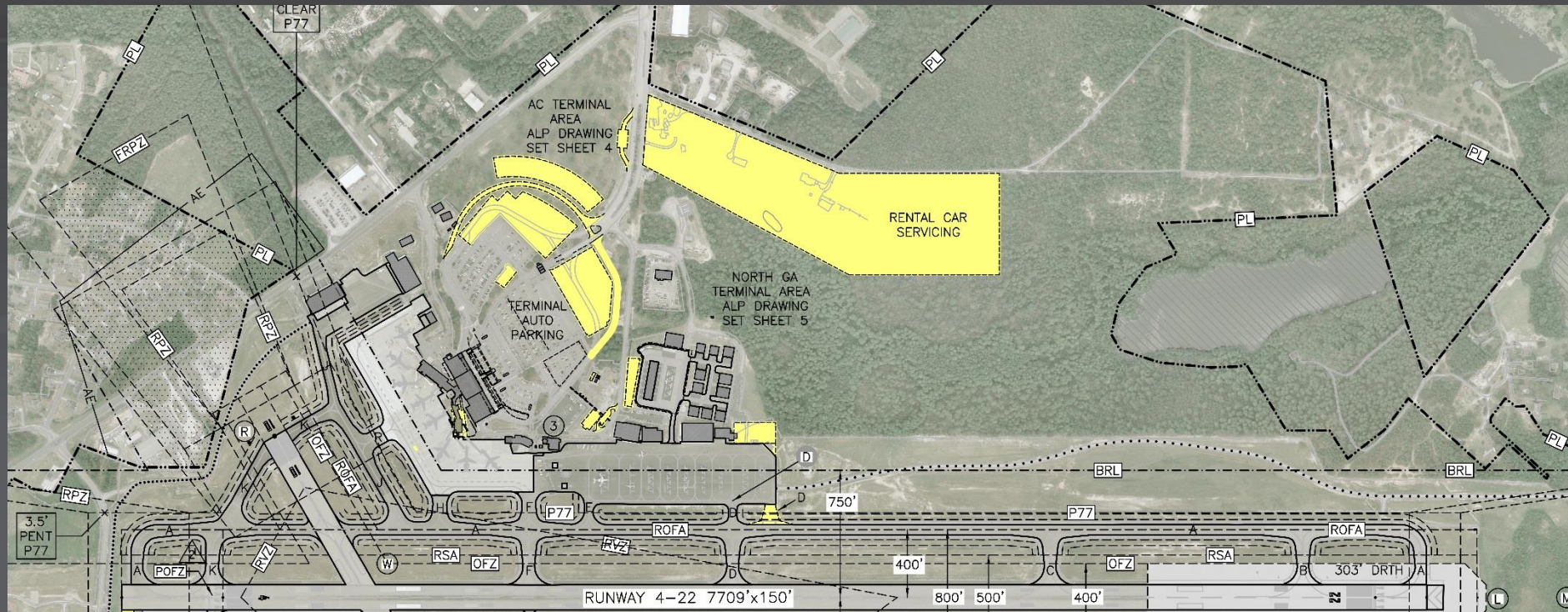
EXTENDED RUNWAY 10-
28 AND FULL PARALLEL
TAXIWAY (BEYOND
PLANNING PERIOD)

AIRPORT MAINTENANCE
BUILDING

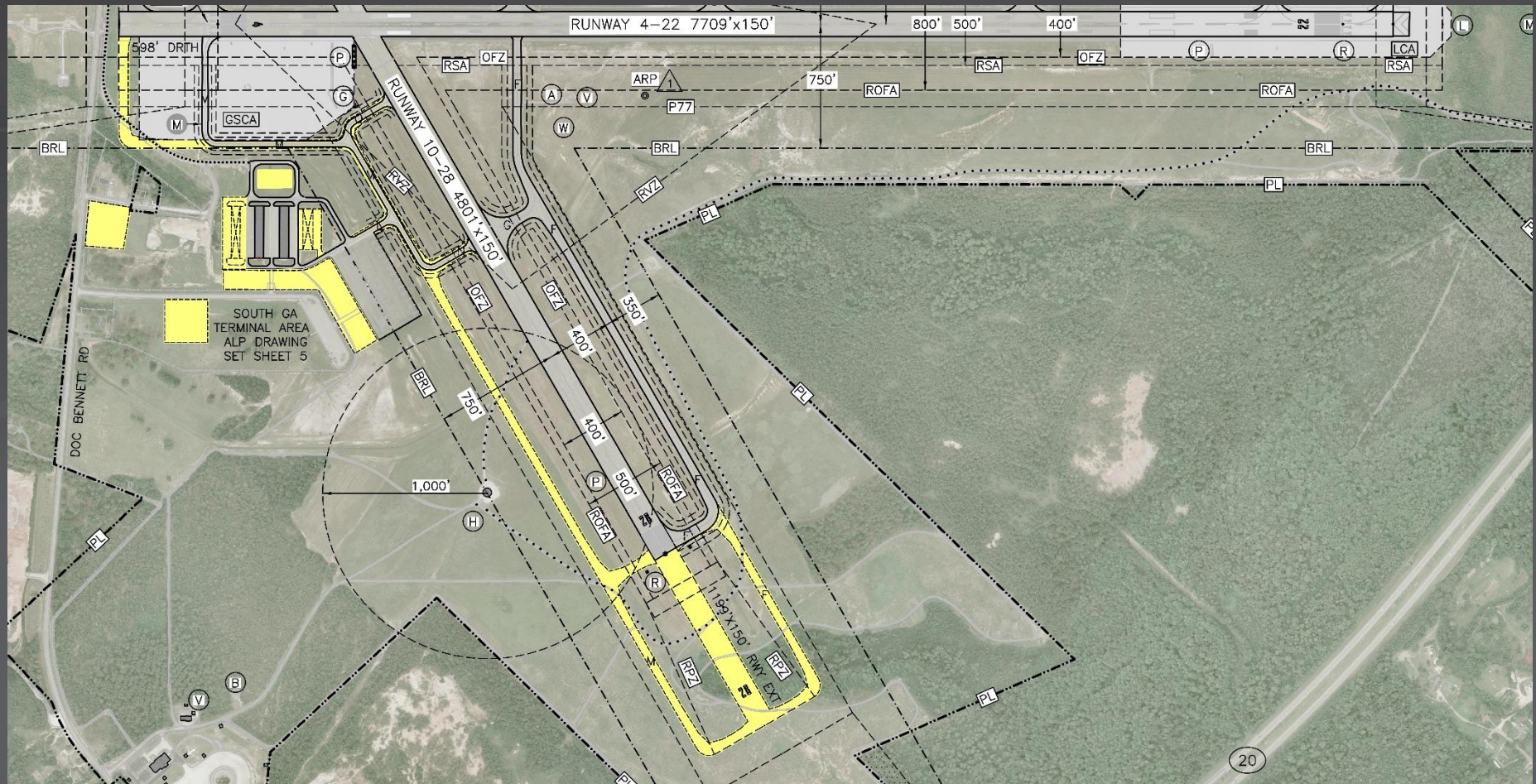
T-HANGAR
DEVELOPMENT

CONVENTIONAL/
CORPORATE HANGAR
DEVELOPMENT

NORTH AREA DEVELOPMENT



SOUTH AREA DEVELOPMENT



NEXT STEPS

- Receive Comments from Airport/Public/City Council
- Finalize Cost Opinions
- Complete Financial Analysis (Funding Strategy)
- Complete Airport Layout Drawings and Report
- Submit ALP to NCDOA and FAA



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