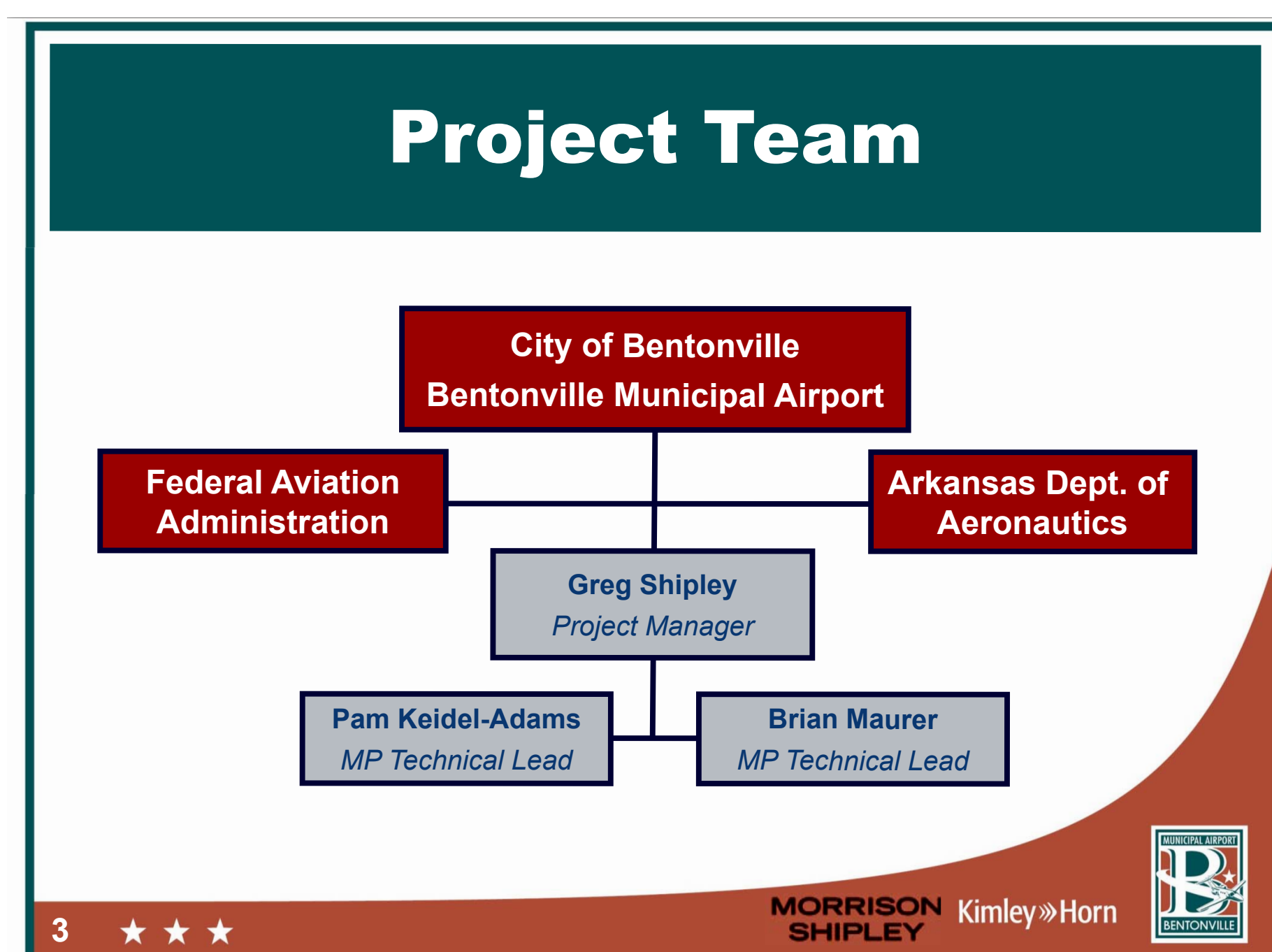
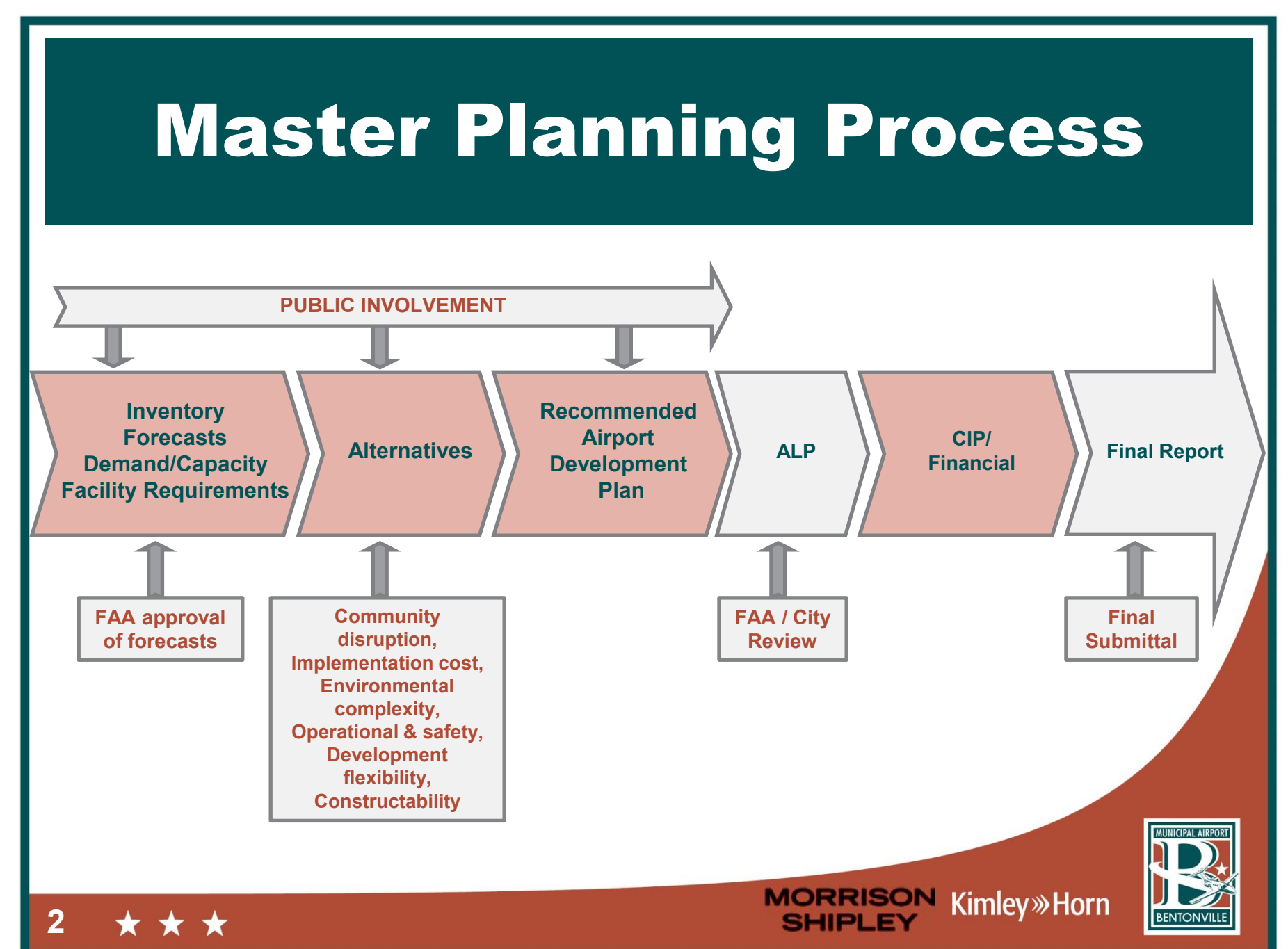




# PLANNING PROCESS



**BENTONVILLE**  
**MUNICIPAL AIRPORT**  
\*\*\*\*\*  
**MASTER PLAN UPDATE**  
**Public Workshop #3**  
August 3, 2015  
MORRISON SHIPLEY Kimley»Horn



### Contacts

- **Greg Shipley, P.E.**
  - [Gshipley@morrisonshipley.com](mailto:Gshipley@morrisonshipley.com)
  - 479-452-1933
- **Pam Keidel-Adams** Kimley»Horn
  - [Pam.Keidel-Adams@kimley-horn.com](mailto:Pam.Keidel-Adams@kimley-horn.com)
  - 602-678-3422

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# FACILITY REQUIREMENTS

## Airfield Facility Requirements

Airside		
	Existing	Ultimate
Runway 18-36		
Length	4,426	5,015
Width	65	75
RDC	B-II-5000	B-II-5000
Turf Runway		
Length	N/A	2448
Width	N/A	75
RDC	N/A	A-1(s)-VIS
Taxiway		
Length	Partial	Full (W) / Partial (E)
Width	35	35

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## Future Storage Needs

Year	T- hangars		
	Required (Units)	Existing Units	Net Surplus / (Deficiency) Number
PAL 1	24	26	2
PAL 2	27	26	(1)
PAL 3	33	26	(7)
Year	Conventional Hangars		
	Required Area (SF)	Existing Area (SF)	Net Surplus / (Deficiency) Area (SF)
PAL 1	66,200	52,450	(13,800)
PAL 2	79,400	52,450	(26,900)
PAL 3	105,000	52,450	(52,900)

Note: New hangars are addressing some of the needs including new 6,300SF hangar on west side.

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## Support Facility Requirements (PAL 3 - 2035)

- Identify an area to develop a maintenance facility
- Improve west side vehicle access and signage
- Construct a full interior perimeter road

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# ALTERNATIVE COMPARISON

## North Extension Cost Estimate (Alternative 1)

Item	Cost (\$)	Basis
Program Definition/Feasibility Study	\$100,000	Comparable Study
NEPA Environmental Assessment	\$400,000	Comparable Study
Land Acquisition		
Minimum for Airfield Needs	\$3,200,000	32 ac. @ \$100,000 per acre
Lake and Park Relocation	\$3,400,000	20 ac. @ \$170,000 per acre
Fees and Services	\$660,000	Assume 10% of Cost
Business Relocation	\$ -	
Construction		
Lake Relocation & Mitigation	\$7,500,000	185,400 CY @ \$40 CY
Runway Extension	\$3,000,000	5,000 SY @ \$600 SY
Design/Bid/Construction Management		
Lake Relocation/Mitigation	\$1,350,000	Assume 18% of Construction
Runway Extension	\$540,000	Assume 18% of Construction
Lake/Wetland Monitoring and Maintenance	\$150,000	3 yrs. @ \$50,000 ea.
<b>Total Estimated Program Costs – Alt 1</b>	<b>\$20,300,000</b>	

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## South Extension Cost Estimate (Alternative 2)

Item	Cost (\$)	Basis
Program Definition/Feasibility Study	\$100,000	Comparable Study
NEPA Environmental Assessment	\$400,000	Comparable Study
Land Acquisition for Airfield Needs		
South RPZ (minimum)	\$1,530,000	9 ac. @ \$170,000 per acre
North RPZ and Southwest (minimum)	\$1,900,000	19 ac. @ \$100,000 per acre
Fees and Services	\$343,000	Assume 10% of Cost
Business Relocations (3)		3 businesses
Property Acquisition (relocation site)	\$561,000	3 ac. @ \$170,000 per acre + 10% fees
Relocation Assistance	\$195,000	3 business @ 65,000 ea.
Design/Bid/Construction Management	\$1,328,400	Assume 18% of Construction
Site Construction	\$7,380,000	12,300 SF of building @ \$600 SF
Demolition of Old Site	\$738,000	Assume 10% of Construction
Wetland Mitigation	\$40,000	1 ac. @ \$40,000 per acre
Runway Extension		
Design/Bid/Construction Management	\$540,000	Assume 18% of Construction
Runway Extension	\$3,000,000	5,000 SY @ \$600 SY
<b>Total Estimated Program Costs – Alt 2</b>	<b>\$18,055,400</b>	

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## Comparison of Alternatives

Evaluation Criteria	North Extension	South Extension
<b>Community Disruption</b>		
Quantitative and qualitative impacts related to the displacement and/or relocation of residences, businesses or public amenities. The more facilities/tenants displaced, the higher the chance of increased project complexity, inconvenience and duration.	+	
	No business relocations	
<b>Implementation Cost</b>		
Estimated total program cost including land/easement acquisition, design, NEPA approval, permitting, construction, wetland mitigation, lake relocation, airspace protection, demolition and replacement of relocated facilities, and construction services.		+
		11% less expensive <sup>1</sup>
<b>Environmental Complexity</b>		
Includes potential long-term impacts to natural resources such as water quality, habitats, and hydrology (e.g. wetland conversion and lake relocation).		+
		Less impact to waters of the U.S

<sup>1</sup> As noted in the chapter, this assumes that HWY 12 remains in the RPZ and is not relocated. If a relocation is required, the cost would be substantial and this alternative would likely not be less expensive.

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## Comparison of Alternatives

Evaluation Criteria	North Extension	South Extension
<b>Operational &amp; Safety Concerns</b>		
Includes wildlife hazard mitigation, compatible land use and airspace protection. Also includes potential impacts to pilot situation awareness.	+	
	Removes a wildlife attractant, compliant RPZs	
<b>Development Flexibility &amp; Expandability</b>		
Includes ability to accommodate changing market demands and any areas gained that are suitable for additional revenue generating development or to accommodate unforeseen user demands.	+	
	Additional runway length and developable space	
<b>Constructability / Ease of Implementation</b>		
Reflects the relative ease of which the facilities can be constructed with standard methods and materials. Community disruption and environmental concerns can also affect the ease of implementation.	+	
	Historical planning and agency coordination	

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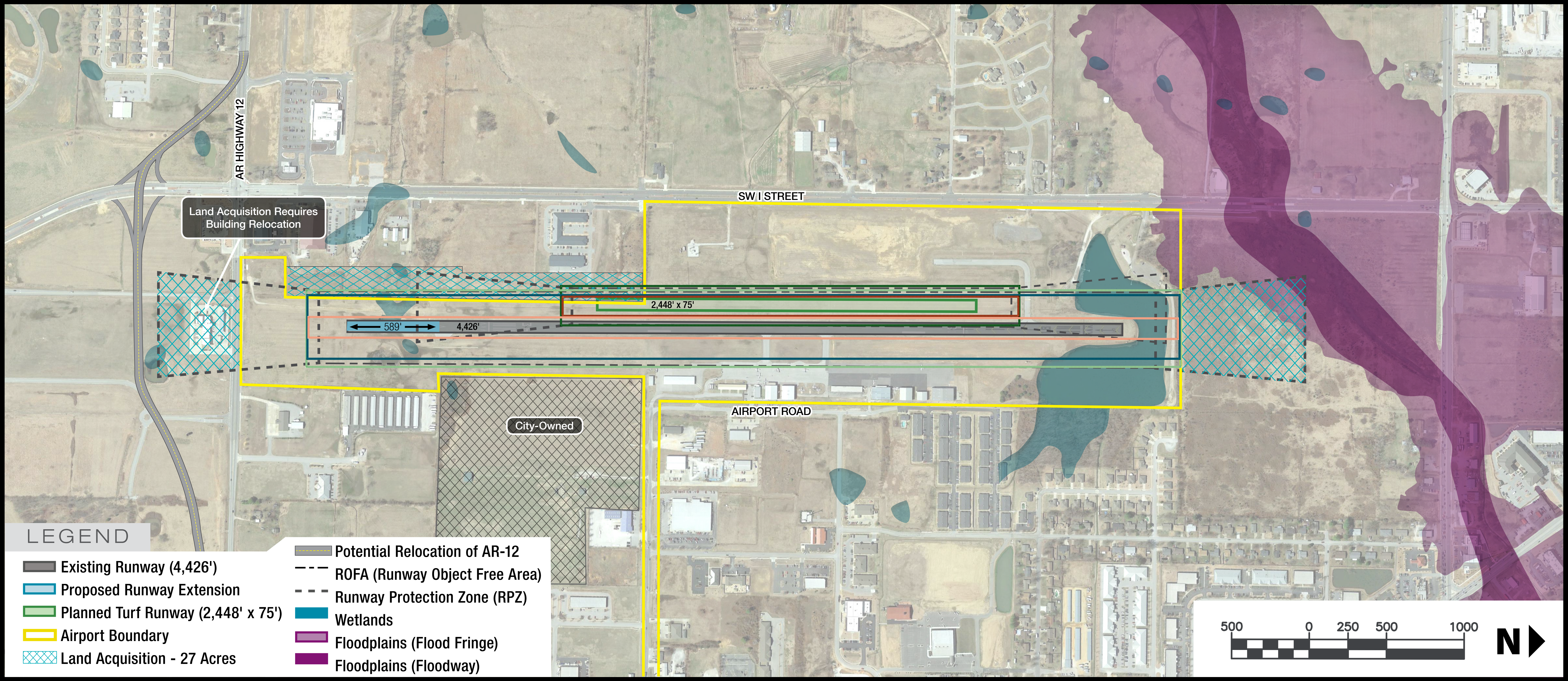
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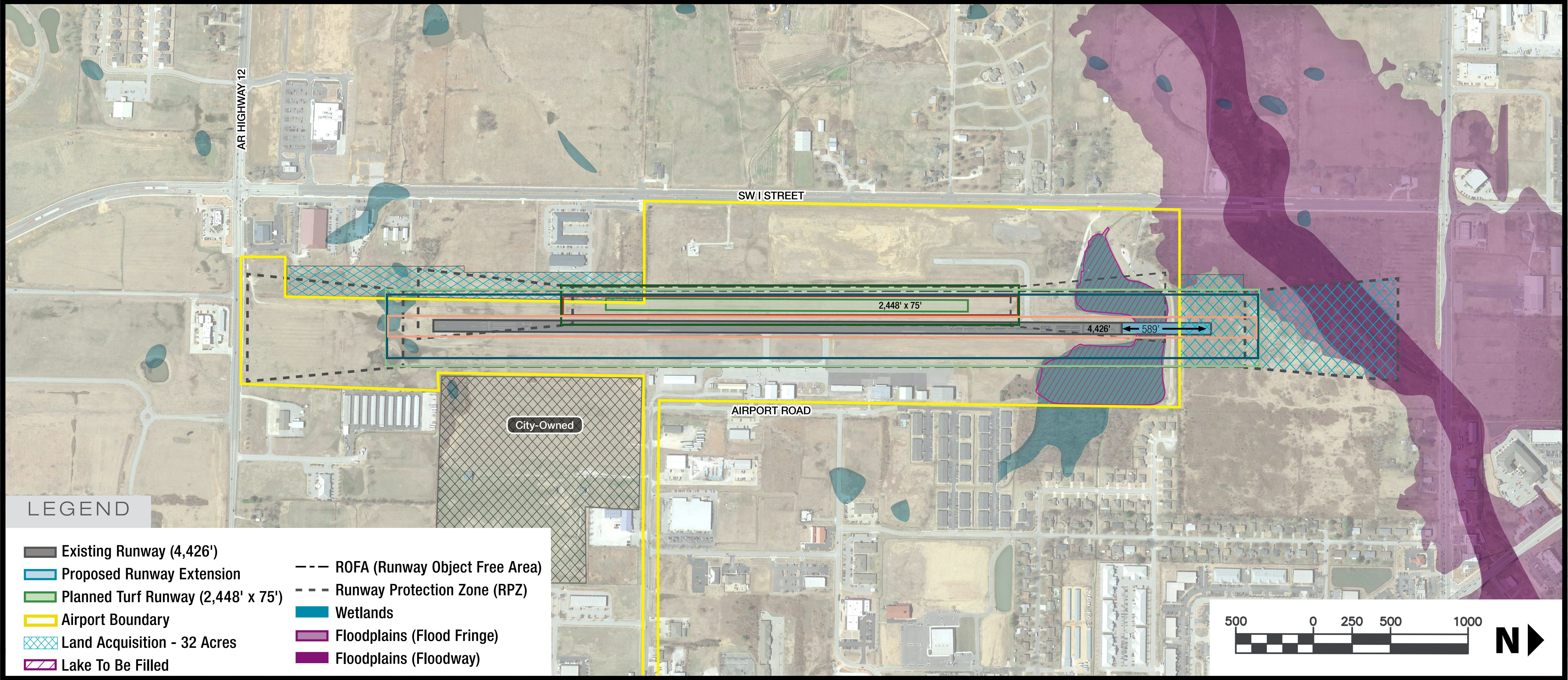


# RUNWAY 18-36 SOUTH EXTENSION



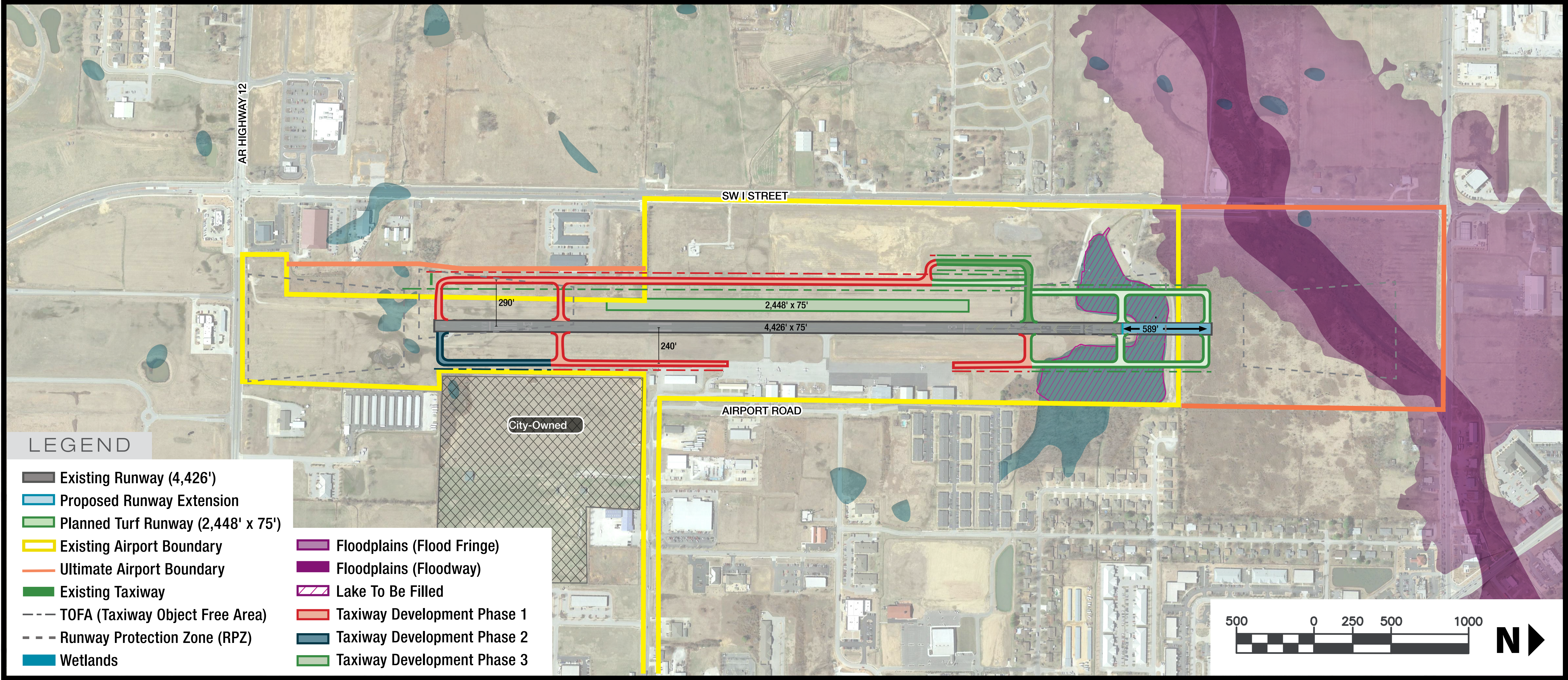


# RUNWAY 18-36 NORTH EXTENSION





# TAXIWAY SYSTEM PHASED ALTERNATIVES





# PREFERRED DEVELOPMENT STRATEGY

## DEVELOPMENT PHASES/FEATURES:

PHASE 1: NEAR-TERM	PHASE 2: FUTURE	PHASE 3: LONG-TERM
<ul style="list-style-type: none"><li>1 Land Acquisition</li><li>2 Construct Turf Runway</li><li>3 Install PAPIs for Runway 18-36</li><li>4 Taxiway Improvements (Phase I)</li><li>5 West Side Hangars &amp; Aprons (Phase I)</li><li>6 West Side General Aviation Terminal</li><li>7 Maintenance Equipment Storage Building</li><li>8 Connecting Taxiway Removal</li></ul>	<ul style="list-style-type: none"><li>9 West Side Hangars &amp; Apron (Phase 2)</li><li>10 Runway Widening &amp; Strengthening</li></ul>	<ul style="list-style-type: none"><li>11 Airfield Perimeter Road</li><li>12 Extend Runway 18-36 (589' North)</li><li>13 Taxiway Improvements (Phase 2)</li><li>14 Taxiway Improvements (Phase 3)</li><li>15 West Side Hangars &amp; Apron (Phase 3)</li></ul>

