





# WELCOME TO THE AIRPORT MASTER PLAN PUBLIC INFORMATION WORKSHOP

### **TONIGHT:**

- Participate in the open house meeting format
- Visit the information stations
- Discuss various study elements with the project team
- Offer your comments (comment sheets are available)
- Obtain additional information from the project website txk.airportstudy.net









## MASTER PLAN DEFINITION

What an Airport Master Plan is:

- → A comprehensive, long-range study of the airport and all air and landside components that describes plans to meet FAA safety standards and future aviation demand.
- Required by the FAA to be conducted every 7-10 years to ensure plans are up-to-date and reflect current conditions and FAA regulations.
- Funded by the FAA through the Airport Improvement Program (AIP), which provides 90% of the total project costs. The remaining 10% is funded by the Arkansas Department of Aeronautics (ADA).
- A TRAA document that will ultimately be presented for approval by the TRAA Board. FAA approves only two elements of the Master Plan: the Aviation Demand Forecasts and the Airport Layout Plan (ALP drawing set).
- An opportunity for airport stakeholders and the general public to engage with airport staff on issues related to the airport and its current and future operations, and environmental and socioeconomic impacts. Up to three (3) public information workshops will be conducted throughout the Master Plan process to facilitate this public outreach effort



- A guarantee that the airport will proceed with any planned projects. Master Plans are guides that help airport staff plan for future airport development; however, the need/demand for certain projects might never materialize.
- A guarantee that the TRAA, ADA, or the FAA will fund any planned projects. Project funding is considered on a project-by-project basis and requires appropriate need and demand. Certain projects may require the completion of a benefit-cost analysis.
- Environmental clearance for specific projects. The Master Plan includes an environmental overview that identifies potential environmental sensitivities per the National Environmental Policy Act of 1969 (NEPA) guidelines. Most planned projects will require a separate NEPA study (environmental impact statement/environmental assessment/categorical exclusion) prior to construction.

# **OBJECTIVES OF A MASTER PLAN**

- **DEVELOP** strategic visions and mission statements to guide airport development/growth
- RESEARCH factors likely to affect air transportation demand segments in the Ark-La-Tex region over the next 20 years
- DETERMINE the airport's current and future critical design aircraft
- ANALYZE the airport's existing airfield system to determine if any deficiencies exist and correct areas of non-standard geometry
- EVALUATE highest and best uses of airport property for aeronautical development, including hangar expansion and maintenance facilities

- **EVALUATE** the potential for expanding commercial air service operations
- Consider options for non-aeronautical development that could produce additional revenue streams for the airport
- DEVELOP a phased, demand-based 20-year Capital Improvement Plan
- PRODUCE an updated Airport Layout Plan drawing set, detailing future airside and landside development
- REVIEW future use and zoning of airport property, instrument approach areas, and nearby developments to ensure flight safety and land use compatibility is maintained

### MASTER PLAN ELEMENTS AND PROCESS

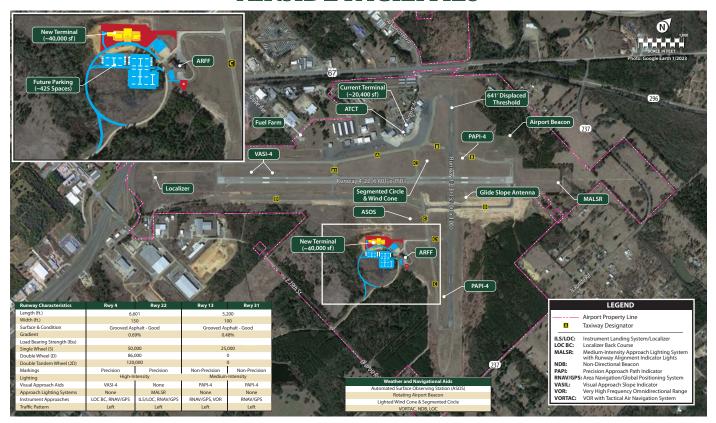








# AIRSIDE FACILITIES



# LANDSIDE FACILITIES



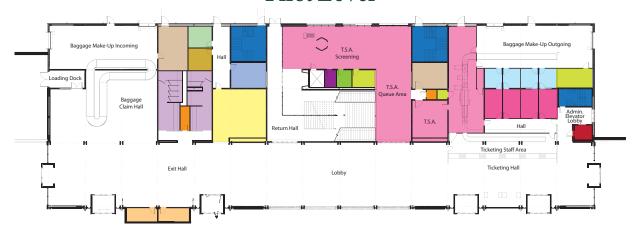






# **NEW AIRPORT TERMINAL**

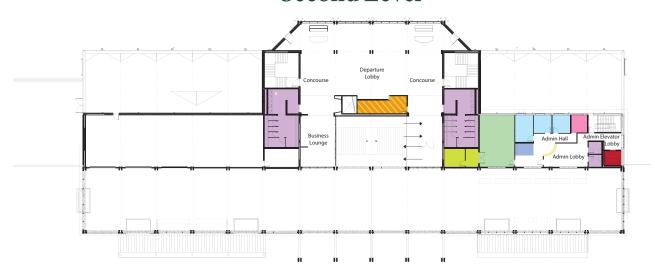
# - First Level







# Second Level -







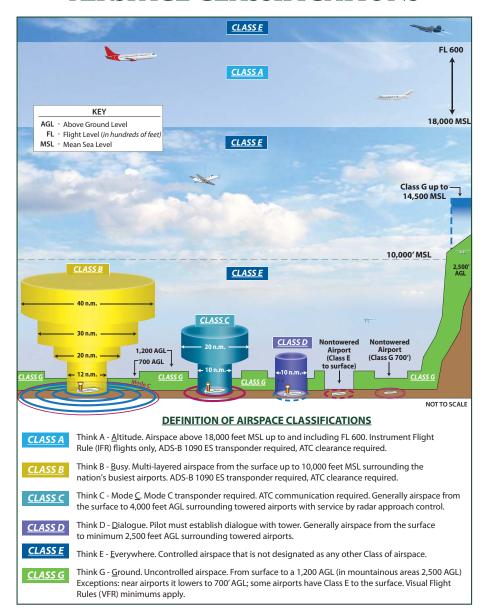




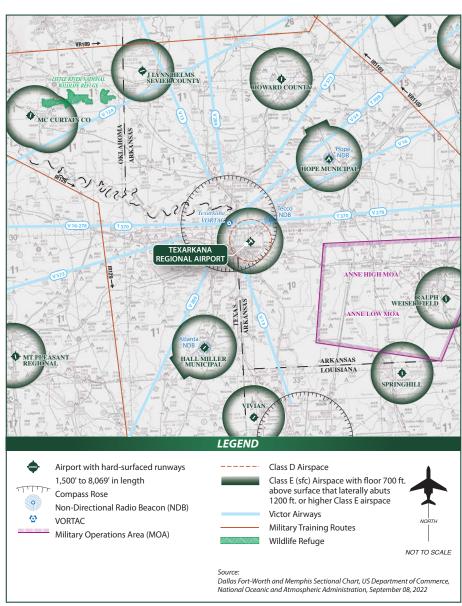




# AIRSPACE CLASSIFICATIONS



# TXK REGIONAL AIRSPACE MAP







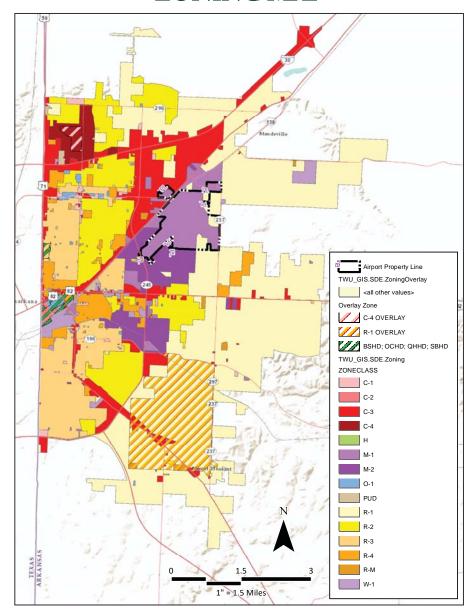
Farmland of Statewide Importa



# **ENVIRONMENTAL SENSITIVITIES**

# Texarkana reshwater Emergent Wetland Farmland Classification Prime Farmland

# **ZONING MAP**

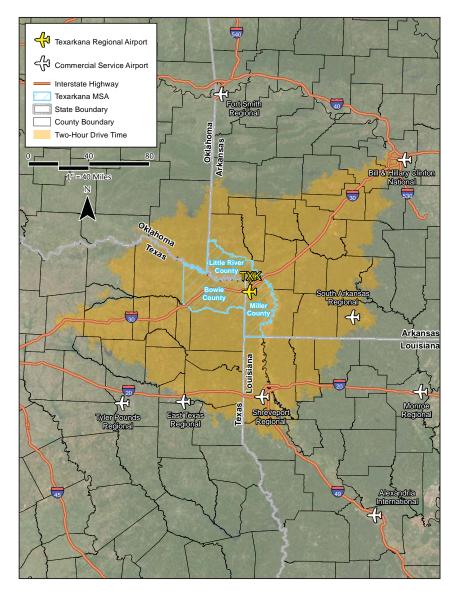




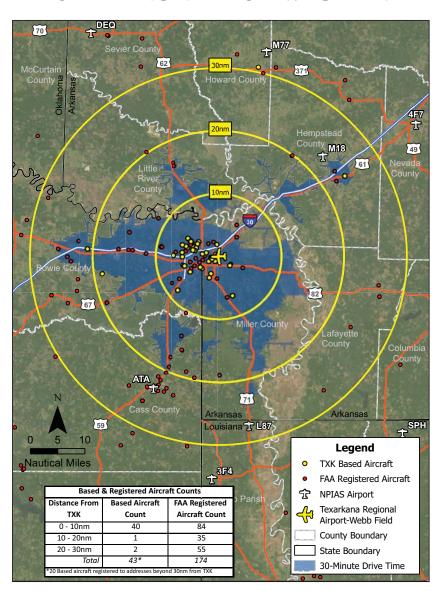




# COMMERCIAL PASSENGER SERVICE AREA



# BASED AIRCRAFT SERVICE AREA

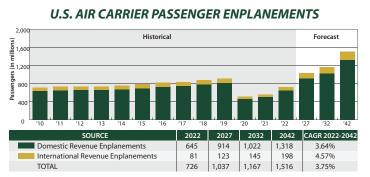








# U.S. COMMERCIAL AIR CARRIER FORECASTS



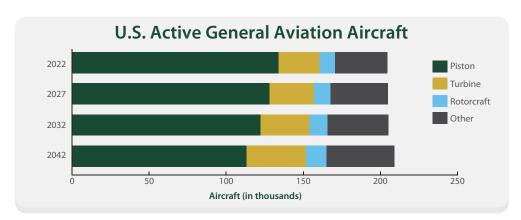
Note: All figures measured in millions. Totals may not equal due to rounding

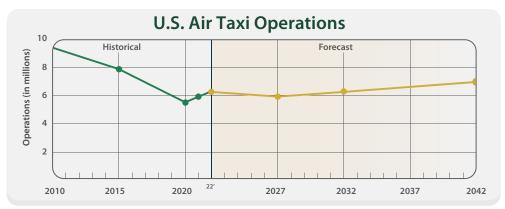
#### **U.S. REGIONAL AIR CARRIER PASSENGER ENPLANEMENTS**



Note: All figures measured in millions. Totals may not equal due to rounding

# NATIONAL GENERAL AVIATION/AIR TAXI FORECASTS













# **TOP TWENTY MARKETS**

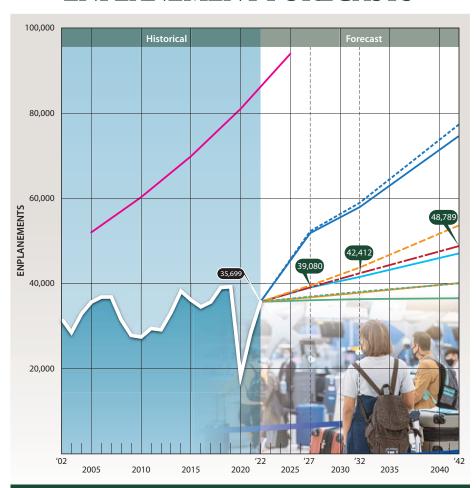
#### 2022 TOP TWENTY MARKETS/NON-STOP SERVICE CITY PAIRS Seattle New York City Chicago Salt Lake City San Francisco Washington D.C. Las Vegas Charlotte Los/Angeles Atlanta San Diego Dallas/Fort Worth 🌒 Austin LEGEND Houston Orlando Non-Stop Route San Antonio Texarkana Regional Airport (TXK) Memil Top Twenty Markets

	2012 Top Twenty Markets		2017 Top Twenty Markets		2021-2022 Top Twenty Markets	
Rank	Destination	Passengers	Destination	Passengers	Destination	Passengers
1	Dallas/Fort Worth	3,280	Los Angeles	3,840	Los Angeles	4,330
2	Los Angeles	2,850	Dallas/Fort Worth	2,990	Orlando	2,490
3	Washington DC	2,610	Washington DC	2,120	Las Vegas	2,270
4	New York City	2,010	Chicago	1,940	Houston	2,150
5	San Francisco	1,640	Orlando	1,940	Washington DC	2,130
6	San Antonio	1,630	San Francisco	1,680	Denver	1,990
7	Chicago	1,580	Atlanta	1,650	Dallas/Fort Worth	1,750
8	Las Vegas	1,440	Denver	1,640	Phoenix	1,680
9	Atlanta	1,270	Charlotte	1,590	New York City	1,650
10	Detroit	1,270	Las Vegas	1,580	San Antonio	1,610
11	Indianapolis	1,140	San Antonio	1,530	San Francisco	1,590
12	Columbus, OH	1,130	Miami	1,510	Miami	1,490
13	Austin	1,120	New York City	1,500	Atlanta	1,380
14	Phoenix	1,110	Phoenix	1,470	San Diego	1,360
15	Boston	1,090	Detroit	1,380	Tampa	1,310
16	Denver	1,030	Philadelphia	1,370	Chicago	1,290
17	Seattle	1,000	Tampa	1,290	Austin	1,270
18	Orlando	950	Austin	1,190	Seattle	1,220
19	San Diego	940	Houston	1,190	Salt Lake City	990
20	Philadelphia	940	Seattle	1,140	Charlotte	990
	Top 20 Total 0&D Passengers	30,030	Top 20 Total 0&D Passengers	34,540	Top 20 Total 0&D Passengers	34,940
	Total 0&D Passengers	55,080	Total O&D Passengers	66,930	Total O&D Passengers	66,550
	% Top 20/Total 0&D Passenge	rs 54.5%	% Top 20/Total 0&D Passenge	rs 51.6%	% Top 20/Total 0&D Passenge	rs 52.5%

#### Non-Stop Service (2022)

• Dallas/Fort Worth

# **ENPLANEMENT FORECASTS**



	LEGEND		
Travel Propensity Factord (TPF) Projections	CAGR	Historic Trend Projections	CAGR
Constant TPF	0.12%	 10-Year Growth Rate	2.06%
 Increasing TPF - Peak Ratio	0.57%	 20-Year Growth Rate	0.58%
 Increasing TPF - Maximum Change (Selected)	1.57%		
		Other Forecasts	
Market Share of Regional Airline Projections		 2023 TXK TAF	1.48%
Constant Market Share	3.76%	 2003 Master Plan	
 Increasing Market Share	3.94%		

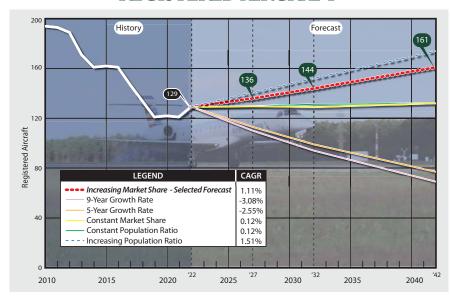




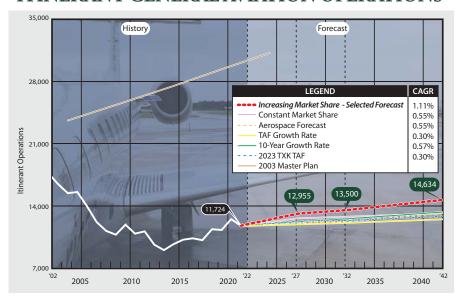




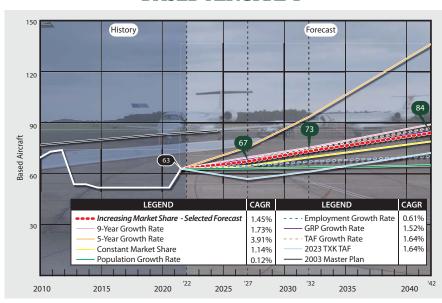
#### REGISTERED AIRCRAFT



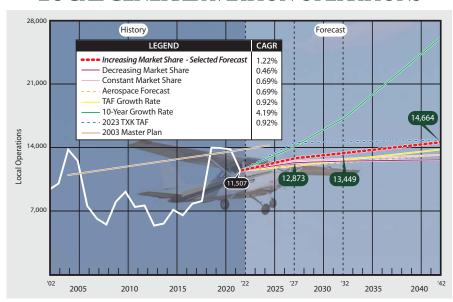
#### ITINERANT GENERAL AVIATION OPERATIONS



#### **BASED AIRCRAFT**



#### LOCAL GENERAL AVIATION OPERATIONS







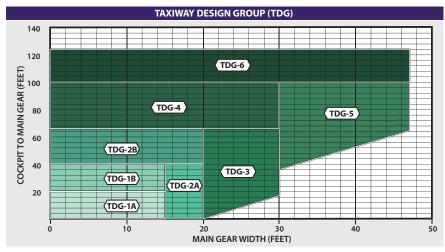




# AIRCRAFT CLASSIFICATION PARAMETERS

#### **AIRCRAFT APPROACH CATEGORY (AAC)** less than 91 knots 91 knots or more but less than 121 knots 121 knots or more but less than 141 knots 141 knots or more but less than 166 knots 166 knots or more **AIRPLANE DESIGN GROUP (ADG)** Group # Wingspan (ft) <20 <49 20-<30 49-<79 30-<45 79-<118 45-<60 118-<171 60-<66 171-<214 66-<80 214-<262 **VISIBILITY MINIMUMS** RVR\* (ft) Flight Visibility Category (statute miles) VIS 3-mile or greater visibility minimums 5.000 Not lower than 1-mile 4,000 Lower than 1-mile but not lower than 3/4-mile 2,400 Lower than 3/4-mile but not lower than 1/2-mile 1,600 Lower than 1/2-mile but not lower than 1/4-mile Lower than 1/4-mile 1,200

\*RVR: Runway Visual Range



# AIRCRAFT REFERENCE CODES

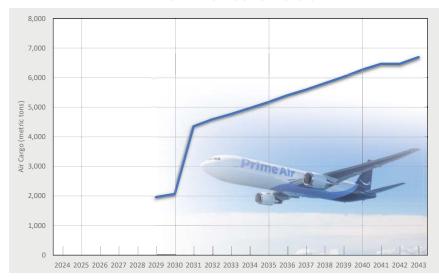
Δ-Ι	Aircraft	TDG	C/D-I	Aircraft	TDG
	Beech Baron 55     Beech Bonanza     Cessna 150, 172     Eclipse 500     Piper Archer, Seneca	1A 1A 1A 1A 1A	C/D-1	• Lear 25, 31, 45, 55, 60 • Learjet 35, 36 (D4)	1B 1B
B-I	Beech Baron 58     Beech King Air 90     Cessna 421     Cessna Citation C11 (525)     Cessna Citation 1 (500)     Embraer Phenom 100	1A 1A 1A 1A 2A 1B	C/D-II	• Challenger 600/604/ 800/850 • Cessna Citation VII, X+ • Embroer Legacy 450/500 • Gulfstream IV, 350, 450 (D-II) • Gulfstream 6200/6280 • Lear 70, 75	1B 1B 1B 2A 1B
A/B-II 12,500 lbs.	Beech Super King Air 200     Cessna 441 Conquest     Cessna Citation CJ2 (525A)     Pilatus PC-12	2A 1A 2A 1A	C/D-III less than 150,000 lbs.	• Gulfstream V • Gulfstream 6500, 550, 600, <b>650 (D-III)</b>	2A 2B
<b>B-II</b> over 12,500 lbs.	Beech Super King Air 350     Cessna Citation CJ3(525B), V (560)     Cessna Citation Bravo (550)     Cessna Citation CJ4 (525C)     Cessna Citation CJ4 (525C)	2A 2A 1A 1B	C/D-III over 150,000 lbs.	• Airbus A319-100, 200 • Boeing 737 -800, 900, BB12 (D-III) • MD-83, 88 (D-III)	3 3 4
	Easting Challent Latitude/Longitude Embraer Phenom 300 Falcon 10, 20, 50 Falcon 900, 2000 Hawker 800, 800XP, 850XP, 4000 Pilatus PC-24	1B 1B 1B 2A 1B	C/D-IV	• Airbus A300-100, 200, 600 • Boeing 757-200 • <b>Boeing 767</b> -300, <b>400</b> • M0-11	5 4 5 6
A/B-III  TDG: Taxiway Design Group	Bombardier Dash 8     Bombardier Global 5000, 6000, 7000, 8000     Falcon 6X, 7X, 8X  Note: Aircraft pictured is id.	3 <b>2B</b> 2B	D-V	<ul> <li>Airbus A330-200, 300</li> <li>Airbus A340-500, 600</li> <li>Boeing 747-100 - 400</li> <li>Boeing 777-300</li> <li>Boeing 787-8, 9</li> </ul>	5 6 5 6 <b>5</b>



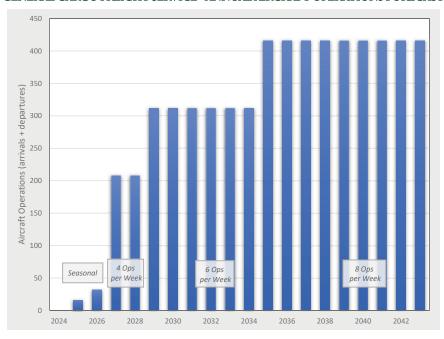




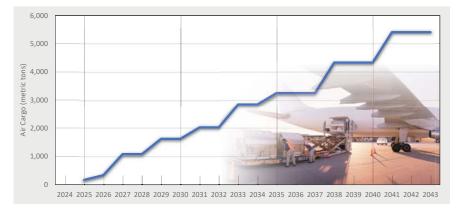
#### AMAZON AIR CARGO FORECASTS



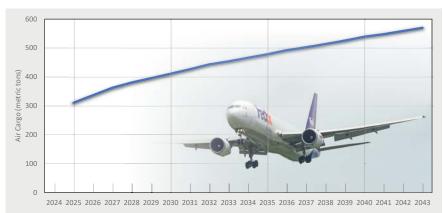
#### GENERAL CARGO FREIGHT SERVICE - ANNUAL AIRCRAFT OPERATIONS FORECAST



#### GENERAL FREIGHTER AIR CARGO FORECASTS



#### FEDEX AIR CARGO FORECASTS



#### AIR CARGO FORECASTS SUMMARY

	2025	2029	2033	2037	2042/2043	
Annual Operations						
FedEx Scenario						
Cessna C208B	522	522	0	0	0	
Cessna C408	0	0	522	522	522	
Amazon Air Scenario						
ATR-72F		626	1,256	1,256	0	
Boeing 737-800F		0	0	0	626	
General Cargo Freighter Scenario						
Boeing 757-200F	16	312	312	416	416	
Air Cargo Tonnage (metric tons)						
FedEx Scenario	310	395	453	502	569	
Amazon Air Scenario		1,961	4,768	5,592	6,693	
General Cargo Freighter Scenario	166	1,622	2,839	3,245	5,408	











# TXK AIR CARGO FORECASTS MAJOR ASSUMPTIONS FOR DEFINED SCENARIOS

#### **FEDEX SCENARIO**

- Assume FedEx flights with 10x per week operations at TXK (5 arrivals & 5 departures)
- In 2025, start with Cessna 208B & upgauge in 2031 to the larger Cessna C408 SkyCourier
- · Aircraft tonnage capacities adjusted for FedEx lower density shipments
- Startup years have accelerated growth for new TXK market, then taper for consistency to Boeing long-terms forecasts
- Validate assumptions with FedEx feeder flights at AFW hub



## **GENERAL CARGO FREIGHTER SCENARIO**

- Scenario depends on new auto manufacturer or similar industrial activity starting near TXK
- Assume B757-200F operation at TXK which will increase weekly frequencies over the forecast period
- Freighter has multi-stop itineraries with only part of a/c allocated to each airport
- 8 flights (2025); 16 flights (2026)
- 4x weekly ops (2027); 6x weekly ops (2029); 8x weekly ops (2035)
- TXK a/c allocation range: 20%-50%



#### **AMAZON AIR SCENARIO**

- · Scenario depends on presence of a large Amazon fulfillment center near TXK
- 2029 startup with ATR-72F at 6x weekly ops service to AFW hub,
- Expect increase to 12x weekly ops with ATR; then eventually upgauge to B737F at 6x weekly service ops
- Tonnage growth occurs at accelerated pace compared to Boeing forecast
- Payload capacity for the ATR-72F is based on analysis Amazon Air's current operations of the aircraft in the U.S.









# FORECAST SUMMARY

	Base Year	Forecast			CAGR
	2022	2027	2032	2042	CAGR
ENPLANEMENTS	35,699	39,080	42,412	48,789	1.57%
ANNUAL OPERATIONS					
Itinerant					
Air Carrier	386	1,983	2,001	2,099	8.84%
Air Taxi	5,361	3,583	3,746	4,094	-1.34%
General Aviation	11,724	12,955	13,500	14,634	1.11%
Military	841	841	841	841	0.00%
<b>Total Itinerant Operations</b>	18,312	19,362	20,088	21,668	0.84%
Local					
General Aviation	11,507	12,873	13,449	14,664	1.22%
Military	926	926	926	926	0.00%
Total Local Operations	12,433	13,799	14,375	15,590	1.14%
Total Annual Operations	30,745	33,161	34,463	37,258	0.97%

CAGR: Compound Annual Growth Rate

	2022	2027	2032	2042			
PEAKING							
Enplanements							
Peak Month	3,570	3,908	4,241	4,879			
Design Day	115	126	137	157			
Design Hour	39	41	88	96			
Annual Operations							
Peak Month	3,159	3,407	3,541	3,828			
Design Day	106	112	116	126			
Busy Day	187	198	205	223			
Design Hour	6	6	6	7			
FLEET MIX							
Single Engine Piston	33	34	35	38			
Multi-Engine Piston	8	7	5	3			
Turboprop	6	8	11	16			
Jet	12	13	16	20			
Helicopter	4	5	6	7			
Based Aircraft	63	67	73	84			

