

SUMMARY OF FINDINGS

SYSTEM EVALUATION

Comprehensive analysis revealed adequacies, deficiencies, and overlaps for the current airport system. System performance measures guided the system evaluation process. Each performance measure has a set of quantifiable benchmarks which determine current performance. Results are used to establish targets for future system performance.

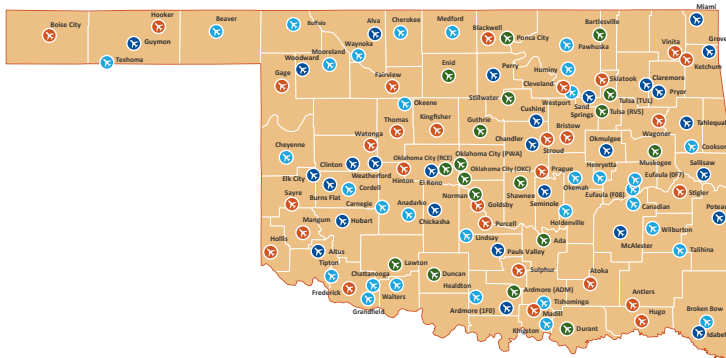
OKLAHOMA SYSTEM PERFORMANCE MEASURES	A SYSTEM THAT IS SAFE
	A SYSTEM THAT IS EFFICIENT
	A SYSTEM THAT IS ACCESSIBLE
	A SYSTEM THAT SUPPORTS THE ECONOMY
	A SYSTEM THAT MEETS USER NEEDS

AIRPORT ROLES AND FACILITY SERVICE OBJECTIVES

Each airport in Oklahoma plays a different role in their community based on the aircraft and customers it serves. Detailed investigation scored and ranked each airport to establish its system role as either a National Business, Regional Business, General, or Community airport. Each role category has facility and service objectives considered desirable for meeting user needs. Each airport's report card shows projects needed to meet system plan objectives. Report cards also reflect additional investment to address airport identified projects.

AIRPORTS IN OKLAHOMA ARE ASSIGNED TO ONE OF FOUR STATE ROLES:

- NATIONAL BUSINESS
- GENERAL
- REGIONAL BUSINESS
- COMMUNITY



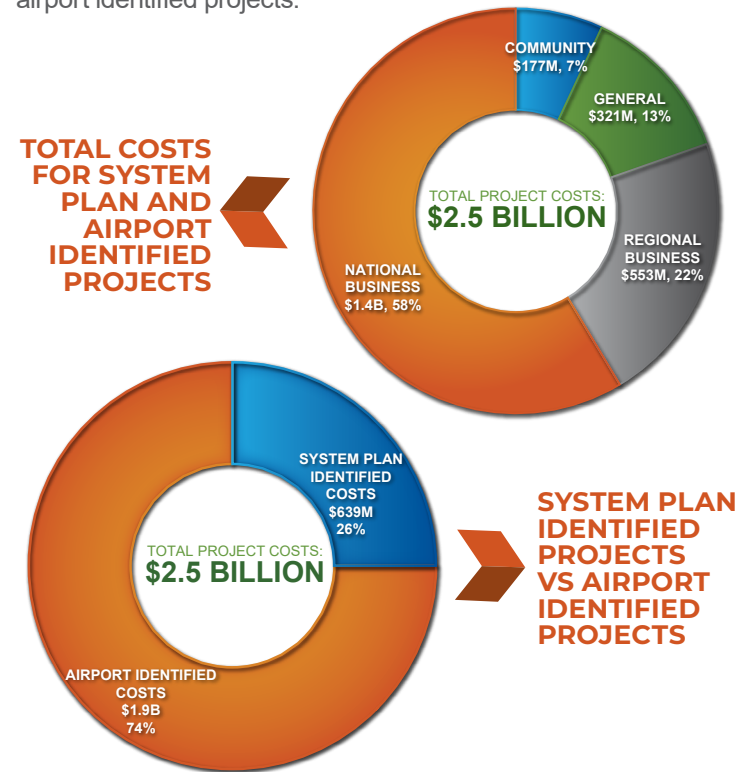
CONCLUSIONS

ESTIMATED COSTS

The Oklahoma airport system currently functions at a relatively high level, but if airports are able to meet their individual facility and service objectives, that performance could improve.

The final step in the system plan was to develop planning level cost estimates associated with improving system airports to meet their facility and service objectives. In addition, information was collected from study airports to identify other projects they plan to implement. Combining system plan identified projects with airport identified projects provides a more holistic understanding of the system's financial needs in the next 20 years.

Costs were summarized by airport role and allocated to show the costs needed to implement system plan identified projects and airport identified projects.



POTENTIAL FUNDING GAP

Considering all investment needs, an average of **\$125.1 million** would be needed in each of the next 20 years to fully address the identified costs. Review of historic and anticipated FAA, state, and local funding sources shows an average of **\$85.8 million** in funding could be available if current funding levels continue. This leaves a potential annual funding gap of **\$39.2 million**; considering this gap, it is important that available funding be strategically invested. It is also important to note that while the airports have an annual investment need of **\$125.1 million**, the airports return an estimated **\$10.6 billion** to the state's economy each year.

The system plan provides important information to OAC, helping to direct available funding to airport projects most essential to meeting the state's transportation needs and economic objectives.

FOR MORE INFORMATION CONTACT

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OKLAHOMA AIRPORT SYSTEM PLAN

BROKEN BOW AIRPORT

BROKEN BOW, OKLAHOMA



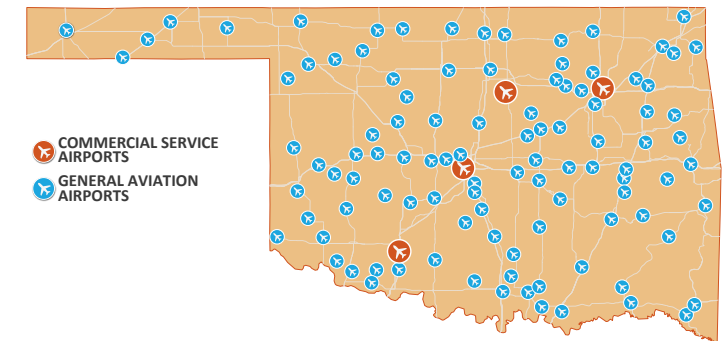
In late 2020, the Oklahoma Aeronautics Commission (OAC) undertook a comprehensive update to its State Airport System Plan. The plan was completed in 2022. This report summarizes major statewide findings, but it focuses primarily on the findings and recommendations from the plan for **Broken Bow Airport**.

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OKLAHOMA AIRPORT SYSTEM PLAN

The update to the Oklahoma Airport System Plan followed Federal Aviation Administration (FAA) guidelines. Airports in Oklahoma provide businesses, residents, and visitors with a high level of accessibility to a wide variety of airports and aviation services. Implementing strategic improvements and focused investment recommendations from the plan can elevate the airport system's current performance.

OKLAHOMA'S STATE AIRPORT SYSTEM



SYSTEM CHARACTERISTICS

- 108 total system airports**
- 4 airports with commercial airline service**
- 104 general aviation airports**
- 90% of airports included in FAA's National Plan of Integrated Airport Systems (NPIAS)**

Airports included in the NPIAS are eligible for FAA funding. FAA, OAC, and airport sponsor partnerships are important for maintaining and improving the airport system.

INVENTORY

The plan started with a comprehensive inventory effort; information was collected on airport activity, facilities, and services. Special inventory efforts focused on:

- Airport control of runway protection zones (RPZs)**
- Runway safety areas (RSAs) meeting FAA standards**
- Parallel runways/taxiways meeting separation standards**
- Primary runways with clear 20:1 approaches**
- Airports with property open for development**
- Hangar storage and general aviation terminal building characteristics**

Data collected as part of the system plan is stored in a Geographic Information System database; the database is accessible at oac.ok.gov.



OVERVIEW

The system plan identifies strategies for improving Oklahoma's 108 commercial and general aviation airports. Each airport's improvements identified in the system plan are focused on helping the airport meet its designated role in the state system. By implementing individual airport recommendations, a higher level of system-wide performance will be achieved. System plan findings and recommendations for **BROKEN BOW AIRPORT** are discussed in this report.



SOURCE: GOOGLE EARTH

BROKEN BOW AIRPORT (90F)

BROKEN BOW, OKLAHOMA

KEY AIRPORT CHARACTERISTICS

FAA/NPIAS ROLE: NON-NPIAS

STATE ROLE: COMMUNITY

OWNER: CITY OF BROKEN BOW

PRIMARY RUNWAY: 17 / 35

APPROACH TYPE: VISUAL

BASED AIRCRAFT: 7

SERVICES: -



AIRPORT ROLE

The system plan included detailed analysis to establish a role for each airport. The analysis assigned the **Broken Bow Airport** to the Community role category. To determine the airport's role assignment, the following factors were considered:

- Total based aircraft, annual operations, and business jet activity
- Runway length, approach type, and air traffic control tower
- Airport reference code (ARC) and fuel type
- Community size and support, along with federal airport role
- Historic and projected rate of population and employment growth
- Business ready characteristics and annual economic impact

BROKEN BOW AIRPORT



COMMUNITY AIRPORT CHARACTERISTICS

MINIMUM RUNWAY LENGTH OBJECTIVE: 3,200 FEET

MARKETS SERVED: PREDOMINANTLY SERVE SMALL COMMUNITIES IN OKLAHOMA

AIRCRAFT SUPPORTED: SMALL TWIN AND SINGLE-ENGINE PLANES

SUITED FOR: TRAVEL TO LOCAL DESTINATIONS

PRIMARY RUNWAY: LIMITED RUNWAY SUPPORT

FACILITY/SERVICE OBJECTIVES: LIMITED IN SCOPE

AIRPORT REPORT CARD FOR BROKEN BOW AIRPORT

AIRPORT ROLE: COMMUNITY (HIGH ACTIVITY)		AIRPORT NAME: BROKEN BOW		CITY: BROKEN BOW		LOCID: 90F		
FACILITIES	OBJECTIVE	ACTUAL	MEETS OBJECTIVE	IMPROVEMENT NEEDED	ESTIMATED COST			
AIRSIDE FACILITIES								
Airport Reference Code	A-I or B-I Small	B-I	Yes	-				
Primary Runway Length	3,200 ft	3,200 ft	Yes	-				
Primary Runway Width	60 ft	50 ft	No	Widen Runway 10 ft	\$960,000			
Taxiway Type	Turnaround One RWY End	Turnaround One RWY End	Yes	-				
Runway Lighting	MIRL (if paved)	MIRL	Yes	-				
Taxiway Lighting	Not an Objective	None	Not an Objective	-				
Approach Type	Non-Precision	Visual	No	Establish Published Approach	\$150,000			
Approach Lighting System	Not an Objective	None	Not an Objective	-				
Rotating Beacon	Yes	Yes	Yes	-				
Segmented Circle	Yes	Yes	Yes	-				
Wind Cone	Yes	Yes	Yes	-				
Visual Guidance Slope Indicator	2 box PAPI on non-Precision approach end	Both Ends 2 Box PAPI	Yes	-				
Runway End Identifier Lights	Not an Objective	No REILs	Not an Objective	-				
Weather Reporting	Not an Objective	None	Not an Objective	-				
Primary RWY PCI	70	64	No	Improve Pavement Condition Index	*			
Weight Capacity	12,500 SW	17,000 SW	Yes	-				
Covered Storage	95% of Forecasted Based AC	100%	Yes	-				
Ramp Area	3,500 SY (5 spaces)	4,300 SY	Yes	-				
GENERAL AVIATION FACILITIES								
Terminal Building	500 sqft	875 sqft	Yes	-				
Restroom (24/7 or key code)	Yes	Yes	Yes	-				
Conference Area	Not an Objective	No	Not an Objective	-				
Pilot's Lounge	Not an Objective	Yes	Not an Objective	-				
Office Space for Airport Manager	Not an Objective	No	Not an Objective	-				
Public Waiting Area	Not an Objective	Yes	Not an Objective	-				
SERVICES								
Fuel	AvGas	No Fuel	No	Add AvGas	\$550,000			
Jet Fuel (24/7 trucking)	Not an Objective	No	Not an Objective	-				
Fixed-Base Operator	Not an Objective	No	Not an Objective	-				
Aircraft Maintenance	Not an Objective	No Maintenance	Not an Objective	-				
Ground Transportation	Not an Objective	No	Not an Objective	-				
Overnight Aircraft Storage	Not an Objective	0 spaces	Not an Objective	-				
GPU	Not an Objective	No	Not an Objective	-				
LAV Service Cart	Not an Objective	No	Not an Objective	-				
COMPLIANCE WITH FAA GUIDANCE								
RPZ Control	Airport Controls all RPZs	Partial Control	No	Secure Full Control of RWY End 17 / 35	*			
RSA Standards	Compliance with RSA Standards	120' x 240' beyond RWY end	Yes	-				
Runway/Taxiway Separation	225 ft	N/A	-	-				
Height Zoning	Jurisdiction with Height Zoning Ordinance	Broken Bow/McCurtain - Yes	Yes	-				
20:1 Surface Obstructions	20:1 Surface Clear of Obstructions	Obstruction on RWY Ends 17 / 35	No	Address Obstruction on RWY Ends 17 / 35	*			
					System Plan Project Cost Subtotal:	\$1,660,000		

*Costs are provided only if available from airport identified project list

FACILITY AND SERVICE OBJECTIVES

Airports in Oklahoma should ideally be equipped with facilities and services to fulfill their designated role in the state airport system. As part of the system plan a report card was developed for each airport. The report card compares current facilities and services to those for each airport's recommended role and any deficiencies are noted. Costs to address most noted deficiencies are also identified in the plan.

INVESTMENT TO SUPPORT AIRPORT IMPROVEMENT

Over the next 20 years, a total cost of **\$1.7 million** was identified to improve the **Broken Bow Airport**. These costs include those needed to address both system plan and airport identified projects.

On an average annual basis, it is estimated that at least **\$80,000** will be needed to improve and maintain the airport. According to an OAC study, the airport has **\$260,000 in annual economic impact**. This benefit should be considered to provide context for the airport's estimated annual financial need.

FINDINGS FOR BROKEN BOW AIRPORT

Ideally, all airports should be improved to meet their system plan identified projects. Prior to implementation, some projects will require demand justification, master planning, environmental analysis, and engineering/permitting. Some airports may have constraints that preclude them from developing all system plan identified projects.

A snapshot of some of the more notable projects identified for **Broken Bow Airport** follows. Appendix C of the System Plan's Technical Report contains a complete listing of airport and system plan identified projects for the airport.

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PROJECTS FOR CONSIDERATION

- WIDEN RUNWAY
- ESTABLISH PUBLISHED APPROACH
- REHABILITATE RUNWAY
- OBTAIN AVGAS FUEL