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

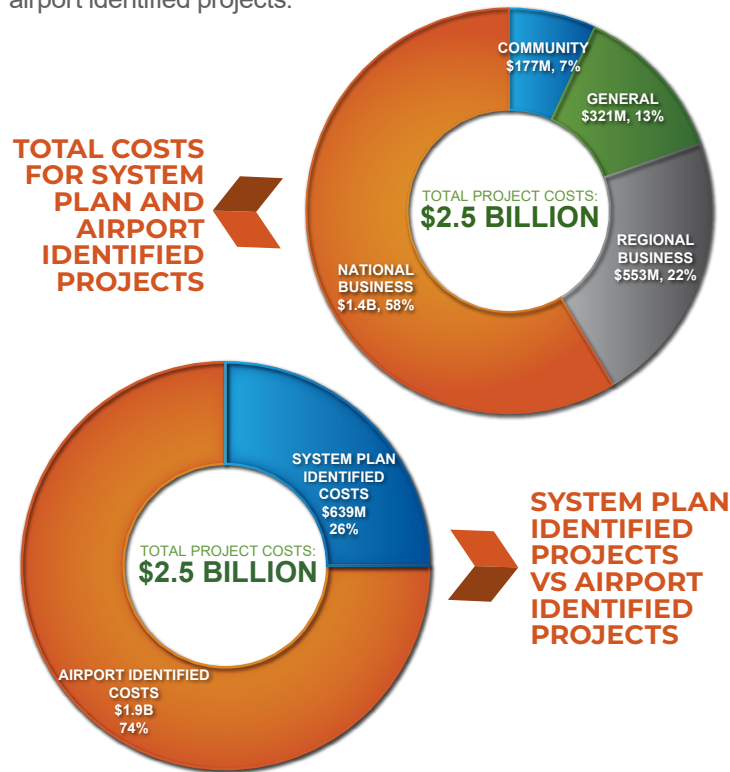OKLAHOMA Aeronautics | OKLAHOMA AIRPORT SYSTEM PLAN
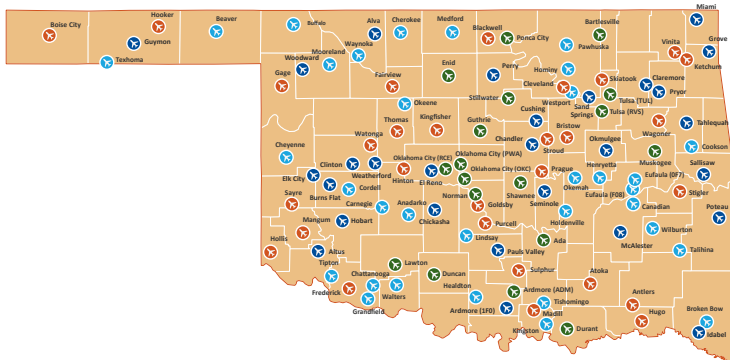
CONCLUSIONS

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.

TOTAL COSTS FOR SYSTEM PLAN AND AIRPORT IDENTIFIED PROJECTS

COMMUNITY $177M, 7%
GENERAL $321M, 13%
REGIONAL BUSINESS $553M, 22%
NATIONAL BUSINESS $1.4B, 58%
TOTAL PROJECT COSTS: **$2.5 BILLION**

SYSTEM PLAN IDENTIFIED PROJECTS VS AIRPORT IDENTIFIED PROJECTS

SYSTEM PLAN IDENTIFIED COSTS $639M 26%
AIRPORT IDENTIFIED COSTS $1.9B 74%
TOTAL PROJECT COSTS: **$2.5 BILLION**

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.

OKLAHOMA
2021 AIRPORT SYSTEM PLAN

OKLAHOMA
AIRPORT SYSTEM PLAN

ALTUS/QUARTZ MOUNTAIN REGIONAL AIRPORT
ATLUS, 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 **Altus/Quartz Mountain Regional Airport**.

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

- COMMERCIAL SERVICE AIRPORTS
- GENERAL AVIATION AIRPORTS
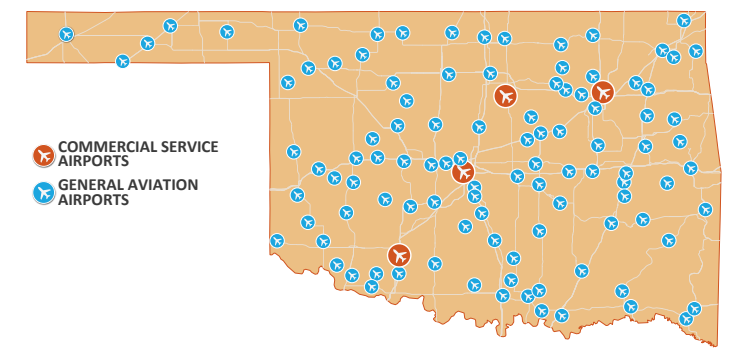
SYSTEM CHARACTERISTICS

- **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 **ALTUS/ QUARTZ MOUNTAIN REGIONAL AIRPORT** are discussed in this report.
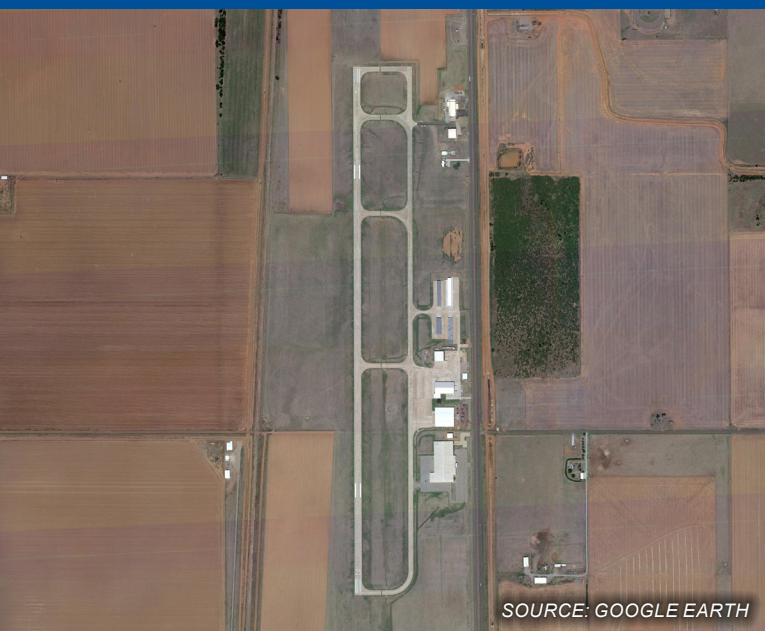
SOURCE: GOOGLE EARTH

ALTUS/QUARTZ MOUNTAIN REGIONAL AIRPORT (AXS)

ATLUS, OKLAHOMA

KEY AIRPORT CHARACTERISTICS

FAA/NPIAS ROLE: LOCAL

STATE ROLE: REGIONAL BUSINESS

OWNER: CITY OF ALTUS

PRIMARY RUNWAY: 17 / 35

APPROACH TYPE: PRECISION-LIKE

BASED AIRCRAFT: 33

SERVICES: FBO, AVGAS / JET A FUEL, AIRCRAFT MAINTENANCE

AIRPORT ROLE

The system plan included detailed analysis to establish a role for each airport. The analysis assigned the **Altus/Quartz Mountain Regional Airport** to the Regional Business 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**

ALTUS/QUARTZ MOUNTAIN REGIONAL AIRPORT

REGIONAL BUSINESS AIRPORT CHARACTERISTICS

MINIMUM RUNWAY LENGTH OBJECTIVE: 5,000 FEET

MARKETS SERVED: PREDOMINANTLY SERVE MID-SIZED COMMUNITIES IN OKLAHOMA

AIRCRAFT SUPPORTED: MEDIUM BUSINESS JETS

SUITED FOR: TRAVEL TO MID-SIZE DOMESTIC DESTINATIONS

PRIMARY RUNWAY: FULL PARALLEL TAXIWAY AND PRECISION-LIKE APPROACH

FACILITY/SERVICE OBJECTIVES: A PUBLIC TERMINAL, JET A FUEL, AND FBO

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 **$13.2 million** was identified to improve the **Altus/Quartz Mountain Regional 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 **$660,000** will be needed to improve and maintain the airport. According to an OAC study, the airport has **$11.9 million in annual economic impact**. This benefit should be considered to provide context for the airport's estimated annual financial need.

FINDINGS FOR ALTUS/QUARTZ MOUNTAIN REGIONAL 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 **Altus/Quartz Mountain Regional 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.

AIRPORT REPORT CARD FOR ALTUS/QUARTZ MOUNTAIN REGIONAL AIRPORT

AIRPORT ROLE: REGIONAL BUSINESS		AIRPORT NAME: ALTUS/QUARTZ MOUNTAIN REGIONAL		CITY: ATLUS	LOCID: AXS
FACILITIES	OBJECTIVE	ACTUAL	MEETS OBJECTIVE	IMPROVEMENT NEEDED	ESTIMATED COST
AIRSIDE FACILITIES					
Airport Reference Code	B-II	D-II	Yes	-	
Primary Runway Length	5,000 ft	5,501 ft	Yes	-	
Primary Runway Width	75 ft	75 ft	Yes	-	
Taxiway Type	Full Parallel	Full Parallel	Yes	-	
Runway Lighting	MIRL	MIRL	Yes	-	
Taxiway Lighting	MITL	MITL	Yes	-	
Approach Type	LPV	LPV	Yes	-	
Approach Lighting System	One RWY End	One RWY End	Yes	-	
Rotating Beacon	Yes	Yes	Yes	-	
Segmented Circle	Yes	Yes	Yes	-	
Wind Cone	Yes	Yes	Yes	-	
Visual Guidance Slope Indicator	Both RWY Ends 4 Box	Both Ends 4 Box PAPI	Yes	-	
Runway End Identifier Lights	On RWY end with Approach	Recip End REILs	No	-	
Weather Reporting	AWOS or ASOS	AWOS IIIP/T	Yes	-	
Primary RWY PCI	70	84	Yes	-	
Weight Capacity	20,000 SW or 50,000 DW	30,000 SW / 48,000 DW	Yes	-	
Covered Storage	100% of Forecasted Based AC	100%	Yes	-	
Ramp Area	16,000 SY (10 spaces - large aircraft)	23,000 SY	Yes	-	
GENERAL AVIATION FACILITIES					
Terminal Building	2,500 ft	3,500 sqft	Yes	-	
Restroom (24/7 or key code)	Yes	No	No	Add Restroom or Add 24/7 access/Key Code	$90,000
Conference Area	Yes	Yes	Yes	-	
Pilot's Lounge	Yes	Yes	Yes	-	
Office Space for Airport Manager	Yes	Yes	Yes	-	
Public Waiting Area	Yes	Yes	Yes	-	
SERVICES					
Fuel	AvGas and Jet A	AvGas / Jet A	Yes	-	
Jet Fuel (24/7 trucking)	Not an Objective	Yes	Not an Objective	-	
Fixed-Base Operator	Yes	Yes	Yes	-	
Aircraft Maintenance	Yes	Major/ Full Service Maintenance	Yes	-	
Ground Transportation	Yes	Yes	Yes	-	
Overnight Aircraft Storage	1 jet	12 spaces	Yes	-	
GPU	Not an Objective	Yes	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	$1,180,000
RSA Standards	Compliance with RSA Standards	500' x 1,000' beyond RW end	No	Clear Obstruction on RWY 35 end	*
Runway/Taxiway Separation	300 ft	550 ft	Yes	-	
Height Zoning	Jurisdiction with Height Zoning Ordiance	Altus/Jackson - Yes	Yes	-	
20:1 Surface Obstructions	20:1 Surface Clear of Obstructions	No Obstruction	Yes	-	
*Costs are provided only if available from airport identified project list ** Airport identified project and cost substituted for OASP project				**System Plan Project Cost Subtotal:**	**$1,270,000**

AXS PROJECTS FOR CONSIDERATION

- **SECURE FULL CONTROL OF RPZ**
- **CONSTRUCT CORPORATE HANGARS**
- **EXTEND AND WIDEN RUNWAY***
- **EXTEND AIRPORT ENTRANCE ROAD***

Indicates airport identified project