

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.

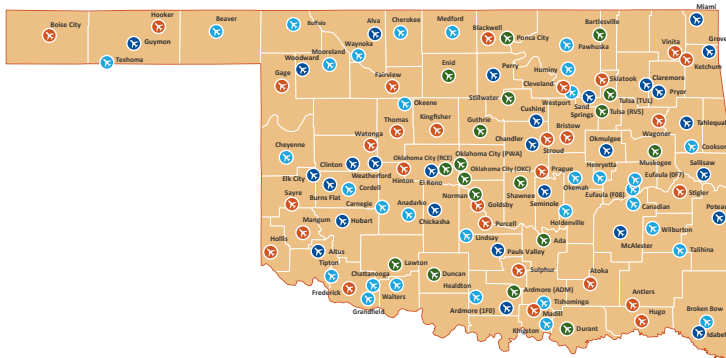
OKLAHOMA SYSTEM PERFORMANCE MEASURES	A SYSTEM THAT IS SAFE
	A SYSTEM THAT IS EFFICIENT
	A SYSTEM THAT IS ACCESSIBLE
	A SYSTEM THAT SUPPORTS THE ECONOMY
	A SYSTEM THAT MEETS USER NEEDS

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



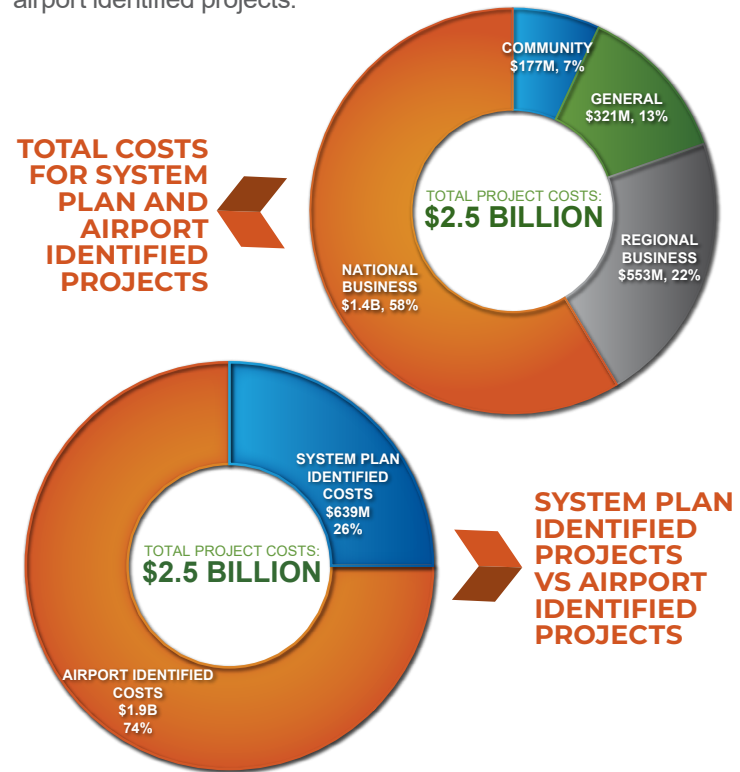
CONCLUSIONS

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

Oklahoma Aeronautics Commission
 110 N Robinson Ave. Suite 200 | Oklahoma City, OK 73102
 405.604.6900 | oac.ok.gov



OKLAHOMA AIRPORT SYSTEM PLAN

TULSA RIVERSIDE AIRPORT TULSA, OKLAHOMA



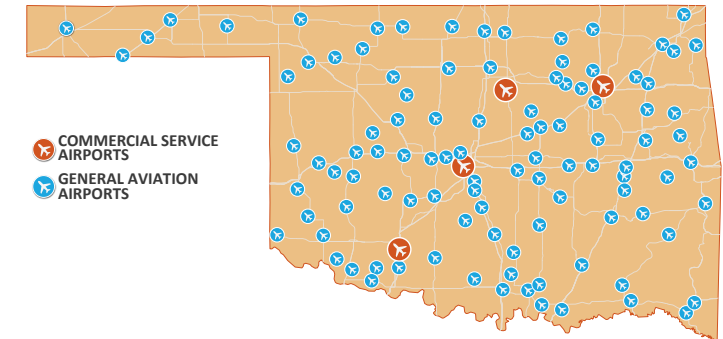
In late 2020, the Oklahoma Aeronautics Commission (OAC) undertook a comprehensive update to its State Airport System Plan. The plan was completed in 2022. This report summarizes major statewide findings, but it focuses primarily on the findings and recommendations from the plan for **Tulsa Riverside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

PREPARED BY
JVIATION
 A WOOLPERT COMPANY

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.



OKLAHOMA AIRPORT SYSTEM PLAN



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 **TULSA RIVERSIDE AIRPORT** are discussed in this report.



SOURCE: GOOGLE EARTH

TULSA RIVERSIDE AIRPORT (RVS)

TULSA, OKLAHOMA

KEY AIRPORT CHARACTERISTICS

- FAA/NPIAS ROLE: NATIONAL
- STATE ROLE: NATIONAL BUSINESS
- OWNER: CITY OF TULSA
- PRIMARY RUNWAY: 01L / 19R
- APPROACH TYPE: PRECISION
- BASED AIRCRAFT: 293
- 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 **Tulsa Riverside Airport** to the National 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

TULSA RIVERSIDE AIRPORT



NATIONAL BUSINESS AIRPORT CHARACTERISTICS

- MINIMUM RUNWAY LENGTH OBJECTIVE:** 6,000 FEET
- MARKETS SERVED:** PREDOMINANTLY SERVE LARGE COMMUNITIES IN OKLAHOMA
- AIRCRAFT SUPPORTED:** LARGE BUSINESS JETS
- SUITED FOR:** TRAVEL TO DOMESTIC AND INTERNATIONAL DESTINATIONS
- PRIMARY RUNWAY:** SERVED BY A FULL PARALLEL TAXIWAY, PRECISION APPROACH, AND APPROACH LIGHTING
- FACILITY/SERVICE OBJECTIVES:** A PUBLIC TERMINAL, JET A FUEL, AND FBO

AIRPORT REPORT CARD FOR TULSA RIVERSIDE AIRPORT

AIRPORT ROLE: NATIONAL BUSINESS		AIRPORT NAME: TULSA RIVERSIDE		CITY: TULSA		LOCID: RVS		
FACILITIES	OBJECTIVE	ACTUAL	MEETS OBJECTIVE	IMPROVEMENT NEEDED	ESTIMATED COST			
AIRSIDE FACILITIES								
Airport Reference Code	C or D	B-II	No	Meet C or D ARC Standards				
Primary Runway Length	6,000 ft	5,102 ft	No	Lengthen Runway 898 ft	\$3,592,000			
Primary Runway Width	100 ft	100 ft	Yes					
Taxiway Type	Full Parallel	Full Parallel	Yes					
Runway Lighting	MIRL	HIRL	Yes					
Taxiway Lighting	MITL	MITL	Yes					
Approach Type	ILS or LPV	ILS	Yes					
Approach Lighting System	Both RWY Ends	None	No	Install Approach Lighting on Both RWY Ends	\$1,840,000			
Rotating Beacon	Yes	Yes	Yes					
Segmented Circle	Yes	Yes	Yes					
Wind Cone	Yes	Yes	Yes					
Visual Guidance Slope Indicator	Both Ends 4 Box	Both Ends 4 Box PAPI	Yes					
Runway End Identifier Lights	Both RWY Ends	Both Ends REILs	Yes					
Weather Reporting	AWOS or ASOS	ASOS	Yes					
Primary RWY PCI	70	75	Yes					
Weight Capacity	20,000 SW and 75,000 DW	61,000 SW / 87,000 DW	Yes					
Covered Storage	100% of Forecasted Based AC	72%	No	96 spaces	\$5,760,000			
Ramp Area	25,000 SY (15 spaces - large aircraft)	100,000+ SY	Yes					
GENERAL AVIATION FACILITIES								
Terminal Building	2,500 sqft	11,000 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)	24/7 trucking	Yes	Yes					
Fixed-Base Operator	Yes	Yes	Yes					
Aircraft Maintenance	Full Service (Major)	Major / Full Service Maintenance	Yes					
Ground Transportation	Yes	Yes	Yes					
Overnight Aircraft Storage	2 jets	15 spaces	Yes					
GPU	Yes	Yes	Yes					
LAV Service Cart	Yes	Yes	Yes					
COMPLIANCE WITH FAA GUIDANCE								
RPZ Control	Airport Controls all RPZs	Full Control	Yes					
RSA Standards	Compliance with RSA Standards	150' x 300' beyond RWY end	Yes					
Runway/Taxiway Separation	240 ft	420 ft	Yes					
Height Zoning	Jurisdiction with Height Zoning Ordinance	Tulsa/Tulsa - Yes	Yes					
20:1 Surface Obstructions	20:1 Surface Clear of Obstructions	No Obstruction	Yes					
*Costs are provided only if available from airport identified projects list					System Plan Project Cost Subtotal:	\$11,282,000		

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 **\$42.1 million** was identified to improve the **Tulsa Riverside 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 **\$2.1 million** will be needed to improve and maintain the airport. According to an OAC study, the airport has **\$94.9 million in annual economic impact**. This benefit should be considered to provide context for the airport's estimated annual financial need.

FINDINGS FOR TULSA RIVERSIDE 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 **Tulsa Riverside 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.

	EXTEND RUNWAY
	CONSTRUCT ADDITIONAL HANGARS
	REPLACE & UPDATE VARIOUS SIGNAGE*
	RELOCATE MAINTENANCE FACILITY*
	CONDUCT MASTER PLAN UPDATE*

*Indicates airport identified project