



2036
ARKANSAS
STATEWIDE AIRPORT
SYSTEM PLAN UPDATE



EXECUTIVE SUMMARY



PLAN OVERVIEW

An effective and efficient transportation system is essential to Arkansas' ability to grow and prosper. Airports and aviation are cornerstones of a first-class transportation system. Within Arkansas, the Arkansas Department of Aeronautics (ADA) is charged with ensuring that the state's system of public commercial and general aviation airports meets the needs of Arkansas' residents, businesses, and visitors.

To help ensure that Arkansas' airport system meets current and future transportation needs while also supporting the state's economy, ADA undertook an update to the Arkansas State Airport System Plan (ASASP). The ASASP helps ADA determine the extent, location, and timing of airport facilities, improvements, and maintenance needed over the next 20 years, with the primary focus being on Arkansas' general aviation airports. The ASASP update was funded by a combination of ADA funding and a grant from the Federal Aviation Administration (FAA).

This report provides a summary of a much larger technical report that was prepared to document the ASASP update.



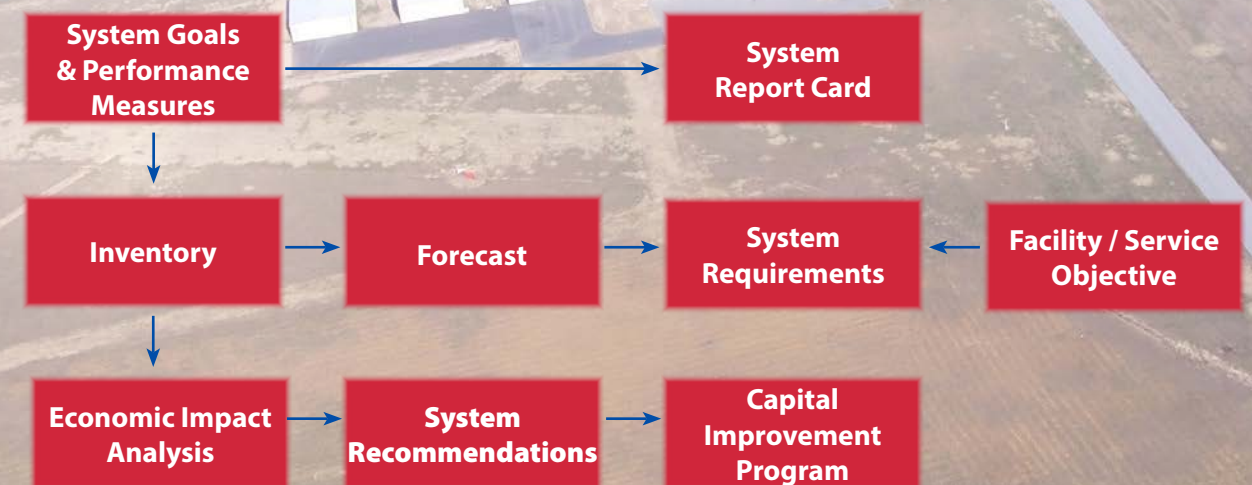
STUDY PROCESS

An essential underpinning of the system plan was the establishment of goals for the Arkansas system of airports. Goals for the Arkansas airport system were then translated into performance measures. Performance measures provide the foundation for evaluating the airport system. In this study, the system evaluation provides a "report card" for the airport system. This report card identifies the system's adequacies and deficiencies.

Within this plan, the system report card was prepared using a series of benchmarks associated with each of the performance measures. The benchmarks are the actual tests or yardsticks used to evaluate how the system is currently performing.

The study's report card enables the ADA to capture current system performance and to set targets for how the system should perform in the future. The ASASP provides the ADA with a powerful and sustainable tool that can be used to track system performance changes over time. The plan also helps the ADA demonstrate how their actions and investments change system performance. The plan enables the ADA to enhance its accountability for airport investment decisions.

The accompanying chart depicts the process that was followed to update the Arkansas State Airport System Plan.



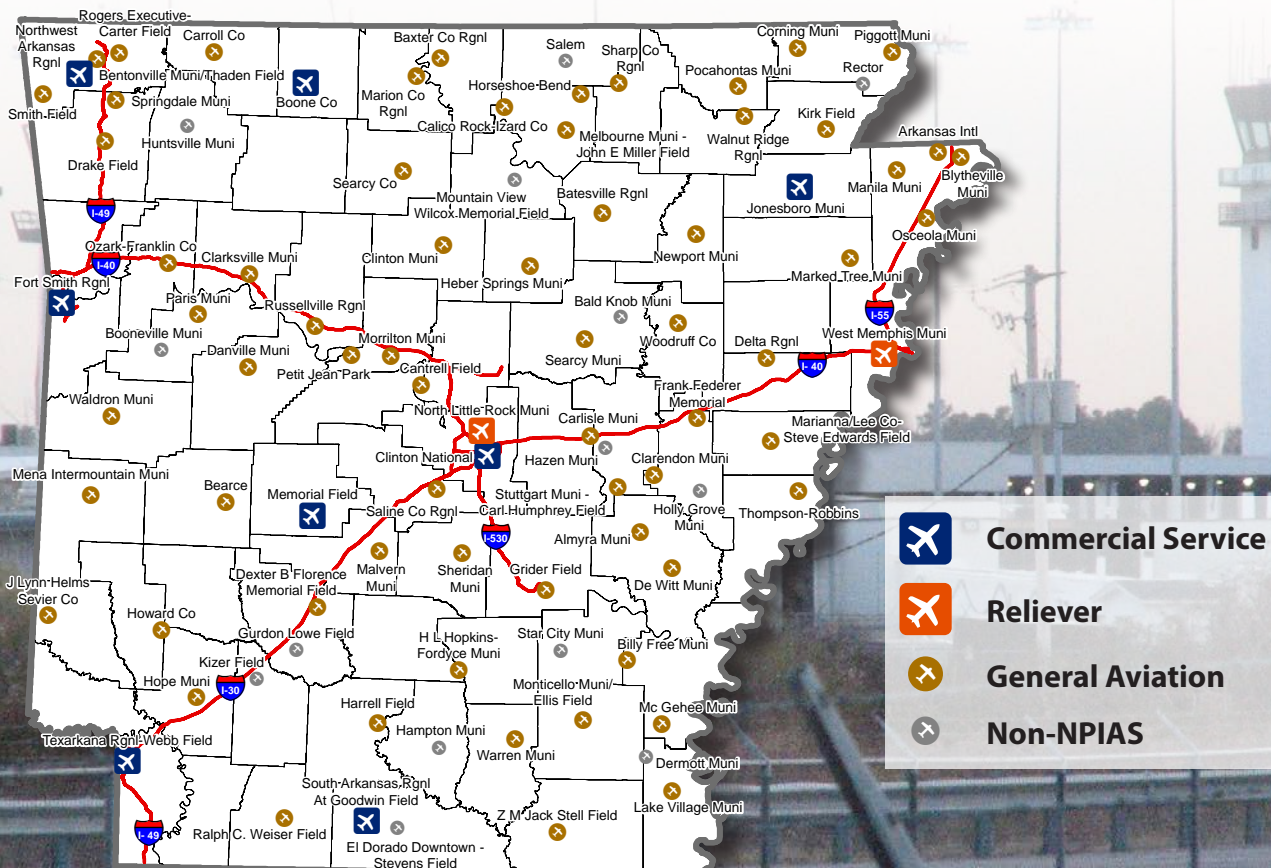
AIRPORT SYSTEM

The Arkansas airport system has 90 airports, which includes eight airports with scheduled commercial airline service and 82 general aviation airports. In 2016, Arkansas' public commercial and general aviation airports accommodated just under 3,000 based aircraft in Arkansas and almost 1.7 million total annual aircraft operations (takeoffs and landings).

The state's commercial service airports connect Arkansas residents and visitors to destinations throughout the nation and the world. In 2016, commercial airports in Arkansas served 1.8 million passenger enplanements.

The Arkansas airport system also serves operations associated with cargo and express carriers, military activity, and various types of general aviation activity. General aviation activity ranges from sophisticated business jets flying non-stop from Arkansas to Europe to single-engine aircraft being used for agricultural applications or recreation.

All 90 Arkansas system airports have public owners or sponsors, and all are open to the public. However, only those airports included in the National Plan of Integrated Airport Systems (NPIAS) are eligible for FAA funding. Presently, 76 of the state's 90 system airports are included in the NPIAS.



ECONOMIC IMPACT OF THE ARKANSAS AIRPORT SYSTEM

As a companion to the ASASP update, analysis was undertaken to measure the economic impact of Arkansas' system of 90 public-use airports, which generates billions of dollars of economic activity, creates thousands of quality jobs, and enhances the health, welfare, and safety of the state.

The economic impact of Arkansas' airport system was estimated using an FAA-approved methodology. An extensive data collection effort allowed for the estimation of direct impacts related to on-airport activities, as well as those related to money spent by visitors arriving in Arkansas via air travel. The circulation of direct impacts in the state's economy via activities such as airport employees purchasing groceries and other goods results in multiplier impacts. These multiplier impacts are estimated through the use of a linear input-output economic model that uses Arkansas-specific inputs. Total economic impacts are the sum of direct and multiplier impacts.

Arkansas' eight commercial service airports are massive economic engines for the state, being both large employment and economic centers, as well as gateways through which economic activity enters the state.

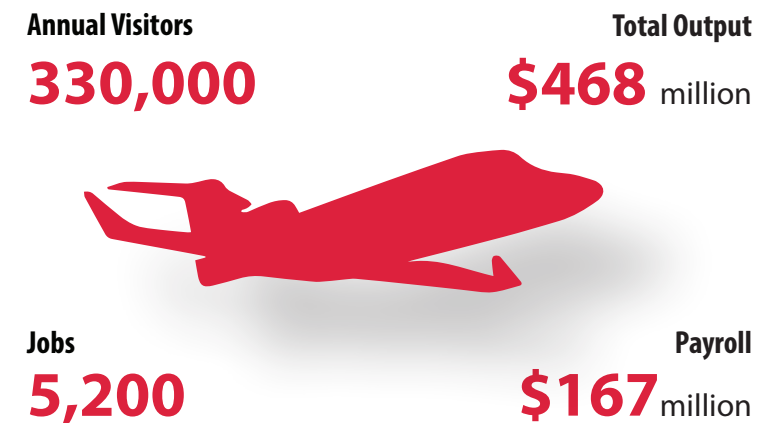
Approximately 80 percent of all annual aircraft operations in the state are attributable to general aviation airports. Arkansas' general aviation airports support a wide variety of functions including corporate travel, pilot training, agricultural spraying, and police and fire protection.

The total economic impact, shown below, comprises nearly 3 percent of Arkansas' gross state product (GSP). Beyond quantifiable dollar amounts, the airports in Arkansas serve as vital business links and support quality of life through medical care, law enforcement, recreation, and the environment.

Arkansas Commercial Airports



Arkansas General Aviation Airports



ECONOMIC IMPACT OF AIRPORTS IN ARKANSAS

City	Airport Name	Jobs	Payroll	Output
Commercial Airports				
El Dorado	South Arkansas Regional at Goodwin Field	89	\$7,190,000	\$20,135,000
Bentonville	Northwest Arkansas Regional	5,807	\$163,380,000	\$463,345,000
Fort Smith	Fort Smith Regional	1,699	\$61,979,000	\$123,491,000
Harrison	Boone County	77	\$2,361,000	\$9,992,000
Hot Springs	Memorial Field	777	\$19,826,000	\$67,770,000
Jonesboro	Jonesboro Municipal	185	\$6,415,000	\$20,698,000
Little Rock	Clinton National	16,778	\$630,170,000	\$1,687,722,000
Texarkana	Texarkana Regional-Webb Field	495	\$15,369,000	\$38,823,000
Commercial Airports Total		25,907	\$906,690,000	\$2,431,976,000

General Aviation Airports				
Almyra	Almyra Municipal	44	\$1,170,000	\$2,134,000
Arkadelphia	Dexter B Florence Memorial Field	82	\$2,241,000	\$5,736,000
Ash Flat	Sharp County Regional	10	\$182,000	\$1,305,000
Augusta	Woodruff County	4	\$93,000	\$461,000
Bald Knob	Bald Knob Municipal	17	\$349,000	\$1,727,000
Batesville	Batesville Regional	113	\$3,863,000	\$12,716,000
Benton	Saline County Regional	135	\$3,476,000	\$9,430,000
Bentonville	Bentonville Municipal/Louise M Thaden Field	94	\$2,100,000	\$5,945,000
Berryville	Carroll County	18	\$375,000	\$1,483,000
Blytheville	Arkansas International	238	\$4,970,000	\$16,291,000
Blytheville	Blytheville Municipal	40	\$1,098,000	\$2,797,000
Booneville	Booneville Municipal	5	\$128,000	\$398,000
Brinkley	Frank Federer Memorial	71	\$2,006,000	\$7,675,000
Calico Rock	Calico Rock-Izard County	1	\$33,000	\$187,000
Camden	Harrell Field	27	\$641,000	\$1,647,000
Carlisle	Carlisle Municipal	49	\$1,252,000	\$3,473,000
Clarendon	Clarendon Municipal	5	\$114,000	\$439,000
Clarksville	Clarksville Municipal	10	\$285,000	\$955,000
Clinton	Clinton Municipal	92	\$2,601,000	\$6,156,000
Colt	Delta Regional	29	\$759,000	\$4,615,000
Conway	Cantrell Field	90	\$2,678,000	\$10,301,000
Corning	Corning Municipal	50	\$1,600,000	\$5,986,000
Crossett	Z M Jack Stell Field	16	\$413,000	\$1,310,000
Danville	Danville Municipal	4	\$77,000	\$551,000
De Queen	J Lynn Helms Sevier County	9	\$179,000	\$915,000
De Witt	De Witt Municipal	46	\$1,235,000	\$5,893,000
Dermott	Dermott Municipal	1	\$46,000	\$96,000
Dumas	Billy Free Municipal	21	\$493,000	\$1,673,000
El Dorado	El Dorado Downtown Airport - Stevens Field	21	\$535,000	\$1,326,000
Fayetteville	Drake Field	219	\$7,331,000	\$18,074,000
Flippin	Marion County Regional	57	\$1,802,000	\$4,094,000
Fordyce	H L Hopkins-Fordyce Municipal	1	\$46,000	\$40,000
Gurdon	Gurdon Lowe Field	<1	\$3,000	\$10,000
Hampton	Hampton Municipal	1	\$38,000	\$0
Hazen	Hazen Municipal	26	\$830,000	\$4,338,000
Heber Springs	Heber Springs Municipal	32	\$732,000	\$3,091,000
Helena	Thompson-Robbins	37	\$928,000	\$3,619,000

ECONOMIC IMPACT OF AIRPORTS IN ARKANSAS

City	Airport Name	Jobs	Payroll	Output
General Aviation Airports				
Holly Grove	Holly Grove Municipal	25	\$775,000	\$3,712,000
Hope	Hope Municipal	23	\$510,000	\$1,688,000
Horseshoe Bend	Horseshoe Bend	11	\$283,000	\$810,000
Huntsville	Huntsville Municipal	9	\$120,000	\$354,000
Lake Village	Lake Village Municipal	129	\$8,100,000	\$9,680,000
Magnolia	Ralph C. Weiser Field	19	\$752,000	\$2,515,000
Malvern	Malvern Municipal	48	\$1,578,000	\$5,133,000
Manila	Manila Municipal	9	\$222,000	\$1,011,000
Marianna	Marianna/Lee County-Steve Edwards Field	70	\$2,288,000	\$7,430,000
Marked Tree	Marked Tree Municipal	10	\$252,000	\$642,000
Marshall	Searcy County	3	\$68,000	\$423,000
Mc Gehee	Mc Gehee Municipal	15	\$378,000	\$1,028,000
Melbourne	Melbourne Municipal - John E Miller Field	47	\$1,102,000	\$3,290,000
Mena	Mena Intermountain Municipal	739	\$14,739,000	\$47,905,000
Monticello	Monticello Municipal/Ellis Field	41	\$1,125,000	\$3,314,000
Morrilton	Morrilton Municipal	13	\$321,000	\$925,000
Morrilton	Petit Jean Park	2	\$5,000	\$12,000
Mount Ida	Bearce	13	\$219,000	\$1,211,000
Mountain Home	Baxter County Regional	60	\$1,540,000	\$5,355,000
Mountain View	Mountain View Wilcox Memorial Field	18	\$381,000	\$1,194,000
Nashville	Howard County	8	\$176,000	\$574,000
Newport	Newport Municipal	27	\$656,000	\$1,679,000
North Little Rock	North Little Rock Municipal	152	\$6,156,000	\$15,632,000
Osceola	Osceola Municipal	6	\$141,000	\$609,000
Ozark	Ozark-Franklin County	21	\$439,000	\$2,433,000
Paragould	Kirk Field	25	\$555,000	\$1,610,000
Paris /Subiaco	Paris Municipal	23	\$1,055,000	\$3,985,000
Piggott	Piggott Municipal	6	\$124,000	\$457,000
Pine Bluff	Grider Field	89	\$2,997,000	\$10,515,000
Pocahontas	Pocahontas Municipal	43	\$900,000	\$3,013,000
Prescott	Kizer Field	2	\$54,000	\$170,000
Rector	Rector	8	\$250,000	\$555,000
Rogers	Rogers Executive Airport - Carter Field	646	\$40,198,000	\$88,423,000
Russellville	Russellville Regional	41	\$1,171,000	\$3,690,000
Salem	Salem	<1	\$5,000	\$10,000
Searcy	Searcy Municipal	108	\$2,934,000	\$8,139,000
Sheridan	Sheridan Municipal	22	\$420,000	\$1,352,000
Siloam Springs	Smith Field	81	\$2,978,000	\$9,116,000
Springdale	Springdale Municipal	243	\$6,735,000	\$18,579,000
Star City	Star City Municipal	1	\$38,000	\$2,000
Stuttgart	Stuttgart Municipal - Carl Humphrey Field	232	\$8,054,000	\$19,563,000
Waldron	Waldron Municipal	2	\$17,000	\$98,000
Walnut Ridge	Walnut Ridge Regional	92	\$2,215,000	\$7,907,000
Warren	Warren Municipal	3	\$40,000	\$239,000
West Memphis	West Memphis Municipal	266	\$7,620,000	\$24,699,000
General Aviation Airports Total		5,166	\$167,388,000	\$467,568,000
Little Rock Air Force Base		11,384	\$397,827,000	\$664,906,000
Total		42,457	\$1,471,905,000	\$3,564,450,000

ECONOMIC IMPACT - LITTLE ROCK AIR FORCE BASE

In addition to the commercial and general aviation airports included in the system plan update, Arkansas is home to a major military facility – Little Rock Air Force Base. According to information supplied by the Little Rock Air Force Base, the installation generates millions of dollars in economic activity and supports thousands of jobs. An economic impact study for Little Rock Air Force Base indicates the following contributions to the Arkansas economy:



EMPLOYMENT

11,384



PAYROLL

\$397,827,000



OUTPUT

\$664,906,000



BUSINESS BENEFITS FROM AVIATION

Businesses throughout Arkansas depend on commercial and general aviation airports to transport employees and goods safely and efficiently. Approximately 2,500 Arkansas businesses were surveyed to measure their dependence upon aviation. Location near commercial service and general aviation airports ranked 6th and 10th respectively out of all categories for consideration when relocating or expanding a business.

Access to airports provides companies with numerous benefits, with a summarization of responses outlining the value as follows:

62%

indicate their employees use commercial airline service.

48%

indicate they have clients/vendors who use commercial airlines to visit them in Arkansas.

18%

lease, charter, own, or have fractional ownership of a general aviation aircraft.

20%

indicate their clients/vendors use general aviation aircraft to visit them in Arkansas.

45%

indicate they use air cargo/package express on a regular basis.

Clearly, aviation and airports are important contributors to Arkansas' economy and to business growth and diversity throughout the state.

SYSTEM PLAN GOALS

The mission of the ASASP is to create a safer, more desirable atmosphere for the pilot, and at the same time, create and improve airports to better serve Arkansas communities and businesses. That was a guiding factor in developing the framework for this system plan, along with several other factors. Considering federal and state needs, input from the prior Arkansas system plan, and input from the ADA, six goals were identified and adopted for use in the ASASP.

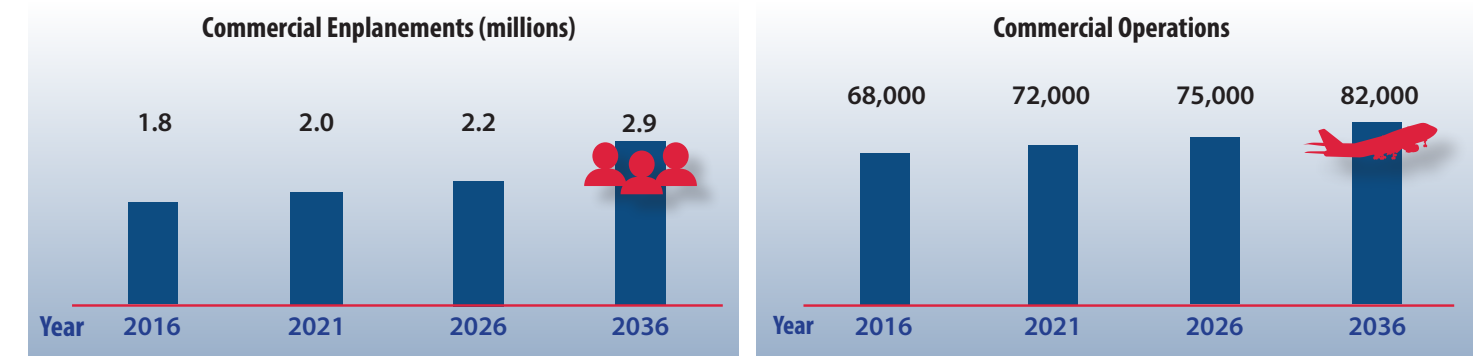
- **Provide an airport system that is accessible from both the ground and the air**
- **Provide airside facility support to meet the needs of the state and its airport customers**
- **Provide NAVAID support to meet the safety needs of the state and its airport customers**
- **Promote an airport system that supports the NPIAS and the National Air Transportation System**
- **Promote an airport system that supports Arkansas' economy and transportation infrastructure**
- **Promote an airport system that is safe and secure**



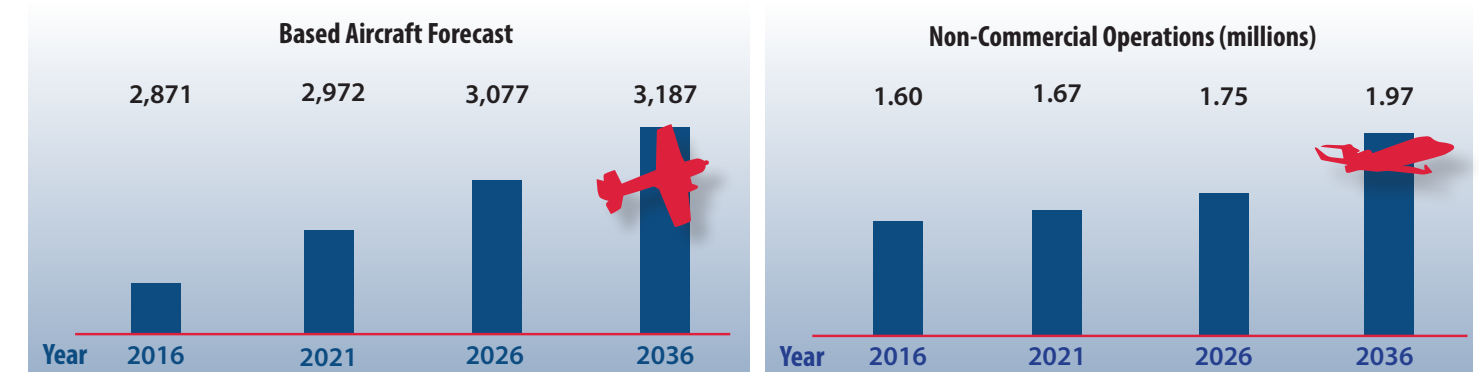
FORECAST

Forecasts for the Arkansas State Aviation System Plan were developed for near-term (2021), mid-term (2026), and long-term (2036) timeframes. Historic and current aviation trends, socioeconomic trends, and industry trends were all considered in the development of the forecasts. Identifying specific areas of the system that are predicted to grow is critical for future planning efforts as well as the overall success of the system.

Commercial service forecasts illustrate the projected growth in enplanements and commercial aircraft operations. Forecasts results show an increase of over 1 million enplanements by 2036, with significant increases at the larger airports in Arkansas such as Northwest Arkansas Regional Airport and Bill and Hillary Clinton National Airport. Operations are also expected to grow, with more than 15,000 additional operations throughout the state.



General aviation forecasts analyze based aircraft, fleet mix, and operations. Over 300 additional aircraft are projected to be based at Arkansas airports by 2036, indicating steady growth in the general aviation sector. Other major growth indicators include operations per based aircraft and hours flown, with both categories projected to see significant increases.



SYSTEM LEVELS

Planning for the future of the Arkansas airport system requires an understanding of current conditions at the 90 study airports. To facilitate planning efforts, each airport is assigned to one of five system levels.

The airport system levels are used to evaluate the performance of individual airports in terms of how they contribute to the system and assess what facility and service improvements would enhance overall system performance. This is accomplished by setting goals for each airport level. The full set of study objectives by airport level is displayed on pages 17 and 18.

ARKANSAS AIRPORT LEVELS



Level 5 airports are equipped to serve all business/corporate jets and some should also be able to accommodate scheduled airline and air cargo activity.

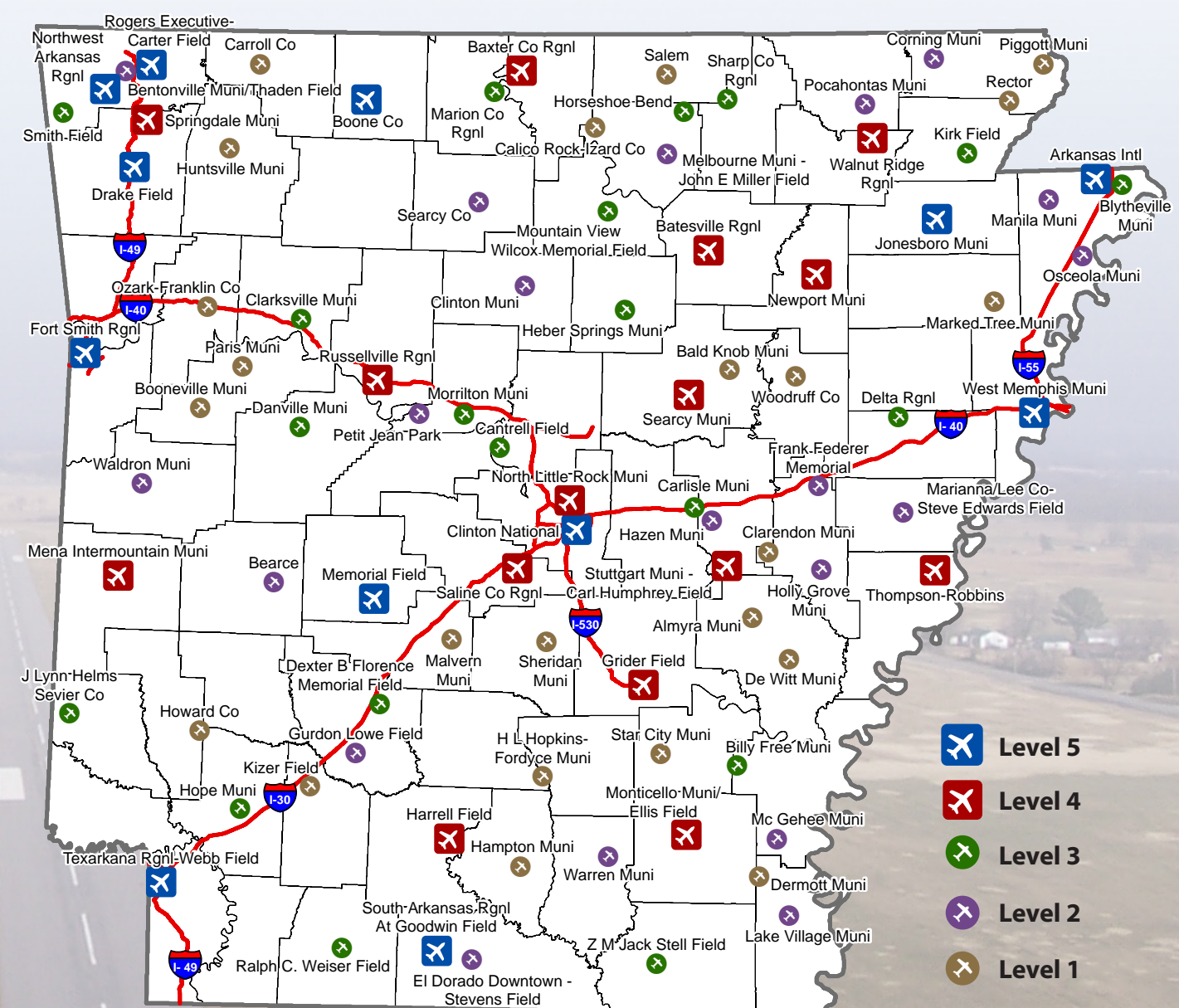
Level 4 airports have facilities and services that serve a notable percentage of aircraft in the business/corporate jet fleet. They primarily serve general aviation needs, but some may also serve other types of demand.

Level 3 airports serve most large twin-engine and all single-engine general aviation aircraft. Occasionally, these airports may also be used by some small general aviation business jets.

Level 2 airports serve smaller twin-engine and all single-engine general aviation aircraft.

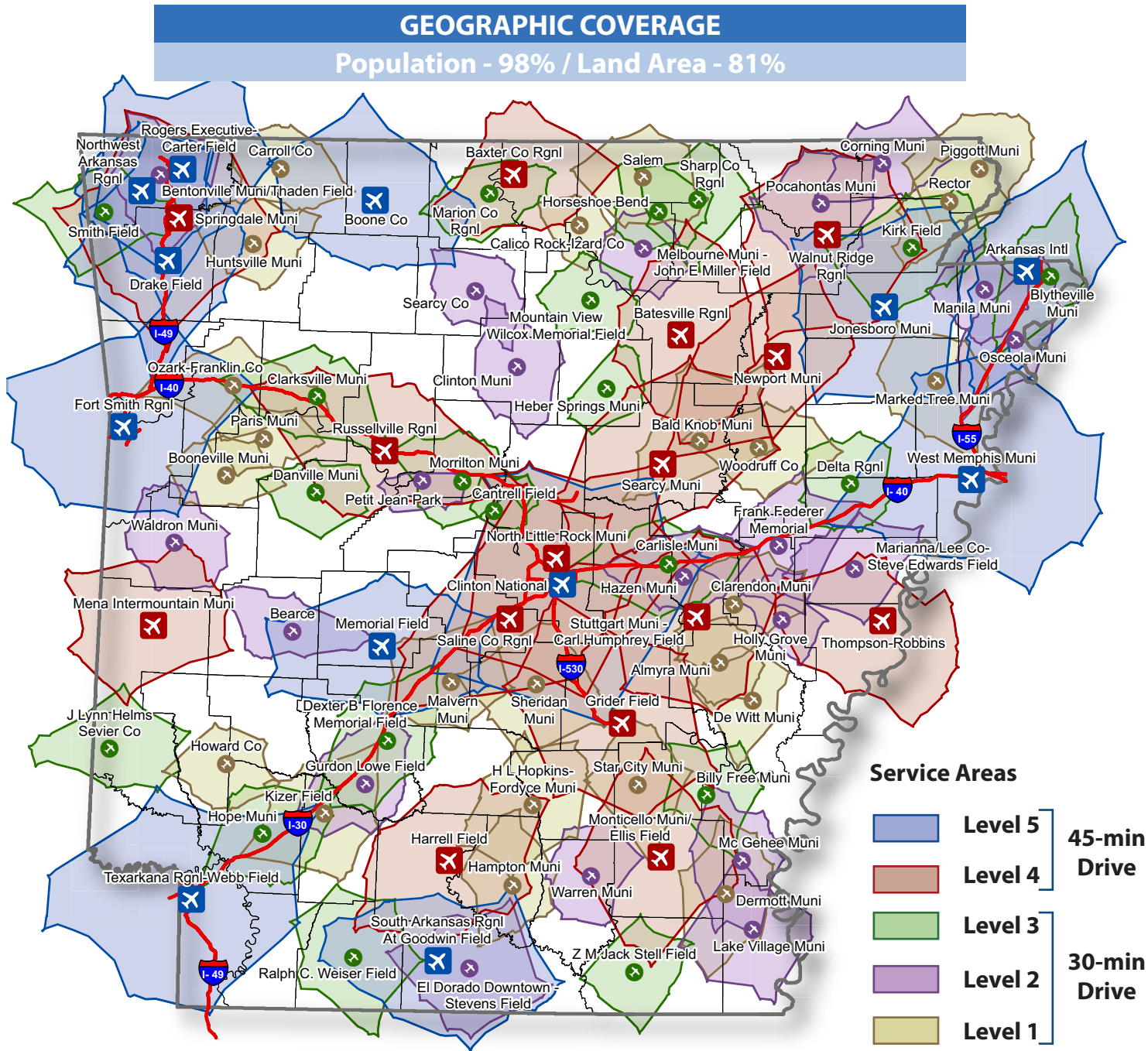
Level 1 airports serve primarily single-engine general aviation aircraft. Occasionally, these airports may also be used by smaller twin-engine general aviation aircraft.

ARKANSAS AIRPORTS' CURRENT SYSTEM LEVELS



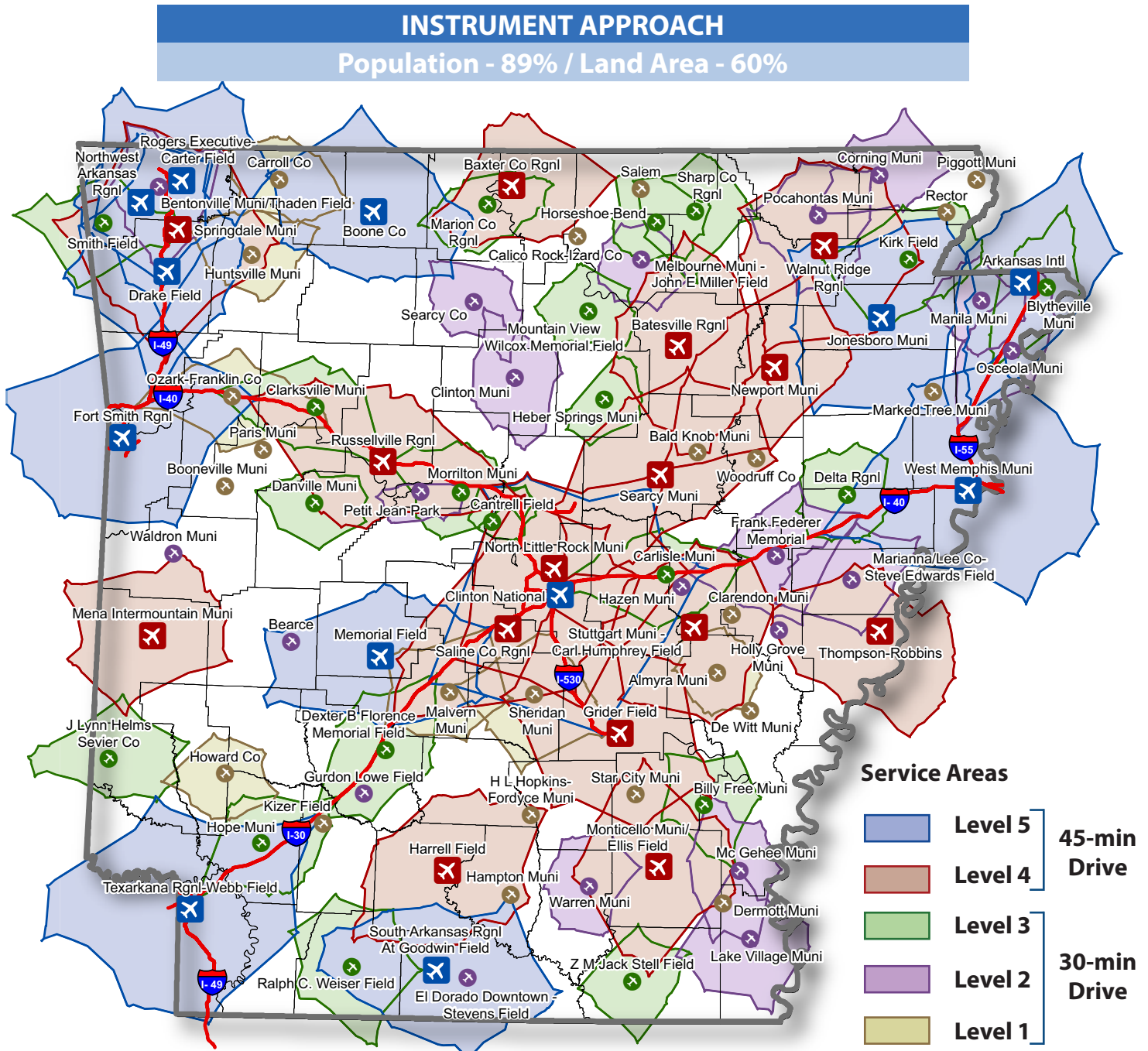
SYSTEM PERFORMANCE

An important part of the ASASP is the system evaluation, which determines how the Arkansas airport system is currently performing and where there are areas for improvement. One measure of the airport system is how well it provides access to the people and places of Arkansas. This is evaluated with the percentage of population and the percentage of state land area that can be reached with a set number of minutes of driving from each airport. This drive time analysis reveals that 98 percent of the population of Arkansas, and 81 percent of its land area, is within the defined market areas of the airport system.



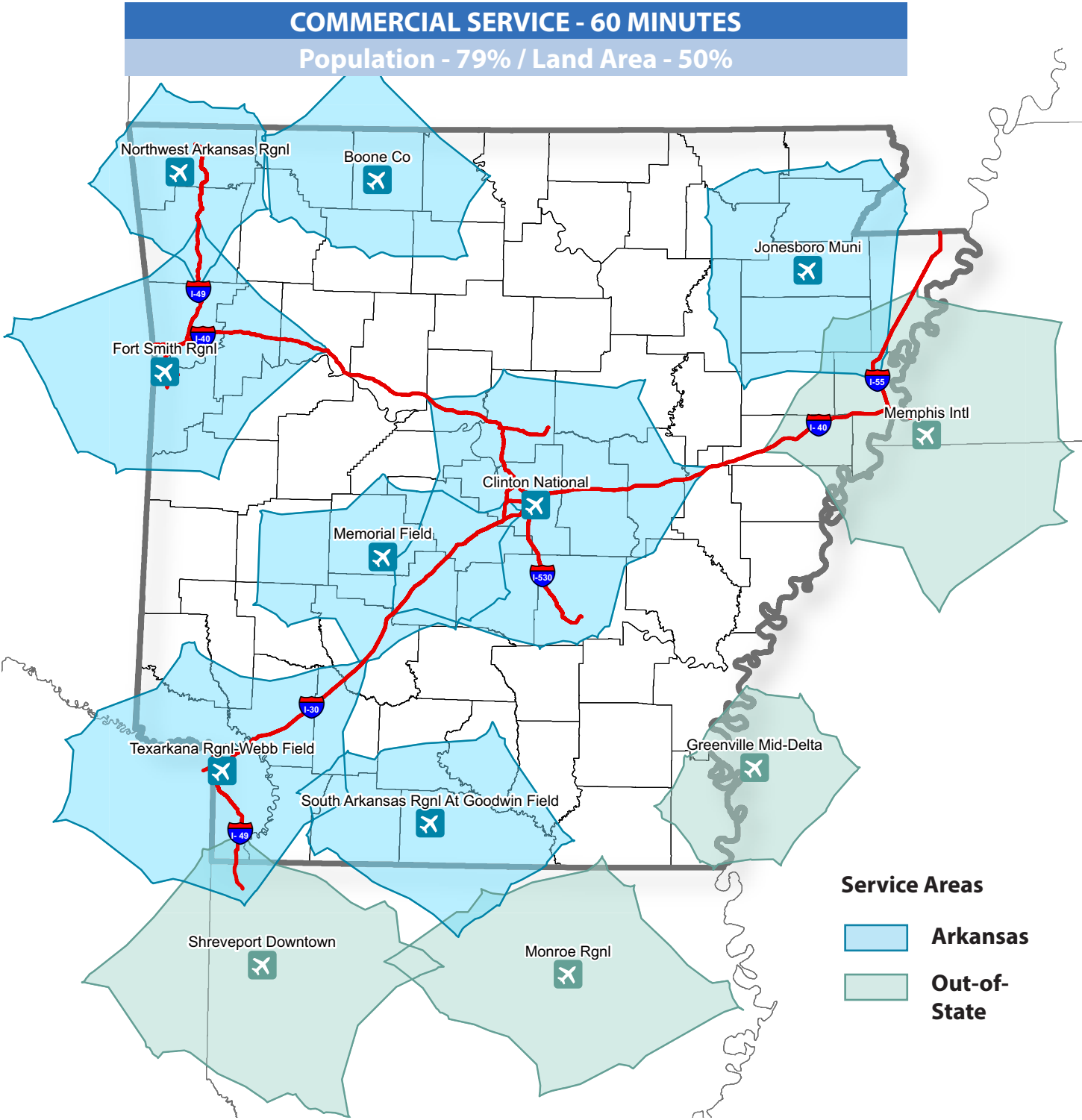
SYSTEM PERFORMANCE

Instrument approaches allow for increased accessibility for larger and more sophisticated aircraft in all types of weather conditions. Access to facilities with instrument approaches provides opportunities for a wider variety of operations and uses. Arkansas is currently providing access with these types of facilities to 89% of the population.



SYSTEM PERFORMANCE

Commercial service is an important link for residents and visitors to access Arkansas and the rest of the world. Currently, commercial service airports are available within 60 minutes for 79% of the population.



SYSTEM PERFORMANCE

Drive time analysis is conducted on more refined aspects of the airport system. These tables show both current and future system performance measures for airports with precision instrument approaches, with weather reporting, included in the NPIAS, and supporting business user needs. The system evaluation is the foundation upon which system plan recommendations are based.



AIRSIDE FACILITY SUPPORT				
Significant Benchmark: Percentage of state land area and population within the market area of an airport with a precision approach. (45-minute drive time for Level 4 and 5, 30-minute drive time for Level 1, 2, and 3)		Current	Future	Target
	Population:	89%	91%	90%
	Area:	63%	63%	75%



AIRPORT APPROACH SUPPORT				
Significant Benchmark: Percentage of state land area and population within a 30-minute drive time of an airport with on-site weather reporting		Current	Future	Target
	Population:	95%	98%	85%
	Area:	85%	92%	65%



NPIAS INCLUSION				
Significant Benchmark: Percentage of state land area and population within a 30-minute drive time of an airport included in the NPIAS		Current	Future	Target
	Population:	92%	93%	96%
	Area:	64%	66%	83%



TRANSPORTATION & ECONOMIC SUPPORT				
Significant Benchmark: Percentage of state land area and population within the market area of an airport meeting business user needs. (45-minute drive time for Level 4 and 5, 30-minute drive time for Level 3)		Current	Future	Target
	Population:	86%	90%	95%
	Area:	55%	60%	75%

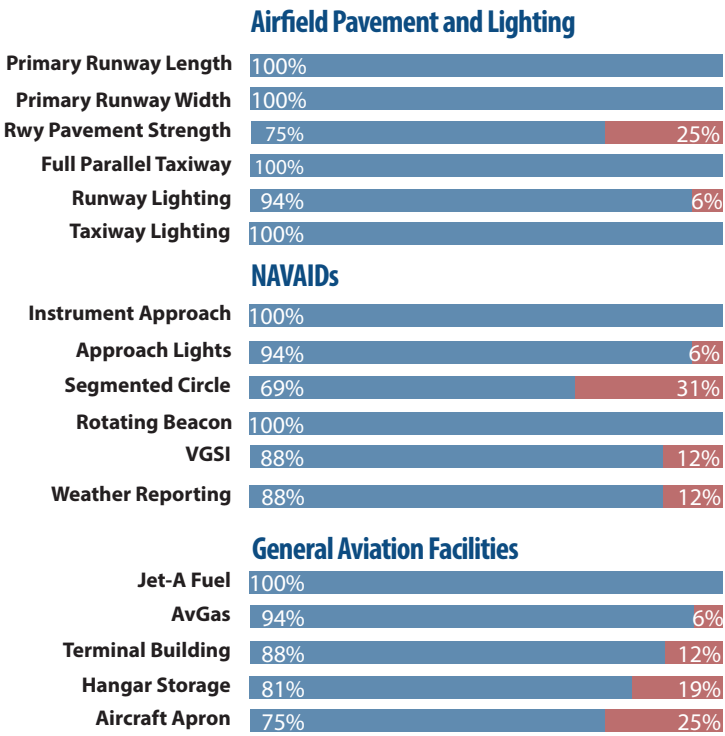
FACILITY AND SERVICE OBJECTIVES

The facility and service objectives established as part of this plan are not requirements, but guidelines for airport development so that each facility can best fulfill its role in the Arkansas system. It is possible that some airports may exceed their objectives, while other airports may not realistically be able to reach all objectives. Establishment of these facility and service objectives does not constitute a commitment on behalf of the state or the FAA to fund noted improvements. These facility and service objectives focus on the general aviation needs of all public airports. The system plan did not establish facility and service objectives to meet the needs of commercial passengers or the airlines.

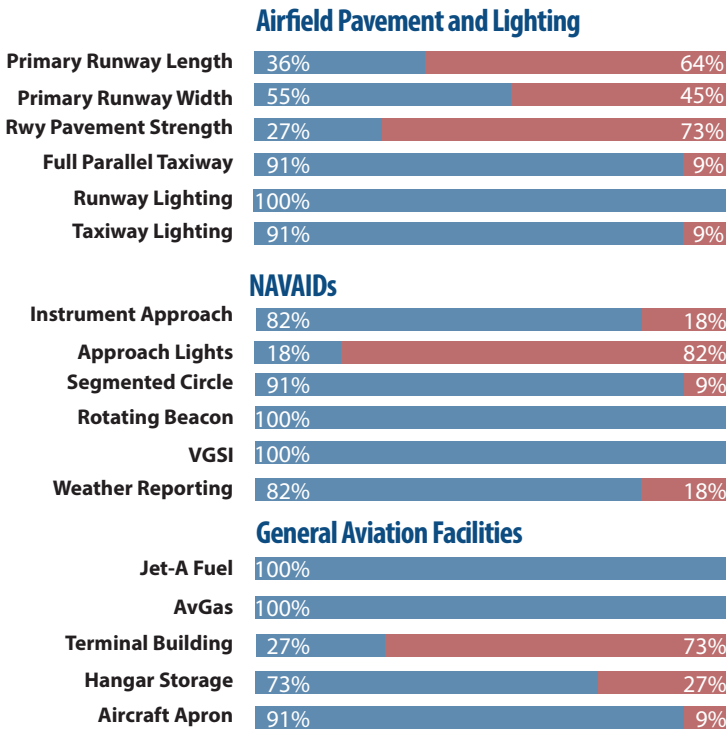
As airport sponsors develop individual airport planning documents, such as Airport Layout Plans (ALPs), Master Plans, and Capital Improvement Plans (CIPs), facility and service objectives identified in the ASASP should serve as a guide for airport development. At the beginning of the ASASP update, on-site visits to all 90 system airports were completed. A major focus of these visits was to catalog facilities and services currently in place at each airport. This was done so that current airport assets could be compared to the ASASP's facility and service objectives. The following charts summarize, by airport level, the goals established for each level and the system's ability to meet noted objectives at each individual airport. Information on facility and service objectives and current performance for specific system airports can be obtained from the ADA.

Meet Objectives Do Not Meet Objectives

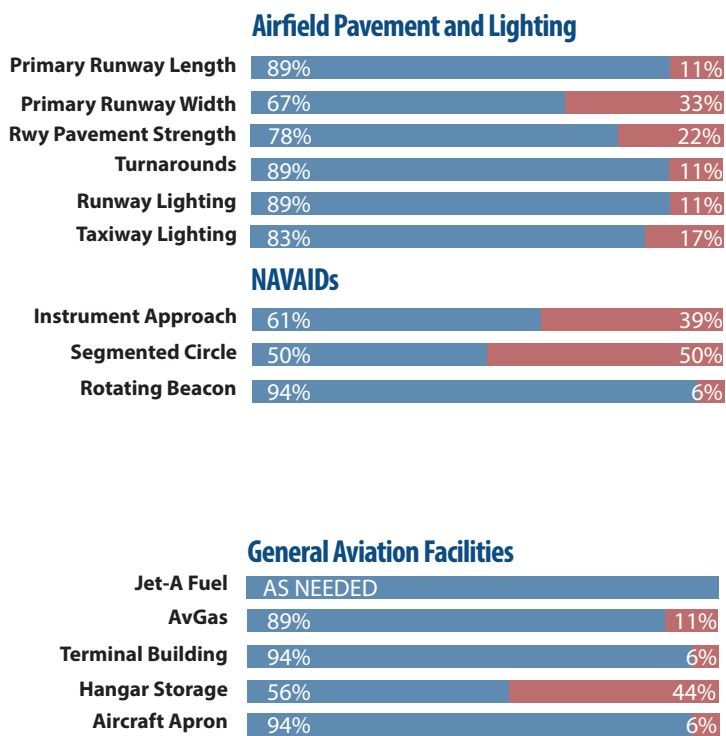
LEVEL 5



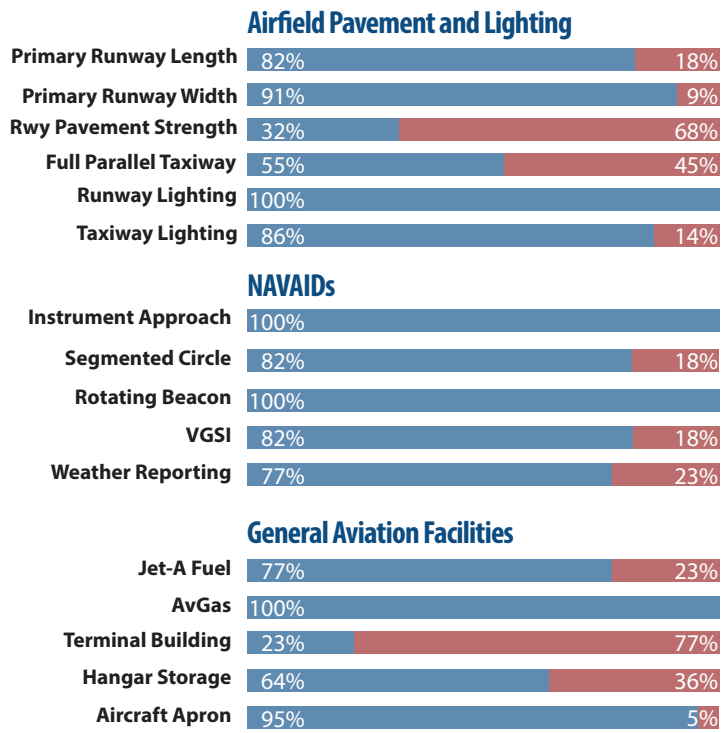
LEVEL 4



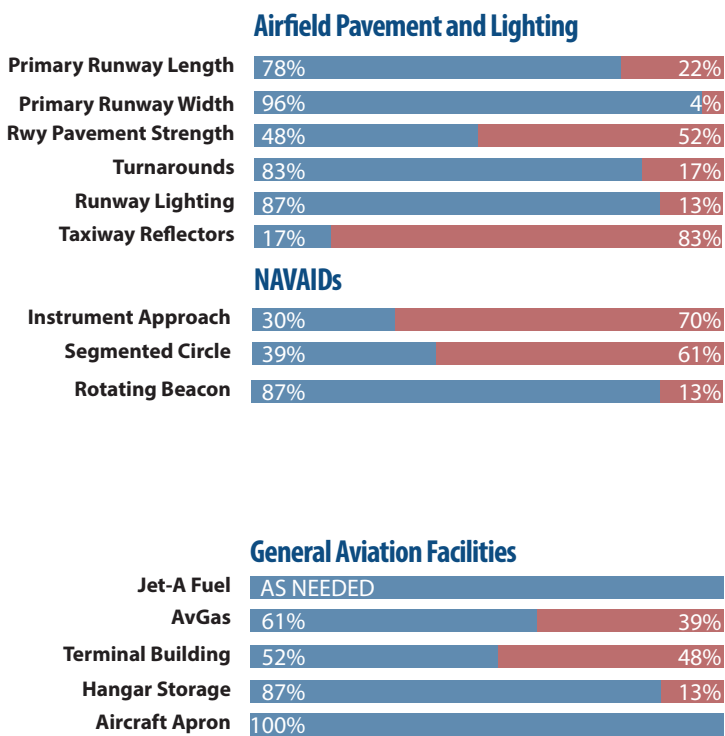
LEVEL 2



LEVEL 3



LEVEL 1



RECOMMENDATIONS

A key first step in determining system recommendations is establishing the levels for the future airport system. It is recommended that the six airports depicted in the Arkansas future system map move up one level in the system.

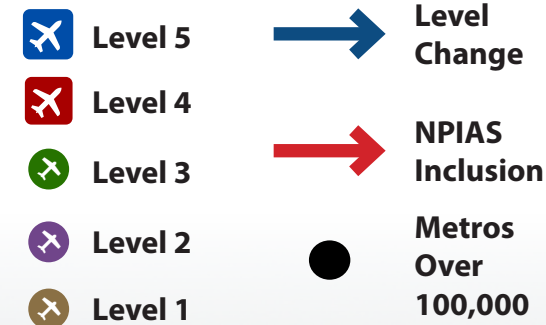
The airport levels established for the future Arkansas airport system are the foundation for determining individual airport improvements. The ASASP evaluated each of the system airports against goals established by their determined levels. The recommendation to change four airports from Level 4 to Level 5 was based on those airports having physical components that correlated with characteristics of Level 5. The two airports moved from Level 2 to Level 3 was due to their projected use and expected growth in their regions.

NPIAS INCLUSION

Inclusion in the NPIAS opens up additional funding opportunities available through the FAA's Airport Improvement Program. The following airports are recommended to be included in the NPIAS:

- Booneville Municipal
- Holly Grove
- Mountain View-Wilcox

MAP LEGEND



SYSTEM LEVEL CHANGES

Level 5



Grider Field
Mena Intermountain Municipal
Searcy Municipal
Stuttgart Municipal

Level 3



Bentonville Municipal
Melbourne Municipal

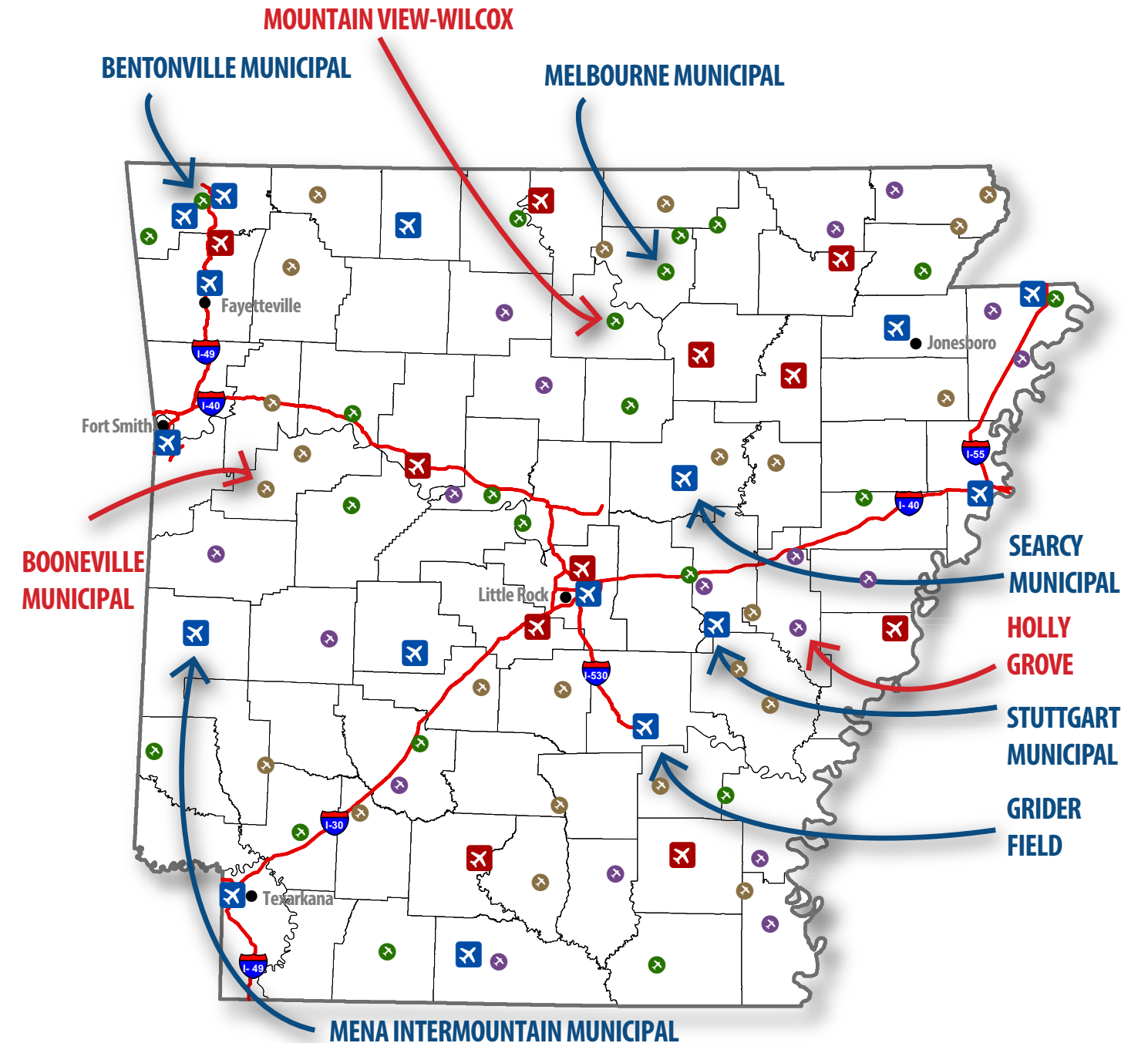
Level 4



Level 2

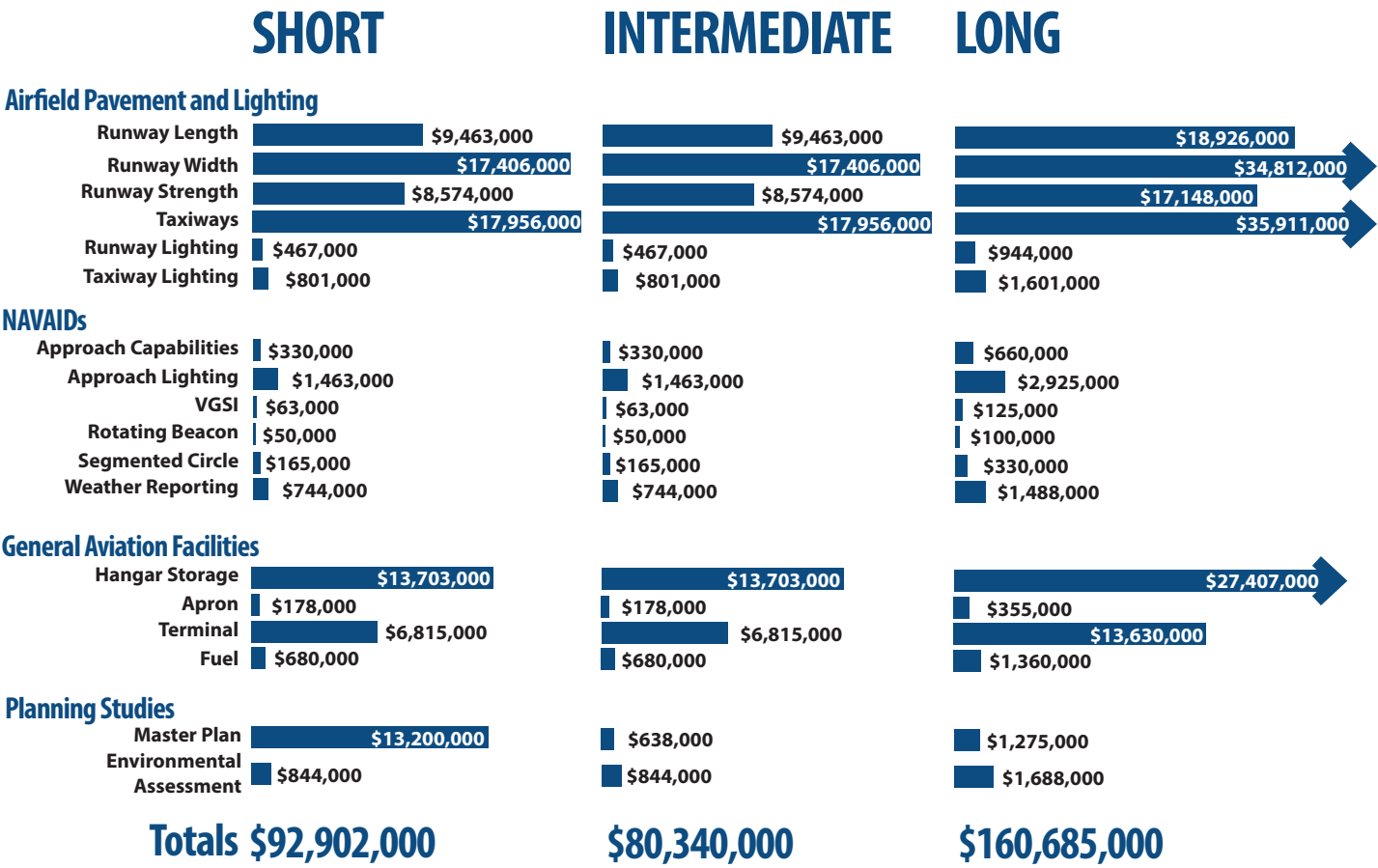


ARKANSAS FUTURE SYSTEM CHANGES AND NPIAS RECOMMENDATIONS



CAPITAL IMPROVEMENTS

The Arkansas State Airport System will require capital improvements in the foreseeable future. Costs for different improvements are broken out below by time frame: short, intermediate, and long. The analysis indicates that major investments will be required to maintain and upgrade runways and taxiways, the primary infrastructure at Arkansas airports. Other important facility investments include hangars and terminals, areas of the airport which are often the first impression that a user or visitor has of the facility. Making sure that these facilities are up-to-date and meeting the needs of the system is important to keeping users coming back to Arkansas airports.



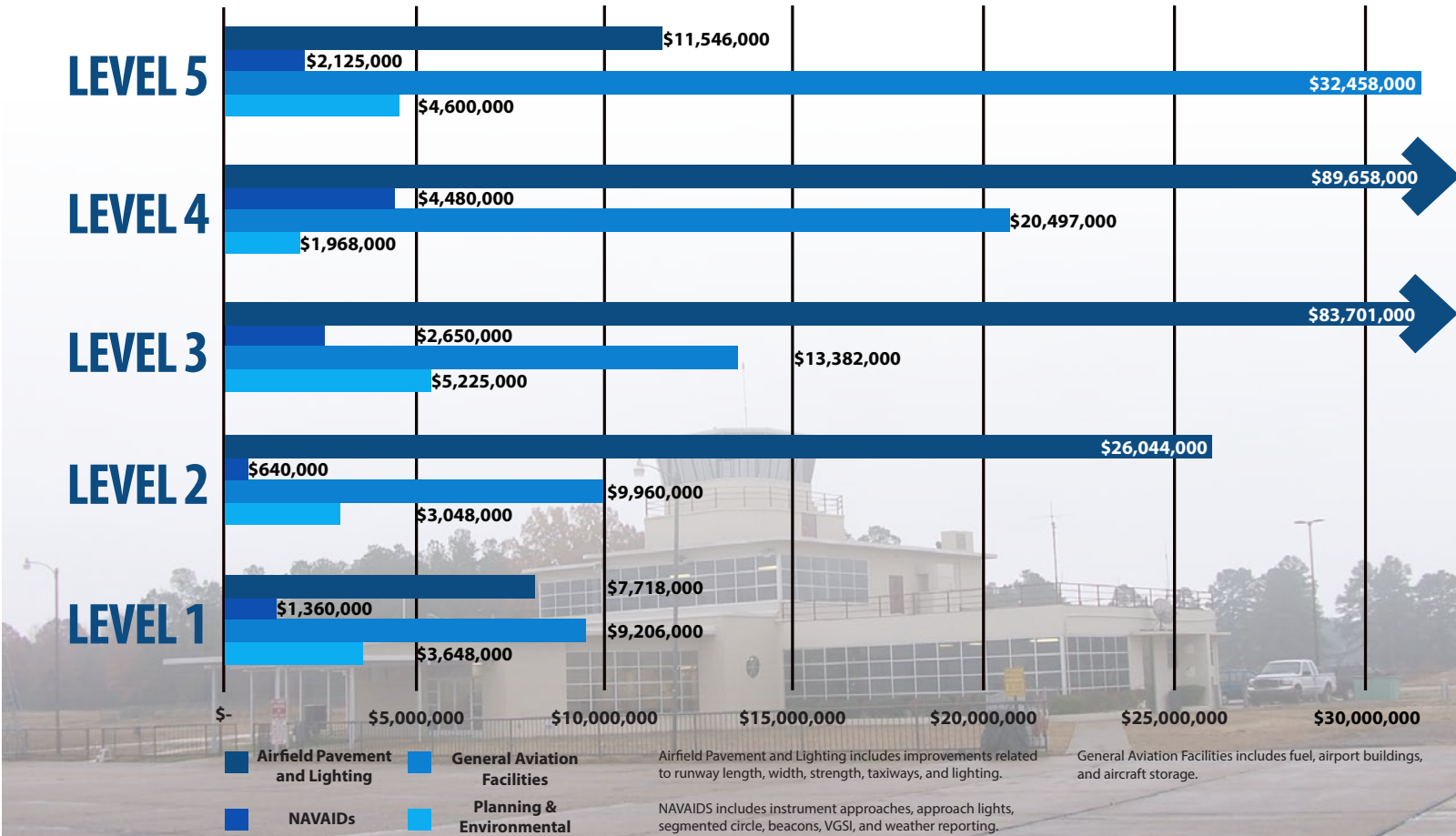
FUNDING AND COSTS

The recommended improvements in facilities and services impact all general aviation airports in Arkansas. The graph summarizes broad categories of projects in terms of their costs for each airport level. The greatest system need in Arkansas is in the airfield area, with more than \$215 million in estimated airfield improvements recommended. Level 4 and 3 airports account for about 80 percent of this need with almost \$30 million in airfield projects.

An estimated \$334 million in funding over a 20-year period from federal, state, and local sources will be needed to meet all performance, facility, and service objectives for Arkansas airports. These costs mainly identify improvements related to general aviation, with no potential projects related to commercial service improvements included in the estimate.

The estimated system plan costs also do not include all new runways, secondary runways, many taxiway projects, maintenance/rehabilitation, security, equipment, access/roadways, or FAA standards/safety requirements. As such, this estimate represents only a portion of the 20-year funding needs for Arkansas’ public airports. With FAA and other funding sources vulnerable to changes, it is important that Arkansas maintain or increase state funding for airports throughout the state.

Future 20-Year Investment:
\$334 million





2036
ARKANSAS
STATEWIDE AIRPORT
SYSTEM PLAN UPDATE

The preparation of this document was financed in part through a grant from the Federal Aviation Administration and with the financial support of the Arkansas Department of Aeronautics. The contents do not necessarily reflect the official views or the policy of the FAA or the Department of Aeronautics. Acceptance of this report does not in any way constitute a commitment to fund the development depicted herein.

For more information on the Arkansas Statewide Airport System Plan, go to fly.arkansas.gov, or contact:

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