



EXECUTIVE SUMMARY





SYSTEM GOALS



SAFETY AND SECURITY

Provide a safe and secure system of airports

INFRASTRUCTURE AND USER SUPPORT

Provide an airport system that meets existing and future user needs

 _

ACCESSIBILITY

Provide a system of airports that is adequately accessible from both the ground and the air



ECONOMIC **SUPPORT**

Support economic development through the air transportation system



PLANNING

Establish airport-related local planning to guide sustainable development and operation of airports in Iowa

EDUCATION AND OUTREACH

Provide local aviation education opportunities that promote understanding, safety, utilization, and career development



IOWA'S AIRPORT SYSTEM IS PREPARED FOR GROWTH

The 2020 Aviation System Plan provides guidance on future development and enhancements to an already outstanding system of airports. This document highlights important details regarding the process and outcomes from the plan, which directly influence the future of airport development in Iowa. Airports in the state represent a diverse cross-section of aviation interests and users; ranging from jet-capable, businesscentric airports to those that cater to local communities and recreational uses.





A PROVEN PROCESS TO DEVELOP PRACTICAL RESULTS

The six goals developed as part of the SASP 2020 influence the entire process. The plan is built on a robust inventory of data collected directly from Iowa airport officials, as well as a forecast of future activity. The current system is evaluated to determine how lowa's airports serve the state's residents. Roles assess each individual airport's place in the system while accompanying facility and service objectives set the expectation for future system performance. Finally, development costs for necessary projects and recommendations were prepared to guide the development of the lowa airport system.





INVENTORY

PERFORMANCE





INCREASED AVIATION ACTIVITY ON THE HORIZON

Forecasts developed as part of SASP 2020 addressed based aircraft, general aviation operations, enplanements, and air cargo activity. COVID-19 created uncertainty in the aviation industry, which impacted aviation activity throughout the state. Projections included in the study assume that it will take a minimum of two years for the industry to replicate 2019 levels of activity. Results from the forecasts are presented below:



SYSTEM ACCESS AND PERFORMANCE **30-MINUTE DRIVE TIME**

Iowa's robust system provides coverage within 30 minutes to 97% of the state population, nearly 3.1 million people.



BLOOMFIELD MOUNT AYR KEOSAUQUA FORT MADISON CENTERVILLE **O CLARINDA** LAMON • BEDFORD

A SYSTEM DESIGNED TO SERVE ALL USERS

The lowa airport system provides access to different user groups including international and national businesses, as well as local users such as agricultural spraying and emergency medical providers. Communities throughout the state directly and indirectly benefit from these users that rely on Iowa airports. These performance measures are examples of important characteristics relied upon by lowa residents and airport users.

Agricultural spraying is a vital component in the production of crops for the country's supply of food. Nearly every airport in the system reported some aerial applicator use in the past year, demonstrating the vital role airports play in this process.

105 AIRPORTS WITH SPRAYING ACTIVITY AND 39 WITH BASED USERS



3

PERFORMANCE MEASURES	IOWA RESIDENTS IN SERVICE AREA
60-minute access to Iowa Commercial Service airports	69.2%
90-minute access to Iowa Commercial Service airports	94.7%
30-minute access to lowa airports with a precision-like approach	88.8%
30-minute access to airports with Jet A Fuel	89.4 %
30-minute access to airports with AvGas Fuel	94.9%
30-minute access to airports with Weather Reporting	89.3%

Air ambulance service provides an important health link for rural communities. Iowa airports in these areas allow fixed-wing and rotor-wing aircraft to expedite patient transport to areas with increased options for medical care.

10 AIRPORTS WITH BASED MEDICAL **EVACUATION SERVICES AND 59 AIRPORTS** WITH TRANSIENT OPERATIONS



ADAPTING AIRPORT ROLES FOR A CHANGING AVIATION ENVIRONMENT

Since the 2010 SASP, three airports have completed improvements to facilities and services that warrant an upgrade to their SASP role. Since completion of the last study, five airports have closed: Morningstar Field, Onawa Municipal, Orange City Municipal, Primghar, and Sioux Center Municipal. Two of the airports, Orange City and Sioux Center, were closed and combined resulting in the opening of the Sioux County Regional Airport. The South Central Regional Airport is planned in the coming years and would combine the airports in Pella and Oskaloosa to become an Enhanced Service Airport.



COMMERCIAL SERVICE

Includes airports that support scheduled commercial service and provide support for all types of general aviation activity. These airports are essential in the national transportation system and are economic pillars in the state and their communities.



ENHANCED SERVICE

Includes airports that have runways over 5,000 feet and services for a wide range of general aviation activity. Airports in this role serve as economic centers for regions, supporting business jet operations as well as other general aviation activity.



GENERAL SERVICE

Includes airports that have runways over 4,000 feet and services that cater to small and mid-size business jets. The airports in this role are recognized as community assets.



BASIC SERVICE

Includes airports that have runways over 3,000 feet and services that meet recreational general aviation activity.



Includes airports that primarily support local activity and provide limited aircraft services.





2020 IOWA AIRPORT ROLES

EACH AIRPORT IN THE IOWA 2020 SYSTEM SERVES AN IMPORTANT ROLE IN HELPING ACHIEVE ITS GOALS AND OBJECTIVES. AIRPORTS IN EACH ROLE SUPPORT SPECIFIC AVIATION USERS AND ACTIVITIES.



OBJECTIVES TAILORED TO EACH ROLE

Facility and service objectives for each role represent ideal conditions for an airport to effectively meet the needs of users and to properly fulfill its role in the system. Objectives were divided into four groups: Airside, Landside, Services, and Planning.

DESCRIPTION	COMMERCIAL SERVICE & ENHANCED SERVICE	GENERAL SERVICE	BASIC SERVICE	LOCAL Service		
AIRSIDE FACILITIES						
Airport Reference Code	C-II	B-II	B-I or below	A-I		
Primary Runway Length	Minimum 5,000 ft	Minimum 4,000 ft	3,000 ft	Not an objective		
Primary Runway Width	Minimum 100 ft	Minimum 75 ft	Minimum 60 ft	Minimum 50 ft		
Тахімау Туре	Full parallel	Turnarounds meet standards (both ends)	Exits as needed	Not an objective		
Approach Type	Vertical guidance	Non-precision	Visual	Visual		
Runway Lighting	MIRL	MIRL	LIRL	Not an objective		
Taxiway Lighting	MITL	MITL	Not an objective	Not an objective		
Visual Guidance Slope Indicator	Both runway ends (or ILS)	Both runway ends	Not an objective	Not an objective		
Runway End Identifier Lights	Both runway ends (or ILS)	Both runway ends	Not an objective	Not an objective		
Rotating Beacon	Yes	Yes	Yes	Not an objective		
Lighted Wind Indicator	Yes - multiple as needed	Yes	Yes	If open for night		
LANDSIDE FACILITIES						
Covered storage	100% of based aircraft	100% of based aircraft	100% of based aircraft	Not an objective		
Overnight storage for business aircraft	Typical average aircraft/business user demand	Typical average aircraft/business user demand	Not an objective	Not an objective		
Terminal building	Yes	Yes	Yes	Not an objective		
Paved entry and parking	Yes	Yes	Not an objective	Not an objective		
SERVICES						
Fixed-Base Operator	Yes	Yes	Not an objective	Not an objective		
Fuel	100LL & Jet A - 24 hour - single point	100LL and Jet A	100LL	Not an objective		
Attendance	Standard business hours, after hours on-call	Standard business hours, after hours on-call	On-call	Not an objective		
Ground Transportation	Courtesy car/car rental available	Courtesy car/car rental available	Not an objective	Not an objective		
WiFi	Yes	Yes	Not an objective	Not an objective		
Restroom (24/7 or key code)	Yes	Yes	Yes	Not an objective		
Security	Full 8-foot perimeter fencing	Visual Barrier/Posted Signs	Visual Barrier/Posted Signs	Posted Signs		
Snow removal	On-Airport Equipment	On-Airport/Shared/Contracted	Timely snow removal	Not an objective		
Aircraft maintenance	Based	Based	Not an objective	Not an objective		
Aircraft rental	Based	Based	Not an objective	Not an objective		
Flight instruction	Available	Available	Available	Not an objective		
Aircraft charter	Based	Available	Not an objective	Not an objective		
Weather reporting	Yes	Yes	Not an objective	Not an objective		
PLANNING						
Land Use Planning	Yes	Yes	Yes	Yes		
Height Zoning	Yes	Yes	Yes	Yes		
Airport Layout Plan	ALP update within last 10 years	ALP update within last 10 years	Yes	Not an objective		

7

A ROBUST AND WELL-DEVELOPED **AIRPORT SYSTEM**

lowa's airport system is welldeveloped; however, the system plan identified strategic enhancements in key areas including aircraft storage, security, aircraft services, and local planning.



RUNWAY END IDENTIFIER LIGHTS 100

ROTATING BEACON

OVERNIGHT STORAGE FOR BUSINESS AIRCRAFT

PAVED ENTRY AND PARKING

FIXED-BASE OPERATOR

GROUND TRANSPORTATION 100%

AIRCRAFT MAINTENANCE 91%

MEASURING SYSTEM PERFORMANCE

Focuses on infrastructure components that are critical to safe and efficient aircraft operations. FAA criteria and standards are emphasized in these objectives. AIRSIDE ARC 97% 3% RUNWAY LENGTH 100% RUNWAY WIDTH 96% 1% TAXIWAY TYPE APPROACH TYPE 100% RUNWAY LIGHTING 97% TAXIWAY LIGHTING 100% VISUAL GUIDANCE SLOPE INDICATOR 2% 99% 1% LIGHTED WIND INDICATOR 100% lighlights components that are highly visible to the public. These may require more and investment for upkeep. LANDSIDE COVERED STORAGE 96% 4% 33% TERMINAL BUILDING 1% SECURITY 72% SERVICES Develops objectives that align with operations and users typical at airports in each role. 100 FUEL 97% 3% ATTENDANCE 8 11% WIFI 100% RESTROOM (24/7 OR KEY CODE) 89% SNOW REMOVAL 97% AIRCRAFT RENTAL 78% FLIGHT INSTRUCTION 82% AIRCRAFT CHARTER 44% 56% WEATHER REPORTING 100% PLANNING Emphasizes local government's role in the future of Iowa airport development. LAND USE PLANNING 64% HEIGHT ZONING AIRPORT LAYOUT PLAN 12% 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Meets Objective
Does Not Meet Objective



ESTIMATING FUNDING NEEDS FOR THE FUTURE

SASP 2020 identified specific projects for airports in the Iowa system that correlate with the established facility and service objectives for each role. Deficiencies were identified and an associated cost estimate to meet the objective was developed.

Estimated project costs from the Iowa Airport Capital Improvement Program (ACIP), as well as the Pavement Maintenance and Rehabilitation Program were also identified and summarized as part of the report.

🔶 \$39.8 MILLION IN SYSTEM PLAN IDENTIFIED COSTS GREATLY **EXCEEDS THE AVERAGE FAA AND** STATE FUNDS **ANTICIPATED**

PROJECTED FUNDING GAP





PROJECT COSTS FOR IOWA GENERAL AVIATION AIRPORTS



10-YEAR PROJECT COST BREAKDOWN

WHAT'S NEXT FOR THE IOWA SYSTEM?

Specific aviation issues were identified at the beginning of the study for targeted data collection and analysis throughout SASP 2020.

Recommendations were developed in part to address these issues - in a manner that assists both lowa airports and their users.

Comments included from airport officials on the inventory survey reflect some of these priorities:

PAVEMENT MAINTENANCE

"Airports, even small ones, are important to towns like us. Businesses use it and would hate to lose the airport. (We) wish there would be more funding to get the runway resurfaced."

COVERED STORAGE

"Lack of hangar space has been the biggest issue...a need expressed from local pilots who have to hangar their aircraft greater distances away."

SYSTEM ACCESS

"The airport is experiencing an increase in aerial applications from area aq sprayers."

"Biggest issue is space for more based aircraft to be hangared and availability of flight instruction for new pilots."



RECOMMENDED IMPROVEMENTS

VERTICAL INFRASTRUCTURE

Support continued vertical infrastructure improvements by maintaining existing funding and identify additional funding sources for maintaining and improving terminal buildings and hangar infrastructure.





PAVEMENT MAINTENANCE

Encourage improved routine pavement maintenance practices and educate airport officials on the benefits of pavement maintenance and the existing PCI program.



AIRFIELD FENCING

Prioritize airfield fencing for security and wildlife with 8-foot perimeter fencing at all Commercial and Enhanced Service airports. If an airport is planning to update or replace fencing, encourage 8-foot height.

AIRPORT ATTENDANCE

Encourage attendance at Enhanced and Genero Service airports. Identify an airport contact at Basic and Local Service airports without after hours arrangements, or that are unattended or maintain irregular hours. Incorporate 24/7 restroom access at system airports.

AIRCRAFT SERVICES

Continue to support aviation services at system airports that will promote a strong aviation system including maintenance, flight instruction, and aircraft rental services.



IOWA'S MARKET CONNECTIONS

The system supports connectivity to numerous markets throughout the United States and beyond. FAA flight data shown on this map presents a one-year snapshot of select markets served.







FOR MORE INFORMATION VISIT: IOWADOT.GOV/AVIATION