Aviation System Plan 2010-2030
Individual Airport Report
Dubuque Regional Airport

Prepared for:

IOWA DEPARTMENT OF TRANSPORTATION

OFFICE OF AVIATION

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Individual Airport Report
Dubuque Regional Airport

The *Iowa Aviation System Plan* Individual Airport Report provides an overview of the aviation system in Iowa, as well as specific information related to the Dubuque Regional Airport. Iowa's air transportation system plays a critical role in the economic development of the state and quality of life for Iowans. The *Iowa Aviation System Plan* evaluates existing conditions and makes recommendations for future development of the air transportation system to meet the needs of users over the next 20 years.

Airport sponsors and airport management can use the Individual Airport Report to better understand the role their airport plays in the state and use it as a guide to improve facilities and services for their aviation users. The Individual Airport Report is divided into two sections: Section One provides an overview of the statewide aviation system; and Section Two provides specific information for the Dubuque Regional Airport. Additional information regarding the *Iowa Aviation System Plan* can be found at http://www.iowadot.gov/avaition.index.html.

Section One – System Plan Overview

1.1 System Planning Process

Development of a meaningful and useful planning document centered on the analysis of data collected for the system's inventory and input received from public involvement on issues, concerns, and needs affecting aviation in Iowa. A comprehensive data collection effort, analysis, and significant public involvement guided the development of the 2010 *Iowa Aviation System Plan*. Contributions from the System Plan Technical Advisory Committee, comprised of individuals involved in different aspects of aviation across the state, as well as input received from the public at five input meetings, also guided the planning process. The process to complete the *Iowa Aviation System Plan* included the following steps:

- Identify goals, objectives, and performance measures.
- Inventory of existing aviation facilities and infrastructure.
- Update airport roles.
- Identify facility and service targets for airport roles.
- Forecast of aviation activity.
- Discuss emerging trends and technologies.
- Develop system recommendations.

1.2 System Plan Goals, Objectives, and Performance Measures

The identification of goals establishes the framework necessary to guide future development and maintenance of the system's airports based on key areas of existing and anticipated user needs. Meeting these goals allows airports to provide facilities and services that meet the air transportation demands of the economy, citizens, and visitors of the state.

The following six goals were established for the system to adequately meet user demands and achieve the overall vision of aviation in Iowa:

- **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 the development and operation of airports in Iowa.
- **Education and Outreach** – Provide local aviation education opportunities that promote understanding, safety, utilization, and career development.

Objectives identify specific means and methods needed to achieve each goal based on an assessment of existing and future user needs. Some objectives may target facilities or services, while others quantify future needs. Not all objectives will be applicable to each airport as some may be adapted to the role it serves within the aviation system.

Performance measures establish criteria to evaluate whether the system is meeting the objectives. Performance measures identify desired levels of the objectives to determine the system's progress towards achieving the goals. Typically expressed as a percentage, the performance measures are used to identify strengths and weaknesses that contribute towards the development of the Plan recommendations. The following lists the objectives and performance measures for each goal.

Goals, Objectives, and Performance Measures

Objectives	Performance Measures
Goal: Safety and Security	
• Airports have clear approaches to primary runways. • Airports have clear approaches to all runways. • Airports have emergency response plans. • Airports develop and implement security plans.	• Percent of airports with clear primary runway approaches. • Percent of airports with clear approaches to all runways. • Percent of airports with emergency response plans. • Percent of airports with airport security plans.
Goal: Infrastructure and User Support	
• Airports meet facility targets identified for their specific role. • Airports meet service targets identified for their specific role. • Primary runways maintained to PCI of 70 or higher. • Airports maintain an overall PCI of 70 or higher. • Based aircraft stored in covered hangars.	• ** Percent of airports meeting facility targets.* • ** Percent of airports meeting at least 75% of service targets.* • Percent of airports with primary runway PCI of 70 or greater. • Percent of airports with overall airport PCI of 70 or greater. • Percent of airports with aircraft storage for all based aircraft.
Goal: Accessibility	
• A 30-minute or less drive time to a commercial or enhanced service airport. • A two-hour or less drive time for most Iowans to a commercial service airport • A 30-minute or less drive time to an airport with weather reporting equipment. • A 30-minute or less drive time to an airport with an instrument approach for most Iowans. • A 30-minute or less drive time to an airport with a vertically guided approach.	• Percent of population 30 minutes from a commercial service or enhanced service airport. • Percent of population within two hours of a commercial service airport. • Percent of population within 30 minutes of an airport with weather reporting equipment. • Percent of population within 30 minutes of an airport with an instrument approach. • Percent of population within 30 minutes of an airport with a vertically guided approach.
Goal: Economic Support	
• Airports coordinate with local economic development offices, chambers of commerce, and city and county officials to include airport information in business promotion materials. • Most of the employment is within a 30 minute drive time of a commercial or enhanced airport. • Airports support aircraft owned and operated by companies doing business in proximity to an airport.	• Active coordination with local economic development offices, chamber of commerce, city, and county officials to include airport in business materials. • Percent of employment within 30 minutes of a commercial service or enhanced airport.
Goal: Planning	
• Airports have a current master plan or ALP. • Airports are protected by local height zoning ordinances. • Airports are included in city/county comprehensive plans or land use plans that address compatible land use around airports.	• ** Percent of airports with a current master plan and/or ALP.* • Percent of airports protected by airport height zoning. • Percent of airports with compatible land use planning through city/county comprehensive planning or land use plans.
Goal: Education and Outreach	
• Airports establish regular communication programs (newsletters, press releases, web sites, or social media.) • Airports have based rental aircraft and availability of regular flight instruction. • Airports host pilot safety programs. • Airports host annual aviation events such as fly-ins, air shows, and static aircraft displays. • Airports host additional types of public events such as business after hours receptions or open houses. • Airports host organized youth education activities such as Young Eagles events or youth camps.	• Percent of airports with regular communication programs. • Percent of airports that have based rental aircraft and regular flight instruction. • Percent of airports that host pilot safety programs. • Airports host annual aviation events. • Airports host additional types of public events. • Airports host organized youth education activities.

Note: * = Measurement criterion to evaluate performance varies by role.

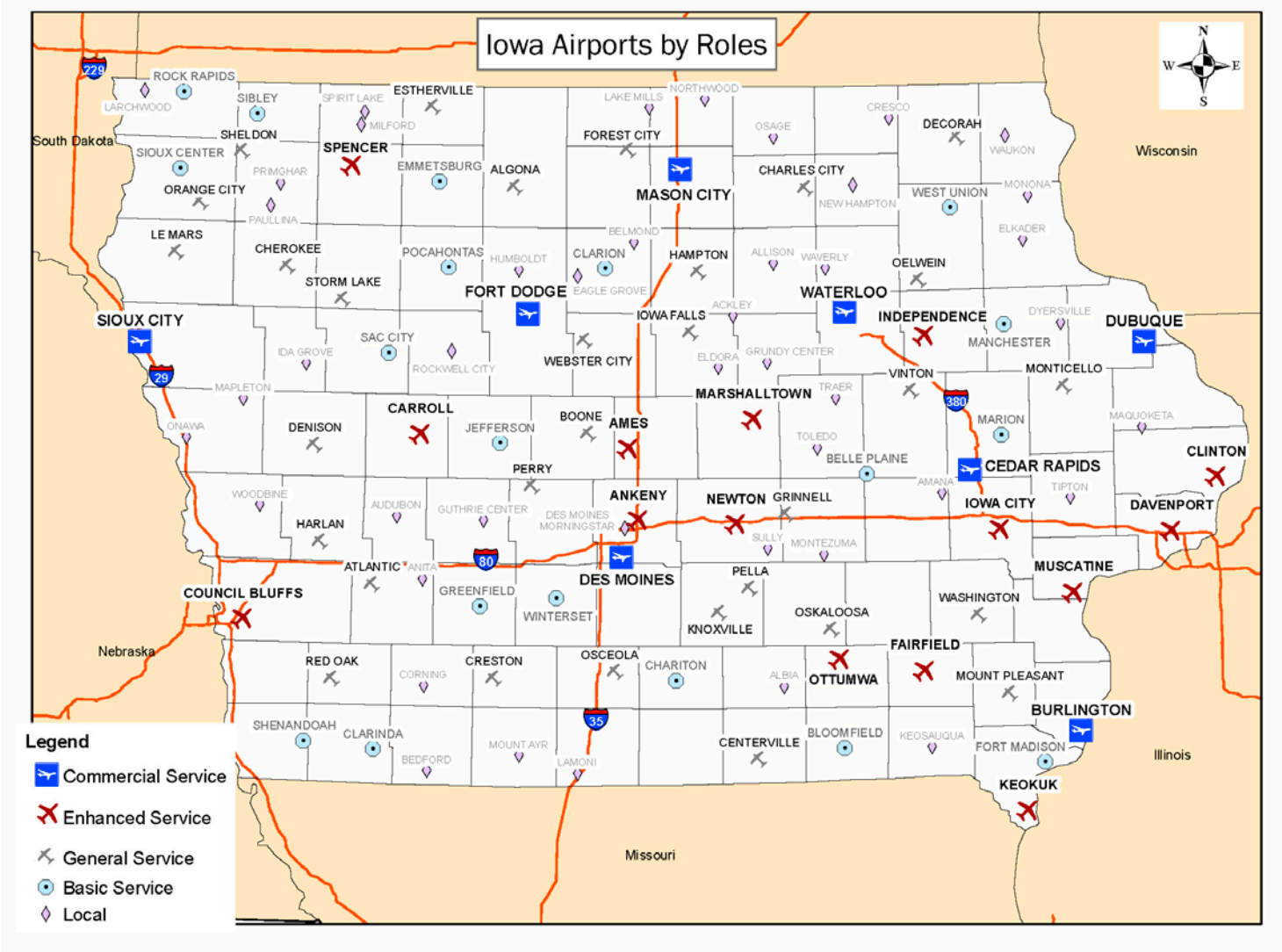
1.3 Airport Roles

Airports in Iowa serve varying types of users and levels of demand. Airports were classified into one of five airport roles based upon their capability to support various types of aircraft and aviation users. Airports were assigned to a role based on currently meeting specific facility and services criteria. As conditions change and an airport meets the criteria for a higher level role, the plan is flexible to recognize role changes. The following table lists each role and its classification criteria while the following graphic identifies the location of each system airport.

Role Classification Criteria

System Role	Criteria
Commercial Service – Commercial Service airports support some level of scheduled commercial airline service, have the infrastructure and service available to support a full range of general aviation activity, meet most needs of the aviation system, and serve as essential transportation and economic centers of the state.	• Commercial airline service.
Enhanced Service – Enhanced Service airports have runways of 5,000 feet or greater in length, facilities and services that can accommodate a full range of general aviation activity including most business jets, serve business aviation, and are regional transportation centers and economic catalysts.	• 5,000 foot or greater paved runway. • Airport Reference Code (ARC) of C-II or greater. • Full time staffing during regular weekday and weekend business hours, available 24 hours a day. • Availability of most based services including aircraft maintenance, flight training, rental aircraft, and aircraft charter. • Availability of jet fuel. • Weather observing system located on airport.
General Service – General Service airports have runways 4,000 feet or greater in length, facilities and services customized to support most general aviation activity including small to mid-size business jets, and service as a community economic asset.	• 4,000 foot or greater paved runway. • Availability of some based services including aircraft maintenance, flight training, rental aircraft, and aircraft charter. • Staffing during regular business hours.
Basic Service – Basic Service airports have runways 3,000 feet or greater in length with facilities and services customized to meet local aviation demands.	• 3,000 feet or greater paved runway. • Availability of aircraft fuel. • Some availability of airport or FBO personnel or on-call availability 24 hours.
Local Service – These airports support local aviation activity, offer few airport services, have turf runways, or are unable to meet criteria defining any other role.	• Turf runways. • Airports not meeting criteria in any other roles.

Iowa Airports by Roles



1.4 Facility and Service Targets

Facility and service targets were established to help airports, within a specific role, meet the needs of their users. While not all targets are required for inclusion in a particular role, these are recommended levels of service and/or facility targets appropriate for the type of use associated with each role. Airports are encouraged to meet or exceed suggested targets for their role to satisfy local and aviation system needs.

The targets are separated into two main categories: airside and landside facilities, and services. Targets for each role vary based on the needs of aviation users for that role. The Enhanced Service airports, for example, will have more targets to meet the needs of business users. There are fewer targets for Local Service airports since they serve users with fewer requirements for operation. In the table below, targets for Commercial Service airports are combined with Enhanced Service targets, since in most categories, Commercial Service airports will exceed targets. Targets required for inclusion in a role are highlighted in red in the following facility and service tables.

Facility Targets

Target Description	Commercial/Enhanced Service Targets	General Service Targets	Basic Service Targets	Local Service Targets
Airside				
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
Type of Parallel Taxiway	Full parallel	Turnarounds meet standards (both ends)	Exits as needed	Not an objective
Type of Runway Approach	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 Indentifier Lights (as required)	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	If open for night	If open for night
RCO Facilities	Tower or RCO	Not an objective	Not an objective	Not an objective
Wind coverage or crosswind runway	Crosswind runway or 95% wind coverage for NPIAS facilities	Crosswind runway or 95% wind coverage for NPIAS facilities	Not an objective	Not an objective
Landside				
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
Aircraft apron	100% of average daily transients	100% of average daily transients	50% of average daily transients	Not an objective
Terminal/administration building	Yes	Yes	Waiting area	Not an objective
Paved entry/terminal parking	Yes	Yes	Not an objective	Not an objective

Note: Targets highlighted in **RED** are requirements for role classification

Service Targets

Target Description	Commercial/Enhanced Service Targets	General Service Targets	Basic Service Targets	Local Service Targets
Services				
Fuel (type & hours)	**100LL & Jet A - 24 hour - single point**	**100LL**	**100LL**	Not an objective
Weekday hours of operation	**Standard business hours, after hours on-call**	**Standard business hours, after hours on-call**	**On-call**	Not an objective
Weekend hours of operation	**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
Food & Beverage	Vending	Vending	Not an objective	Not an objective
Posted contact info	Yes	Yes	Yes	Yes
Internet access	Yes	Yes	Not an objective	Not an objective
Restroom	Yes	Yes	Yes	Not an objective
Pilot area	Yes	Yes	Not an objective	Not an objective
Security	Security plan	Security plan	Security plan	Security plan
Snow removal	Timely snow removal	Timely snow removal	Snow removal	Not an objective
Rental aircraft	**Based**	Based	Not an objective	Not an objective
Flight training	**Available**	Available	Available	Not an objective
Aircraft maintenance/repair	**Based**	Based	Not an objective	Not an objective
Aircraft charter	**Based**	Available	Available	Not an objective
Weather reporting/flight planning capabilities	**Yes**	Yes	Not an objective	Not an objective

Note: Targets highlighted in **RED** are requirements for role classification

1.5 System Forecasts, Trends, and Technology

During the past decade, aviation activity was impacted by economic conditions and events that were difficult to predict. Projections for the next twenty years indicate commercial airline enplanements, based aircraft, and operations are expected to experience slow growth. The 2010-2030 Federal Aviation Administration (FAA) Aerospace Forecast projects that the number of active aircraft throughout the planning period will increase at one percent (1.0%) annually, while the number of based aircraft in the state is projected to be slightly higher at 1.25 percent (1.25%). Aircraft operations are anticipated to increase at one-half of one percent annually.

Several anticipated trends and developing technologies will affect aviation in Iowa throughout the planning period. It is important the system is prepared to adapt to these changes to meet the short- and long-term needs of aviation users. Topics that could significantly impact aviation in Iowa include the implementation of the Next Generation Air Transportation System (NextGen), environmental sustainability, and future aircraft types.

1.6 System Plan Recommendations

Federal, state, and local airport sponsors all have a role in providing adequate infrastructure and services to support the demands of the air transportation system. Review of the system's performance and comments received from the public and the System Plan Technical Advisory Committee identified recommended improvements and initiatives. Recommendations address specific goals and general concepts for the system. A cooperative approach towards the implementation of plan recommendations is necessary for the Iowa aviation system to meet the air transportation demands of the state. Continued management of essential programs and services by the Iowa Department of Transportation (Iowa DOT) Office of Aviation helps strengthen the safety and security of the state aviation system.

Airport sponsors own and operate the airports, having ultimate responsibility for daily and long term operations and maintenance. Recommendations in the *Iowa Aviation System Plan* provide a guide for airport sponsors to assess their role to ensure that Iowa has safe, quality facilities and services to meet the air transportation needs. Recommendations to enhance safety of the system include actively mitigating obstructions, developing and enforcing compatible land use controls, actively mitigating wildlife hazards, and developing emergency response plans. Airport sponsors are encouraged to engage their community leaders and stakeholders in developing a strategic plan to guide the future of the airport and its role in economic development. More specific recommended actions are detailed beginning on Page 13 of this report.

1.7 System Plan Summary

The Iowa aviation system is an integrated network of users, aircraft, businesses, airports, technologies, and services that supports the economy and serves as a transportation resource for both the state and the nation. The Iowa DOT, in conjunction with the FAA and individual owners and operators of each airport, continue to strive towards meeting system goals and objectives to maintain a safe, efficient, and effective aviation system. As airports respond to changing needs of aviation users and the communities they serve, it is important to consider both facilities and services identified in the targets established for airport roles.

Maintaining and developing the airports' infrastructure and services is critical to the continued health of Iowa's economy and the quality of life for Iowans. Through addressing needs identified in the recommendations, the *Iowa Aviation System Plan* will help ensure users of the aviation system are offered safe, quality facilities and services that support the air transportation demands of Iowa for the next twenty years.

Section Two – Individual Airport Overview

This section provides information specific to the Dubuque Regional Airport, including a brief history of the airport, forecasts of operations and based aircraft, performance measure recommendations, a summary of capital improvement projects, and an airport fact sheet.

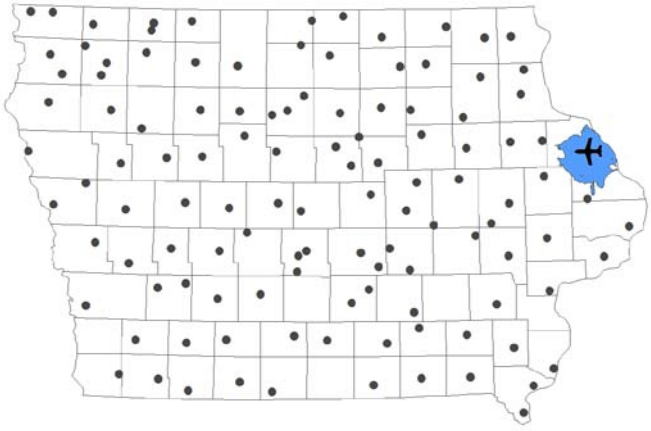
2.1 Airport Summary

The Dubuque Regional airport is owned by the City of Dubuque. An airport commission was established by the city to manage the airport. The FAA recognizes the airport as playing a role in the national airport system and includes the airport in the National Plan of Integrated Airport Systems (NPIAS) as a non-hub primary commercial service airport. (A non-hub airport is one that enplanes more than 10,000, but less than 0.05 percent of the total U.S. passengers.) The airport is eligible for primary passenger entitlement funding.

The *Iowa Aviation System Plan* identifies the Dubuque Regional Airport as a Commercial Service airport. Commercial Service airports support scheduled airline service and have the infrastructure and services available to support a full range of general aviation activity. The airport meets most needs of the aviation system and serves as an essential transportation and economic center of the state. Specific airport information can be found in the Airport Fact Sheet located in the appendix of this report.

The Dubuque Regional Airport serves the aviation needs of the City of Dubuque, Dubuque County and surrounding counties. The airport was originally constructed and opened at its present site in 1948, located six (6) miles south of Dubuque in Dubuque County. Regional access to the airport is from U.S. Highway 61.

30 Minute Drive Time



Airport Location

2.2 Airport Current Conditions & Facilities

A summary of general airport information, facilities, and services at the Dubuque Regional Airport is included in the Fact Sheet at the end of this report. Airport information in the Fact Sheet reflects updated information and may vary from the 2010 data used in the *Iowa Aviation System Plan* technical report. The Dubuque Regional Airport has been classified as an Commercial Service airport. This classification is relevant to specific facility and service targets as well as performance measures.

2.3 Airport Forecasts

Aviation demand projections for based aircraft and aircraft operations were prepared for each of the 117 public use airports in Iowa's aviation system. A number of different FAA forecasting techniques were utilized in the projection of aviation activity at each airport ranging from subjective judgment to mathematical modeling based on historical trends. Data obtained from airport managers, the Office of Aviation, the 2010-2030 FAA Aerospace Forecast, and the FAA Air Traffic Activity Data System (ATADS) also contributed to the projections developed for each airport.

Based aircraft projections were developed for each airport by multiplying a compound annual growth rate (CAGR) of 1.25 percent (1.25%) to the number of current (2010) based aircraft at each airport as reported by airport managers. Aircraft operations were projected by multiplying the forecasted number of based aircraft by an adopted Office of Aviation estimation guideline outlined in FAA Order 5090.3C, *Field Formulation of the National Plan of Integrated Airport Systems (NPIAS).* This is an acceptable procedure to forecast operations where limited or no historical data may be available, permitting a single methodology to be applied to all airports. Airports with 1 to 30 based aircraft forecasted were assigned 250 operations per aircraft, while airports with 31 to 99 based aircraft were assigned 350 operations per aircraft. Airports forecasted with 100 or more aircraft were assigned 450 operations per aircraft. The based aircraft and operations projections developed for Dubuque Regional Airport using the methodologies as described previously are presented in the following table.

Airport Forecasts

Forecast Year	Based Aircraft	Operations
2010	74	49,608
2015	79	51,133
2020	84	52,729
2025	89	54,403
2030	95	56,161

Sources
Based aircraft: 2010 Airport Manager Survey, Mead & Hunt, Inc.
Operations: FAA Order 5090.3C, FAA Aerospace Forecast 2010-2030, FAA ATADS

2.4 System Performance by Airport

Although progress has been made to achieve the goals and objectives, continuous improvements are necessary to provide Iowa with an air transportation system that supports the economy and quality of life demands. Dubuque Regional Airport has a role in meeting these goals by striving to meet the individual performance measures that are applicable to its current role as an Commercial Service airport. Each airport plays a role in meeting the goals and objectives. Individual airports can assess their specific performance, to determine what is appropriate to meet their needs, taking into account the recommendations from the system plan. It is understood that full implementation of some of the targets may not be feasible; however, it is important to identify goals and work to attain those that are reasonable.

2.4.a Recommendations to Support the System Plan Goals

Evaluation of how well the Dubuque Regional Airport is meeting the objectives identified areas that could be improved to achieve the system plan goals. Focusing future improvements to enhance facilities, services, and planning to meet the objectives, while maintaining existing performance in areas meeting or exceeding desired conditions, contributes to a vibrant aviation system. Recommendations included on Page 14 list actions the airport may consider to benefit users of aviation in Iowa. In addition to specific recommendations to meet system goals and objectives, the *Iowa Aviation System Plan* recommends that airport sponsors and managers take the following actions to enhance a safe and effective operating environment:

- Reduce on-airport wildlife habitat and mitigate hazardous wildlife activity to limit potential safety concerns.
- Engage community leaders and stakeholders in developing a strategic plan to guide the development of the airport, coordinating with economic development interests.
- Develop a welcome image for visitors arriving by air and provide directional signage to the business community to ensure a connection.
- Actively work to protect runway approaches by developing or enforcing height and compatible land use zoning.

2.4.b Recommendations to Achieve the Facility and Service Targets

Facility and service targets identify levels of infrastructure and services that are desirable to effectively meet user needs. Though it may not be feasible to meet or exceed all targets, the airport is encouraged to develop and maintain facilities and services to levels defined for the Commercial Service role. The tables presented on Page 15 and Page 16 identify what is recommended for the Dubuque Regional Airport to achieve each target.

Airport Recommendations to Support the Goals of the Iowa Aviation System

Objective	Achieving Performance/Recommendation
Goal: Safety and Security	
• Airport has clear approaches to primary runway.	YES - Continue to preserve clear approaches to primary runway.
• Airport has clear approaches to all runways.	YES - Continue to preserve clear approaches to all runways.
• Airport has an emergency response plan.	YES - Update airport emergency plan annually.
• Airport develops and implements a security plan.	YES - Continue to update security plan annually.
Goal: Infrastructure and User Support	
• Airport meets facility targets identified for its role.	YES - Continue to maintain and preserve facilities to meet or exceed targets by role.
• Airport meets service targets identified for its role.	YES - Continue to provide services that meet or exceed targets by role.
• Primary runway maintained to PCI of 70 or higher.	YES - Continue to maintain primary runway to a PCI of 70 or higher. *Primary runway PCI: 85*
• Airport maintains overall PCI of 70 or higher.	YES - Continue to maintain all pavement surfaces to achieve an overall airport PCI rating of 70 or higher. *Overall PCI Rating: 85*
• All based aircraft stored in covered hangars.	YES - Continue to provide hangars for all based aircraft.
Goal: Economic Support	
• Airport coordinates with local officials to include information in business promotional materials.	Establish cooperative relationships with local economic development offices, chambers of commerce, and city and county officials to include airport information in business promotional materials.
Goal: Planning	
• Airport has a current master plan or ALP.	YES - Airport continue to update Airport Layout Plan at least every 8 years. Last Airport Layout Plan update: 2005
• Airport is protected by local height zoning ordinances.	YES - Update height zoning ordinance as needed and monitor its enforcement.
• Airport compatible land use is included in city/county comprehensive or land use plans.	NO - Coordinate with city and county officials to address compatible land use in a comprehensive or land use plan. Review and update land uses as needed with each plan update.
Goal: Education and Outreach	
• Airport has a regular communication program.	YES - Continue to regularly communicate airport news and events through newsletters, press releases, web sites, and social media.
• Airport has based rental aircraft and availability of flight instruction.	NO - Provide based rental aircraft and establish a method to make flight instruction available at the Airport.
• Airport hosts pilot safety programs.	NO - Coordinate with the FAA, industry associations, and other aviation organizations to host pilot safety programs.
• Airport hosts annual aviation events, additional types of public events, and organized youth educational activities.	Increase efforts to host annual aviation events such as fly-ins and air shows, additional types of public events such as open houses, tours, conferences, and meetings, and organized youth educational activities such as aviation camps, Young Eagles programs, and internships.

Airside and Landside Facility Target Needs

Target Description	Existing Condition		Target	Recommendation
Airside Facilities				
Airport Reference Code	C-III		C-II	Maintain airfield to at least C-II design standards
Primary Runway Length	6,502 ft		Minimum 5,000 ft	Maintain runway length to at least 5,000 ft
Primary Runway Width	100 ft		Minimum 100 ft	Maintain 100 ft runway width
Type of Parallel Taxiway	Full parallel		Full parallel	Maintain full parallel taxiway
Type of Runway Approach	Precision		Vertical Guidance	Maintain an approach that provides at least vertical guidance
Runway Lighting	HIRL		MIRL	Maintain at least MIRL runway lighting
Taxiway Lighting	MITL		MITL	Maintain MITL taxiway lighting
Visual Guidance Slope Indicator	Rwy 13	Rwy 31	Both runway ends (or ILS)	Maintain a VGSI on both runway ends
	VASI	PAPI		
Runway End Identifier Lights (as required)	No	No	Both runway ends (or ILS)	Maintain ILS approach
Rotating Beacon	Yes		Yes	Maintain rotating beacon
Lighted Wind Indicator	Yes		Yes - Multiple as needed	Maintain lighted wind indicator
RCO Facilities	none		Tower or RCO	Maintain at least an RCO
Wind coverage or crosswind runway	Crosswind runway		Crosswind runway or 95% coverage for NPIAS facilities	Maintain crosswind runway
Landside Facilities				
Covered storage for based aircraft	69% of based aircraft		100% of based aircraft	Construct additional storage for 100% of based aircraft
Overnight storage for business aircraft	Yes		Typical average aircraft/ business user demand	Continue to provide overnight storage for itinerant business aircraft
Aircraft apron	100% of average daily transients		100% of average daily transients	Maintain apron size to park 100% of average daily transients
Terminal/administration building	Free standing		Yes	Maintain terminal building
Paved entry/terminal parking	Entry & parking		Entry & parking	Maintain paved entry road & parking lot

Service Target Needs

Target Description	Existing Condition	Target	Recommendation
Services			
Fuel (type & hours)	Type: Jet A & 100LL 24 hour availability: Yes	100LL & Jet A (24 hrs - single point)	Continue to provide 100LL & Jet A fuel with 24 hour availability
Weekday hours of operation	5am-10pm	Standard business hours; after hours on-call	Continue to maintain staffing during standard business hours and after hours on-call
Weekend hours of operation	5am-10pm	Standard business hours; after hours on-call	Continue to maintain staffing during standard business hours and after hours on-call
Ground Transportation	Courtesy car & car rental	Courtesy car/ car rental available	Continue to offer car rental and/or a courtesy car
Food & Beverage	Yes	Vending	Continue to provide at least vending services
Posted contact info	Yes	Yes	Continue to post and update after hours contact information
Internet access	Wireless	Yes	Continue to provide a method to access the internet
Restroom	Number of restrooms: 4	Yes	Continue to provide restrooms
Pilot area	Yes	Yes	Continue to maintain a pilot area
Security plan	Yes	Security plan	Continue to maintain and update security plan annually
Snow removal	Anti-icing & plowing	Timely Snow Removal	Continue to provide timely snow removal
Rental aircraft	none	Based	Provide based rental aircraft
Flight training	On-call	Available	Continue to provide flight training
Aircraft maintenance/repair	Based	Based	Continue to offer based aircraft maintenance and repair
Aircraft charter	On-call	Based	Provide a based aircraft charter service
Weather reporting/ flight planning capabilities	Yes	Yes	Continue to provide weather reporting & flight planning capabilities

2.5 Potential Projects

Although significant investment has been made to improve the overall condition of system infrastructure, it is important to continue to preserve and develop infrastructure to meet the needs of aviation users. In addition to needed facility and service target improvements, specific airport needs identified on Capital Improvement Plans (CIPs) and Long Range Needs Assessments (LRNAs) were evaluated to project the anticipated level of investment that will be required by airports throughout the twenty year planning period.

To determine the anticipated level of investment needed at the Dubuque Regional Airport, the following resources were referenced:

- Cost estimates for airports to achieve 100% of the system plan facility targets.
- 2011-2016 Airport Capital Improvement Program (CIP) plans.
- Airport Long Range Needs Assessments (LRNA).
- Cost estimates to meet the system plan Airport Layout Plan objective, focusing on the development and continual update of electronic ALPs (e-ALPs).
- Cost estimates to maintain pavement condition index at 70 using pavement rehabilitation projects identified in the Iowa Statewide 2010 Pavement Management Report.
- Because of the wide variation in methods to mitigate runway approach obstructions, separate costs were not identified to address the clear approach objective. These costs are included in many of the airport CIP and LRNA, and will be identified through specific annual initiatives.

A summary of funding needed to address development needs and other potential projects at the Dubuque Regional Airport is presented on Page 18.

2011-2030 Development Needs

Project Description	Funding Needed
Airport Layout Plan update (2013, 2021, 2029)	$1,350,000
TOTAL	**$1,350,000**

Source: 2011-2016 CIP Plans, LRNA plans, Iowa Statewide 2010 Pavement Management Report, Mead & Hunt, Inc.

2011-2030 Other Potential Projects

Project Description	Funding Needed
Construct sitework	$5,408,311
Construct US-61 and entrance road intersection	$529,925
Construct terminal building	$8,752,175
Construct terminal apron	$6,130,160
Construct aircraft deicing fluid containment/collection	$948,300
Install electric and gas service	$435,050
Construct water and wastewater improvements	$741,380
Construct parking lot - phase 1	$2,084,851
Construct entrance road - paving	$710,657
Construct circulation roadway	$1,113,051
Install passenger boarding bridges - design	$88,125
Install passenger boarding bridges - construction	$881,251
Acquire terminal furnishings and equipment - design	$152,750
Acquire terminal furnishings and equipment - construction	$1,198,500
Install monument and guidance signage	$129,251
Construct parking lot - phase 2	$2,193,725
Construct parallel and connecting Taxiway F - grading	$760,225
Construct airport perimeter road	$1,266,651
Construct parallel and connecting Taxiway F - paving	$2,222,151
TOTAL	**$35,746,489**

Source: 2011-2016 CIP Plans, LRNA plans, Iowa Statewide 2010 Pavement Management Report, Mead & Hunt, Inc.

Dubuque Regional Airport

Fact Sheet

General Information	Based Aircraft
Airport name: Dubuque Regional Airport	**Single engine:** 61
Associated city: Dubuque	**Multi engine:** 11
FAA identifier: DBQ	**Jets:** 2
Iowa Aviation System Plan Role: Commercial Service	**Military:** 0
Manager: Robert Grierson	**Helicopters:** 0
Phone: 563-589-4128	**Ultralights:** 0
Latitude: 42° 24' 07" N	**TOTAL:** 74
Longitude: 90° 42' 34" W	
Elevation: 1,077 ft	

Airside Facilities	Landside Facilities
Type of taxiway system: Full parallel	**Apron aircraft tie-down locations:** Commercial airline apron
Taxiway lighting: MITL	**Total hangar parking spaces:** 51
Rotating beacon: Yes	**Overnight storage for itinerant aircraft:** Yes
Weather reporting equipment: ASOS	**Type of terminal/admin building:** Free standing
Lighted wind indicator: Yes	**Paved surfaces:** Entry & parking
Remote Communication Outlet (RCO): none	

Runway Information

Runway	Length	Width	ARC	PCI rating	Lighting System
13/31	6,502 ft	100 ft	C-III	85	HIRL
18/36	6,327 ft	150 ft	C-III	85	HIRL

Runway Approach Information

Runway	Published approaches	Approach categories	Approach Slope	VGSI	REIL
13	LOC/DME BC Rwy 13 RNAV (GPS) Rwy 13 VOR Rwy 13	S-13: 404-3/4 LPV DA: 316-1; LNAV MDA: 343-3/4 S-13 (TAYOD FIX): 443-3/4	34:1	VASI	No
31	LOC Rwy 31 VOR Rwy 31 RNAV (GPS) Rwy 31	S-31: 478-1/2 S-31 (ZUKOB FIX): 478-3/4 LPV DA: 419-1; LNAV MDA: 478-3/4	34:1	PAPI	No
18	None	Visual	20:1	PAPI	No
36	ILS or LOC Rwy 36 VOR Rwy 36 RNAV (GPS) Rwy 36	S-ILS 36: 200-1/2 S-36 (GAPGE FIX): 492-1/2 LPV DA: 200-1/2; LNAV MDA: 432-1/2	50:1	PAPI	No

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Planning	Fueling Capabilities
Security plan: Yes	**Fuel types:** Jet A & 100LL
Emergency response plan: Yes	**24 hour fueling available:** Yes
Last Airport Layout Plan update: 2005	
Local height zoning: Yes	
Inclusion in local comprehensive plan: No	

Staffing

Weekday hours of personnel: 5am-10pm

Weekend hours of personnel: 5am-10pm

Posted after hours contact information: Yes

Services & Programs

Aircraft maintenance & repair: Based	**Aircraft charter:** On-call
Flight instruction: On-call	**Rental aircraft:** none
Snow removal: Anti-icing & plowing	**Internet:** Wireless
Food & beverage: Yes	**Restrooms:** 4

Pilot area: Yes

Type of ground transportation: Courtesy car & car rental

Regular communication program: Website, news releases, city and private newsletters, presentations

Pilot safety program: none

Employment From General Aviation Visitor Spending (Source: 2009 Uses and Benefits of Aviation in Iowa)

Indirect Employment	Induced Employment	Total Employment

Total Airport-Related Employment

Direct & Indirect Employment	Induced Employment	Total Employment

Economic Output

Direct & Indirect Output	Induced Output	Total Output
$20,830,200	$13,556,000	$34,386,200

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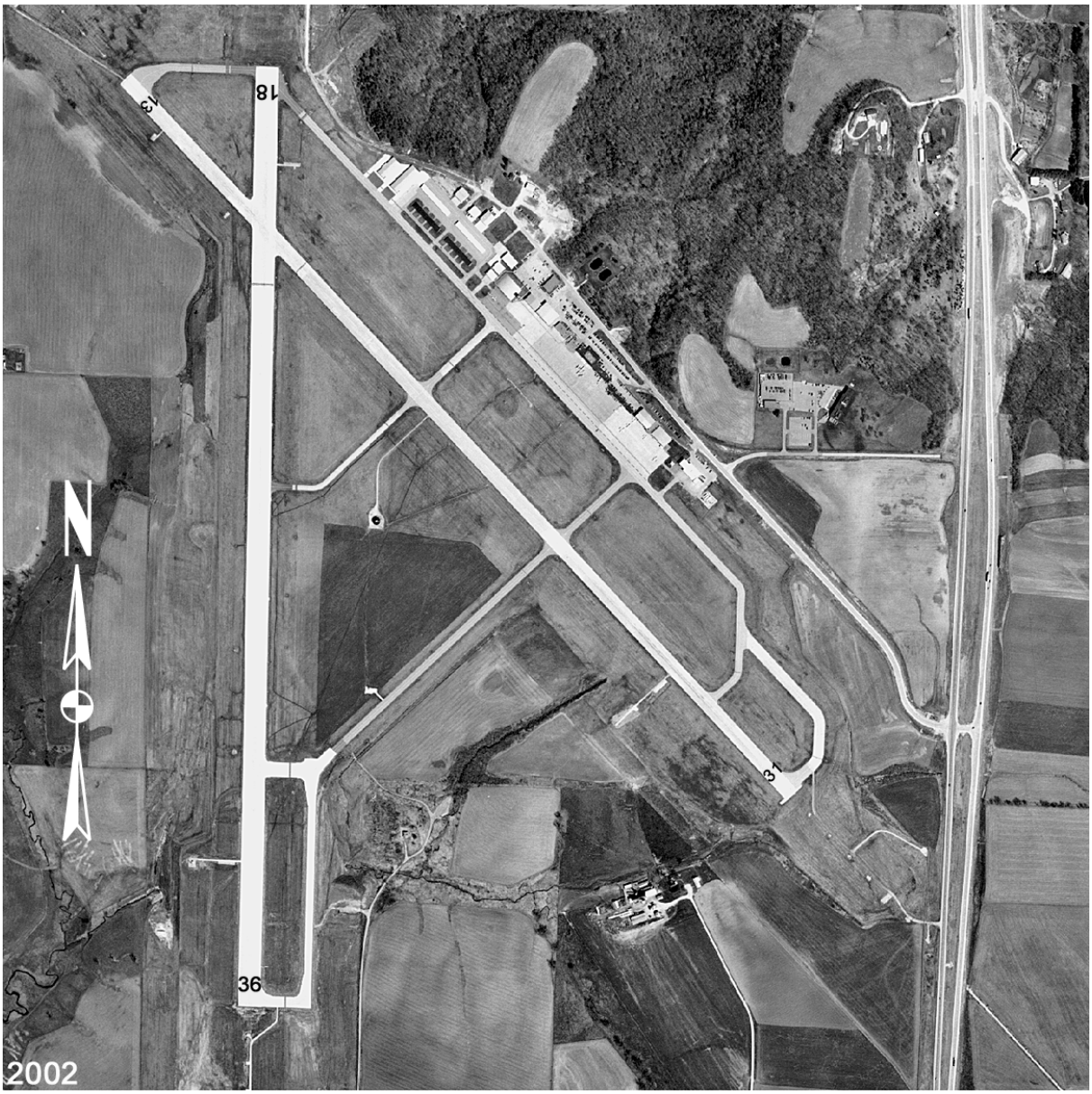

Source: Iowa Department of Transportation

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The technical report and executive summary for the Iowa Aviation System Plan is available on the Iowa DOT Office of Aviation website at:

http://www.iowadot.gov/aviation.index.html