



IOWA AVIATION SYSTEM PLAN

AIRPORT SUMMARY REPORT

SOUTHEAST IOWA REGIONAL AIRPORT - BURLINGTON

Prepared for:

IOWA DEPARTMENT OF TRANSPORTATION
OFFICE OF AVIATION

2004

Prepared by:

Snyder & Associates, Inc. and Wilbur Smith Associates, Inc.



SNYDER & ASSOCIATES
Engineers and Planners



Wilbur Smith Associates

"The preparation of this document was financed in part through a planning grant from the Federal Aviation Administration (FAA) as approved under the Airport and Airway Improvement Act of 1982. The contents of this report reflect the views of the Consultant, which is responsible for the facts and accuracy of the data depicted herein, and do not necessarily reflect the official views or policy of the FAA. Acceptance of this report by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted therein, nor does it indicate that the proposed development is environmentally acceptable in accordance with applicable public laws."

IOWA AVIATION SYSTEM PLAN - AIRPORT SUMMARY REPORT

This summary is intended to provide a general understanding of the specific information, findings and recommendations from the Iowa Aviation System Plan. An individual airport report was prepared for each public owned airport in Iowa.

INTRODUCTION

The Iowa Department of Transportation Office of Aviation, along with the System Plan Advisory Committee and consultant team, developed a strategic approach by which to identify and evaluate the needs of the Iowa aviation system within the period 2004 to 2024.

The Iowa aviation system is an integral component of the state's transportation network. The aviation system meets aviation and economic needs and links Iowa to the national transportation system. Aviation provides an important and efficient means of transportation for the movement of people and goods. The vision for the Iowa aviation system is to have safe, quality facilities and services that support transportation demands and meet economic development and quality of life needs in the state.

The primary goal of the system plan is to provide a framework that supports informed decisions related to planning and developing the Iowa aviation system. The objectives of this update of the Iowa Aviation System Plan are to:

- Identify and analyze aviation assets, including airspace, ground facilities and services, and needs of the state to assure that aviation performs its role in Iowa's economy and for its citizens.
- Provide continued guidance for development of a system of airports to meet the state's existing and future air transportation needs, projecting five, ten, and 20-year projects and giving guidance to meet needs.
- Build consensus among public policy makers, airport sponsors and users so that the plan's recommendations can be more readily accomplished.

Each airport was assigned to a functional classification. Facility and service objectives were developed for functional classifications. Based on existing facilities and services, recommendations were set forth for each airport.

SYSTEM GOALS

The following five goals and associated performance measures were identified and adopted to guide the Iowa aviation system development and establish the framework for the Iowa Aviation System Plan:

- **Development** – To provide an airport system that meets current and future customer needs.
- **Economic Support** – To promote an aviation system that sustains and enhances Iowa's economy.
- **Safety & Security** – To promote a safe and secure system of airports.
- **Accessibility** – To provide a system of airports that is accessible from both the ground and the air.
- **Education** – To support a system of airports that provides educational and career opportunities and promotes an understanding of the benefits of Iowa's air transportation system.

Performance Measure & Benchmark Summary	
<p>Performance Measure: Development</p> <p><i>Benchmarks</i></p> <ul style="list-style-type: none"> • Airports meeting aircraft storage objectives • Airports meeting aircraft parking objectives • Airports meeting auto parking objectives • Airports with Pavement Condition Index (PCI) rating of 70 or higher on primary runway • Airports with current master plan or Airport Layout Plan (ALP) • Airports included in a local comprehensive plan or with surrounding land use controls/zonings <p>Performance Measure: Economic Support</p> <p><i>Benchmarks</i></p> <ul style="list-style-type: none"> • Airports with jet fuel • Airports with a runway length of 5,500 feet or greater • Airports with rental car services • Airports with a courtesy car available • Airports with a 24-7 fueling (credit card or FBO) • Iowa employment within a 30-minute drive time of Commercial or Enhanced Service airport • Employment growth counties within 30-minute drive time of Commercial or Enhanced Service airport • Airports supporting air cargo • Airports with aircraft maintenance <p>Performance Measure: Safety and Security</p> <p><i>Benchmarks</i></p> <ul style="list-style-type: none"> • Airports with clear approaches to primary runway • Airports with wildlife management plans • Airports with emergency response plans • Airports with perimeter fencing • Airports with controlled access to airfield 	<p>Performance Measure: Accessibility</p> <p><i>Benchmarks</i></p> <ul style="list-style-type: none"> • Airports with precision approaches • Airports with any instrument approach • Airports with approach lighting system (ALS) • Airports with a precision approach and ALS • Iowa's Population within 30 minutes of any system airport • Iowa's population within 30 minutes of a Commercial or Enhanced Service airport • Iowa's population within 30 minutes of a General Service airport • Iowa's population within 30 minutes of an airport with a non-precision approach • Iowa's population within 30 minutes of an airport with a precision approach • Iowa's population within 30 minutes of an airport with onsite weather reporting equipment • Iowa's population within 60 minutes of an airport with one or more scheduled commercial airlines • Iowa's population within 120 minutes of an airport with two or more scheduled commercial airlines • Iowa's population within 120 minutes of an airport with two or more scheduled commercial airlines or 60 minutes of an airport with one or more scheduled commercial airlines <p>Performance Measure: Education</p> <p><i>Benchmarks</i></p> <ul style="list-style-type: none"> • Airports with on-site flight instruction • Aviation related training programs connected with local schools • Airports with public outreach/educational (following National Air Transportation Association (NATA,) National Business Aircraft Association (NBAA,) and Aircraft Owners and Pilots Association (AOPA) guidelines) programs, or hosting functions to bring the non-flying public to the airport

AIRPORT FUNCTIONAL ROLES

Airports within any transportation system contribute to meeting air transportation and economic needs in different ways and at varying levels. While each airport within a system contributes in some way, airports fill different roles. Because airports in the Iowa aviation system play different roles, their needs for facilities and services also vary accordingly.

With input from the Iowa DOT Office of Aviation and the System Plan Advisory Committee, each public owned airport in Iowa was assigned to one of five roles.

RECOMMENDED FUNCTIONAL AIRPORT ROLES

- **Commercial Service Airports** – these airports support some level of scheduled commercial airline service and they support a full range of general aviation aircraft to virtually all domestic and possibly some international destinations.
- **Enhanced Service Airports** – these airports support almost all general aviation aircraft, including most types of business jets; these airports generally serve as transportation centers and economic catalysts for the State.
Facility and service objectives: 5,500' x 100' runway, parallel taxiway, precision approach, approach lighting, AWOS/ASOS, covered aircraft storage, jet and aviation fuel, full service FBO, and ground transportation
- **General Service Airports** – these airports support most twin and single engine general aviation aircraft and may experience occasional use by business jets. These airports support regional and in-state air transportation needs and local economic development.
Facility and service objectives: 4,000' x 75' runway, partial parallel taxiway or turnarounds, non-precision approach, AWOS/ASOS, covered aircraft storage, jet and aviation fuel, limited service FBO, and ground transportation.
- **Basic Service Airports** – these airports support primarily single engine general aviation aircraft but may also sometimes accommodate smaller twin-engine general aviation aircraft. These airports support local air transportation, and special use aviation activities.
Facility and service objectives: 3,000' x 60' runway (paved), 2,500' runway (turf), exits as needed, visual approach, covered aircraft storage, and aviation fuel.
- **Basis Service II Airports** – These airports support local air transportation, special use aviation activities, and may duplicate services in the area.
No facility and service objectives are specified for these airports.

AIRPORT FACILITY AND SERVICE OBJECTIVE

Airport facility and service objectives were established for the functional roles. These objectives were developed with input from the Iowa DOT Office of Aviation and System Plan Advisory Committee. The facility and services objectives should not be considered a requirement or development standard. Current airport facilities and services were compared to the facility and service objectives. Where existing facilities and services do not meet or exceed the objectives, consideration may be given by the airport owner to develop future facility and services improvements. Development of some facilities would require local support and justification of need through development of an airport master plan or through the environmental documentation process.

No state or federal funding resources are guaranteed or committed by inclusion of specific facility and service improvements in this report.

Facility and service objectives for commercial service airports should, at minimum, equal those developed for enhanced service airports as well as recommendations set forth in a current Airport Master Plan.

Basic Service II airports should meet state minimum safety standards: Runway width 50', visual approach 20:1, wind indicator, and 24 hour public telephone. Additional facility and service objectives were not established for Basic Service II airports.

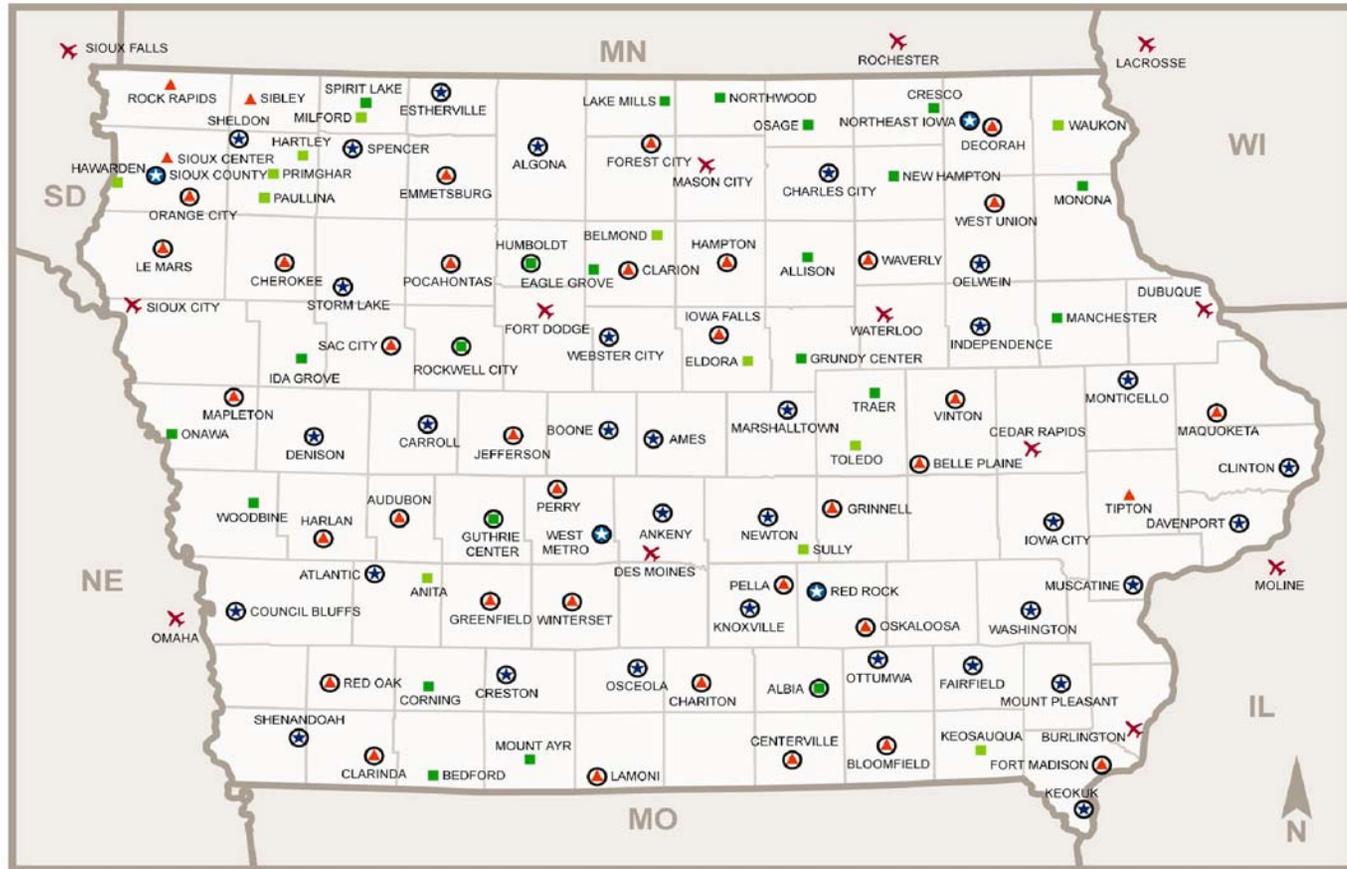
The following table sets forth the facility and service objectives for Enhanced Service, General Service, and Basic Service airports.

FACILITY AND SERVICE OBJECTIVES

	Enhanced Service Airports	General Service Airports	Basic Service Airports
Airport Reference Code (ARC)	C-II	B-II	B-I or Below
Runway Length (Primary)	Minimum 5,500 feet	Minimum Length 4,000 feet	3,000 feet Paved; 2500 feet Turf
Runway Width	100 feet	75 feet	60 feet Paved; 120 feet Turf
Taxiway	Full Parallel	Partial or Turnarounds	Exits as Needed
Approach	Precision	Non-Precision	Visual
Runway Lighting	MIRL/HIRL	MIRL	LIRL (Pilot Controlled)
Taxiway Lighting	MITL/HITL	LITL	Not An Objective
Weather Reporting	AWOS/ASOS	AWOS/ASOS	Not An Objective
Approach Aids	ALS	ALS	Not An Objective
Visual Guidance Slope Indicator (VGSI)	Both Runway Ends	Both Runway Ends	Not An Objective
Runway End Identifier Lights (REILS)	Both Runway Ends	Both Runway Ends	Not An Objective
Rotating Beacon	Rotating Beacon	Rotating Beacon	Not an Objective
Lighted Wind Indicator	Lighted Wind Indicator	Lighted Wind Indicator	Lighted Wind Indicator/Wind Sock
RCO Facilities	RCO Facilities	Not an Objective	Not an Objective
Other Pavement Strength	To Be Determined	To Be Determined	To Be Determined
Covered Storage	For 100% of Based Aircraft	100% of Based Aircraft	100% of Based Aircraft
Aircraft Apron	100% of Daily Transient	50% of Daily Transient	50% of Daily Transient
Terminal/Administration Bldg.	Yes	Not An Objective	Not An Objective
Auto Parking	Spaces equal to 100% of Based Aircraft (paved)	75% of Based Aircraft	50% of Based Aircraft
Fencing	Perimeter	Not An Objective	Not An Objective
Other	Building for Airport Maintenance Equipment	Not An Objective	Not An Objective
Fuel	100LL & Jet A - 24 Hour	100LL & Jet A 24 Hour (as needed)	100LL
FBO	Full Service - 24 Hour	Limited	Not An Objective
Ground Transportation	Rental Car, Taxi or Other	Courtesy Car/Off Site Rental Car	Not An Objective
Food Services	Vending	Vending	Not An Objective
Phone	Yes	Yes	Yes
Restroom	Yes	Yes	Yes
Pilot Lounge	Yes with Weather Reporting	Yes with Weather Reporting	Not An Objective
Security*	*	*	*
Snow Removal	Snow Removal	Snow Removal	Yes

*See the Iowa DOT Security Enhancement Guidelines.

Airports by System Role



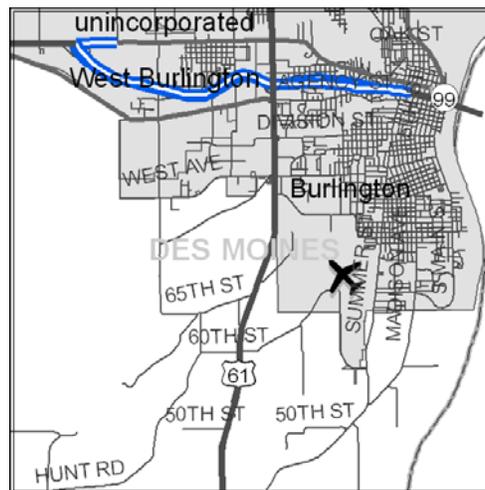
- | | | |
|---------------------------------|-----------------------------|---------|
| ✕ Commercial Service Airports | ▲ General Service Airports | |
| ★ Enhanced Service Airports | ■ Basic Service Airports | ○ NPIAS |
| ★ New Enhanced Service Airports | ■ Basic Service II Airports | |

SOUTHEAST IOWA REGIONAL AIRPORT - BURLINGTON (BRL) INDIVIDUAL SUMMARY REPORT

The airport was dedicated in 1929 as the Burlington Municipal Airport. The name was changed in 1996 to the Southeast Iowa Regional Airport. An airport authority was established by the City of Burlington and West Burlington on July 1, 1996. A three (3) member board governs the airport with two members appointed by the City of Burlington and one member appointed by the City of West Burlington. The Airport Authority Board has the power (as set forth in Chapter 330A of the Iowa Code) to make decisions on behalf of the airport. A full time airport manager manages daily operations at the facility. The airport has an annual operating budget of approximately \$350,000 and an annual capital improvement budget of between \$1,000,000 and \$1,500,000.

The airport is classified in the National Plan of Integrated Airport Systems (NPIAS) as a non-primary commercial service airport and is identified in the Iowa Aviation System Plan as a Commercial Service airport. The airport is currently enplaning over 7,500 passengers. The airport serves the general aviation community in southeast Iowa and western Illinois. There are 51 based aircraft at the facility.

LOCATION MAP



The Southeast Iowa Regional Airport is a 536-acre facility located in Des Moines County. The airport, located two (2) miles southwest of the Burlington central business district, is within the corporate boundaries of the City of Burlington. Regional access to the airport is provided by US 61 and US 34.

EXISTING FACILITIES

- **Runway Facilities**

The Southeast Iowa Regional Airport supports two runway facilities. The primary runway is oriented north-south on 18/36 headings. The runway is 6,702 feet in length and 150 feet in width. The Runway 18 threshold is displaced 1,210 feet. The runway has precision markings (i.e. runway designation, centerline, threshold, touchdown point, touchdown zone, side stripes, and aircraft holding positions), and is currently maintained to accommodate aircraft in Approach Category D and Design Group III. The pavement is strength-rated at 65,000 pounds for single wheel gear (SWL), and 90,000 pounds for dual wheel gear (DWL).

Runway 18/36 is equipped with high intensity threshold and edge lights (HIRL). Runway 18 is equipped with a visual approach slope indicator (VASI). Runway 36 is equipped with an approach light system (MALSR). Runway 18/36 is equipped with a localizer (LOC), distance measuring equipment (DME) and glide slope (GS) facility.

Runway 12/30, the secondary runway, is 5,350 feet in length and 100 feet in width. The concrete surfaced runway has a 37,000 pound single wheel loading and a 58,000 pound dual wheel loading. The runway is equipped with medium intensity threshold and edge lights (MITL). Runway 12 is equipped with runway end identifier lights (REIL) and visual approach slope indicator lights (VASI). Runway 30 is equipped with runway end identifier lights (REIL) and precision approach path indicator lights (PAPI). The threshold on Runway 30 is displaced 500 feet.

Runways 18/36 and 12/30 are served by a full parallel taxiway system. Taxiway A, which extends along Runway 18/36, was reconstructed in 2003. The taxiway, 50 feet in width, is equipped with high intensity taxiway edge lights (HITL). Taxiway C extends along Runway 12/30 and is equipped with medium intensity threshold lights (MITL). Taxiway C is 75 feet in width.

In addition, other landing aids at the airport include a rotating beacon, UNICOM (a private radio communication service that provides air traffic, weather, and other advisories to pilots arriving and/or departing the airport) and an Automated Surface Observing System (ASOS).

A non-precision instrument approach may be made to Runways 12, 30 and 36. A precision instrument approach may be made to Runway 36.

The following published approaches were available as of 7-10-03.

ILS Runway 36, VOR or GPS Runway 30, RNAV (GPS) Runway 36
NDB Runway 36, VOR/DME or GPS Runway 12

- **Terminal Facilities**

Landside facilities at the Southeast Iowa Regional Airport include the airline passenger terminal complex, general aviation facilities, fuel storage facilities and airport maintenance facilities.

The existing airline passenger terminal complex is located on the east side of the airport with vehicle access from Summer Street. The terminal access road provides traffic flow around the terminal building and parking lots.

The existing terminal building was recently renovated and provides 9,580 square feet of floor area. The structure provides space for airline ticketing, airline boarding, baggage claim, car rental as well as the fixed-base operator (FBO). The FBO occupies 1,700 square feet of the structure.

The front curb area of the terminal building is approximately 90 feet in length and can accommodate approximately four vehicles. Departing passengers enter the terminal building from the curbside at ground level.

Ticketing and bag checking takes place on the ground level. The existing terminal facility does not have hold room facilities and functions using a combined lobby configuration with the existing lobby area doubling as a passenger waiting area and public seating. Public telephone, newspaper/vending machines and various advertising concessions are located throughout the terminal facility.

Vehicle parking for the passenger terminal complex is immediately south of passenger terminal building in a surface parking lot of 300 spaces. A total of 15 spaces of the lot are used for general aviation parking, 200 spaces for long term parking, 43 spaces for car rental ready and return, and 14 for employees.

The passenger terminal apron, providing for air carrier aircraft parking, currently encompasses approximately 5,633 square yards of pavement adjacent to the north side of the terminal building.

Airport administrative offices are located in a free standing structure on the east side of the airport. The structure, containing approximately 1,440 square feet, provides space for offices, restroom facilities, public waiting area and conference room.

- **General Aviation Facilities**

General aviation facilities primarily consist of hangars for aircraft, aircraft parking apron and terminal facilities. General aviation terminal facilities provide space for passenger waiting, pilots' lounge and flight planning, concessions, management, storage, and various other needs.

Hangar facilities include a ten unit tee hangar that was constructed in 1946 and a conventional hangar constructed in 1953. Twenty (20) additional tee hangar units were constructed in the 1970's. A corporate hangar with capacity for 9 to 12 aircraft was also constructed in the 1970's. The airport provides storage for 52 aircraft. There are three conventional (approximately 1,376 SF) aircraft storage facilities under construction. Construction is to be completed in 2004 providing storage for three cabin class general aviation aircraft.

There are six (6) aircraft on a waiting list for storage space.

The airport supports two apron areas for use by the FBO and general aviation aircraft

- Local 4,760 SY
- Itinerant/FBO 4,760 SY

There are nine tiedowns for transient aircraft.

The FBO is on-call 24 hours each day. A telephone is available for public use.

- **Military**

There are no military installations at the airport. Military operations at the Southeast Iowa Regional Airport include training and other operations conducted by the various armed services. Future military activity at the airport will likely resemble activity in recent years, which has varied from 200 to 500 annual operations.

- **Fuel Facilities**

There is one 10,000 gallon above ground fuel storage facility for 100LL and a 12,000 gallon above ground fuel storage facility for Jet A. The FBO at the airport has two mobile fuel trucks that service the aircraft on the aprons. One truck holds Jet A fuel and the other holds AvGas.

- **Other Facilities**

The airport does not have an air traffic control tower. The airport maintenance and snow removal equipment building is located southeast of the passenger terminal building and is approximately 4,900 square feet in size. An aircraft rescue and fire fighting (ARFF) facility is located on the airport. ARFF services are provided by the city at Index A standards.

- **Zoning**

The City of Burlington has adopted a land use plan and zoning district regulations. A tall structures ordinance has been adopted by the city and the county.

EXISTING SERVICES

- **Commercial Services**

Currently nonstop scheduled commercial airline service is provided from the Southeast Iowa Regional Airport as follows:

Southeast Iowa Regional Airport.

Carrier	Equipment	# Seats	Daily Departures	Non-stop Destinations
Corporate Airlines American Connection	Jetstream 32	19	3	St. Louis

January 2004

In 2003 the airport accommodated over 8,052 enplaning passengers, approximately 1% of the state's total enplaning passengers, with 3 daily departures. The U.S. Department of Transportation's Essential Air Service (EAS) program provides a subsidy to Corporate Airlines to maintain service to Burlington. The airline services are provided from the passenger terminal building. Other major services provided from the passenger terminal include food and beverage restaurant, public meeting rooms and rental car counters and offices.

- **General Aviation Services**

The airport is home to a full service fixed-base operator (FBO) providing aeronautical services to the general aviation public. Aeronautical services include fuel sales, avionics, and aircraft sales and repair aircraft. The FBO has its own terminal facilities, which include pilot briefing room, restrooms, public telephones, conference room, offices, pilot lounge, and vending machines. The FBO facility provides access to taxi and rental car services.

- **Other Government Services**

Aircraft rescue and fire fighting (ARFF) services are provided by Burlington fire fighting personnel and meet FAR Part 139 Index A requirements. Security and law enforcement services are provided by the Burlington Police Department.

SOUTHEAST IOWA REGIONAL AIRPORT - BURLINGTON (BRL)



Federal Role: Non-Primary Commercial Service Airport
State Role: Commercial Service Airport

CURRENT AND FORECAST DEMAND

Based aircraft at the airport totaled 51 aircraft in 2003. Of those, there were 45 single engine piston, three multi-engine piston, one turbojet aircraft, one helicopter, and one listed as other aircraft. The number of based aircraft is forecast to increase to no fewer than 60 in 2022.

There were an estimated 32,187 total annual operations conducted in 2003. General aviation operations accounted for 77.2 percent of the activity. Air taxi and commuter accounted for 16.4 percent. The operational mix is expected to change over the 20-year period. The total number of operations is expected to be 41,437 in 2022.

OPERATIONAL ACTIVITY

	<u>2003</u>	<u>2007</u>	<u>2012</u>	<u>2022</u>	<u>% change 2003-2022</u>
Based Aircraft	51	52	56	60	17.6%
Annual Operations	24,837	26,470	30,183	32,171	29.5%
Itinerant Operations	14,107	15,882	18,110	19,302	36.8%
Local Operations	10,730	10,558	12,073	12,868	19.9%
Commuter/Air Taxi	5,300	5,919	6,795	6,795	28.2%
Commercial	1,950	2,127	2,371	2,371	21.5%
Military Operations	100	100	100	100	0.0%
Total	32,187	34,616	39,449	41,437	28.7%

The based aircraft mix and aircraft operational mix are expected to change over the 20 year planning period. Reference may be made to Chapter Four of the 2004-2024 Iowa Aviation System Plan for additional forecast data regarding:

- Based aircraft mix
- Operational mix
- Annual Instrument Approaches
- Annual Instrument Operations

AIRPORT FACILITY AND SERVICE NEEDS

The Southeast Iowa Regional Airport has been classified as a Commercial Service airport and should provide facilities and services commensurate with its system role.

OTHER RECOMMENDATIONS

- Security enhancements
- Runway 18/36; Taxiway C Rehabilitation
- Land acquisition
- Airport Master Plan Update
- CFR Vehicle Replacement

Snyder & Associates, Inc.



SNYDER & ASSOCIATES
Engineers and Planners

2727 SW Snyder Blvd.
Ankeny, Iowa 50023
Phone: 515.964.2020
Fax: 515.964.7938
www.snyder-associates.com

Wilbur Smith Associates, Inc.



6600 Clough Pike
Cincinnati, OH 45244
Phone: 513.233.3700
Fax: 513.624.5182
www.wilbursmith.com

Airport Summary Reports can be found on the Office of Aviation website: www.iawings.com