



# Uses and Benefits of Aviation in Iowa

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# Uses and Benefits of Aviation in Iowa

## INTRODUCTION

Air transportation is a key contributor to Iowa's economy. The Iowa Department of Transportation's Office of Aviation completed this 2009 study documenting the value of aviation in Iowa. The statewide economic impact study shows how aviation serves as an economic engine, documents various ways air transportation is used in Iowa, and discusses other benefits that air transportation supports.

Economic aviation related benefits measured in this study fall into two categories. In one category, benefits are measured in terms of the jobs, payroll, and annual economic activity that various aviation and air transportation groups support. In the other category, increased efficiency that various business sectors realize from their use of aviation is estimated in terms of increased productivity.

Many of the economic benefits identified in this study are associated with commercial and general aviation airports that serve communities throughout Iowa. Beyond the boundaries of the airports are companies in Iowa engaged in aviation related services and the manufacture of products for the aviation industry.

The magnitude of economic impact Iowa receives from aviation activity is significant. From analysis completed as part of this study, it is estimated these groups are contributing, on an annual basis, approximately **\$5.4 billion** to Iowa's economy while supporting an estimated **47,223 jobs** in Iowa with an annual payroll of **\$2.7 billion**.

Throughout Iowa, there are hundreds of businesses whose efficiency is improved and whose productivity is increased through their use of aviation. Aviation also helps to support Iowa's multi-billion dollar agricultural industry. This study estimates the annual productivity of Iowa's agricultural industry is increased by **\$214 million** as a result of agricultural aviation. The efficiency of many private sector businesses is improved as a result of their use of air cargo, commercial aviation, and general aviation. This study estimates that the productivity of private sector employers in Iowa is increased on an annual basis by over **\$12.8 billion** as result of their use of air transportation.

Specific uses and benefits of air transportation considered in this report include:

**Airports and Visitors** – Commercial and general aviation airports are themselves centers of employment and generators of significant economic activity. Airports purchase goods and services and undertake capital improvement projects, broadening the impact they have on both statewide and local economies. Airports serving Iowa are used in many ways and support a variety of benefits discussed in this study. Uses of airports in Iowa are summarized in **Exhibit 1**. This study estimated the economic benefit Iowa receives from 10 commercial airports, 101 publicly-owned general aviation airports, and 14 privately-owned general aviation airports. On-airport activities, businesses, and capital improvement projects undertaken by airports included in this study support over **9,000 jobs** with an annual payroll of approximately **\$346 million**. Annually, airports pump nearly **\$1.2 billion** into the statewide economy as they purchase various goods and services and undertake capital improvement projects.

## Exhibit 1 Use of Airports in Iowa

Many of the airports support business and corporate aviation on a regular basis. Businesses in Iowa increase their productivity by using both general and commercial aviation. In addition, customers and suppliers of Iowa-based businesses also use aviation when visiting Iowa.
Airports make it possible to charter or rent general aviation aircraft to support personal and business travel. Some airports also facilitate aircraft sales.
All airports support various types of personal and recreational flying.
Flight training is supported by many airports. In some instances, airports are used to support visiting students and instructors conducting flight training. Some civilian airports also support military flight training.
Airports support a variety of maintenance services for aircraft. Maintenance activities support both aircraft based at airports as well as aircraft visiting Iowa.
Aviation education is supported by airports. Airports support not only flight training, but also training for aircraft maintenance and aviation management. Many airports also support youth aviation camps and aviation related educational activities such as the Young Eagles.
Airports facilitate the shipment and receipt of various types of air cargo and freight.
The vast majority of all study airports support both based and transient aerial applicators that improve the productivity of Iowa's multi-billion dollar agricultural industry.
Airports enable doctors to reach smaller towns in Iowa, and they facilitate the transfer of patients to larger medical centers. Airports increase accessibility to better health care throughout the state.
Airports support activities such as aerial photography, aerial patrols for agencies such as the Department of Natural Resources, and aerial inspections for power and pipelines.
Airports support law enforcement activities, the activities of the Civil Air Patrol, and prisoner transport.
Airports are used to support aerial real estate tours, sightseeing, aerial advertising, and news reporting.
Airports included in this study often host events, such as fly-ins or air shows, which attract the non-flying public.

Visitors travel to Iowa via both commercial airline flights and general aviation aircraft; over **one million** visitors arrive in Iowa each year by air. Once in the state, these visitors spend money for lodging, food, entertainment, retail sales, and other items. Visitor spending helps to support notable volumes of additional economic activity in the state. Based on surveys of visitors arriving on commercial airlines and on general aviation aircraft, visitors spend an estimated **\$220 million** each



year that supports **7,430** jobs with an annual payroll of approximately **\$241 million**. Total output resulting from visitor spending exceeds **\$363 million**.

When all on-airport activities and visitors are considered, annual economic activity for the study airports is estimated at almost **16,470** jobs, **\$587 million** in annual payroll, and over **\$1.5 billion** in annual economic activity.

**Military Units**– Four commercial airports in Iowa and two general aviation airports in Iowa have on-site military units. These airports serve Boone, Davenport, Des Moines, Fort Dodge, Sioux City, and Waterloo. Military units considered in this study are tenants of the six civilian airports. Their activities help to boost both the local and statewide economies. The employment, payroll, and annual economic activity of these units are included in the estimate of total annual economic activity for all study airports shown in the previous paragraphs. Specific impacts associated with the six on-airport military units include: almost **2,250** jobs, over **\$84 million** in annual payroll, and almost **\$279 million** in total annual economic activity.

**Agricultural Aviation** – Agriculture is a multi-billion dollar industry in Iowa. The vast majority of the airports in Iowa contribute to supporting aerial applicators. In some instances, the agricultural aviation operators are based at airports in Iowa; and in other instances, they operate from airports in Iowa for various periods of time during the growing season. Aerial applicators boost the economy through their operations and through increased agricultural productivity. Yearly, an estimated **four million acres** of crops are sprayed by aerial applicators that operate from one of the airports in Iowa. Their activities increase the value of crops grown in Iowa by **\$214 million** each year.

**Helicopter Emergency Medical Services (EMS)** – Emergency medical service (EMS) providers operate at hospitals and heliports in Iowa. While it is not possible to quantify the economic benefit of all health care related activities that aviation supports, it is possible to estimate the economic impacts that are specific to the major helicopter EMS providers in Iowa. This study estimates that companies in Iowa engaged in providing emergency medical services using helicopters support approximately **250** jobs with an annual payroll over **\$11 million**. Total annual economic activity associated with Iowa's EMS providers is estimated at almost **\$22 million**.

**Off-Airport Aviation Related Businesses** – Throughout Iowa, there are more than 25 businesses engaged in the production of products that are used in the aviation or aerospace industries. In some instances, these are small businesses manufacturing small numbers of general aviation aircraft each year; and in other instances, these are major multi-billion dollar employers whose clientele are worldwide in scope. Some of the largest employers in this category include Rockwell Collins and Alcoa's Davenport Works. The employment, payroll, and economic activity of these aviation related businesses all provide benefits to Iowa's economy. These employers support over **30,500 jobs** with an annual payroll estimated at **\$2.07 billion**. These companies have annual aviation related economic activity or output in Iowa estimated at **\$3.85 billion**.

**Aviation Benefits for the Iowa Business Community** - Many private sector employers rely directly on aviation to increase their productivity and efficiency. In some instances, these businesses have selected to do business at their current location because of the location's proximity to a commercial or general aviation airport. Surveys of members of the Iowa Business Council indicate that proximity to a commercial airport ranks as high as third and proximity to a general aviation airport ranks sixth of all factors they consider important to their business location. These employers rely on commercial and general aviation airports to support their businesses travel needs. Many private sector businesses rely on air cargo shipments as part of their supply chain management, to ship their



products, and to receive goods and materials. Through the increased efficiency they realize through their use of various facets of air transportation, the productivity of private sector employers in Iowa benefits from an estimated **142,100** jobs with an annual payroll of over **\$5.8 billion**. Through their use of aviation, the annual productivity of off-airport private sector businesses in Iowa is improved by an estimated **\$12.8 billion**.

**Qualitative Benefits** – Some benefits from aviation cannot be quantified or assigned a dollar value. Nevertheless, there are many ways aviation benefits Iowa through services that are vital to residents, businesses, visitors, and government within the state. **Appendix A** to this report provides a summary for each of the public general aviation airports included in this study that helps to highlight some of the more notable ways activities at airports help to improve Iowa's quality of life.

The remainder of this report is devoted to discussing in more detail specific economic impacts discussed in this introductory section.



## ECONOMIC IMPACTS OF STUDY AIRPORTS

This section quantifies employment, annual payroll, and total annual economic activity associated with on-airport activities and visitors who arrive in Iowa via study airports. On-airport benefits are associated with tenants/businesses located at each airport and with capital improvement projects undertaken by the airports or their tenants. Visitor impacts result from travelers who arrive in Iowa via commercial airlines or on privately-owned general aviation aircraft.

Economic impacts for study airports are classified in the following categories:

- Direct Impacts – these are impacts associated with on airport activities and businesses or with capital improvement projects.
- Indirect Impacts – these impacts are usually realized off-airport and are associated with visitor spending.
- Induced Impacts – these impacts are associated with the recirculation of direct and indirect impacts and are measured with economic multipliers.
- Total Impacts – these impacts are the sum of direct, indirect, and induced impacts.

**Appendix B** to the report provides information on the methodology used to calculate economic impacts discussed in this section.

### Airports Included In This Study

Economic benefits associated with eight commercial airports in Iowa, two commercial airports in neighboring states that help to serve Iowa, 101 public general aviation airports, and 14 privately-owned general aviation airports are analyzed in this report.

**Exhibit 2** depicts the eight commercial airports in Iowa and the two Border Airports considered in the benefit and use analysis. The airline travel needs of Iowa residents, businesses, and visitors are met by the eight commercial airports in Iowa and, to varying degrees, by nearby airports in other states. As a result of their close geographic proximity, Iowa accrues economic benefits from the operation of Eppley Airfield in Omaha and the Quad City International Airport in Moline. For this analysis, these two commercial airports are referred to as Border Airports.

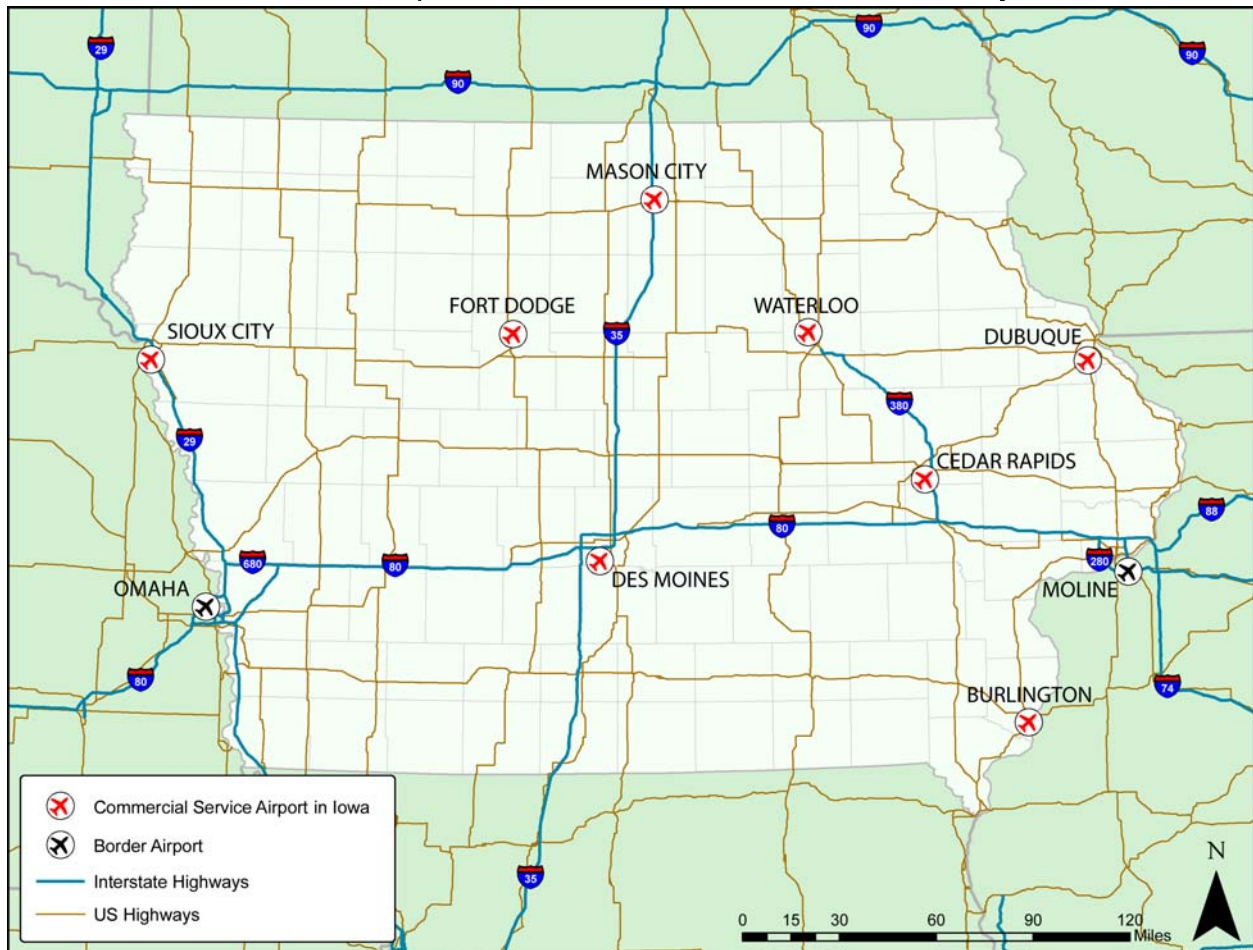
**Exhibit 3** reflects the associated city for public and private general aviation airports considered in this study. As part of its process to plan for and develop the public airport system, the Iowa Office of Aviation has assigned publicly-owned general aviation airports to one of four categories or roles. Briefly, these roles are as follows:

- Enhanced Service Airports (32 airports) – These airports support almost all types of general aviation aircraft, including general aviation business jets.
- General Service Airports (37 airports) – These airports support most twin- and single-engine general aviation aircraft and may occasionally support business jet operations.
- Basic Service Airports (22 airports) – These airports support primarily single-engine general aviation aircraft but may also accommodate smaller twin-engine planes.
- Basic Service II Airports (10 airports) – These airports support local air transportation needs and special use aviation activities.



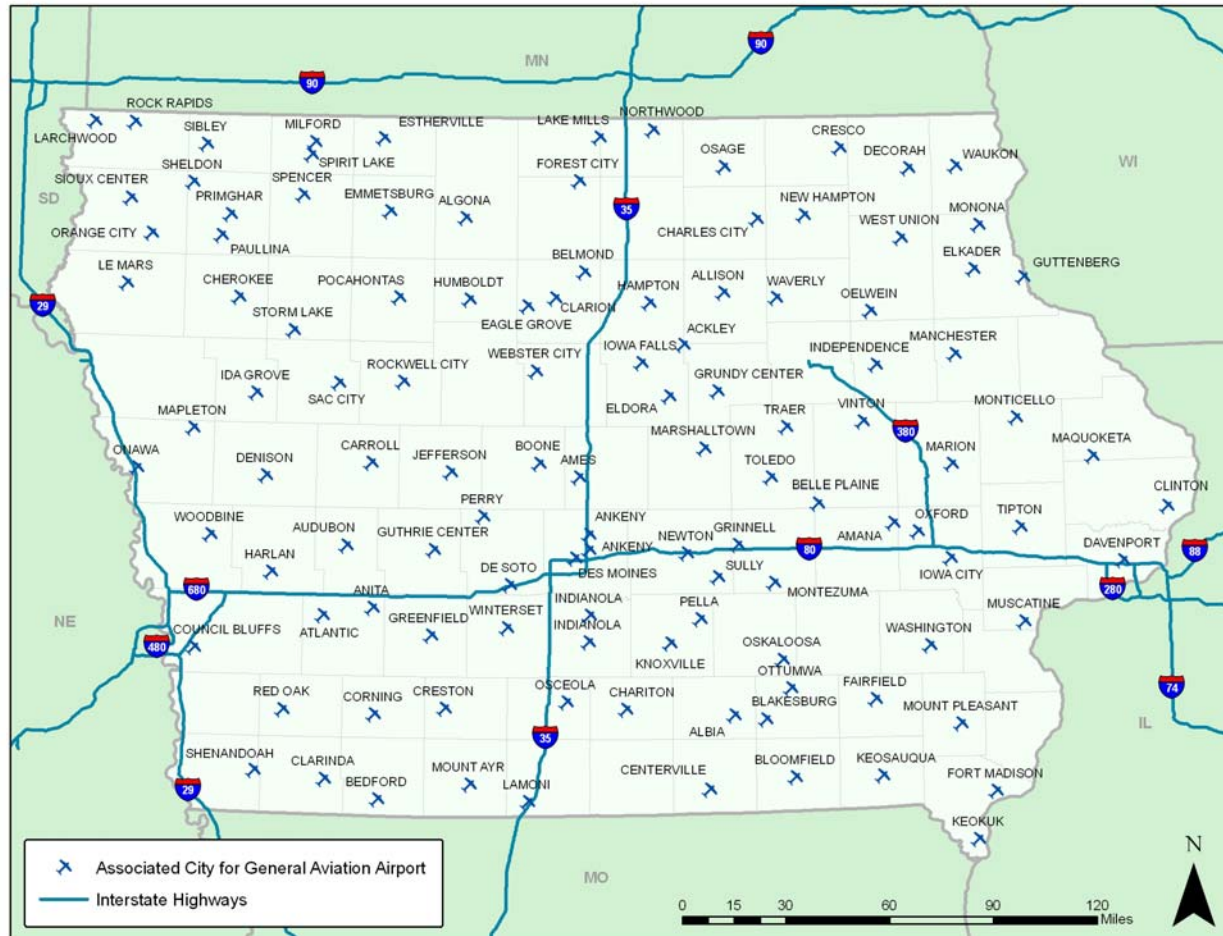
While privately-owned airports are not part of the system for which the Office of Aviation plans, 14 privately-owned airports were considered in this economic impact analysis. These 14 larger privately-owned airports also help to support Iowa's air transportation needs. **Table 1** presents the general aviation airports considered in this study and their assigned system roles.

**Exhibit 2**  
**Commercial Airports Considered In Uses and Benefits Analysis**



Source: Wilbur Smith Associates

### Exhibit 3 General Aviation Airports Considered In Uses and Benefits Analysis



Source: Wilbur Smith Associates

**Table 1**  
**System Roles for General Aviation Airports in Iowa**

Associated City	Airport Name	Associated City	Airport Name
<b>Enhanced Service Airports</b>			
Algona	Algona Municipal	Keokuk	Keokuk Municipal
Ames	Ames Municipal	Knoxville	Knoxville Municipal
Ankeny	Ankeny Regional	Marshalltown	Marshalltown Municipal
Atlantic	Atlantic Municipal	Monticello	Monticello Regional
Boone	Boone Municipal	Mount Pleasant	Mt. Pleasant Municipal
Carroll	Carroll Municipal	Muscatine	Muscatine Municipal
Charles City	Northeast Iowa Regional	Newton	Newton Municipal
Clinton	Clinton Municipal	Oelwein	Oelwein Municipal
Council Bluffs	Council Bluffs Municipal	Osceola	Osceola Municipal
Creston	Creston Municipal	Ottumwa	Ottumwa Regional
Davenport	Davenport Municipal	Sheldon	Sheldon Municipal
Denison	Denison Municipal	Shenandoah	Shenandoah Municipal
Estherville	Estherville Municipal	Spencer	Spencer Municipal
Fairfield	Fairfield Municipal	Storm Lake	Storm Lake Municipal
Independence	Independence Municipal	Washington	Washington Municipal
Iowa City	Iowa City Municipal	Webster City	Webster City Municipal
<b>General Service Airports</b>			
Audubon	Audubon County	Le Mars	Le Mars Municipal
Belle Plaine	Belle Plaine Municipal	Mapleton	Mapleton Municipal
Bloomfield	Bloomfield Municipal	Maquoketa	Maquoketa Municipal
Centerville	Centerville Municipal	Orange City	Orange City Municipal
Chariton	Chariton Municipal	Oskaloosa	Oskaloosa Municipal
Cherokee	Cherokee County Regional	Pella	Pella Municipal
Clarinda	Clarinda Municipal	Perry	Perry Municipal
Clarion	Clarion Municipal	Pocahontas	Pocahontas Municipal
Decorah	Decorah Municipal	Red Oak	Red Oak Municipal
Emmetsburg	Emmetsburg Municipal	Rock Rapids	Rock Rapids Municipal
Forest City	Forest City Municipal	Sac City	Sac City Municipal
Fort Madison	Fort Madison Municipal	Sibley	Sibley Municipal
Greenfield	Greenfield Municipal	Sioux Center	Sioux Center Municipal
Grinnell	Grinnell Regional	Tipton	Tipton Municipal
Hampton	Hampton Municipal	Vinton	Vinton Veterans Memorial
Harlan	Harlan Municipal	Waverly	Waverly Municipal
Iowa Falls	Iowa Falls Municipal	West Union	West Union Municipal
Jefferson	Jefferson Municipal	Winterset	Winterset-Madison County
Lamoni	Lamoni Municipal		
<b>Basic Service Airports</b>			
Albia	Albia Municipal	Manchester	Manchester Municipal
Allison	Allison Municipal	Monona	Monona Municipal
Bedford	Bedford Municipal	Mount Ayr	Mt. Ayr Municipal

**Table 1 (cont.)**  
**System Roles for General Aviation Airports in Iowa**

Associated City	Airport Name	Associated City	Airport Name
<b>Basic Service Airports (cont.)</b>			
Corning	Corning Municipal	New Hampton	New Hampton Municipal
Cresco	Cresco Municipal	Northwood	Northwood Municipal
Eagle Grove	Eagle Grove Municipal	Onawa	Onawa Municipal
Grundy Center	Grundy Center Municipal	Osage	Osage Municipal
Guthrie Center	Guthrie County Regional	Rockwell City	Rockwell City Municipal
Humboldt	Humboldt Municipal	Spirit Lake	Spirit Lake Municipal
Ida Grove	Ida Grove Municipal	Traer	Traer Municipal
Lake Mills	Lake Mills Municipal	Woodbine	Woodbine Municipal
<b>Basic Service II Airports</b>			
Anita	Anita Municipal	Paullina	Paullina Municipal
Belmond	Belmond Municipal	Primghar	Primghar Municipal
Eldora	Eldora Municipal	Sully	Sully Municipal
Keosauqua	Keosauqua Municipal	Toledo	Toledo Municipal
Milford	Milford Municipal	Waukon	Waukon Municipal
<b>Private Airports</b>			
Ackley	Ackley Airport	Guttenberg	Able Island
Amana	Amana Airport	Indianola	Nash Field
Ankeny	Todd's Field	Indianola	Agritech
Blakesburg	Antique Airfield	Larchwood	Larchwood Airport
De Soto	Aircraft Supermarket	Marion	Marion Airport
Des Moines	Morningstar Airport	Montezuma	Montezuma Airport
Elkader	Elkader Airport	Oxford	Green Castle
Sources: Wilbur Smith Associates and IMPLAN Multipliers			

Appendix B presents the methodology that was used to estimate total annual economic impacts associated with the airports shown in Exhibits 2 and 3. Also discussed in the appendix are various data gathering efforts employed to support the economic modeling process. Using the methodology and approach presented in Appendix B, estimates of employment, annual payroll, and total annual output or economic activity were developed for study airports. These estimates are discussed in the following sections.

## Employment Impacts for Study Airports

The findings of this analysis indicate that commercial and general aviation airports serving Iowa are an important source of jobs. As this section documents, the airports help to support 16,468 jobs. Employment, as defined in this analysis, is based on “Full-Time Equivalent” (FTE) estimates where two part-time jobs are generally assumed to equal one full-time job.

Employment impacts are calculated for on-airport activities and visitors. Direct on-airport activity includes all aviation related businesses and tenants, including military units and based aerial applicators. On airport activity also includes capital improvement projects undertaken by an airport or its tenants. Estimates for on-airport employment and capital improvement projects were obtained from airport managers/sponsors, individual airport tenants, and Iowa DOT records.

While it is not possible to list all airport tenants/businesses that support on-airport employment at commercial and general aviation airports included in this study, a listing of most include:

- Airport management
- Airport maintenance
- Federal Aviation Administration (FAA)
- Transportation Security Administration (TSA)
- Commercial airlines
- Air cargo carriers
- Fixed base operators (FBOs)
- Corporate flight departments
- Flight schools
- Aircraft maintenance
- Part 135 and charter operators
- Aircraft sales
- Terminal concessionaires
- Rental cars
- Ground transportation providers
- Airport parking companies
- Aerial applicators
- Military units

Some study airports host many of these types of businesses/tenants, while other airports have no on-site businesses.

Employment impacts for airports also include those supported by visitor spending. Visitors arrive in Iowa on both commercial and general aviation aircraft. Once they are in Iowa, spending by these visitors helps to support additional airport related employment. Appendix B provides a description of how visitor spending was calculated for this study.

## Employment Impacts for Commercial Airports

### Employment from On-Airport Activity at Commercial Airports

**Table 2** presents direct employment by category for each of the commercial airports. These estimates of direct employment were obtained from surveys completed as part of this study.

Table 2 identifies the total number of jobs associated with on-airport aviation related activities and businesses. Direct jobs consist of employees who are engaged in the provision of aviation related services on an airport. In the case of on-airport aviation related military units, full and part-time military personnel and military-related civilian employees were also included. Average employment impacts from airport-related capital improvement projects (CIP) were modeled in this analysis. In total, there are 4,273 direct jobs supported in Iowa at the commercial airports included in this study.

**Table 2**  
**Direct Airport Employment by Category**  
**Commercial Airports**

Airport	Commercial Airlines	On-Airport CIP	On-Airport Activities	General Aviation/Corporate	Military	Other	Total
Southeast Iowa Regional Airport	5	7	9	6	0	10	37
The Eastern Iowa Airport	74	74	148	149	0	241	686
Des Moines International Airport	136	204	304	213	260	434	1,551
Dubuque Regional Airport	10	16	27	42	0	26	121
Fort Dodge Regional Airport	5	8	40	7	82	4	146
Mason City Municipal Airport	6	9	12	9	0	4	39
Sioux Gateway Airport	12	25	44	65	694	27	866
Waterloo Regional Airport	7	9	22	33	167	15	253
<b>Iowa Subtotal</b>	<b>255</b>	<b>352</b>	<b>606</b>	<b>523</b>	<b>1,203</b>	<b>761</b>	<b>3,699</b>
Quad City International Airport*	31	38	115	97	0	29	309
Eppley Airfield*	37	25	57	76	0	71	265
<b>Border Airports Subtotal*</b>	<b>68</b>	<b>63</b>	<b>172</b>	<b>173</b>	<b>0</b>	<b>100</b>	<b>574</b>
<b>Total</b>	<b>323</b>	<b>415</b>	<b>778</b>	<b>696</b>	<b>1,203</b>	<b>861</b>	<b>4,273</b>
Sources: Wilbur Smith Associates and IMPLAN multipliers							
Note: *This estimate reflects only those employees at these airports who reside in Iowa; employment may not sum to totals due to rounding							

In Table 2, employment in the “on-airport activities” column includes airport management, air cargo companies, jobs related to the Transportation Security Administration (TSA), concessionaires, and others. Employment in the “general aviation/corporate” column includes jobs related to fixed base operators, corporate flight departments, flight instructors, and others.



Induced impacts represent the jobs created by the multiplier effect stemming from each airport's direct employment. For example, an employee of a fuel distributor may owe a portion of their job to an airport since the distributor sells fuel to the airport's FBO. As a result of on-airport activity accounted for in the direct impact category, additional induced employment is created.

**Table 3** presents direct, induced, and total employment related to on-airport activities at commercial airports. Induced impacts associated with the day-to-day operation of the commercial airports add 3,052 full-time jobs. When direct and induced airport-related employment impacts are combined, on-airport aviation related businesses and construction projects support 7,325 jobs at the commercial airports included in this study.

**Table 3**  
**Employment Associated with On-Airport Activity**  
**Commercial Airports**

	Direct Employment	Induced Employment	Total Employment
Southeast Iowa Regional Airport	37	30	67
The Eastern Iowa Airport	686	526	1,212
Des Moines International Airport	1,551	1,126	2,677
Dubuque Regional Airport	121	94	215
Fort Dodge Regional Airport	146	95	241
Mason City Municipal Airport	39	30	69
Sioux Gateway Airport	866	551	1,417
Waterloo Regional Airport	253	167	420
<b>Iowa Subtotal</b>	<b>3,699</b>	<b>2,619</b>	<b>6,318</b>
Quad City International Airport*	309	227	536
Eppley Airfield*	265	206	471
<b>Border Airports Subtotal*</b>	<b>574</b>	<b>433</b>	<b>1,007</b>
<b>Total</b>	<b>4,273</b>	<b>3,052</b>	<b>7,325</b>
Sources: Wilbur Smith Associates and IMPLAN multipliers			
Note: *This estimate reflects only those employees at these airports who reside in Iowa			



### Employment from Visitor Spending at Commercial Airports

Visitors arriving via commercial airlines typically spend money, thereby supporting additional indirect employment. **Table 4** identifies the number of employees in Iowa whose jobs are supported by the spending of visitors arriving via commercial airlines.

It is possible to calculate visitor spending, and subsequently, the number of jobs supported by visitors. Indirect jobs supported by spending from visitors arriving on commercial airlines are attributed to a variety of sectors; however, most of the jobs are concentrated in the hotel/motel, restaurant, recreational and entertainment, and retail sectors.

As Table 4 shows, there are 4,796 indirect jobs supported by commercial service visitor spending. Induced impacts include those jobs that exist due to the multiplier effect. Induced impacts result in 1,787 additional full-time positions supported by the spending of commercial service visitors. When indirect and induced visitor-related employment impacts are combined, approximately 6,500 jobs are supported by spending from visitors to Iowa who arrive via commercial airlines.

**Table 4**  
**Employment from Commercial Service Visitor Spending**

	Indirect Employment	Induced Employment	Total Employment
Southeast Iowa Regional Airport	22	7	29
The Eastern Iowa Airport	1,042	371	1,413
Des Moines International Airport	1,979	704	2,683
Dubuque Regional Airport	85	30	115
Fort Dodge Regional Airport	13	5	18
Mason City Municipal Airport	26	9	35
Sioux Gateway Airport	89	32	121
Waterloo Regional Airport	55	19	74
<b>Iowa Subtotal</b>	<b>3,311</b>	<b>1,177</b>	<b>4,488</b>
Quad City International Airport*	549	195	744
Eppley Airfield*	936	415	1,268
<b>Border Airports Subtotal*</b>	<b>1,485</b>	<b>610</b>	<b>2,012</b>
<b>Total</b>	<b>4,796</b>	<b>1,787</b>	<b>6,500</b>
Sources: Wilbur Smith Associates and IMPLAN multipliers			
Note: * This estimate reflects only those jobs supported by visitor spending that takes place in Iowa			

Spending by visitors arriving on general aviation aircraft at the eight commercial airport in Iowa supports 302 jobs in various service industries. When the multiplier impact is considered, an additional 82 jobs are supported. In total, spending by general aviation visitors arriving in Iowa via one of the commercial airports supports 384 jobs.

Similar to visitors using commercial airline service, visitors using general aviation aircraft to travel to one of the commercial airports typically spend money while visiting, thereby helping to support additional employment. **Table 5** identifies indirect, induced, and total Iowa jobs supported by spending from visitors arriving by general aviation aircraft via one of the eight commercial airports in Iowa.

**Table 5**  
**Employment from General Aviation Visitor Spending**  
**Commercial Airports**

Airport	Indirect Employment	Induced Employment	Total Employment
Southeast Iowa Regional Airport	14	4	18
The Eastern Iowa Airport	55	15	70
Des Moines International Airport	91	25	116
Dubuque Regional Airport	42	11	53
Fort Dodge Regional Airport	16	4	20
Mason City Municipal Airport	28	8	36
Sioux Gateway Airport	25	7	32
Waterloo Regional Airport	31	8	39
<b>Total</b>	<b>302</b>	<b>82</b>	<b>384</b>
Source: Wilbur Smith Associates and IMPLAN multipliers			

### Total Employment at Commercial Airports

**Table 6** identifies the total number of jobs supported by activities at commercial airports. As a result of on-airport activities and spending by visitors using commercial airports, there are 9,371 direct and indirect full-time equivalent jobs. The multiplier effect (induced impact) adds 4,921 additional jobs; 14,209 jobs are supported in Iowa by aviation related businesses and visitors at commercial airports.

**Table 6**  
**Total Iowa Airport-Related Employment**  
**Commercial Airports**

	Direct and Indirect Employment	Induced Employment	Total Employment
Southeast Iowa Regional Airport	73	41	114
The Eastern Iowa Airport	1,783	912	2,695
Des Moines International Airport	3,621	1,855	5,476
Dubuque Regional Airport	248	135	383
Fort Dodge Regional Airport	175	104	279
Mason City Municipal Airport	93	47	140
Sioux Gateway Airport	980	590	1,570
Waterloo Regional Airport	339	194	533
<b>Iowa Subtotal</b>	<b>7,312</b>	<b>3,878</b>	<b>11,190</b>
Quad City International Airport*	858	422	1,280
Eppley Airfield*	1,201	621	1,739
<b>Border Airports Subtotal*</b>	<b>2,059</b>	<b>1,043</b>	<b>3,019</b>
<b>Total</b>	<b>9,371</b>	<b>4,921</b>	<b>14,209</b>
Source: Wilbur Smith Associates and IMPLAN multipliers			
Note: *This total includes only that portion of the total employment for these airports that resides in Iowa			

## Employment Impacts for General Aviation Airports

### Employment from On-Airport Activity at General Aviation Airports

**Table 7** identifies the total number of jobs associated on-airport aviation related activities, businesses, and capital improvement projects (CIP) at general aviation airports included in this study. Direct jobs consist of employees who are engaged in the provision of aviation related services on an airport. Not all general aviation airports have on-site businesses. Further, the mix of businesses varies by airport. Examples of on-airport business contributing to employment at general aviation airports include: airport management, fixed base operators (FBOs), corporate flight departments, flight instructors, aerial applicators, military units, airport maintenance, aircraft maintenance and repair, aircraft charter operators, and aircraft sales. In total, there are 1,002 direct jobs supported in Iowa at the general aviation airports included in this study.

As a result of on-airport activity, additional induced employment is created. Induced impacts associated with the day-to-day operation of general aviation airports add 711 full-time jobs. When direct and induced airport-related employment impacts are combined, 1,713 jobs are attributable to the general aviation airports included in this study. This information is shown in Table 7 along with direct, induced, and total employment related to on-airport activities at individual general aviation airports.

**Table 7**  
**Employment Associated with On-Airport Activity**  
**General Aviation Airports**

Airport Name	Associated City	Direct Employment	Induced Employment	Total Employment
Albia Municipal	Albia	2.5	1.5	4.0
Algona Municipal	Algona	4.0	3.0	7.0
Allison Municipal	Allison	1.0	0.5	1.5
Ames Municipal	Ames	29.0	22.0	51.0
Anita Municipal	Anita	0.5	0.5	1.0
Ankeny Regional	Ankeny	58.0	42.0	100.0
Atlantic Municipal	Atlantic	24.5	16.0	40.5
Audubon County	Audubon	3.0	2.0	5.0
Bedford Municipal	Bedford	0.5	0.5	1.0
Belle Plaine Municipal	Belle Plaine	9.0	7.5	16.5
Belmond Municipal	Belmond	0.5	0.5	1.0
Bloomfield Municipal	Bloomfield	4.0	2.5	6.5
Boone Municipal	Boone	66.0	40.5	106.5
Carroll Municipal	Carroll	9.5	6.0	15.5
Centerville Municipal	Centerville	2.0	1.0	3.0
Chariton Municipal	Chariton	3.0	2.0	5.0
Northeast Iowa Regional	Charles City	6.5	5.5	12.0
Cherokee County Regional	Cherokee	2.5	2.0	4.5
Clarinda Municipal	Clarinda	3.0	2.0	5.0
Clarion Municipal	Clarion	2.0	1.5	3.5

**Table 7 (cont.)**  
**Employment Associated with On-Airport Activity**  
**General Aviation Airports**

<b>Airport Name</b>	<b>Associated City</b>	<b>Direct Employment</b>	<b>Induced Employment</b>	<b>Total Employment</b>
Clinton Municipal	Clinton	2.5	2.0	4.5
Corning Municipal	Corning	0.5	0.5	1.0
Council Bluffs Municipal	Council Bluffs	82.5	60.0	142.5
Cresco Municipal	Cresco	0.5	0.5	1.0
Creston Municipal	Creston	2.0	1.5	3.5
Davenport Municipal	Davenport	209.0	133.0	342.0
Decorah Municipal	Decorah	4.0	2.5	6.5
Denison Municipal	Denison	3.0	2.0	5.0
Eagle Grove Municipal	Eagle Grove	0.5	0.5	1.0
Eldora Municipal	Eldora	0.5	0.5	1.0
Emmetsburg Municipal	Emmetsburg	7.5	4.5	12.0
Estherville Municipal	Estherville	8.0	6.0	14.0
Fairfield Municipal	Fairfield	5.0	3.5	8.5
Forest City Municipal	Forest City	12.0	8.0	20.0
Fort Madison Municipal	Fort Madison	1.0	1.0	2.0
Greenfield Municipal	Greenfield	2.5	2.0	4.5
Grinnell Regional	Grinnell	4.0	2.5	6.5
Grundy Center Municipal	Grundy Center	0.5	0.5	1.0
Guthrie County Regional	Guthrie Center	1.5	1.0	2.5
Hampton Municipal	Hampton	4.0	3.0	7.0
Harlan Municipal	Harlan	4.5	3.5	8.0
Humboldt Municipal	Humboldt	0.0	0.0	0.0
Ida Grove Municipal	Ida Grove	0.0	0.0	0.0
Independence Municipal	Independence	17.5	11.0	28.5
Iowa City Municipal	Iowa City	37.5	26.5	64.0
Iowa Falls Municipal	Iowa Falls	11.0	8.5	19.5
Jefferson Municipal	Jefferson	6.0	4.0	10.0
Keokuk Municipal	Keokuk	10.0	7.0	17.0
Keosauqua Municipal	Keosauqua	0.5	0.5	1.0
Knoxville Municipal	Knoxville	4.5	3.0	7.5
Lake Mills Municipal	Lake Mills	0.5	0.5	1.0
Lamoni Municipal	Lamoni	1.5	1.0	2.5
Le Mars Municipal	Le Mars	7.5	5.5	13.0
Manchester Municipal	Manchester	0.5	0.5	1.0
Mapleton Municipal	Mapleton	2.0	1.5	3.5
Maquoketa Municipal	Maquoketa	12.0	9.5	21.5
Marshalltown Municipal	Marshalltown	12.5	9.5	22.0
Milford Municipal	Milford	0.5	0.5	1.0

**Table 7 (cont.)**  
**Employment Associated with On-Airport Activity**  
**General Aviation Airports**

<b>Airport Name</b>	<b>Associated City</b>	<b>Direct Employment</b>	<b>Induced Employment</b>	<b>Total Employment</b>
Monona Municipal	Monona	0.0	0.0	0.0
Monticello Regional	Monticello	9.0	6.5	15.5
Mt. Ayr Municipal	Mount Ayr	0.5	0.5	1.0
Mt. Pleasant Municipal	Mount Pleasant	13.5	10.0	23.5
Muscatine Municipal	Muscatine	25.5	19.5	45.0
New Hampton Municipal	New Hampton	0.5	0.5	1.0
Newton Municipal	Newton	6.5	5.0	11.5
Northwood Municipal	Northwood	0.5	0.5	1.0
Oelwein Municipal	Oelwein	7.0	5.5	12.5
Onawa Municipal	Onawa	1.5	1.0	2.5
Orange City Municipal	Orange City	6.5	5.0	11.5
Osage Municipal	Osage	0.5	0.5	1.0
Osceola Municipal	Osceola	2.0	1.5	3.5
Oskaloosa Municipal	Oskaloosa	5.5	3.5	9.0
Ottumwa Regional	Ottumwa	31.0	23.5	54.5
Paullina Municipal	Paullina	0.5	0.5	1.0
Pella Municipal	Pella	21.5	17.5	39.0
Perry Municipal	Perry	2.5	2.0	4.5
Pocahontas Municipal	Pocahontas	1.5	1.5	3.0
Primghar Municipal	Primghar	0.5	0.5	1.0
Red Oak Municipal	Red Oak	8.5	5.0	13.5
Rock Rapids Municipal	Rock Rapids	3.0	2.5	5.5
Rockwell City Municipal	Rockwell City	3.0	1.5	4.5
Sac City Municipal	Sac City	2.0	1.0	3.0
Sheldon Municipal	Sheldon	4.0	2.5	6.5
Shenandoah Municipal	Shenandoah	3.0	2.0	5.0
Sibley Municipal	Sibley	3.0	2.5	5.5
Sioux Center Municipal	Sioux Center	12.0	10.0	22.0
Spencer Municipal	Spencer	20.0	16.0	36.0
Spirit Lake Municipal	Spirit Lake	0.5	0.5	1.0
Storm Lake Municipal	Storm Lake	10.5	7.5	18.0
Sully Municipal	Sully	0.5	0.5	1.0
Tipton Municipal	Tipton	1.0	1.0	2.0
Toledo Municipal	Toledo	0.0	0.0	0.0
Traer Municipal	Traer	0.5	0.5	1.0
Vinton Veterans Memorial	Vinton	4.5	3.5	8.0
Washington Municipal	Washington	7.5	5.0	12.5
Waukon Municipal	Waukon	1.5	1.0	2.5
Waverly Municipal	Waverly	6.5	5.5	12.0

**Table 7 (cont.)**  
**Employment Associated with On-Airport Activity**  
**General Aviation Airports**

Airport Name	Associated City	Direct Employment	Induced Employment	Total Employment
Webster City Municipal	Webster City	21.0	17.0	38.0
West Union Municipal	West Union	5.0	3.5	8.5
Winterset-Madison County	Winterset	12.5	10.0	22.5
Woodbine Municipal	Woodbine	0.5	0.5	1.0
<b>Public Airports Subtotals</b>		<b>977.5</b>	<b>690.5</b>	<b>1,668.0</b>
Private Airports	Various	24.5	20.5	45.0
<b>Totals</b>		<b>1,002.0</b>	<b>711.0</b>	<b>1,713.0</b>
Sources: Wilbur Smith Associates and IMPLAN Multipliers				

#### Employment from Visitor Spending at General Aviation Airports

Visitors using general aviation aircraft to access one of the general aviation airports in Iowa typically spend money while visiting, thereby helping to support additional employment. Indirect jobs associated with general aviation visitor spending associated with general aviation airports are attributed to a variety of sectors; however, most of these jobs are concentrated in the hotel/motel, restaurant, recreational and entertainment, and retail sectors.

**Table 8** identifies the number of Iowa jobs supported by spending from visitors arriving by general aviation aircraft using one of the general aviation airports in Iowa. All study airports have at least a modest level of visitor activity. At some airports, however, visitor related spending is not of a magnitude sufficient to support visitor related employment as calculated in this study. Appendix B provides a discussion of the approach used to estimate visitor spending. As a result of visitor expenditures tied to general aviation airports in Iowa, there are 426 indirect jobs supported in Iowa. Induced employment includes those jobs that exist due to continued circulation (multiplier impact) of general aviation visitor expenditures. Induced impacts result in 120 additional full-time jobs. When indirect and induced general aviation visitor-related employment impacts are combined, 546 jobs are supported by the spending of visitors arriving via general aviation airports in Iowa. Table 8 presents this information along with visitor related employment for each general aviation airport in Iowa.

**Table 8**  
**Employment from General Aviation Visitor Spending**  
**General Aviation Airports**

Airport Name	Associated City	Indirect Employment	Induced Employment	Total Employment
Albia Municipal	Albia	0.5	0.0	0.5
Algona Municipal	Algona	6.5	2.0	8.5
Allison Municipal	Allison	0.0	0.0	0.0
Ames Municipal	Ames	37.0	10.5	47.5
Anita Municipal	Anita	0.0	0.0	0.0
Ankeny Regional	Ankeny	32.5	9.0	41.5
Atlantic Municipal	Atlantic	1.0	0.5	1.5



**Table 8 (cont.)**  
**Employment from General Aviation Visitor Spending**  
**General Aviation Airports**

Airport Name	Associated City	Indirect Employment	Induced Employment	Total Employment
Audubon County	Audubon	0.0	0.0	0.0
Bedford Municipal	Bedford	0.5	0.0	0.5
Belle Plaine Municipal	Belle Plaine	0.5	0.0	0.5
Belmond Municipal	Belmond	0.0	0.0	0.0
Bloomfield Municipal	Bloomfield	0.5	0.0	0.5
Boone Municipal	Boone	3.5	1.0	4.5
Carroll Municipal	Carroll	3.0	1.0	4.0
Centerville Municipal	Centerville	1.0	0.5	1.5
Chariton Municipal	Chariton	0.0	0.0	0.0
Northeast Iowa Regional	Charles City	0.0	0.0	0.0
Cherokee County Regional	Cherokee	7.0	2.0	9.0
Clarinda Municipal	Clarinda	3.5	1.0	4.5
Clarion Municipal	Clarion	1.5	0.5	2.0
Clinton Municipal	Clinton	15.0	4.0	19.0
Corning Municipal	Corning	0.0	0.0	0.0
Council Bluffs Municipal	Council Bluffs	29.5	8.0	37.5
Cresco Municipal	Cresco	0.0	0.0	0.0
Creston Municipal	Creston	1.0	0.5	1.5
Davenport Municipal	Davenport	36.0	10.0	46.0
Decorah Municipal	Decorah	5.0	1.5	6.5
Denison Municipal	Denison	1.0	0.5	1.5
Eagle Grove Municipal	Eagle Grove	0.5	0.0	0.5
Eldora Municipal	Eldora	0.0	0.0	0.0
Emmetsburg Municipal	Emmetsburg	0.0	0.0	0.0
Estherville Municipal	Estherville	1.0	0.5	1.5
Fairfield Municipal	Fairfield	3.0	1.0	4.0
Forest City Municipal	Forest City	1.5	0.5	2.0
Fort Madison Municipal	Fort Madison	0.0	0.0	0.0
Greenfield Municipal	Greenfield	4.0	1.0	5.0
Grinnell Regional	Grinnell	1.5	0.5	2.0
Grundy Center Municipal	Grundy Center	0.0	0.0	0.0
Guthrie County Regional	Guthrie Center	0.5	0.0	0.5
Hampton Municipal	Hampton	0.5	0.0	0.5
Harlan Municipal	Harlan	5.5	1.5	7.0
Humboldt Municipal	Humboldt	0.5	0.0	0.5
Ida Grove Municipal	Ida Grove	0.0	0.0	0.0
Independence Municipal	Independence	1.0	0.5	1.5
Iowa City Municipal	Iowa City	40.0	11.0	51.0
Iowa Falls Municipal	Iowa Falls	0.5	0.0	0.5
Jefferson Municipal	Jefferson	1.5	0.5	2.0
Keokuk Municipal	Keokuk	5.0	1.5	6.5
Keosauqua Municipal	Keosauqua	0.0	0.0	0.0

**Table 8 (cont.)**  
**Employment from General Aviation Visitor Spending**  
**General Aviation Airports**

Airport Name	Associated City	Indirect Employment	Induced Employment	Total Employment
Knoxville Municipal	Knoxville	4.0	1.0	5.0
Lake Mills Municipal	Lake Mills	0.0	0.0	0.0
Lamoni Municipal	Lamoni	0.0	0.0	0.0
Le Mars Municipal	Le Mars	0.5	0.0	0.5
Manchester Municipal	Manchester	0.0	0.0	0.0
Mapleton Municipal	Mapleton	1.5	0.5	2.0
Maquoketa Municipal	Maquoketa	1.5	0.5	2.0
Marshalltown Municipal	Marshalltown	6.0	1.5	7.5
Milford Municipal	Milford	1.0	0.5	1.5
Monona Municipal	Monona	0.0	0.0	0.0
Monticello Regional	Monticello	4.0	1.0	5.0
Mt. Ayr Municipal	Mount Ayr	0.0	0.0	0.0
Mt. Pleasant Municipal	Mount Pleasant	1.0	0.5	1.5
Muscatine Municipal	Muscatine	16.5	4.5	21.0
New Hampton Municipal	New Hampton	0.0	0.0	0.0
Newton Municipal	Newton	11.5	3.0	14.5
Northwood Municipal	Northwood	0.5	0.0	0.5
Oelwein Municipal	Oelwein	1.0	0.5	1.5
Onawa Municipal	Onawa	0.0	0.0	0.0
Orange City Municipal	Orange City	1.5	0.5	2.0
Osage Municipal	Osage	0.0	0.0	0.0
Osceola Municipal	Osceola	1.0	0.5	1.5
Oskaloosa Municipal	Oskaloosa	13.0	3.5	16.5
Ottumwa Regional	Ottumwa	14.5	4.0	18.5
Paullina Municipal	Paullina	0.5	0.0	0.5
Pella Municipal	Pella	5.5	1.5	7.0
Perry Municipal	Perry	1.5	0.5	2.0
Pocahontas Municipal	Pocahontas	0.5	0.0	0.5
Primghar Municipal	Primghar	1.5	0.5	2.0
Red Oak Municipal	Red Oak	4.5	1.5	6.0
Rock Rapids Municipal	Rock Rapids	1.0	0.5	1.5
Rockwell City Municipal	Rockwell City	0.5	0.0	0.5
Sac City Municipal	Sac City	1.5	0.5	2.0
Sheldon Municipal	Sheldon	3.5	1.0	4.5
Shenandoah Municipal	Shenandoah	3.0	1.0	4.0
Sibley Municipal	Sibley	0.0	0.0	0.0
Sioux Center Municipal	Sioux Center	9.5	2.5	12.0
Spencer Municipal	Spencer	11.0	3.0	14.0
Spirit Lake Municipal	Spirit Lake	1.0	0.5	1.5
Storm Lake Municipal	Storm Lake	10.5	3.0	13.5
Sully Municipal	Sully	0.0	0.0	0.0
Tipton Municipal	Tipton	0.0	0.0	0.0

**Table 8 (cont.)**  
**Employment from General Aviation Visitor Spending**  
**General Aviation Airports**

Airport Name	Associated City	Indirect Employment	Induced Employment	Total Employment
Toledo Municipal	Toledo	0.0	0.0	0.0
Traer Municipal	Traer	0.5	0.0	0.5
Vinton Veterans Memorial	Vinton	3.5	1.0	4.5
Washington Municipal	Washington	14.0	4.0	18.0
Waukon Municipal	Waukon	0.0	0.0	0.0
Waverly Municipal	Waverly	11.0	3.0	14.0
Webster City Municipal	Webster City	3.0	1.0	4.0
West Union Municipal	West Union	0.0	0.0	0.0
Winterset-Madison County	Winterset	3.5	1.0	4.5
Woodbine Municipal	Woodbine	0.0	0.0	0.0
<b>Public Airports Subtotals</b>		<b>422.5</b>	<b>119.0</b>	<b>541.5</b>
Private Airports	Various	3.5	1.0	4.5
<b>Totals</b>		<b>426.0</b>	<b>120.0</b>	<b>546.0</b>
Sources: Wilbur Smith Associates and IMPLAN Multipliers. Note: Employment impacts at airports with annual visitor spending levels less than \$9,000 result in zero indirect employment.				

### Total Employment at General Aviation Airports

**Table 9** identifies the total number of jobs supported by activities at general aviation airports. As a result of on-airport activities and spending by visitors using general aviation airports, there are 1,428 direct and indirect jobs. The multiplier effect (induced impact) adds 831 additional jobs. In total, 2,259 jobs are supported in Iowa by on-airport activities and visitors using the general aviation airports.

**Table 9**  
**Total Iowa Airport-Related Employment**  
**General Aviation Airports**

Airport Name	Associated City	Direct and Indirect Employment	Induced Employment	Total Employment
Albia Municipal	Albia	3.0	1.5	4.5
Algona Municipal	Algona	10.5	5.0	15.5
Allison Municipal	Allison	1.0	0.5	1.5
Ames Municipal	Ames	66.0	32.5	98.5
Anita Municipal	Anita	0.5	0.5	1.0
Ankeny Regional	Ankeny	90.5	51.0	141.5
Atlantic Municipal	Atlantic	25.5	16.5	42.0
Audubon County	Audubon	3.0	2.0	5.0
Bedford Municipal	Bedford	1.0	0.5	1.5
Belle Plaine Municipal	Belle Plaine	9.5	7.5	17.0
Belmond Municipal	Belmond	0.5	0.5	1.0
Bloomfield Municipal	Bloomfield	4.5	2.5	7.0
Boone Municipal	Boone	69.5	41.5	111.0
Carroll Municipal	Carroll	12.5	7.0	19.5
Centerville Municipal	Centerville	3.0	1.5	4.5
Chariton Municipal	Chariton	3.0	2.0	5.0
Northeast Iowa Regional	Charles City	6.5	5.5	12.0
Cherokee County Regional	Cherokee	9.5	4.0	13.5
Clarinda Municipal	Clarinda	6.5	3.0	9.5
Clarion Municipal	Clarion	3.5	2.0	5.5
Clinton Municipal	Clinton	17.5	6.0	23.5
Corning Municipal	Corning	0.5	0.5	1.0
Council Bluffs Municipal	Council Bluffs	112.0	68.0	180.0
Cresco Municipal	Cresco	0.5	0.5	1.0
Creston Municipal	Creston	3.0	2.0	5.0
Davenport Municipal	Davenport	245.0	143.0	388.0
Decorah Municipal	Decorah	9.0	4.0	13.0
Denison Municipal	Denison	4.0	2.5	6.5
Eagle Grove Municipal	Eagle Grove	1.0	0.5	1.5
Eldora Municipal	Eldora	0.5	0.5	1.0
Emmetsburg Municipal	Emmetsburg	7.5	4.5	12.0
Estherville Municipal	Estherville	9.0	6.5	15.5

**Table 9 (cont.)**  
**Total Iowa Airport-Related Employment**  
**General Aviation Airports**

Airport Name	Associated City	Direct and Indirect Employment	Induced Employment	Total Employment
Fairfield Municipal	Fairfield	8.0	4.5	12.5
Forest City Municipal	Forest City	13.5	8.5	22.0
Fort Madison Municipal	Fort Madison	1.0	1.0	2.0
Greenfield Municipal	Greenfield	6.5	3.0	9.5
Grinnell Regional	Grinnell	5.5	3.0	8.5
Grundy Center Municipal	Grundy Center	0.5	0.5	1.0
Guthrie County Regional	Guthrie Center	2.0	1.0	3.0
Hampton Municipal	Hampton	4.5	3.0	7.5
Harlan Municipal	Harlan	10.0	5.0	15.0
Humboldt Municipal	Humboldt	0.5	0.0	0.5
Ida Grove Municipal	Ida Grove	0.0	0.0	0.0
Independence Municipal	Independence	18.5	11.5	30.0
Iowa City Municipal	Iowa City	77.5	37.5	115.0
Iowa Falls Municipal	Iowa Falls	11.5	8.5	20.0
Jefferson Municipal	Jefferson	7.5	4.5	12.0
Keokuk Municipal	Keokuk	15.0	8.5	23.5
Keosauqua Municipal	Keosauqua	0.5	0.5	1.0
Knoxville Municipal	Knoxville	8.5	4.0	12.5
Lake Mills Municipal	Lake Mills	0.5	0.5	1.0
Lamoni Municipal	Lamoni	1.5	1.0	2.5
Le Mars Municipal	Le Mars	8.0	5.5	13.5
Manchester Municipal	Manchester	0.5	0.5	1.0
Mapleton Municipal	Mapleton	3.5	2.0	5.5
Maquoketa Municipal	Maquoketa	13.5	10.0	23.5
Marshalltown Municipal	Marshalltown	18.5	11.0	29.5
Milford Municipal	Milford	1.5	1.0	2.5
Monona Municipal	Monona	0.0	0.0	0.0
Monticello Regional	Monticello	13.0	7.5	20.5
Mt. Ayr Municipal	Mount Ayr	0.5	0.5	1.0
Mt. Pleasant Municipal	Mount Pleasant	14.5	10.5	25.0
Muscatine Municipal	Muscatine	42.0	24.0	66.0
New Hampton Municipal	New Hampton	0.5	0.5	1.0
Newton Municipal	Newton	18.0	8.0	26.0
Northwood Municipal	Northwood	1.0	0.5	1.5
Oelwein Municipal	Oelwein	8.0	6.0	14.0
Onawa Municipal	Onawa	1.5	1.0	2.5
Orange City Municipal	Orange City	8.0	5.5	13.5
Osage Municipal	Osage	0.5	0.5	1.0
Osceola Municipal	Osceola	3.0	2.0	5.0
Oskaloosa Municipal	Oskaloosa	18.5	7.0	25.5
Ottumwa Regional	Ottumwa	45.5	27.5	73.0

**Table 9 (cont.)**  
**Total Iowa Airport-Related Employment**  
**General Aviation Airports**

<b>Airport Name</b>	<b>Associated City</b>	<b>Direct and Indirect Employment</b>	<b>Induced Employment</b>	<b>Total Employment</b>
Paullina Municipal	Paullina	1.0	0.5	1.5
Pella Municipal	Pella	27.0	19.0	46.0
Perry Municipal	Perry	4.0	2.5	6.5
Pocahontas Municipal	Pocahontas	2.0	1.5	3.5
Primghar Municipal	Primghar	2.0	1.0	3.0
Red Oak Municipal	Red Oak	13.0	6.5	19.5
Rock Rapids Municipal	Rock Rapids	4.0	3.0	7.0
Rockwell City Municipal	Rockwell City	3.5	1.5	5.0
Sac City Municipal	Sac City	3.5	1.5	5.0
Sheldon Municipal	Sheldon	7.5	3.5	11.0
Shenandoah Municipal	Shenandoah	6.0	3.0	9.0
Sibley Municipal	Sibley	3.0	2.5	5.5
Sioux Center Municipal	Sioux Center	21.5	12.5	34.0
Spencer Municipal	Spencer	31.0	19.0	50.0
Spirit Lake Municipal	Spirit Lake	1.5	1.0	2.5
Storm Lake Municipal	Storm Lake	21.0	10.5	31.5
Sully Municipal	Sully	0.5	0.5	1.0
Tipton Municipal	Tipton	1.0	1.0	2.0
Toledo Municipal	Toledo	0.0	0.0	0.0
Traer Municipal	Traer	1.0	0.5	1.5
Vinton Veterans Memorial	Vinton	8.0	4.5	12.5
Washington Municipal	Washington	21.5	9.0	30.5
Waukon Municipal	Waukon	1.5	1.0	2.5
Waverly Municipal	Waverly	17.5	8.5	26.0
Webster City Municipal	Webster City	24.0	18.0	42.0
West Union Municipal	West Union	5.0	3.5	8.5
Winterset-Madison County	Winterset	16.0	11.0	27.0
Woodbine Municipal	Woodbine	0.5	0.5	1.0
<b>Public Airports Subtotals</b>		<b>1,400.0</b>	<b>809.5</b>	<b>2,209.5</b>
Private Airports	Various	28.0	21.5	49.5
<b>Totals</b>		<b>1,428.0</b>	<b>831.0</b>	<b>2,259.0</b>
Sources: Wilbur Smith Associates and IMPLAN Multipliers				

### ***Total Employment Impacts for All Study Airports***

**Table 10** identifies the total number of jobs supported by on-airport activities and visitors at all study airports. There are 10,799 direct and indirect full-time equivalent jobs. The multiplier effect (induced impact) adds 5,752 additional jobs. In total, 16,468 jobs are supported by on-airport businesses, capital improvement projects, and visitors using all study airports.

**Table 10**  
**Total Iowa Airport-Related Employment**  
**All Study Commercial and General Aviation Airports**

	Direct and Indirect Employment	Induced Employment	Total Employment
Study Commercial Airports	9,371.0	4,921.0	14,209.0
Study General Aviation Airports	1,428.0	831.0	2,259.0
<b>Total</b>	<b>10,799.0</b>	<b>5,752.0</b>	<b>16,468.0</b>
Source: Wilbur Smith Associates and IMPLAN multipliers Note: * Commercial airport total includes all eight commercial airports in Iowa and only that portion of the employment for the Border Airports that resides in Iowa			

Study airports and visitors using the airports have a positive impact on employment in Iowa. The next section quantifies payroll impacts associated with employment estimates presented in this section.





## **Payroll Impacts For Study Airports**

Employment linked to the study airports results in a significant annual payroll benefit for Iowa. Payroll impacts discussed in this section relate to the previously identified employment benefits associated with on-airport activities and visitors for both commercial and general aviation airports.

### ***Payroll Impacts for Commercial Airports***

This section discusses payroll impacts for commercial airports included in this study. Payroll impacts are related to jobs in the direct impact category tied to on-airport activity and jobs in the indirect category supported by visitor spending. Spending tied to direct and indirect payroll starts one of the notable economic impact cycles measured in this report. Total annual payroll impacts related to study airports are estimated at \$587 million.

### Payroll from On-Airport Activity at Commercial Airports

Direct annual payroll impacts are estimated at \$181.8 million. This direct payroll impact also ripples throughout the Iowa economy creating induced payroll impacts that can be measured through the use of the IMPLAN model. The induced annual payroll impact related to on-airport activities at the commercial airports, estimated through the multipliers, is \$105.1 million. Total payroll impacts produced by activities at commercial service airports, which include direct and induced annual payroll, are nearly \$287 million annually.

**Table 11** identifies annual payroll benefits associated with on-airport activity at each of the commercial airports considered in this study. Payroll presented in Table 11 corresponds to total on-airport employment at the commercial airports presented previously in Table 3. This payroll includes, in addition to the on-airport activities and businesses, payroll supported by airport capital improvement projects and, for some airports, employment from military units.

**Table 11**  
**On-Airport Activity Payroll**  
**Commercial Airports**

Airport	Direct Payroll	Induced Payroll	Total Payroll
Southeast Iowa Regional Airport	\$1,087,800	\$671,800	\$1,759,600
The Eastern Iowa Airport	\$27,170,200	\$18,410,700	\$45,580,900
Des Moines International Airport	\$67,476,100	\$40,408,000	\$107,884,100
Dubuque Regional Airport	\$4,581,100	\$3,057,300	\$7,638,400
Fort Dodge Regional Airport	\$6,841,300	\$3,133,600	\$9,974,900
Mason City Municipal Airport	\$1,440,600	\$849,400	\$2,290,000
Sioux Gateway Airport	\$40,156,300	\$18,820,900	\$58,977,200
Waterloo Regional Airport	\$7,274,400	\$3,658,500	\$10,932,900
<b>Iowa Subtotal</b>	<b>\$156,027,800</b>	<b>\$89,010,200</b>	<b>\$245,038,000</b>
Quad City International	\$13,765,000	\$8,202,400	\$21,967,400
Eppley Airfield	\$11,960,665	\$7,934,600	\$19,895,300
<b>Border Airports Subtotal*</b>	<b>\$25,725,665</b>	<b>\$16,137,000</b>	<b>\$41,862,700</b>
<b>Total</b>	<b>\$181,753,465</b>	<b>\$105,147,200</b>	<b>\$286,900,700</b>

Sources: Wilbur Smith Associates and IMPLAN multipliers.  
Note: \*This total includes only that portion of the total payroll for these airports for employees residing in Iowa

### Payroll from Visitor Spending at Commercial Airports

Indirect payroll consists of wages and benefits paid to employees working at restaurants, hotels/motels, retail businesses, and other service industries that are used by commercial service visitors. Indirect annual payroll attributable to spending by commercial service visitors is estimated at nearly \$137.7 million.

As employees in the service industries spend their payroll, the money continues to circulate, generating additional employment and subsequent payroll. Annual induced payroll impacts associated with commercial service visitor supported employment are estimated at more than \$77 million. When indirect and induced annual payroll impacts stemming from commercial service visitor spending in Iowa are combined, a total annual payroll impact of nearly \$214.7 million is produced.

**Table 12** identifies the annual payroll impact attributed to spending by commercial service visitors arriving in Iowa using the study's commercial airports. Payroll reflected in Table 12 corresponds to employment estimates for commercial service visitors shown previously in Table 4.

**Table 12**  
**Annual Payroll from Commercial Service Visitor Spending**

<b>Airport</b>	<b>Indirect Payroll</b>	<b>Induced Payroll</b>	<b>Total Payroll</b>
Southeast Iowa Regional Airport	\$613,100	\$342,900	\$956,000
The Eastern Iowa Airport	\$29,936,300	\$16,742,400	\$46,678,700
Des Moines International Airport	\$56,866,000	\$31,803,300	\$88,669,300
Dubuque Regional Airport	\$2,430,700	\$1,359,300	\$3,790,000
Fort Dodge Regional Airport	\$362,000	\$202,500	\$564,500
Mason City Municipal Airport	\$721,400	\$403,500	\$1,124,900
Sioux Gateway Airport	\$2,546,000	\$1,424,000	\$3,970,000
Waterloo Regional Airport	\$1,565,800	\$875,700	\$2,441,500
<b>Iowa Subtotal</b>	<b>\$95,041,300</b>	<b>\$53,153,600</b>	<b>\$148,194,900</b>
Quad City International Airport*	\$15,763,100	\$8,815,800	\$24,578,900
Eppley Airfield*	\$26,880,400	\$15,033,300	\$41,913,700
<b>Border Airport Subtotal*</b>	<b>\$42,643,500</b>	<b>\$23,849,100</b>	<b>\$66,492,600</b>
<b>Total</b>	<b>\$137,684,800</b>	<b>\$77,002,700</b>	<b>\$214,687,500</b>
Sources: Wilbur Smith Associates and IMPLAN multipliers			
Note: *This total includes only that portion of the total payroll for visitor spending that takes place in Iowa.			

**Table 13** presents payroll impacts from spending by general aviation visitors arriving at one of the commercial airports. Indirect payroll includes salaries paid to employees working in visitor-related businesses and other service industries. Indirect annual payroll attributable to spending by general aviation visitors who arrive in Iowa using one of the eight commercial airports is estimated at nearly \$8.6 million. As employees in the visitor-related industries spend their payroll, this spending continues to circulate generating subsequent payroll. The induced annual payroll impact associated with commercial airport general aviation visitor spending is estimated at over \$4.8 million. When indirect and induced payroll impacts stemming from general aviation visitor spending at the eight commercial airports are combined, a total payroll impact of nearly \$13.4 million is produced.

**Table 13**  
**Annual Payroll from General Aviation Visitor Spending**  
**Commercial Airports**

Airport	Indirect Payroll	Induced Payroll	Total Payroll
Southeast Iowa Regional Airport	\$401,000	\$226,000	\$627,000
The Eastern Iowa Airport	\$1,571,100	\$885,300	\$2,456,400
Des Moines International Airport	\$2,598,500	\$1,464,300	\$4,062,800
Dubuque Regional Airport	\$1,179,100	\$664,500	\$1,843,600
Fort Dodge Regional Airport	\$445,600	\$251,000	\$696,600
Mason City Municipal Airport	\$802,000	\$451,900	\$1,253,900
Sioux Gateway Airport	\$698,700	\$393,800	\$1,092,500
Waterloo Regional Airport	\$862,600	\$486,100	\$1,348,700
<b>Total</b>	<b>\$8,558,600</b>	<b>\$4,822,900</b>	<b>\$13,381,500</b>
Sources: Wilbur Smith Associates and IMPLAN multipliers			

### Total Payroll at Commercial Airports

The total benefit of combined on-airport activities and visitor-related payroll impacting Iowa from commercial airports considered in this study is identified in **Table 14**. The collective direct and indirect annual payroll impact supported by the commercial airports is nearly \$328 million. With close to \$187 million in induced annual payroll benefits, nearly \$515 million in total annual payroll is realized in Iowa as a result of visitor spending and on-airport activity associated with the commercial service airports.

**Table 14**  
**Total Annual Payroll**  
**Commercial Airports**

<b>Airport</b>	<b>Direct and Indirect Payroll</b>	<b>Induced Payroll</b>	<b>Total Payroll</b>
Southeast Iowa Regional Airport	\$2,101,900	\$1,240,700	\$3,342,600
The Eastern Iowa Airport	\$58,677,600	\$36,038,400	\$94,716,000
Des Moines International Airport	\$126,940,600	\$73,675,600	\$200,616,200
Dubuque Regional Airport	\$8,190,900	\$5,081,100	\$13,272,000
Fort Dodge Regional Airport	\$7,648,900	\$3,587,100	\$11,236,000
Mason City Municipal Airport	\$2,964,000	\$1,704,800	\$4,668,800
Sioux Gateway Airport	\$43,401,000	\$20,638,700	\$64,039,700
Waterloo Regional Airport	\$9,702,800	\$5,020,300	\$14,723,100
<b>Iowa Subtotal</b>	<b>\$259,627,700</b>	<b>\$146,986,700</b>	<b>\$406,614,400</b>
Quad City International Airport*	\$29,528,100	\$17,018,200	\$46,546,300
Eppley Airfield*	\$38,841,100	\$22,967,900	\$61,809,000
<b>Border Airport Subtotal*</b>	<b>\$68,369,200</b>	<b>\$39,986,100</b>	<b>\$108,355,300</b>
<b>Total</b>	<b>\$327,996,900</b>	<b>\$186,972,800</b>	<b>\$514,969,700</b>
Sources: Wilbur Smith Associates and IMPLAN multipliers Note: *This total includes only that portion of the total payroll associated with employment for these airports that resides in Iowa			

## Payroll Impacts at General Aviation Airports

### Payroll from On-Airport Activity and Visitor Spending at General Aviation Airports

Direct and indirect annual payroll supported by general aviation airports is estimated at \$44.6 million. The multiplier adds almost another \$30 million in induced payroll impacts for general aviation airports. Total annual payroll impacts for general aviation airports are estimated at \$71.6 million.

Total annual payroll associated with the general aviation airports included in this study is shown in **Table 15**. Information on payroll impacts for individual airports is also shown in this table. In Table 15, payroll for on-airport and visitor-related activities are combined.

**Table 15**  
**Annual Payroll from On-Airport Activities and Visitor Spending**  
**General Aviation Airports**

Associated City	Airport Name	Direct and Indirect Payroll	Induced Payroll	Total Payroll
Albia Municipal	Albia	\$80,600	\$35,600	\$116,200
Algona Municipal	Algona	\$294,200	\$166,500	\$460,700
Allison Municipal	Allison	\$16,600	\$7,000	\$23,600
Ames Municipal	Ames	\$1,749,400	\$1,138,600	\$2,888,000
Anita Municipal	Anita	\$1,000	\$400	\$1,400
Ankeny Regional	Ankeny	\$3,372,500	\$2,054,500	\$5,427,000
Atlantic Municipal	Atlantic	\$899,700	\$474,500	\$1,374,200
Audubon County	Audubon	\$89,000	\$37,800	\$126,800
Bedford Municipal	Bedford	\$10,800	\$5,900	\$16,700
Belle Plaine Municipal	Belle Plaine	\$305,100	\$232,700	\$537,800
Belmond Municipal	Belmond	\$8,300	\$3,500	\$11,800
Bloomfield Municipal	Bloomfield	\$166,600	\$100,700	\$267,300
Boone Municipal	Boone	\$2,648,800	\$1,186,400	\$3,835,200
Carroll Municipal	Carroll	\$348,200	\$177,700	\$525,900
Centerville Municipal	Centerville	\$77,800	\$35,700	\$113,500
Chariton Municipal	Chariton	\$102,000	\$43,300	\$145,300
Northeast Iowa Regional	Charles City	\$168,700	\$113,500	\$282,200
Cherokee County Regional	Cherokee	\$216,200	\$124,500	\$340,700
Clarinda Municipal	Clarinda	\$172,700	\$111,400	\$284,100
Clarion Municipal	Clarion	\$85,300	\$40,200	\$125,500
Clinton Municipal	Clinton	\$401,700	\$216,200	\$617,900
Corning Municipal	Corning	\$8,300	\$3,500	\$11,800
Council Bluffs Municipal	Council Bluffs	\$3,488,700	\$2,180,100	\$5,668,800
Cresco Municipal	Cresco	\$8,300	\$3,500	\$11,800
Creston Municipal	Creston	\$87,900	\$54,300	\$142,200
Davenport Municipal	Davenport	\$7,698,800	\$3,787,100	\$11,485,900
Decorah Municipal	Decorah	\$254,500	\$136,800	\$391,300
Denison Municipal	Denison	\$101,400	\$45,700	\$147,100

**Table 15 (cont.)**  
**Annual Payroll from On-Airport Activities and Visitor Spending**  
**General Aviation Airports**

Associated City	Airport Name	Direct and Indirect Payroll	Induced Payroll	Total Payroll
Eagle Grove Municipal	Eagle Grove	\$9,800	\$5,500	\$15,300
Eldora Municipal	Eldora	\$8,300	\$3,500	\$11,800
Emmetsburg Municipal	Emmetsburg	\$262,800	\$111,600	\$374,400
Estherville Municipal	Estherville	\$320,300	\$218,800	\$539,100
Fairfield Municipal	Fairfield	\$317,000	\$173,100	\$490,100
Forest City Municipal	Forest City	\$535,800	\$344,500	\$880,300
Fort Madison Municipal	Fort Madison	\$17,700	\$7,500	\$25,200
Greenfield Municipal	Greenfield	\$104,000	\$66,300	\$170,300
Grinnell Regional	Grinnell	\$157,100	\$85,100	\$242,200
Grundy Center Municipal	Grundy Center	\$2,000	\$800	\$2,800
Guthrie County Regional	Guthrie Center	\$45,200	\$20,500	\$65,700
Hampton Municipal	Hampton	\$146,200	\$93,700	\$239,900
Harlan Municipal	Harlan	\$253,500	\$139,900	\$393,400
Humboldt Municipal	Humboldt	\$9,800	\$5,500	\$15,300
Ida Grove Municipal	Ida Grove	\$0	\$0	\$0
Independence Municipal	Independence	\$594,500	\$274,100	\$868,600
Iowa City Municipal	Iowa City	\$2,290,100	\$1,398,800	\$3,688,900
Iowa Falls Municipal	Iowa Falls	\$392,000	\$270,500	\$662,500
Jefferson Municipal	Jefferson	\$219,700	\$141,100	\$360,800
Keokuk Municipal	Keokuk	\$439,500	\$271,400	\$710,900
Keosauqua Municipal	Keosauqua	\$8,300	\$3,500	\$11,800
Knoxville Municipal	Knoxville	\$236,700	\$139,900	\$376,600
Lake Mills Municipal	Lake Mills	\$8,300	\$3,500	\$11,800
Lamoni Municipal	Lamoni	\$53,100	\$22,500	\$75,600
Le Mars Municipal	Le Mars	\$359,600	\$236,600	\$596,200
Manchester Municipal	Manchester	\$8,300	\$3,500	\$11,800
Mapleton Municipal	Mapleton	\$79,700	\$44,400	\$124,100
Maquoketa Municipal	Maquoketa	\$422,900	\$290,600	\$713,500
Marshalltown Municipal	Marshalltown	\$555,400	\$359,000	\$914,400
Milford Municipal	Milford	\$21,100	\$11,700	\$32,800
Monona Municipal	Monona	\$0	\$0	\$0
Monticello Regional	Monticello	\$338,200	\$212,900	\$551,100
Mt. Ayr Municipal	Mount Ayr	\$8,300	\$3,500	\$11,800
Mt. Pleasant Municipal	Mount Pleasant	\$467,300	\$352,500	\$819,800
Muscatine Municipal	Muscatine	\$1,415,300	\$1,011,300	\$2,426,600
New Hampton Municipal	New Hampton	\$2,700	\$1,100	\$3,800
Newton Municipal	Newton	\$441,100	\$296,900	\$738,000
Northwood Municipal	Northwood	\$9,800	\$5,500	\$15,300
Oelwein Municipal	Oelwein	\$255,100	\$169,900	\$425,000



**Table 15 (cont.)**  
**Annual Payroll from On-Airport Activities and Visitor Spending**  
**General Aviation Airports**

Associated City	Airport Name	Direct and Indirect Payroll	Induced Payroll	Total Payroll
Onawa Municipal	Onawa	\$35,400	\$15,000	\$50,400
Orange City Municipal	Orange City	\$284,700	\$220,100	\$504,800
Osage Municipal	Osage	\$2,500	\$1,100	\$3,600
Osceola Municipal	Osceola	\$84,600	\$38,600	\$123,200
Oskaloosa Municipal	Oskaloosa	\$455,300	\$262,200	\$717,500
Ottumwa Regional	Ottumwa	\$1,425,100	\$952,100	\$2,377,200
Paullina Municipal	Paullina	\$9,800	\$5,500	\$15,300
Pella Municipal	Pella	\$1,213,500	\$993,200	\$2,206,700
Perry Municipal	Perry	\$105,200	\$58,500	\$163,700
Pocahontas Municipal	Pocahontas	\$47,000	\$35,900	\$82,900
Primghar Municipal	Primghar	\$29,300	\$16,500	\$45,800
Red Oak Municipal	Red Oak	\$379,400	\$173,300	\$552,700
Rock Rapids Municipal	Rock Rapids	\$121,000	\$83,200	\$204,200
Rockwell City Municipal	Rockwell City	\$80,600	\$35,600	\$116,200
Sac City Municipal	Sac City	\$78,400	\$37,300	\$115,700
Sheldon Municipal	Sheldon	\$134,900	\$80,200	\$215,100
Shenandoah Municipal	Shenandoah	\$147,400	\$70,700	\$218,100
Sibley Municipal	Sibley	\$121,100	\$65,700	\$186,800
Sioux Center Municipal	Sioux Center	\$956,800	\$742,900	\$1,699,700
Spencer Municipal	Spencer	\$913,100	\$660,100	\$1,573,200
Spirit Lake Municipal	Spirit Lake	\$26,500	\$14,000	\$40,500
Storm Lake Municipal	Storm Lake	\$524,200	\$336,600	\$860,800
Sully Municipal	Sully	\$8,300	\$3,500	\$11,800
Tipton Municipal	Tipton	\$17,700	\$7,500	\$25,200
Toledo Municipal	Toledo	\$0	\$0	\$0
Traer Municipal	Traer	\$9,800	\$5,500	\$15,300
Vinton Veterans Memorial	Vinton	\$173,100	\$109,700	\$282,800
Washington Municipal	Washington	\$606,400	\$365,200	\$971,600
Waukon Municipal	Waukon	\$35,400	\$15,000	\$50,400
Waverly Municipal	Waverly	\$437,000	\$283,300	\$720,300
Webster City Municipal	Webster City	\$1,241,700	\$1,026,400	\$2,268,100
West Union Municipal	West Union	\$203,600	\$116,800	\$320,400
Winterset-Madison County	Winterset	\$405,100	\$291,400	\$696,500
Woodbine Municipal	Woodbine	\$8,300	\$3,500	\$11,800
<b>Public Airports Subtotals</b>		<b>\$44,001,800</b>	<b>\$26,444,700</b>	<b>\$70,446,500</b>
Private Airports	Various	\$631,800	\$521,500	\$1,153,300
<b>Totals</b>		<b>\$44,633,600</b>	<b>\$26,966,200</b>	<b>\$71,599,800</b>
Sources: Wilbur Smith Associates and IMPLAN Multipliers				

### ***Total Payroll Impacts for Study Airports***

Annual payroll benefits from commercial airports considered in this study are shown in Table 14, and annual payroll benefits from general aviation airports are shown in Table 15. The information presented in these two tables represents total payroll benefits from on-airport activities and visitor spending for the study airports.

**Table 16** presents total annual payroll impacts for all study airports. The collective direct and indirect annual payroll impact supported by all study airports is over \$372.6 million. With nearly \$214 million in induced annual payroll benefits, almost \$586.6 million in total annual payroll is realized in Iowa as a result of visitor spending and on-airport activity associated with study airports.

**Table 16**  
**Total Annual Payroll**  
**All Study Airports**

	Direct and Indirect Payroll	Induced Payroll	Total Payroll
Commercial Airports*	\$327,996,900	\$186,972,800	\$514,969,700
General Aviation Airports	\$44,633,600	\$26,966,200	\$71,599,800
<b>Total</b>	<b>\$372,630,500</b>	<b>\$213,939,000</b>	<b>\$586,569,500</b>
Source: Wilbur Smith Associates and IMPLAN multipliers Note: * Commercial airport total includes all eight commercial airports in Iowa and only that portion of the payroll for the Border Airports that is paid to employees residing in Iowa			

Study airports are responsible for helping to support an estimated \$586.6 million in annual payroll. This payroll is attributable to both on-airport activities and visitor spending. The next section provides information on total annual economic activity or output that is associated with the commercial and general aviation airports included in this study.

## Output Impacts For Study Airports

Annual economic output benefiting Iowa's economy is discussed in this section. For this study, output or economic activity is defined as annual gross sales and average annual capital expenditures for on-airport operations. The exceptions are government entities and airlines located on airports. Government and airline output is defined as the sum of annual capital expenditures, payroll, and operating expenses. Output related to commercial service and general aviation visitors is defined as expenditures made during their visits. Total annual output related to the airports exceeds \$1.5 billion.

### *Output Impacts for Commercial Airports*

#### Output from On-Airport Activity at Commercial Airports

Total direct annual output from on-airport operations and activities at commercial airports is estimated at \$611.7 million. Induced airport related output impacts are estimated using IMPLAN multipliers. Appendix B provides a discussion of methodology and multipliers used in this study. Using the IMPLAN model, induced annual output for the commercial airports is estimated at \$401.3 million. When direct and induced impacts are combined, the total annual output for the commercial airports attributed to on-airport activities is more than \$1 billion.

**Table 17** identifies direct, induced, and total annual output for all on-airport activities at the commercial airports included in this analysis. As aviation related businesses located on each commercial airport spend money, these expenditures ripple through Iowa's economy. For example, if an airport were to improve or expand its terminal to accommodate commercial airline passengers, money would be spent in the area's economy on construction materials, labor, and other services.

**Table 17**  
**On-Airport Activity Output**  
**Commercial Airports**

	Direct Output	Induced Output	Total Output
Southeast Iowa Regional Airport	\$4,942,800	\$3,208,800	\$8,151,600
The Eastern Iowa Airport	\$91,649,500	\$59,599,500	\$151,249,000
Des Moines International Airport	\$232,667,200	\$152,420,500	\$385,087,700
Dubuque Regional Airport	\$15,926,400	\$10,342,200	\$26,268,600
Fort Dodge Regional Airport	\$20,588,300	\$13,819,900	\$34,408,200
Mason City Municipal Airport	\$4,833,200	\$3,151,200	\$7,984,400
Sioux Gateway Airport	\$126,476,200	\$84,752,600	\$211,228,800
Waterloo Regional Airport	\$35,267,500	\$23,553,500	\$58,821,000
<b>Iowa Subtotal</b>	<b>\$532,351,100</b>	<b>\$350,848,200</b>	<b>\$883,199,300</b>
Quad City International Airport*	\$44,032,400	\$27,802,900	\$71,835,300
Eppley Airfield*	\$35,308,800	\$22,691,800	\$58,000,600
<b>Border Airport Subtotal*</b>	<b>\$79,341,200</b>	<b>\$50,494,700</b>	<b>\$129,835,900</b>
<b>Total</b>	<b>\$611,692,300</b>	<b>\$401,342,900</b>	<b>\$1,013,035,200</b>
Sources: Wilbur Smith Associates and IMPLAN multipliers			
Note: *This reflects only that portion of the annual output/spending impact associated with these airports that is realized in Iowa.			

### Output from Visitor Spending at Commercial Airports

Spending estimates presented in Table 18 are based on the results of passenger surveys conducted for this study. Indirect output from commercial service visitor spending is estimated at nearly \$194.2 million. As the service industries re-spend this output, the output continues to circulate resulting in induced impacts. Induced annual impacts related to commercial service visitor output or spending are estimated at close to \$125.2 million each year. In total, the combined annual output from commercial service visitor spending is more than \$319.3 million. **Table 18** identifies the output attributed to commercial visitor spending at the 10 commercial airports considered in this study.

**Table 18**  
**Output from Commercial Service Visitor Spending**

Airport	Indirect Output	Induced Output	Total Output
Southeast Iowa Regional Airport	\$864,600	\$557,400	\$1,422,000
The Eastern Iowa Airport	\$42,215,100	\$27,214,700	\$69,429,800
Des Moines International Airport	\$80,190,300	\$51,696,100	\$131,886,400
Dubuque Regional Airport	\$3,427,600	\$2,209,700	\$5,637,300
Fort Dodge Regional Airport	\$510,500	\$329,100	\$839,600
Mason City Municipal Airport	\$1,017,300	\$655,900	\$1,673,200
Sioux Gateway Airport	\$3,590,300	\$2,314,600	\$5,904,900
Waterloo Regional Airport	\$2,208,100	\$1,423,400	\$3,631,500
<b>Iowa Subtotal</b>	<b>\$134,023,800</b>	<b>\$86,400,900</b>	<b>\$220,424,700</b>
Quad City International Airport*	\$22,228,500	\$14,330,000	\$36,558,500
Eppley Airfield*	\$37,905,700	\$24,436,600	\$62,342,300
<b>Border Airport Subtotal*</b>	<b>\$60,134,200</b>	<b>\$38,766,600</b>	<b>\$98,900,800</b>
<b>Total</b>	<b>\$194,158,000</b>	<b>\$125,167,500</b>	<b>\$319,325,500</b>
Sources: Wilbur Smith Associates and IMPLAN multipliers			
Note: *This estimate reflects only those employees at these airports who reside in Iowa			

Total indirect annual output from general aviation visitor spending at the commercial airports is estimated at more than \$10.7 million. As the service industries re-spend indirect output, money continues to circulate, resulting in induced output impacts. The induced impacts related to general aviation visitor output for commercial airports are estimated at nearly \$7.3 million each year. The total annual output from spending by visitors arriving via general aviation aircraft at commercial airports exceeds \$18 million. **Table 19** identifies the output attributed to general aviation visitors using the eight commercial airports in Iowa.

**Table 19**  
**Output from General Aviation Visitor Spending**  
**Commercial Airports**

Airport	Indirect Output	Induced Output	Total Output
Southeast Iowa Regional Airport	\$502,000	\$341,500	\$843,500
The Eastern Iowa Airport	\$1,966,900	\$1,337,800	\$3,304,700
Des Moines International Airport	\$3,253,200	\$2,212,800	\$5,466,000
Dubuque Regional Airport	\$1,476,200	\$1,004,100	\$2,480,300
Fort Dodge Regional Airport	\$557,800	\$379,400	\$937,200
Mason City Municipal Airport	\$1,004,100	\$682,900	\$1,687,000
Sioux Gateway Airport	\$874,800	\$595,000	\$1,469,800
Waterloo Regional Airport	\$1,079,900	\$734,600	\$1,814,500
<b>Total</b>	<b>\$10,714,900</b>	<b>\$7,288,100</b>	<b>\$18,003,000</b>
Sources: Wilbur Smith Associates and IMPLAN multipliers			

### Total Output at Commercial Airports

The total combined annual output related to commercial airports analyzed in this study is presented in **Table 20**. Direct and indirect annual output from just commercial airports measures more than \$808.4 million. Induced output impacts for commercial airports are estimated at \$528.5 million. Combined direct, indirect, and induced output from commercial airport activities, visitors, and the multiplier effect produce a total annual output estimate of over \$1.34 billion for Iowa's economy.

**Table 20**  
**Total Annual Airport Output**  
**Commercial Airports**

	Direct and Indirect Output	Induced Output	Total Output
Southeast Iowa Regional Airport	\$6,309,400	\$4,107,700	\$10,417,100
The Eastern Iowa Airport	\$135,831,500	\$88,152,000	\$223,983,500
Des Moines International Airport	\$316,110,700	\$206,329,400	\$522,440,100
Dubuque Regional Airport	\$20,830,200	\$13,556,000	\$34,386,200
Fort Dodge Regional Airport	\$21,656,600	\$14,528,400	\$36,185,000
Mason City Municipal Airport	\$6,854,600	\$4,490,000	\$11,344,600
Sioux Gateway Airport	\$130,941,300	\$87,662,200	\$218,603,500
Waterloo Regional Airport	\$38,555,500	\$25,711,500	\$64,267,000
<b>Iowa Subtotal</b>	<b>\$677,089,800</b>	<b>\$444,537,200</b>	<b>\$1,121,627,000</b>
Quad City International Airport*	\$66,260,900	\$42,132,900	\$108,393,800
Eppley Airfield*	\$65,037,200	\$41,856,800	\$106,894,000
<b>Border Airport Subtotal*</b>	<b>\$131,298,100</b>	<b>\$83,989,700</b>	<b>\$215,287,800</b>
<b>Total</b>	<b>\$808,387,900</b>	<b>\$528,526,900</b>	<b>\$1,336,914,800</b>
Sources: Wilbur Smith Associates and IMPLAN multipliers			
Note: *Represents only that portion of total annual output from these airports that are realized in Iowa			

## Output Impacts at General Aviation Airports

### Output Impacts from On-Airport Activity and Visitor Spending at General Aviation Airports

Output for general aviation airports shown in **Table 21** represents output from on-airport activities and tenants, as well as from general aviation visitor spending.

Total direct and indirect annual output from general aviation airports is estimated at nearly \$112.7 million. As direct and indirect output continues to circulate, additional induced impacts result. The induced output impacts related to general aviation airports are estimated at over \$74.2 million each year. The total annual output from general aviation airports approaches \$187 million.

**Table 21**  
**Output from On-Airport Activity and Visitor Spending**  
**General Aviation Airports**

Associated City	Airport Name	Direct & Indirect Output	Induced Output	Total Output
Albia Municipal	Albia	\$154,700	\$104,700	\$259,400
Algona Municipal	Algona	\$942,700	\$628,700	\$1,571,400
Allison Municipal	Allison	\$21,800	\$14,700	\$36,500
Ames Municipal	Ames	\$4,698,100	\$3,091,300	\$7,789,400
Anita Municipal	Anita	\$3,100	\$2,100	\$5,200
Ankeny Regional	Ankeny	\$8,902,100	\$5,878,600	\$14,780,700
Atlantic Municipal	Atlantic	\$2,793,800	\$1,849,800	\$4,643,600
Audubon County	Audubon	\$240,900	\$163,000	\$403,900
Bedford Municipal	Bedford	\$19,500	\$13,200	\$32,700
Belle Plaine Municipal	Belle Plaine	\$310,100	\$204,200	\$514,300
Belmond Municipal	Belmond	\$17,900	\$12,200	\$30,100
Bloomfield Municipal	Bloomfield	\$474,000	\$310,500	\$784,500
Boone Municipal	Boone	\$4,408,300	\$2,967,100	\$7,375,400
Carroll Municipal	Carroll	\$1,111,100	\$738,700	\$1,849,800
Centerville Municipal	Centerville	\$144,900	\$98,200	\$243,100
Chariton Municipal	Chariton	\$295,100	\$199,800	\$494,900
Northeast Iowa Regional	Charles City	\$599,800	\$389,200	\$989,000
Cherokee County Regional	Cherokee	\$564,300	\$380,600	\$944,900
Clarinda Municipal	Clarinda	\$516,500	\$339,700	\$856,200
Clarion Municipal	Clarion	\$282,200	\$191,200	\$473,400
Clinton Municipal	Clinton	\$1,023,100	\$692,700	\$1,715,800
Corning Municipal	Corning	\$22,200	\$15,100	\$37,300
Council Bluffs Municipal	Council Bluffs	\$7,666,500	\$5,071,000	\$12,737,500
Cresco Municipal	Cresco	\$12,200	\$8,300	\$20,500
Creston Municipal	Creston	\$255,700	\$168,100	\$423,800
Davenport Municipal	Davenport	\$12,176,800	\$8,093,700	\$20,270,500
Decorah Municipal	Decorah	\$485,800	\$328,000	\$813,800
Denison Municipal	Denison	\$343,900	\$232,800	\$576,700
Eagle Grove Municipal	Eagle Grove	\$9,300	\$6,300	\$15,600



**Table 21**  
**Output from On-Airport Activity and Visitor Spending**  
**General Aviation Airports**

Associated City	Airport Name	Direct & Indirect Output	Induced Output	Total Output
Eldora Municipal	Eldora	\$11,600	\$7,800	\$19,400
Emmetsburg Municipal	Emmetsburg	\$605,900	\$410,000	\$1,015,900
Estherville Municipal	Estherville	\$913,500	\$596,100	\$1,509,600
Fairfield Municipal	Fairfield	\$976,400	\$643,300	\$1,619,700
Forest City Municipal	Forest City	\$1,929,000	\$1,258,000	\$3,187,000
Fort Madison Municipal	Fort Madison	\$73,800	\$50,100	\$123,900
Greenfield Municipal	Greenfield	\$166,400	\$113,000	\$279,400
Grinnell Regional	Grinnell	\$422,900	\$281,100	\$704,000
Grundy Center Municipal	Grundy Center	\$4,100	\$2,800	\$6,900
Guthrie County Regional	Guthrie Center	\$107,400	\$72,700	\$180,100
Hampton Municipal	Hampton	\$560,200	\$366,300	\$926,500
Harlan Municipal	Harlan	\$642,900	\$430,900	\$1,073,800
Humboldt Municipal	Humboldt	\$88,500	\$60,000	\$148,500
Ida Grove Municipal	Ida Grove	\$26,400	\$17,900	\$44,300
Independence Municipal	Independence	\$1,448,400	\$973,300	\$2,421,700
Iowa City Municipal	Iowa City	\$6,754,700	\$4,452,600	\$11,207,300
Iowa Falls Municipal	Iowa Falls	\$1,668,600	\$1,081,500	\$2,750,100
Jefferson Municipal	Jefferson	\$363,500	\$242,600	\$606,100
Keokuk Municipal	Keokuk	\$1,375,800	\$906,100	\$2,281,900
Keosauqua Municipal	Keosauqua	\$9,900	\$6,700	\$16,600
Knoxville Municipal	Knoxville	\$635,800	\$420,500	\$1,056,300
Lake Mills Municipal	Lake Mills	\$14,300	\$9,700	\$24,000
Lamoni Municipal	Lamoni	\$163,500	\$110,600	\$274,100
Le Mars Municipal	Le Mars	\$823,600	\$540,800	\$1,364,400
Manchester Municipal	Manchester	\$16,600	\$11,300	\$27,900
Mapleton Municipal	Mapleton	\$153,800	\$103,500	\$257,300
Maquoketa Municipal	Maquoketa	\$1,247,600	\$820,200	\$2,067,800
Marshalltown Municipal	Marshalltown	\$1,700,900	\$1,113,200	\$2,814,100
Milford Municipal	Milford	\$51,400	\$34,900	\$86,300
Monona Municipal	Monona	\$18,000	\$12,100	\$30,100
Monticello Regional	Monticello	\$1,069,700	\$701,200	\$1,770,900
Mt. Ayr Municipal	Mount Ayr	\$14,300	\$9,700	\$24,000
Mt. Pleasant Municipal	Mount Pleasant	\$2,242,300	\$1,446,100	\$3,688,400
Muscatine Municipal	Muscatine	\$2,817,800	\$1,853,200	\$4,671,000
New Hampton Municipal	New Hampton	\$16,800	\$11,400	\$28,200
Newton Municipal	Newton	\$1,355,600	\$890,600	\$2,246,200
Northwood Municipal	Northwood	\$11,000	\$7,500	\$18,500
Oelwein Municipal	Oelwein	\$1,132,400	\$734,200	\$1,866,600
Onawa Municipal	Onawa	\$103,600	\$70,100	\$173,700
Orange City Municipal	Orange City	\$620,500	\$404,400	\$1,024,900

**Table 21**  
**Output from On-Airport Activity and Visitor Spending**  
**General Aviation Airports**

Associated City	Airport Name	Direct & Indirect Output	Induced Output	Total Output
Osage Municipal	Osage	\$13,300	\$9,100	\$22,400
Osceola Municipal	Osceola	\$263,600	\$178,600	\$442,200
Oskaloosa Municipal	Oskaloosa	\$1,066,800	\$713,900	\$1,780,700
Ottumwa Regional	Ottumwa	\$3,885,500	\$2,543,900	\$6,429,400
Paullina Municipal	Paullina	\$10,900	\$7,400	\$18,300
Pella Municipal	Pella	\$2,702,600	\$1,744,100	\$4,446,700
Perry Municipal	Perry	\$213,900	\$143,700	\$357,600
Pocahontas Municipal	Pocahontas	\$144,300	\$93,700	\$238,000
Primghar Municipal	Primghar	\$53,900	\$36,600	\$90,500
Red Oak Municipal	Red Oak	\$841,800	\$570,300	\$1,412,100
Rock Rapids Municipal	Rock Rapids	\$340,100	\$223,500	\$563,600
Rockwell City Municipal	Rockwell City	\$182,800	\$123,700	\$306,500
Sac City Municipal	Sac City	\$177,000	\$120,000	\$297,000
Sheldon Municipal	Sheldon	\$585,500	\$386,300	\$971,800
Shenandoah Municipal	Shenandoah	\$319,100	\$216,300	\$535,400
Sibley Municipal	Sibley	\$217,600	\$145,400	\$363,000
Sioux Center Municipal	Sioux Center	\$3,283,800	\$2,123,100	\$5,406,900
Spencer Municipal	Spencer	\$3,526,900	\$2,287,500	\$5,814,400
Spirit Lake Municipal	Spirit Lake	\$65,500	\$44,500	\$110,000
Storm Lake Municipal	Storm Lake	\$1,740,400	\$1,148,300	\$2,888,700
Sully Municipal	Sully	\$17,100	\$11,600	\$28,700
Tipton Municipal	Tipton	\$127,300	\$86,200	\$213,500
Toledo Municipal	Toledo	\$8,400	\$5,700	\$14,100
Traer Municipal	Traer	\$11,500	\$7,800	\$19,300
Vinton Veterans Memorial	Vinton	\$564,400	\$375,200	\$939,600
Washington Municipal	Washington	\$1,143,200	\$765,400	\$1,908,600
Waukon Municipal	Waukon	\$77,700	\$52,600	\$130,300
Waverly Municipal	Waverly	\$902,300	\$597,400	\$1,499,700
Webster City Municipal	Webster City	\$5,678,300	\$3,656,300	\$9,334,600
West Union Municipal	West Union	\$407,200	\$272,900	\$680,100
Winterset-Madison County	Winterset	\$1,168,100	\$760,100	\$1,928,200
Woodbine Municipal	Woodbine	\$10,900	\$7,400	\$18,300
<b>Public Airports Subtotals</b>		<b>\$110,607,500</b>	<b>\$72,930,000</b>	<b>\$183,537,500</b>
Private Airports	Various	\$2,188,800	\$1,408,100	\$3,596,900
<b>Totals</b>		<b>\$112,796,300</b>	<b>\$74,338,100</b>	<b>\$187,134,400</b>
Sources: Wilbur Smith Associates and IMPLAN Multipliers				

### ***Total Output Impacts for All Study Airports***

Total annual output for commercial airports was shown in Table 20 and total output for general aviation airports was shown previously in Table 21.

The total combined annual output related to all airports analyzed in this study is presented in **Table 22**. Direct and indirect annual output measures over \$921 million. Induced output impacts are estimated at \$602.8 million. Combined direct, indirect, and induced output from airport activities, visitors, and the multiplier effect produce a total annual output impact of over \$1.52 billion for Iowa's economy.

**Table 22**  
**Total Annual Airport Output**  
**All Study Airports**

	Direct & Indirect Output	Induced Output	Total Output
Iowa Commercial Airports*	\$808,387,900	\$528,526,900	\$1,336,914,800
Iowa General Aviation Airports	\$112,796,300	\$74,338,100	\$187,134,400
<b>Total</b>	<b>\$921,184,200</b>	<b>\$602,865,000</b>	<b>\$1,524,049,200</b>
Source: Wilbur Smith Associates and IMPLAN multipliers			
Note: * This total includes only that portion of the total employment for Border Airports that resides in Iowa			

### **Summary of Impacts for Study Airports**

Economic impacts presented in this section represent those that existed at the point in time data were collected and analysis was completed. It is worth noting that increases in economic impacts, especially those derived from airports and visitors, are not linear in nature. For this analysis, relationships between activity indicators at study airports and economic impact estimates were calculated. These correlations and relationships are discussed in **Appendix C**.



When all on-airport activities and visitors are considered, annual economic activity for the study airports is estimated at 16,468 jobs, \$586.5 million in annual payroll, and \$1.52 billion in annual economic activity. **Table 23** shows these totals. In addition to economic impacts from study airports, there are other aviation related economic benefits that are discussed in the next sections of the report.

**Table 23**  
**Summary of Total Economic Impacts**  
**All Study Airports**

	Total Employment	Total Payroll	Total Output
Iowa Commercial Airports*	14,209.0	\$514,969,700	\$1,336,914,800
Iowa General Aviation Airports	2,259.0	\$71,599,800	\$187,134,400
<b>Total</b>	<b>16,468.0</b>	<b>\$586,569,500</b>	<b>\$1,524,049,200</b>
Source: Wilbur Smith Associates and IMPLAN multipliers Note: * Commercial airport total includes all eight commercial airports in Iowa and only that portion of the employment for the Border Airports that resides in Iowa			

## ECONOMIC IMPACTS OF MILITARY UNITS AT CIVILIAN AIRPORTS

This section highlights the impact of aviation related military units at various airports in Iowa. Since military units on civilian airports are considered on-airport businesses/tenants, employment, payroll, and output economic impacts for military units operating in Iowa are included in the economic impacts for study airports presented in the preceding section. There are four commercial airports and two general aviation airports with military units.

- Boone Municipal Airport
- Davenport Municipal Airport
- Des Moines International Airport
- Fort Dodge Regional Airport
- Sioux Gateway Airport
- Waterloo Regional Airport

A methodology and approach similar to that for estimating the economic impacts for on-airport activity at the study airports was used to develop estimates of military related employment, payroll, and annual economic activity or output presented in **Table 24**. (See Appendix B for a discussion of methodology.) As with other on-airport businesses or tenants considered in this study, direct employment, payroll, and outputs for each of the military units were determined through survey efforts. Direct impacts from military activity were then subjected to study multipliers to determine induced impacts. For each of the military units at the six study airports, their direct and induced impacts equal their total impacts presented in Table 24.

Military units operating at airports in Iowa support 2,247 jobs with an annual payroll of \$84.2 million. Total annual output from military units is estimated at \$278.7 million. It is worth noting again, that the impacts shown in Table 24 for each of the airports were previously included in employment, payroll, and output estimates in the previous section. Therefore, the impacts presented in Table 24 are not additive to employment, payroll, or output impacts presented in the previous section for applicable airports.

**Table 24**  
**Total On-Airport Military Impacts**

	Total Military Employment	Total Military Payroll	Total Military Output	% of Total Output from Military Activity
Boone Municipal	80.0	\$2,991,600	\$5,473,700	76%
Davenport Municipal	236.0	\$4,986,000	\$6,602,400	36%
Des Moines International	417.0	\$17,491,000	\$60,845,700	16%
Fort Dodge Regional	132.0	\$4,986,000	\$20,451,900	64%
Sioux Gateway Airport	1,114.0	\$46,721,200	\$162,528,100	74%
Waterloo Regional Airport	268.0	\$6,998,000	\$22,847,600	38%
<b>Total</b>	<b>2,247.0</b>	<b>\$84,173,800</b>	<b>\$278,749,400</b>	-
Sources: Wilbur Smith Associates and IMPLAN multipliers				

Table 24 puts into perspective the role military activities play in contributing to the total output of the six applicable study airports. Table 24 shows the percent of each airport's total output that is driven by military activity. As noted from the information provided in this section, six of the study airports have notable economic benefits associated with military units that they host.



## ECONOMIC IMPACTS FROM AGRICULTURAL AVIATION

Agriculture is very important to Iowa's economy. There are an estimated 31.5 million acres in the state that are devoted to crop production. Aviation helps to improve crop production around the state. Depending on circumstances and annual conditions, aerial applicators sometimes spray crops in Iowa with fertilizers, but more often they apply products that reduce the spread of disease or pests that can damage or destroy crops. Even partial crop loss can have a notable adverse impact on Iowa's overall economy.

Aerial applicators, by the very nature of their work, are transitory, moving from airport to airport around Iowa to address treatment needs. In some instances, aerial applicators treating crops in Iowa are "based" at airports within the state; and in other instances, applicators are based at airports beyond the state. In either case, the net result is that aviation plays a significant role in supporting Iowa's multi-billion dollar agricultural industry.

Economic impacts for agricultural aviation fall into different categories. For aerial applicators based at a study airport, employment, payroll, and output benefits for these on-airport businesses have been estimated previously as part of each airport's economic activity. The employment, payroll, and output impacts of aerial applicators based at study airports are similar to other on-airport businesses/tenants. Aerial applicators that operate in communities on a transitory basis sometimes incur expenditures for hotels and food. Economic impacts for these transient sprayers are reflected in the visitor impact category for applicable study airports.

Aerial applicators also help to improve the productivity of crops grown in the state. Research conducted for this study shows that an average of approximately four million acres are treated through aerial applications on a yearly basis – an area larger than the state of Connecticut. The value of the crops associated with this acreage is estimated at \$14.8 billion. Information from the Iowa Department of Agriculture and Land Stewardship, Iowa State University, and the Iowa Aerial Applicator Association indicates that treatments applied to crops from aerial applicators increases the value of annual crop production by an estimated \$214 million.



**Table 25** summarizes which airports accommodate aerial applicators. As this table shows, 86 percent of all general aviation airports in Iowa report they support some level of activity by aerial applicators.

**Table 25**  
**Airports Used by Aerial Applicators**

Airport Name	Associated City	Aerial Applicator Activity Reported
Albia Municipal	Albia	Yes
Algona Municipal	Algona	Yes
Allison Municipal	Allison	Yes
Ames Municipal	Ames	Yes
Anita Municipal	Anita	Yes
Ankeny Regional	Ankeny	No
Atlantic Municipal	Atlantic	Yes
Audubon County	Audubon	Yes
Bedford Municipal	Bedford	Yes
Belle Plaine Municipal	Belle Plaine	Yes
Belmond Municipal	Belmond	Yes
Bloomfield Municipal	Bloomfield	Yes
Boone Municipal	Boone	Yes
Carroll Municipal	Carroll	Yes
Centerville Municipal	Centerville	Yes
Chariton Municipal	Chariton	Yes
Northeast Iowa Regional	Charles City	Yes
Cherokee County Regional	Cherokee	Yes
Clarinda Municipal	Clarinda	Yes
Clarion Municipal	Clarion	Yes
Clinton Municipal	Clinton	No
Corning Municipal	Corning	Yes
Council Bluffs Municipal	Council Bluffs	Yes
Cresco Municipal	Cresco	Yes
Creston Municipal	Creston	Yes
Davenport Municipal	Davenport	No
Decorah Municipal	Decorah	No
Denison Municipal	Denison	Yes
Eagle Grove Municipal	Eagle Grove	Yes
Eldora Municipal	Eldora	Yes
Emmetsburg Municipal	Emmetsburg	No
Estherville Municipal	Estherville	Yes

**Table 25 (cont.)**  
**Airports Used by Aerial Applicators**

Airport Name	Associated City	Aerial Applicator Activity Reported
Fairfield Municipal	Fairfield	Yes
Forest City Municipal	Forest City	Yes
Fort Madison Municipal	Fort Madison	Yes
Greenfield Municipal	Greenfield	Yes
Grinnell Regional	Grinnell	Yes
Grundy Center Municipal	Grundy Center	No
Guthrie County Regional	Guthrie Center	No
Hampton Municipal	Hampton	Yes
Harlan Municipal	Harlan	Yes
Humboldt Municipal	Humboldt	Yes
Ida Grove Municipal	Ida Grove	Yes
Independence Municipal	Independence	Yes
Iowa City Municipal	Iowa City	Yes
Iowa Falls Municipal	Iowa Falls	Yes
Jefferson Municipal	Jefferson	Yes
Keokuk Municipal	Keokuk	Yes
Keosauqua Municipal	Keosauqua	No
Knoxville Municipal	Knoxville	Yes
Lake Mills Municipal	Lake Mills	No
Lamoni Municipal	Lamoni	Yes
Le Mars Municipal	Le Mars	Yes
Manchester Municipal	Manchester	Yes
Mapleton Municipal	Mapleton	Yes
Maquoketa Municipal	Maquoketa	Yes
Marshalltown Municipal	Marshalltown	Yes
Milford Municipal	Milford	No
Monona Municipal	Monona	Yes
Monticello Regional	Monticello	Yes
Mt. Ayr Municipal	Mount Ayr	No
Mt. Pleasant Municipal	Mount Pleasant	Yes
Muscatine Municipal	Muscatine	Yes
New Hampton Municipal	New Hampton	Yes
Newton Municipal	Newton	Yes
Northwood Municipal	Northwood	Yes
Oelwein Municipal	Oelwein	Yes
Onawa Municipal	Onawa	Yes
Orange City Municipal	Orange City	Yes
Osage Municipal	Osage	Yes
Osceola Municipal	Osceola	Yes
Oskaloosa Municipal	Oskaloosa	Yes

**Table 25 (cont.)**  
**Airports Used by Aerial Applicators**

Airport Name	Associated City	Aerial Applicator Activity Reported
Ottumwa Regional	Ottumwa	Yes
Paullina Municipal	Paullina	Yes
Pella Municipal	Pella	Yes
Perry Municipal	Perry	Yes
Pocahontas Municipal	Pocahontas	Yes
Primghar Municipal	Primghar	No
Red Oak Municipal	Red Oak	Yes
Rock Rapids Municipal	Rock Rapids	Yes
Rockwell City Municipal	Rockwell City	Yes
Sac City Municipal	Sac City	Yes
Sheldon Municipal	Sheldon	Yes
Shenandoah Municipal	Shenandoah	Yes
Sibley Municipal	Sibley	Yes
Sioux Center Municipal	Sioux Center	Yes
Spencer Municipal	Spencer	Yes
Spirit Lake Municipal	Spirit Lake	No
Storm Lake Municipal	Storm Lake	Yes
Sully Municipal	Sully	No
Tipton Municipal	Tipton	Yes
Toledo Municipal	Toledo	Yes
Traer Municipal	Traer	Yes
Vinton Veterans Memorial	Vinton	Yes
Washington Municipal	Washington	Yes
Waukon Municipal	Waukon	Yes
Waverly Municipal	Waverly	Yes
Webster City Municipal	Webster City	Yes
West Union Municipal	West Union	Yes
Winterset-Madison County	Winterset	Yes
Woodbine Municipal	Woodbine	No
Sources: Airport Management, Wilbur Smith Associates		

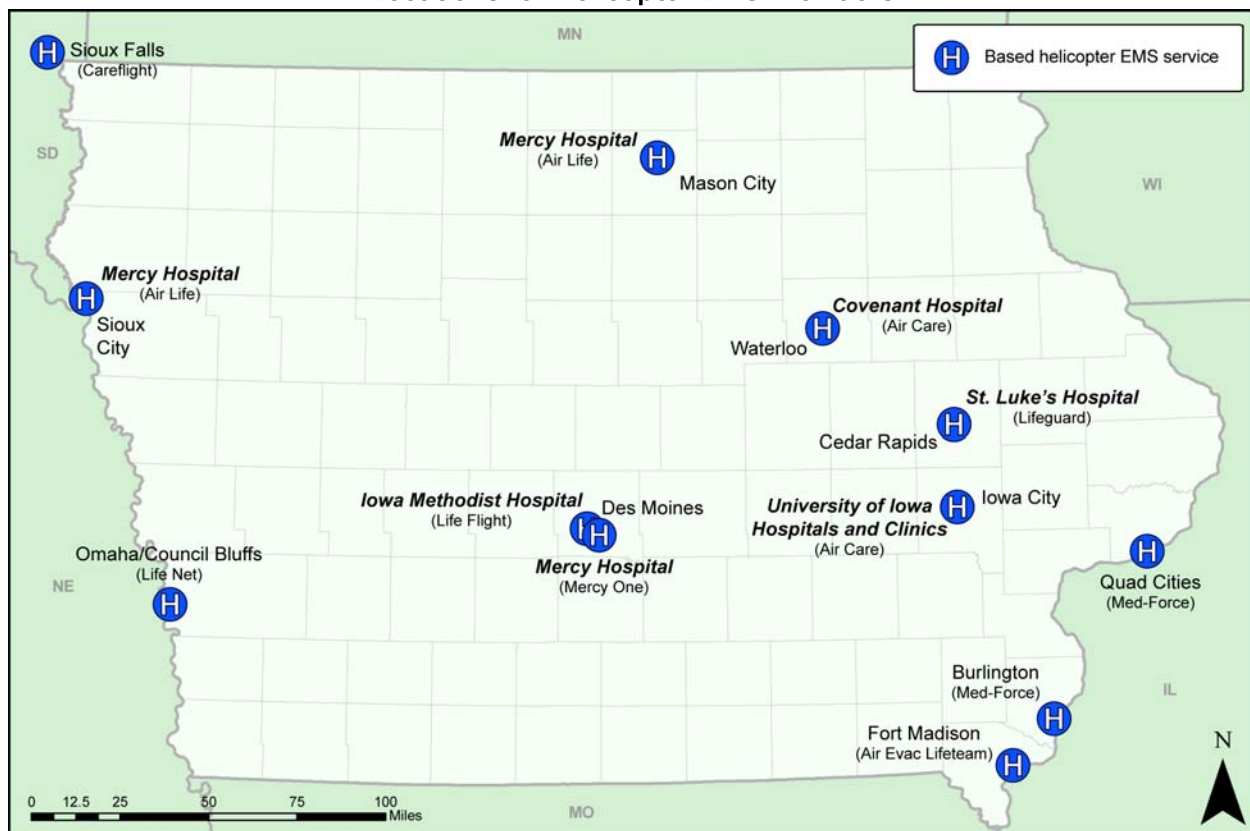
## ECONOMIC BENEFITS FROM HELICOPTER EMERGENCY MEDICAL SERVICE (EMS) PROVIDERS

It is not possible to place an actual dollar value on emergency medical services that aviation in Iowa supports. It is nevertheless important to recognize that aviation contributes immensely to the health and well-being of residents throughout the state by supporting important medical and emergency services.

It is possible to quantify the economic benefit of the state's primary providers of helicopter emergency medical services. Helicopter EMS providers operate a fleet of eight hospital-based helicopters that primarily operate from heliports located at hospitals throughout the state. Combined, these EMS providers employ an estimated 136 people; these jobs include both pilots and emergency medical personal. Annual payroll for these jobs is estimated at \$6.1 million. Total annual economic activity associated with these helicopter EMS providers is estimated at \$13.3 million.

These eight hospital-based programs, as well as additional independent and bordering helicopter EMS programs, are depicted on **Exhibit 4**. It is estimated these programs fly in excess 4,000 missions each year in Iowa.

**Exhibit 4**  
**Locations for Helicopter EMS Providers**





Impacts for EMS providers are comparable to direct impacts identified for aviation related businesses at airports included in this study. A methodology similar to that used for estimating the economic benefits of on-airport activities (see Appendix B) was used to estimate the economic benefit of Iowa's helicopter EMS providers. Direct employment, payroll, and output benefits were subjected to multipliers used in this study to estimate induced economic impacts. Combined, direct and induced impacts equal the total economic impact for EMS providers.

When both direct and induced benefits for hospital-based air ambulance agencies are considered, total annual economic benefits attributable to these providers are as follows:

- Jobs – 249.5
- Total annual payroll - \$11.3 million
- Total annual economic activity/output - \$21.8 million

Economic impacts for EMS providers are in addition to those identified for study airports.

## ECONOMIC IMPACTS OF OFF-AIRPORT AVIATION RELATED BUSINESSES

Research conducted for this study indicates there are at least 26 businesses in Iowa that are directly involved in the production of aviation related products that are not located on one of the airports whose impacts were measured earlier in this analysis. Estimates developed in this study show these businesses are responsible for \$3.9 billion in total annual economic output. Aviation related businesses are located in various communities throughout Iowa. **Table 26** lists these businesses, their location, and provides a short description of the type of aviation related activity of each company.

**Table 26**  
**Off-Airport Aviation Related Businesses in Iowa**

Company	City	Description
Airabella Inc	Peosta	Aircraft Manufacturing
Aircraft Engine Resources Llc	Brighton	Aircraft Parts
Alcoa Davenport Works	Bettendorf	Aluminum Aircraft Parts
Carleton Life Support Systems Inc.	Davenport	Aircraft Oxygen Systems
Cleveland Aircraft Tool	Boone	Tooling
Dakota Air Frame	Larchwood	Air Frame Manufacturing
Eaton Corporation	Belmond	Engine Parts
FRC Component Products	Mason City	Aircraft Antennas
From Here To There P D Q Inc	Clear Lake	Aircraft Manufacturing
Geater Machining & Manufacturing	Independence	Tooling
Goodrich Corporation	Carroll	Aircraft Parts
Igles Corporation	Bedford	Aircraft Manufacturing
Indy Aircraft (aka Golden Circle Air)	Independence	Aircraft Manufacturing
Iowa Aircraft	Burlington	Aircraft Manufacturing
Iowa Mold & Engineering	Belle Plaine	Plastics Manufacturing
Iron Design	Clarksville	Metal Fabrication
JLM Aviation	Reasnor	Aviation Support
Kruse Air	Sioux City	Aircraft Manufacturing
Recreation Wheels Llc	Orange City	Wheel Manufacturing
Retro Flight	Atlantic	Radio Controlled Rockets
Rockwell Collins	Cedar Rapids	Avionics
Shey Systems	Hiawatha	Aircraft Parts
Snap-On Tools Co.	Algona	Tooling
St. Croix Aircraft	Corning	Aircraft Restoration
Vermeer Aviation	Sioux Center	Aircraft Manufacturing
Warp Drive, Inc	Ventura	Aircraft Parts
Source: Airport Management, Dun and Bradstreet, Wilbur Smith Associates		

Surveys were sent to each of these businesses as part of this study. In addition, other research was completed to secure information on the number of people the businesses employ, as well as the total Iowa-related annual economic activity or output that is associated with each business.

Aviation related businesses in Iowa, similar to the study airports, are responsible for supporting jobs, payroll, and annual economic activity. Economic benefits associated with aviation related companies in Iowa were estimated using an approach similar to that used to estimate the economic benefits for study airports (see Appendix B). Direct employment, payroll, and output estimates for each aviation related business were subjected to study multipliers to estimate induced economic impacts. Combined, direct and induced impacts equal the total economic impact for aviation related businesses in Iowa. It is important to note that economic impact estimates in this category represent the portion of each employer's business that is Iowa-related.

**Table 27** shows the additional employment, annual payroll, and annual economic activity or output that is associated with these aviation related businesses.

**Table 27**  
**Jobs, Payroll, and Economic Activity/Output**  
**Off-Airport Aviation Related Businesses in Iowa**

	Direct	Induced	Total
Employment	11,177	19,329	30,506
Payroll	\$701,239,460	\$1,372,329,831	\$2,073,569,291
Output	\$2,457,523,000	\$1,396,900,309	\$3,854,423,309
Source: Airport Management, Dun and Bradstreet, US Bureau of Labor Statistics, Wilbur Smith Associates			

The employment, payroll, and output impacts shown in Table 27 are in addition to those previously shown that are generated by commercial and general aviation airports analyzed in this study. When direct employment, payroll, and output benefits from aviation related businesses are combined with induced impacts shown in Table 27, total economic impacts for aviation related businesses in Iowa are as follows:

- Jobs – 30,506
- Annual Payroll – \$2.1 billion
- Annual Output – \$3.9 billion

Information in this section helps to provide a more complete picture of all economic benefits that Iowa realizes on an annual basis from all facets of air transportation-related activity.





## AVIATION BENEFITS FOR THE IOWA BUSINESS COMMUNITY

Economic impacts associated with aviation in Iowa extend beyond on-airport activities and commercial service and general aviation visitors. Many employees and companies in Iowa rely heavily on aviation. As a result, Iowa benefits from “value-added” impacts associated with air transportation supported by study airports. These value-added impacts include increases in productivity that businesses in Iowa realize from their use of Iowa’s air transportation system.

Two separate surveys of businesses were completed for this study. In one survey, members of the Iowa Business Council were contacted. The Iowa Business Council represents the 21 largest employers in the state.

In the second survey, 475 additional businesses were contacted. Information from airports in Iowa and FAA flight records was used to identify types of companies doing businesses in Iowa that benefit from using aviation. These sources reveal that employers in the following sectors often rely on aviation to increase their efficiency and improve their productivity:

- Manufacturing
- Communications and utilities
- Wholesale trade
- Finance, insurance, and real estate
- Engineering, architecture, and accounting
- Business, personnel, and legal services

Information from the two businesses surveys was used to:

- Determine how the business community in Iowa relies on air cargo
- Assess how businesses use both commercial and general aviation and how they benefit from both forms of transportation
- Determine how commercial and general aviation airports influence the locations of businesses in Iowa
- Estimate the increases in productivity the Iowa business community realizes from its use of aviation

### Business Use of Air Cargo

Air cargo activity at commercial airports in Iowa provides jobs and supports economic activity in Iowa. Many businesses and industries rely on air cargo to transport commodities to their customers or as a function in their supply chain management. Two separate business surveys helped to show how important air cargo is to businesses in the state.

From surveys provided by the sixty (60) percent responded that they use some form of air cargo or express shipping service on a regular basis. These businesses use air cargo as follows:

- Just less than 59 percent ship documents weighing less than two pounds.
- More than 50 percent ship parcels weighing between two and 70 pounds.
- About 20 percent use air cargo to ship freight weighing more than 70 pounds.

When businesses ship and receive packages that weigh less than two pounds, they are most likely sending overnight mail. Businesses that ship parcels in the 2 to 7 pound range most likely rely on air cargo for just-in-time supply chain, inventory, and parts management. Generally speaking, packages in the two to seven pound range do not require dedicated air cargo facilities.

Additional information on ways businesses in Iowa depend on air cargo was obtained from the other business survey. Of the Iowa businesses who participated in the second business survey, 81 percent indicated that they rely on air cargo or express shipping on a regular basis to support their activities and increase their productivity.

There are several means by which businesses in Iowa ship and receive air cargo. According to survey results, of the responding businesses that indicated they rely on air cargo, these businesses ship and receive air cargo using one or more of the following methods:

- One hundred percent use integrated express carriers such as FedEx or UPS to meet their air cargo needs.
- Forty-three percent ship and receive air cargo using commercial airlines.
- Twenty-nine percent use freight forwarders such as Towne Air Freight or Forward Air to meet their air cargo needs.
- Eight percent use chartered aircraft to meet their air cargo shipping requirements.
- Five percent use company owned aircraft when they have a need to ship or receive air cargo.

## **Business Use of Commercial Aviation**

Iowa generates more than 2.5 million commercial airline boardings every year. Approximately 1.4 million of these boardings can be attributed to trips that support sales and operations of manufacturing companies, financial service businesses, Iowa's agricultural industry, and other business activity throughout the state.

Iowa's largest employers report that being in close proximity to a commercial airport is critical to their business operations. Based on a 2007 survey, the 21 largest employers in Iowa reported their combined annual travel budgets exceed \$52 million. This estimate helps to underscore how important commercial airline travel is to the success of these major employers in Iowa.

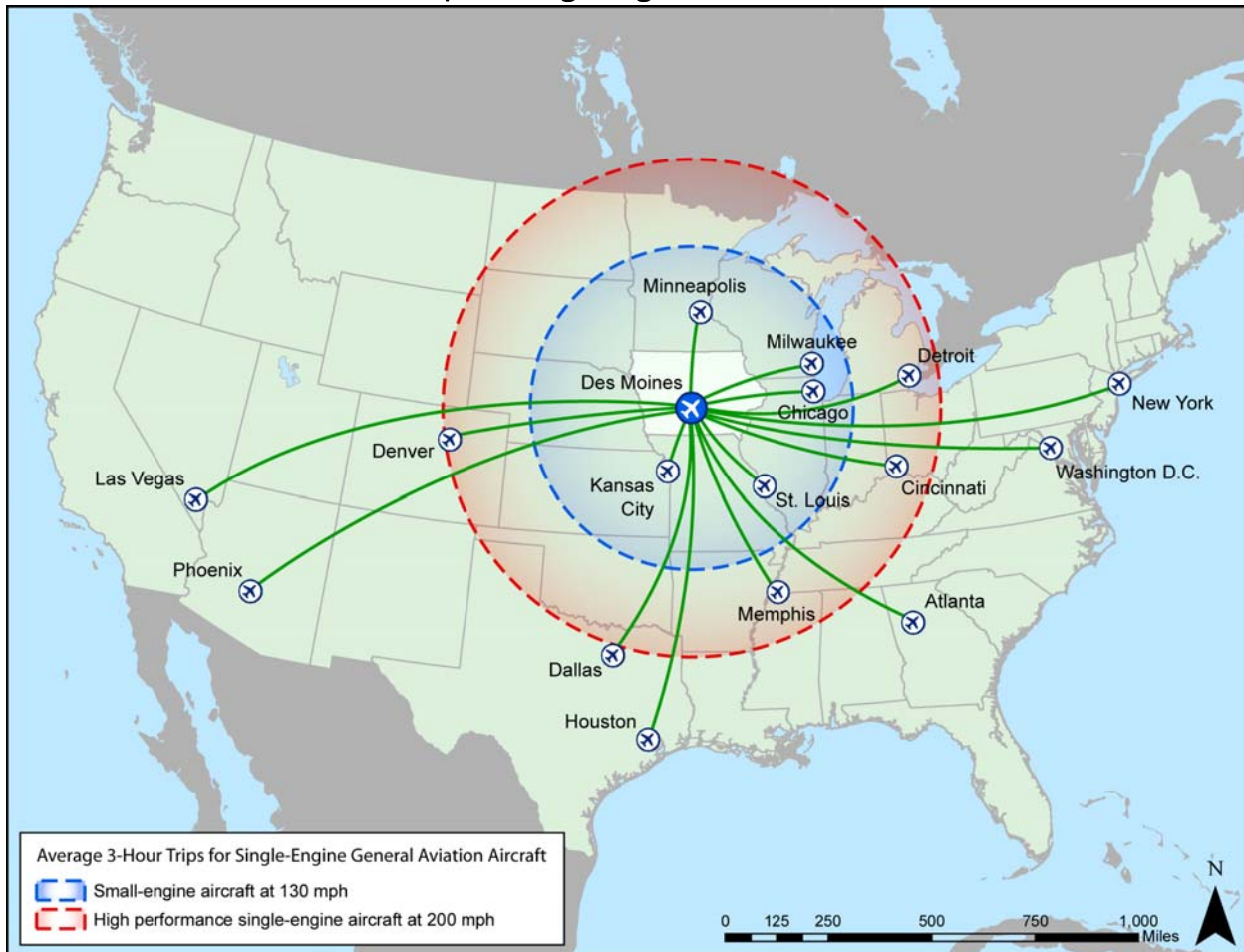
Access to air service is important for economic development and to supporting operations for companies doing business in Iowa. Commercial aviation connects business in Iowa with customers and other businesses around the country and around the world.

## **Business Use of General Aviation**

Business use of general aviation aircraft can range from the rental of small single-engine aircraft to multiple aircraft corporate fleets that are supported by dedicated flight crews and mechanics. Iowa businesses use general aviation to visit customers, vendors, and branch offices. When 21 of the largest employers in Iowa were contacted, forty-seven (47) percent of the responding businesses reported that they own, rent, or charter general aviation aircraft. All of the 21 largest businesses in Iowa rely on general aviation in some way to support their activities and increase their productivity.

**Exhibit 5** shows 3-hour flights that can be made from Iowa using single-engine general aviation aircraft. This exhibit helps to demonstrate the effectiveness of general aviation as a business tool.

**Exhibit 5**  
**Three Hour Trips for Single-Engine General Aviation Planes**



Further research involving another 475 businesses provided more insight into how and where businesses in Iowa rely on general aviation to increase their productivity. The second survey provided information on how businesses use general aviation to support their activities, what type of general aircraft they use, and which airports in Iowa they rely on most frequently when using general aviation to support their businesses operations.

A total of 69 percent of survey respondents indicate they use general aviation in some way to support their operations and increase their productivity. The specific breakdown for business use of general aviation aircraft, follows:

- 51 percent of the respondents own their own general aviation aircraft. General aviation aircraft ownership by type of plane was reported as:
  - 44 percent piston single-engine aircraft,
  - 8 percent piston multi-engine aircraft
  - 21 percent turboprop aircraft

- 31 percent jet aircraft
- Some respondents reported ownership of multiple aircraft types
- 31 percent of the respondents use air charter service. Aircraft charter by type of plane was reported as:
  - 4 percent piston single-engine aircraft
  - 29 percent piston multi-engine aircraft
  - 25 percent turboprop aircraft
  - 29 percent jet aircraft
  - Some respondents reported charter of multiple aircraft types
- Nine percent of the respondents lease general aviation aircraft. General aviation aircraft leasing by type of plane was reported most often as either single-engine or jet aircraft.
- Ten percent of the respondents reported that they have fractional ownership interest in a general aviation aircraft. Fractional ownership by type of plane was reported most frequently as jet aircraft.
- 21 percent of the respondents reported they rent general aviation aircraft to support their business. Aircraft rental by type of plane was reported as:
  - 56 percent piston single-engine aircraft
  - 18 percent piston multi-engine aircraft
  - 12 percent turboprop aircraft.

## Impact of Airports on Business Locations in Iowa

This study's business surveys questioned respondents on the importance of various factors that they would consider if they were contemplating relocation or expansion. Survey respondents were asked to consider several different factors. Businesses rated each factor as being not important, important, or very important to their decisions on locations in Iowa. When the scores were averaged, the factors in order of importance when relocating or expanding from the two different business surveys are as follows:

### Survey of Iowa Business Council Members

1. Availability of labor/trained work force
2. Tax incentives
3. **Commercial service airport**
4. Convenient highway access
5. Cost of hiring
6. **General aviation airport**
7. Proximity of suppliers
8. Academic or cultural centers
9. Universities or R&D centers
10. Raw materials/natural resources

### Survey of 475 Businesses

1. Convenient highway access
2. Tax incentives
3. Available labor/trained workforce
4. **Commercial service airport**
5. Proximity of suppliers
6. **General aviation airport**
7. Raw materials/natural resources
8. Universities or R&D centers
9. Academic or cultural centers
10. Urban business district

As shown, proximity to a commercial airport ranked third or fourth and proximity to a general aviation airport ranked sixth. This information underscores the value that companies conducting business in Iowa gain from their proximity to airports.

## Increased Productivity for Businesses Using Aviation in Iowa

It is impossible to make exact estimates of the economic benefit Iowa businesses realize from using air transportation. Nevertheless, it is possible to make broad assumptions as to how air transportation increases the productivity of businesses in Iowa. Responses from 475 businesses provide insight into how the productivity of companies in employment sectors surveyed increases as a result of using aviation as a business tool. Survey responses show the following:

- In addition to employment previously discussed in this report, there are 142,100 other jobs in Iowa that in some way benefit from or rely on aviation.
- The estimated annual payroll for these jobs is \$5.82 billion.
- When businesses in Iowa rely on aviation, their annual productivity is increased by an estimated \$12.8 billion.

According to the U.S. Department of Commerce, Bureau of Labor Statistics (BLS), there are over 912,300 employees in Iowa in the surveyed employment sectors (manufacturing; communications and utilities; wholesale trade; finance, insurance, and real estate; engineering, architecture, and accounting; and business, personnel, and legal services). Survey results were extrapolated to all employment included in the surveyed business sectors.

Survey results show that approximately 16.8 percent of the employees in the surveyed business sectors in some way rely on or benefit from air transportation. When applied to the 912,300 jobs in the surveyed employment sectors, there are 153,300 jobs in Iowa that have increased productivity from air transportation. Since manufacturing was one of the sectors surveyed, to avoid double-counting, the 11,177 jobs previously identified for aviation related service and manufacturing businesses were subtracted from the 153,800 estimate. This yields approximately 142,100 jobs that have increased productivity in some way from air transportation. These value-added jobs rely on aviation services, aircraft, and commercial and general aviation airports in Iowa.

It is estimated that the annual payroll associated with these 142,100 value-added jobs is \$5.82 billion. This payroll figure was calculated by multiplying the 142,100 jobs by the average annual payroll (obtained from BLS) for surveyed industries in Iowa. The average yearly output value of these workers was determined from IMPLAN multipliers. The annual output associated with the 142,100 jobs is estimated at \$12.8 billion.

By using various forms of air transportation, the efficiency of many employers in Iowa is increased. Survey results show that the productivity of businesses in selected employment sectors increases by as much as \$12.8 billion each year as a result of air transportation. This information helps to show the significant and far-reaching benefit that air transportation has on Iowa's economy.



## QUALITATIVE BENEFITS OF AIR TRANSPORTATION

Previous sections of this report focused on the quantitative economic benefits resulting from study airports, aviation and non-aviation businesses, and operations of emergency medical service providers. There are also a number of qualitative benefits that must be considered when assessing the total value of aviation in Iowa. While it is difficult to place a dollar value on qualitative impacts, these benefits improve the quality of life in Iowa in a variety of ways. Airport specific information on services and other activities supported by general aviation airports included in this study is contained in Appendix A to this document.

It is impossible to quantify every benefit received from aviation. For example, when a manufacturing facility is down because of a broken machine, emergency shipment of parts minimizes downtime and losses. Often, air transportation is the most viable way to move patients, medical teams, bereaving family members, or organs for transplant.

There are many activities that aviation in Iowa accommodates that makes Iowa a better place to live. Some examples include:

- With direct access to thousands of communities throughout the United States, personal, charter, and business airplanes make travel more convenient and efficient, making it easier for businesses in Iowa to retain customers and employees.
- Commercial airline service provides connectivity to the world, opening up opportunities from weekend get-a-ways to vacations in international destinations.
- Aerial survey provides inspection of major utility lines transmitting gas and electricity throughout Iowa; aerial survey is also used for important mapping services.
- In today's busy world, the experience of a first airplane ride still provides an experience that is remembered for a lifetime.
- General aviation helps to improve medical care in many parts of the state by allowing specialty doctors to reach locations that are without large hospitals or specialized medical care.
- Aviation enables someone living in Iowa to shop on-line in a New York boutique and have their purchase delivered the next day.
- The Department of Natural Resources uses airports to conduct aerial inspections to help Iowa improve and protect various aspects of its natural environment.
- Aviation is used to help various law enforcement agencies, including the Iowa State Patrol, to carry out their duties and responsibilities.
- Airports in Iowa help to support career training for many facets of the aviation industry, including pilots, mechanics, and those interested in aviation management.
- From transport helicopters to fighter jets to aerial re-fuelers, Air National Guard operations supported by airports in Iowa help to defend our freedoms, keep us safe, and support critical services following natural disasters.
- News reporting and aerial surveillance is enhanced by the use of aircraft; this type of use was vital during the floods of 2008. Many different types of aircraft, as well as small, medium, and large airports played significant roles in flood recovery efforts.
- Aviation opens up recreational activities such as skydiving, glider flights, and personal aviation.

These examples help to show how even if someone never directly uses an airport or aviation themselves, their lives are still being touched by the many facets of air transportation.

## ECONOMIC IMPACT SUMMARY

### Statewide Economic Impact

**Table 28** summarizes Iowa's total annual economic benefit from air transportation calculated in this study. This total benefit includes on-airport activities, visitor spending, aviation related businesses, and the benefits from helicopter emergency medical service (EMS) providers. Benefits from military units and based aerial applicators are included in the airport impacts shown in Table 28.

**Table 28**  
**Iowa's Economic Impact from Air Transportation**

	Direct & Indirect Impacts	Induced Impacts	Total Impacts
<b>Employment</b>			
On-Airport Operations Impact	5,275.0	3,763.0	9,038.0
Commercial Service Visitor Impacts	4,796.0	1,787.0	6,500.0
General Aviation Visitor Impacts	728.0	202.0	930.0
Off-Airport Aviation-Related Businesses	11,177.0	19,328.5	30,505.5
Helicopter EMS	126.0	123.5	249.5
<b>Total Employment</b>	<b>22,102.0</b>	<b>25,204.0</b>	<b>47,223.0</b>
<b>Payroll</b>			
On-Airport Operations Impact	\$218,078,000	\$127,431,100	\$345,509,100
Commercial Service Visitor Impacts	\$137,684,800	\$77,002,700	\$214,687,500
General Aviation Visitor Impacts	\$16,867,700	\$9,505,200	\$26,372,900
Off-Airport Aviation-Related Businesses	\$701,239,460	\$1,372,329,831	\$2,073,569,291
Helicopter EMS	\$6,100,000	\$5,200,000	\$11,300,000
<b>Total Payroll</b>	<b>\$1,079,969,960</b>	<b>\$1,591,468,831</b>	<b>\$2,671,438,791</b>
<b>Output</b>			
On-Airport Operations Impact	\$709,115,000	\$465,224,700	\$1,174,339,700
Commercial Service Visitor Impacts	\$194,158,000	\$125,167,500	\$319,325,500
General Aviation Visitor Impacts	\$26,088,500	\$17,744,400	\$43,832,900
Off-Airport Aviation-Related Businesses	\$2,457,523,000	\$1,396,900,309	\$3,854,423,309
Helicopter EMS	\$13,300,000	\$8,500,000	\$21,800,000
<b>Total Output</b>	<b>\$3,400,184,500</b>	<b>\$2,013,536,909</b>	<b>\$5,413,721,409</b>
Sources: Wilbur Smith Associates and IMPLAN multipliers			

As shown in this table:

- On-airport activities, including airport businesses/tenants and construction impacts, are responsible for supporting 9,038 jobs, \$345.5 million in annual payroll, and \$1.2 billion in annual economic activity or output.
- Visitors arriving in Iowa by air support an additional 7,430 jobs, \$241.1 million in annual payroll, and \$363.1 million in annual economic activity.
- Aviation related businesses in Iowa support over 30,505 jobs, \$2.07 billion in annual payroll, and \$3.85 billion in annual economic activity or output.





- Iowa's helicopter emergency medical service (EMS) providers support another 250 jobs, \$11.3 in annual payroll, and \$21.8 million in annual economic activity.

What this table does not adequately convey is the economic contribution that general aviation airports make. General aviation airports have annual economic output estimated \$187 million. In addition, the general aviation airports are largely responsible for supporting agricultural aviation which boosts the annual productivity of Iowa's agricultural industry by \$214 million. The total economic benefit from the general aviation airports exceeds \$400 million.

When these activities are combined, air transportation in Iowa currently supports the following economic impacts:

- 47,223 jobs
- \$2.67 billion in annual payroll
- \$5.41 billion in annual economic activity or output

In addition, the productivity of many businesses in Iowa is improved through air transportation and aviation related services supported by airports considered in this study. Increased business productivity estimates are as follows:

- Agriculture in Iowa gains \$214 in increased annual crop productivity from agricultural aviation.
- Private sector off-airport businesses in Iowa gain \$12.8 billion in increased productivity from the efficiency they realize from using all facets of aviation and air transportation.

## Economic Impacts for Study Airports

Benefits from on-airport activities and visitors can be assigned to the individual airport level. **Tables 29 and 30** show individual economic impact estimates for commercial and general aviation airports included in this study.

**Table 29**  
**Total Annual Economic Impact by Airport**  
**Commercial Airports**

Airport	Associated City	Total Employment*	Total Payroll	Total Output
Southeast Iowa Regional Airport	Burlington	114	\$3,342,600	\$10,417,100
The Eastern Iowa Airport	Cedar Rapids	2,695	\$94,716,000	\$223,983,500
Des Moines International Airport	Des Moines	5,476	\$200,616,200	\$522,440,100
Dubuque Regional Airport	Dubuque	383	\$13,272,000	\$34,386,200
Fort Dodge Regional Airport	Fort Dodge	279	\$11,236,000	\$36,185,000
Mason City Municipal Airport	Mason City	140	\$4,668,800	\$11,344,600
Sioux Gateway Airport	Sioux City	1,570	\$64,039,700	\$218,603,500
Waterloo Regional Airport	Waterloo	533	\$14,723,100	\$64,267,000
<b>Iowa Subtotal</b>		<b>11,190</b>	<b>\$406,614,400</b>	<b>\$1,121,627,000</b>
Quad City International Airport **	Moline	1,280	\$46,546,300	\$108,393,800
Eppeley Airfield **	Omaha	1,739	\$61,809,000	\$106,894,000
<b>Border Airport Subtotal**</b>		<b>3,019</b>	<b>\$108,355,300</b>	<b>\$215,287,800</b>
<b>Totals</b>		<b>14,209</b>	<b>\$514,969,700</b>	<b>\$1,336,914,800</b>

Sources: Wilbur Smith Associates and IMPLAN multipliers

Notes: \*Full-time equivalent; \*\* Includes only the benefits of these airports realized in Iowa.

**Table 30**  
**Total Annual Economic Impact by Airport**  
**General Aviation Airports**

Airport Name	Associated City	Total Employment	Total Payroll	Total Output
Albia Municipal	Albia	4.5	\$116,200	\$259,400
Algona Municipal	Algona	15.5	\$460,700	\$1,571,400
Allison Municipal	Allison	1.5	\$23,600	\$36,500
Ames Municipal	Ames	98.5	\$2,888,000	\$7,789,400
Anita Municipal	Anita	1.0	\$1,400	\$5,200
Ankeny Regional	Ankeny	141.5	\$5,427,000	\$14,780,700
Atlantic Municipal	Atlantic	42.0	\$1,374,200	\$4,643,600
Audubon County	Audubon	5.0	\$126,800	\$403,900
Bedford Municipal	Bedford	1.5	\$16,700	\$32,700
Belle Plaine Municipal	Belle Plaine	17.0	\$537,800	\$514,300
Belmond Municipal	Belmond	1.0	\$11,800	\$30,100
Bloomfield Municipal	Bloomfield	7.0	\$267,300	\$784,500

**Table 30 (cont.)**  
**Total Annual Economic Impact by Airport**  
**General Aviation Airports**

Airport Name	Associated City	Total Employment	Total Payroll	Total Output
Boone Municipal	Boone	111.0	\$3,835,200	\$7,375,400
Carroll Municipal	Carroll	19.5	\$525,900	\$1,849,800
Centerville Municipal	Centerville	4.5	\$113,500	\$243,100
Chariton Municipal	Chariton	5.0	\$145,300	\$494,900
Northeast Iowa Regional	Charles City	12.0	\$282,200	\$989,000
Cherokee County Regional	Cherokee	13.5	\$340,700	\$944,900
Clarinda Municipal	Clarinda	9.5	\$284,100	\$856,200
Clarion Municipal	Clarion	5.5	\$125,500	\$473,400
Clinton Municipal	Clinton	23.5	\$617,900	\$1,715,800
Corning Municipal	Corning	1.0	\$11,800	\$37,300
Council Bluffs Municipal	Council Bluffs	180.0	\$5,668,800	\$12,737,500
Cresco Municipal	Cresco	1.0	\$11,800	\$20,500
Creston Municipal	Creston	5.0	\$142,200	\$423,800
Davenport Municipal	Davenport	388.0	\$11,485,900	\$20,270,500
Decorah Municipal	Decorah	13.0	\$391,300	\$813,800
Denison Municipal	Denison	6.5	\$147,100	\$576,700
Eagle Grove Municipal	Eagle Grove	1.5	\$15,300	\$15,600
Eldora Municipal	Eldora	1.0	\$11,800	\$19,400
Emmetsburg Municipal	Emmetsburg	12.0	\$374,400	\$1,015,900
Estherville Municipal	Estherville	15.5	\$539,100	\$1,509,600
Fairfield Municipal	Fairfield	12.5	\$490,100	\$1,619,700
Forest City Municipal	Forest City	22.0	\$880,300	\$3,187,000
Fort Madison Municipal	Fort Madison	2.0	\$25,200	\$123,900
Greenfield Municipal	Greenfield	9.5	\$170,300	\$279,400
Grinnell Regional	Grinnell	8.5	\$242,200	\$704,000
Grundy Center Municipal	Grundy Center	1.0	\$2,800	\$6,900
Guthrie County Regional	Guthrie Center	3.0	\$65,700	\$180,100
Hampton Municipal	Hampton	7.5	\$239,900	\$926,500
Harlan Municipal	Harlan	15.0	\$393,400	\$1,073,800
Humboldt Municipal	Humboldt	0.5	\$15,300	\$148,500
Ida Grove Municipal	Ida Grove	0.0	\$0	\$44,300
Independence Municipal	Independence	30.0	\$868,600	\$2,421,700
Iowa City Municipal	Iowa City	115.0	\$3,688,900	\$11,207,300
Iowa Falls Municipal	Iowa Falls	20.0	\$662,500	\$2,750,100
Jefferson Municipal	Jefferson	12.0	\$360,800	\$606,100
Keokuk Municipal	Keokuk	23.5	\$710,900	\$2,281,900
Keosauqua Municipal	Keosauqua	1.0	\$11,800	\$16,600
Knoxville Municipal	Knoxville	12.5	\$376,600	\$1,056,300
Lake Mills Municipal	Lake Mills	1.0	\$11,800	\$24,000

**Table 30 (cont.)**  
**Total Annual Economic Impact by Airport**  
**General Aviation Airports**

Airport Name	Associated City	Total Employment	Total Payroll	Total Output
Lamoni Municipal	Lamoni	2.5	\$75,600	\$274,100
Le Mars Municipal	Le Mars	13.5	\$596,200	\$1,364,400
Manchester Municipal	Manchester	1.0	\$11,800	\$27,900
Mapleton Municipal	Mapleton	5.5	\$124,100	\$257,300
Maquoketa Municipal	Maquoketa	23.5	\$713,500	\$2,067,800
Marshalltown Municipal	Marshalltown	29.5	\$914,400	\$2,814,100
Milford Municipal	Milford	2.5	\$32,800	\$86,300
Monona Municipal	Monona	0.0	\$0	\$30,100
Monticello Regional	Monticello	20.5	\$551,100	\$1,770,900
Mt. Ayr Municipal	Mount Ayr	1.0	\$11,800	\$24,000
Mt. Pleasant Municipal	Mount Pleasant	25.0	\$819,800	\$3,688,400
Muscatine Municipal	Muscatine	66.0	\$2,426,600	\$4,671,000
New Hampton Municipal	New Hampton	1.0	\$3,800	\$28,200
Newton Municipal	Newton	26.0	\$738,000	\$2,246,200
Northwood Municipal	Northwood	1.5	\$15,300	\$18,500
Oelwein Municipal	Oelwein	14.0	\$425,000	\$1,866,600
Onawa Municipal	Onawa	2.5	\$50,400	\$173,700
Orange City Municipal	Orange City	13.5	\$504,800	\$1,024,900
Osage Municipal	Osage	1.0	\$3,600	\$22,400
Osceola Municipal	Osceola	5.0	\$123,200	\$442,200
Oskaloosa Municipal	Oskaloosa	25.5	\$717,500	\$1,780,700
Ottumwa Regional	Ottumwa	73.0	\$2,377,200	\$6,429,400
Paullina Municipal	Paullina	1.5	\$15,300	\$18,300
Pella Municipal	Pella	46.0	\$2,206,700	\$4,446,700
Perry Municipal	Perry	6.5	\$163,700	\$357,600
Pocahontas Municipal	Pocahontas	3.5	\$82,900	\$238,000
Primghar Municipal	Primghar	3.0	\$45,800	\$90,500
Red Oak Municipal	Red Oak	19.5	\$552,700	\$1,412,100
Rock Rapids Municipal	Rock Rapids	7.0	\$204,200	\$563,600
Rockwell City Municipal	Rockwell City	5.0	\$116,200	\$306,500
Sac City Municipal	Sac City	5.0	\$115,700	\$297,000
Sheldon Municipal	Sheldon	11.0	\$215,100	\$971,800
Shenandoah Municipal	Shenandoah	9.0	\$218,100	\$535,400
Sibley Municipal	Sibley	5.5	\$186,800	\$363,000
Sioux Center Municipal	Sioux Center	34.0	\$1,699,700	\$5,406,900
Spencer Municipal	Spencer	50.0	\$1,573,200	\$5,814,400
Spirit Lake Municipal	Spirit Lake	2.5	\$40,500	\$110,000
Storm Lake Municipal	Storm Lake	31.5	\$860,800	\$2,888,700
Sully Municipal	Sully	1.0	\$11,800	\$28,700

Table 30 (cont.)  
Total Annual Economic Impact by Airport  
General Aviation Airports

Airport Name	Associated City	Total Employment	Total Payroll	Total Output
Tipton Municipal	Tipton	2.0	\$25,200	\$213,500
Toledo Municipal	Toledo	0.0	\$0	\$14,100
Traer Municipal	Traer	1.5	\$15,300	\$19,300
Vinton Veterans Memorial	Vinton	12.5	\$282,800	\$939,600
Washington Municipal	Washington	30.5	\$971,600	\$1,908,600
Waukon Municipal	Waukon	2.5	\$50,400	\$130,300
Waverly Municipal	Waverly	26.0	\$720,300	\$1,499,700
Webster City Municipal	Webster City	42.0	\$2,268,100	\$9,334,600
West Union Municipal	West Union	8.5	\$320,400	\$680,100
Winterset-Madison County	Winterset	27.0	\$696,500	\$1,928,200
Woodbine Municipal	Woodbine	1.0	\$11,800	\$18,300
<b>Public Airports Subtotals</b>		<b>2,209.5</b>	<b>\$70,446,500</b>	<b>\$183,537,500</b>
Private Airports	Various	49.5	\$1,153,300	\$3,596,900
<b>Totals</b>		<b>2,259.0</b>	<b>\$71,599,800</b>	<b>\$187,134,400</b>
Sources: Wilbur Smith Associates and IMPLAN Multipliers				



## Appendix A

### Activities and Services

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# Activities and Services at Albia Municipal Airport

- Albia -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental						●
Personal/Recreational	●					
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical			●			
Aerial Photography				●		
Sightseeing Flights						●
Law Enforcement			●			
Doctor Transport		●				
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols			●			
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Algona Municipal Airport

- Algona -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education				●		
Aircraft Maintenance	●					
Aircraft Sales				●		
Air Cargo					●	
Ag Spraying	●					
Emergency Medical					●	
Aerial Photography			●			
Sightseeing Flights			●			
Law Enforcement				●		
Doctor Transport					●	
Civil Air Patrol					●	
Hosting Community Events				●		
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections			●			
Real Estate Tours				●		
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols				●		
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Allison Municipal Airport

- Allison -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate				●		
Air Charter					●	
Aircraft Rental						●
Personal/Recreational	●					
Flight Training				●		
Career Training/Education						●
Youth Education				●		
Aircraft Maintenance					●	
Aircraft Sales						●
Air Cargo					●	
Ag Spraying		●				
Emergency Medical					●	
Aerial Photography					●	
Sightseeing Flights					●	
Law Enforcement				●		
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training				●		
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Ames Municipal Airport

- Ames -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter	●					
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education	●					
Youth Education		●				
Aircraft Maintenance	●					
Aircraft Sales	●					
Air Cargo						●
Ag Spraying		●				
Emergency Medical			●			
Aerial Photography				●		
Sightseeing Flights	●					
Law Enforcement			●			
Doctor Transport						●
Civil Air Patrol			●			
Hosting Community Events			●			
Traffic or News Reporting			●			
Air Show/Fly-ins				●		
Military Exercises/Training				●		
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport				●		
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Anita Municipal Airport

- Anita -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter						●
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Ankeny Regional Airport

- Ankeny -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter	●					
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales	●					
Air Cargo	●					
Ag Spraying					●	
Emergency Medical	●					
Aerial Photography		●				
Sightseeing Flights	●					
Law Enforcement	●					
Doctor Transport	●					
Civil Air Patrol	●					
Hosting Community Events		●				
Traffic or News Reporting					●	
Air Show/Fly-ins						●
Military Exercises/Training		●				
Aerial Inspections				●		
Real Estate Tours			●			
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Atlantic Municipal Airport

- Atlantic -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter						●
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education				●		
Aircraft Maintenance	●					
Aircraft Sales						●
Air Cargo						●
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography					●	
Sightseeing Flights					●	
Law Enforcement	●					
Doctor Transport					●	
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections				●		
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols				●		
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Audubon County Airport

- Audubon -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter				●		
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying					●	
Emergency Medical					●	
Aerial Photography						●
Sightseeing Flights					●	
Law Enforcement					●	
Doctor Transport				●		
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training					●	
Aerial Inspections					●	
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Bedford Municipal Airport

- Bedford -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate			●			
Air Charter					●	
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance			●			
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical					●	
Aerial Photography					●	
Sightseeing Flights					●	
Law Enforcement					●	
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Belle Plaine Municipal Airport

- Belle Plaine -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter						●
Aircraft Rental						●
Personal/Recreational			●			
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance			●			
Aircraft Sales						●
Air Cargo						●
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement				●		
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training		●				
Aerial Inspections			●			
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols			●			
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Belmond Municipal Airport

- Belmond -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter						●
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical		●				
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Bloomfield Municipal Airport

- Bloomfield -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo						●
Ag Spraying		●				
Emergency Medical					●	
Aerial Photography					●	
Sightseeing Flights			●			
Law Enforcement					●	
Doctor Transport		●				
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections					●	
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols					●	
Firefighting					●	

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Boone Municipal Airport

- Boone -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter						
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales						●
Air Cargo		●				
Ag Spraying	●					
Emergency Medical						●
Aerial Photography		●				
Sightseeing Flights				●		
Law Enforcement				●		
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events				●		
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training	●					
Aerial Inspections	●					
Real Estate Tours						●
Advertising/Banner Towing					●	
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Carroll Municipal Airport

- Carroll -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education						●
Aircraft Maintenance		●				
Aircraft Sales					●	
Air Cargo				●		
Ag Spraying			●			
Emergency Medical			●			
Aerial Photography				●		
Sightseeing Flights				●		
Law Enforcement		●				
Doctor Transport			●			
Civil Air Patrol			●			
Hosting Community Events				●		
Traffic or News Reporting				●		
Air Show/Fly-ins					●	
Military Exercises/Training		●				
Aerial Inspections		●				
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols				●		
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Centerville Municipal Airport

- Centerville -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter						●
Aircraft Rental		●				
Personal/Recreational	●					
Flight Training			●			
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying			●			
Emergency Medical					●	
Aerial Photography				●		
Sightseeing Flights				●		
Law Enforcement					●	
Doctor Transport			●			
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections			●			
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Chariton Municipal Airport

- Chariton -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate			●			
Air Charter		●				
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical						●
Aerial Photography	●					
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport		●				
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins						●
Military Exercises/Training					●	
Aerial Inspections					●	
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols		●				
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Cherokee County Regional Airport

- Cherokee -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		•				
Air Charter			•			
Aircraft Rental	•					
Personal/Recreational	•					
Flight Training	•					
Career Training/Education						•
Youth Education					•	
Aircraft Maintenance						•
Aircraft Sales						•
Air Cargo						•
Ag Spraying				•		
Emergency Medical			•			
Aerial Photography		•				
Sightseeing Flights		•				
Law Enforcement					•	
Doctor Transport				•		
Civil Air Patrol			•			
Hosting Community Events					•	
Traffic or News Reporting						•
Air Show/Fly-ins					•	
Military Exercises/Training						•
Aerial Inspections			•			
Real Estate Tours					•	
Advertising/Banner Towing						•
Prisoner Transport			•			
Environmental Patrols				•		
Firefighting						•

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Clarinda Municipal Airport

- Clarinda -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter			●			
Aircraft Rental				●		
Personal/Recreational	●					
Flight Training						●
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance			●			
Aircraft Sales					●	
Air Cargo					●	
Ag Spraying	●					
Emergency Medical		●				
Aerial Photography					●	
Sightseeing Flights					●	
Law Enforcement					●	
Doctor Transport					●	
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections			●			
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport				●		
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Clarion Municipal Airport

- Clarion -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter			●			
Aircraft Rental						●
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education						●
Aircraft Maintenance				●		
Aircraft Sales			●			
Air Cargo						●
Ag Spraying					●	
Emergency Medical						●
Aerial Photography					●	
Sightseeing Flights		●				
Law Enforcement					●	
Doctor Transport					●	
Civil Air Patrol					●	
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections				●		
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Clinton Municipal Airport

- Clinton -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education			●			
Aircraft Maintenance		●				
Aircraft Sales				●		
Air Cargo				●		
Ag Spraying						●
Emergency Medical					●	
Aerial Photography				●		
Sightseeing Flights						●
Law Enforcement				●		
Doctor Transport				●		
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training		●				
Aerial Inspections				●		
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols				●		
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Corning Municipal Airport

- Corning -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate				●		
Air Charter			●			
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights			●			
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport				●		
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Council Bluffs Municipal Airport

- Council Bluffs -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter	●					
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education	●					
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales			●			
Air Cargo					●	
Ag Spraying					●	
Emergency Medical	●					
Aerial Photography		●				
Sightseeing Flights	●					
Law Enforcement	●					
Doctor Transport		●				
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting				●		
Air Show/Fly-ins					●	
Military Exercises/Training				●		
Aerial Inspections		●				
Real Estate Tours		●				
Advertising/Banner Towing		●				
Prisoner Transport		●				
Environmental Patrols				●		
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Cresco Municipal Airport

- Cresco -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying	●					
Emergency Medical					●	
Aerial Photography						●
Sightseeing Flights			●			
Law Enforcement				●		
Doctor Transport				●		
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Creston Municipal Airport

- Creston -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education			●			
Aircraft Maintenance	●					
Aircraft Sales				●		
Air Cargo						●
Ag Spraying	●					
Emergency Medical				●		
Aerial Photography				●		
Sightseeing Flights		●				
Law Enforcement			●			
Doctor Transport	●					
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training			●			
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols				●		
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Davenport Municipal Airport

- Davenport -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter	●					
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education	●					
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales	●					
Air Cargo	●					
Ag Spraying						●
Emergency Medical		●				
Aerial Photography		●				
Sightseeing Flights		●				
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol		●				
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training	●					
Aerial Inspections					●	
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Decorah Municipal Airport

- Decorah -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental		●				
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo				●		
Ag Spraying				●		
Emergency Medical				●		
Aerial Photography				●		
Sightseeing Flights			●			
Law Enforcement					●	
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins				●		
Military Exercises/Training					●	
Aerial Inspections					●	
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Denison Municipal Airport

- Denison -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training			●			
Career Training/Education						●
Youth Education						●
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo		●				
Ag Spraying	●					
Emergency Medical					●	
Aerial Photography	●					
Sightseeing Flights					●	
Law Enforcement			●			
Doctor Transport						●
Civil Air Patrol			●			
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins		●				
Military Exercises/Training					●	
Aerial Inspections			●			
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Eagle Grove Municipal Airport

- Eagle Grove -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter					●	
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical					●	
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport					●	
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Eldora Municipal Airport

- Eldora -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter						●
Aircraft Rental						●
Personal/Recreational			●			
Flight Training			●			
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Emmetsburg Municipal Airport

- Emmetsburg -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate			●			
Air Charter						●
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance			●			
Aircraft Sales					●	
Air Cargo						●
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography					●	
Sightseeing Flights	●					
Law Enforcement			●			
Doctor Transport			●			
Civil Air Patrol						●
Hosting Community Events				●		
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections					●	
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols		●				
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Estherville Municipal Airport

- Estherville -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education	●					
Youth Education				●		
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo			●			
Ag Spraying	●					
Emergency Medical		●				
Aerial Photography			●			
Sightseeing Flights		●				
Law Enforcement					●	
Doctor Transport		●				
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections					●	
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Fairfield Municipal Airport

- Fairfield -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter		●				
Aircraft Rental		●				
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education				●		
Aircraft Maintenance	●					
Aircraft Sales			●			
Air Cargo				●		
Ag Spraying					●	
Emergency Medical					●	
Aerial Photography					●	
Sightseeing Flights				●		
Law Enforcement					●	
Doctor Transport						●
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training					●	
Aerial Inspections			●			
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Forest City Municipal Airport

- Forest City -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo						●
Ag Spraying		●				
Emergency Medical						●
Aerial Photography			●			
Sightseeing Flights		●				
Law Enforcement					●	
Doctor Transport						●
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections		●				
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols		●				
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



## Activities and Services at Fort Madison Municipal Airport

- Fort Madison -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter	●					
Aircraft Rental						●
Personal/Recreational	●					
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical						●
Aerial Photography		●				
Sightseeing Flights					●	
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections		●				
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport			●			
Environmental Patrols			●			
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Greenfield Municipal Airport

- Greenfield -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter					●	
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying					●	
Emergency Medical						
Aerial Photography					●	
Sightseeing Flights				●		
Law Enforcement					●	
Doctor Transport						●
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Grinnell Regional Airport

- Grinnell -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter			●			
Aircraft Rental		●				
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education				●		
Aircraft Maintenance			●			
Aircraft Sales						●
Air Cargo			●			
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography			●			
Sightseeing Flights		●				
Law Enforcement			●			
Doctor Transport				●		
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections		●				
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Grundy Center Municipal Airport

- Grundy Center -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter						●
Aircraft Rental						●
Personal/Recreational			●			
Flight Training			●			
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying						●
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Guthrie County Regional Airport

- Guthrie Center -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate					●	
Air Charter				●		
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying						●
Emergency Medical					●	
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport				●		
Civil Air Patrol					●	
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Hampton Municipal Airport

- Hampton -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate				●		
Air Charter				●		
Aircraft Rental						●
Personal/Recreational	●					
Flight Training			●			
Career Training/Education						●
Youth Education						●
Aircraft Maintenance	●					
Aircraft Sales	●					
Air Cargo					●	
Ag Spraying	●					
Emergency Medical					●	
Aerial Photography				●		
Sightseeing Flights					●	
Law Enforcement				●		
Doctor Transport					●	
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting		●				
Air Show/Fly-ins					●	
Military Exercises/Training			●			
Aerial Inspections				●		
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Harlan Municipal Airport

- Harlan -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental		●				
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance			●			
Aircraft Sales						●
Air Cargo						●
Ag Spraying					●	
Emergency Medical					●	
Aerial Photography						●
Sightseeing Flights		●				
Law Enforcement			●			
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections					●	
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Humboldt Municipal Airport

- Humboldt -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter			●			
Aircraft Rental		●				
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance			●			
Aircraft Sales						●
Air Cargo					●	
Ag Spraying				●		
Emergency Medical					●	
Aerial Photography			●			
Sightseeing Flights					●	
Law Enforcement			●			
Doctor Transport			●			
Civil Air Patrol			●			
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections					●	
Real Estate Tours				●		
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



## Activities and Services at Ida Grove Municipal Airport

- Ida Grove -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter						●
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical						●
Aerial Photography					●	
Sightseeing Flights				●		
Law Enforcement				●		
Doctor Transport				●		
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Independence Municipal Airport

- Independence -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo			●			
Ag Spraying					●	
Emergency Medical			●			
Aerial Photography			●			
Sightseeing Flights			●			
Law Enforcement			●			
Doctor Transport					●	
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training		●				
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport				●		
Environmental Patrols				●		
Firefighting					●	

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Iowa City Municipal Airport

- Iowa City -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter	●					
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education	●					
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales	●					
Air Cargo			●			
Ag Spraying		●				
Emergency Medical		●				
Aerial Photography			●			
Sightseeing Flights			●			
Law Enforcement		●				
Doctor Transport		●				
Civil Air Patrol		●				
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training				●		
Aerial Inspections			●			
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols				●		
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Iowa Falls Municipal Airport

- Iowa Falls -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance			●			
Aircraft Sales					●	
Air Cargo						●
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography				●		
Sightseeing Flights					●	
Law Enforcement					●	
Doctor Transport						●
Civil Air Patrol					●	
Hosting Community Events				●		
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training			●			
Aerial Inspections				●		
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



## Activities and Services at Jefferson Municipal Airport

- Jefferson -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter			●			
Aircraft Rental						●
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education			●			
Aircraft Maintenance		●				
Aircraft Sales						●
Air Cargo			●			
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography				●		
Sightseeing Flights			●			
Law Enforcement			●			
Doctor Transport				●		
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting				●		
Air Show/Fly-ins					●	
Military Exercises/Training		●				
Aerial Inspections			●			
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols				●		
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Keokuk Municipal Airport

- Keokuk -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter		●				
Aircraft Rental		●				
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education			●			
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo			●			
Ag Spraying		●				
Emergency Medical				●		
Aerial Photography				●		
Sightseeing Flights				●		
Law Enforcement					●	
Doctor Transport					●	
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training				●		
Aerial Inspections			●			
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Keosauqua Municipal Airport

- Keosauqua -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter						●
Aircraft Rental						●
Personal/Recreational			●			
Flight Training		●				
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying						●
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Knoxville Municipal Airport

- Knoxville -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education				●		
Aircraft Maintenance	●					
Aircraft Sales				●		
Air Cargo			●			
Ag Spraying	●					
Emergency Medical		●				
Aerial Photography		●				
Sightseeing Flights		●				
Law Enforcement			●			
Doctor Transport						●
Civil Air Patrol					●	
Hosting Community Events				●		
Traffic or News Reporting				●		
Air Show/Fly-ins					●	
Military Exercises/Training			●			
Aerial Inspections				●		
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols			●			
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Lake Mills Municipal Airport

- Lake Mills -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter						●
Aircraft Rental						●
Personal/Recreational			●			
Flight Training		●				
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying						●
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Lamoni Municipal Airport

- Lamoni -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate				●		
Air Charter				●		
Aircraft Rental						●
Personal/Recreational		●				
Flight Training		●				
Career Training/Education						●
Youth Education				●		
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying					●	
Emergency Medical						●
Aerial Photography					●	
Sightseeing Flights						●
Law Enforcement				●		
Doctor Transport						●
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections		●				
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



## Activities and Services at Le Mars Municipal Airport

- Le Mars -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		•				
Air Charter			•			
Aircraft Rental		•				
Personal/Recreational	•					
Flight Training	•					
Career Training/Education						•
Youth Education						
Aircraft Maintenance	•					
Aircraft Sales				•		
Air Cargo					•	
Ag Spraying	•					
Emergency Medical				•		
Aerial Photography			•			
Sightseeing Flights				•		
Law Enforcement					•	
Doctor Transport						•
Civil Air Patrol				•		
Hosting Community Events					•	
Traffic or News Reporting						•
Air Show/Fly-ins						
Military Exercises/Training						•
Aerial Inspections						•
Real Estate Tours					•	
Advertising/Banner Towing						•
Prisoner Transport					•	
Environmental Patrols						•
Firefighting						•

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Manchester Municipal Airport

- Manchester -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate				●		
Air Charter				●		
Aircraft Rental						●
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical					●	
Aerial Photography						●
Sightseeing Flights			●			
Law Enforcement						●
Doctor Transport					●	
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections				●		
Real Estate Tours				●		
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Mapleton Municipal Airport

- Mapleton -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate			●			
Air Charter						●
Aircraft Rental						●
Personal/Recreational	●					
Flight Training			●			
Career Training/Education						●
Youth Education						●
Aircraft Maintenance	●					
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical			●			
Aerial Photography						●
Sightseeing Flights		●				
Law Enforcement					●	
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections			●			
Real Estate Tours				●		
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols			●			
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Maquoketa Municipal Airport

- Maquoketa -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter	●					
Aircraft Rental		●				
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales	●					
Air Cargo				●		
Ag Spraying					●	
Emergency Medical						●
Aerial Photography					●	
Sightseeing Flights		●				
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training		●				
Aerial Inspections				●		
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Marshalltown Municipal Airport

- Marshalltown -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental		●				
Personal/Recreational		●				
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance		●				
Aircraft Sales					●	
Air Cargo					●	
Ag Spraying	●					
Emergency Medical					●	
Aerial Photography					●	
Sightseeing Flights					●	
Law Enforcement		●				
Doctor Transport					●	
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training			●			
Aerial Inspections		●				
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting					●	

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Milford Municipal Airport

- Milford -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter				●		
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying						●
Emergency Medical					●	
Aerial Photography				●		
Sightseeing Flights				●		
Law Enforcement				●		
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours				●		
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Monona Municipal Airport

- Monona -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate					●	
Air Charter						●
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance			●			
Aircraft Sales						●
Air Cargo					●	
Ag Spraying	●					
Emergency Medical						●
Aerial Photography			●			
Sightseeing Flights		●				
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections					●	
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Monticello Regional Airport

- Monticello -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales				●		
Air Cargo		●				
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography			●			
Sightseeing Flights			●			
Law Enforcement				●		
Doctor Transport				●		
Civil Air Patrol				●		
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training				●		
Aerial Inspections		●				
Real Estate Tours				●		
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Mt. Ayr Municipal Airport

- Mount Ayr -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate					●	
Air Charter					●	
Aircraft Rental						●
Personal/Recreational		●				
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying						●
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport		●				
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Mt. Pleasant Municipal Airport

- Mount Pleasant -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter	●					
Aircraft Rental		●				
Personal/Recreational		●				
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales						●
Air Cargo				●		
Ag Spraying	●					
Emergency Medical					●	
Aerial Photography			●			
Sightseeing Flights		●				
Law Enforcement				●		
Doctor Transport				●		
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training					●	
Aerial Inspections						●
Real Estate Tours				●		
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Muscatine Municipal Airport

- Muscatine -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter	●					
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education		●				
Youth Education				●		
Aircraft Maintenance	●					
Aircraft Sales						●
Air Cargo			●			
Ag Spraying	●					
Emergency Medical					●	
Aerial Photography			●			
Sightseeing Flights			●			
Law Enforcement				●		
Doctor Transport						●
Civil Air Patrol					●	
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training			●			
Aerial Inspections					●	
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at New Hampton Municipal Airport

- New Hampton -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate			●			
Air Charter						●
Aircraft Rental						●
Personal/Recreational			●			
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical						●
Aerial Photography					●	
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training				●		
Aerial Inspections					●	
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Newton Municipal Airport

- Newton -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter	●					
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance		●				
Aircraft Sales				●		
Air Cargo			●			
Ag Spraying					●	
Emergency Medical				●		
Aerial Photography				●		
Sightseeing Flights		●				
Law Enforcement		●				
Doctor Transport					●	
Civil Air Patrol				●		
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training		●				
Aerial Inspections		●				
Real Estate Tours				●		
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Northeast Iowa Regional Airport

- Charles City -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education			●			
Aircraft Maintenance	●					
Aircraft Sales			●			
Air Cargo					●	
Ag Spraying					●	
Emergency Medical				●		
Aerial Photography					●	
Sightseeing Flights			●			
Law Enforcement					●	
Doctor Transport		●				
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training		●				
Aerial Inspections			●			
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Northwood Municipal Airport

- Northwood -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter						●
Aircraft Rental						●
Personal/Recreational	●					
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying	●					
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Oelwein Municipal Airport

- Oelwein -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental			●			
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales						●
Air Cargo			●			
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography	●					
Sightseeing Flights	●					
Law Enforcement			●			
Doctor Transport			●			
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting			●			
Air Show/Fly-ins						●
Military Exercises/Training	●					
Aerial Inspections		●				
Real Estate Tours			●			
Advertising/Banner Towing						●
Prisoner Transport				●		
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Onawa Municipal Airport

- Onawa -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate			●			
Air Charter				●		
Aircraft Rental						●
Personal/Recreational	●					
Flight Training						●
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying				●		
Emergency Medical					●	
Aerial Photography				●		
Sightseeing Flights				●		
Law Enforcement			●			
Doctor Transport					●	
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections					●	
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



## Activities and Services at Orange City Municipal Airport

- Orange City -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter						●
Aircraft Rental	●					
Personal/Recreational		●				
Flight Training			●			
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales	●					
Air Cargo	●					
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography			●			
Sightseeing Flights					●	
Law Enforcement			●			
Doctor Transport						●
Civil Air Patrol		●				
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Osage Municipal Airport

- Osage -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate				●		
Air Charter						●
Aircraft Rental						●
Personal/Recreational	●					
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying	●					
Emergency Medical						●
Aerial Photography					●	
Sightseeing Flights				●		
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport				●		
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Osceola Municipal Airport

- Osceola -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter			●			
Aircraft Rental						●
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales						●
Air Cargo			●			
Ag Spraying				●		
Emergency Medical					●	
Aerial Photography				●		
Sightseeing Flights						●
Law Enforcement		●				
Doctor Transport					●	
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training					●	
Aerial Inspections			●			
Real Estate Tours			●			
Advertising/Banner Towing						●
Prisoner Transport				●		
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Oskaloosa Municipal Airport

- Oskaloosa -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education						●
Aircraft Maintenance	●					
Aircraft Sales	●					
Air Cargo						●
Ag Spraying				●		
Emergency Medical			●			
Aerial Photography			●			
Sightseeing Flights	●					
Law Enforcement			●			
Doctor Transport			●			
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Ottumwa Regional Airport

- Ottumwa -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter		●				
Aircraft Rental		●				
Personal/Recreational	●					
Flight Training	●					
Career Training/Education	●					
Youth Education				●		
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo			●			
Ag Spraying	●					
Emergency Medical				●		
Aerial Photography					●	
Sightseeing Flights					●	
Law Enforcement			●			
Doctor Transport		●				
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins						●
Military Exercises/Training			●			
Aerial Inspections		●				
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols			●			
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Paullina Municipal Airport

- Paullina -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate					●	
Air Charter					●	
Aircraft Rental						●
Personal/Recreational	●					
Flight Training			●			
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying	●					
Emergency Medical					●	
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Pella Municipal Airport

- Pella -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales				●		
Air Cargo					●	
Ag Spraying		●				
Emergency Medical					●	
Aerial Photography			●			
Sightseeing Flights		●				
Law Enforcement			●			
Doctor Transport					●	
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols		●				
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



## Activities and Services at Perry Municipal Airport - Perry -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter			●			
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales						●
Air Cargo						●
Ag Spraying	●					
Emergency Medical					●	
Aerial Photography						●
Sightseeing Flights					●	
Law Enforcement				●		
Doctor Transport						●
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training		●				
Aerial Inspections				●		
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols		●				
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Pocahontas Municipal Airport

- Pocahontas -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental		●				
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying	●					
Emergency Medical		●				
Aerial Photography			●			
Sightseeing Flights		●				
Law Enforcement			●			
Doctor Transport		●				
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections			●			
Real Estate Tours				●		
Advertising/Banner Towing					●	
Prisoner Transport				●		
Environmental Patrols				●		
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



## Activities and Services at Primghar Municipal Airport

- Primghar -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter						●
Aircraft Rental						●
Personal/Recreational				●		
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying						●
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport				●		
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Red Oak Municipal Airport

- Red Oak -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate				●		
Air Charter						●
Aircraft Rental						●
Personal/Recreational		●				
Flight Training					●	
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying					●	
Emergency Medical					●	
Aerial Photography					●	
Sightseeing Flights					●	
Law Enforcement			●			
Doctor Transport		●				
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training					●	
Aerial Inspections					●	
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting					●	

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Rock Rapids Municipal Airport

- Rock Rapids -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter			●			
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education						●
Aircraft Maintenance	●					
Aircraft Sales						●
Air Cargo						●
Ag Spraying					●	
Emergency Medical						●
Aerial Photography				●		
Sightseeing Flights						●
Law Enforcement					●	
Doctor Transport			●			
Civil Air Patrol			●			
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections		●				
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Rockwell City Municipal Airport

- Rockwell City -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate					●	
Air Charter						●
Aircraft Rental						●
Personal/Recreational	●					
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo					●	
Ag Spraying		●				
Emergency Medical					●	
Aerial Photography				●		
Sightseeing Flights			●			
Law Enforcement					●	
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections					●	
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport				●		
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Sac City Municipal Airport

- Sac City -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate					●	
Air Charter					●	
Aircraft Rental				●		
Personal/Recreational	●					
Flight Training					●	
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance		●				
Aircraft Sales						●
Air Cargo						●
Ag Spraying	●					
Emergency Medical				●		
Aerial Photography				●		
Sightseeing Flights						●
Law Enforcement				●		
Doctor Transport			●			
Civil Air Patrol				●		
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training				●		
Aerial Inspections					●	
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Sheldon Municipal Airport

- Sheldon -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter	●					
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo				●		
Ag Spraying				●		
Emergency Medical					●	
Aerial Photography			●			
Sightseeing Flights			●			
Law Enforcement					●	
Doctor Transport		●				
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training				●		
Aerial Inspections				●		
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Shenandoah Municipal Airport

- Shenandoah -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate			●			
Air Charter			●			
Aircraft Rental						●
Personal/Recreational						●
Flight Training						●
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo			●			
Ag Spraying					●	
Emergency Medical						●
Aerial Photography					●	
Sightseeing Flights			●			
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections		●				
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



## Activities and Services at Sibley Municipal Airport

- Sibley -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter		●				
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo						●
Ag Spraying					●	
Emergency Medical			●			
Aerial Photography		●				
Sightseeing Flights		●				
Law Enforcement				●		
Doctor Transport				●		
Civil Air Patrol			●			
Hosting Community Events				●		
Traffic or News Reporting					●	
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections					●	
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Sioux Center Municipal Airport

- Sioux Center -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter	●					
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education			●			
Aircraft Maintenance	●					
Aircraft Sales				●		
Air Cargo			●			
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography			●			
Sightseeing Flights		●				
Law Enforcement				●		
Doctor Transport		●				
Civil Air Patrol				●		
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Spencer Municipal Airport

- Spencer -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter	●					
Aircraft Rental		●				
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education				●		
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo	●					
Ag Spraying	●					
Emergency Medical		●				
Aerial Photography			●			
Sightseeing Flights		●				
Law Enforcement			●			
Doctor Transport		●				
Civil Air Patrol				●		
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training		●				
Aerial Inspections		●				
Real Estate Tours			●			
Advertising/Banner Towing					●	
Prisoner Transport					●	
Environmental Patrols			●			
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Spirit Lake Municipal Airport

- Spirit Lake -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate			●			
Air Charter			●			
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying						●
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights			●			
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Storm Lake Municipal Airport

- Storm Lake -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education						●
Aircraft Maintenance	●					
Aircraft Sales						●
Air Cargo						●
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography			●			
Sightseeing Flights		●				
Law Enforcement					●	
Doctor Transport		●				
Civil Air Patrol						●
Hosting Community Events				●		
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections				●		
Real Estate Tours				●		
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Sully Municipal Airport

- Sully -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate					●	
Air Charter						●
Aircraft Rental						●
Personal/Recreational		●				
Flight Training					●	
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying						●
Emergency Medical					●	
Aerial Photography					●	
Sightseeing Flights					●	
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Tipton Municipal Airport

- Tipton -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter						●
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo			●			
Ag Spraying	●					
Emergency Medical				●		
Aerial Photography				●		
Sightseeing Flights			●			
Law Enforcement		●				
Doctor Transport						●
Civil Air Patrol			●			
Hosting Community Events				●		
Traffic or News Reporting				●		
Air Show/Fly-ins					●	
Military Exercises/Training			●			
Aerial Inspections				●		
Real Estate Tours			●			
Advertising/Banner Towing						●
Prisoner Transport					●	
Environmental Patrols			●			
Firefighting					●	

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Toledo Municipal Airport

- Toledo -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter				●		
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance					●	
Aircraft Sales						●
Air Cargo						●
Ag Spraying		●				
Emergency Medical			●			
Aerial Photography				●		
Sightseeing Flights		●				
Law Enforcement				●		
Doctor Transport			●			
Civil Air Patrol				●		
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training				●		
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Traer Municipal Airport

- Traer -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter						●
Aircraft Rental						●
Personal/Recreational	●					
Flight Training			●			
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying	●					
Emergency Medical					●	
Aerial Photography						●
Sightseeing Flights			●			
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Vinton Veterans Memorial Airpark

- Vinton -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate			●			
Air Charter					●	
Aircraft Rental		●				
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales						●
Air Cargo						●
Ag Spraying					●	
Emergency Medical						●
Aerial Photography		●				
Sightseeing Flights		●				
Law Enforcement					●	
Doctor Transport						●
Civil Air Patrol			●			
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training		●				
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Washington Municipal Airport

- Washington -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter		●				
Aircraft Rental			●			
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance	●					
Aircraft Sales			●			
Air Cargo		●				
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography					●	
Sightseeing Flights					●	
Law Enforcement			●			
Doctor Transport					●	
Civil Air Patrol				●		
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins					●	
Military Exercises/Training					●	
Aerial Inspections				●		
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.





# Activities and Services at Waukon Municipal Airport

- Waukon -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate				●		
Air Charter			●			
Aircraft Rental						●
Personal/Recreational	●					
Flight Training		●				
Career Training/Education						●
Youth Education					●	
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo					●	
Ag Spraying					●	
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights			●			
Law Enforcement					●	
Doctor Transport		●				
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training						●
Aerial Inspections					●	
Real Estate Tours					●	
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Waverly Municipal Airport

- Waverly -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate	●					
Air Charter		●				
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education		●				
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo						●
Ag Spraying	●					
Emergency Medical						●
Aerial Photography	●					
Sightseeing Flights	●					
Law Enforcement					●	
Doctor Transport						●
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting						●
Air Show/Fly-ins					●	
Military Exercises/Training	●					
Aerial Inspections	●					
Real Estate Tours		●				
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Webster City Municipal Airport

- Webster City -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter	●					
Aircraft Rental	●					
Personal/Recreational	●					
Flight Training	●					
Career Training/Education	●					
Youth Education				●		
Aircraft Maintenance	●					
Aircraft Sales			●			
Air Cargo	●					
Ag Spraying	●					
Emergency Medical			●			
Aerial Photography		●				
Sightseeing Flights		●				
Law Enforcement				●		
Doctor Transport			●			
Civil Air Patrol				●		
Hosting Community Events			●			
Traffic or News Reporting						
Air Show/Fly-ins					●	
Military Exercises/Training		●				
Aerial Inspections			●			
Real Estate Tours			●			
Advertising/Banner Towing						●
Prisoner Transport			●			
Environmental Patrols				●		
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at West Union Municipal Airport

- West Union -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter			●			
Aircraft Rental						●
Personal/Recreational		●				
Flight Training		●				
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo			●			
Ag Spraying	●					
Emergency Medical						●
Aerial Photography				●		
Sightseeing Flights				●		
Law Enforcement				●		
Doctor Transport			●			
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections				●		
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Winterset-Madison County Airport

- Winterset -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate		●				
Air Charter				●		
Aircraft Rental						●
Personal/Recreational	●					
Flight Training	●					
Career Training/Education						●
Youth Education				●		
Aircraft Maintenance	●					
Aircraft Sales					●	
Air Cargo						●
Ag Spraying		●				
Emergency Medical						●
Aerial Photography		●				
Sightseeing Flights			●			
Law Enforcement						●
Doctor Transport			●			
Civil Air Patrol					●	
Hosting Community Events					●	
Traffic or News Reporting					●	
Air Show/Fly-ins						●
Military Exercises/Training			●			
Aerial Inspections			●			
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols					●	
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



# Activities and Services at Woodbine Municipal Airport

- Woodbine -

Airport Activities and Services						
Activity Type	Daily	Weekly	Monthly	Quarterly	Annually	Never
Corporate						●
Air Charter						●
Aircraft Rental						●
Personal/Recreational			●			
Flight Training		●				
Career Training/Education						●
Youth Education						●
Aircraft Maintenance						●
Aircraft Sales						●
Air Cargo						●
Ag Spraying						●
Emergency Medical						●
Aerial Photography						●
Sightseeing Flights						●
Law Enforcement						●
Doctor Transport						●
Civil Air Patrol						●
Hosting Community Events						●
Traffic or News Reporting						●
Air Show/Fly-ins						●
Military Exercises/Training						●
Aerial Inspections						●
Real Estate Tours						●
Advertising/Banner Towing						●
Prisoner Transport						●
Environmental Patrols						●
Firefighting						●

Notes: Information on this page obtained from a variety of sources such as Airport IQ, FlightAware, local interviews, statewide business surveys, and on-site airport visits. Career Training/Education applies to airports with on-site college level programs. If activities are seasonal, frequency is reported for how often the activity takes place during the season.



## Appendix B

# Methodology and Data Collection

## Appendix B

# Methodology and Data Collection

### Overview of Economic Impact Modeling

This appendix provides information on the methodology used to estimate the economic impact of study airports. It also highlights data collection efforts that were required to support the study's approach. The methodology discussed in this appendix was used specifically to estimate the economic impacts of commercial airports, general aviation airports, and visitors analyzed in this report. The methodology was also followed to estimate the economic impact of emergency medical service (EMS) providers and aviation-related businesses. The approach also guided research that was completed to estimate how aviation increases productivity for businesses in Iowa.

The total economic impact of airports in this report is quantified in terms of employment, payroll, and output. Output represents total economic activity or spending from aviation related activities supported by airports included in this study. Economic impacts are reported in terms of three aviation-dependent groups:

- On-airport activities and businesses, including capital improvement projects
- Visitors traveling to Iowa via commercial airlines
- Visitors traveling to/within Iowa via general aviation aircraft

### *Impact Categories in the Modeling Process*

Economic impacts or benefits for the airports considered in this study were calculated using an input-output model. The input-output model considers three impact categories to assess the economic benefits associated with on-airport activities and visitors arriving by air. These categories are:

#### **1. Direct and Indirect Impacts**

Direct impacts are benefits that are associated with tenants or businesses located on an airport. Airport tenants are directly engaged in the provision of aviation services. Direct impacts include the employment, payroll, and output related to entities such as airlines, concessionaires, rental car operators, food and beverage providers, government agencies, the military, flight schools, fixed based operators (FBOs), aerial applicators, and others. Benefits stemming from all capital improvement projects are also measured in the direct impact category.

Indirect impacts are usually realized off-airport. These impacts are typically attributed to visitor spending. Visitor spending indirectly supports jobs and provides wages and benefits. Industries most commonly supported by visitor spending are concentrated in the service sector and include hotels/motels, restaurants, transportation, retail, and entertainment.



## **2. Induced Impacts**

Induced impacts are those benefits that are the result of the recirculation of direct and indirect impacts within the economy. Recirculation of direct and indirect impacts within an economy is frequently referred to as the multiplier effect. For example, as an airport employee spends his or her salary for housing, food, or services, that spending circulates through the economy and leads to increases in associated spending, payroll, and employment in various sectors of Iowa's economy. For each wave of spending beyond the first round, a portion of the re-spending takes place outside the economic area being modeled (in this case, the State of Iowa).

## **3. Total Impacts**

Total impacts are the sum of direct, indirect, and induced economic impacts.

Because induced impacts are not as easily measured as direct and indirect impacts, a reliable method for estimating induced impacts must be employed. A leading method used to estimate induced impacts is an input-output model.

The Impact Analysis for Planning (IMPLAN) input/output model was used to measure the multiplier effect and to quantify induced impacts. An input-output model, in its most basic form, is a linear model that estimates purchases and sales between various sectors of the economy. This modeling process is considered to be one of the leading methods available for estimating the total economic impact of an industry (in this case, airports). The U.S. Forest Service in cooperation with several other government agencies initially developed the IMPLAN system. It is now considered one of the standard methods for evaluating the economic contribution of public facilities.

The IMPLAN model contains a large economic database that is used to generate input-output tables. It includes data from sources such as Dunn and Bradstreet, the U.S. Department of Commerce, and the U.S. Census Bureau. IMPLAN multipliers and data tables specific to Iowa's industrial sectors were obtained and used in this analysis.

### ***Components of the Economy Measured in the Modeling Process***

The IMPLAN input-output model used for this analysis requires impact estimates for three separate components of the economy. These categories are:

#### **1. Employment**

Employment is based on full-time equivalent (FTE) positions. In this analysis, two part-time positions are the equivalent of one full-time position. For study airports, employment occurs on-airport. Employment occurs off-airport if the employment is supported by visitor spending or by aviation related or dependent businesses considered in the study. Employment also occurs from induced or multiplier impacts.

#### **2. Payroll**

Payroll represents the annual wages and benefits paid to all workers. For the study airports, payroll is identified for all employment noted in number one above.

### **3. Output (Spending)**

Output for on-airport activities is typically assumed to be the sum of annual gross sales and average annual capital expenditures. While this assumption works well for profit-oriented tenants, it must be modified for government tenants, airlines, and visitor impacts as it relates to output. Government entities typically do not generate sales. While airlines do generate sales, ticket revenue is usually transferred outside the area being modeled. In order to estimate the impact of these two important tenant-related activities, government and airline output is equated to the sum of payroll, operating expenditures, and average annual capital improvement outlays. For visitors using an airport, output is assumed to equal visitor spending.

It is important to note that payroll and output cannot be combined because elements of economic benefit related to payroll are also contained, to some extent, in the output estimate. Each of the three impact components (employment, payroll, and output) stands alone as a measure of total economic impact.

## **Data Collection**

A number of data collection efforts were undertaken to gather information related to economic activity occurring at the airports considered in this study. The following groups were considered to obtain data to estimate direct and indirect impacts:

- Airports
- Commercial Service Visitors
- General Aviation Visitors

Direct and indirect impacts for airports, commercial service visitors, and general aviation visitors were identified primarily through survey efforts. IMPLAN multipliers were then applied to direct and indirect impacts to estimate subsequent induced economic impacts. The methods used to collect information from each group considered in this analysis are discussed in the following sections.

### ***Data Collection for Airports***

Airport managers were contacted to provide names, mailing addresses, and telephone numbers for each aviation related tenant or business that operates at their airport. Surveys were sent directly to each tenant. Follow-up calls were made to on-airport businesses to ensure responses and to verify information on returned surveys. In-person site visits were made to most airports to collect and/or verify missing data. Additional survey responses were collected as a result of these on-site visits. Businesses at each airport were grouped into categories to aid in data interpolation. These categories include:

- Air Cargo Companies
- Concessionaires
- Corporate Flight Departments



- FBO/Flight Instruction/Aircraft Maintenance/Air Taxi
- Local/State/Federal Government (this category includes airport management, city/county personnel, etc.)
- Passenger Airlines
- Military
- Aerial Applicator Services

Surveys sent to each on-airport business, including airport managers, requested the following information:

- Type of aviation activity conducted or service provided
- Number of full-time and part-time employees employed on the airport
- Total annual wages and benefits paid to on-airport employees
- Total capital improvement expenditures (construction projects) at the airport for a multi-year period
- Total operating expenses for the business (excluding payroll and capital improvements which were previously identified)
- Total gross sales (where applicable) for the business during the most recent calendar year

A 100 percent response rate was achieved for employment estimates for airport management and for on-airport businesses. For those surveyed who did not supply complete information on payroll and output, estimates were developed using ratios of payroll per employee and output per employee. These ratios were developed from survey data obtained from those who did respond to the survey.

Airport activities were grouped by North American Industry Classification System (NAICS) code based on the primary service or good each business or tenant provides. This was done to facilitate subsequent IMPLAN modeling to estimate induced impacts. The NAICS is a sector-specific code used to describe industry types. For this analysis, airlines, aircraft maintenance, FBOs, air cargo, and corporate flight departments were combined in the air transportation NAICS code. Impacts stemming from construction projects were divided among various construction-related codes, while concessions were distributed among retail, food and beverage, and auto rental codes.

There are many employees who work at Eppley Field in Omaha or at Quad City International Airport in Moline who live in Iowa. Wages paid to these employees are generally spent in Iowa. To measure the economic benefit that Iowa realizes from these workers, it was necessary to determine the number of on-airport employees at each of these Border Airports that resides in Iowa.

The portion of on-airport employment at Eppley Airfield that is related to economic activity in Iowa was estimated using the ratio of the Omaha-Council Bluffs MSA employees whose jobs are located in Iowa versus Nebraska. Based on this employment ratio, 11 percent of the employees in the MSA live in Iowa. This percentage was used to estimate economic benefits from on-airport activity at Eppley Airfield that accrue to Iowa.



The portion of on-airport operator-related economic benefit that Iowa realizes from Quad City International Airport was estimated using this study's survey responses. These surveys provided the number of employees living in Iowa versus Illinois. An estimated 28 percent of the workers employed at the Quad City International reside in Iowa.

### ***Data Collection for Commercial Service Visitors***

Airline flights arriving at and departing from the commercial airports considered in this analysis provide access for thousands of business and leisure travelers. Visitors using commercial airports as a gateway to the state contribute to Iowa's economy through their expenditures for food, lodging, entertainment, transportation, retail sales, and other goods and services. Numerous service and goods producing industries in Iowa also benefit from the multiplier effects (induced impacts) stemming from indirect impacts associated with visitor spending.

On-site commercial airline passenger surveys were conducted for this study. Departing travelers were interviewed prior to boarding their flight and were asked several questions related to their trip. Departing passengers were first asked to indicate whether they were a resident of the airport's market area or a visitor. Those passengers indicating that they were visitors were then asked several questions to determine the following:

- The purpose of their trip (business or leisure)
- Duration of their stay
- Total expenditures during their stay in each of the following categories: lodging, food and beverage, rental car/limo/taxi, entertainment, retail, and other
- The total number of people accounted for in the expenditures they identified

Surveys of departing airline passengers were conducted for a multi-day period at each of the eight commercial airports in Iowa in order to collect the information noted above.

### ***Data Collection for General Aviation Visitors***

Visitors also arrive in Iowa via general aviation aircraft using both commercial and general aviation airports. Similar to visitors that arrive on commercial airlines, these travelers have various expenditures once they arrive in Iowa. While the expenditure categories for general aviation visitors are similar to those of visitors arriving on commercial airlines, length of stay and expenditures per day for general aviation visitors typically are not the same.

A survey of visiting general aviation pilots and passengers was undertaken with the assistance of 20 fixed base operators (FBOs) at larger general aviation airports in Iowa. The survey was distributed to visiting pilots and passengers during August and September 2008. Similar to the survey of visitors using commercial airlines, this survey sought information on trip purpose, length of stay, and expenditures. Information gathered via this survey was used to estimate visitor expenditures for the general aviation airports included in the study.

In addition to gathering information from visiting pilots and passengers, airport managers and FBOs at study airports also provided information that was used to help estimate



economic impacts for visitors to Iowa arriving via general aviation aircraft. As part of the data collection for study airports, managers and FBOs provided information on the number of aircraft they estimate visit their airport during a typical week and the average pilot/passenger occupancy of these visiting planes. This information was used to help develop estimates for visitors arriving via the general aviation airports.

## **Estimating Visitor Expenditures (Output) For Study Airports**

This section describes the methodology used to estimate visitor spending or output for both commercial and general aviation airports considered in this study.

### ***Commercial Service Visitor Expenditures***

The following methodology was used to estimate commercial service visitor impacts:

- Annual enplanement data was gathered for each of the 10 commercial airports included in this study. The ratio of resident passengers to visitor passengers was identified for each individual airport using US DOT O&D data. These ratios were applied to each airport's annual enplanement data to determine the number of visitors using each commercial airport.
- Using survey data, visitors were grouped into two categories: business-related visitors and leisure-related visitors.
- Information from passenger surveys conducted for this study was compared to and supplemented with results from passenger surveys from similar studies. After the results of this study's passenger survey were compiled, it appeared that responses at some smaller study airports were impacted by sample size. In these instances, a substantial database that Wilbur Smith Associates maintains on visitor travel and expenditure patterns was used to adjust survey results.

- Average length of stay and average daily expenditures for business-related visitors and leisure-related visitors were estimated; this information was applied to the number of visitors using each airport to determine total annual economic activity (or output) associated with commercial airline visitors using each airport. Average length of stay and average daily expenditures for business-related and leisure-related commercial service visitors modeled in this analysis are provided in **Table B-1**.

**Table B-1**  
**Commercial Service Visitors Length of Stay and Spending Patterns in Iowa**

Airport	Avg. Business Stay (in days)	Avg. Leisure Stay (in days)	Avg. Daily Business Spending	Avg. Daily Leisure Spending	Business Visitors	Leisure Visitors
Southeast Iowa Regional Airport	2.4	4.2	\$88	\$45	2,789	1,502
The Eastern Iowa Airport	1.6	2.4	\$151	\$70	123,487	75,686
Des Moines International Airport	1.6	2.4	\$151	\$70	188,634	212,715
Dubuque Regional Airport	2.0	2.8	\$114	\$50	8,084	12,126
Fort Dodge Regional Airport	2.4	4.2	\$88	\$45	1,166	1,425
Mason City Municipal Airport	2.4	4.2	\$88	\$45	2,203	2,921
Quad City International Airport	1.6	2.4	\$151	\$70	63,218	56,062
Eppley Airfield	1.6	2.4	\$151	\$70	87,780	29,260
Sioux Gateway Airport	2.0	2.8	\$114	\$50	13,537	3,599
Waterloo Regional Airport	2.0	2.8	\$114	\$50	4,386	9,762
Source: Wilbur Smith Associates						

As reflected in Table B-1, the average length of stay for visitors on business is shorter than that of leisure-related visitors. Average daily spending for leisure travelers is less than that for business travelers because a high percentage of leisure travelers stay with friends and family. Finally, the average length of stay for all visitors using single carrier airports is longer than that of those using the multi-carrier airports. This finding is influenced by higher flight frequencies at the multi-carrier airports which often shorten trip duration.

The portion of commercial service visitor spending related to Iowa's economy realized from passengers who arrive in Iowa via Eppley Airfield or Quad City International was estimated as follows:

- Eppley Airfield serves a total of 308,000 Iowa-related enplanements annually. US DOT O&D information indicates that 38 percent of all enplanements at this airport are attributed to visitor travel. The remaining 62 percent of the enplanements are associated with resident travel. This yields 117,040 Iowa-related visitors. These visitors arrive in Omaha; but upon their arrival, they travel to Iowa where their spending takes place.

- Quad City International Airport serves a total of 284,000 Iowa-related enplanements annually. The US DOT O&D information indicates that nearly 42 percent of these enplanements are attributed to visitor travel. This yields 119,280 Iowa-related visitors who arrive via this Border Airport.

**Table B-2** presents estimated annual commercial service visitor expenditures for the commercial airports.

**Table B-2**  
**Estimated Commercial Service Visitor Expenditures (Output) in Iowa**

Airport	Associated City	Annual Business Spending	Annual Leisure Spending	Annual Commercial Service Visitor Expenditures
Southeast Iowa Regional Airport	Burlington	\$589,037	\$283,878	\$872,915
The Eastern Iowa Airport	Cedar Rapids	\$29,834,459	\$12,715,248	\$42,549,707
Des Moines International Airport	Des Moines	\$45,573,974	\$35,736,120	\$81,310,094
Dubuque Regional Airport	Dubuque	\$1,843,152	\$1,697,640	\$3,540,792
Fort Dodge Regional Airport	Fort Dodge	\$246,259	\$269,325	\$515,584
Mason City Municipal Airport	Mason City	\$465,274	\$552,069	\$1,017,343
Quad City International Airport	Moline	\$15,273,469	\$9,418,416	\$24,691,885
Eppley Airfield	Omaha	\$21,207,648	\$4,915,680	\$26,123,328
Sioux Gateway Airport	Sioux City	\$3,086,436	\$503,860	\$3,590,296
Waterloo Regional Airport	Waterloo	\$1,000,008	\$1,366,680	\$2,366,688
<b>Total</b>		<b>\$119,119,716</b>	<b>\$67,458,916</b>	<b>\$186,578,632</b>
Source: Wilbur Smith Associates				

In order to estimate employment associated with commercial service visitor expenditures, Iowa-specific employment ratios per million dollars of visitor output (spending) were developed using the IMPLAN model. The IMPLAN model indicates that approximately 24.7 persons are employed in Iowa as a result of every \$1 million in annual commercial service visitor output or spending. Employment supported by the visitor spending shown in Table B-2 was presented in the Employment Impacts for Study Airports section of the technical report.

In order to estimate payroll impacts associated with employment supported by commercial service visitor spending, the average state wage for applicable industry sectors was applied to the estimated number of employees. Most visitor expenditures take place in the hotel/motel, food/beverage, entertainment, retail, and transportation sectors. Based on data obtained from the U.S. Bureau of Labor Statistics, an average annual wage of \$28,740 per employee was used in this analysis. Payroll estimates for jobs supported by visitor spending are reported in the Payroll Impacts for Study Airports section of the technical report.

#### Example Calculation of Commercial Service Visitor Impacts

An example of the commercial service visitor spending activity associated with Des Moines International Airport is used to demonstrate this methodology. When the economic impact





for commercial airports was developed, this airport had a total of approximately 978,900 enplanements. It was determined through US DOT O&D data that 41 percent of the enplanements were visitors. Business-related visitors served at this airport spent an estimated \$151 per day during their trip, while leisure travelers spent an estimated \$70 per day. Business travelers stayed an average of 1.6 days, while leisure travelers stayed an average of 2.4 days. This yields a total annual commercial service visitor expenditure estimate of more than \$80 million. The overall annual indirect and induced output impact produced by commercial service visitors associated with the Des Moines International Airport is nearly \$132 million.

For every \$1 million of visitor output 24.7 full-time jobs are supported. Noting that Des Moines International has an estimated output of \$80 million related to commercial service visitors, yields nearly 1,980 visitor-related jobs associated with the Des Moines International Airport's commercial service visitors (\$80 million x 24.7). Since most indirect visitor supported jobs are in the service and retail industries, multiplying the 1,980 visitor-related jobs by an average payroll of \$28,740 produces an annual payroll impact of nearly \$57 million for jobs associated with commercial airline visitor spending. The overall indirect and induced payroll impact produced by commercial service visitors associated with Des Moines International Airport is nearly \$89 million. (Table 4 shows employment for all study airports that is supported by spending from commercial service visitors).

### ***General Aviation Visitor Expenditures at Commercial Airports***

General aviation refers to all segments of aircraft activity that are not related to the commercial airlines or the military. The economic activity associated with visitors who arrive on general aviation aircraft at the commercial airports in Iowa was estimated using average stay and daily expenditure information. Transient general aviation pilots and passengers were not surveyed at the commercial airports. In order to estimate total annual output associated with visitors who arrive in Iowa via general aviation aircraft at commercial airports, data was also considered from other similar economic impact studies.

General aviation visitor spending estimates for commercial airports are based on transient aircraft operations. Itinerant operations are defined as non-training flights that enter or leave an airport's airspace, whereas transient flights are assumed to have arrived from another airport. Estimates of each commercial airport's total annual itinerant operations were obtained from the airports or the Iowa DOT Office of Aviation.

This analysis assumes that general aviation visitors using Eppley Airfield and Quad City International Airport are visitors traveling to Nebraska or Illinois. General aviation visitors are less likely to use the two Border Airports to access Iowa because of the availability of general aviation airports in Iowa. Hence, no portion of general aviation visitor spending associated with Eppley Airfield or Quad City International was assumed to be associated with Iowa's economy.





### Example Calculation of General Aviation Visitor Expenditures at Commercial Airports

An example of how general aviation visitor impacts at commercial airports were calculated follows:

- The number of itinerant general aviation arrivals for each airport was obtained. For example, Mason City Municipal Airport has an estimated 30,000 total annual general aviation operations (arrivals and departures). Of these 30,000 general aviation operations, 18,000 are itinerant operations (comprised of arrivals and departures). Fifty percent of itinerant operations are considered itinerant arrivals. On an annual basis, Mason City Municipal Airport has an estimated 9,000 itinerant arrivals.
- The number of itinerant arrivals performed by transient or visiting aircraft is required to calculate visitor impacts. By definition, transient operations are business or leisure flights conducted by aircraft not based locally. Transient operations are equated with that portion of each airport's general aviation activity associated with visitors. It is estimated by the Aircraft Owners and Pilots Association (AOPA) that 33 percent of all itinerant arrivals on general aviation aircraft are typically transient. These transient flights are equated with either business or pleasure visitors. In this example, approximately 33 percent of the 9,000 itinerant arrivals equal 2,970 transient arrivals.
- The average number of aircraft occupants and average trip stay is applied to the estimate of transient arrivals to determine total general aviation visitor days. The average trip length for visitors arriving on general aviation aircraft at the multi-carrier commercial airports was estimated at 0.8 days (19.2 hours) and the average trip length at single carrier airports was 1.2 days (28.8 hours). It is important to note that while some visitors stay for several days, many visitors using general aviation stay only a few hours. The average number of general aviation aircraft occupants for multi-carrier airports was 4.1, and the average number of aircraft occupants for single carrier airports was 2.7.
- In this example, the 2,970 transient arrivals at Mason City Municipal Airport yields the following number of total annual visitor days:
  - $2,970 \text{ arrivals} \times 1.2 \text{ days} \times 2.7 \text{ persons/aircraft} = 9,623 \text{ total annual general aviation visitor days}$
- To calculate the impact of these visitors, it is necessary to estimate average expenditures per visitor, per day. It is assumed, on average, general aviation visitors spent \$159 when visiting multi-carrier airports and \$104 when visiting single carrier airports. The typical visitor expenditure was then applied to the estimated number of visitor days to produce general aviation visitor expenditures (output).
  - $9,623 \text{ days} \times \$104/\text{per person/day} = \$1,000,792 \text{ in annual general aviation visitor output}$

- For this analysis the average length of stay for general aviation visitors was shorter at the multi-carrier commercial airports. This shorter stay duration is influenced by the higher percentage of business-related visitors who come for short business trips. The multi-carrier airports tend to attract larger general aviation planes, hence their higher ratio of pilots and passengers per plane. Higher daily expenditures by general aviation visitors at the multi-carrier airports also reflect a higher proportion of business travelers and larger, more sophisticated general aviation aircraft.

To determine direct payroll and employment impacts linked to general aviation visitor spending, IMPLAN ratios based on \$1 million of output were used for each industry category. Ratios developed by the IMPLAN model indicate that for every \$1 million in general aviation visitor output, approximately 28 full-time positions in the service/retail industries are supported.

In the previous example, spending from general aviation visitors using Mason City Municipal Airport supports approximately 28 full-time jobs. The average statewide salary for service/retail jobs (\$28,740) is applied to the estimate of employment to determine annual payroll associated with general aviation visitor spending. In the Mason City Municipal Airport example, annual general aviation visitor-related payroll exceeds \$800,000 (28 employees x \$28,740).

**Table B-3** presents estimated visiting/transient general aviation aircraft arrivals for commercial airports in Iowa. It is important to note that local and training operations attributable to general aviation aircraft do not factor into the calculation of general aviation visitor impacts.

**Table B-3**  
**Estimates of Annual Transient General Aviation Arrivals**  
**Commercial Airports**

Airport	Associated City	Total General Aviation Operations	Itinerant Operations	Itinerant Arrivals	Estimated Transient Arrivals
Southeast Iowa Regional Airport	Burlington	15,000	9,000	4,500	1,485
The Eastern Iowa Airport	Cedar Rapids	30,797	22,765	11,383	3,756
Des Moines International Airport	Des Moines	42,245	37,653	18,827	6,213
Dubuque Regional Airport	Dubuque	48,928	26,464	13,232	4,367
Fort Dodge Regional Airport	Fort Dodge	17,500	10,000	5,000	1,650
Mason City Municipal Airport	Mason City	30,000	18,000	9,000	2,970
Sioux Gateway Airport	Sioux City	20,008	15,682	7,841	2,588
Waterloo Regional Airport	Waterloo	29,600	19,360	9,680	3,194
<b>Total</b>		<b>234,078</b>	<b>158,924</b>	<b>79,462</b>	<b>26,222</b>
Sources: Airport Master Record Form 5010 Data and AOPA Note: Does not include operations by commercial airlines.					

Using the information presented in Table B-3 and assumptions on length of visitor stay, occupants per aircraft, and average expenditures per day, **Table B-4** reflects the resultant estimates of annual expenditures for general aviation visitors arriving via the commercial airports.

**Table B-4**  
**Estimated Annual General Aviation Visitor Expenditures (Output)**  
**Commercial Airports**

Airport	Associated City	Estimated Transient Arrivals	Annual General Aviation Visitors	Total Annual Days Stayed	Annual General Aviation Visitor Expenditures
Southeast Iowa Regional Airport	Burlington	1,485	4,010	4,811	\$502,000
The Eastern Iowa Airport	Cedar Rapids	3,756	15,401	12,320	\$1,966,900
Des Moines International Airport	Des Moines	6,213	25,742	20,378	\$3,253,200
Dubuque Regional Airport	Dubuque	4,367	11,790	14,148	\$1,476,200
Fort Dodge Regional Airport	Fort Dodge	1,650	4,455	5,346	\$557,800
Mason City Municipal Airport	Mason City	2,970	8,019	9,623	\$1,004,100
Sioux Gateway Airport	Sioux City	2,588	6,986	8,384	\$874,800
Waterloo Regional Airport	Waterloo	3,194	8,625	10,350	\$1,079,900
<b>Total</b>		<b>26,222</b>	<b>85,028</b>	<b>85,360</b>	<b>\$10,714,900</b>
Source: Wilbur Smith Associates					

Similar to spending by visitors arriving on commercial airlines, spending by visitors who arrive at the commercial airports on general aviation aircraft helps to support jobs and associated payroll. Employment and payroll supported by general aviation visitor spending at the commercial airports, shown in Table B-4, is presented in the technical report.

#### ***General Aviation Visitor Expenditures at General Aviation Airports***

Estimates for spending associated with visitors arriving on general aviation aircraft at the general aviation airports included in this study were also developed. To develop these estimates, survey information from airport managers and FBOs at study airports was used. This information was used to help establish averages for the portion of each airport's itinerant arrivals that are true transient or visiting aircraft. Information from airport management and FBOs was also used to establish an average occupancy rate for aircraft that visit each airport.

Surveys completed by visiting pilots and passengers helped to further refine estimates on the average length of stay for visiting general aviation aircraft and on the pilot/passenger occupancy of arriving transient aircraft. Information from visiting pilots and passenger was used to provide a range of estimated spending per day per visitor.



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### Example Calculation of General Aviation Visitor Expenditures at General Aviation Airports

An example of how general aviation visitor impacts at general aviation airports were calculated follows:

- The number of itinerant general aviation arrivals for each airport was obtained. For example, Marshalltown Municipal Airport has an estimated 10,850 total annual general aviation operations (arrivals and departures). Of these 10,850 general aviation operations, 5,802 are itinerant operations (comprised of arrivals and departures). Fifty percent of itinerant operations are considered itinerant arrivals. On an annual basis, Marshalltown Municipal Airport has an estimated 2,901 itinerant arrivals.
- The number of itinerant arrivals performed by transient or visiting aircraft is required to calculate visitor impacts. By definition, transient operations are business or leisure flights conducted by aircraft not based locally. Transient operations are equated with that portion of each airport's general aviation activity associated with visitors. Information from airport managers and FBOs at airports in Iowa was used to establish ranges for the percent of airport operations that are transient or visiting in nature. These ranges correspond to the airport roles for general aviation airports in Iowa.

For the Enhanced Service Airports, transient arrivals, as a percent of itinerant arrivals, ranged from a high of 64 percent to a low of 19 percent; the mid-range percent for Enhanced Service Airport transient arrivals is 41 percent. For General Service Airports, transient arrivals, as a percent of itinerant arrivals, ranged from a high of 59 percent to a low of 13 percent; the mid-range percent for General Service Airport arrivals is 33 percent. For all Basic Service I Airports, transient arrivals, as a percent of itinerant arrivals, were estimated at 32 percent. For all Basic Service II Airports, transient arrivals, as a percent of itinerant arrivals, were estimated at 37 percent. Each general aviation airport's percent of transient arrivals was influenced by reported average weekly visiting aircraft.

In the Marshalltown Municipal example, the airport's true transient arrivals were estimated at 41 percent of the airport's itinerant arrivals.

- The average number of aircraft occupants and average trip stay is applied to the estimate of transient arrivals to determine total general aviation visitor days. Information from pilots and passengers visiting general aviation airports in Iowa was used to estimate an average length of stay. For Enhanced Service Airports, the estimated length of stay was 14.5 hours (.6 days). For General Service Airports and all Basic Service Airports, the average length of stay was 24 hours (1 day). Information from airport managers, FBOs, and the pilots and passengers themselves was used to establish average occupancy rates for visiting aircraft. The average number of general aviation aircraft occupants for Enhanced Service Airports was 3.5, for General Service Airports 3 occupants, for Basic Service I Airports 1.9 occupants, and for Basic Service II Airports 1.7 occupants.



- In this example, the 1,178 transient arrivals at Marshalltown Municipal Airport (2,091 itinerant arrivals x 41% = 1,178 transient arrivals) yields the following number of total annual visitor days:
  - $1,178 \text{ arrivals} \times .6 \text{ day} \times 3.55 \text{ persons/aircraft} = 2,509 \text{ total annual general aviation visitor days}$
- To calculate the impact of these visitors, it is necessary to estimate average expenditures per visitor, per day. Based on information from visiting pilot/passenger surveys, on average, general aviation visitors spent \$85.60 when visiting Enhanced Service Airports, \$55.33 when visiting General Service Airports, and \$35.00 when visiting all Basic Service Airports. The typical visitor expenditure was then applied to the estimated number of visitor days to produce general aviation visitor expenditures (output).
  - $2,509 \text{ days} \times \$85.60/\text{per person/day} = \$214,770 \text{ in annual general aviation visitor output}$
- For this analysis the average length of stay for general aviation visitors was shorter at the Enhanced Service Airports. This shorter stay duration is influenced by the higher percentage of business-related visitors who come for short business trips. The Enhanced Service and some General Service Airports tend to attract larger general aviation planes, hence their higher ratio of pilots and passengers per plane. Higher daily expenditures by general aviation visitors at the Enhanced Service Airports also reflect a higher proportion of business travelers and larger, more sophisticated general aviation aircraft.

To determine direct payroll and employment impacts linked to general aviation visitor spending, IMPLAN ratios based on \$1 million of output were used for each industry category. Ratios developed by the IMPLAN model indicate that for every \$1 million in general aviation visitor output, approximately 28 full-time positions in the service/retail industries are supported. For this example, the \$214,770 in annual visitor output supports 6 indirect jobs. ( $\$214,770/\$1,000,000 = .2147 \times 28 = 6 \text{ jobs}$ ).

In the example, spending from general aviation visitors using Marshalltown Municipal Airport would then support approximately six full-time jobs. The average statewide salary for service/retail jobs (\$28,740) is applied to the estimate of employment to determine annual payroll associated with general aviation visitor spending. In the Marshalltown Municipal Airport example, annual general aviation indirect visitor-related payroll is \$172,440 (6 employees x \$28,740). It is important to note that employment and payroll resulting from visitor spending is calculated from indirect impacts, not from the sum of indirect and induced impacts. Further, indirect spending by an airport's visitors that amounts to less than \$9,000 results in employment and payroll impacts too small to be captured by the modeling process; in these cases, visitor employment and payroll are rounded to zero.

**Table B-5** presents estimated visiting/transient general aviation aircraft arrivals for the general aviation airports in Iowa. It is important to note that local and training operations attributable to general aviation aircraft do not factor into the calculation of general aviation visitor impacts.

**Table B-5**  
**Estimates of Annual Transient General Aviation Arrivals**  
**General Aviation Airports**

Airport	Associated City	Total General Aviation Operations	Itinerant Operations	Itinerant Arrivals	Estimated Transient Arrivals
Albia Municipal	Albia	2,000	1,136	568	181
Algona Municipal	Algona	8,750	6,272	3,136	1,273
Allison Municipal	Allison	755	500	250	80
Ames Municipal	Ames	38,138	22,884	11,442	7,334
Anita Municipal	Anita	300	150	75	28
Ankeny Regional	Ankeny	33,656	20,000	10,000	6,410
Atlantic Municipal	Atlantic	5,950	2,275	1,138	212
Audubon County	Audubon	2,562	562	281	37
Bedford Municipal	Bedford	2,000	1,330	665	212
Belle Plaine Municipal	Belle Plaine	2,424	1,024	512	67
Belmond Municipal	Belmond	250	125	63	23
Bloomfield Municipal	Bloomfield	1,750	995	498	65
Boone Municipal	Boone	14,400	3,540	1,770	719
Carroll Municipal	Carroll	7,000	2,840	1,420	577
Centerville Municipal	Centerville	3,000	1,500	750	246
Chariton Municipal	Chariton	1,000	750	375	49
Northeast Iowa Regional	Charles City	4,900	490	245	95
Cherokee County Regional	Cherokee	8,750	5,048	2,524	1,484
Clarinda Municipal	Clarinda	5,500	2,750	1,375	809
Clarion Municipal	Clarion	2,750	1,650	825	270
Clinton Municipal	Clinton	15,371	9,223	4,612	2,956
Corning Municipal	Corning	2,000	750	375	120
Council Bluffs Municipal	Council Bluffs	36,450	18,137	9,069	5,813
Cresco Municipal	Cresco	1,500	376	188	60
Creston Municipal	Creston	4,500	2,180	1,090	203
Davenport Municipal	Davenport	38,250	22,170	11,085	7,105
Decorah Municipal	Decorah	8,400	3,760	1,880	1,105
Denison Municipal	Denison	4,200	2,058	1,029	191
Eagle Grove Municipal	Eagle Grove	2,000	886	443	141
Eldora Municipal	Eldora	500	300	150	55
Emmetsburg Municipal	Emmetsburg	1,750	175	88	70
Estherville Municipal	Estherville	8,550	2,154	1,077	200
Fairfield Municipal	Fairfield	7,700	3,078	1,539	625



**Table B-5 (cont.)**  
**Estimates of Annual Transient General Aviation Arrivals**  
**General Aviation Airports**

<b>Airport</b>	<b>Associated City</b>	<b>Total General Aviation Operations</b>	<b>Itinerant Operations</b>	<b>Itinerant Arrivals</b>	<b>Estimated Transient Arrivals</b>
Forest City Municipal	Forest City	4,900	1,960	980	321
Fort Madison Municipal	Fort Madison	2,000	650	325	42
Greenfield Municipal	Greenfield	4,998	2,840	1,420	835
Grinnell Regional	Grinnell	4,550	1,820	910	298
Grundy Center Municipal	Grundy Center	250	150	75	24
Guthrie County Regional	Guthrie Center	2,500	1,422	711	227
Hampton Municipal	Hampton	3,750	1,500	750	98
Harlan Municipal	Harlan	7,000	3,978	1,989	1,170
Humboldt Municipal	Humboldt	3,200	1,800	900	287
Ida Grove Municipal	Ida Grove	1,250	368	184	59
Independence Municipal	Independence	7,300	1,844	922	171
Iowa City Municipal	Iowa City	36,450	24,756	12,378	7,934
Iowa Falls Municipal	Iowa Falls	2,250	1,008	504	66
Jefferson Municipal	Jefferson	4,586	2,211	1,106	362
Keokuk Municipal	Keokuk	7,000	4,900	2,450	995
Keosauqua Municipal	Keosauqua	250	142	71	26
Knoxville Municipal	Knoxville	8,050	3,736	1,868	758
Lake Mills Municipal	Lake Mills	1,000	570	285	91
Lamoni Municipal	Lamoni	1,000	740	370	48
Le Mars Municipal	Le Mars	5,950	1,272	636	83
Manchester Municipal	Manchester	1,000	568	284	91
Mapleton Municipal	Mapleton	2,922	1,660	830	272
Maquoketa Municipal	Maquoketa	3,500	1,910	955	313
Marshalltown Municipal	Marshalltown	10,850	5,802	2,901	1,178
Milford Municipal	Milford	3,850	3,090	1,545	570
Monona Municipal	Monona	1,500	618	309	99
Monticello Regional	Monticello	8,080	3,666	1,833	744
Mt. Ayr Municipal	Mount Ayr	1,000	570	285	91
Mt. Pleasant Municipal	Mount Pleasant	4,320	1,800	900	167
Muscatine Municipal	Muscatine	12,600	10,080	5,040	3,231
New Hampton Municipal	New Hampton	250	250	125	40
Newton Municipal	Newton	10,000	7,000	3,500	2,244
Northwood Municipal	Northwood	1,750	1,050	525	167
Oelwein Municipal	Oelwein	3,500	1,962	981	182
Onawa Municipal	Onawa	900	200	100	32
Orange City Municipal	Orange City	4,500	1,990	995	326
Osage Municipal	Osage	3,500	700	350	112

**Table B-5 (cont.)**  
**Estimates of Annual Transient General Aviation Arrivals**  
**General Aviation Airports**

<b>Airport</b>	<b>Associated City</b>	<b>Total General Aviation Operations</b>	<b>Itinerant Operations</b>	<b>Itinerant Arrivals</b>	<b>Estimated Transient Arrivals</b>
Osceola Municipal	Osceola	6,350	2,628	1,314	244
Oskaloosa Municipal	Oskaloosa	13,500	9,450	4,725	2,778
Ottumwa Regional	Ottumwa	24,900	8,964	4,482	2,873
Paullina Municipal	Paullina	1,750	996	498	184
Pella Municipal	Pella	14,000	3,900	1,950	1,147
Perry Municipal	Perry	3,750	2,132	1,066	349
Pocahontas Municipal	Pocahontas	3,800	1,000	500	65
Primghar Municipal	Primghar	4,775	4,475	2,238	826
Red Oak Municipal	Red Oak	11,550	3,465	1,733	1,019
Rock Rapids Municipal	Rock Rapids	3,260	1,550	775	254
Rockwell City Municipal	Rockwell City	2,250	1,280	640	204
Sac City Municipal	Sac City	6,650	2,282	1,141	374
Sheldon Municipal	Sheldon	10,000	3,333	1,667	677
Shenandoah Municipal	Shenandoah	4,866	2,766	1,383	561
Sibley Municipal	Sibley	4,550	744	372	48
Sioux Center Municipal	Sioux Center	10,350	7,144	3,572	2,100
Spencer Municipal	Spencer	15,300	6,748	3,374	2,163
Spirit Lake Municipal	Spirit Lake	4,200	3,228	1,614	515
Storm Lake Municipal	Storm Lake	11,560	6,565	3,283	2,104
Sully Municipal	Sully	600	600	300	111
Tipton Municipal	Tipton	2,000	812	406	53
Toledo Municipal	Toledo	910	540	270	100
Traer Municipal	Traer	2,250	1,098	549	175
Vinton Veterans Memorial	Vinton	4,500	2,558	1,279	752
Washington Municipal	Washington	11,900	8,482	4,241	2,718
Waukon Municipal	Waukon	1,000	250	125	46
Waverly Municipal	Waverly	13,544	7,946	3,973	2,336
Webster City Municipal	Webster City	9,000	3,158	1,579	641
West Union Municipal	West Union	750	460	230	30
Winterset-Madison County	Winterset	8,800	2,456	1,228	722
Woodbine Municipal	Woodbine	500	250	125	40
Private Airports	Various	70,000	12,000	6,000	1,914
<b>Totals</b>		<b>741,377</b>	<b>354,911</b>	<b>177,456</b>	<b>90,580</b>
Sources: Airport Management, Iowa DOT Office of Aviation					





Using the information in Table B-5 and previously noted information on assumptions by airport role on length of stay, spending per day, and aircraft occupancy, **Table B-6** presents estimated expenditures by visitors arriving via each of the publicly owned general aviation airports.

**Table B-6**  
**Estimated Annual General Aviation Visitor Expenditures (Output)**  
**General Aviation Airports**

Airport Name	Associated City	Estimated Transient Arrivals	Annual General Aviation Visitors	Total Annual Days Stayed	Annual General Aviation Visitor Expenditures
Albia Municipal	Albia	181	341	341	\$11,900
Algona Municipal	Algona	1,273	4,520	2,712	\$232,100
Allison Municipal	Allison	80	150	150	\$5,200
Ames Municipal	Ames	7,334	26,037	15,622	\$1,337,300
Anita Municipal	Anita	28	47	47	\$1,600
Ankeny Regional	Ankeny	6,410	22,756	13,653	\$1,168,700
Atlantic Municipal	Atlantic	212	751	451	\$38,600
Audubon County	Audubon	37	110	110	\$6,100
Bedford Municipal	Bedford	212	399	399	\$14,000
Belle Plaine Municipal	Belle Plaine	67	200	200	\$11,100
Belmond Municipal	Belmond	23	39	39	\$1,400
Bloomfield Municipal	Bloomfield	65	195	195	\$10,800
Boone Municipal	Boone	719	2,551	1,531	\$131,000
Carroll Municipal	Carroll	577	2,047	1,228	\$105,100
Centerville Municipal	Centerville	246	739	739	\$40,900
Chariton Municipal	Chariton	49	147	147	\$8,100
Northeast Iowa Regional	Charles City	95	162	97	\$8,300
Cherokee County Regional	Cherokee	1,484	4,467	4,467	\$247,200
Clarinda Municipal	Clarinda	809	2,434	2,434	\$134,700
Clarion Municipal	Clarion	270	813	813	\$45,000
Clinton Municipal	Clinton	2,956	10,494	6,296	\$539,000
Corning Municipal	Corning	120	225	225	\$7,900
Council Bluffs Municipal	Council Bluffs	5,813	20,636	12,381	\$1,059,900
Cresco Municipal	Cresco	60	113	113	\$3,900
Creston Municipal	Creston	203	720	432	\$37,000
Davenport Municipal	Davenport	7,105	25,224	15,135	\$1,295,500
Decorah Municipal	Decorah	1,105	3,327	3,327	\$184,100
Denison Municipal	Denison	191	679	408	\$34,900
Eagle Grove Municipal	Eagle Grove	141	266	266	\$9,300
Eldora Municipal	Eldora	55	94	94	\$3,300
Emmetsburg Municipal	Emmetsburg	70	70	42	\$1,900
Estherville Municipal	Estherville	200	711	427	\$36,500

**Table B-6 (cont.)**  
**Estimated Annual General Aviation Visitor Expenditures (Output)**  
**General Aviation Airports**

<b>Airport Name</b>	<b>Associated City</b>	<b>Estimated Transient Arrivals</b>	<b>Annual General Aviation Visitors</b>	<b>Total Annual Days Stayed</b>	<b>Annual General Aviation Visitor Expenditures</b>
Fairfield Municipal	Fairfield	625	2,218	1,331	\$113,900
Forest City Municipal	Forest City	321	966	966	\$53,500
Fort Madison Municipal	Fort Madison	42	127	127	\$7,000
Greenfield Municipal	Greenfield	835	2,513	2,513	\$139,100
Grinnell Regional	Grinnell	298	897	897	\$49,600
Grundy Center Municipal	Grundy Center	24	45	45	\$1,600
Guthrie County Regional	Guthrie Center	227	426	426	\$14,900
Hampton Municipal	Hampton	98	293	293	\$16,200
Harlan Municipal	Harlan	1,170	3,520	3,520	\$194,800
Humboldt Municipal	Humboldt	287	540	540	\$18,900
Ida Grove Municipal	Ida Grove	59	110	110	\$3,900
Independence Municipal	Independence	171	609	365	\$31,300
Iowa City Municipal	Iowa City	7,934	28,167	16,900	\$1,446,600
Iowa Falls Municipal	Iowa Falls	66	197	197	\$10,900
Jefferson Municipal	Jefferson	362	1,090	1,090	\$60,300
Keokuk Municipal	Keokuk	995	3,531	2,119	\$181,400
Keosauqua Municipal	Keosauqua	26	45	45	\$1,600
Knoxville Municipal	Knoxville	758	2,692	1,615	\$138,300
Lake Mills Municipal	Lake Mills	91	171	171	\$6,000
Lamoni Municipal	Lamoni	48	145	145	\$8,000
Le Mars Municipal	Le Mars	83	249	249	\$13,800
Manchester Municipal	Manchester	91	170	170	\$6,000
Mapleton Municipal	Mapleton	272	818	818	\$45,300
Maquoketa Municipal	Maquoketa	313	941	941	\$52,100
Marshalltown Municipal	Marshalltown	1,178	4,181	2,509	\$214,700
Milford Municipal	Milford	570	969	969	\$33,900
Monona Municipal	Monona	99	185	185	\$6,500
Monticello Regional	Monticello	744	2,642	1,585	\$135,700
Mt. Ayr Municipal	Mount Ayr	91	171	171	\$6,000
Mt. Pleasant Municipal	Mount Pleasant	167	594	357	\$30,500
Muscatine Municipal	Muscatine	3,231	11,469	6,881	\$589,000
New Hampton Municipal	New Hampton	40	75	75	\$2,600
Newton Municipal	Newton	2,244	7,964	4,779	\$409,100
Northwood Municipal	Northwood	167	315	315	\$11,000
Oelwein Municipal	Oelwein	182	648	389	\$33,300
Onawa Municipal	Onawa	32	60	60	\$2,100

**Table B-6 (cont.)**  
**Estimated Annual General Aviation Visitor Expenditures (Output)**  
**General Aviation Airports**

<b>Airport Name</b>	<b>Associated City</b>	<b>Estimated Transient Arrivals</b>	<b>Annual General Aviation Visitors</b>	<b>Total Annual Days Stayed</b>	<b>Annual General Aviation Visitor Expenditures</b>
Orange City Municipal	Orange City	326	981	981	\$54,300
Osage Municipal	Osage	112	210	210	\$7,300
Osceola Municipal	Osceola	244	868	521	\$44,600
Oskaloosa Municipal	Oskaloosa	2,778	8,363	8,363	\$462,700
Ottumwa Regional	Ottumwa	2,873	10,199	6,119	\$523,800
Paullina Municipal	Paullina	184	312	312	\$10,900
Pella Municipal	Pella	1,147	3,451	3,451	\$191,000
Perry Municipal	Perry	349	1,051	1,051	\$58,100
Pocahontas Municipal	Pocahontas	65	196	196	\$10,800
Primghar Municipal	Primghar	826	1,404	1,404	\$49,100
Red Oak Municipal	Red Oak	1,019	3,066	3,066	\$169,700
Rock Rapids Municipal	Rock Rapids	254	764	764	\$42,300
Rockwell City Municipal	Rockwell City	204	384	384	\$13,400
Sac City Municipal	Sac City	374	1,125	1,125	\$62,200
Sheldon Municipal	Sheldon	677	2,402	1,441	\$123,400
Shenandoah Municipal	Shenandoah	561	1,993	1,196	\$102,400
Sibley Municipal	Sibley	48	146	146	\$8,100
Sioux Center Municipal	Sioux Center	2,100	6,322	6,322	\$349,800
Spencer Municipal	Spencer	2,163	7,678	4,607	\$394,300
Spirit Lake Municipal	Spirit Lake	515	968	968	\$33,900
Storm Lake Municipal	Storm Lake	2,104	7,469	4,482	\$383,600
Sully Municipal	Sully	111	188	188	\$6,600
Tipton Municipal	Tipton	53	159	159	\$8,800
Toledo Municipal	Toledo	100	169	169	\$5,900
Traer Municipal	Traer	175	329	329	\$11,500
Vinton Veterans Memorial	Vinton	752	2,264	2,264	\$125,200
Washington Municipal	Washington	2,718	9,651	5,790	\$495,700
Waukon Municipal	Waukon	46	78	78	\$2,700
Waverly Municipal	Waverly	2,336	7,032	7,032	\$389,100
Webster City Municipal	Webster City	641	2,276	1,365	\$116,900
West Union Municipal	West Union	30	90	90	\$5,000
Winterset-Madison County	Winterset	722	2,173	2,173	\$120,300
Woodbine Municipal	Woodbine	40	75	75	\$2,600
Private Airports	Various	1,914	3,598	3,598	\$125,900
<b>Totals</b>		<b>90,580</b>	<b>298,616</b>	<b>208,800</b>	<b>15,373,600</b>
Sources: Airport Management, Iowa DOT Office of Aviation					

Estimates of visitor spending presented in this appendix are important to the economic impact analysis for study airports. Each airport's total economic benefits are related to its on-airport employment, payroll, and output impacts as well as to those of its visitors. Visitor spending estimates presented in this appendix were used to estimate employment and payroll supported by visitors arriving on both commercial and general aviation aircraft in Iowa. In addition, visitor spending is an important component of total annual economic activity or output for each of the study airports.

## **Estimating Construction Impacts at Study Airports**

The previous section outlined the methodology used to calculate indirect visitor spending for each study airport. This section provides a description of the approach used to estimate construction impacts for each airport which are included in each airport's direct economic impact estimate.

The same methodology or approach was used to estimate construction impacts for all commercial and general aviation airports considered in this study. Construction projects at airports included in this analysis are reflected in the direct impact category. Airports themselves, as well as businesses and tenants located on airports, undertake capital improvement projects. When construction projects are undertaken, over their duration, they help to support employment and payroll linked to the airports. Implementing capital improvement projects also requires the purchase of goods and services which creates economic activity or output.

The following methodology was used to estimate direct construction impacts:

- Capital Improvement Plan (CIP) data for the most recent four years were gathered from airport sponsors/managers, from aviation related tenants located on each airport, and from Iowa DOT.
- CIP data for the four-year period was averaged to avoid showing peaks or troughs in construction spending.
- The IMPLAN Input/Output model indicates that for every \$1 million spent annually on construction supports 11.7 "construction-related" jobs in Iowa. These jobs include construction workers, equipment operators, foremen, engineers, and managers.
- CIP activity at the two commercial Border Airports considered in this study that translates into economic activity in Iowa was estimated using the percentage of construction workers in the Metropolitan Statistical Area (MSA) for each Border Airport that reside in Iowa. Eppley Airfield is located in the Omaha-Council Bluffs, Nebraska-Iowa MSA. Of the total construction jobs in this MSA, nine percent are located in Iowa. This analysis assumed nine percent of the total annual CIP impact generated by Eppley Airfield accrues to Iowa. Quad City International Airport is located in the Quad Cities, Illinois-Iowa MSA. This MSA includes the cities of Moline and Rock Island in Illinois and the cities of Davenport and Bettendorf in Iowa. Of the total construction jobs in this MSA, 48 percent are located in Iowa. This analysis assumed 48 percent of the total annual CIP impact generated by Quad City International Airport accrues to Iowa's economy.

For each of the study airports, an average annual CIP was developed using information from this study's survey effort. Average CIP for each airport is presented in the technical report as part of each airport's direct output estimate. Ratios noted above were used to translate direct CIP estimates into direct employment and payroll estimates for each airport. Direct CIP impacts in the employment, payroll, and output categories are not shown separately in the report. They are combined with employment, payroll, and output estimates for other on airport business activities.

### **Multipliers for Estimating Induced Economic Impacts for Study Airports**

Employment, payroll, and output impacts derived from on-airport activities as well as visitors comprise each airport's direct and indirect economic impacts. As these impacts enter the economy, they circulate among other sectors, creating successive waves of additional spending. This phenomenon is referred to as the multiplier effect. Multiplier effects are also referred to as induced impacts.

Multiplier effects arise from various interdependencies within an economic system. For example, the operation of an airport requires inputs in the form of supplies, equipment, and maintenance. These inputs generate a boost in sales for those firms or businesses providing these services and products. Moreover, the goods and services themselves require inputs for their production. The process continues as a large number of impacts re-circulate through the economy.

Multipliers for estimating induced impacts were derived from the IMPLAN model and were developed specifically to measure economic impacts in Iowa. Individual multipliers for each sector of the economy being modeled were used. As previously mentioned, individual IMPLAN multipliers were obtained for various North American Industries Classification System (NAICS) codes. The NAICS codes used for modeling on-airport impacts and visitor impacts in this analysis are depicted in **Table B-7**.

**Table B-7**  
**Iowa IMPLAN Multipliers by NAICS Code**

NAICS Industry Classification	Employment Multiplier	Payroll Multiplier	Output Multiplier
Government (including Airport Owners) <sup>1</sup>	1.60	1.42	1.68
Construction C.I.P. <sup>2</sup>	1.64	1.45	1.61
Concessions <sup>3</sup>	1.83	1.86	1.64
Aviation Sector <sup>4</sup>	1.83	1.86	1.64
Commercial Service Visitor Expenditures <sup>5</sup>	1.36	1.56	1.64
General Aviation Visitor Expenditures <sup>5</sup>	1.28	1.56	1.68
Sources: Wilbur Smith Associates and IMPLAN multipliers Notes: 1. Government multipliers are the weighted average of State & Local Government. 2. Construction multipliers are the weighted average of the New Industrial & commercial Construction, Maintenance and Repair, and Engineering and Architecture Industries. 3. Concessions multipliers are the weighted average of the Food/Beverage, Hotels/Motels, Miscellaneous Store Retailers, and Business Support Services. 4. Aviation related multipliers are the weighted average of the Air Transportation and Aircraft Maintenance and Manufacturing Industries. 5. Visitor industries multipliers are the weighted average of the Hotel, Food/Beverage, Retail, and Automobile Rental Industries.			

While these NAICS groups do not cover all on-airport business and visitor impact categories, they do provide a representative average for generating multipliers. For example, aviation related business expenditures at the study airports were grouped into air transportation and various industry types related to aerospace NAICS codes. Visitor expenditures were grouped into retail sales, auto rental, hotel/motel, and food/beverage NAICS codes.

Multipliers discussed in this section along with other methodology and data gathering efforts provided much of the underlying basis for the economic impacts presented in the technical report.



## Appendix C

### Correlation of Economic Impacts



## Appendix C

### Correlation of Economic Impacts

#### Correlation of Economic Impact and Aviation Activity

Ranges of economic benefits per enplaning commercial passenger were developed for the commercial airports. Ranges of benefits per enplanement were developed for the multi-carrier airports and for the airports that are served by one or two carriers. Ranges of benefits per enplanement are shown in **Table C-1**. Also shown in this table are ranges of benefits per on-airport employee. Benefit ratios shown in Table C-1 consider all direct, indirect, and induced impacts for the commercial airports.

**Table C-1**  
**Benefits Per Enplaned Commercial Passenger and Employee**  
**Commercial Airports**

	Total Employment	Total Payroll	Total Output
	Per 100 Enplanements		
Multi-Carrier Airports	0.30-0.33	\$10,800-12,300	\$25,700-31,900
Single- or Two-Carrier Airports*	0.50-0.90	\$17,500-26,000	\$44,300-92,400
	Per On-airport Employee		
Multi-Carrier Airports	3.5-4.0	\$130,000-140,000	\$325,000-337,000
Single- or Two-Carrier Airports*	2.1-3.6	\$60,000-120,000	\$254,000-290,000
Source: Wilbur Smith Associates, US DOT, IMPLAN Multipliers			
Note: *Ranges do not include Fort Dodge and Sioux City airports due to military tenants			



In addition, benefit ranges per based aircraft, per total annual general aviation operations, and per total annual itinerant general aviation operations were developed for general aviation airports included in this study. Benefit ranges were established for Enhanced Service, General Service, and Basic Service (combined Basic Service I and II) airports. Ranges of benefits for these categories are shown in **Table C-2**. Also shown in this table are ranges of benefits per on-airport employee. Benefit ratios shown in Table C-2 consider all direct, indirect, and induced impacts for the general aviation airports.

**Table C-2**  
**Benefits Per Based Aircraft, Annual Operations, Annual Itinerant Operations, and Employees**  
**General Aviation Airports**

	Total Employment	Total Payroll	Total Output
<b>Per Based Aircraft</b>			
Enhanced	0.20-3.6	\$5,900-106,000	\$21,000-230,000
General Service	0.15-3.4	\$2,100-73,900	15,000-80,000
Basic Service	0.20-3.0	\$1,100-10,100	\$1,600-11,000
<b>Per 100 GA Operations</b>			
Enhanced	0.15-1.00	\$2,000-30,000	\$7,000-85,000
General Service	0.09-1.10	\$1,200-29,500	\$5,500-60,000
Basic Service	0.06-0.40	\$450-5,800	\$1,000-14,000
<b>Per 100 Itinerant GA Operations</b>			
Enhanced	0.20-3.00	\$4,700-72,000	\$16,000-210,000
General Service	0.22-2.00	\$3,000-70,000	\$10,000-150,000
Basic Service	0.30-0.70	\$500-20,000	\$1,700-23,000
<b>Per On-Airport Employee</b>			
Enhanced	1.7-9.4	\$49,000-130,000	\$138,000-400,000
General Service	1.7-5.4	\$25,200-\$110,000	\$100,000-285,000
Basic Service	1.6-5.0	\$5,600-65,000	\$9,000-180,000
Source: Wilbur Smith Associates, Airport Management, Iowa DOT, IMPLAN Multipliers			

## Correlation of Economic Impacts with Airport Management/Airport Role

Steps were also undertaken to correlate airport management information for general aviation airports with annual economic impacts. As part of this study's data gathering effort, information was sought on airport governance and management structures. It is worth noting that not all airports provided this requested information, and that airports may not have been consistent in the way they reported their management structure. **Table C-3** ranks economic impacts for all general aviation airports included in this analysis from highest to lowest. Economic impacts shown in this table include all direct, indirect, and induced impacts associated with on-airport and visitor activities.

For those airports that provided information on their governance and management structures, this information is also presented in Table C-3. In addition to showing total economic impact information and airport management, this table also shows the airport system role for each of the publicly-owned general aviation airports included in this analysis.



**Table C-3**  
**Airport Management and Economic Impact Information**  
**General Aviation Airports**

Airport Name	Associated City	Airport Role	Total Employment	Total Payroll	Total Output	Management Structure
Davenport Municipal	Davenport	Enhanced	388.0	\$11,485,900	\$20,270,500	Contract/FBO
Ankeny Regional	Ankeny	Enhanced	141.5	\$5,427,000	\$14,780,700	Dedicated Full-Time Manager
Council Bluffs Municipal	Council Bluffs	Enhanced	180.0	\$5,668,800	\$12,737,500	Dedicated Full-Time Manager
Iowa City Municipal	Iowa City	Enhanced	115.0	\$3,688,900	\$11,207,300	Dedicated Full-Time Manager
Webster City Municipal	Webster City	Enhanced	42.0	\$2,268,100	\$9,334,600	Contract/FBO
Ames Municipal	Ames	Enhanced	98.5	\$2,888,000	\$7,789,400	Part-Time Public Employee
Boone Municipal	Boone	Enhanced	111.0	\$3,835,200	\$7,375,400	Dedicated Full-Time Manager
Ottumwa Regional	Ottumwa	Enhanced	73.0	\$2,377,200	\$6,429,400	Dedicated Full-Time Manager
Spencer Municipal	Spencer	Enhanced	50.0	\$1,573,200	\$5,814,400	Contract/FBO
Sioux Center Municipal	Sioux Center	General Service	34.0	\$1,699,700	\$5,406,900	Contract/FBO
Muscatine Municipal	Muscatine	Enhanced	66.0	\$2,426,600	\$4,671,000	Contract/FBO
Atlantic Municipal	Atlantic	Enhanced	42.0	\$1,374,200	\$4,643,600	Contract/FBO
Pella Municipal	Pella	General Service	46.0	\$2,206,700	\$4,446,700	Contract/FBO
Mt. Pleasant Municipal	Mount Pleasant	Enhanced	25.0	\$819,800	\$3,688,400	Contract/FBO
Forest City Municipal	Forest City	General Service	22.0	\$880,300	\$3,187,000	Contract/FBO
Storm Lake Municipal	Storm Lake	Enhanced	31.5	\$860,800	\$2,888,700	Dedicated Full-Time Manager
Marshalltown Municipal	Marshalltown	Enhanced	29.5	\$914,400	\$2,814,100	Contract/FBO
Iowa Falls Municipal	Iowa Falls	General Service	20.0	\$662,500	\$2,750,100	Dedicated Full-Time Manager
Independence Municipal	Independence	Enhanced	30.0	\$868,600	\$2,421,700	Contract/FBO
Keokuk Municipal	Keokuk	Enhanced	23.5	\$710,900	\$2,281,900	Contract/FBO
Newton Municipal	Newton	Enhanced	26.0	\$738,000	\$2,246,200	Contract/FBO
Maquoketa Municipal	Maquoketa	General Service	23.5	\$713,500	\$2,067,800	Part-Time Public Employee
Winterset-Madison County	Winterset	General Service	27.0	\$696,500	\$1,928,200	Contract/FBO
Washington Municipal	Washington	Enhanced	30.5	\$971,600	\$1,908,600	Contract/FBO
Oelwein Municipal	Oelwein	Enhanced	14.0	\$425,000	\$1,866,600	Contract/FBO
Carroll Municipal	Carroll	Enhanced	19.5	\$525,900	\$1,849,800	Contract/FBO
Oskaloosa Municipal	Oskaloosa	General Service	25.5	\$717,500	\$1,780,700	Contract/FBO



**Table C-3 (cont.)**  
**Airport Management and Economic Impact Information**  
**General Aviation Airports**

Airport Name	Associated City	Airport Role	Total Employment	Total Payroll	Total Output	Management Structure
Monticello Regional	Monticello	Enhanced	20.5	\$551,100	\$1,770,900	Dedicated Full-Time Manager
Clinton Municipal	Clinton	Enhanced	23.5	\$617,900	\$1,715,800	Dedicated Full-Time Manager
Fairfield Municipal	Fairfield	Enhanced	12.5	\$490,100	\$1,619,700	Contract/FBO
Algona Municipal	Algona	Enhanced	15.5	\$460,700	\$1,571,400	Part-Time Public Employee
Estherville Municipal	Estherville	Enhanced	15.5	\$539,100	\$1,509,600	Part-Time Public Employee
Waverly Municipal	Waverly	General Service	26.0	\$720,300	\$1,499,700	Contract/FBO
Red Oak Municipal	Red Oak	General Service	19.5	\$552,700	\$1,412,100	Part-Time Public Employee
Le Mars Municipal	Le Mars	General Service	13.5	\$596,200	\$1,364,400	Contract/FBO
Harlan Municipal	Harlan	General Service	15.0	\$393,400	\$1,073,800	Contract/FBO
Knoxville Municipal	Knoxville	Enhanced	12.5	\$376,600	\$1,056,300	Contract/FBO
Orange City Municipal	Orange City	General Service	13.5	\$504,800	\$1,024,900	Part-Time Public Employee
Emmetsburg Municipal	Emmetsburg	General Service	12.0	\$374,400	\$1,015,900	Part-Time Public Employee
Northeast Iowa Regional	Charles City	Enhanced	12.0	\$282,200	\$989,000	Dedicated Full-Time Manager
Sheldon Municipal	Sheldon	Enhanced	11.0	\$215,100	\$971,800	Contract/FBO
Cherokee County Regional	Cherokee	General Service	13.5	\$340,700	\$944,900	Contract/FBO
Vinton Veterans Memorial	Vinton	General Service	12.5	\$282,800	\$939,600	Part-Time Public Employee
Hampton Municipal	Hampton	General Service	7.5	\$239,900	\$926,500	Contract/FBO
Clarinda Municipal	Clarinda	General Service	9.5	\$284,100	\$856,200	Contract/FBO
Decorah Municipal	Decorah	General Service	13.0	\$391,300	\$813,800	Dedicated Full-Time Manager
Bloomfield Municipal	Bloomfield	General Service	7.0	\$267,300	\$784,500	Contract/FBO
Grinnell Regional	Grinnell	General Service	8.5	\$242,200	\$704,000	Dedicated Full-Time Manager
West Union Municipal	West Union	General Service	8.5	\$320,400	\$680,100	Part-Time Public Employee
Jefferson Municipal	Jefferson	General Service	12.0	\$360,800	\$606,100	Dedicated Full-Time Manager
Denison Municipal	Denison	Enhanced	6.5	\$147,100	\$576,700	Contract/FBO
Rock Rapids Municipal	Rock Rapids	General Service	7.0	\$204,200	\$563,600	Part-Time Public Employee
Shenandoah Municipal	Shenandoah	Enhanced	9.0	\$218,100	\$535,400	Part-Time Public Employee
Belle Plaine Municipal	Belle Plaine	General Service	17.0	\$537,800	\$514,300	Contract/FBO



**Table C-3 (cont.)**  
**Airport Management and Economic Impact Information**  
**General Aviation Airports**

Airport Name	Associated City	Airport Role	Total Employment	Total Payroll	Total Output	Management Structure
Chariton Municipal	Chariton	General Service	5.0	\$145,300	\$494,900	Part-Time Public Employee
Clarion Municipal	Clarion	General Service	5.5	\$125,500	\$473,400	Part-Time Public Employee
Osceola Municipal	Osceola	Enhanced	5.0	\$123,200	\$442,200	Part-Time Public Employee
Creston Municipal	Creston	Enhanced	5.0	\$142,200	\$423,800	Contract/FBO
Audubon County	Audubon	General Service	5.0	\$126,800	\$403,900	Part-Time Public Employee
Sibley Municipal	Sibley	General Service	5.5	\$186,800	\$363,000	Contract/FBO
Perry Municipal	Perry	General Service	6.5	\$163,700	\$357,600	Contract/FBO
Rockwell City Municipal	Rockwell City	Basic I	5.0	\$116,200	\$306,500	Part-Time Public Employee
Sac City Municipal	Sac City	General Service	5.0	\$115,700	\$297,000	Part-Time Public Employee
Greenfield Municipal	Greenfield	General Service	9.5	\$170,300	\$279,400	Part-Time Public Employee
Lamoni Municipal	Lamoni	General Service	2.5	\$75,600	\$274,100	Part-Time Public Employee
Albia Municipal	Albia	Basic I	4.5	\$116,200	\$259,400	Part-Time Public Employee
Mapleton Municipal	Mapleton	General Service	5.5	\$124,100	\$257,300	Contract/FBO
Centerville Municipal	Centerville	General Service	4.5	\$113,500	\$243,100	Part-Time Public Employee
Pocahontas Municipal	Pocahontas	General Service	3.5	\$82,900	\$238,000	Part-Time Public Employee
Tipton Municipal	Tipton	General Service	2.0	\$25,200	\$213,500	Part-Time Public Employee
Guthrie County Regional	Guthrie Center	Basic I	3.0	\$65,700	\$180,100	Part-Time Public Employee
Onawa Municipal	Onawa	Basic I	2.5	\$50,400	\$173,700	Part-Time Public Employee
Humboldt Municipal	Humboldt	Basic I	0.5	\$15,300	\$148,500	Part-Time Public Employee
Waukon Municipal	Waukon	Basic II	2.5	\$50,400	\$130,300	Part-Time Public Employee
Fort Madison Municipal	Fort Madison	General Service	2.0	\$25,200	\$123,900	Part-Time Public Employee
Spirit Lake Municipal	Spirit Lake	Basic I	2.5	\$40,500	\$110,000	Part-Time Public Employee
Primghar Municipal	Primghar	Basic II	3.0	\$45,800	\$90,500	Part-Time Public Employee
Milford Municipal	Milford	Basic II	2.5	\$32,800	\$86,300	Part-Time Public Employee
Ida Grove Municipal	Ida Grove	Basic I	0.0	\$0	\$44,300	Part-Time Public Employee
Corning Municipal	Corning	Basic I	1.0	\$11,800	\$37,300	Part-Time Public Employee
Allison Municipal	Allison	Basic I	1.5	\$23,600	\$36,500	Part-Time Public Employee



**Table C-3 (cont.)**  
**Airport Management and Economic Impact Information**  
**General Aviation Airports**

Airport Name	Associated City	Airport Role	Total Employment	Total Payroll	Total Output	Management Structure
Bedford Municipal	Bedford	Basic I	1.5	\$16,700	\$32,700	Part-Time Public Employee
Belmond Municipal	Belmond	Basic II	1.0	\$11,800	\$30,100	Part-Time Public Employee
Monona Municipal	Monona	Basic I	0.0	\$0	\$30,100	Part-Time Public Employee
Sully Municipal	Sully	Basic II	1.0	\$11,800	\$28,700	Part-Time Public Employee
New Hampton Municipal	New Hampton	Basic I	1.0	\$3,800	\$28,200	Part-Time Public Employee
Manchester Municipal	Manchester	Basic I	1.0	\$11,800	\$27,900	Part-Time Public Employee
Lake Mills Municipal	Lake Mills	Basic I	1.0	\$11,800	\$24,000	Part-Time Public Employee
Mt. Ayr Municipal	Mount Ayr	Basic I	1.0	\$11,800	\$24,000	Part-Time Public Employee
Osage Municipal	Osage	Basic I	1.0	\$3,600	\$22,400	Part-Time Public Employee
Cresco Municipal	Cresco	Basic I	1.0	\$11,800	\$20,500	Part-Time Public Employee
Eldora Municipal	Eldora	Basic II	1.0	\$11,800	\$19,400	Part-Time Public Employee
Traer Municipal	Traer	Basic I	1.5	\$15,300	\$19,300	Part-Time Public Employee
Northwood Municipal	Northwood	Basic I	1.5	\$15,300	\$18,500	Part-Time Public Employee
Paullina Municipal	Paullina	Basic II	1.5	\$15,300	\$18,300	Part-Time Public Employee
Woodbine Municipal	Woodbine	Basic I	1.0	\$11,800	\$18,300	Part-Time Public Employee
Keosauqua Municipal	Keosauqua	Basic II	1.0	\$11,800	\$16,600	Part-Time Public Employee
Eagle Grove Municipal	Eagle Grove	Basic I	1.5	\$15,300	\$15,600	Part-Time Public Employee
Toledo Municipal	Toledo	Basic II	0.0	\$0	\$14,100	Part-Time Public Employee
Grundy Center Municipal	Grundy Center	Basic I	1.0	\$2,800	\$6,900	Part-Time Public Employee
Anita Municipal	Anita	Basic II	1.0	\$1,400	\$5,200	Part-Time Public Employee
<b>Public Airports Subtotals</b>			<b>2,209.5</b>	<b>\$70,446,500</b>	<b>\$183,537,500</b>	
Private Airports	Various	Private	49.5	\$1,153,300	\$3,596,900	
<b>Totals</b>			<b>2,259.0</b>	<b>\$71,599,800</b>	<b>\$187,134,400</b>	
Sources: Wilbur Smith Associates and IMPLAN Multipliers						



Reviewing the information presented in Table C-3 related to airport management/governance and economic impact, results in the following conclusions:

- In terms of economic impact, the lowest third of Iowa's general aviation airports are exclusively managed by part-time public employees. Often these managers hold additional duties in the community, such as city manager, public works, city clerk, etc. Occasionally these managers are volunteers.
- The middle one-third of the airports (in terms of total output) has a variety of governance structures. Approximately one-half are part time employees. Forty percent contract airfield management and maintenance to an FBO, while just over ten percent have a dedicated full-time airport manager.
- Only twelve percent of the highest airports (in terms of economic impact) employ part-time public employees to oversee airport management. Twenty-seven percent of these airports have dedicated full-time management staff, while the remaining sixty percent have contract FBOs providing on-site management.
- All of Iowa's Basic I and Basic II Airports are managed by part-time public employees.
- Among the General Service Airports, 11 percent are managed by full-time dedicated employees, while 38 percent have contracted management duties to an on-site FBO. The remaining 51 percent are managed part-time by a public employee.
- In all, 85 percent of the Enhanced Service Airports are managed by on-site staff.
- Thirty-five percent of the Enhanced Service Airports are managed by a dedicated airport manager, while 50 percent contract airport management to an FBO.
- Only 15 percent of the Enhanced Service Airports are managed by part-time employees.
- Among the general aviation airports that generate \$1 million in total output or more, 82 percent are managed by on-site staff, either by a dedicated airport manager or contract FBO manager.

These observations point to a significant correlation between and economic impact airport management structure at Iowa's general aviation airports. Generally speaking, as an airport's economic impact and thus its overall influence and presence in a community grows, the responsibilities and duties of airport management evolve to require an on-site, full-time management to support the airport.