

## Chapter Six: System Performance

Six goals and corresponding objectives were established to ensure that the aviation system is meeting the needs of aviation system users. Performance measures were developed to evaluate how well the system is meeting the goals and objectives. Evaluation of the goals and objectives provides the foundation to assess how well the system is performing and to identify gaps in the system.



The aviation system goals and objectives established for this plan were discussed in detail in Chapter 2. Though most objectives apply to all airports, some may have different criteria based on airport role. Only publicly owned airports are included in the performance measure evaluations. **Table 6-1** reviews the goals and objectives.

This chapter uses the airport data presented in the inventory to evaluate the goals and objectives using the performance measures established for the 2010 system plan update. Many of the goals and objectives for the system are identical to those developed in the 2004 Iowa Aviation System Plan. In those cases, a comparison will be made as to the progress, or lack of progress, in meeting goals and objectives. The performance measures will also identify strengths, as well as gaps, of the aviation system.

**Table 6-1: System Goals and Objectives**

Goal	Objectives
<b>Safety and Security</b>	<ul style="list-style-type: none"> <li>• Clear approaches to primary runways</li> <li>• Clear approaches to all runways</li> <li>• Airports have an emergency response plan</li> <li>• Airports have a security plan</li> </ul>
<b>Infrastructure and User Support</b>	<ul style="list-style-type: none"> <li>• Airports meet 100% of facility targets by role</li> <li>• Airports meet 75% service and planning targets by role</li> <li>• Primary runway PCI rating of 70 or higher</li> <li>• Overall PCI pavement rating of 70 or higher</li> <li>• Covered hangars for all based aircraft</li> </ul>
<b>Accessibility</b>	<ul style="list-style-type: none"> <li>• Most of population within 30 minute drive time of a commercial or enhanced airport</li> <li>• Most of population within 120 minute drive time of a commercial service airport</li> <li>• Most of population within 30 minute drive time of airport with weather reporting equipment</li> <li>• Most of population within 30 minute drive time of an airport with an instrument approach</li> <li>• Most of population within 30 minute drive of an airport with a vertically guided approach</li> </ul>
<b>Economic Support</b>	<ul style="list-style-type: none"> <li>• Coordination with local officials to include airport information in business promotional materials</li> <li>• Most employment within 30 minute drive of a commercial or enhanced service airport</li> <li>• Support of aircraft owned and operated by companies doing business in the community</li> </ul>
<b>Planning</b>	<ul style="list-style-type: none"> <li>• Airports have a current master plan or ALP</li> <li>• Airports are protected by height zoning ordinances</li> <li>• Community comprehensive/land use plans address compatible land use surrounding the airport</li> </ul>
<b>Education and Outreach</b>	<ul style="list-style-type: none"> <li>• Airports establish regular communication programs</li> <li>• Airports have based rental aircraft and availability of flight instruction</li> <li>• Airports host pilot safety programs</li> <li>• Airports host annual aviation events</li> <li>• Airports host additional public events</li> <li>• Airports host youth educational activities</li> </ul>

## 6.1 System Performance – Safety and Security

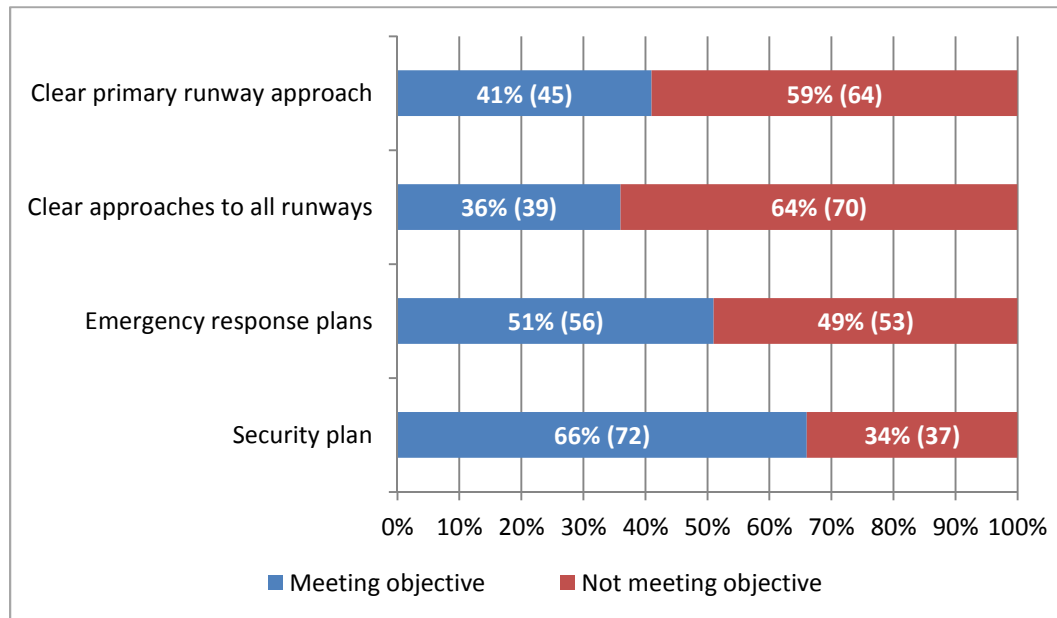
Providing a safe and secure system of airports for aviation users is a priority for decision makers at the local, state and federal level. Protecting aircraft from obstructions and developing procedures and guidelines for emergency and security procedures allows aviation system users to operate in a safe and secure environment. Four performance measures were established to measure how well the system is meeting the Safety and Security objectives:



- Percent of airports with clear approaches to primary runways.
- Percent of airports with clear approaches to all runways.
- Percent of airports with emergency response plans.
- Percent of airports with security plans.

**Figure 6-1** summarizes the number of airports that are meeting or exceeding these Safety and Security performance measures.

**Figure 6-1: Performance Summary – Safety and Security**



The results of the Safety and Security performance measure show that there is room for improvement to meet objectives. The following sections discuss the measures and review the performance for each airport role.

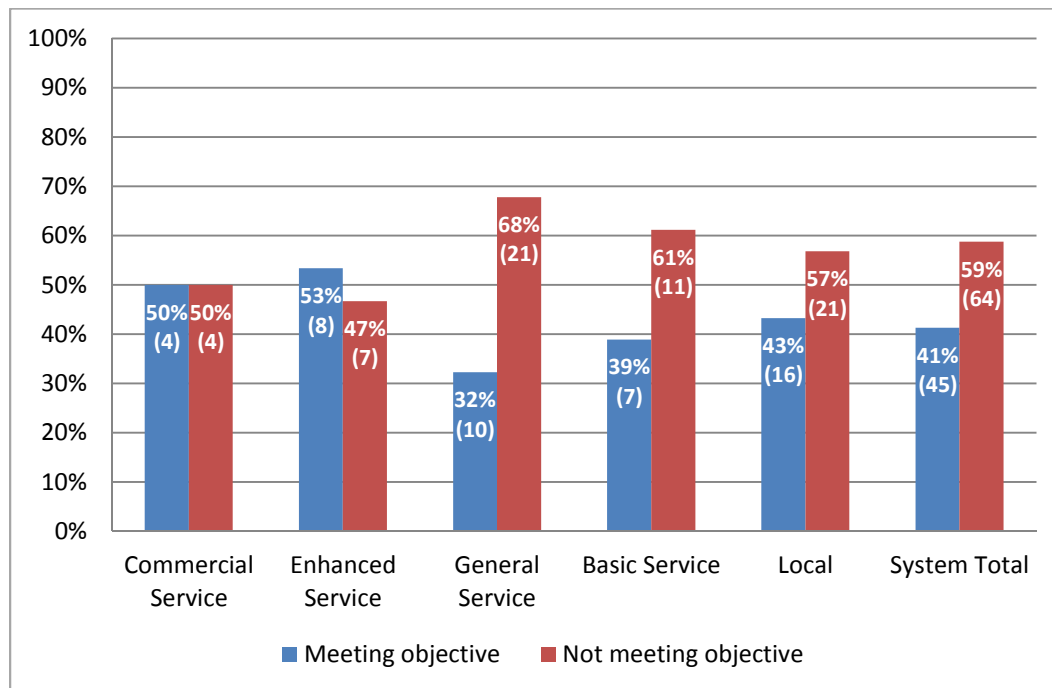
### 6.1.a Percent of Airports That Have Clear Approaches to Both Primary Ends –

Approach slopes to primary runways for all public use airports were reviewed to determine if the approach was clear from obstructions relative to the required slope for the type of approach to the primary runway. The approach clearance required for each airport to meet this goal depends on the type of approach, which typically varies by the design standards for type of aircraft using the airport. Some airports may have mitigated the obstructions by lighting obstructions or displacing runway thresholds, which improve the safety of the airport but may limit the use of the runway. These percentages do not take into account any mitigation an airport may have taken.

- With only 41 percent (41%) of airports having clear approaches to the main runway, additional approach review and mitigation is needed.
- The percent of primary runways with clear approaches improved 24 percent (24%) from 17 percent (17%) found in the 2004 system plan.

**Figure 6-2** provides a summary by airport role. **Table 6-2** identifies the airports that do not have clear approaches to both ends of their primary runway.

**Figure 6-2: Clear Approaches to Primary Runway Ends by Role**



Sources: FAA 5010 Forms, ALPs, Iowa DOT Part 77 surface drawings, Iowa DOT WAAS survey information

**Table 6-2: Airports with Obstructions within Primary Runway Approaches**

Commercial Service	Enhanced Service	General Service	Basic Service	Local
Burlington	Ames	Algona	Belle Plaine	Audubon
Cedar Rapids	Ankeny	Boone	Bloomfield	Cresco
Sioux City	Carroll	Centerville	Chariton	Grundy Center
Waterloo	Clinton	Charles City	Clarinda	Humboldt
	Davenport	Cherokee	Clarion	Keosauqua
	Iowa City	Creston	Emmetsburg	Lake Mills
	Marshalltown	Decorah	Fort Madison	Mapleton
		Denison	Iowa Falls	Maquoketa
		Forest City	Pocahontas	Milford
		Grinnell	Sibley	New Hampton
		Hampton	Sioux Center	Onawa
		Knoxville		Osage
		Monticello		Paullina
		Oelwein		Rockwell City
		Osceola		Spirit Lake
		Pella		Sully
		Perry		Tipton
		Red Oak		Toledo
		Sheldon		Traer
		Vinton		Waverly
		Webster City		Woodbine

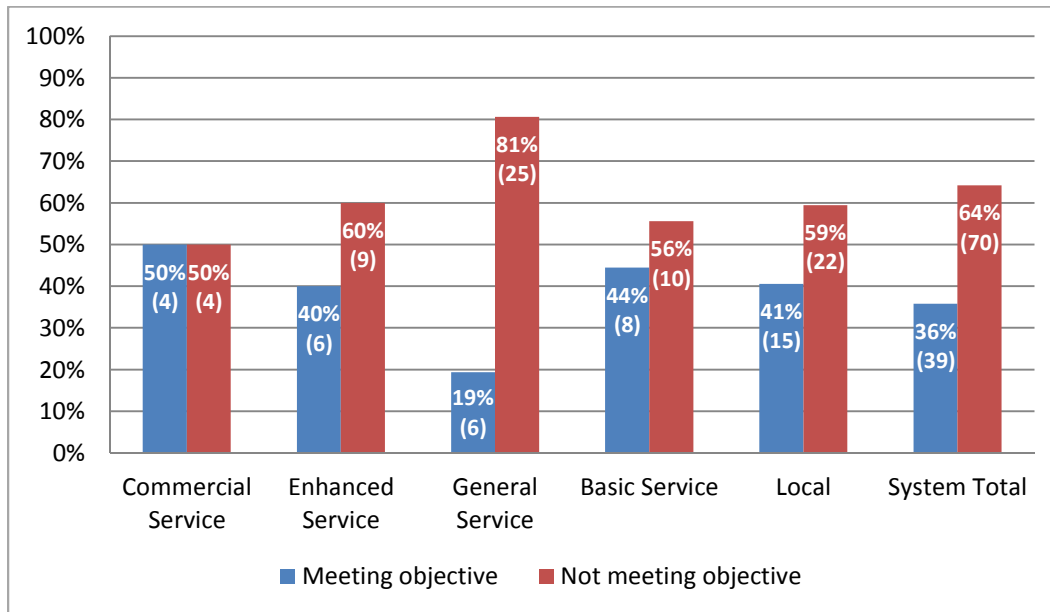
Sources: FAA 5010 Forms, ALPs, Iowa DOT Part 77 surface drawings, Iowa DOT WAAS survey information

**6.1.b Percent of Airports With Clear Approaches to All Runway Ends** – This performance measure looks at the approach slope to all runways at public use airports to determine if the approach is clear from obstructions relative to the required slope for the type of approach. This measurement does not take into account any mitigation that may be done.

- Overall, only 36 percent (36%) of airports have clear approaches to all runway ends.
- Only 19 percent (19%) of general service airports have clear approaches to all runway ends.
- The 2004 system plan did not have a comparable performance measure.

**Figure 6-3** shows the summary by airport role and **Table 6-3** identifies which airports do not have clear approaches to all runway ends.

**Figure 6-3: Clear Approaches to All Runway Ends by Role**



Sources: FAA 5010 Forms, ALPs, Iowa DOT Part 77 surface drawings, Iowa DOT WAAS survey information

**Table 6-3: Airports without Clear Approaches to All Runways**

Commercial Service	Enhanced Service	General Service	Basic Service	Local
Burlington	Ames	Algona	Belle Plaine	Audubon
Cedar Rapids	Ankeny	Atlantic	Bloomfield	Cresco
Sioux City	Carroll	Boone	Chariton	Eagle Grove
Waterloo	Clinton	Centerville	Clarinda	Grundy Center
	Davenport	Charles City	Clarion	Humboldt
	Iowa City	Cherokee	Emmetsburg	Keosauqua
	Keokuk	Creston	Fort Madison	Lake Mills
	Marshalltown	Decorah	Pocahontas	Mapleton
	Spencer	Denison	Sibley	Maquoketa
		Forest City	Sioux Center	Milford
		Grinnell		New Hampton
		Hampton		Onawa
		Iowa Falls		Osage
		Knoxville		Paullina
		Monticello		Rockwell City
		Oelwein		Spirit Lake
		Osceola		Sully
		Pella		Tipton
		Perry		Toledo
		Red Oak		Traer
		Sheldon		Waverly
		Storm Lake		Woodbine
		Vinton		
		Washington		
		Webster City		

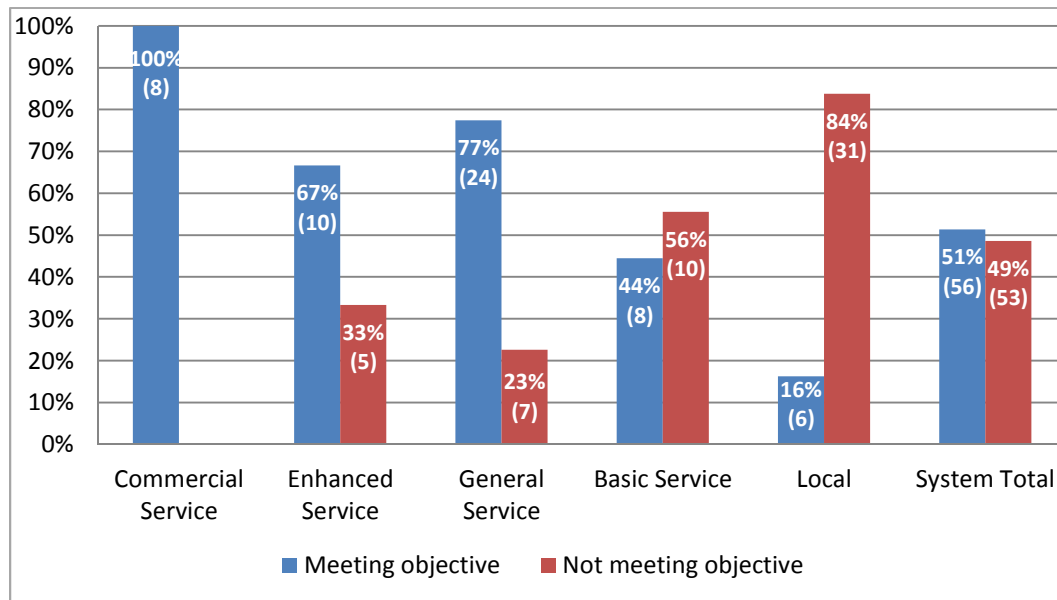
Sources: FAA 5010 Forms, ALPs, Iowa DOT Part 77 surface drawings, Iowa DOT WAAS survey information

**6.1.c Percent of Airports With Emergency Response Plans** – Airports that have a plan to react effectively to emergency scenarios contribute to the enhanced safety of the system. The complexity of an emergency response plan needed by airports vary by airport role.

- All commercial service and 67 percent (67%) of enhanced service airports have emergency response plans.
- Most (84%) Local airports do not report having an emergency response plan.
- A similar comparison cannot be made with the 2004 system plan, as not all publicly owned airports were included in the measure.

**Figure 6-4** provides a summary by airport role and **Table 6-4** identifies which airports do not have an emergency response plan.

**Figure 6-4: Emergency Response Plans by Role**



Source: Airport manager survey

**Table 6-4: Airports without Emergency Response Plans**

Commercial Service	Enhanced Service	General Service	Basic Service	Local	
(none)	Ankeny	Creston	Belle Plaine	Albia	Milford
	Carroll	Hampton	Bloomfield	Allison	Monona
	Davenport	Orange City	Clarinda	Anita	Mount Ayr
	Keokuk	Oskaloosa	Emmetsburg	Audubon	New Hampton
	Muscatine	Pella	Greenfield	Bedford	Northwood
		Red Oak	Jefferson	Cresco	Onawa
		Storm Lake	Manchester	Eldora	Paullina
			Sioux Center	Grundy Center	Rockwell City
			West Union	Guthrie Center	Spirit Lake
			Winterset	Humboldt	Sully
				Ida Grove	Tipton
				Keosauqua	Toledo
				Lake Mills	Traer
				Lamoni	Waukon
				Mapleton	Woodbine
				Maquoketa	

Source: Airport manager survey

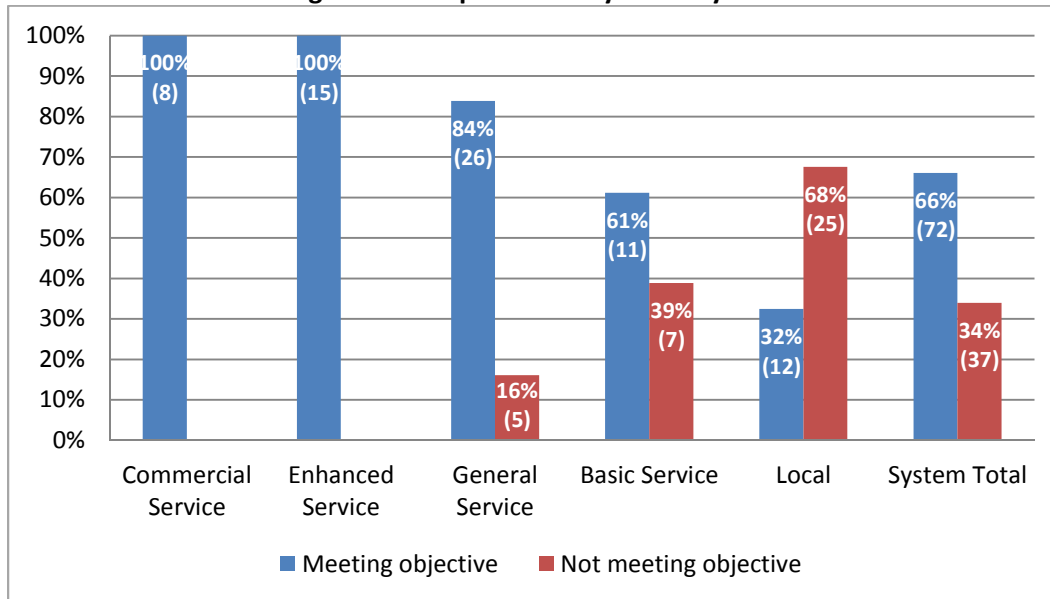
**6.1.d Percent of Airports With Airport Security Plans** – The development and implementation of a security plan outlining methods and procedures to increase the security of an airport helps enhance the overall security of the system. Although the complexity of security plans vary by airport role, it is considered important that all airports have a security plan. Security plans are required by the Transportation Security Administration for Commercial Service airports. During 2003 and 2004, the Iowa DOT General Aviation Security initiative provided a security plan template to all general aviation airports that could be tailored to fit the size of airport.

- All Commercial Service, Enhanced Service, and 84 percent (84%) of General Service airports have developed security plans.
- Only 32% of Local airports have developed a plan.
- The overall percent (66%) of airports with security plans increased significantly from the twenty-five percent (25%) found in the 2004 system plan.

**Figure 6-5** shows the percentage of airports with security plans by airport role. **Table 6-5** lists airports that do not have a security plan.



Figure 6-5: Airport Security Plans by Role



Source: Airport manager survey

Table 6-5: Airports without Security Plans

Commercial Service	Enhanced Service	General Service	Basic Service	Local	
(none)	(none)	Boone	Chariton	Albia	Monona
		Creston	Emmetsburg	Anita	Mount Ayr
		Denison	Fort Madison	Audubon	Northwood
		Harlan	Greenfield	Bedford	Onawa
		Webster City	Manchester	Cresco	Osage
			West Union	Eagle Grove	Paullina
			Winterset	Eldora	Primghar
				Grundy Center	Spirit Lake
				Humboldt	Toledo
				Ida Grove	Traer
				Keosauqua	Waukon
				Lake Mills	Woodbine
				Lamoni	

Source: Airport manager survey

**6.1.e Summary of Gaps in Meeting Objectives** – Although there have been improvements since the 2004 system plan, gaps remain in meeting the objectives of the Safety and Security goal. Objectives with significant gaps to address include:

- **Clear approaches to both ends of primary runway** – Although a significant improvement from the 2004 plan in approaches that are clear of obstructions to both ends of the primary runway was found, additional mitigation measures are needed to maximize the usefulness of runways and to ensure the safety of people in aircraft and on the ground. Ultimate performance for this objective would be for all airports to have clear approaches. The percentage of airports

that have mitigated the obstruction to the best of their ability should also be determined.

- **Clear approaches to all runway ends** – Increasing the overall number of airports with clear approaches to all runway ends will minimize the existing gap in meeting this objective.
- **Emergency response plans and security plans** – The percentage of airports having these plans should be increased. In particular, Basic Service and Local airports are not meeting their target; although it is important that airports in all other roles develop these plans to the appropriate level.

## 6.2 System Performance – Infrastructure and User Support

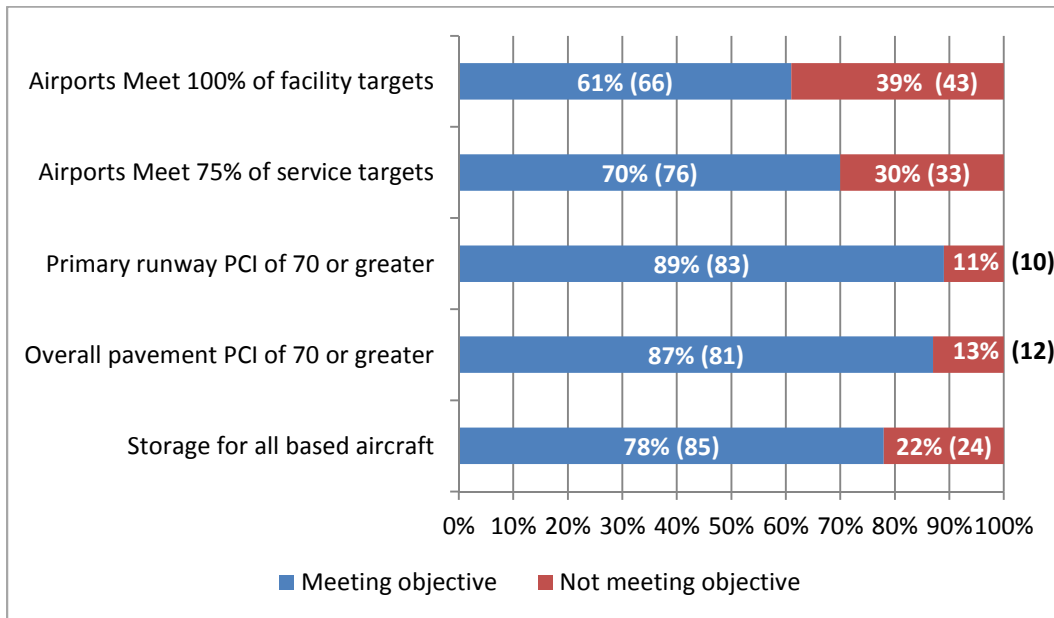
Airports that have adequate infrastructure and services are necessary for an aviation system to effectively support the demands of users. Measuring how well the system is meeting this goal is dependent upon defined infrastructure conditions and levels of services at each airport. Five performance measures were developed to review how well airports are achieving the Infrastructure and User Support goal:



- Percentage of airports meeting at least 100 percent (100%) of facility targets by role.
- Percentage of airports meeting at least 75 percent (75%) of service targets by role.
- Percentage of airports with primary runway Pavement Condition Index of 70 or greater.
- Percentage of airports with overall airport Pavement Condition Index of 70 or greater.
- Percentage of airports with aircraft storage for all based aircraft.

The summary of performance measures presented in **Figure 6-6** indicates a high level of support is being provided by most airports to support the Infrastructure and User Support goal.

**Figure 6-6: Performance Summary – Infrastructure and User Support**



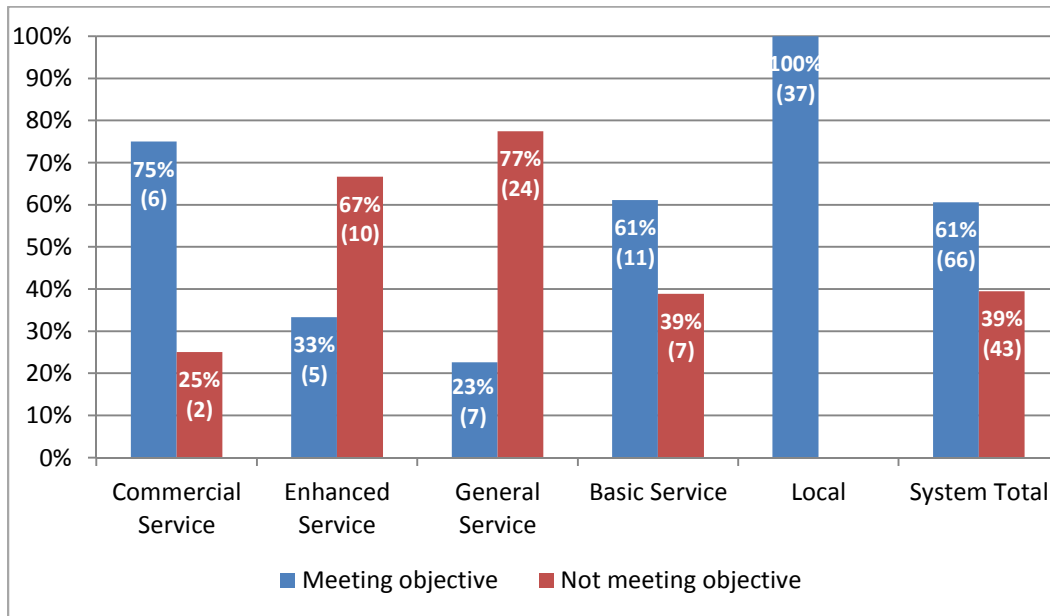
Each measure and level of performance by airport role is discussed in the following sections.

**6.2.a Percentage of Airports Meeting 100 Percent (100%) of Facility Targets** – Each airport role provides varying levels of facilities based upon the demands of its users. In addition to airside infrastructure that is required for an airport to be assigned a role, airside and landside facility targets were recommended for airports. These targets identify levels of facilities and services that meet needs of various levels of aviation users. To meet the needs of aviation users, airports should meet 100 percent (100%) of the recommended facility targets within their assigned roles. Airport roles and facility targets were discussed in depth in Chapter 4. Facility targets by role can also be found in **Table 6-17** at the end of this chapter.

- Overall, 61 percent (61%) of airports are meeting 100 percent (100%) of facility targets by role.
- Improvements are needed to increase the percentage of Enhanced Service and General Service airports meeting all facility targets (33% and 23%, respectively).
- All Local airports are meeting 100 percent (100%) of targets for its role, in part because there are few recommended targets.
- A comparable performance measure was not included as part of the 2004 system plan.

**Figure 6-7** illustrates the percentage of airports meeting or not meeting all of the facility targets. **Table 6-6** lists the airports that are not meeting the objective. **Table 6-19** located at the end of this chapter indicates whether airports meet targets for their role.

**Figure 6-7: Airports Meeting 100% of Facility Targets by Role**



Source: Airport manager survey

**Table 6-6: Airports Not Meeting 100% of Facility Targets**

Commercial Service	Enhanced Service	General Service	Basic Service	Local
Mason City	Ames	Algona	Bloomfield	(none)
Waterloo	Carroll	Atlantic	Clarinda	
	Clinton	Centerville	Manchester	
	Council Bluffs	Cherokee	Rock Rapids	
	Fairfield	Creston	Sibley	
	Independence	Decorah	Sioux Center	
	Iowa City	Forest City	Winterset	
	Marshalltown	Grinnell		
	Muscatine	Hampton		
	Newton	Harlan		
		Iowa Falls		
		Knoxville		
		Le Mars		
		Mount Pleasant		
		Oelwein		
		Orange City		
		Osceola		
		Pella		
		Perry		
		Sheldon		
		Storm Lake		
		Vinton		
		Washington		
		Webster City		

Source: Airport manager survey

### 6.2.b Percentage of Airports Meeting at Least 75 Percent (75%) of Service Targets

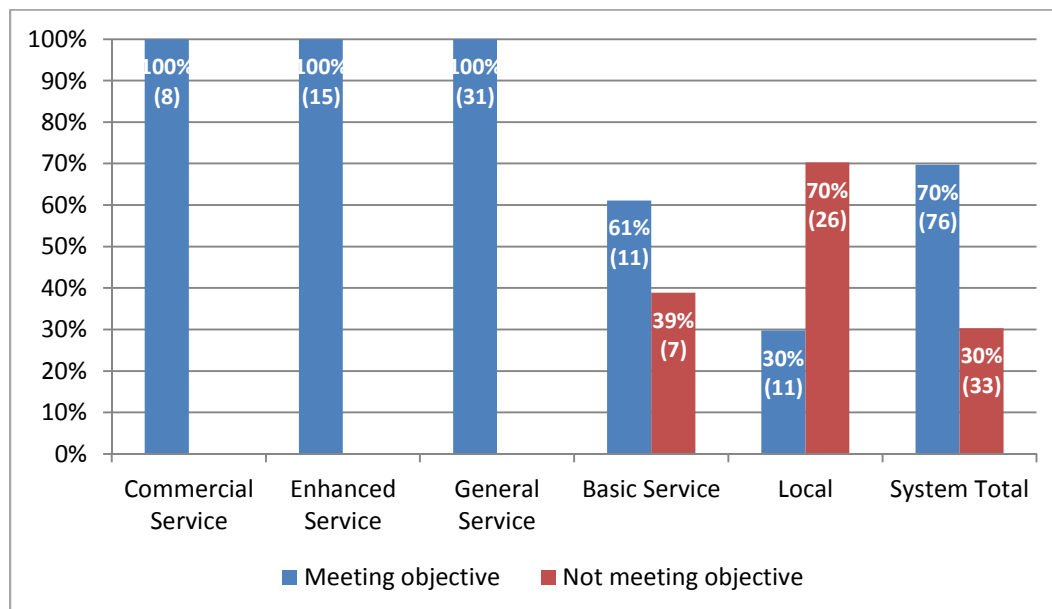
– The levels and types of services provided at an airport varies based upon the demands of its users. Airports serving a wider variety of users are expected to provide more advanced levels of services. Targets were identified to meet user needs based upon roles. Airport roles and service targets were discussed in depth in Chapter 4. Service targets by role can also be found in **Table 6-18** at the end of this chapter.

To meet the needs of the aviation users, airports should meet at least 75 percent (75%) of the service targets for their role.

- Overall, 70 percent (70%) of airports are meeting or exceeding this level of performance.
- All Commercial Service, Enhanced Service and General Service airports are achieving desired performance.
- Only 30 percent (30%) of Local airports are meeting at least 75 percent (75%) of the targets.
- The 2004 system plan did not include a comparable performance measure.

**Figure 6-8** illustrates the percentage of airports meeting at least 75 percent (75%) of the service targets. Airports that are not meeting this desired level of targets are listed in **Table 6-7**. **Table 6-20** at the end of this chapter identifies whether or not airports meet service targets established for their role.

**Figure 6-8: Airports Meeting 75% of Service Targets**



Source: Airport manager survey

**Table 6-7: Airports Not Meeting 75% of Service Targets**

Commercial Service	Enhanced Service	General Service	Basic Service	Local	
(none)	(none)	(none)	Chariton	Albia	Monona
			Emmetsburg	Anita	Mount Ayr
			Fort Madison	Audubon	Northwood
			Greenfield	Bedford	Onawa
			Manchester	Cresco	Osage
			Pocahontas	Eagle Grove	Paullina
			West Union	Eldora	Primghar
				Grundy Center	Spirit Lake
				Humboldt	Sully
				Ida Grove	Toledo
				Keosauqua	Traer
				Lake Mills	Waukon
				Lamoni	Woodbine

Source: Airport manager survey

#### 6.2.c Percentage of Airports With A Primary Runway Pavement Condition Index (PCI) Rating of 70 or Greater

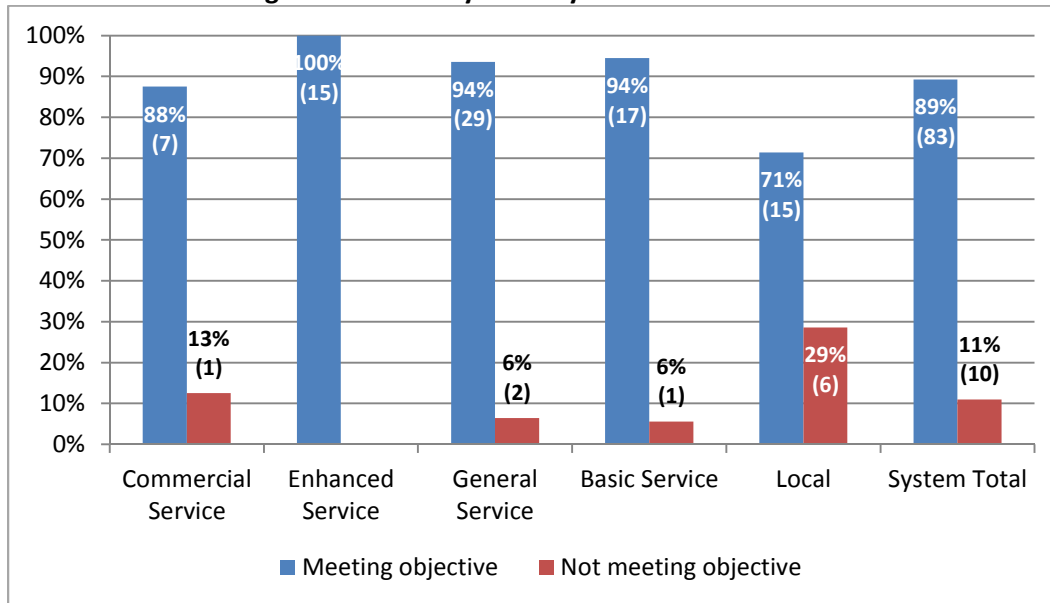
The Pavement Condition Index (PCI) is a standard that rates the condition of a pavement surface based on a visual assessment. Pavements rated at 100 are considered to be in excellent condition while those with serious defects are rated at 0. Runways with a PCI rating less than 70 generally require more costly repair beyond routine maintenance. Airports with a primary runway rating of 70 or greater are maintaining runway pavements in a condition that supports the goal of providing adequate infrastructure. The overall pavement rating for each airport is calculated by the Iowa Department of Transportation – Office of Aviation (Office of Aviation) when airport pavement inspections are performed on three year cycles. Ratings analyzed for this evaluation utilized the Office of Aviation database and took into consideration recently completed pavement projects that were completed after the most recent inspection.



- Overall, airports are performing well with 89 percent (89%) maintaining their primary runway to a PCI rating of 70 or greater.
- The percentage of airports meeting this measure increased thirteen percent (13%) from the analysis performed for the 2004 system plan. This increase can be contributed to the success of cooperative runway pavement maintenance efforts by the Office of Aviation, the FAA and individual airports.

**Figure 6-9** presents the percentages of airports achieving this performance while **Table 6-8** lists those with a primary runway PCI rating of less than 70.

**Figure 6-9: Primary Runway PCI of 70 or Greater**



Source: Airport manager survey

**Table 6-8: Airports with Primary Runway PCI Less Than 70**

Commercial Service	Enhanced Service	General Service	Basic Service	Local
Fort Dodge	(none)	Orange City Perry	Bloomfield	Audubon Guthrie Center Humboldt Milford New Hampton Waverly

Source: 2010 Airport Manager Survey

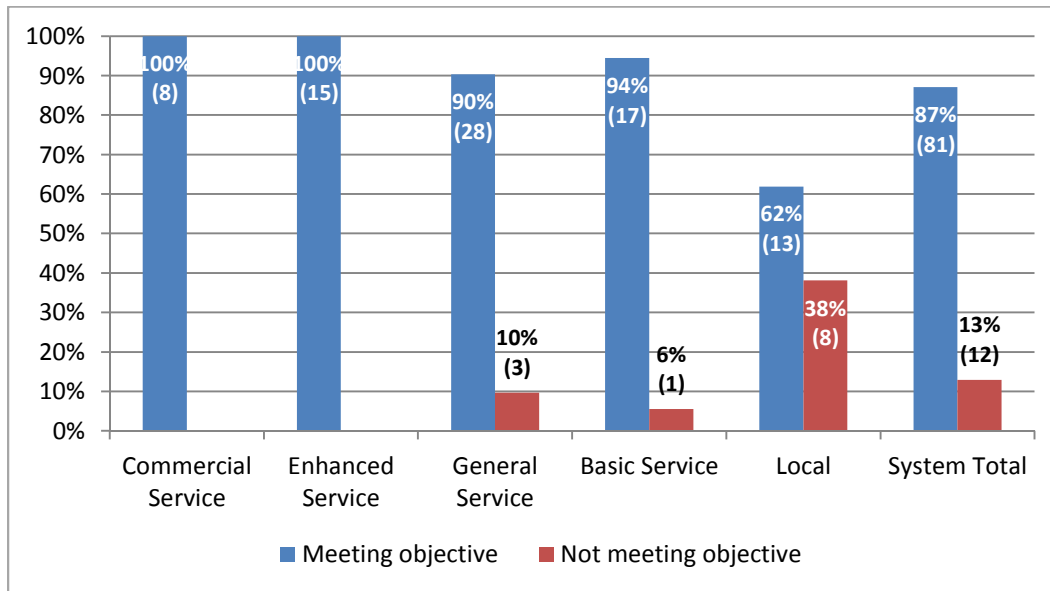
#### 6.2.d Percentage of Airports With An Overall Pavement Condition Index (PCI)

**Rating of 70 or Greater** – The Office of Aviation maintains an overall PCI rating for each airport based on the average of individual PCI ratings for runways, taxiways, and ramps. Airports with an overall rating of 70 or greater are maintaining all airfield pavements in a condition that supports the goal of providing adequate infrastructure. The overall pavement rating for each airport is calculated by the Office of Aviation when airport inspections are performed on three year cycles. Ratings analyzed for this evaluation utilized the Office of Aviation database and took into consideration recently completed pavement projects that may have not been included in the most recent inspection.

- Overall, 87 percent (87%) of airports have an overall PCI rating of 70 or greater.
- An overall airport pavement PCI rating was not measured as part of the 2004 system plan.

**Figure 6-10** illustrates the percentages of airports achieving this performance with **Table 6-9** lists those airports with an overall airfield PCI of less than 70.

**Figure 6-10: Overall Airport PCI of 70 or Greater**



Source: Airport manager survey

**Table 6-9: Airports with an Overall PCI of Less Than 70**

Commercial Service	Enhanced Service	General Service	Basic Service	Local
(none)	(none)	Le Mars Orange City Perry	Bloomfield	Audubon Cresco Guthrie Center Humboldt Milford New Hampton Osage Waverly

Source: Airport manager survey

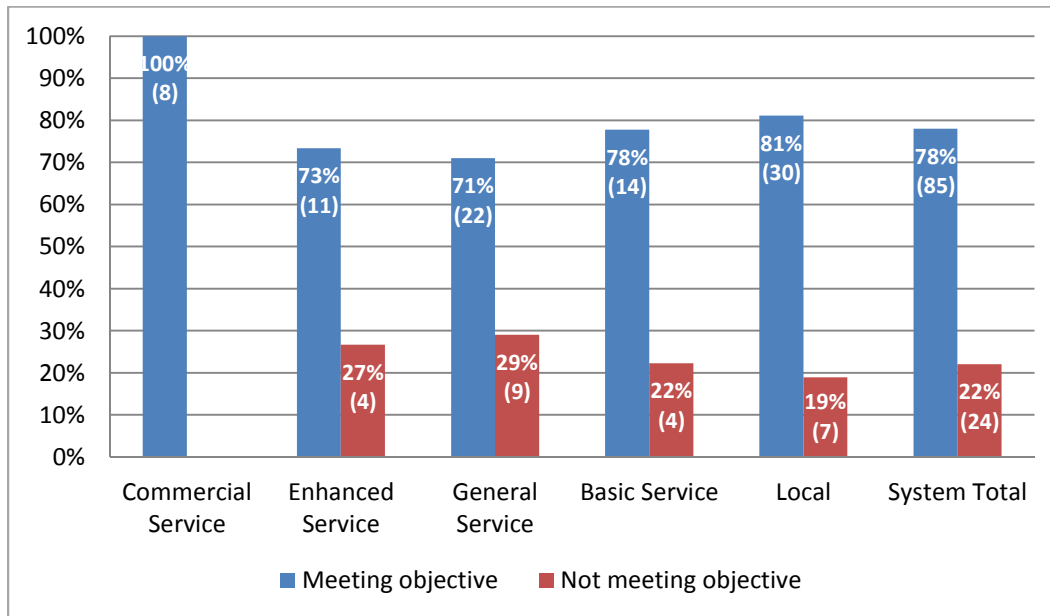
**6.2.e Percentage of Airports With Covered Storage for All Based Aircraft** – Storing aircraft in hangars protects the aircraft from adverse environmental conditions and provides a level of security at the airport. To determine whether an airport had adequate storage for based aircraft, the number of based aircraft reported by airport managers was compared to the number of parking spaces at each hangar reported on the Airport Manager Survey.

- Overall, 78 percent (78%) of airports have covered storage for all based aircraft.
- A thirteen percent (13%) increase in the number of airports meeting this performance measure was experienced from the 2004 system plan, a result of state and federal investment in new hangar construction.

**Figure 6-11** illustrates the percentages of airports by role while **Table 6-10** lists those that do not have covered storage for all based aircraft.



**Figure 6-11: Covered Storage for All Based Aircraft**



Source: Airport manager survey

**Table 6-10: Airports Not Meeting Covered Storage for All Based Aircraft**

Commercial Service	Enhanced Service	General Service	Basic Service	Local
(none)	Clinton	Atlantic	Clarinda	Anita
	Council Bluffs	Decorah	Manchester	Eagle Grove
	Iowa City	Knoxville	Sioux Center	Humboldt
	Muscatine	Le Mars	Winterset	Maquoketa
		Monticello		Rockwell City
		Oelwein		Spirit Lake
		Pella		Toledo
		Sheldon		
		Storm Lake		

Source: Airport manager survey

**6.2.f Summary of Gaps in Meeting the Infrastructure and User Support Goal** – The following summary lists the performance measures where improvements are needed to achieve the Infrastructure and User Support goal.

- **Airports Meeting 100 percent (100%) of Facility Targets** – Facility improvements are needed for Enhanced and General Service airports to meet 100 percent (100%) of targets.
- **Airports Meeting 75 percent (75%) of Service Targets** – Increased services are needed at Local airports to meet at least 75 percent (75%) of targets.

### 6.3 System Performance – Accessibility

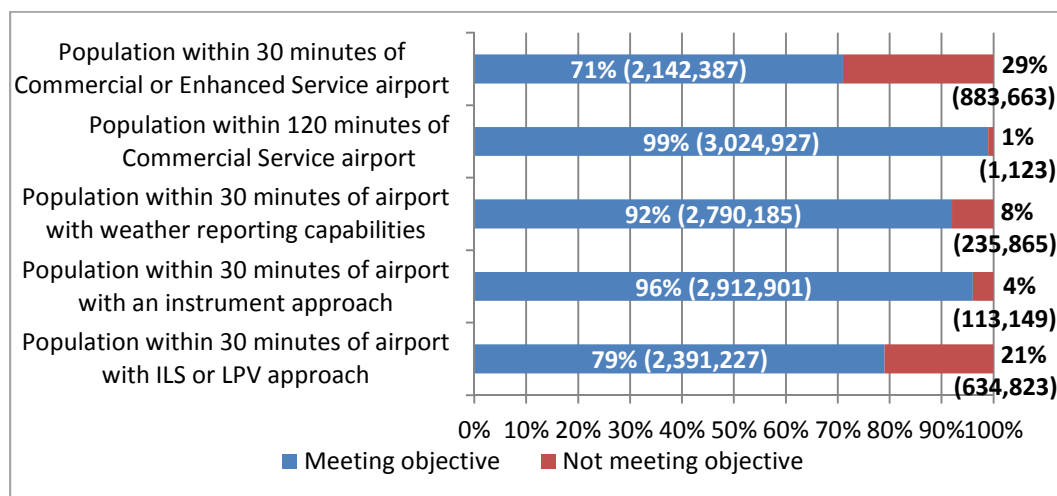
Providing accessibility to airports by ground and air is an important goal for the system. Five drive time measures were established to evaluate the level of accessibility airports provide to the state's population:

- Percentage of population within 30 minutes of a Commercial Service or Enhanced Service airport.
- Percentage of population within 120 minutes (two hours) of a Commercial Service airport.
- Percentage of population within 30 minutes of an airport with weather reporting capabilities.
- Percentage of population within 30 minutes of an airport with an instrument approach.
- Percentage of population within 30 minutes of an airport with an Instrument Landing System (ILS) or Localizer Performance with Vertical Guidance (LPV) approach.

Using the Iowa DOT Travel Analysis Model (iTRAM), a network of travel times based on the posted speed limit of interstate highways, state trunk lines, and local roads was established so that drive time analyses could be performed. Utilizing historic population and employment counts as maintained by the State of Iowa, 2009 data was estimated through interpolation and inserted into the travel model to measure the population within each drive time criteria. The results of these analyses indicate that airports are performing well towards supporting the objectives of the Accessibility goal.

**Figure 6-12** summarizes the percentage of the population within the defined drive time buffers for each performance measure. Evaluation of each is presented in the following sections.

**Figure 6-12: Performance Summary – Accessibility**

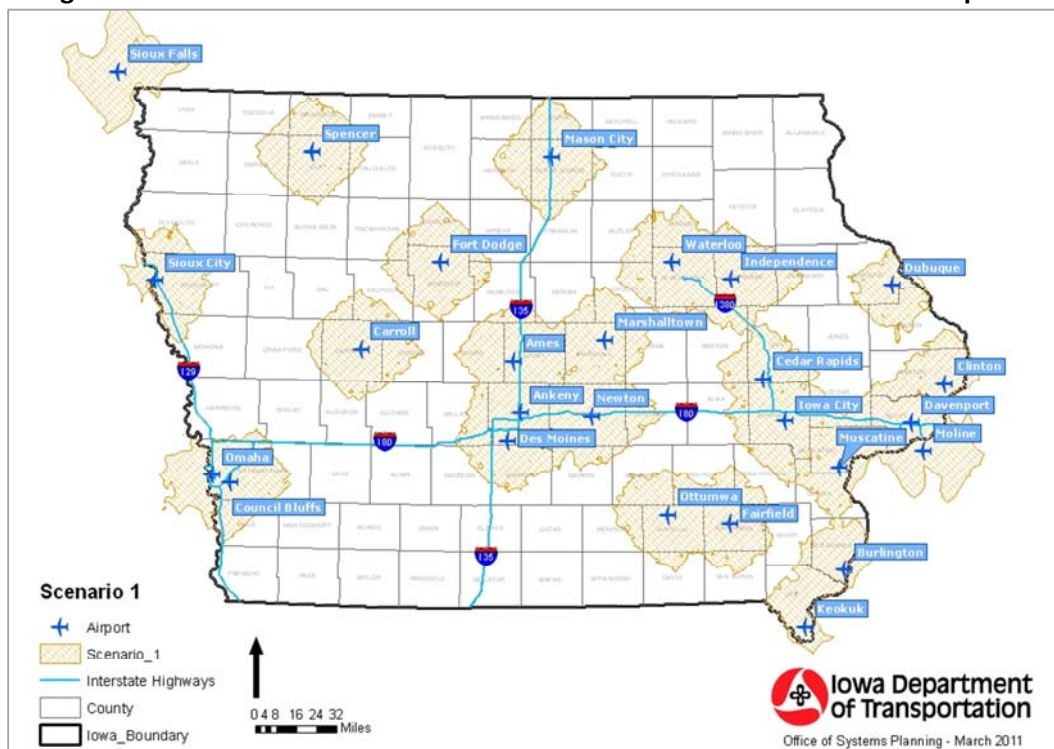


**6.3.a Percentage of Population Within 30 Minutes of a Commercial or Enhanced Service Airport** – Airports with infrastructure and services to meet most business needs (Commercial Service and Enhanced Service airports) should be accessible to most of the population.

- Evaluation found 71 percent (71%) of the Iowa population is within a 30 minute drive of a Commercial or Enhanced Service airport.
- Though a similar measure was conducted for the 2004 system plan, the 2010 evaluation cannot be compared, as a result of the change in criteria classifying airports in the Enhanced Service role.

The geographic coverage for the 30 minute drive time for Commercial Service and Enhanced Service airports is shown in **Figure 6-13**.

**Figure 6-13: 30 Minute Drive Times of Commercial and Enhanced Service Airports**



Source: Iowa DOT Travel Analysis Model (iTRAM), Iowa DOT Office of Systems Planning

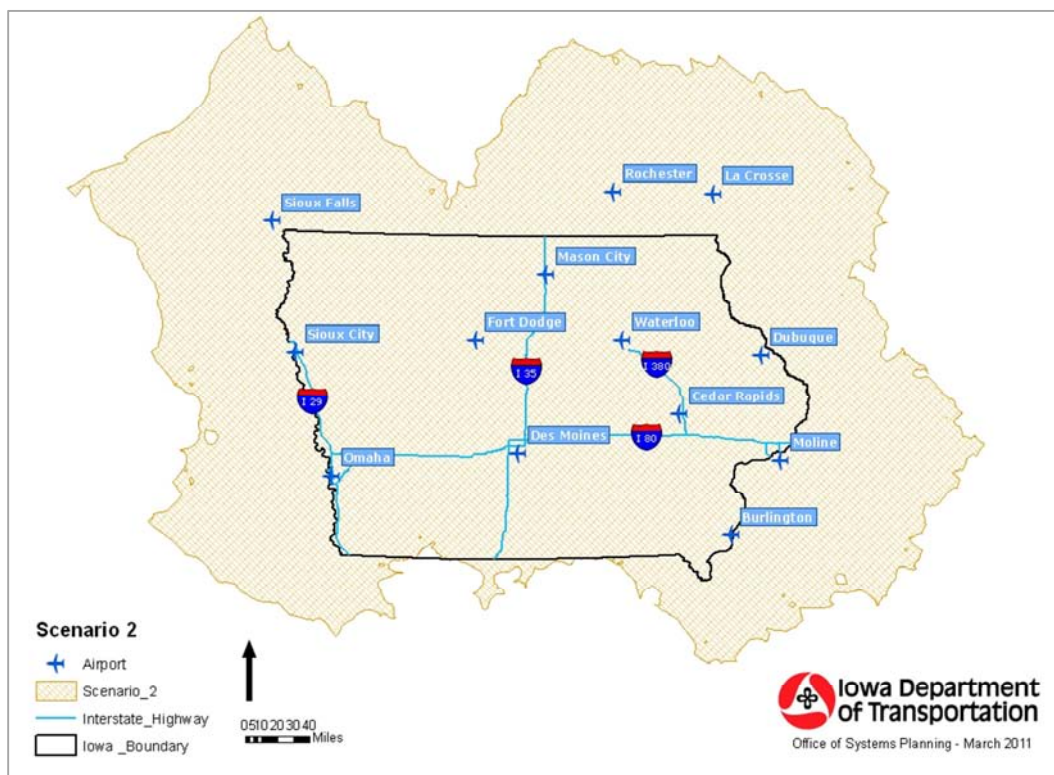
### 6.3.b Percentage of Population Within 120 Minutes of a Commercial Service Airport –

The Office of Aviation also determined that access to a Commercial Service airport within 120 minute drive for the majority of the population provides effective commercial service accessibility. Out of state commercial service airports within close proximity to Iowa's border including Omaha (Nebraska), Sioux Falls (South Dakota), Rochester (Minnesota), La Crosse (Wisconsin), and Moline (Illinois) were also included in this evaluation. **Figure 6-14** illustrates the 120 minute drive time geographic boundaries.



- More than 99 percent (99%) of the population is within a two hour drive of a Commercial Service airport.
- Percentage of population within 120 minutes is the same found during the 2004 system plan.

**Figure 6-14: 120 Minute Drive Times from Commercial Service Airports**

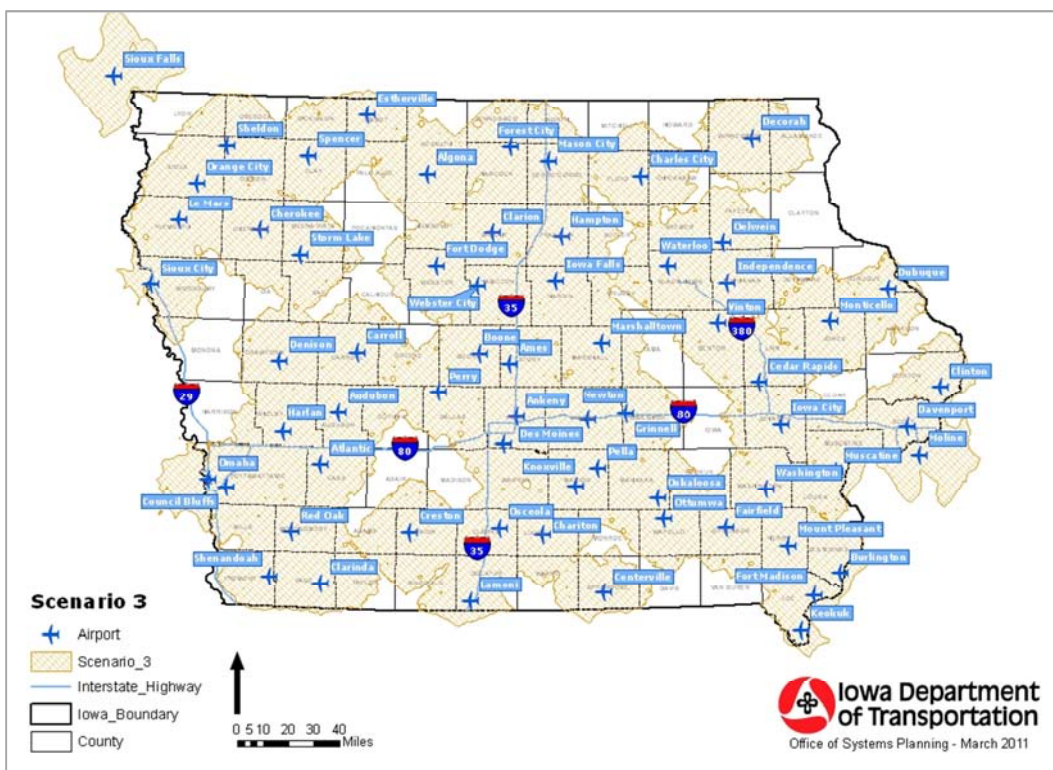


Source: Iowa DOT Travel Analysis Model (iTRAM), Iowa DOT Office of Systems Planning

**6.3.c Percentage of Population Within 30 Minutes of an Airport With Weather Reporting Equipment** – Airports with weather reporting equipment, either an Automated Weather Observing System (AWOS) or Automated Surface Observing System (ASOS), are capable of providing accurate weather information. A geographically dispersed network of airports capable of providing accurate weather information increases accessibility during conditions that may impact flight operations. **Figure 6-15** illustrates the geographic boundary of the 30 minute service area.

- Most of the population (92%) is within a 30 minute drive of an airport with weather reporting capabilities.
- A six percent (6%) increase in the coverage area, as compared to the 2004 system plan analysis, can be attributed to the addition of six of the seven sites recommended in the 2004 plan.

**Figure 6-15: 30 Minute Drive Times from Airports with Weather Reporting Equipment**



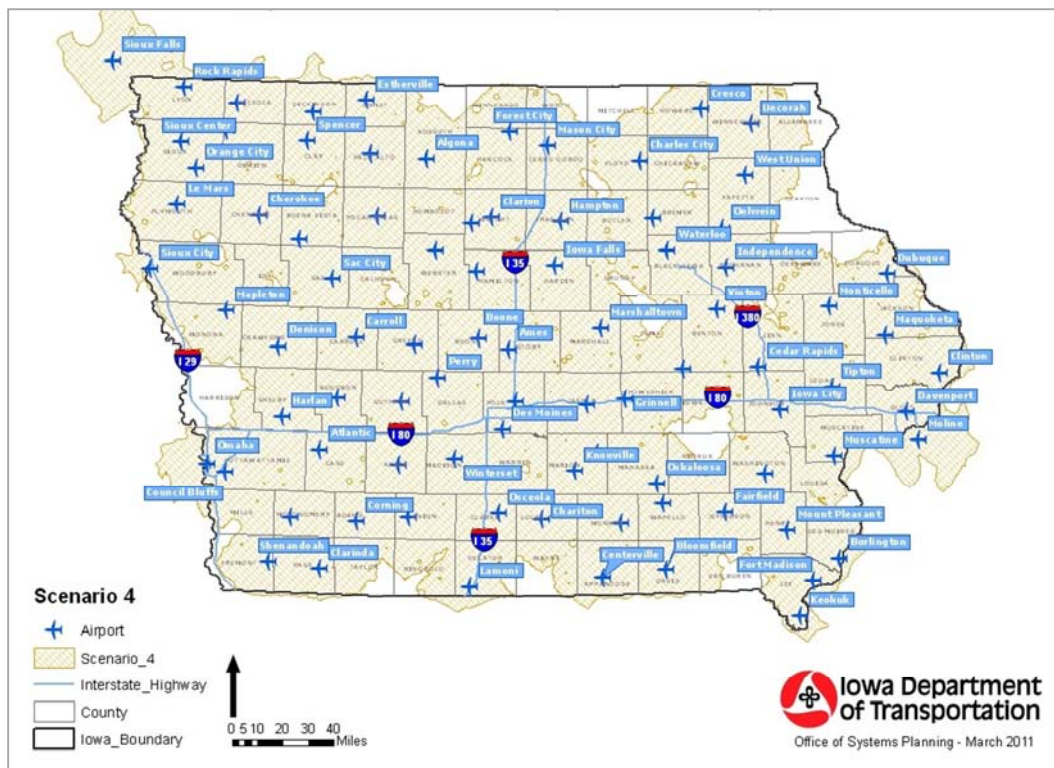
Source: Iowa DOT Travel Analysis Model (iTRAM), Iowa DOT Office of Systems Planning



**6.3.d Percentage of Population Within 30 Minutes of an Airport With an Instrument Approach** – Instrument approaches contribute to the accessibility of an airport by providing a means for aircraft to conduct landings during conditions that limit visibility. A high percentage of the population within proximity of an airport with these capabilities increases the accessibility of the system. The geographic service area for percentage of population within a 30 minute drive from an airport with an instrument approach is presented in **Figure 6-16**.

- Currently 96 percent (96%) of the population is within a 30 minute drive of an airport with an instrument approach.
- No significant changes occurred in the coverage area since the 2004 system plan.

**Figure 6-16: 30 Minute Drive Times of Airports with Instrument Approaches**



Source: Iowa DOT Travel Analysis Model (iTRAM), Iowa DOT Office of Systems Planning

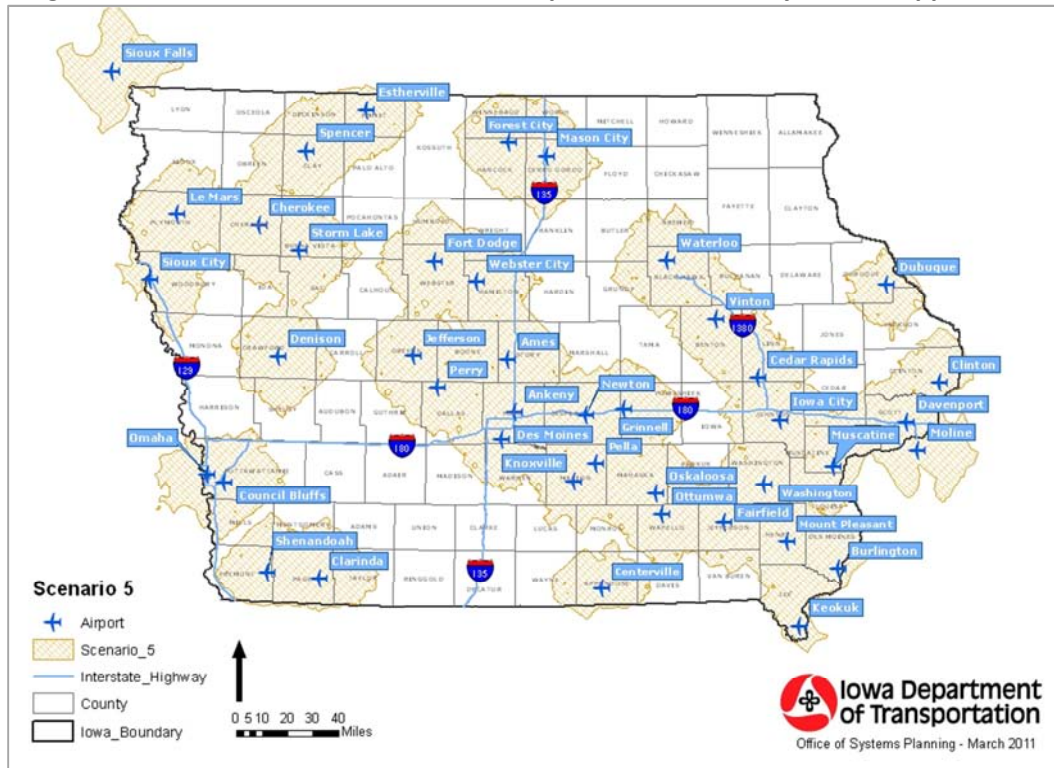
**6.3.e Percentage of Population Within 30 Minutes of an Airport With A Vertically Guided Approach** – Vertically guided approaches include those with Instrument Landing Systems (ILS) or Localizer with Vertical Guidance (LPV) that provide vertical and horizontal guidance for properly equipped aircraft when landing. These types of approaches allow aircraft to land in conditions with low visibility and/or cloud ceilings, contributing to the level of accessibility.



**Figure 6-17** illustrates the 30 minute drive time coverage for airports with vertically guided approaches.

- Overall, 79 percent (79%) of the population is within a 30 minute drive of an airport with an ILS or LPV.
- Installation of additional vertically guided approaches since the 2004 plan is reflected by the 25 percent (25%) increase in population that falls within this service area.

**Figure 6-17: 30 Minute Drive Time from Airports with Vertically Guided Approaches**



Source: Iowa DOT Travel Analysis Model (iTRAM), Iowa DOT Office of Systems Planning

**6.3.f Summary of Gaps in Meeting the Accessibility Goal** – The 2010 analyses showed that the system provides adequate coverage for all Accessibility performance measures.

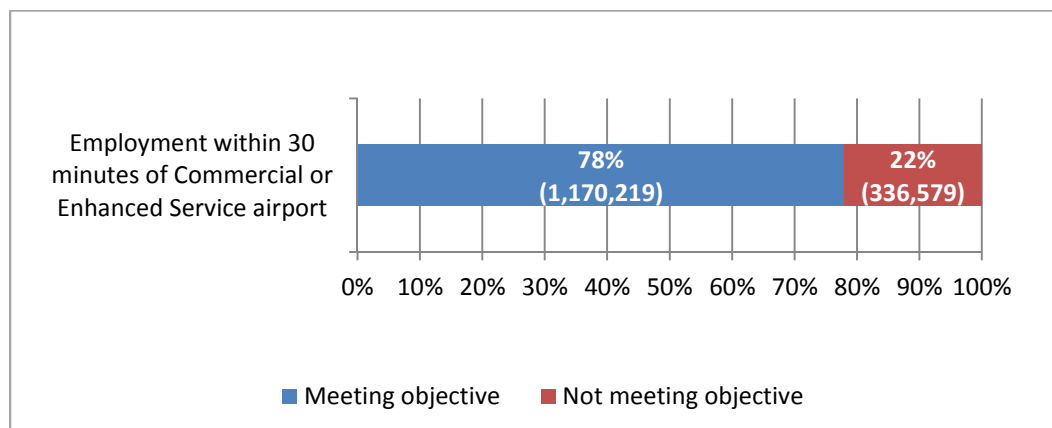
## 6.4 System Performance – Economic Support

Airports facilitate the efficient and effective movement of people, goods, and services and can serve as an economic catalyst to the local and state economy. Airports are important assets to the communities and businesses. Objectives for this goal are more difficult to measure. Although data was available to measure only one of the three objectives, it is important to monitor this goal to determine effectiveness of the air transportation system in supporting economic development. The following performance measures were established to evaluate how well the system is meeting the Economic Support goal:

- Percentage of airports that have coordinated with local economic development, chamber of commerce, city, and county officials to include airport information in business promotional materials.
- Percent of employment within 30 minutes of a Commercial Service or Enhanced Service airport.

**Figure 6-18** summarizes how well the system is meeting the objectives of the Economic Support goal for the one for which there is data. The lack of a quantifiable method to measure the level of coordination with local economic officials for the inclusion of airport information in business promotional materials prevents a statistical analysis to be performed for this performance measure.

**Figure 6-18: Performance Summary – Economic Support**



**6.4.a Percentage of Airports With Information Included in Business Promotional Materials** – The inclusion of information in business promotional materials helps demonstrate the economic benefits of an airport to existing and potential businesses.

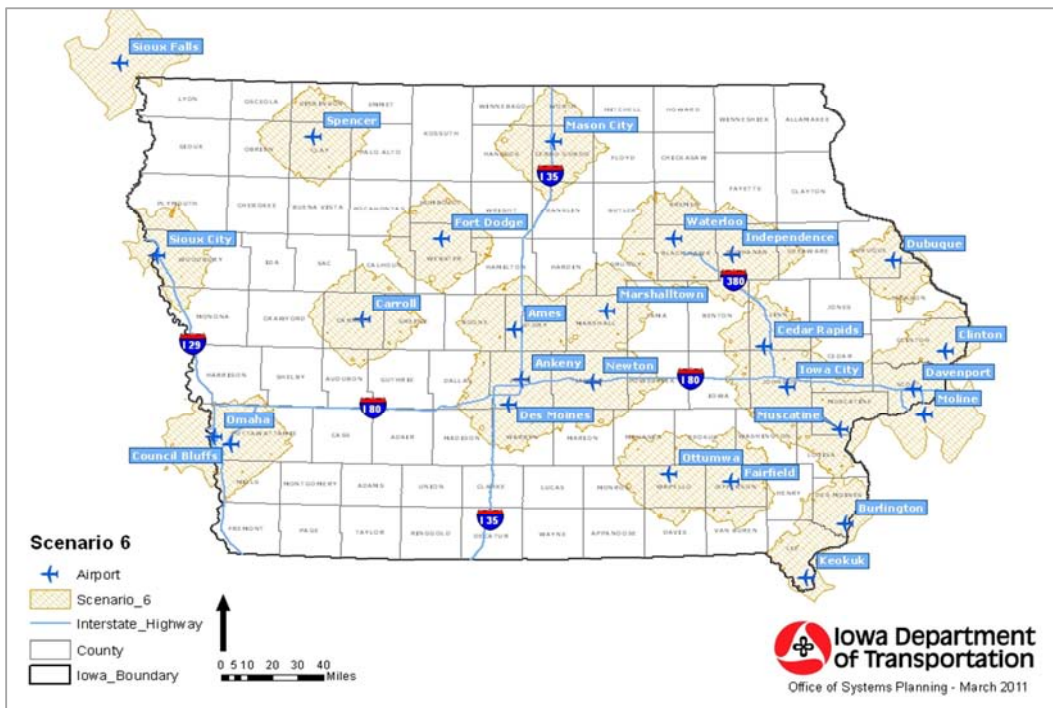


Information on facilities and services included in these materials help contribute to the attractiveness of the region and enhances the level of support the airport provides to area businesses. No statistical analyses were conducted to measure the level of performance due to the lack of a specific quantitative methodology. Instead, success can be measured by cooperative relationships that are established with local economic development offices, chambers of commerce, and city and county officials.

**6.4.b Percentage of Employment Within 30 Minutes of a Commercial or Enhanced Service Airport** – Commercial and Enhanced Service airports play a more significant role within the aviation system because of the higher level of facilities and services they provide to aviation users. Location of these airports in proximity to a majority of the employment in the state helps contribute to the Economic Support goal. Evaluation of the percentage of employment within a 30 minute drive time provides a means to evaluate the level of support offered by these airports. The geographic boundaries for employment within a 30 minute drive time of Commercial Service and Enhanced Service airports are illustrated in **Figure 6-19**.

- Approximately seventy-eight percent (78%) of the employment is located within a 30 minute drive of a Commercial or Enhanced Service airport.
- An equal comparison with the analysis performed for the 2004 system plan cannot be achieved due to a change in the criteria classifying Enhanced Service airports for the 2010 plan.

**Figure 6-19: Employment within 30 Minutes of a Commercial or Enhanced Airport**



Source: Iowa DOT Travel Analysis Model (iTRAM), Iowa DOT Office of Systems Planning

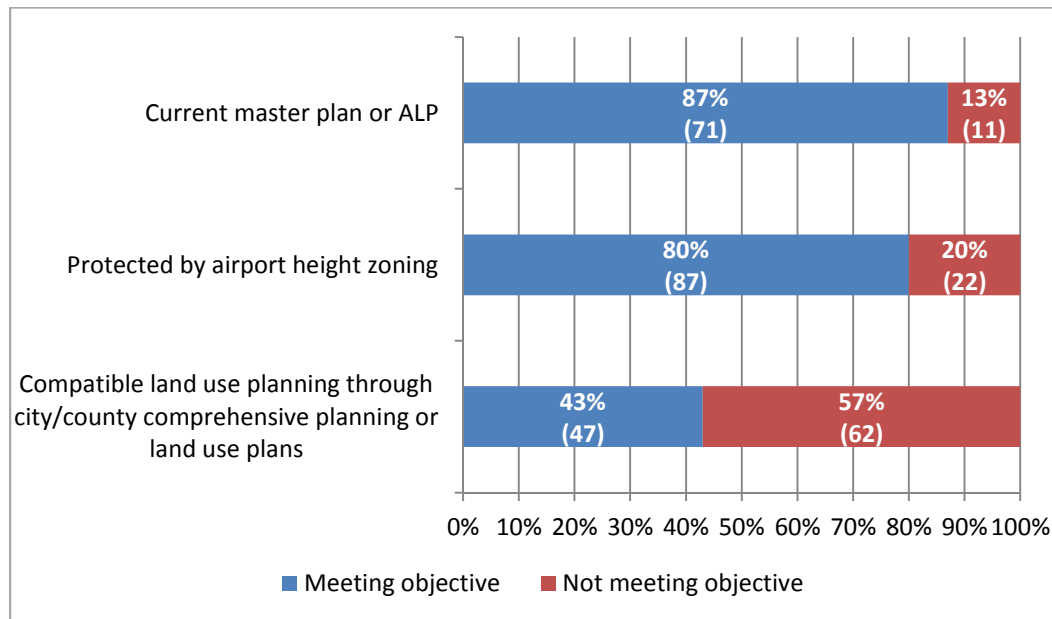
## 6.5 System Performance – Planning

The Planning goal is focused on establishing local initiatives that help guide the development and operation of airports. These initiatives help identify future levels of aviation activity and recommend infrastructure improvements to meet demand. Community planning can also help an airport mitigate height obstructions and incompatible land use, providing long term viability for the airport. Performance measures established to assess the progress towards achieving the Planning goal are as follows:

- Percentage of airports with a current master plan or Airport Layout Plan.
- Percentage of airports protected by a height zoning ordinance.
- Percentage of airports with compatible land use planning through city/county comprehensive planning or land use plans.

**Figure 6-20** summarizes the percentage of airports achieving the desired level of performance for each measure.

**Figure 6-20: Performance Summary – Planning**



Review of the summary indicates that while 87 percent (87%) of airports have a current master plan or ALP and 80 percent (80%) are protected by height zoning, improvement is needed to increase the number of airports with compatible land use planning through city/county comprehensive planning or land use plans. The following sections discuss these individual measures and review performance for each by airport role.

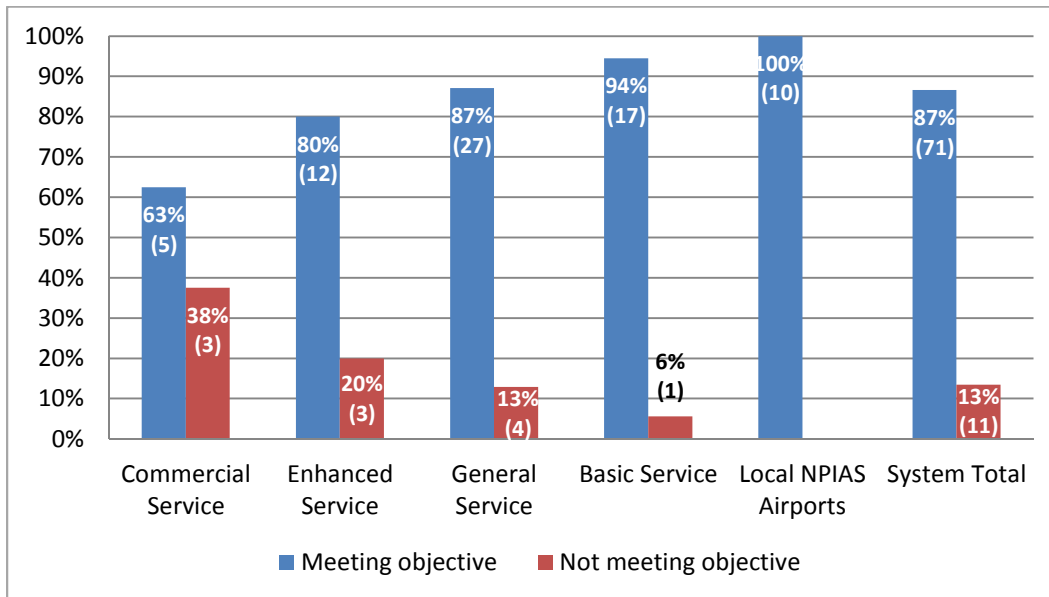
#### **6.5.a Percentage of Airports With Current Master Plan and/or Airport Layout Plan –**

Airport master plans and Airport Layout Plans (ALPs) are documents that address improvements necessary for an airport to meet future demand. System performance is measured by the percent of airports that have current plans, with the target set for every eight years for Commercial and Enhanced Service airports and every ten years for General Service airports. Basic Service airports meet the objective if they have a plan in place and no plan is targeted for Local airports. Results for this performance measure are as follows:

- Overall, eighty-seven percent (87%) of airports have a current master plan or ALP in accordance with the timeline for their assigned role.
- Only sixty-three percent (63%) of Commercial Service have an approved plan within the last eight years. However, all of those without a current plan are in various stages of development or approval of an update.
- Eighty percent (80%) of Enhanced Service airports have updated their respective documents within the last eight years.
- Within the last ten years, eighty-seven percent (87%) of General Service airports have updated their ALPs.
- Ninety-four percent (94%) of Basic Service airports have an ALP.
- Since an ALP is a requirement to receive federal funds for airport development projects, all of the Basic Service airports classified in the NPIAS have an ALP.
- A two percent (2%) decrease in the number of airports with current master plans or ALPs was experienced from the 2004 system plan. The percentage of airports that meet this objective will vary over time as plans become outdated.

**Figure 6-21** illustrates the percentages for the airports while **Table 6-11** identifies those airports without a current master plan or ALP. All of the airports included in **Table 6-11** are in the process of updating their ALP.

**Figure 6-21: Current Master Plan and/or Airport Layout Plan**



Source: Office of Aviation

**Table 6-11: Airports without a Current Master Plan and/or Airport Layout Plan**

Commercial Service	Enhanced Service	General Service	Basic Service	Local NPIAS
Burlington Fort Dodge Waterloo	Council Bluffs Davenport Fairfield	Estherville Oskaloosa Pella Sheldon	Manchester	(none)

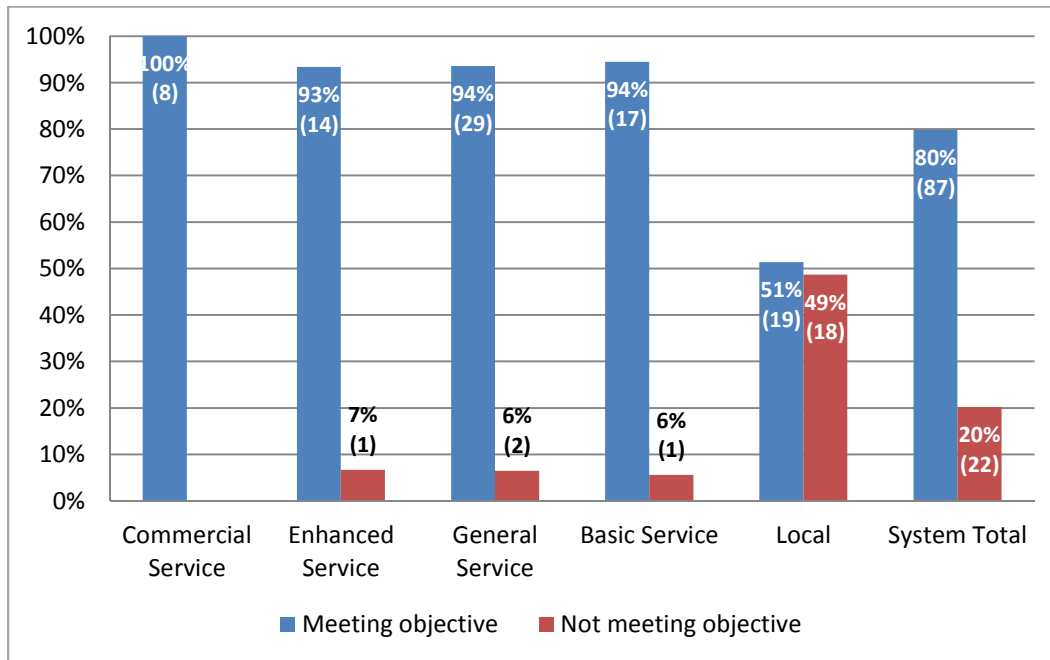
Source: Office of Aviation

**6.5.b Percentage of Airports Protected by Local Height Zoning** – Airports that coordinate with local communities to enact height zoning ordinances take proactive steps to protect air space for aircraft operations.

- All of the Commercial Service airports are protected by a local zoning ordinance.
- Most Enhanced Service (93%), General Service (94%), and Basic Service (94%) airports have height zoning.
- Only fifty-one percent (51%) of Local airports are protected by local height zoning.
- A comparable performance measure was not conducted in the 2004 system plan.

**Figure 6-22** illustrates the percentages of airports meeting the desired performance while **Table 6-12** lists the airports not protected by height zoning.

**Figure 6-22: Airport Height Zoning in Place**



Source: Airport manager survey

**Table 6-12: Airports Not Protected By Height Zoning**

Commercial Service	Enhanced Service	General Service	Basic Service	Local
(none)	Marshalltown	Atlantic Centerville	Sioux Center	Albia Allison Anita Bedford Eldora Guthrie Center Keosauqua Lake Mills Lamoni Mapleton Northwood Paullina Primghar Spirit Lake Sully Tipton Toledo Woodbine

Source: Airport manager survey

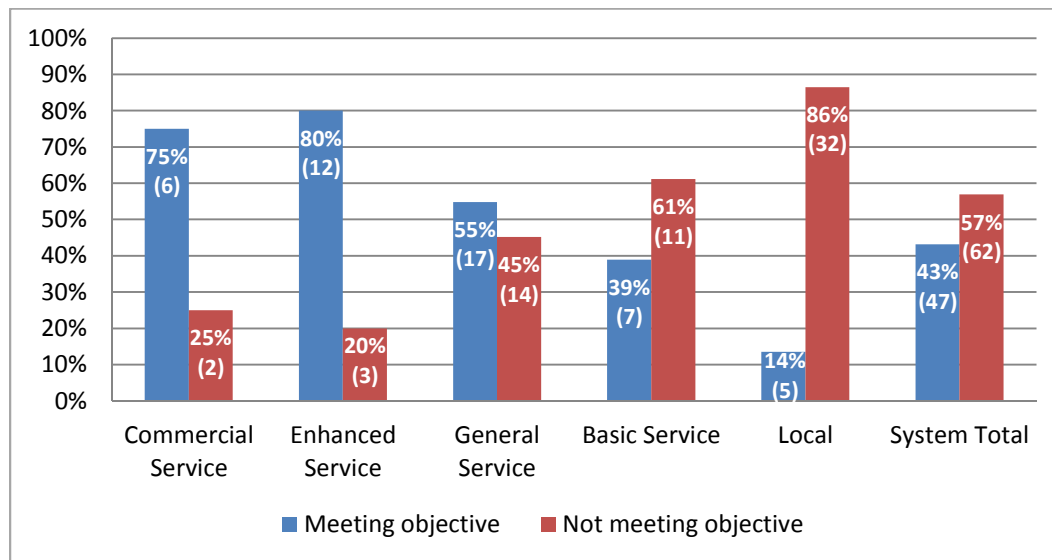
**6.5.c Percentage of Airports With Compatible Land Use Planning Through City/County Comprehensive Planning or Land Use Plans** – City and county comprehensive plans and land use plans that support compatible land use development near airports help airports maintain safe operations and the viability of the aviation

system. The percentage of airports that have achieved cooperative efforts with city and county officials to address compatible land uses through local planning documents provide a measure of how well the aviation system is planning for the continued effective use of the airports within the system.

- Overall, only 43 percent (43%) of airports have land use planning addressed by a city or county comprehensive plan or land use plan.
- A high percent of Commercial and Enhanced Service airports have land use plans, 75 percent (75%) and 80 percent (80%), respectively.
- Additional coordination is needed to increase the number of General Service, Basic Service and Local airports with compatible land use addressed through city or county plans.

A summary of the percentage of airports meeting this performance measure is illustrated in **Figure 6-23**, while airports without compatible land use planning are listed in **Table 6-13**.

**Figure 6-23: Inclusion of Airport in City or County Comprehensive or Land Use Plans**



Source: Airport manager survey

**Table 6-13: Airports Not Included in City or County Comprehensive or Land Use Plans**

Commercial Service	Enhanced Service	General Service	Basic Service	Local	
Dubuque	Clinton	Algona	Bloomfield	Albia	Milford
Sioux City	Davenport	Atlantic	Clarinda	Allison	Monona
	Newton	Centerville	Fort Madison	Anita	Mount Ayr
		Creston	Greenfield	Audubon	Northwood
		Estherville	Manchester	Bedford	Osage
		Forest City	Pocahontas	Belmond	Paullina
		Hampton	Sac City	Corning	Primghar
		Le Mars	Shenandoah	Eagle Grove	Rockwell City
		Mount Pleasant	Sibley	Eldora	Spirit Lake
		Oelwein	Sioux Center	Grundy Center	Sully
		Osceola	Winterset	Guthrie Center	Tipton
		Oskaloosa		Humboldt	Toledo
		Pella		Keosauqua	Traer
		Perry		Lamoni	Waukon
				Mapleton	Waverly
				Maquoketa	Woodbine

Source: Airport manager survey

**6.5.d Summary of Gaps in Achieving the Planning Goal** – The system is performing well in the percentage of airports with current Airport Layout Plans and Height Zoning. Below is a summary of the gaps in meeting the objectives and necessary improvements to achieve the Planning goal.

- **Compatible land use through city or county comprehensive plans or land use plans** – An increase is needed in the number of General Service, Basic Service and Local airports with compatible land uses addressed in city or county comprehensive plans or land use plans.

## 6.6 System Performance – Education and Outreach

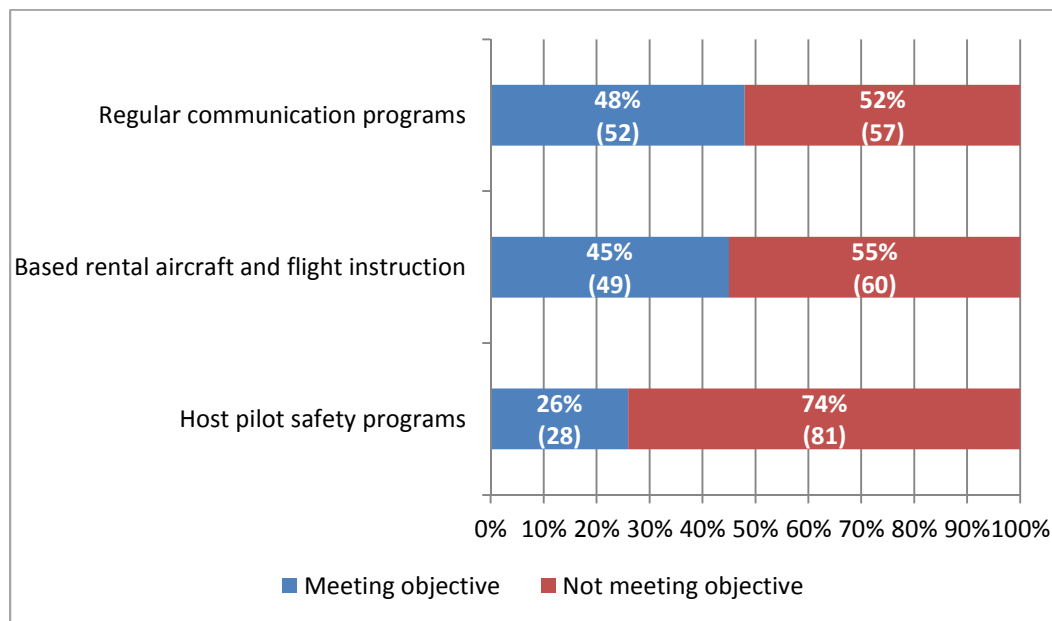
Education and public outreach are necessary elements for the continued growth of aviation within Iowa. Allowing the general public to interact with an airport while presenting the benefits of aviation helps strengthen community relationships and fosters a better understanding of the aviation industry. Additionally, hosting events and programs that educate the local aviation community contribute to a safer flying public and helps increase an interest in aviation with children and young adults. Achieving this goal is dependent upon airports embracing education and outreach efforts at the local level. The following performance measures evaluate how well the system is achieving the Education and Outreach goal:

- Percent of airports with regular communication programs.
- Percent of airports with based rental aircraft and regular flight instruction.
- Percent of airports that host pilot safety programs.

- Airports host annual aviation events.
- Airports host additional types of public events.
- Airports host organized youth education activities.

A summary of the performance measures with available data obtained by the Airport Manager Survey are presented in **Figure 6-24**. Measures without data available to analyze should be reviewed during a future survey effort.

**Figure 6-24: Performance Summary – Education and Outreach**



Evaluation of the quantitative measures indicates additional improvements are needed to meet the objectives. Additional improvements as outlined by the remaining measures will help guide future progress towards achieving the Education and Outreach goal. The following sections review these measures and the level of performance of each by system role. Methods to achieve desired performance by those measures that could not be evaluated by statistical analyses are also discussed.

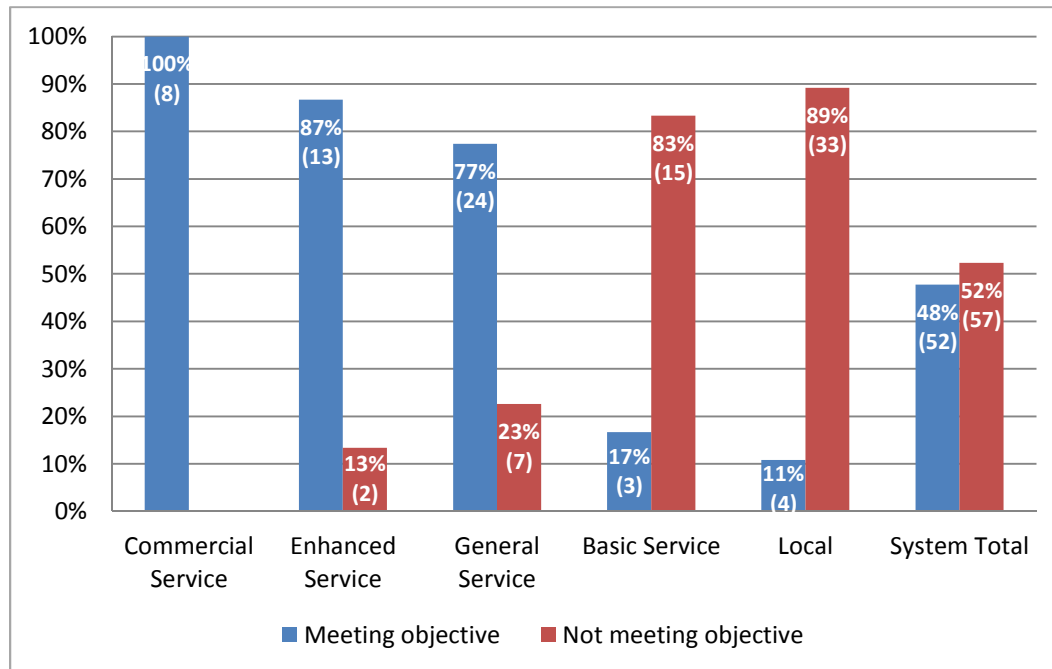
**6.6.a Percentage of Airports With Regular Communication Programs** – Regular communication programs such as newsletters, press releases, web sites, and social media provide an avenue to keep people informed on recent airport news and events.

- Overall, 48 percent (48%) of airports have established such programs.
- Successful performance is achieved by Commercial Service (100%), Enhanced Service (87%), and General Service (77%) airports.
- An increase in the number of regular communication programs is needed at Basic Service and Local airports.
- A similar performance measure was not conducted for the 2004 system plan.



**Figure 6-25** illustrates the percentage of airports that have established such programs. Airports that do not have communication programs are listed in **Table 6-14**.

**Figure 6-25: Regular Communication Programs**



Source: Airport manager survey

**Table 6-14: Airports without Regular Communication Programs**

Commercial Service	Enhanced Service	General Service	Basic Service	Local	
(none)	Muscatine Ottumwa	Algona Centerville Decorah Forest City Grinnell Hampton Orange City	Belle Plaine Bloomfield Chariton Clarinda Clarion Emmetsburg Greenfield Jefferson Rock Rapids Sac City Shenandoah Sibley Sioux Center West Union Winterset	Albia Allison Anita Audubon Bedford Belmond Corning Cresco Eagle Grove Eldora Grundy Center Guthrie Center Humboldt Ida Grove Keosauqua Lake Mills Mapleton	Maquoketa Milford Monona Mount Ayr Northwood Onawa Osage Paullina Primghar Rockwell City Spirit Lake Sully Toledo Traer Waukon Waverly

Source: Airport manager survey

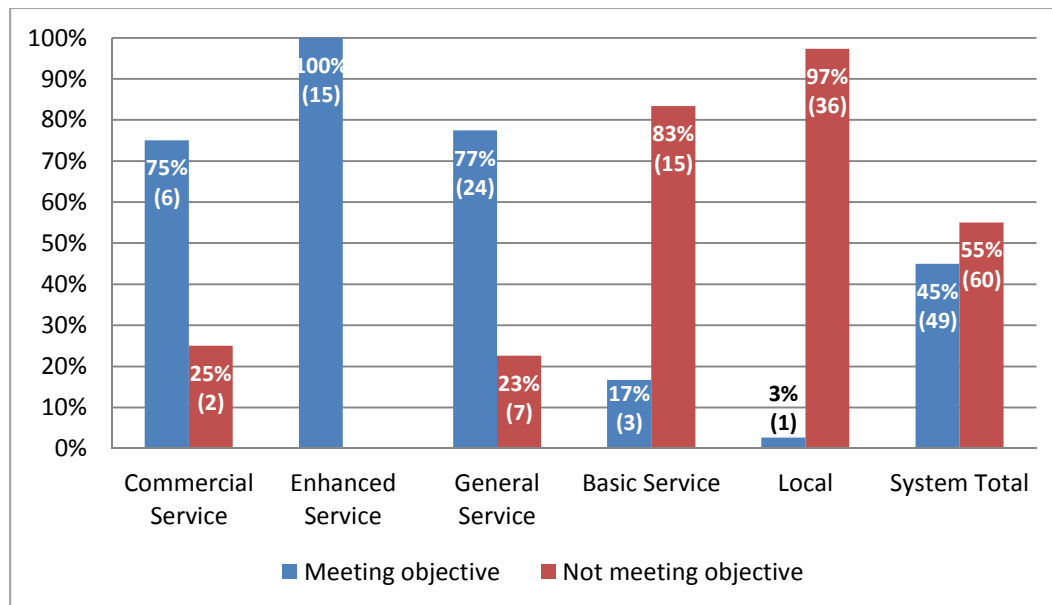
**6.6.b Percentage of Airports With Based Rental Aircraft and Flight Instruction Availability** – The availability of rental aircraft and flight instruction allows an airport to provide both educational and outreach opportunities. Those with an interest towards earning a pilot's license or those who need to rent an aircraft are able to do so at airports that provide these services. For an airport to achieve this objective, both based rental aircraft and available flight instruction must be present.



- More than 75 percent (75%) of Commercial Service, Enhanced Service, and General Service airports are achieving this performance.
- Only seventeen percent (17%) and three percent (3%) of Basic Service and Local airports, respectively, have based rental aircraft and flight instruction.
- An analysis of airports with both based rental aircraft and flight instruction was not performed as part of the 2004 system plan.

**Figure 6-26** presents the percent of airports that offer both services while **Table 6-15** lists those where it is unavailable.

**Figure 6-26: Availability of Both Based Rental Aircraft and Flight Instruction**



Source: Airport manager survey

**Table 6-15: Airports without Both Based Rental Aircraft and Flight Instruction**

Commercial Service	Enhanced Service	General Service	Basic Service	Local	
Des Moines	(none)	Algona	Belle Plaine	Albia	Maquoketa
Dubuque		Creston	Chariton	Allison	Milford
		Hampton	Clarinda	Anita	Monona
		Oelwein	Clarion	Audubon	Mount Ayr
		Perry	Emmetsburg	Bedford	New Hampton
		Red Oak	Fort Madison	Belmond	Northwood
		Vinton	Greenfield	Corning	Onawa
			Jefferson	Cresco	Osage
			Manchester	Eagle Grove	Paullina
			Rock Rapids	Eldora	Primghar
			Sac City	Grundy Center	Rockwell City
			Shenandoah	Guthrie Center	Spirit Lake
			Sibley	Humboldt	Sully
			West Union	Ida Grove	Tipton
			Winterset	Keosauqua	Toledo
				Lake Mills	Traer
				Lamoni	Waukon
				Mapleton	Woodbine

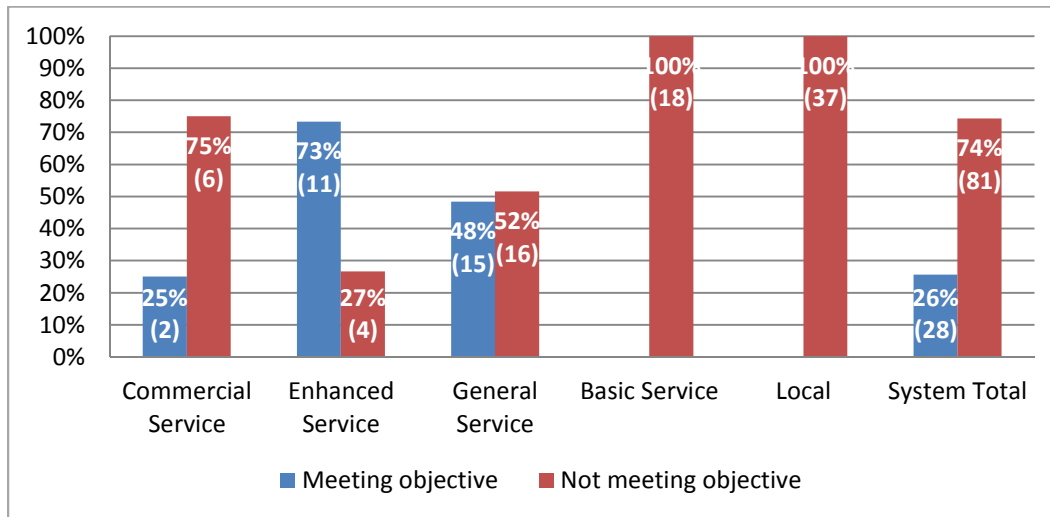
Source: Airport manager survey

**6.6.c Percentage of Airports That Host Pilot Safety Programs** – Airports hosting pilot safety programs help educate pilots on safe aircraft operating procedures while keeping them informed on regulatory changes and updated risk management techniques. A high percentage of airports hosting these programs help to achieve the Education and Outreach goal.

- Overall, only twenty-six percent (26%) of airports host pilot safety programs.
- Enhanced Service airports lead all roles with seventy-three percent (73%) meeting the desired performance.
- Programs are not being hosted at Basic Service or Local airports.
- A comparable measure was not conducted for the 2004 system plan.

The percentages of airports hosting these programs are presented in **Figure 6-27**. **Table 6-16** lists the airports not meeting this objective.

**Figure 6-27: Pilot Safety Programs**



Source: Airport manager survey

**Table 6-16: Airports without Pilot Safety Programs**

Commercial Service	Enhanced Service	General Service	Basic Service	Local	
Des Moines	Ames	Centerville	Belle Plaine	Albia	Milford
Dubuque	Muscatine	Charles City	Bloomfield	Allison	Monona
Fort Dodge	Newton	Cherokee	Chariton	Anita	Mount Ayr
Mason City	Ottumwa	Creston	Clarinda	Audubon	New Hampton
Sioux City		Decorah	Clarion	Bedford	Northwood
Waterloo		Estherville	Emmetsburg	Belmond	Onawa
		Forest City	Fort Madison	Corning	Osage
		Grinnell	Greenfield	Cresco	Paullina
		Hampton	Jefferson	Eagle Grove	Primghar
		Osceola	Manchester	Eldora	Rockwell City
		Oskaloosa	Pocahontas	Grundy Center	Spirit Lake
		Perry	Rock Rapids	Guthrie Center	Sully
		Red Oak	Sac City	Humboldt	Tipton
		Storm Lake	Shenandoah	Ida Grove	Toledo
		Vinton	Sibley	Keosauqua	Traer
		Washington	Sioux Center	Lake Mills	Waukon
			West Union	Lamoni	Waverly
			Winterset	Mapleton	Woodbine
				Maquoketa	

Source: 2010 Airport Manager Survey

**6.6.d Airports Host Annual Aviation Events** – Hosting annual aviation events helps bring residents of local communities to an airport to experience aviation. Providing events that allow the general public to interact with the aviation community helps support the goal of Education and Outreach. The lack of data prevented a statistical analysis of this objective. It is recommended that data be collected during the next survey effort to identify current performance. Airports without annual aviation events are encouraged to

establish such programs to strengthen support in meeting the Education and Outreach goal.

**6.6.e Airports Host Additional Types of Public Events**

– Hosting aviation and non-aviation related public events at airports helps area residents gain a better understanding of the importance of aviation and view the airport as an asset. Data from each airport was not collected during this study but should be gathered during the next survey effort. Airports are encouraged to host events such as open houses, tours, and provide the use of facilities such as conference rooms, empty hangars, or other available spaces for meetings, conferences, and other after business hours events to help build and strengthen community relationships.



**6.6.f Airports Host Organized Youth Educational Activities** – Future growth of aviation is dependent upon successful efforts towards increasing interest among youth and young adults. Efforts undertaken by airports to provide these opportunities help support the Education goal. Data from each airport was not collected during this study but should be gathered during the next survey effort. Youth camps sponsored by the Iowa Aviation Promotion Group were held at eleven airports, reaching 370 youth during 2010. Young Eagles events, job shadowing, and internships are additional activities that airports could participate to help achieve the Education and Outreach goal.

**6.6.g Summary of Gaps in Meeting Education and Outreach Goal** – Improvements to the following objectives would increase the participation by airports to help achieve the Education and Outreach goal:

- **Regular Communication Programs** – An increase is needed in the number of Basic Service and Local airports with regular communication programs.
- **Airports with Based Rental Aircraft and Available Flight Instruction** – Increasing the availability of based rental aircraft and flight instruction at General Service airports and providing access to rental aircraft and flight instruction at Basic Service and Local airports would help achieve the Education goal.
- **Airports That Host Pilot Safety Programs** – Additional Commercial Service, General Service, Basic Service, and Local airports to host pilot safety programs is needed to provide additional safety education to pilots.
- **Airports That Host Annual Aviation Events** – Increased efforts are needed by airports to organize and host annual aviation events such as fly-ins and air shows.

- **Airports That Host Additional Types of Events** – Increasing the number of airports that host additional types of events such as open houses, tours, conferences, and meetings would help achieve the Education and Outreach goal.
- **Airports That Host Organized Youth Educational Activities** – Additional progress is necessary to increase the number of airports that host youth educational activities such as aviation camps, Young Eagles programs, and internships.

## 6.7 Summary

Strengths and gaps in performance are identified based on a review of how well the measures are being met. Measures where a high percentage of airports are meeting or exceeding a defined infrastructure condition or level of service illustrate areas where the needs of users are being adequately met. Gaps are identified when the percentage of airports not meeting a desired performance are greater than those achieving the measure. These shortcomings are used to focus plan recommendations to increase the support of each goal for the benefits of the system. Gaps in performance will be further addressed with corresponding recommendations in Chapter 8 of the report.

**Table 6-17: Facility Targets by Role**

Target Description	Commercial Service/Enhanced Targets	General Service Targets	Basic Service Targets	Local Targets
<b>Airside Facilities</b>				
Airport Reference Code	C-II	B-II	B-I or below	A-I
Primary Runway Length	Minimum 5,000 ft	Minimum 4,000 ft	3,000 ft	Not an objective
Primary Runway Width	Minimum 100 ft	Minimum 75 ft	Minimum 60 ft	Minimum 50 ft
Type of Parallel Taxiway	Full parallel	Turnarounds meet standards (both ends)	Exits as needed	Not an objective
Type of Runway Approach	Vertical guidance	Non-precision	Visual	Visual
Runway Lighting	MIRL	MIRL	LIRL	Not an objective
Taxiway Lighting	MTL	MTL	Not an objective	Not an objective
Visual Guidance Slope Indicator	Both runway ends (or ILS)	Both runway ends	Not an objective	Not an objective
Runway End Identifier Lights - as required	Both runway ends (or ILS)	Both runway ends	Not an objective	Not an objective
Rotating Beacon	Yes	Yes	Yes	Not an objective
Lighted Wind Indicator	Yes - multiple as needed	Yes	If open for night	If open for night
RCO Facilities	Tower or RCO	Not an objective	Not an objective	Not an objective
Wind coverage or crosswind runway	Crosswind runway or 95% wind coverage for NPIAS facilities	Crosswind runway or 95% wind coverage for NPIAS facilities	Not an objective	Not an objective
<b>Landside Facilities</b>				
Covered storage	100% of based aircraft	100% of based aircraft	100% of based aircraft	Not an objective
Overnight storage for business aircraft	Typical average aircraft/business user demand	Typical average aircraft/business user demand	Not an objective	Not an objective
Aircraft apron	100% of average daily transients	100% of average daily transients	50% of average daily transients	Not an objective
Terminal/administration building	Yes	Yes	Waiting area	Not an objective
Paved entry/terminal parking	Yes	Yes	Not an objective	Not an objective

**Table 6-18: Service Targets by Role**

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

Note: Targets highlighted in green are requirements as part of the role classification

**Table 6-19: Summary of Facility Targets**

Performance Towards Meeting Facility Targets By Role  
(n/a = not a target)

Role	Airport	ARC	Primary Rwy Length	Primary Rwy Width	Parallel Twy	Rwy Aprpr	Rwy Lighting	Twy Lighting	VGSI	REIL	Rotating Beacon	Lighted Wind Indicator	RCO Facility	Wind Coverage/Crosswind Runway	Covered Storage for Based Aircraft	Overnight Storage for Business Aircraft	Aircraft Apron	Terminal/Admin Building	Paved Entry/Terminal Parking
Commercial	Burlington	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Commercial	Cedar Rapids	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Commercial	Des Moines (International)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Commercial	Dubuque	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Commercial	Fort Dodge	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Commercial	Mason City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Commercial	Sioux City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Commercial	Waterloo	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Enhanced	Ames	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Enhanced	Ankeny	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Carroll	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Clinton	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes
Enhanced	Council Bluffs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Enhanced	Davenport	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Fairfield	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Independence	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Enhanced	Iowa City	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Enhanced	Keokuk	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Marshalltown	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Muscatine	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Enhanced	Newton	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Enhanced	Ottumwa	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Spencer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
General	Algona	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	Yes
General	Atlantic	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	No	No	Yes	Yes	Yes
General	Boone	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	No	Yes	Yes	Yes

Source: Airport manager survey



**Table 6-19: Summary of Facility Targets**

Performance Towards Meeting Facility Targets By Role  
(n/a = not a target)

Role	Airport	ARC	Primary Rwy Length	Primary Rwy Width	Parallel Twy	Rwy Aprpr	Rwy Lighting	Twy Lighting	VGSI	REIL	Rotating Beacon	Lighted Wind Indicator	RCO Facility	Wind Coverage/Crosswind Runway	Covered Storage for Based Aircraft	Overnight Storage for Business Aircraft	Aircraft Apron	Terminal/Admin Building	Paved Entry/Terminal Parking
General	Centerville	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No	Yes	Yes	Yes	Yes	Yes
General	Charles City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	Yes
General	Cherokee	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No	Yes	Yes	No	Yes	No
General	Creston	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	No
General	Decorah	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No	No	Yes	Yes	Yes	Yes
General	Denison	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	Yes
General	Estherville	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	No	Yes	Yes	Yes
General	Forest City	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	No	Yes	Yes	Yes
General	Grinnell	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No	Yes	No	Yes	Yes	Yes
General	Hampton	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No	Yes	No	Yes	Yes	Yes
General	Harlan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	n/a	Yes	Yes	No	Yes	Yes	Yes
General	Iowa Falls	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No	Yes	No	Yes	Yes	Yes
General	Knoxville	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No	No	Yes	Yes	Yes	Yes
General	Le Mars	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No	No	Yes	Yes	Yes	Yes
General	Monticello	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	No	Yes	Yes	Yes	Yes
General	Mount Pleasant	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	Yes
General	Oelwein	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	n/a	Yes	No	No	Yes	Yes	Yes
General	Orange City	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	n/a	No	Yes	No	Yes	Yes	Yes
General	Osceola	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No	Yes	No	Yes	Yes	Yes
General	Oskaloosa	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	Yes
General	Pella	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No	No	Yes	No	Yes	Yes
General	Perry	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	No	Yes	Yes	Yes
General	Red Oak	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	Yes
General	Sheldon	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No	No	Yes	Yes	Yes	Yes
General	Storm Lake	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	No	No	No	Yes	Yes
General	Vinton	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	No	Yes	Yes	Yes

Source: Airport manager survey

**Table 6-19: Summary of Facility Targets**

Performance Towards Meeting Facility Targets By Role  
(n/a = not a target)

Role	Airport	ARC	Primary Rwy Length	Primary Rwy Width	Parallel Twy	Rwy Apr	Rwy Lighting	Twy Lighting	VGSI	REIL	Rotating Beacon	Lighted Wind Indicator	RCO Facility	Wind Coverage/Crosswind Runway	Covered Storage for Based Aircraft	Overnight Storage for Business Aircraft	Aircraft Apron	Terminal/Admin Building	Paved Entry/Terminal Parking
General	Washington	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	No	No	Yes	Yes
General	Webster City	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	No	No	Yes	Yes
Basic	Belle Plaine	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Bloomfield	Yes	Yes	No	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Chariton	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Clarinda	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	No	n/a	Yes	Yes	n/a
Basic	Clarion	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Emmetsburg	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Fort Madison	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Greenfield	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Jefferson	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Manchester	Yes	Yes	No	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	No	n/a	Yes	Yes	n/a
Basic	Marion	Yes	Yes	Yes	Yes	Yes	No	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Pocahontas	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Rock Rapids	Yes	Yes	No	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Sac City	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Shenandoah	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Sibley	Yes	Yes	No	Yes	Yes	Yes	n/a	n/a	n/a	No	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Sioux Center	Yes	Yes	No	Yes	Yes	No	n/a	n/a	n/a	No	Yes	n/a	n/a	No	n/a	Yes	Yes	n/a
Basic	West Union	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
Basic	Winterset	Yes	Yes	No	Yes	Yes	Yes	n/a	n/a	n/a	Yes	Yes	n/a	n/a	No	n/a	Yes	Yes	n/a
Local	Ackley	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Albia	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Allison	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Amana	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Anita	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Source: Airport manager survey

**Table 6-19: Summary of Facility Targets**

Performance Towards Meeting Facility Targets By Role  
(n/a = not a target)

Role	Airport	ARC	Primary Rwy Length	Primary Rwy Width	Parallel Twy	Rwy Aprpr	Rwy Lighting	Twy Lighting	VGSI	REIL	Rotating Beacon	Lighted Wind Indicator	RCO Facility	Wind Coverage/Crosswind Runway	Covered Storage for Based Aircraft	Overnight Storage for Business Aircraft	Aircraft Apron	Terminal/Admin Building	Paved Entry/Terminal Parking
Local	Audubon	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Bedford	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Belmond	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Corning	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Cresco	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Des Moines (Morningstar)	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Dyersville	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Eagle Grove	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Eldora	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Elkader	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Grundy Center	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Guthrie Center	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Humboldt	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Ida Grove	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Keosauqua	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Lake Mills	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Lamoni	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Larchwood	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Mapleton	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Maquoketa	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Milford	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Monona	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Montezuma	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Mount Ayr	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	New Hampton	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Northwood	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Source: Airport manager survey

**Table 6-19: Summary of Facility Targets**

Performance Towards Meeting Facility Targets By Role  
(n/a = not a target)

Role	Airport	ARC	Primary Rwy Length	Primary Rwy Width	Parallel Twy	Rwy Apr	Rwy Lighting	Twy Lighting	VGSI	REIL	Rotating Beacon	Lighted Wind Indicator	RCO Facility	Wind Coverage/ Crosswind Runway	Covered Storage for Based Aircraft	Overnight Storage for Business Aircraft	Aircraft Apron	Terminal/ Admin Building	Paved Entry/ Terminal Parking
Local	Onawa	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Osage	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Paullina	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Primghar	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Rockwell City	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Spirit Lake	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Sully	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Tipton	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Toledo	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Traer	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Waukon	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Waverly	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Local	Woodbine	Yes	n/a	Yes	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Source: Airport manager survey

**Table 6-20: Summary of Service Targets**

		Performance Towards Meeting Service Targets By Role (n/a = not a target)															
Role	Airport	Fuel (Type & Hours)	Weekday Hours	Weekend Hours	Ground Transportation	Food & Beverage	Posted Contact Info	Internet Access	Restroom	Pilot Area	Security Plan	Snow Removal	Rental Aircraft	Flight Training	Aircraft Maintenance/ Repair	Aircraft Charter	Weather Reporting/ Flight Planning
Commercial	Burlington	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Commercial	Cedar Rapids	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Commercial	Des Moines (International)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Commercial	Dubuque	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Commercial	Fort Dodge	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Commercial	Mason City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Commercial	Sioux City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Commercial	Waterloo	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Ames	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Ankeny	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Carroll	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Clinton	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Enhanced	Council Bluffs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Davenport	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Enhanced	Fairfield	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Independence	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Enhanced	Iowa City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Keokuk	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Enhanced	Marshalltown	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Muscatine	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Enhanced	Newton	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Enhanced	Ottumwa	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced	Spencer	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
General	Algona	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
General	Atlantic	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
General	Boone	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
General	Centerville	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
General	Charles City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
General	Cherokee	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes

Source: Airport manager survey

**Table 6-20: Summary of Service Targets**

		Performance Towards Meeting Service Targets By Role (n/a = not a target)															
Role	Airport	Fuel (Type & Hours)	Weekday Hours	Weekend Hours	Ground Transportation	Food & Beverage	Posted Contact Info	Internet Access	Restroom	Pilot Area	Security Plan	Snow Removal	Rental Aircraft	Flight Training	Aircraft Maintenance/ Repair	Aircraft Charter	Weather Reporting/ Flight Planning
General	Creston	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes
General	Decorah	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
General	Denison	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
General	Estherville	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
General	Forest City	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
General	Grinnell	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
General	Hampton	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes
General	Harlan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes
General	Iowa Falls	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
General	Knoxville	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
General	Le Mars	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
General	Monticello	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
General	Mount Pleasant	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
General	Oelwein	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
General	Orange City	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
General	Osceola	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
General	Oskaloosa	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
General	Pella	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
General	Perry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes
General	Red Oak	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes
General	Sheldon	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
General	Storm Lake	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
General	Vinton	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
General	Washington	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
General	Webster City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Basic	Belle Plaine	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	No	n/a	No	n/a
Basic	Bloomfield	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	Yes	n/a	No	n/a
Basic	Chariton	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	No	Yes	n/a	No	n/a	No	n/a
Basic	Clarinda	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	No	n/a	No	n/a

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Basic	Clarion	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	No	n/a	No	n/a
Basic	Emmetsburg	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	No	Yes	n/a	No	n/a	No	n/a
Basic	Fort Madison	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	No	Yes	n/a	No	n/a	No	n/a
Basic	Greenfield	Yes	Yes	No	n/a	n/a	Yes	n/a	Yes	n/a	No	Yes	n/a	No	n/a	No	n/a
Basic	Jefferson	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	No	n/a	No	n/a
Basic	Manchester	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	No	Yes	n/a	No	n/a	No	n/a
Basic	Marion	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	Yes	n/a	Yes	n/a
Basic	Pocahontas	Yes	No	No	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	Yes	n/a	No	n/a
Basic	Rock Rapids	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	No	n/a	No	n/a
Basic	Sac City	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	Yes	n/a	No	n/a
Basic	Shenandoah	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	Yes	n/a	No	n/a
Basic	Sibley	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	Yes	n/a	No	n/a
Basic	Sioux Center	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	Yes	Yes	n/a	Yes	n/a	Yes	n/a
Basic	West Union	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	No	Yes	n/a	No	n/a	No	n/a
Basic	Winterset	Yes	Yes	Yes	n/a	n/a	Yes	n/a	Yes	n/a	No	Yes	n/a	Yes	n/a	No	n/a
Local	Ackley	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Albia	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Allison	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Amana	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Anita	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Audubon	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Bedford	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Belmond	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Corning	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Cresco	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Des Moines (Morningstar)	n/a	n/a	n/a	n/a	n/a	No	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Dyersville	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Eagle Grove	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Eldora	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a

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Role	Airport	Fuel (Type & Hours)	Weekday Hours	Weekend Hours	Ground Transportation	Food & Beverage	Posted Contact Info	Internet Access	Restroom	Pilot Area	Security Plan	Snow Removal	Rental Aircraft	Flight Training	Aircraft Maintenance/ Repair	Aircraft Charter	Weather Reporting/ Flight Planning
Local	Elkader	n/a	n/a	n/a	n/a	n/a	No	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Grundy Center	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Guthrie Center	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Humboldt	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Ida Grove	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Keosauqua	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Lake Mills	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Lamoni	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Larchwood	n/a	n/a	n/a	n/a	n/a	No	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Mapleton	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Maquoketa	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Milford	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Montezuma	n/a	n/a	n/a	n/a	n/a	No	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Monona	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Mount Ayr	n/a	n/a	n/a	n/a	n/a	No	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	New Hampton	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Northwood	n/a	n/a	n/a	n/a	n/a	No	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Onawa	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Osage	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Paullina	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Primghar	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Rockwell City	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Spirit Lake	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Sully	n/a	n/a	n/a	n/a	n/a	No	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Tipton	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Toledo	n/a	n/a	n/a	n/a	n/a	No	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Traer	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Waukon	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a
Local	Waverly	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	n/a	n/a
Local	Woodbine	n/a	n/a	n/a	n/a	n/a	No	n/a	n/a	n/a	No	n/a	n/a	n/a	n/a	n/a	n/a

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