

APPENDIX B: CURRENT FACILITY AND SERVICE OBJECTIVE COMPLIANCE

A variety of actions and recommendations are needed to enable system airports to meet target objectives established in the Arizona State Airports System Plan (SASP). Facility and service objectives for Commercial Service, Reliever, GA-Community, GA-Rural, and GA-Basic airports have been established to enable system airports to fulfill their functional roles and as identified in Chapter Five, Establish Existing Airport Roles. In many instances, system airports have identified similar facility and service needs as part of their individual master plans and capital improvement programs and are proceeding to address many of the facility and service-related needs identified in the SASP.

This appendix further identifies and expands on the facility and service objectives discussed in Chapter Six. The objectives are analyzed to determine current compliance. This appendix is divided into two sections. The first section describes each of the airside facilities that are objectives at each system airport. The second section identifies general aviation landside facilities and services that should be offered at those airports.

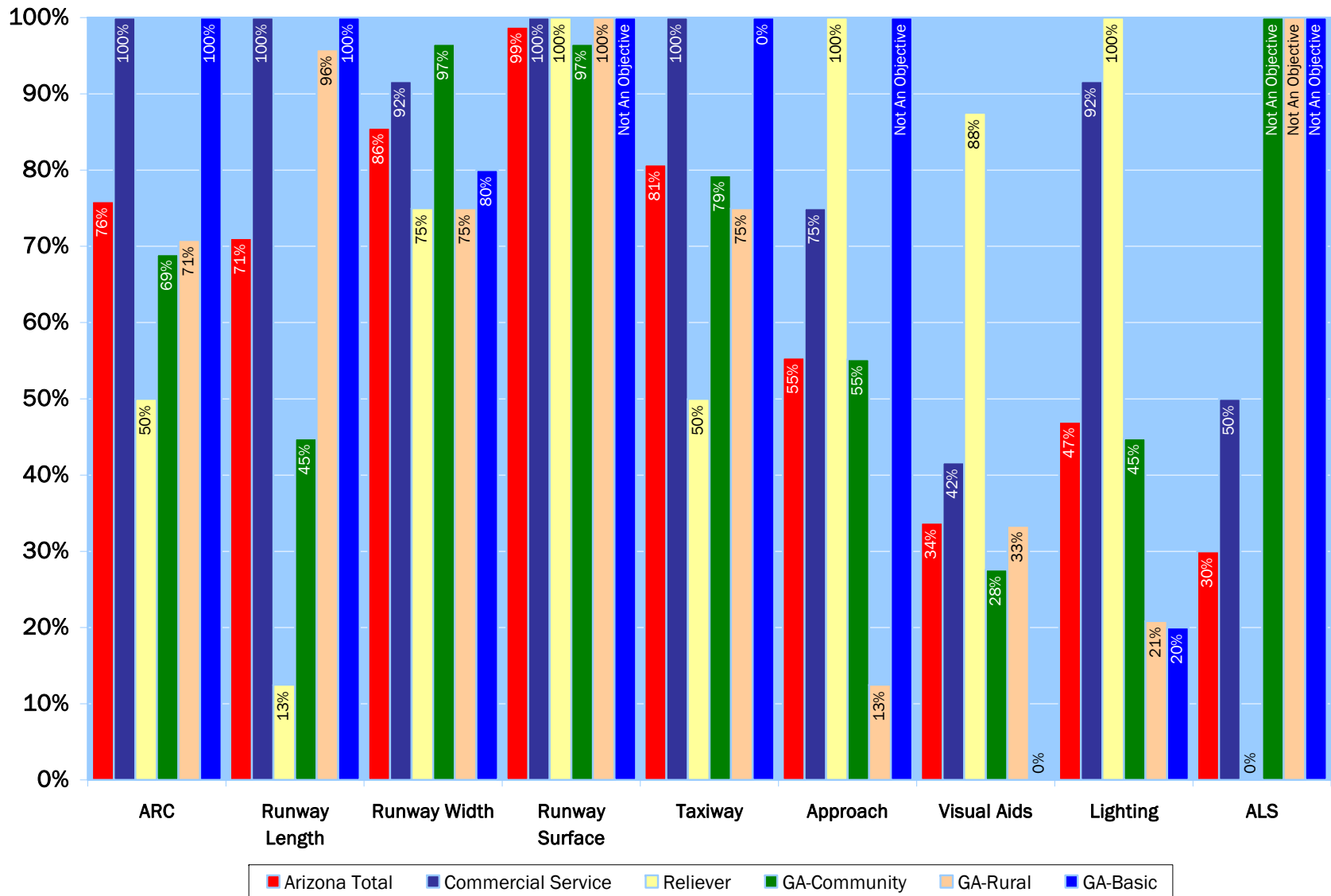
AIRSIDE FACILITIES

Airside facilities play the most significant role in the ability of the airports to support system needs. Airside facility objectives include the following items:

- Airport Reference Code (ARC)
- Primary runway length, width, and surface
- Taxiway type and width
- Approach type
- Visual aids
- Runway and taxiway lighting
- Approach lighting system (ALS)

Figure B-1 summarizes the system's compliance for each airside facility objective.

Figure B-1: Airside Facility Compliance Summary



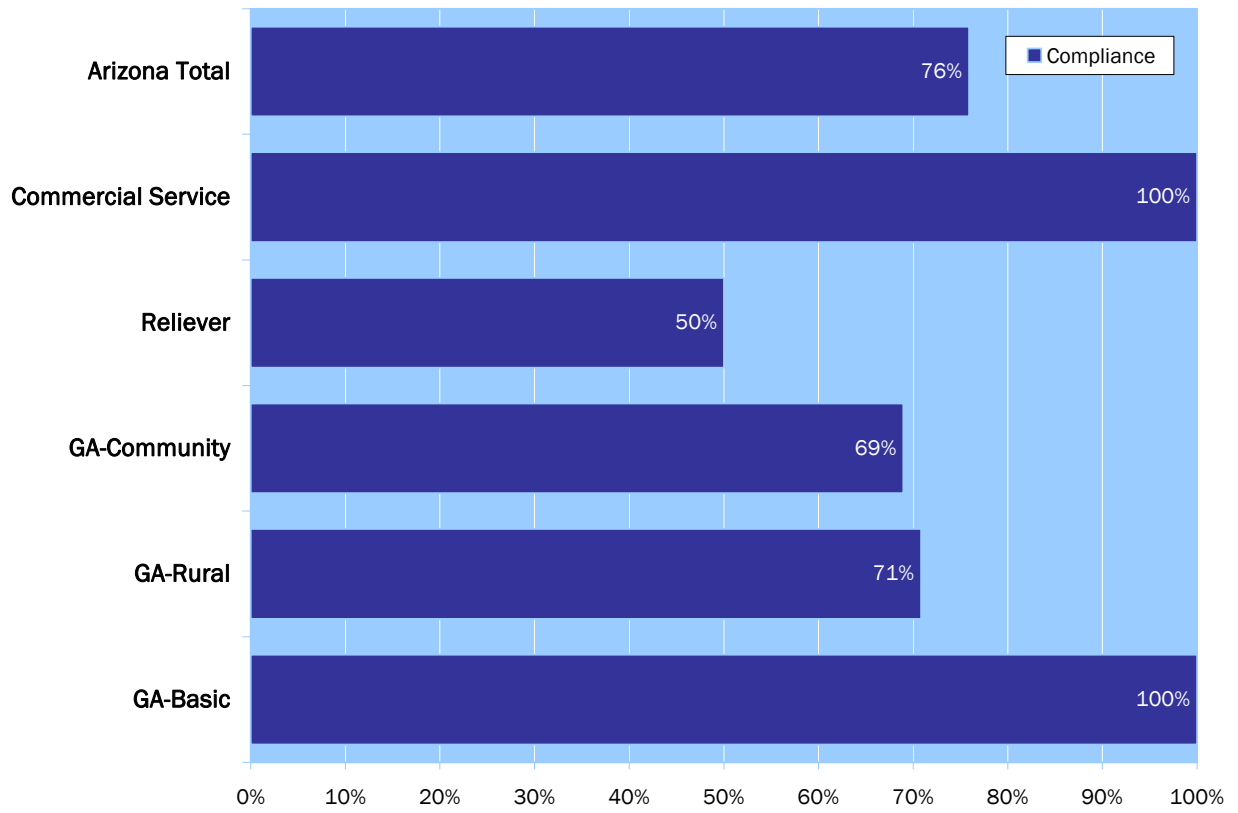
Airport Reference Code (ARC)

Each airport in the Federal Aviation Administration's (FAA) National Plan of Integrated Airport Systems (NPIAS) is encouraged by the FAA to meet all applicable design and development standards. The most demanding aircraft that operates at the airport on a regular basis with at least 500 takeoffs and landings a year determines each airport's individual design standards and is known as the design or critical aircraft.

An airport's design standards are typically established during the development of an airport-specific master plan or airport layout plan (ALP). Each airport's design standards are related to the approach speed and the wingspan of its design aircraft. These two parameters are used to determine each airport's airport reference code (ARC); a letter, A, B, C, D, or E, is defined by the approach speed of the design aircraft, while a Roman numeral, I, II, III, IV, or V, is identified based on the wingspan of the design aircraft. A full discussion of ARCs is provided in Chapters Three and Five.

Figure B-2 summarizes ARC objectives at SASP airports. For the ARC objectives, 100 percent of Commercial Service, 50 percent of Reliever, 69 percent of GA-Community, 71 percent of GA-Rural, and 100 percent of GA-Basic airports meet the ARC objective set for them. System-wide, this accounts for 76 percent of airports included in the SASP that meet their ARC objective based on their existing role in the system. It is important to note that airports that are not included in the NPIAS are not required to meet FAA standards, however, the FAA standards have been developed to promote the safe and orderly development of all airports and provide a reference point regarding facility development at all airports. **Figure B-3** details these results by individual airports.

Figure B-2: Percentage of Airports by Role Meeting ARC Objectives



Source: Airport Inventory & Data Survey 2008, Airport Records

Figure B-3: ARC Compliance by Airport

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing ARC</i>	<i>Objective</i>	<i>Compliance</i>
Commercial Service: Objective - Consistent with Master Plan*				
Bullhead City	Laughlin/Bullhead International	C-III	D-IV	Yes
Flagstaff	Flagstaff Pulliam	C-III	C-III	Yes
Grand Canyon	Grand Canyon National Park	C-III	C-III	Yes
Kingman	Kingman	C-III	C-III	Yes
Mesa	Phoenix-Mesa Gateway	D-V	D-V	Yes
Page	Page	B-II	D-II	Yes
Peach Springs	Grand Canyon West	B-II	C-II	Yes
Phoenix	Phoenix Sky Harbor International	D-V	D-V	Yes
Prescott	Ernest A. Love Field	C-III	D-IV	Yes
Show Low	Show Low Regional	C-III	D-III	Yes
Tucson	Tucson International	D-IV	D-IV	Yes
Yuma	Yuma International Airport	E-VI	D-IV	Yes
Reliever: Objective - C-III				
Chandler	Chandler Municipal	B-II	C-III	No
Glendale	Glendale Municipal	B-II	C-III	No
Goodyear	Phoenix Goodyear	D-IV	C-III	Yes
Marana	Marana Regional	B-II	C-III	No
Mesa	Falcon Field	D-II	C-III	Yes
Phoenix	Phoenix Deer Valley	C-II	C-III	No
Scottsdale	Scottsdale	C-III	C-III	Yes
Tucson	Ryan Field	B-II	C-III	Yes
GA-Community: Objective - B-II				
Benson	Benson Municipal	B-I	B-II	No
Buckeye	Buckeye Municipal	B-II	B-II	Yes
Carefree	Sky Ranch at Carefree	B-I	B-II	No
Casa Grande	Casa Grande Municipal	B-II	B-II	Yes
Chandler	Memorial Airfield	D-IV	B-II	Yes
Chandler	Stellar Airpark	B-I	B-II	No
Colorado City	Colorado City Municipal	B-II	B-II	Yes
Coolidge	Coolidge Municipal	C-II	B-II	Yes
Cottonwood	Cottonwood	B-I	B-II	No
Douglas	Douglas Municipal	B-II	B-II	Yes
Eloy	Eloy Municipal	B-II	B-II	Yes
Grand Canyon	Grand Canyon Valle	A-I	B-II	No
Holbrook	Holbrook Municipal	B-I	B-II	No
Lake Havasu City	Lake Havasu City	C-III	B-II	Yes
Marana	Pinal Airpark	D-V	B-II	Yes
Nogales	Nogales International	C-II	B-II	Yes
Parker	Avi Suquilla	C-II	B-II	Yes
Payson	Payson	B-II	B-II	Yes
Peoria	Pleasant Valley	A-II	B-II	No
Safford	Safford Regional	B-II	B-II	Yes
Sedona	Sedona	B-I	B-II	No
Sierra Vista	Sierra Vista Municipal	D-IV	B-II	Yes
Springerville	Springerville Municipal	B-II	B-II	Yes
St Johns	St Johns Industrial Air Park	B-II	B-II	Yes

Figure B-3: ARC Compliance by Airport (Continued)

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing ARC</i>	<i>Objective</i>	<i>Compliance</i>
GA-Community: Objective - B-II				
Taylor	Taylor	B-II	B-II	Yes
Wickenburg	Wickenburg Municipal	B-II	B-II	No
Willcox	Cochise County	B-II	B-II	Yes
Williams	H.A. Clark Memorial Field	B-II	B-II	Yes
Winslow	Winslow-Lindbergh Regional	C-II	B-II	Yes
GA-Rural: Objective - B-I				
Ajo	Eric Marcus Municipal	B-I	B-I	Yes
Bisbee	Bisbee Municipal	B-I	B-I	Yes
Bullhead City	Sun Valley	A-I	B-I	No
Chinle	Chinle Municipal	B-I	B-I	Yes
Clifton/Morenci	Greenlee County	B-II	B-I	Yes
Douglas	Cochise College	B-I	B-I	Yes
Douglas Bisbee	Bisbee Douglas International	C-I	B-I	Yes
Gila Bend	Gila Bend Municipal	B-II	B-I	Yes
Globe	San Carlos Apache	C-II	B-I	Yes
Kayenta	Kayenta	B-II	B-I	Yes
Kearny	Kearny	A-I	B-I	No
Marble Canyon	Marble Canyon	A-I	B-I	No
Maricopa	Estrella Sailport	A-I	B-I	No
Peach Springs	Grand Canyon Caverns	A-I	B-I	No
Phoenix	Phoenix Regional	B-I	B-I	Yes
Polacca	Polacca	A-I	B-I	No
San Luis	Rolle Airfield	B-I	B-I	Yes
San Manuel	San Manuel/Ray/Blair	B-I	B-I	Yes
Seligman	Seligman	B-I	B-I	Yes
Temple Bar	Temple Bar	A-I	B-I	No
Tuba City	Tuba City	B-II	B-I	Yes
Tucson	La Cholla Airpark	B-I	B-I	Yes
Whiteriver	Whiteriver	B-II	B-I	Yes
Window Rock	Window Rock	B-II	B-I	Yes
GA-Basic: Objective - A-I				
Aguila	Eagle Roost	A-I	A-I	Yes
Bagdad	Bagdad	B-I	A-I	Yes
Cibecue	Cibecue	B-II	A-I	Yes
Meadview	Pearce Ferry	A-I	A-I	Yes
Peach Springs	Hualapai	A-I	A-I	Yes
Rimrock	Rimrock	A-I	A-I	Yes
Sells	Sells	A-I	A-I	Yes
Superior	Superior Municipal	B-II	A-I	Yes
Tombstone	Tombstone Municipal	A-I	A-I	Yes
Whitmore	Grand Canyon Bar Ten Airstrip	A-I	A-I	Yes

Sources: *Airport Inventory & Data Survey 2008, Airport Records*

*Commercial Service objectives are "Ultimate" goal from master plans. Not meeting this goal does not cause non-compliance.

Runway Length

Adequate runway facilities, especially runway lengths, are important components of an aviation system. Facility and service objectives were developed for each of the classification levels based on the types of aircraft anticipated to operate at airports in these role classifications. In this analysis, the ability of the existing system to meet the identified minimum objective for primary runway length was examined using each airport's respective ARC and their role.

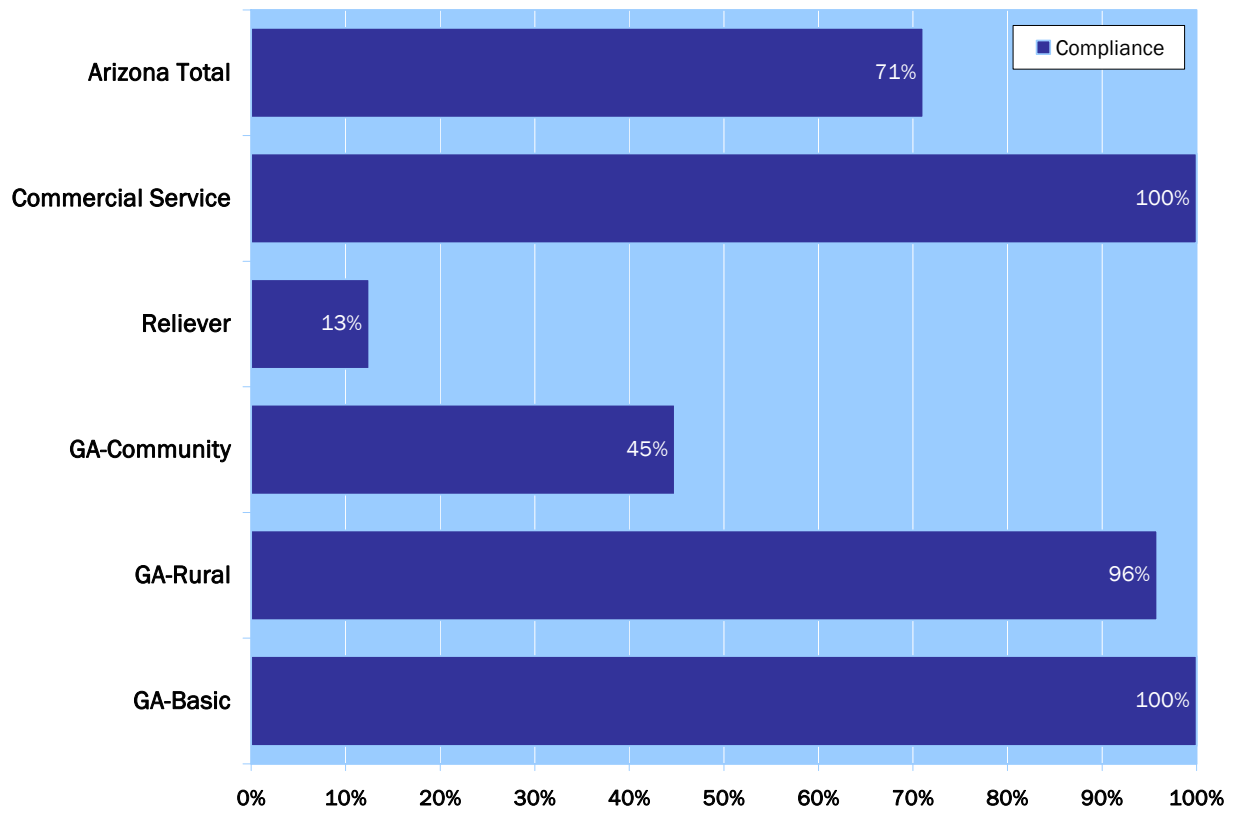
The FAA runway length model was used to calculate optimal lengths unique for Reliever, GA-Community, and GA-Rural airports. The model takes into account a number of factors such as mean maximum daily temperature during the hottest month and elevation or altitude of each airport. The model has several outputs depending on the type of aircraft and useful load the airport will accommodate. Based on input from ADOT, the five airport roles have the following objectives set for their primary runway lengths:

- Commercial Service: consistent with master plan
- Reliever: accommodate 75 percent of large aircraft at 90 percent useful load
- GA-Community: accommodate 75 percent of large aircraft at 60 percent useful load
- GA-Rural: accommodate 75 percent of small planes
- GA-Basic: maintain existing length

The SASP sets minimum primary runway lengths as a basis for evaluation. Airports that exceed the minimum primary runway length are recommended to maintain the additional length, as determined to be necessary.

As shown in **Figure B-4**, 71 percent of the system airports meet the minimum primary runway length objectives for their respective role. All Commercial Service airports are compliant with this objective. Based on the results of the FAA runway length model, only 13 percent of Reliever airports are compliant with runway length objectives, while 45 percent of GA-Community and 96 percent of GA-Rural airports are compliant. The low compliance of in the Reliever and GA-Community roles are due to the long runway length objectives noted by the FAA model needed to accommodate large general aviation aircraft, which takes into account the mean temperature, which is higher in much of Arizona, compared to other states. Because GA-Basic airports are recommended to maintain their current runway length, they show 100 percent compliance.

Figure B-4: Percentage of Airports by Role Meeting Primary Runway Length Objectives



Sources: FAA Runway Length Program. *Airport Inventory & Data Survey 2008*

An analysis of the primary runway length for each airport is presented in **Figure B-5**.

Figure B-5: Primary Runway Length Compliance by Airport

<i>Associated City</i>	<i>Airport Name</i>	<i>Primary Runway</i>	<i>Primary Runway Length</i>	<i>Objective Length</i>	<i>Compliance</i>
Commercial Service: Objective - Consistent with Master Plan*					
Bullhead City	Laughlin/Bullhead International	16/34	7,520	9,000	Yes
Flagstaff	Flagstaff Pulliam	03/21	8,800	8,800	Yes
Grand Canyon	Grand Canyon National Park	03/21	9,000	10,000	Yes
Kingman	Kingman	03/21	6,831	7,000	Yes
Mesa	Phoenix-Mesa Gateway	12R/30L	10,401	12,501	Yes
Page	Page	15/33	5,950	7,200	Yes
Peach Springs	Grand Canyon West	17/35	5,058	6,500	Yes
Phoenix	Phoenix Sky Harbor Intl	08/26	11,489	12,000	Yes
Prescott	Ernest A. Love Field	03R/21L	7,616	7,616	Yes
Show Low	Show Low Regional	06/24	7,200	8,600	Yes
Tucson	Tucson International	11L/29R	10,996	11,000	Yes
Yuma	Yuma International	03L/21R	13,300	13,299	Yes
Reliever: Objective - Accommodate 75% of large aircraft at 90% useful load					
Chandler	Chandler Municipal	04R\22L	4,850	8,110	No
Glendale	Glendale Municipal	01/19	7,150	8,270	No
Goodyear	Phoenix Goodyear	03/21	8,500	8,500	Yes
Marana	Marana Regional	04R/22L	5,102	8,320	No
Mesa	Falcon Field	07R/25L	8,208	8,410	No
Phoenix	Phoenix Deer Valley	03/21	8,249	8,680	No
Scottsdale	Scottsdale	12/30	6,901	8,130	No
Tucson	Ryan Field	06R/24L	5,500	8,480	No
GA-Community: Objective - Accommodate 75% of large aircraft at 60% useful load					
Benson	Benson Municipal	10/28	4,000	6,270	No
Buckeye	Buckeye Municipal	17/35	5,500	5,550	No
Carefree	Sky Ranch at Carefree	06/24	4,037	4,037	Yes
Casa Grande	Casa Grande Municipal	05/23	5,200	5,230	No
Chandler	Memorial Airfield	12/30	8,530	5,140	Yes
Chandler	Stellar Airpark	17/35	3,913	3,913	Yes
Colorado City	Colorado City Municipal	11/29	6,300	7,050	No
Coolidge	Coolidge Municipal	05/23	5,528	5,420	Yes
Cottonwood	Cottonwood	14/32	4,250	6,490	No
Douglas	Douglas Municipal	03/21	5,760	6,390	No
Eloy	Eloy Municipal	02/20	3,900	5,000	No
Grand Canyon	Grand Canyon Valle	01/19	4,199	4,199	Yes
Holbrook	Holbrook Municipal	03/21	6,698	7,280	No
Lake Havasu City	Lake Havasu City	14/32	8,000	5,480	Yes
Marana	Pinal Airpark	12/30	6,850	5,230	Yes
Nogales	Nogales International	03/21	7,199	7,430	No
Parker	Avi Suquilla	01/19	6,750	5,090	Yes
Payson	Payson	06/24	5,500	6,780	No
Peoria	Pleasant Valley	05C/23C	4,200	4,200	Yes
Safford	Safford Regional	12/30	6,015	5,970	Yes
Sedona	Sedona	03/21	5,132	7,710	No
Sierra Vista	Sierra Vista Municipal	08/26	12,001	7,840	Yes

Figure B-5: Primary Runway Length Compliance by Airport (Continued)

Associated City	Airport Name	Primary Runway	Primary Runway Length	Objective Length	Compliance
GA-Community: Objective - Accommodate 75% of large aircraft at 60% useful load					
Springerville	Springerville Municipal	03/21	8,417	7,700	Yes
St Johns	St Johns Industrial Air Park	14/32	5,322	7,050	No
Taylor	Taylor	03/21	7,200	8,080	No
Wickenburg	Wickenburg Municipal	05/23	6,100	6,280	No
Willcox	Cochise County	03/21	6,095	6,430	No
Williams	H.A. Clark Memorial Field	18/36	6,000	7,340	No
Winslow	Winslow-Lindbergh Regional	04/22	7,499	7,390	Yes
GA-Rural: Objective - Accommodate 75% of small airplanes					
Ajo	Eric Marcus Municipal	12/30	3,800	3,150	Yes
Bisbee	Bisbee Municipal	17/35	5,929	4,480	Yes
Bullhead City	Sun Valley	18/36	3,700	2,950	Yes
Chinle	Chinle Municipal	18/36	6,149	4,920	Yes
Clifton/Morenci	Greenlee County	07/25	4,970	4,010	Yes
Douglas	Cochise College	05/23	5,303	4,110	Yes
Douglas Bisbee	Bisbee Douglas International	17/35	7,311	4,130	Yes
Gila Bend	Gila Bend Municipal	04/22	5,200	2,980	Yes
Globe	San Carlos Apache	09/27	6,500	3,810	Yes
Kayenta	Kayenta	05/23	7,100	5,020	Yes
Kearny	Kearny	08/26	3,400	3,290	Yes
Marble Canyon	Marble Canyon	03/21	3,715	3,715	Yes
Maricopa	Estrella Sailport	6R/24L	2,520	2,520	Yes
Peach Springs	Grand Canyon Caverns	05/23	5,300	5,300	Yes
Phoenix	Phoenix Regional	03/21	4,000	3,120	Yes
Polacca	Polacca	04/22	4,200	4,920	No
San Luis	Rolle Airfield	17/35	2,800	2,730	Yes
San Manuel	San Manuel/Ray/Blair	11/29	4,200	3,790	Yes
Seligman	Seligman	04/22	4,800	4,770	Yes
Temple Bar	Temple Bar	18/36	3,500	3,170	Yes
Tuba City	Tuba City	15/33	6,230	4,380	Yes
Tucson	La Cholla Airpark	01/19	4,500	4,500	Yes
Whiteriver	Whiteriver	01/19	6,350	4,520	Yes
Window Rock	Window Rock	02/20	7,000	5,770	Yes
GA-Basic: Objective - Maintain existing					
Aguila	Eagle Roost	17/35	3,400	3,400	Yes
Bagdad	Bagdad	05/23	4,552	4,552	Yes
Cibecue	Cibecue	07/25	4,200	4,200	Yes
Meadview	Pearce Ferry	01/19	2,810	2,810	Yes
Peach Springs	Hualapai	07/25	4,790	4,790	Yes
Rimrock	Rimrock	05/23	2,184	2,184	Yes
Sells	Sells	04/22	5,830	5,830	Yes
Superior	Superior Municipal	04/22	3,250	3,250	Yes
Tombstone	Tombstone Municipal	06/24	4,610	4,610	Yes
Whitmore	Grand Canyon Bar Ten Airstrip	16/34	4,300	4,300	Yes

Sources: FAA Runway Length Program, *Airport Inventory & Data Survey 2008*

Note: *Commercial Service objectives are "ultimate" goal from master plans. Not meeting this goal does not cause incompliance.

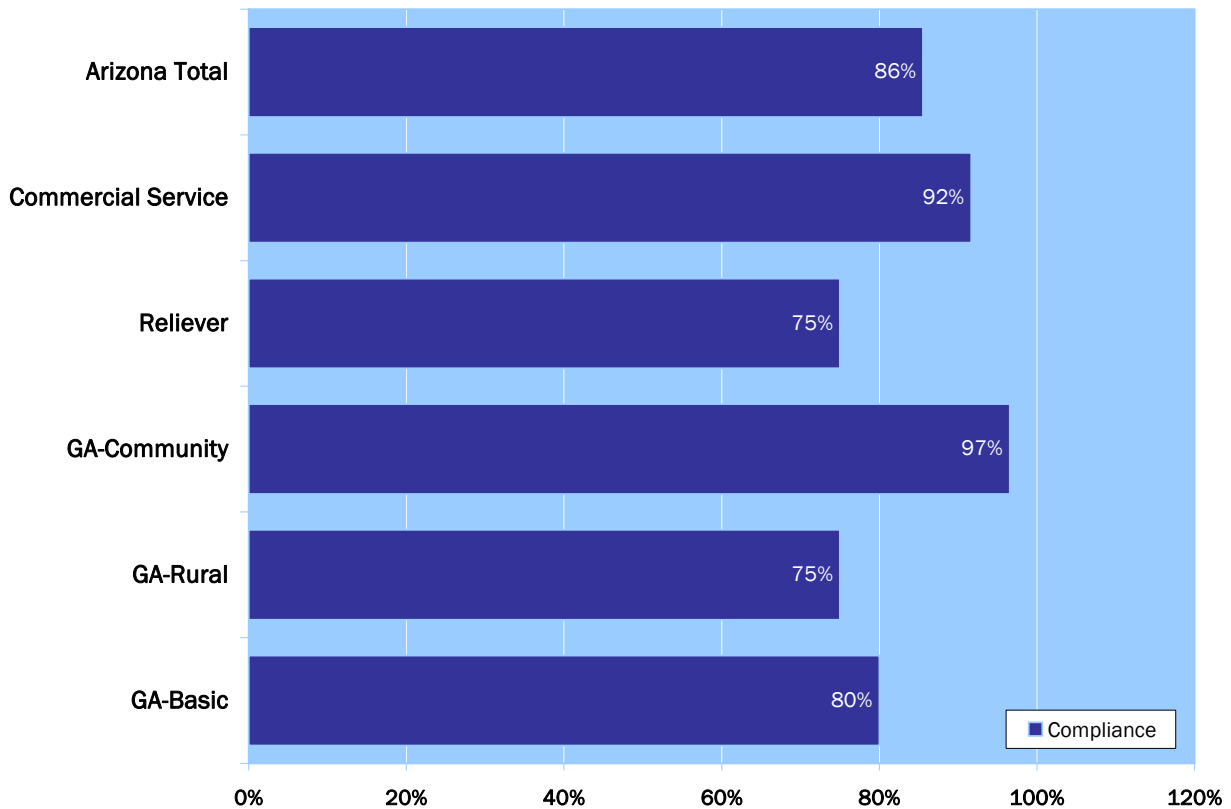
Runway Width

Another important component to the runway system is the width of the primary runway. It is important for runways to have adequate width that meet the minimum facility standards established as part of this study and meet FAA design standards. Objectives for runway widths were based on the recommended ARC of each airport and determined using FAA guidelines.¹

As shown in **Figure B-6**, 86 percent of the system airports meet the primary runway width objectives for their respective role. Ninety-two percent of Commercial Service, 75 percent of Reliever, and 97 percent of GA-Community airports meet primary runway width objectives. Seventy-five percent of GA-Rural and 80 percent of GA-Basic airports meet this objective.

Figure B-7 shows each airport’s adequacy in the primary runway width objective.

Figure B-6: Percentage of Airports by Role Meeting Primary Runway Width Objectives



Source: Airport Inventory & Data Survey 2008

¹ For airports with an ARC exceeding the recommended ARC, widths were based on the existing ARC.

Figure B-7: Primary Runway Width Compliance by Airport

<i>Associated City</i>	<i>Airport Name</i>	<i>Primary Runway</i>	<i>Primary Runway Width</i>	<i>ARC Objective Runway Width</i>	<i>Compliance</i>
Commercial Service: Objective - Consistent with Master Plan					
Bullhead City	Laughlin/Bullhead International	16/34	150	150	Yes
Flagstaff	Flagstaff Pulliam	03/21	150	150	Yes
Grand Canyon	Grand Canyon National Park	03/21	150	150	Yes
Kingman	Kingman	03/21	150	150	Yes
Mesa	Phoenix-Mesa Gateway	12R/30L	150	150	Yes
Page	Page	15/33	150	150	Yes
Peach Springs	Grand Canyon West	17/35	60	100	No
Phoenix	Phoenix Sky Harbor International	08/26	150	150	Yes
Prescott	Ernest A. Love Field	03R/21L	150	150	Yes
Show Low	Show Low Regional	06/24	100	100	Yes
Tucson	Tucson International	11L/29R	150	150	Yes
Yuma	Yuma International Airport	03L/21R	200	200	Yes
Reliever: Objective - Consistent with ARC, Minimum C-III					
Chandler	Chandler Municipal	04R\22L	75	100	No
Glendale	Glendale Municipal	01/19	100	100	Yes
Goodyear	Phoenix Goodyear	03/21	150	150	Yes
Marana	Marana Regional	04R/22L	100	100	Yes
Mesa	Falcon Field	07R/25L	100	100	Yes
Phoenix	Phoenix Deer Valley	03/21	100	100	Yes
Scottsdale	Scottsdale	12/30	100	100	Yes
Tucson	Ryan Field	06R/24L	75	100	No
GA-Community: Objective - Consistent with ARC, Minimum B-II					
Benson	Benson Municipal	10/28	75	75	Yes
Buckeye	Buckeye Municipal	17/35	75	75	Yes
Carefree	Sky Ranch at Carefree	06/24	50	50	Yes
Casa Grande	Casa Grande Municipal	05/23	100	75	Yes
Chandler	Memorial Airfield	12/30	300	100	Yes
Chandler	Stellar Airpark	17/35	60	60	Yes
Colorado City	Colorado City Municipal	11/29	75	75	Yes
Coolidge	Coolidge Municipal	05/23	150	75	Yes
Cottonwood	Cottonwood	14/32	75	75	Yes
Douglas	Douglas Municipal	03/21	75	75	Yes
Eloy	Eloy Municipal	02/20	75	75	Yes
Grand Canyon	Grand Canyon Valle	01/19	45	45	Yes
Holbrook	Holbrook Municipal	03/21	75	75	Yes
Lake Havasu City	Lake Havasu City	14/32	100	75	Yes
Marana	Pinal Airpark	12/30	150	150	Yes
Nogales	Nogales International	03/21	90	100	No
Parker	Avi Suquilla	01/19	100	75	Yes
Payson	Payson	06/24	75	75	Yes
Peoria	Pleasant Valley	05C/23C	100	100	Yes
Safford	Safford Regional	12/30	100	75	Yes
Sedona	Sedona	03/21	100	75	Yes
Sierra Vista	Sierra Vista Municipal	08/26	150	150	Yes

Figure B-7: Primary Runway Width Compliance by Airport (Continued)

Associated City	Airport Name	Primary Runway	Primary Runway Width	ARC Objective Runway Width	Compliance
GA-Community: Objective - Consistent with ARC, Minimum B-II					
Springerville	Springerville Municipal	03/21	75	60	Yes
St Johns	St Johns Industrial Air Park	14/32	75	75	Yes
Taylor	Taylor	03/21	75	75	Yes
Wickenburg	Wickenburg Municipal	05/23	75	75	Yes
Willcox	Cochise County	03/21	75	75	Yes
Williams	H.A. Clark Memorial Field	18/36	100	75	Yes
Winslow	Winslow-Lindbergh Regional	04/22	150	100	Yes
GA-Rural: Objective - Consistent with ARC, Minimum B-I					
Ajo	Eric Marcus Municipal	12/30	60	60	Yes
Bisbee	Bisbee Municipal	17/35	75	60	Yes
Bullhead City	Sun Valley	18/36	42	75	No
Chinle	Chinle Municipal	18/36	60	75	No
Clifton/Morenci	Greenlee County	07/25	75	75	Yes
Douglas	Cochise College	05/23	72	75	No
Douglas Bisbee	Bisbee Douglas International	17/35	100	60	Yes
Gila Bend	Gila Bend Municipal	04/22	75	75	Yes
Globe	San Carlos Apache	09/27	100	100	Yes
Kayenta	Kayenta	05/23	75	75	Yes
Kearny	Kearny	08/26	60	60	Yes
Marble Canyon	Marble Canyon	03/21	35	35	Yes
Maricopa	Estrella Sailport	6R/24L	30	30	Yes
Peach Springs	Grand Canyon Caverns	05/23	45	45	Yes
Phoenix	Phoenix Regional	03/21	50	75	No
Polacca	Polacca	04/22	50	75	No
San Luis	Rolle Airfield	17/35	60	60	Yes
San Manuel	San Manuel/Ray/Blair	11/29	75	60	Yes
Seligman	Seligman	04/22	75	75	Yes
Temple Bar	Temple Bar	18/36	50	75	No
Tuba City	Tuba City	15/33	75	75	Yes
Tucson	La Cholla Airpark	01/19	44	44	Yes
Whiteriver	Whiteriver	01/19	75	75	Yes
Window Rock	Window Rock	02/20	75	60	Yes
GA-Basic: Objective - Consistent with ARC, Minimum A-I					
Aguila	Eagle Roost	17/35	40	40	Yes
Bagdad	Bagdad	05/23	60	60	Yes
Cibecue	Cibecue	07/25	100	75	Yes
Meadview	Pearce Ferry	01/19	90	60	Yes
Peach Springs	Hualapai	07/25	30	60	No
Rimrock	Rimrock	05/23	75	75	Yes
Sells	Sells	04/22	48	60	No
Superior	Superior Municipal	04/22	75	75	Yes
Tombstone	Tombstone Municipal	06/24	65	60	Yes
Whitmore	Grand Canyon Bar Ten Airstrip	16/34	33	33	Yes

Source: Airport Inventory & Data Survey 2008

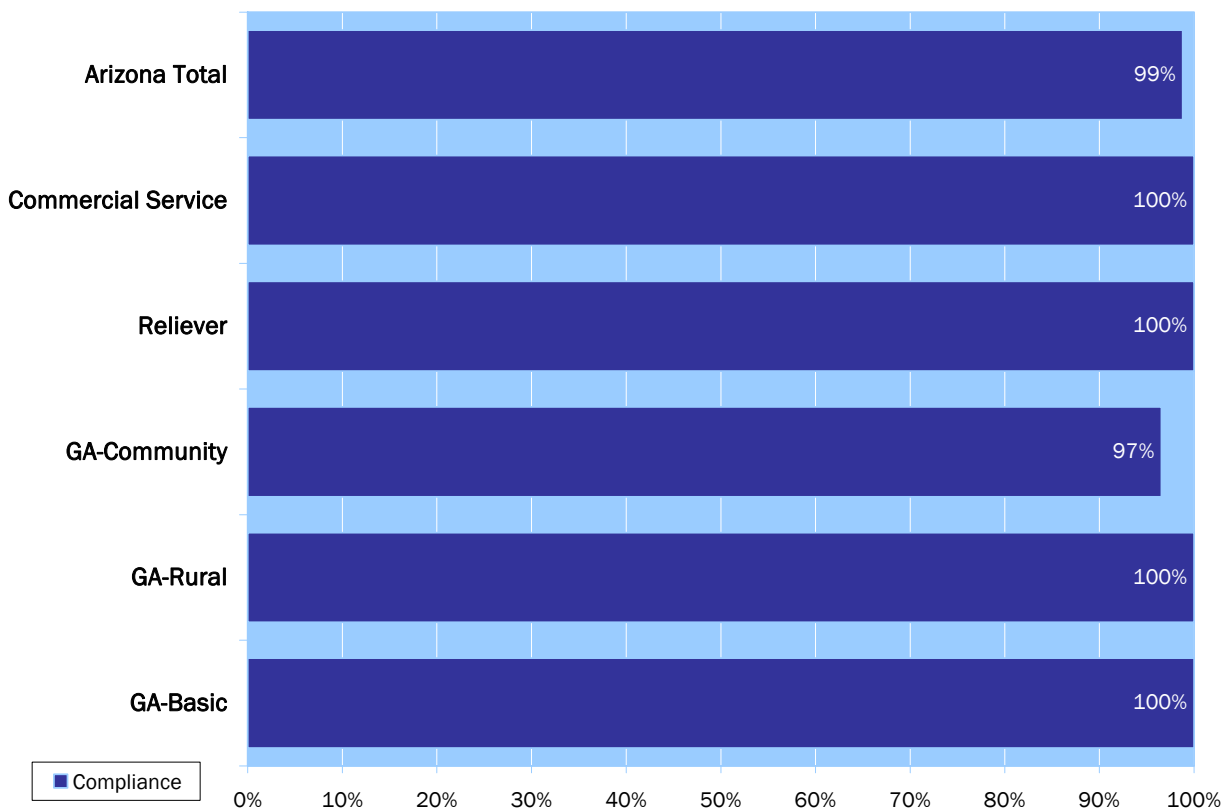
Primary Runway Surface

A runway’s surface type is a major determinant of the types of aircraft that can land on it, weight capacity, and resistance to weathering. Runway surfaces range from turf and gravel to concrete and asphalt, the latter paved runways are required to land aircraft of any significant size.

Figure B-8 summarizes SASP airport roles in their compliance with primary runway surface objectives. Statewide, 99 percent of SASP airports are compliant with the runway surface objectives for their airport roles. GA-Community, at 97 percent compliance, is the only role that is not 100 percent compliant.

Figure B-9 details airport adequacy for this objective.

Figure B-8: Percentage of Airports by Role Meeting Primary Runway Surface Objectives



Source: Airport Inventory & Data Survey 2008

Figure B-9: Primary Runway Surface Compliance by Airport

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing Runway Surface</i>	<i>Compliance</i>
Commercial Service: Objective - Asphalt/Paved			
Bullhead City	Laughlin/Bullhead International	Asphalt	Yes
Flagstaff	Flagstaff Pulliam	Asphalt	Yes
Grand Canyon	Grand Canyon National Park	Asphalt	Yes
Kingman	Kingman	Asphalt	Yes
Mesa	Phoenix-Mesa Gateway	Concrete	Yes
Page	Page	Asphalt	Yes
Peach Springs	Grand Canyon West	Asphalt	Yes
Phoenix	Phoenix Sky Harbor International	Concrete	Yes
Prescott	Ernest A. Love Field	Asphalt	Yes
Show Low	Show Low Regional	Asphalt	Yes
Tucson	Tucson International	Asphalt	Yes
Yuma	Yuma International Airport	Concrete	Yes
Reliever: Objective - Asphalt/Paved			
Chandler	Chandler Municipal	Asphalt	Yes
Glendale	Glendale Municipal	Asphalt	Yes
Goodyear	Phoenix Goodyear	Asphalt	Yes
Marana	Marana Regional	Asphalt	Yes
Mesa	Falcon Field	Asphalt	Yes
Phoenix	Phoenix Deer Valley	Asphalt	Yes
Scottsdale	Scottsdale	Asphalt	Yes
Tucson	Ryan Field	Asphalt	Yes
GA-Community: Objective - Asphalt/Paved			
Benson	Benson Municipal	Asphalt	Yes
Buckeye	Buckeye Municipal	Asphalt	Yes
Carefree	Sky Ranch at Carefree	Asphalt	Yes
Casa Grande	Casa Grande Municipal	Asphalt	Yes
Chandler	Memorial Airfield	Asphalt	Yes
Chandler	Stellar Airpark	Asphalt	Yes
Colorado City	Colorado City Municipal	Asphalt	Yes
Coolidge	Coolidge Municipal	Asphalt	Yes
Cottonwood	Cottonwood	Asphalt	Yes
Douglas	Douglas Municipal	Asphalt	Yes
Eloy	Eloy Municipal	Asphalt	Yes
Grand Canyon	Grand Canyon Valle	Asphalt	Yes
Holbrook	Holbrook Municipal	Asphalt	Yes
Lake Havasu City	Lake Havasu City	Asphalt	Yes
Marana	Pinal Airpark	Asphalt	Yes
Nogales	Nogales International	Asphalt	Yes
Parker	Avi Suquilla	Asphalt	Yes
Payson	Payson	Asphalt	Yes
Peoria	Pleasant Valley	Dirt	No
Safford	Safford Regional	Asphalt	Yes
Sedona	Sedona	Asphalt	Yes
Sierra Vista	Sierra Vista Municipal	Concrete	Yes

Figure B-9: Primary Runway Surface Compliance by Airport (Continued)

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing Runway Surface</i>	<i>Compliance</i>
GA-Community: Objective - Asphalt/Paved			
Springerville	Springerville Municipal	Asphalt	Yes
St Johns	St Johns Industrial Air Park	Asphalt	Yes
Taylor	Taylor	Asphalt	Yes
Wickenburg	Wickenburg Municipal	Asphalt	Yes
Willcox	Cochise County	Asphalt	Yes
Williams	H.A. Clark Memorial Field	Asphalt	Yes
Winslow	Winslow-Lindbergh Regional	Asphalt	Yes
GA-Rural: Objective - Asphalt Desired; Unpaved			
Ajo	Eric Marcus Municipal	Asphalt	Yes
Bisbee	Bisbee Municipal	Asphalt	Yes
Bullhead City	Sun Valley	Asphalt	Yes
Chinle	Chinle Municipal	Asphalt	Yes
Clifton/Morenci	Greenlee County	Asphalt	Yes
Douglas	Cochise College	Asphalt	Yes
Douglas Bisbee	Bisbee Douglas International	Asphalt	Yes
Gila Bend	Gila Bend Municipal	Asphalt	Yes
Globe	San Carlos Apache	Asphalt	Yes
Kayenta	Kayenta	Asphalt	Yes
Kearny	Kearny	Concrete	Yes
Marble Canyon	Marble Canyon	Asphalt	Yes
Maricopa	Estrella Sailport	Asphalt	Yes
Peach Springs	Grand Canyon Caverns	Gravel	Yes
Phoenix	Phoenix Regional	Asphalt	Yes
Polacca	Polacca	Asphalt	Yes
San Luis	Rolle Airfield	Asphalt	Yes
San Manuel	San Manuel/Ray/Blair	Asphalt	Yes
Seligman	Seligman	Asphalt	Yes
Temple Bar	Temple Bar	Asphalt	Yes
Tuba City	Tuba City	Asphalt	Yes
Tucson	La Cholla Airpark	Asphalt	Yes
Whiteriver	Whiteriver	Asphalt	Yes
Window Rock	Window Rock	Asphalt	Yes
GA-Basic: Objective - Gravel/Dirt			
Aguila	Eagle Roost	Asphalt	Yes
Bagdad	Bagdad	Asphalt	Yes
Cibecue	Cibecue	Gravel	Yes
Meadview	Pearce Ferry	Dirt	Yes
Peach Springs	Hualapai	Asphalt	Yes
Rimrock	Rimrock	Asphalt	Yes
Sells	Sells	Asphalt	Yes
Superior	Superior Municipal	Dirt	Yes
Tombstone	Tombstone Municipal	Asphalt	Yes
Whitmore	Grand Canyon Bar Ten Airstrip	Chip & Seal/Dirt	Yes

Source: *Airport Inventory & Data Survey 2008*

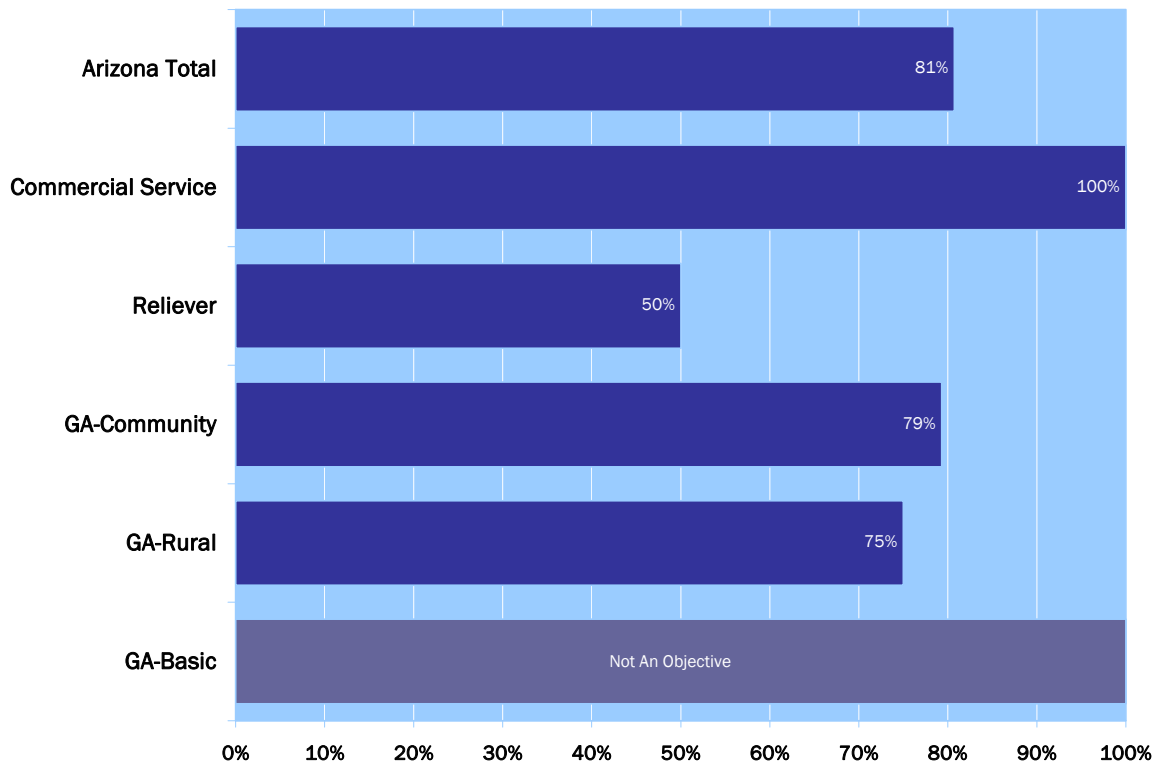
Taxiway

Taxiways are constructed to facilitate aircraft movements to and from the runway system. Strategically placed taxiway exits permit aircraft to clear the runway after landing and significantly increase the runway capacity. Some taxiways are necessary simply to provide access between the apron and runway, whereas other taxiways become needed as activity increases and safer and more efficient use of the airfield is required. Objectives were developed in the SASP for both taxiway type and width. Based on input from ADOT, the five airport roles have the following taxiway objectives:

- Commercial Service: Full parallel taxiway, with width consistent with airport master plan
- Reliever: Full parallel taxiway, with width consistent with ARC
- GA-Community: Full or partial parallel taxiway, with width consistent with ARC
- GA-Rural: Full or partial parallel taxiway, connectors, or turnarounds; width per ARC where applicable
- GA-Basic: Not an objective

Figure B-10 reveals that 100 percent of Commercial Service, 50 percent of Reliever, 79 percent of GA-Community, and 75 percent of GA-Rural airports currently meet their taxiway objectives. Eighty-one percent of all system airports now meet the system plan’s taxiway objective.

Figure B-10: Percentage of Airports by Role Meeting Taxiway Objectives



Source: Airport Inventory & Data Survey 2008

The current and objective taxiway types and widths for each system airport are presented in Figure B-11. Airports must meet both their taxiway type and width objectives in order to be compliant. As shown, all Reliever airports meet their taxiway type objective, but half fall short of their width objectives, which are determined by their ARC.

Figure B-11: Taxiway Type and Width Compliance by Airport

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing Taxiway Type</i>	<i>Existing Taxiway Width</i>	<i>Objective Taxiway Width</i>	<i>Full Taxiway Compliance</i>
Commercial Service: Objective - Consistent with Master Plan (Full Parallel)					
Bullhead City	Laughlin/Bullhead Intl	Full Parallel	75	75	Yes
Flagstaff	Flagstaff Pulliam	Full Parallel	50	50	Yes
Grand Canyon	Grand Canyon National Park	Full Parallel	75	50	Yes
Kingman	Kingman	Full Parallel	75	75	Yes
Mesa	Phoenix-Mesa Gateway	Partial Parallel	75	75	Yes*
Page	Page	Full Parallel	40	40	Yes
Peach Springs	Grand Canyon West	Full (under constr.)	40	50	Yes
Phoenix	Phoenix Sky Harbor Intl	Full Parallel	75	75	Yes
Prescott	Ernest A. Love Field	Full Parallel	50	75	Yes
Show Low	Show Low Regional	Full Parallel	50	50	Yes
Tucson	Tucson International	Full Parallel	60	75	Yes
Yuma	Yuma International	Full Parallel	75	75	Yes
Reliever: Objective - Full Parallel; width per ARC					
Chandler	Chandler Municipal	Full Parallel	40	50	No
Glendale	Glendale Municipal	Full Parallel	35	50	No
Goodyear	Phoenix Goodyear	Full Parallel	75	75	Yes
Marana	Marana Regional	Full Parallel	50	50	Yes
Mesa	Falcon Field	Full Parallel	50	50	Yes
Phoenix	Phoenix Deer Valley	Full Parallel	75	50	Yes
Scottsdale	Scottsdale	Full Parallel	40	50	No
Tucson	Ryan Field	Full Parallel	45	50	No
GA-Community: Objective - Full or Partial Parallel; width per ARC					
Benson	Benson Municipal	Full Parallel	50	35	Yes
Buckeye	Buckeye Municipal	Full Parallel	40	35	Yes
Carefree	Sky Ranch at Carefree	Full Parallel	30	35	No
Casa Grande	Casa Grande Municipal	Full Parallel	40	35	Yes
Chandler	Memorial Airfield	Full Parallel	50	35	No
Chandler	Stellar Airpark	Full Parallel	40	35	Yes
Colorado City	Colorado City Municipal	Partial Parallel	35	35	Yes
Coolidge	Coolidge Municipal	Stub	40	35	No
Cottonwood	Cottonwood	Full Parallel	40	35	Yes
Douglas	Douglas Municipal	Partial Parallel	35	35	Yes
Eloy	Eloy Municipal	Full Parallel	40	35	Yes
Grand Canyon	Grand Canyon Valle	Stub	28	35	No
Holbrook	Holbrook Municipal	Full Parallel	35	35	Yes
Lake Havasu City	Lake Havasu City	Full Parallel (TW 'A')	50	35	Yes
Marana	Pinal Airpark	Full Parallel	150	75	Yes
Nogales	Nogales International	Full Parallel	52	35	Yes
Parker	Avi Suquilla	Partial Parallel	75	35	Yes
Payson	Payson	Full Parallel	35	35	Yes
Peoria	Pleasant Valley	None	NA	35	No
Safford	Safford Regional	Full Parallel	35	35	Yes
Sedona	Sedona	Partial Parallel	35	35	Yes
Sierra Vista	Sierra Vista Municipal/LAA	Full Parallel	85	75	Yes

Figure B-11: Taxiway Type and Width Compliance by Airport (Continued)

Associated City	Airport Name	Existing Taxiway Type	Existing Taxiway Width	Objective Taxiway Width	Full Taxiway Compliance
GA-Community: Objective - Full or Partial Parallel; width per ARC					
Springerville	Springerville Municipal	Full Parallel	30	35	No
St Johns	St Johns Industrial Air Park	Full Parallel	40	35	Yes
Taylor	Taylor	Partial Parallel	35	35	Yes
Wickenburg	Wickenburg Municipal	Full Parallel	34.5	35	No
Willcox	Cochise County	Full Parallel (part gravel)	35	35	Yes
Williams	H.A. Clark Memorial Field	Full Parallel	50	35	Yes
Winslow	Winslow-Lindbergh Regional	Full Parallel	40	35	Yes
GA-Rural: Objective - Full or Partial Parallel, Connectors, or Turnarounds; width per ARC where applicable					
Ajo	Eric Marcus Municipal	Stub	30	25	Yes
Bisbee	Bisbee Municipal	Full Parallel	35	25	Yes
Bullhead City	Sun Valley	Full Parallel	20	25	No
Chinle	Chinle Municipal	Turnaround	NA	25	Yes
Clifton/Morenci	Greenlee County	Full Parallel (12/08)	35	35	Yes
Douglas	Cochise College	Full Parallel	25	25	Yes
Douglas Bisbee	Bisbee Douglas International	Partial Parallel	35	25	Yes
Gila Bend	Gila Bend Municipal	Full Parallel	40	35	Yes
Globe	San Carlos Apache	Full Parallel	35	35	Yes
Kayenta	Kayenta	None	NA	35	No
Kearny	Kearny	Turnarounds	0	25	Yes
Marble Canyon	Marble Canyon	Stub	20	20	Yes
Maricopa	Estrella Sailport	None	NA	NA	No
Peach Springs	Grand Canyon Caverns	Partial Parallel	20	20	Yes
Phoenix	Phoenix Regional	Full Parallel	25	25	Yes
Polacca	Polacca	None	NA	35	No
San Luis	Rolle Airfield	Turnaround	0	25	Yes
San Manuel	San Manuel/Ray/Blair	Partial Parallel	50	25	Yes
Seligman	Seligman	Full Parallel	35	25	Yes
Temple Bar	Temple Bar	Turnarounds	0	25	Yes
Tuba City	Tuba City	None	NA	25	No
Tucson	La Cholla Airpark	Full Parallel	18	18	Yes
Whiteriver	Whiteriver	Partial Parallel	35	35	Yes
Window Rock	Window Rock	None	NA	25	No
GA-Basic: Not an Objective					
Aguila	Eagle Roost	Turnaround	33	25	Yes
Bagdad	Bagdad	None	NA	25	Yes
Cibecue	Cibecue	None	NA	35	Yes
Meadview	Pearce Ferry	None	NA	25	Yes
Peach Springs	Hualapai	None	NA	NA	Yes
Rimrock	Rimrock	None	NA	25	Yes
Sells	Sells	Turnaround	35	35	Yes
Superior	Superior Municipal	None	NA	25	Yes
Tombstone	Tombstone Municipal	None	NA	25	Yes
Whitmore	Grand Canyon Bar Ten Airstrip	None	NA	25	Yes

Source: *Airport Inventory & Data Survey 2008*

Notes: NA=Not Applicable, *Commercial Service objectives are "ultimate" goal from master plans. Not meeting this goal does not cause noncompliance.

APPROACH

Precision approach systems provide electronic horizontal and vertical information to aircraft during their approach to and landing at an airport. These systems allow aircraft to locate an airport and land on a specific runway during periods of reduced visibility and/or inclement weather. Operators of the most demanding general aviation aircraft, including business aircraft, typically prefer to operate at airports with precision approaches, in part due to their reliability during periods of inclement weather. Additionally, a precision approach minimizes the time that airports are closed because of poor visibility. This reduces delays, rerouting of aircraft, and ground travel times associated with not being able to access the most convenient airport.

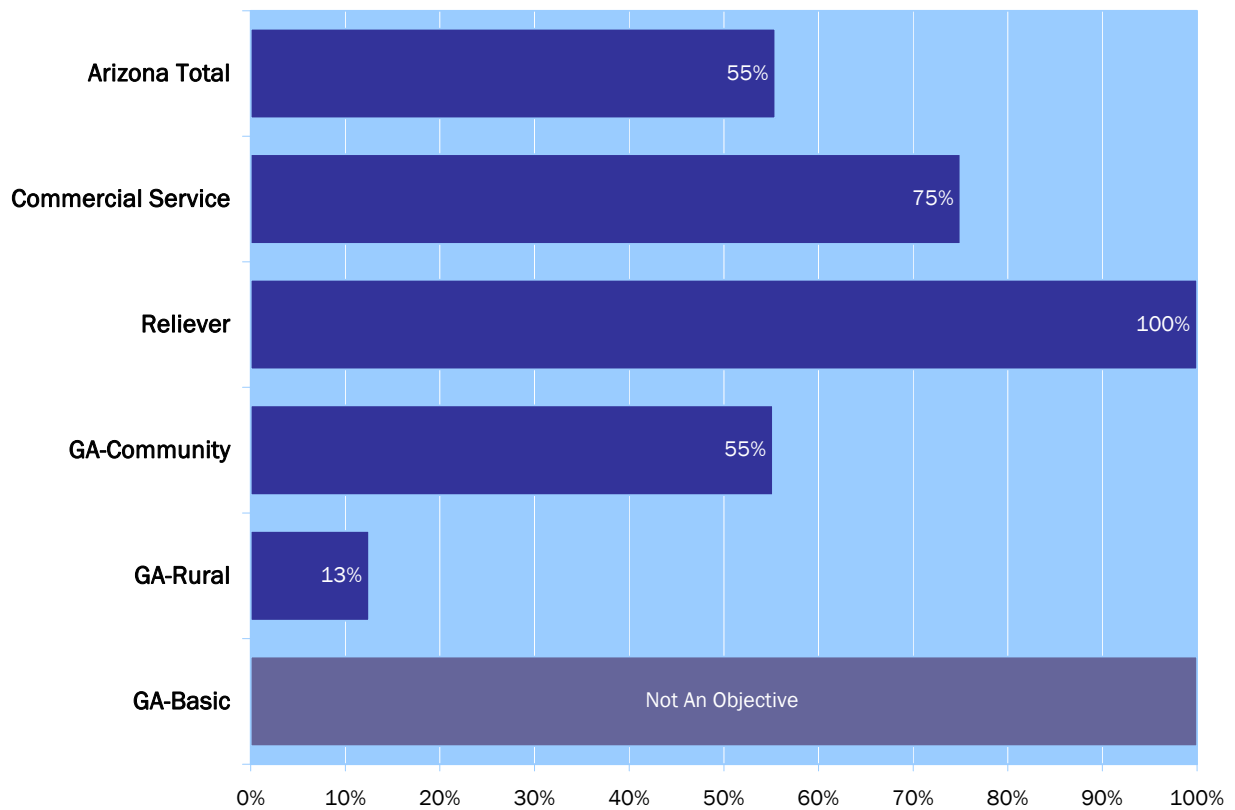
Similar to precision approaches, non-precision approaches provide electronic information to aircraft during their approach to and landing at an airport. In general, non-precision approach systems provide horizontal guidance with relation to a specific runway at an airport. Some of these systems do provide vertical guidance or glide slope information to aircraft although most do not. While not as advanced or expensive to install and maintain as precision approaches, non-precision approaches support airport operations during periods of reduced visibility and inclement weather when visual approaches are not possible. Non-precision approaches also provide additional reliability to aircraft operators.

Airports were evaluated based on the type of the most demanding approach available/published. The following categories were used:

- Precision Approach
- Near-Precision Approach
- Non-Precision Approach
- Visual Approach

As shown in **Figure B-12**, only 55 percent of system airports currently meet their approach type objective. By role, 75 percent of Commercial Service, 100 percent of Reliever, 55 percent of GA-Community, and 13 percent of GA-Rural airports meet their objectives. A published approach is not an objective at GA-Basic Airports.

Figure B-12: Percentage of Airports by Role Meeting Approach Type Objectives



Source: FAA Approach Plates

Figure B-13 lists the Arizona airports that currently report having an instrument approach to at least one end of their primary runway and whether or not system airports meet their objectives.

Figure B-13: Approach Type Compliance by Airport

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing Approach Capability</i>	<i>Compliance</i>
Commercial Service: Objective - Precision Desired; Near Precision Minimum			
Bullhead City	Laughlin/Bullhead International	Near-Precision	Yes
Flagstaff	Flagstaff Pulliam	Precision	Yes
Grand Canyon	Grand Canyon National Park	Precision	Yes
Kingman	Kingman	Non-Precision	No
Mesa	Phoenix-Mesa Gateway	Precision	Yes
Page	Page	Near-Precision	Yes
Peach Springs	Grand Canyon West	Visual	No
Phoenix	Phoenix Sky Harbor International	Precision	Yes
Prescott	Ernest A. Love Field	Precision	Yes
Show Low	Show Low Regional	Non-Precision	No
Tucson	Tucson International	Precision	Yes
Yuma	Yuma International Airport	Precision	Yes
Reliever: Objective - Near-Precision Desired; Non-Precision Minimum			
Chandler	Chandler Municipal	Non-Precision	Yes
Glendale	Glendale Municipal	Near-Precision	Yes
Goodyear	Phoenix Goodyear	Non-Precision	Yes
Marana	Marana Regional	Non-Precision	Yes
Mesa	Falcon Field	Non-Precision	Yes
Phoenix	Phoenix Deer Valley	Near-Precision	Yes
Scottsdale	Scottsdale	Non-Precision	Yes
Tucson	Ryan Field	Precision	Yes
GA-Community: - Objective - Non-Precision			
Benson	Benson Municipal	Visual	No
Buckeye	Buckeye Municipal	Visual	No
Carefree	Sky Ranch at Carefree	Visual	No
Casa Grande	Casa Grande Municipal	Precision	Yes
Chandler	Memorial Airfield	Visual	No
Chandler	Stellar Airpark	Non-Precision	Yes
Colorado City	Colorado City Municipal	Non-Precision	Yes
Coolidge	Coolidge Municipal	Non-Precision	Yes
Cottonwood	Cottonwood	Visual	No
Douglas	Douglas Municipal	Visual	No
Eloy	Eloy Municipal	Visual	No
Grand Canyon	Grand Canyon Valle	Non-Precision	Yes
Holbrook	Holbrook Municipal	Visual	No
Lake Havasu City	Lake Havasu City	Non-Precision	Yes
Marana	Pinal Airpark	Visual	No
Nogales	Nogales International	Non-Precision	Yes
Parker	Avi Suquilla	Non-Precision	Yes
Payson	Payson	Non-Precision	Yes
Peoria	Pleasant Valley	Visual	No
Safford	Safford Regional	Non-Precision	Yes
Sedona	Sedona	Non-Precision	Yes
Sierra Vista	Sierra Vista Municipal	Precision	Yes
Springerville	Springerville Municipal	Non-Precision	Yes
St Johns	St Johns Industrial Air Park	Non-Precision	Yes

Figure B-13: Approach Type Compliance by Airport (Continued)

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing Approach Capability</i>	<i>Compliance</i>
GA-Community: - Objective - Non-Precision			
Taylor	Taylor	Non-Precision	Yes
Wickenburg	Wickenburg Municipal	Visual	No
Willcox	Cochise County	Non-Precision	Yes
Williams	H.A. Clark Memorial Field	Visual	No
Winslow	Winslow-Lindbergh Regional	Non-Precision	Yes
GA-Rural: Objective - Non-Precision			
Ajo	Eric Marcus Municipal	Visual	No
Bisbee	Bisbee Municipal	Visual	No
Bullhead City	Sun Valley	Visual	No
Chinle	Chinle Municipal	Visual	No
Clifton/Morenci	Greenlee County	Visual	No
Douglas	Cochise College	Visual	No
Douglas Bisbee	Bisbee Douglas International	Non-Precision	Yes
Gila Bend	Gila Bend Municipal	Visual	No
Globe	San Carlos Apache	Non-Precision	Yes
Kayenta	Kayenta	Visual	No
Kearny	Kearny	Visual	No
Marble Canyon	Marble Canyon	Visual	No
Maricopa	Estrella Sailport	Visual	No
Peach Springs	Grand Canyon Caverns	Visual	No
Phoenix	Phoenix Regional	Visual	No
Polacca	Polacca	Visual	No
San Luis	Rolle Airfield	Visual	No
San Manuel	San Manuel/Ray/Blair	Visual	No
Seligman	Seligman	Visual	No
Temple Bar	Temple Bar	Visual	No
Tuba City	Tuba City	Visual	No
Tucson	La Cholla Airpark	Visual	No
Whiteriver	Whiteriver	Visual	No
Window Rock	Window Rock	Non-Precision	Yes
GA-Basic: Not an Objective			
Aguila	Eagle Roost	Visual	NA
Bagdad	Bagdad	Visual	NA
Cibecue	Cibecue	Visual	NA
Meadview	Pearce Ferry	Visual	NA
Peach Springs	Hualapai	Visual	NA
Rimrock	Rimrock	Visual	NA
Sells	Sells	Visual	NA
Superior	Superior Municipal	Visual	NA
Tombstone	Tombstone Municipal	Visual	NA
Whitmore	Grand Canyon Bar Ten Airstrip	Visual	NA

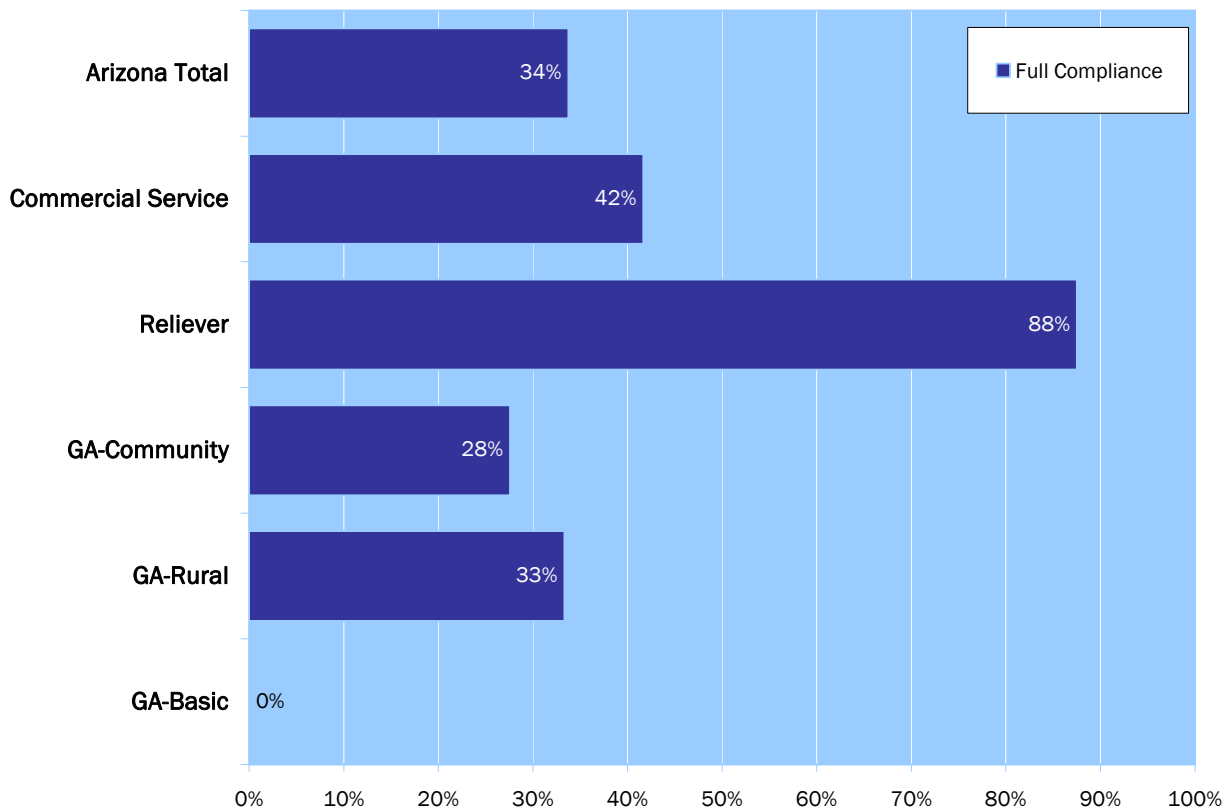
Source: FAA Approach Plates

Visual Aids

Various visual aids provide navigational assistance to aircraft arriving and departing Arizona’s airports. Further, visual aids provide support to non-precision and precision approach aids. Visual aids required at Arizona airports include rotating beacons, wind indicators, segmented circles, Runway End Identifier Lights (REILs) on both runway ends, and a Visual Glide Slope Indicator such as Visual Approach Slope Indicators (VASIs), or Precision Approach Path Indicators (PAPIs), or Pulse Light Approach Slope Indicator (PLASI) on both runway ends.

As shown in **Figure B-14**, 35 percent of all system airports currently meet the visual aids objectives benchmark. By role, 42 percent of Commercial Service, 88 percent of Reliever, 28 percent of GA-Community, 33 percent of GA-Rural, and zero percent of GA-Basic airports meet all of their visual aid objectives.

Figure B-14: Percentage of Airports by Role Meeting Visual Aid Objectives



Source: Airport Inventory & Data Survey 2008

Figure B-15 presents which airports currently meet their objectives for visual aids. Notably, if an airport does not meet all of its visual aid objectives it is recognized as not meeting the benchmark in totality.

Figure B-15: Visual Aid Compliance by Airport

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing Visual Aids</i>	<i>Compliance</i>
Commercial Service: Objective - Rotating Beacon, Lighted Wind Cone/Segmented Circle, REILs, VGSI			
Bullhead City	Laughlin/Bullhead Intl	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Flagstaff	Flagstaff Pulliam	Rotating Beacon, Lighted Wind Cone, PAPIs	No
Grand Canyon	Grand Canyon National Park	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REIL, VASI	No
Kingman	Kingman	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Mesa	Phoenix-Mesa Gateway	Rotating Beacon, Lighted Wind Cone, Segmented Circle	No
Page	Page	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, VASIs	Yes
Peach Springs	Grand Canyon West	Wind Sock, Segmented Circle	No
Phoenix	Phoenix Sky Harbor Intl	Rotating Beacon, Lighted Wind Cone, REIL, PAPIs	No
Prescott	Ernest A. Love Field	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Show Low	Show Low Regional	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Tucson	Tucson International	Rotating Beacon, Lighted Wind Cone, REIL, PAPIs	No
Yuma	Yuma International	Rotating Beacon, Lighted Wind Cone, PAPIs	No
Reliever: Objective - Rotating Beacon, Lighted Wind Cone/Segmented Circle, REILs, VGSI			
Chandler	Chandler Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Glendale	Glendale Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Goodyear	Phoenix Goodyear	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Marana	Marana Regional	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Mesa	Falcon Field	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Phoenix	Phoenix Deer Valley	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Scottsdale	Scottsdale	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Tucson	Ryan Field	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REIL, VASI	No
GA-Community: Objective - Rotating Beacon, Lighted Wind Cone/Segmented Circle, REILs, VGSI			
Benson	Benson Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Buckeye	Buckeye Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, PAPIs	No
Carefree	Sky Ranch at Carefree	Lighted Wind Cone, REILs, PLASIs	No
Casa Grande	Casa Grande Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, VASIs	No
Chandler	Memorial Airfield	Wind Sock	No
Chandler	Stellar Airpark	Rotating Beacon, Lighted Wind Cone, Segmented Circle, VASI	No
Colorado City	Colorado City Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Coolidge	Coolidge Municipal	Rotating Beacon, Wind Sock, Segmented Circle, PAPIs	No
Cottonwood	Cottonwood	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REIL, PAPI	No
Douglas	Douglas Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, PAPIs	No
Eloy	Eloy Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle	No
Grand Canyon	Grand Canyon Valle	Rotating Beacon, Wind Sock, Segmented Circle, REILs, VASIs	No
Holbrook	Holbrook Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Lake Havasu City	Lake Havasu City	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Marana	Pinal Airpark	Rotating Beacon, Lighted Wind Cone, Segmented Circle	No
Nogales	Nogales International	Rotating Beacon, Lighted Wind Cone, Segmented Circle, PAPI	No
Parker	Avi Suquilla	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Payson	Payson	Rotating Beacon, Lighted Wind Cone, Segmented Circle, PAPI	No
Peoria	Pleasant Valley	Wind Sock, Segmented Circle	No
Safford	Safford Regional	Rotating Beacon, Lighted Wind Cone, Segmented Circle, VASIs	No
Sedona	Sedona	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Sierra Vista	Sierra Vista Municipal	Rotating Beacon, Lighted Wind Cone, PAPIs	No
Springerville	Springerville Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, PAPIs	No

Figure B-15: Visual Aid Compliance by Airport (Continued)

Associated City	Airport Name	Existing Visual Aids	Compliance
GA-Community: Objective - Rotating Beacon, Lighted Wind Cone/Segmented Circle, REILs, VASI			
St Johns	St Johns Industrial Air Park	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REIL, PAPIs	No
Taylor	Taylor	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Wickenburg	Wickenburg Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Willcox	Cochise County	Rotating Beacon, Lighted Wind Cone, Segmented Circle	No
Williams	H.A. Clark Memorial Field	Rotating Beacon, Wind Sock, Segmented Circle, REILs, PAPIs	No
Winslow	Winslow-Lindbergh Regional	Rotating Beacon, Wind Sock, Segmented Circle, REIL, VASI	No
GA-Rural: Objective - Rotating Beacon, Wind Cone/Segmented Circle, VASI			
Ajo	Eric Marcus Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, PAPIs	Yes
Bisbee	Bisbee Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle	No
Bullhead City	Sun Valley	Wind Sock, Segmented Circle	No
Chinle	Chinle Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Clifton/Morenci	Greenlee County	Rotating Beacon, Lighted Wind Cone, Segmented Circle, PAPIs	Yes
Douglas	Cochise College	Rotating Beacon, Lighted Wind Cone, Segmented Circle, PAPIs	Yes
Douglas Bisbee	Bisbee Douglas Intl	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, VASIs	Yes
Gila Bend	Gila Bend Municipal	Rotating Beacon, Lighted Wind Cone, Segmented Circle, PAPIs	Yes
Globe	San Carlos Apache	Rotating Beacon, Wind Sock, Segmented Circle, REILs, PAPIs	No
Kayenta	Kayenta	Rotating Beacon, Lighted Wind Cone, Segmented Circle, VASI	No
Kearny	Kearny	Wind Sock	No
Marble Canyon	Marble Canyon	Wind Sock, Segmented Circle	No
Maricopa	Estrella Sailport	Wind Sock, Segmented Circle	No
Peach Springs	Grand Canyon Caverns	Wind Sock	No
Phoenix	Phoenix Regional	Wind Sock	No
Polacca	Polacca	Wind Sock	No
San Luis	Rolle Airfield	Wind Sock, Segmented Circle	No
San Manuel	San Manuel/Ray/Blair	Wind Sock, Segmented Circle	No
Seligman	Seligman	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Temple Bar	Temple Bar	Wind Sock, Segmented Circle	No
Tuba City	Tuba City	Rotating Beacon, Lighted Wind Cone, Segmented Circle, REILs, PAPIs	Yes
Tucson	La Cholla Airpark	Lighted Wind Cone, VASI	No
Whiteriver	Whiteriver	Rotating Beacon, Wind Sock, Segmented Circle, REILs, PAPI	No
Window Rock	Window Rock	Rotating Beacon, Lighted Wind Cone, REIL, PAPI	No
GA-Basic: Objective - Rotating Beacon, Wind Sock			
Aguila	Eagle Roost	Lighted Wind Cone	No
Bagdad	Bagdad	Wind Cone	No
Cibecue	Cibecue	Wind Sock	No
Meadview	Pearce Ferry	Wind Sock, Segmented Circle	No
Peach Springs	Hualapai	Wind Sock	No
Rimrock	Rimrock	Wind Sock, REIL, VASI	No
Sells	Sells	Wind Sock	No
Superior	Superior Municipal	Wind Sock	No
Tombstone	Tombstone Municipal	Wind Sock, VASI	No
Whitmore	Grand Canyon Bar Ten Airstrip	Wind Sock	No

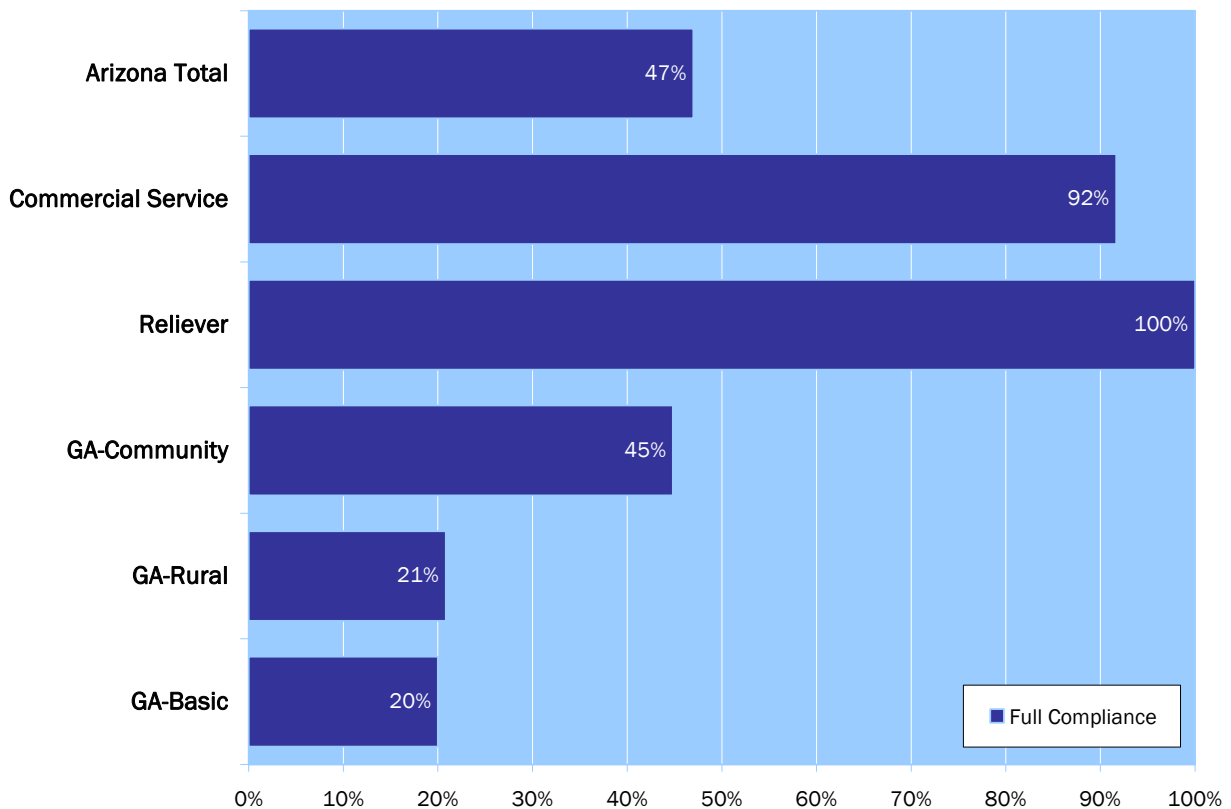
Source: Airport Inventory & Data Survey 2008

Lighting

Runway lights are used to outline the edges of runways during periods of darkness or restricted visibility conditions. These light systems are classified according to the intensity or brightness they are capable of producing: High Intensity Runway Lights (HIRL), Medium Intensity Runway Lights (MIRL), Low Intensity Runway Lights (LIRL), and reflectors. Taxiway lights are named the same way: high (HITL), medium (MITL), and low (LITL). At smaller airports, runway reflectors are often acceptable. It should be noted that in order to meet this benchmark, airports must meet both their runway and taxiway lighting objectives.

As shown in **Figure B-16**, 47 percent of all airports included in the SASP meet their lighting objectives. This includes 92 percent of Commercial Service and 100 percent of Reliever airports. In addition, 45 percent of GA-Community, 21 percent of GA-Rural and 20 percent of GA-Basic airports meet their objectives.

Figure B-16: Percentage of Airports by Role Meeting Runway and Taxiway Lighting Objectives



Source: *Airport Inventory & Data Survey 2008*

Figure B-17 indicates which airports are currently meeting their respective lighting objectives.

Figure B-17: Runway and Taxiway Lighting Compliance by Airport

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing Runway Lighting</i>	<i>Existing Taxiway Lighting</i>	<i>Full Compliance</i>
Commercial Service: Objective - HIRL/HITL (MIRL/MITL Minimum)				
Bullhead City	Laughlin/Bullhead International	MIRL	MITL	Yes
Flagstaff	Flagstaff Pulliam	HIRL	MITL	Yes
Grand Canyon	Grand Canyon National Park	MIRL	MITL	Yes
Kingman	Kingman	MIRL	MITL	Yes
Mesa	Phoenix-Mesa Gateway	MIRL	MITL	Yes
Page	Page	MIRL	MITL	Yes
Peach Springs	Grand Canyon West	None	None	No
Phoenix	Phoenix Sky Harbor International	HIRL	MITL	Yes
Prescott	Ernest A. Love Field	MIRL	MITL	Yes
Show Low	Show Low Regional	MIRL	MITL	Yes
Tucson	Tucson International	HIRL	MITL	Yes
Yuma	Yuma International Airport	HIRL	MITL	Yes
Reliever: Objective - MIRL/MITL				
Chandler	Chandler Municipal	MIRL	MITL	Yes
Glendale	Glendale Municipal	MIRL	MITL	Yes
Goodyear	Phoenix Goodyear	MIRL	MITL	Yes
Marana	Marana Regional	MIRL	MITL	Yes
Mesa	Falcon Field	MIRL	MITL	Yes
Phoenix	Phoenix Deer Valley	MIRL	MITL	Yes
Scottsdale	Scottsdale	MIRL	MITL	Yes
Tucson	Ryan Field	MIRL	MITL	Yes
GA-Community: Objective - MIRL/MITL				
Benson	Benson Municipal	HIRL	MITL	Yes
Buckeye	Buckeye Municipal	MIRL	MITL	Yes
Carefree	Sky Ranch at Carefree	LIRL	None	No
Casa Grande	Casa Grande Municipal	MIRL	MITL	Yes
Chandler	Memorial Airfield	None	None	No
Chandler	Stellar Airpark	MIRL	Reflectors	No
Colorado City	Colorado City Municipal	MIRL	Reflectors	No
Coolidge	Coolidge Municipal	MIRL	MITL	Yes
Cottonwood	Cottonwood	MIRL	None	No
Douglas	Douglas Municipal	MIRL	MITL	Yes
Eloy	Eloy Municipal	MIRL	None	No
Grand Canyon	Grand Canyon Valle	MIRL	None	No
Holbrook	Holbrook Municipal	MIRL	MITL	Yes
Lake Havasu City	Lake Havasu City	MIRL	MITL	Yes
Marana	Pinal Airpark	MIRL	Reflectors	No
Nogales	Nogales International	MIRL	MITL	Yes
Parker	Avi Suquilla	MIRL	MITL	Yes
Payson	Payson	MIRL	Reflectors	No
Peoria	Pleasant Valley	None	None	No
Safford	Safford Regional	MIRL	MITL	Yes
Sedona	Sedona	MIRL	MITL	Yes
Sierra Vista	Sierra Vista Municipal	HIRL	MITL	Yes

Figure B-17: Runway and Taxiway Lighting Compliance by Airport (Continued)

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing Runway Lighting</i>	<i>Existing Taxiway Lighting</i>	<i>Full Compliance</i>
GA-Community: Objective - MIRL/MITL				
Springerville	Springerville Municipal	MIRL	Reflectors	No
St Johns	St Johns Industrial Air Park	MIRL	Reflectors	No
Taylor	Taylor	MIRL	Reflectors	No
Wickenburg	Wickenburg Municipal	MIRL	MITL	Yes
Willcox	Cochise County	MIRL	Reflectors	No
Williams	H.A. Clark Memorial Field	MIRL	None	No
Winslow	Winslow-Lindbergh Regional	MIRL	None	No
GA-Rural: Community - MIRL/MITL				
Ajo	Eric Marcus Municipal	LIRL	NA	No
Bisbee	Bisbee Municipal	MIRL	MITL	Yes
Bullhead City	Sun Valley	LIRL	None	No
Chinle	Chinle Municipal	MIRL	MITL	Yes
Clifton/Morenci	Greenlee County	MIRL	Reflectors	No
Douglas	Cochise College	LIRL	LITL	No
Douglas Bisbee	Bisbee Douglas International	MIRL	MITL	Yes
Gila Bend	Gila Bend Municipal	MIRL	MITL	Yes
Globe	San Carlos Apache	HIRL	None	No
Kayenta	Kayenta	MIRL	NA	No
Kearny	Kearny	None	None	No
Marble Canyon	Marble Canyon	None	None	No
Maricopa	Estrella Sailport	None	None	No
Peach Springs	Grand Canyon Caverns	None	None	No
Phoenix	Phoenix Regional	None	None	No
Polacca	Polacca	LIRL	NA	No
San Luis	Rolle Airfield	None	None	No
San Manuel	San Manuel/Ray/Blair	None	None	No
Seligman	Seligman	MIRL	MITL	Yes
Temple Bar	Temple Bar	None	None	No
Tuba City	Tuba City	MIRL	NA	No
Tucson	La Cholla Airpark	LIRL	Reflectors	No
Whiteriver	Whiteriver	MIRL	None	No
Window Rock	Window Rock	MIRL	NA	No
GA-Basic: Community - LIRL or Reflectors				
Aguila	Eagle Roost	LIRL	None	Yes
Bagdad	Bagdad	None	None	No
Cibecue	Cibecue	None	NA	No
Meadview	Pearce Ferry	None	None	No
Peach Springs	Hualapai	None	NA	No
Rimrock	Rimrock	LIRL	NA	Yes
Sells	Sells	None	None	No
Superior	Superior Municipal	None	None	No
Tombstone	Tombstone Municipal	None	None	No
Whitmore	Grand Canyon Bar Ten Airstrip	None	None	No

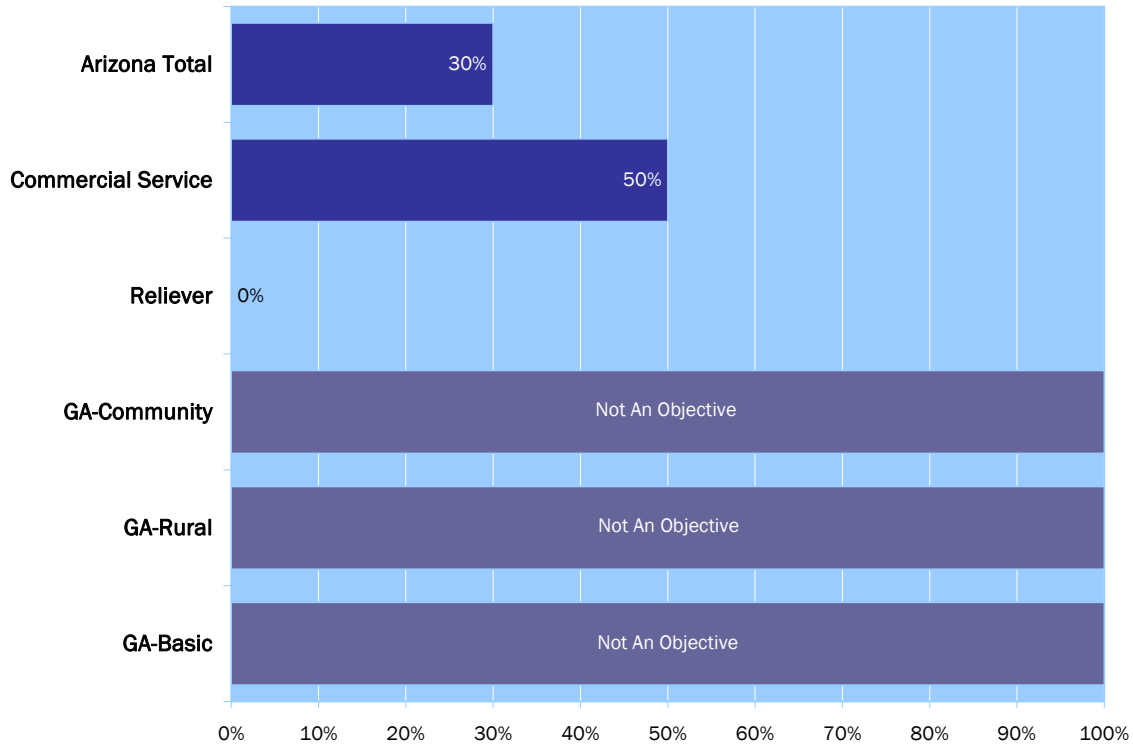
Source: *Airport Inventory & Data Survey 2008*

Note: NA=not applicable

Approach Lighting Systems

Much like visual aids, an approach lighting system (ALS) provides navigational assistance to aircraft arriving at and departing from Arizona’s system airports. **Figure B-18** summarizes the percentage of airports in each role that meet this objective. An ALS is only a requirement for Commercial Service airports and a suggestion for Reliever airports. It is not an objective for the other general aviation airports. Only 30 percent of airports for which it is a suggestion at a minimum have an ALS. Fifty percent of Commercial Service and no Reliever airports currently have an ALS.

Figure B-18: Percentage of Airports by Role Meeting ALS Objectives



Source: Airport Inventory & Data Survey 2008

Figure B-19 details the results of this analysis at Commercial Service and Reliever airports.

Figure B-19: Approach Lighting System Compliance by Airport

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing ALS</i>	<i>Compliance</i>
Commercial Service: Objective - ALS			
Bullhead City	Laughlin/Bullhead International	None	No
Flagstaff	Flagstaff Pulliam	ALS	Yes
Grand Canyon	Grand Canyon National Park	ALS	Yes
Kingman	Kingman	None	No
Mesa	Phoenix-Mesa Gateway	None	No
Page	Page	None	No
Peach Springs	Grand Canyon West	None	No
Phoenix	Phoenix Sky Harbor International	ALS	Yes
Prescott	Ernest A. Love Field	ALS	Yes
Show Low	Show Low Regional	None	No
Tucson	Tucson International	ALS	Yes
Yuma	Yuma International Airport	ALS	Yes
Reliever: Objective - ALS Desired			
Chandler	Chandler Municipal	None	No
Glendale	Glendale Municipal	None	No
Goodyear	Phoenix Goodyear	None	No
Marana	Marana Regional	None	No
Mesa	Falcon Field	None	No
Phoenix	Phoenix Deer Valley	None	No
Scottsdale	Scottsdale	None	No
Tucson	Ryan Field	None	No

Source: *Airport Inventory & Data Survey 2008*

LANDSIDE FACILITIES AND SERVICES

Landside facilities and services contribute significantly to the development of an airport and its attractiveness. Hangar storage and apron parking are key elements in determining the number of aircraft that can be accommodated at the airport. A fixed base operator (FBO), which provides various services like fuel and maintenance, as well as rental cars and auto parking play a vital role at the airport by attracting general aviation users and facilitating their passage. Landside facility and service objectives described below include the following:

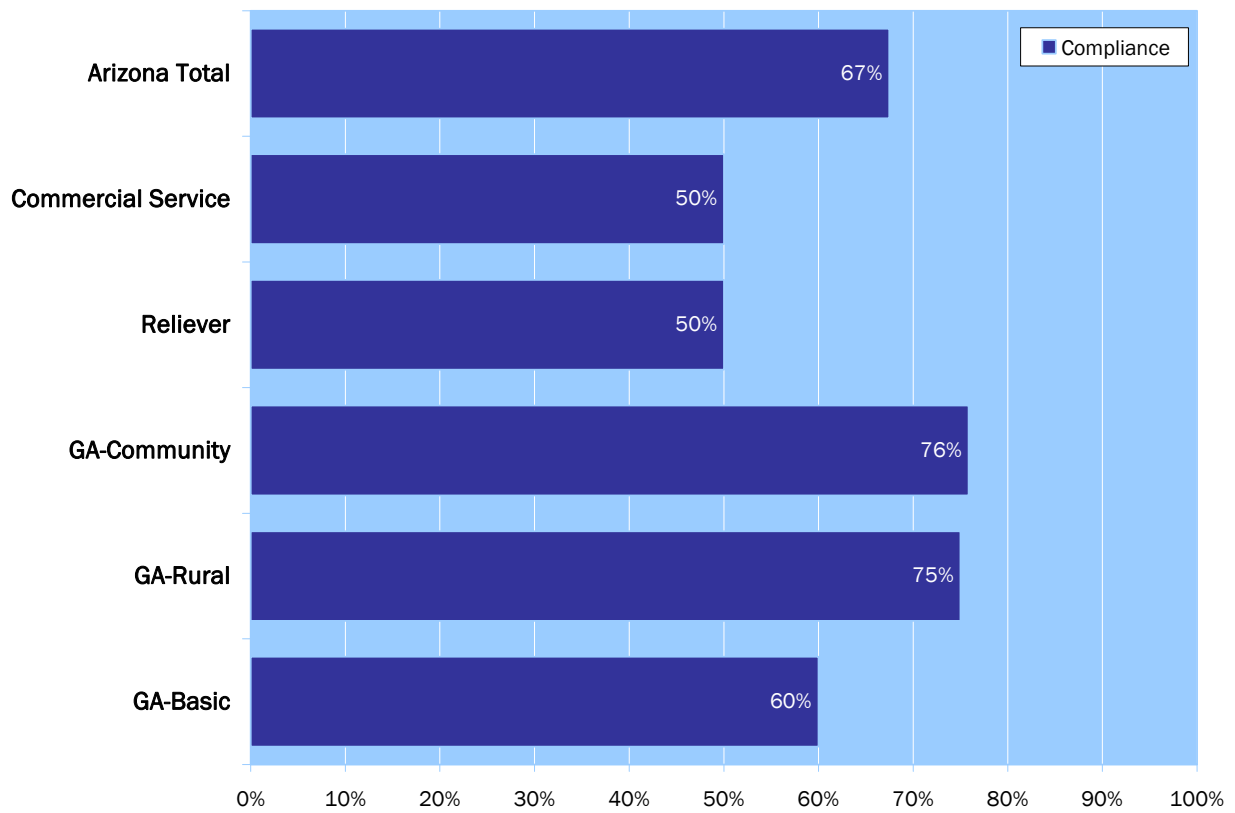
- Airport Fencing
- Services
 - Fixed base operator (FBO)
 - Maintenance
 - Ground transportation
 - Phone
 - Restroom
 - Aviation fuel
- Facilities
 - Commercial or general aviation terminals
 - Pilots lounge or related facilities
 - Hangars
 - Apron
 - Auto Parking

Airport Fencing

Fencing all or part of an airport is a crucial component in airport safety and security. Airports in Arizona typically employ one of four types of airport fencing. Four-foot tall barbwire and six-foot chain link fencing are used commonly in full perimeter fencing and sometimes to fence secure areas. Eight-foot security fencing and 10-foot wildlife fencing are also used; security fencing is more common to fence in secure areas such as the runway, apron, or control tower. For this benchmark, perimeter fencing was only considered compliant if it was complete fencing with no gaps. There is an objective for all airports to have full perimeter fencing. It is also a goal for Commercial Service and Reliever airports to have some type of controlled access to their airfields.

As shown in **Figure B-20**, 67 percent of airports in the SASP meet their objectives for airport fencing. By role, 50 percent of Commercial Service, 50 percent of Reliever, 76 percent of GA-Community, 75 percent of GA-Rural, and 60 percent of GA-Basic airports meet objectives set for airport fencing.

Figure B-20: Percentage of Airports by Role Meeting Airport Fencing Objectives



Source: Airport Inventory & Data Survey

Figure B-21 details fencing compliance by individual airport. As shown, while all Commercial Service and Reliever airports have full perimeter fencing, many noted that they had did not have controlled access to their airports, which is part of their objective. This led to the low compliance in these two categories.

Figure B-21: Airport Fencing Compliance by Airport

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing Fencing</i>	<i>Compliance</i>
Commercial Service: Objective - Perimeter Fencing and Controlled Areas			
Bullhead City	Laughlin/Bullhead International	Perimeter Fencing	No
Flagstaff	Flagstaff Pulliam	Perimeter Fencing	No
Grand Canyon	Grand Canyon National Park	Perimeter Fencing and Controlled Areas	Yes
Kingman	Kingman	Perimeter Fencing	No
Mesa	Phoenix-Mesa Gateway	Perimeter Fencing and Controlled Areas	Yes
Page	Page	Perimeter Fencing	No
Peach Springs	Grand Canyon West	Perimeter Fencing and Controlled Areas	Yes
Phoenix	Phoenix Sky Harbor International	Perimeter Fencing and Controlled Areas	Yes
Prescott	Ernest A. Love Field	Perimeter Fencing	No
Show Low	Show Low Regional	Perimeter Fencing	No
Tucson	Tucson International	Perimeter Fencing and Controlled Areas	Yes
Yuma	Yuma International Airport	Perimeter Fencing and Controlled Areas	Yes
Reliever: Objective - Perimeter Fencing and Controlled Areas			
Chandler	Chandler Municipal	Perimeter Fencing	No
Glendale	Glendale Municipal	Perimeter Fencing	No
Goodyear	Phoenix Goodyear	Perimeter Fencing and Controlled Areas	Yes
Marana	Marana Regional	Perimeter Fencing and Controlled Areas	Yes
Mesa	Falcon Field	Perimeter Fencing	No
Phoenix	Phoenix Deer Valley	Perimeter Fencing and Controlled Areas	Yes
Scottsdale	Scottsdale	Perimeter Fencing	No
Tucson	Ryan Field	Perimeter Fencing and Controlled Areas	Yes
GA-Community: Objective - Perimeter Fencing			
Benson	Benson Municipal	Perimeter Fencing and Controlled Areas	Yes
Buckeye	Buckeye Municipal	Perimeter Fencing and Controlled Areas	Yes
Carefree	Sky Ranch at Carefree	Partial Perimeter Fencing	No
Casa Grande	Casa Grande Municipal	Perimeter Fencing and Controlled Areas	Yes
Chandler	Memorial Airfield	None	No
Chandler	Stellar Airpark	Perimeter Fencing	Yes
Colorado City	Colorado City Municipal	Perimeter Fencing and Controlled Areas	Yes
Coolidge	Coolidge Municipal	Perimeter Fencing	Yes
Cottonwood	Cottonwood	Perimeter Fencing	Yes
Douglas	Douglas Municipal	Partial Perimeter Fencing and Controlled Areas	No
Eloy	Eloy Municipal	Controlled Areas	No
Grand Canyon	Grand Canyon Valle	Perimeter Fencing	Yes
Holbrook	Holbrook Municipal	Perimeter Fencing	Yes
Lake Havasu City	Lake Havasu City	Perimeter Fencing and Controlled Areas	Yes
Marana	Pinal Airpark	Perimeter Fencing and Controlled Areas	Yes
Nogales	Nogales International	Perimeter Fencing	Yes
Parker	Avi Suquilla	Perimeter Fencing	Yes
Payson	Payson	Perimeter Fencing	Yes
Peoria	Pleasant Valley	None	No
Safford	Safford Regional	Perimeter Fencing and Controlled Areas	Yes
Sedona	Sedona	Perimeter Fencing and Controlled Areas	Yes
Sierra Vista	Sierra Vista Municipal	Perimeter Fencing	Yes
Springerville	Springerville Municipal	None	No
St Johns	St Johns Industrial Air Park	Perimeter Fencing and Controlled Areas	Yes
Taylor	Taylor	Controlled Areas	No

Figure B-21: Airport Fencing Compliance by Airport (Continued)

<i>Associated City</i>	<i>Airport Name</i>	<i>Existing Fencing</i>	<i>Compliance</i>
GA-Community: Objective - Perimeter Fencing			
Wickenburg	Wickenburg Municipal	Perimeter Fencing	Yes
Willcox	Cochise County	Perimeter Fencing	Yes
Williams	H.A. Clark Memorial Field	Perimeter Fencing	Yes
Winslow	Winslow-Lindbergh Regional	Perimeter Fencing and Controlled Areas	Yes
GA-Rural: Objective - Perimeter Fencing			
Ajo	Eric Marcus Municipal	Perimeter Fencing	Yes
Bisbee	Bisbee Municipal	Perimeter Fencing and Controlled Areas	Yes
Bullhead City	Sun Valley	Perimeter Fencing	Yes
Chinle	Chinle Municipal	Perimeter Fencing	Yes
Clifton/Morenci	Greenlee County	Perimeter Fencing	Yes
Douglas	Cochise College	Perimeter Fencing and Controlled Areas	Yes
Douglas Bisbee	Bisbee Douglas International	Perimeter Fencing	Yes
Gila Bend	Gila Bend Municipal	Perimeter Fencing	Yes
Globe	San Carlos Apache	Perimeter Fencing	Yes
Kayenta	Kayenta	Perimeter Fencing	Yes
Kearny	Kearny	Perimeter Fencing	Yes
Marble Canyon	Marble Canyon	Controlled Areas	No
Maricopa	Estrella Sailport	None	No
Peach Springs	Grand Canyon Caverns	Partial Perimeter Fencing	No
Phoenix	Phoenix Regional	None	No
Polacca	Polacca	Perimeter Fencing	Yes
San Luis	Rolle Airfield	Controlled Areas	No
San Manuel	San Manuel/Ray/Blair	Perimeter Fencing and Controlled Areas	Yes
Seligman	Seligman	Perimeter Fencing and Controlled Areas	Yes
Temple Bar	Temple Bar	Perimeter Fencing	Yes
Tuba City	Tuba City	Perimeter Fencing	Yes
Tucson	La Cholla Airpark	None	No
Whiteriver	Whiteriver	Perimeter Fencing	Yes
Window Rock	Window Rock	Perimeter Fencing	Yes
GA-Basic: Objective - Perimeter Fencing Desired			
Aguila	Eagle Roost	Perimeter Fencing	Yes
Bagdad	Bagdad	Perimeter Fencing	Yes
Cibecue	Cibecue	Perimeter Fencing	Yes
Meadview	Pearce Ferry	Perimeter Fencing	Yes
Peach Springs	Hualapai	None	No
Rimrock	Rimrock	None	No
Sells	Sells	None	No
Superior	Superior Municipal	Perimeter Fencing	Yes
Tombstone	Tombstone Municipal	Perimeter Fencing	Yes
Whitmore	Grand Canyon Bar Ten Airstrip	None	No

Source: Airport Inventory & Data Survey 2008

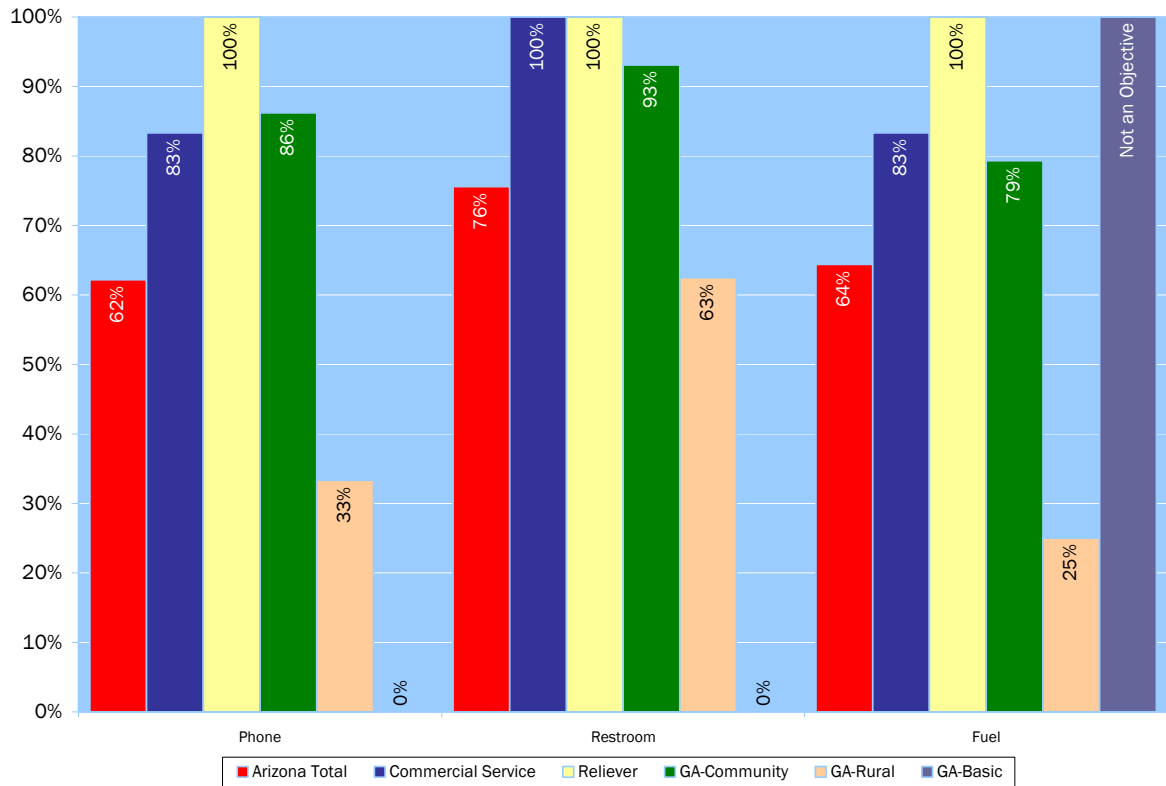
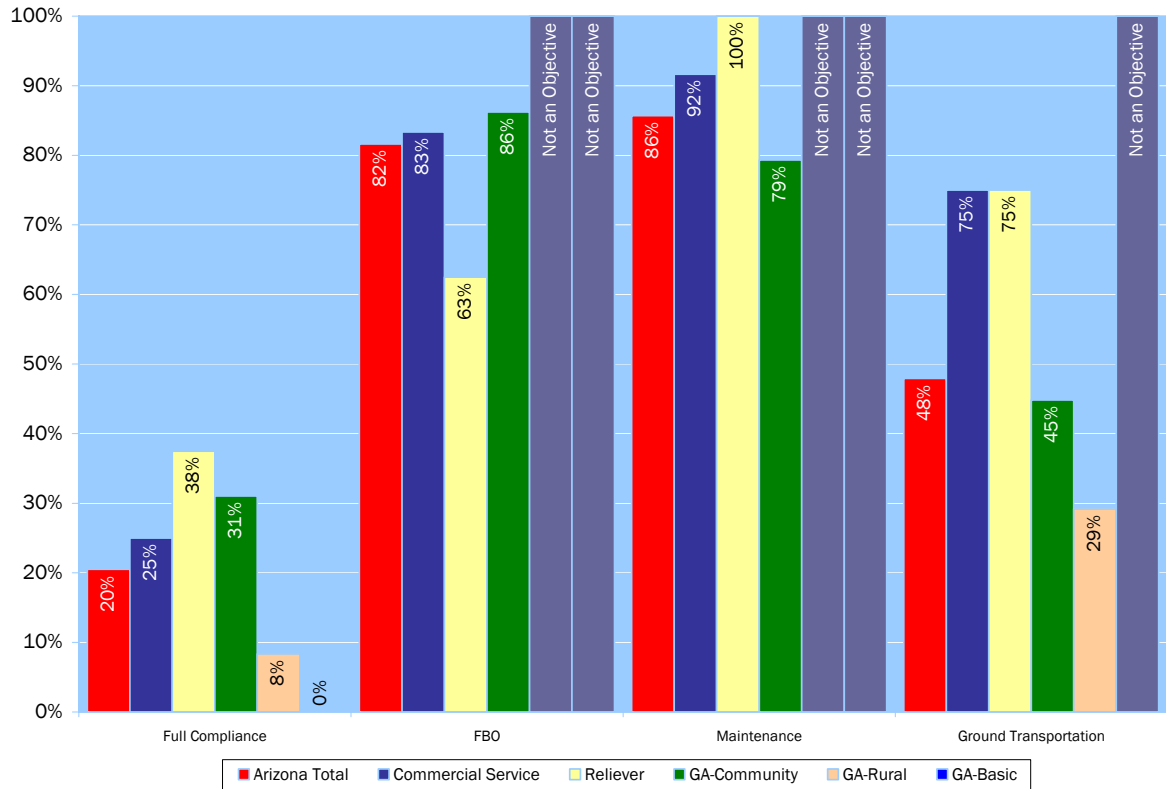
Services

Services which are available to local pilots and tenants, as well as transient pilots, are often expected necessities while others are essential for security. Basic services that are typically welcomed at airports by pilots include local and/or emergency phone service and restrooms. The presence of an FBO which provides aviation services at an airport is a service provided to both local and transient users. An FBO was considered full-service if it provides flight instruction, maintenance, fuel, and charter service. Coupled with an FBO, a designated maintenance facility and/or hangar are important services that airports can provide that are beneficial to all vested members of the aviation community. This service is yet another mechanism that airports use to be self-sufficient while conducting business and adding jobs to the economic base of the local community, region, and state. Additionally, when aircraft owners fly into an airport either for business or discretionary purposes, it is often important for them to have access to transportation services. Users may require on-site rental car services, while at other times, off-site rental car service, or a courtesy/loaner car is acceptable to meet this demand.

Figure B-22 shows that only 20 percent of all system airports meet their respective services objectives completely. While 80 percent of airports do not meet all of the applicable objectives for their role, it is noteworthy that the airports perform much better in this benchmark by individual services. Many airports partially fulfill an individual service objective. For example, Commercial Service and Reliever airports are required to have both Jet A and AvGas available to the public 24 hours a day, seven days a week. Many airports that have public fuel do not meet this requirement as it may not be available 24/7.

Figure B-23 indicates which airports are currently meeting their respective landside service objectives. It must be taken into consideration that if an airport does not meet all of its service objectives it is recognized as not meeting the objective in totality.

Figure B-22: Percentage of Airports by Role Meeting Service Objectives



Source: Airport Inventory & Data Survey

Figure B-23: Airport Services Compliance by Airport

Associated City	Airport Name	Individual Service Compliance						Full Compliance
		FBO	Maintenance	Ground Transportation	Phone	Restroom	Fuel	
Commercial Service: Objective - Full Service FBO, Maintenance, On-site Rental Car, Phone, Restroom, 24/7 AvGas and Jet A								
Bullhead City	Laughlin/Bullhead International	Yes	Yes	Yes	No	Yes	Yes	No
Flagstaff	Flagstaff Pulliam	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Grand Canyon	Grand Canyon National Park	Yes	Yes	No	Yes	Yes	No	No
Kingman	Kingman	Yes	Yes	Yes	Yes	Yes	Yes	No
Mesa	Phoenix-Mesa Gateway	Yes	Yes	Yes	Yes	Yes	Yes	No
Page	Page	No	Yes	Yes	Yes	Yes	Yes	No
Peach Springs	Grand Canyon West	No	No	No	Yes	Yes	No	No
Phoenix	Phoenix Sky Harbor International	Yes	Yes	Yes	Yes	Yes	Yes	No
Prescott	Ernest A. Love Field	Yes	Yes	Yes	No	Yes	Yes	No
Show Low	Show Low Regional	Yes	Yes	No	Yes	Yes	Yes	No
Tucson	Tucson International	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yuma	Yuma International	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reliever: Objective - Full Service FBO, Maintenance, On-site Rental Car, Phone, Restroom, 24/7 AvGas and Jet A								
Chandler	Chandler Municipal	Yes	Yes	No	Yes	Yes	Yes	No
Glendale	Glendale Municipal	Yes	Yes	Yes	Yes	Yes	Yes	No
Goodyear	Phoenix Goodyear	No	Yes	Yes	Yes	Yes	Yes	No
Marana	Marana Regional	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mesa	Falcon Field	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Phoenix	Phoenix Deer Valley	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Scottsdale	Scottsdale	No	Yes	Yes	Yes	Yes	Yes	No
Tucson	Ryan Field	No	Yes	No	Yes	Yes	Yes	No
GA-Community: Objective - Limited Service FBO, Limited Maintenance, On-site Ground Transportation, Phone, Restroom, AvGas and Jet A								
Benson	Benson Municipal	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Buckeye	Buckeye Municipal	No	No	No	Yes	Yes	Yes	No
Carefree	Sky Ranch at Carefree	No	No	No	Yes	Yes	Yes	No
Casa Grande	Casa Grande Municipal	No	Yes	No	No	No	Yes	No
Chandler	Memorial Airfield	No	No	No	No	No	No	No
Chandler	Stellar Airpark	Yes	Yes	No	Yes	Yes	Yes	No
Colorado City	Colorado City Municipal	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Coolidge	Coolidge Municipal	Yes	Yes	No	Yes	Yes	Yes	No

Figure B-23: Airport Services Compliance by Airport (Continued)

Associated City	Airport Name	Individual Service Compliance						Full Compliance
		FBO	Maintenance	Ground Transportation	Phone	Restroom	Fuel	
GA-Community: Objective - Limited Service FBO, Limited Maintenance, On-site Ground Transportation, Phone, Restroom, AvGas and Jet A								
Cottonwood	Cottonwood	Yes	Yes	No	No	Yes	No	No
Douglas	Douglas Municipal	Yes	Yes	No	Yes	Yes	Yes	No
Eloy	Eloy Municipal	Yes	Yes	No	Yes	Yes	Yes	No
Grand Canyon	Grand Canyon Valle	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Holbrook	Holbrook Municipal	Yes	No	Yes	Yes	Yes	No	No
Lake Havasu City	Lake Havasu City	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Marana	Pinal Airpark	Yes	Yes	No	No	Yes	Yes	No
Nogales	Nogales International	Yes	Yes	No	Yes	Yes	Yes	No
Parker	Avi Suquilla	Yes	Yes	No	Yes	Yes	Yes	No
Payson	Payson	Yes	Yes	No	Yes	Yes	Yes	No
Peoria	Pleasant Valley	Yes	Yes	No	Yes	Yes	No	No
Safford	Safford Regional	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sedona	Sedona	Yes	No	Yes	Yes	Yes	Yes	No
Sierra Vista	Sierra Vista Municipal	Yes	Yes	No	Yes	Yes	Yes	No
Springerville	Town of Springerville Municipal	Yes	Yes	Yes	Yes	Yes	Yes	Yes
St Johns	St Johns Industrial Air Park	Yes	No	Yes	Yes	Yes	Yes	No
Taylor	Taylor	Yes	Yes	Yes	Yes	Yes	No	No
Wickenburg	Wickenburg Municipal	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Willcox	Cochise County	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Williams	H.A. Clark Memorial Field	Yes	Yes	No	Yes	Yes	No	No
Winslow	Winslow-Lindbergh Regional	Yes	Yes	Yes	Yes	Yes	Yes	Yes
GA-Rural: Objective - Ground Transportation, Phone, Restroom, AvGas								
Ajo	Eric Marcus Municipal	NA	NA	No	No	No	No	No
Bisbee	Bisbee Municipal	NA	NA	Yes	Yes	Yes	Yes	Yes
Bullhead City	Sun Valley	NA	NA	No	Yes	Yes	Yes	No
Chinle	Chinle Municipal	NA	NA	No	No	No	No	No
Clifton/Morenci	Greenlee County	NA	NA	No	No	Yes	No	No
Douglas	Cochise College	NA	NA	No	Yes	Yes	Yes	No
Douglas Bisbee	Bisbee Douglas International	NA	NA	No	Yes	Yes	Yes	No
Gila Bend	Gila Bend Municipal	NA	NA	No	No	Yes	No	No
Globe	San Carlos Apache	NA	NA	Yes	No	Yes	No	No
Kayenta	Kayenta	NA	NA	No	No	No	No	No

Figure B-23: Airport Services Compliance by Airport (Continued)

Associated City	Airport Name	Individual Service Compliance						Full Compliance
		FBO	Maintenance	Ground Transportation	Phone	Restroom	Fuel	
GA-Rural: Objective - Ground Transportation, Phone, Restroom, AvGas								
Kearny	Kearny	NA	NA	No	No	Yes	No	No
Marble Canyon	Marble Canyon	NA	NA	No	Yes	Yes	No	No
Maricopa	Estrella Sailport	NA	NA	No	No	Yes	No	No
Peach Springs	Grand Canyon Caverns	NA	NA	Yes	Yes	Yes	No	No
Phoenix	Phoenix Regional	NA	NA	No	No	Yes	No	No
Polacca	Polacca	NA	NA	No	No	No	No	No
San Luis	Rolle Airfield	NA	NA	No	No	No	No	No
San Manuel	San Manuel/Ray/Blair	NA	NA	Yes	Yes	Yes	Yes	Yes
Seligman	Seligman	NA	NA	No	No	Yes	No	No
Temple Bar	Temple Bar	NA	NA	No	No	No	No	No
Tuba City	Tuba City	NA	NA	No	No	No	No	No
Tucson	La Cholla Airpark	NA	NA	Yes	No	No	Yes	No
Whiteriver	Whiteriver	NA	NA	Yes	No	No	No	No
Window Rock	Window Rock	NA	NA	Yes	Yes	Yes	No	No
GA-Basic: Objective - Phone and Restroom Desired								
Aguila	Eagle Roost	NA	NA	NA	No	No	NA	No
Bagdad	Bagdad	NA	NA	NA	No	No	NA	No
Cibecue	Cibecue	NA	NA	NA	No	No	NA	No
Meadview	Pearce Ferry	NA	NA	NA	No	No	NA	No
Peach Springs	Hualapai	NA	NA	NA	No	No	NA	No
Rimrock	Rimrock	NA	NA	NA	No	No	NA	No
Sells	Sells	NA	NA	NA	No	No	NA	No
Superior	Superior Municipal	NA	NA	NA	No	No	NA	No
Tombstone	Tombstone Municipal	NA	NA	NA	No	No	NA	No
Whitmore	Grand Canyon Bar Ten Airstrip	NA	NA	NA	No	No	NA	No

Source: Airport Inventory & Data Survey 2008

Note: NA=Not Applicable

Facilities

Landside facilities are important infrastructure elements of an airport and vital economic catalysts for both airport and its community. A terminal building is typically seen as both an airport's and community's "welcome center" when pilots and users arrive by aircraft. General aviation terminals serve different roles depending on the complexity of the airport. At many airports, the terminal may house the FBO, a pilots' lounge, a weather information area, and an observation area.

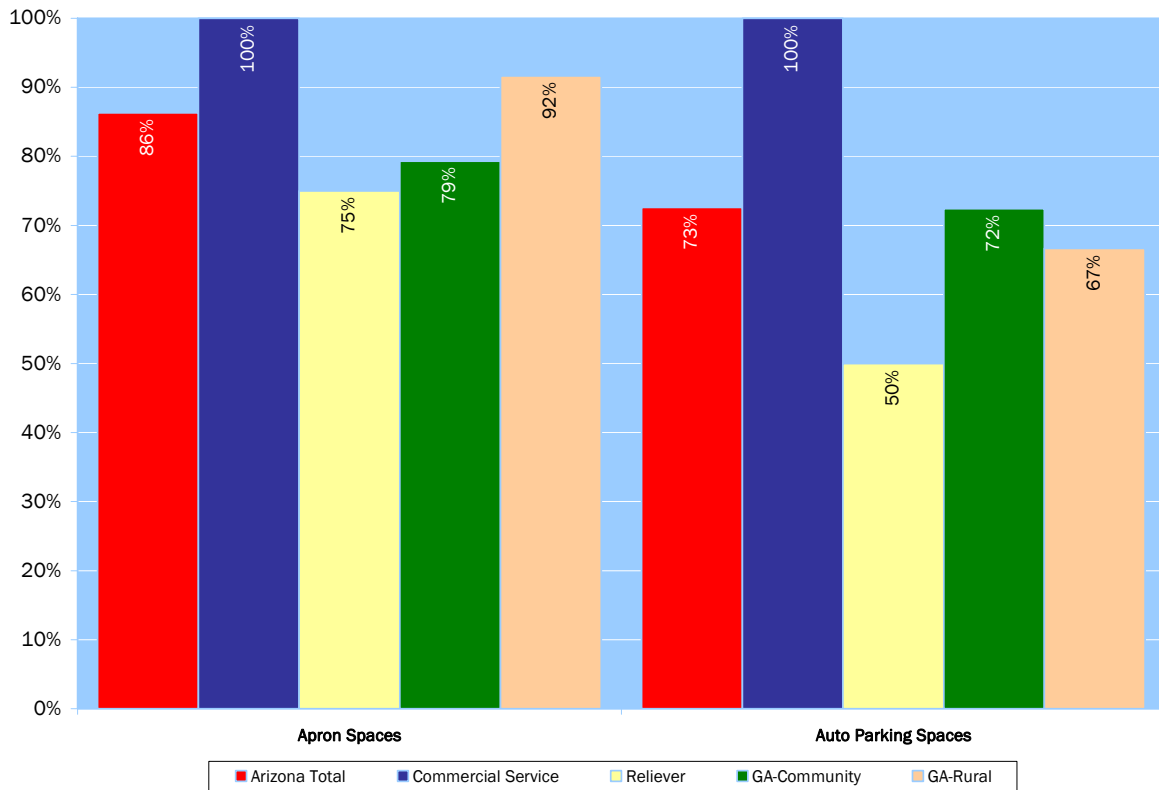
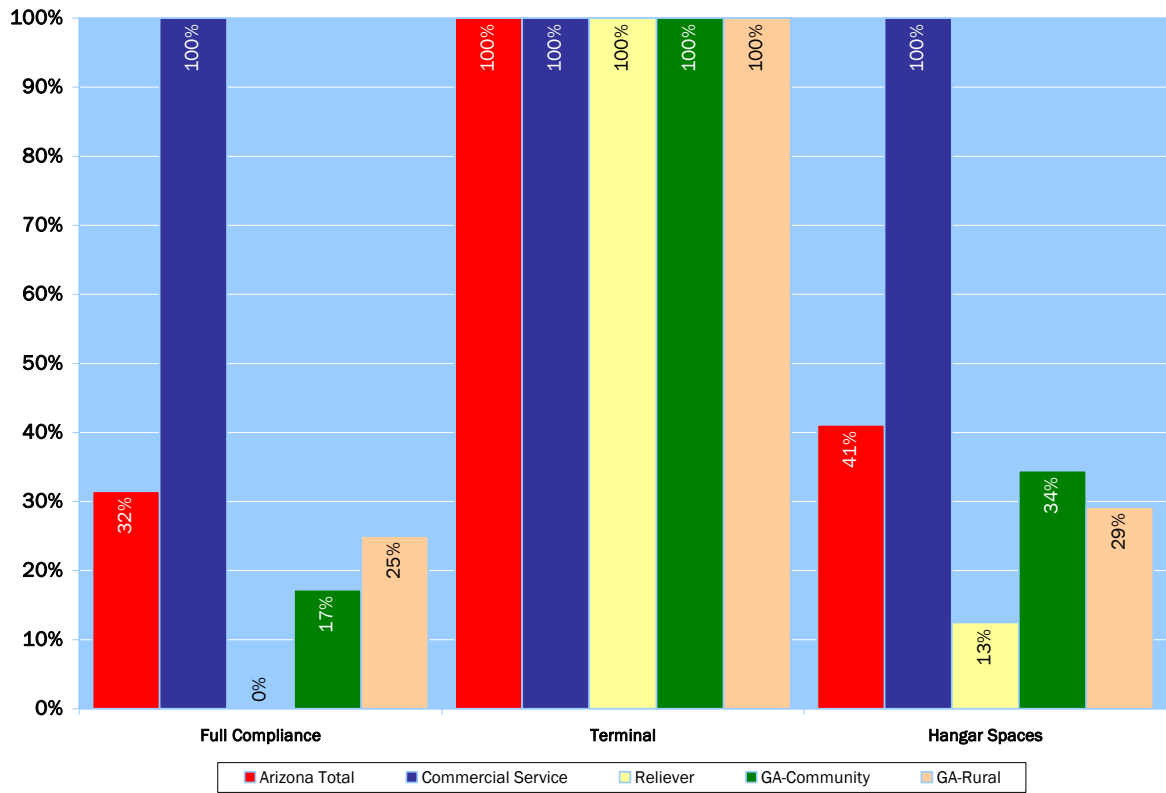
Similarly, the need to provide covered storage for based aircraft varies by airport, climate, aircraft cost, security, and other considerations. Nationally, there continues to be trend for owners of general aviation aircraft to seek covered storage. Until recently, hangar development did not qualify for federal grants and the need for hangar development often lagged behind the airport's ability to provide such facilities. In addition to providing covered storage for based aircraft there is the need to ensure adequate apron space for storing local and transient aircraft that cannot be housed in hangars.

Regardless of how an individual reaches an airport, there is an inherent need for auto parking whether it is for employees of aviation businesses to park their personal vehicles, aircraft owners that wish to park their car before taking their aircraft for a flight, or visitors and business users arriving via aircraft that will rent a car or utilize a courtesy car to go into town. As a result of the events on September 11, 2001, new security guidelines for commercial and general aviation airports may result in restricted auto parking in aircraft movement areas. Airports should therefore plan to provide auto parking in designated areas away from hangars and other areas of aircraft movement.

Figure B-24 shows that only 32 percent of airports for which facility objectives were set meet these objectives. Similar to the landside service objectives, most airports roles perform better in the individual facility objectives. The only facility objective where poor performance is noted is in the number of hangar spaces. Only 41 percent of total airports met this objective. Again, one should consider that if an airport does not meet all of its applicable landside facility objectives it is recognized as not meeting the objective in totality. Facility objectives were not set for GA-Basic airports.

Figure B-25 indicates which airports are currently meeting their respective landside service objectives.

Figure B-24: Percentage of Airports by Role Meeting Landside Facility Objectives



Source: Airport Inventory & Data Survey

Figure B-25: Airport Facilities Compliance by Airport

Associated City	Airport Name	Hangar Objective	Apron Objective	Auto Parking Objective	Individual Facility Compliance					Full Compliance	
					Terminal	Hangars	Apron	Auto Parking	Other Facilities		
Commercial Service: Objective - Consistent with Master Plan											
Bullhead City	Laughlin/Bullhead International	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Flagstaff	Flagstaff Pulliam	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Grand Canyon	Grand Canyon National Park	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kingman	Kingman	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mesa	Phoenix-Mesa Gateway	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Page	Page	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Peach Springs	Grand Canyon West	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Phoenix	Phoenix Sky Harbor International	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Prescott	Ernest A. Love Field	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Show Low	Show Low Regional	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tucson	Tucson International	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yuma	Yuma International Airport	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reliever: Objective - Terminal with Pilots' Lounge, Hangars (75% of based fleet and 25% overnight), Apron (25% of based fleet and 75% transient), Auto Parking (75% of based fleet)											
Chandler	Chandler Municipal	382	217	375	Yes	No	Yes	No	Yes	Yes	No
Glendale	Glendale Municipal	314	148	310	Yes	No	Yes	Yes	Yes	Yes	No
Goodyear	Phoenix Goodyear	215	159	230	Yes	Yes	No	No	Yes	Yes	No
Mesa	Falcon Field	723	382	711	Yes	No	Yes	Yes	Yes	Yes	No
Phoenix	Phoenix Deer Valley	968	464	956	Yes	No	No	Yes	Yes	Yes	No
Scottsdale	Scottsdale	347	249	336	Yes	No	Yes	No	Yes	Yes	No
Tucson	Marana Regional	233	112	207	Yes	No	No	No	Yes	Yes	No
Tucson	Ryan Field	235	153	228	Yes	No	Yes	Yes	Yes	Yes	No
GA-Community: Objective - Terminal with Appropriate Facilities, Hangars (60% of based fleet and 25% overnight), Apron (40% of based fleet and 50% transient), Auto Parking (33% of based fleet)											
Benson	Benson Municipal	26	21	14	Yes	No	Yes	Yes	Yes	Yes	No
Buckeye	Buckeye Municipal	39	31	21	Yes	Yes	Yes	No	Yes	Yes	No
Carefree	Sky Ranch at Carefree	70	46	38	Yes	Yes	No	No	Yes	Yes	No
Casa Grande	Casa Grande Municipal	56	44	31	Yes	No	Yes	Yes	Yes	Yes	No
Chandler	Memorial Airfield	1	3	0	Yes	Yes	No	Yes	Yes	Yes	No
Chandler	Stellar Airpark	93	68	51	Yes	Yes	No	No	Yes	Yes	No
Colorado City	Colorado City Municipal	4	4	2	Yes	Yes	Yes	No	Yes	Yes	No

Figure B-25: Airport Facilities Compliance by Airport (Continued)

Associated City	Airport Name	Hangar Objective	Apron Objective	Auto Parking Objective	Individual Facility Compliance					Full Compliance
					Terminal	Hangars	Apron	Auto Parking	Other Facilities	
GA-Community: Objective - Terminal with Appropriate Facilities, Hangars (60% of based fleet and 25% overnight), Apron (40% of based fleet and 50% transient), Auto Parking (33% of based fleet)										
Coolidge	Coolidge Municipal	21	18	12	Yes	No	No	No	Yes	No
Cottonwood	Cottonwood	31	27	17	Yes	No	Yes	Yes	Yes	No
Douglas	Douglas Municipal	17	17	9	Yes	No	Yes	Yes	Yes	No
Eloy	Eloy Municipal	26	22	14	Yes	No	Yes	Yes	Yes	No
Grand Canyon	Grand Canyon Valle	4	2	2	Yes	Yes	Yes	Yes	Yes	Yes
Holbrook	Holbrook Municipal	13	11	7	Yes	No	Yes	Yes	Yes	No
Lake Havasu City	Lake Havasu City	140	109	76	Yes	No	Yes	Yes	Yes	No
Marana	Pinal Airpark	1	0	0	Yes	Yes	Yes	Yes	Yes	Yes
Nogales	Nogales International	23	24	12	Yes	No	Yes	Yes	Yes	No
Parker	Avi Suquilla	27	25	14	Yes	No	Yes	Yes	Yes	No
Payson	Payson	54	46	29	Yes	No	Yes	No	Yes	No
Peoria	Pleasant Valley	21	14	12	Yes	No	Yes	No	Yes	No
Safford	Safford Regional	26	26	14	Yes	No	Yes	Yes	Yes	No
Sedona	Sedona	66	66	35	Yes	Yes	Yes	Yes	Yes	Yes
Sierra Vista	Sierra Vista Municipal	50	38	28	Yes	Yes	No	Yes	Yes	No
Springerville	Town of Springerville Municipal	12	14	7	Yes	No	Yes	Yes	Yes	No
St Johns	St Johns Industrial Air Park	10	14	5	Yes	No	Yes	Yes	Yes	Yes
Taylor	Taylor	9	7	5	Yes	Yes	Yes	Yes	Yes	Yes
Wickenburg	Wickenburg Municipal	29	24	16	Yes	Yes	No	Yes	Yes	No
Willcox	Cochise County	17	15	9	Yes	No	Yes	No	Yes	No
Williams	H.A. Clark Memorial Field	12	9	6	Yes	No	Yes	Yes	Yes	No
Coolidge	Coolidge Municipal	21	18	12	Yes	No	No	No	Yes	No
GA-Rural: Objective - Hangars (50% of based fleet and 25% overnight), Apron (50% of based fleet and 25% transient), Auto Parking (equal to based fleet)										
Ajo	Eric Marcus Municipal	5	9	8	Yes	Yes	Yes	No	Yes	No
Bisbee	Bisbee Municipal	18	32	34	Yes	No	Yes	No	Yes	No
Bullhead City	Sun Valley	17	23	33	Yes	No	No	No	Yes	No
Chinle	Chinle Municipal	3	4	4	Yes	No	Yes	Yes	Yes	No
Clifton/Morenci	Greenlee County	2	2	2	Yes	Yes	Yes	Yes	Yes	Yes
Douglas	Cochise College	12	12	15	Yes	No	Yes	Yes	Yes	No
Douglas Bisbee	Bisbee Douglas International	10	18	18	Yes	No	Yes	Yes	Yes	No

Figure B-25: Airport Facilities Compliance by Airport (Continued)

Associated City	Airport Name	Hangar Objective	Apron Objective	Auto Parking Objective	Individual Facility Compliance					Full Compliance	
					Terminal	Hangars	Apron	Auto Parking	Other Facilities		
GA-Rural: Objective - Hangars (50% of based fleet and 25% overnight), Apron (50% of based fleet and 25% transient), Auto Parking (equal to based fleet)											
Gila Bend	Gila Bend Municipal	2	3	3	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Globe	San Carlos Apache	24	38	47	Yes	No	Yes	No	Yes	No	No
Kayenta	Kayenta	1	2	0	Yes	No	Yes	Yes	Yes	No	No
Kearny	Kearny	3	5	5	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Marble Canyon	Marble Canyon	1	1	1	Yes	No	Yes	No	Yes	No	No
Maricopa	Estrella Sailport	15	20	28	Yes	No	Yes	No	Yes	No	No
Peach Springs	Grand Canyon Caverns	1	2	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Phoenix	Phoenix Regional	6	8	11	Yes	No	Yes	No	Yes	No	No
Polacca	Polacca	1	2	0	Yes	No	Yes	Yes	Yes	No	No
San Luis	Rolle Airfield	0	2	0	Yes	Yes	Yes	Yes	Yes	Yes	Yes
San Manuel	San Manuel/Ray/Blair	30	53	57	Yes	No	Yes	Yes	Yes	No	No
Seligman	Seligman	1	3	0	Yes	No	Yes	Yes	Yes	No	No
Temple Bar	Temple Bar	1	2	0	Yes	No	Yes	Yes	Yes	No	No
Tuba City	Tuba City	1	2	0	Yes	No	Yes	Yes	Yes	No	No
Tucson	La Cholla Airpark	49	67	97	Yes	No	No	No	Yes	No	No
Whiteriver	Whiteriver	1	2	0	Yes	No	Yes	Yes	Yes	No	No
Window Rock	Window Rock	3	4	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: Airport Inventory & Data Survey 2008