Appendix D – Airport Classification

Introduction

Airports are given different classifications or designations, depending on the source. This appendix discusses the various sources or systems used nationally, regionally, or locally to classify an airport. The primary systems used to classify an airport include:

a. FAA National Plan of Integrated Airport Systems (NPIAS)
b. Regional or State Aviation System Plans (SASP)
c. FAA General Aviation Airport Report (ASSET)

National Plan of Integrated Airport Systems

The Airport and Airway Improvement Act of 1982 directed the Secretary of Transportation to prepare, publish, and biannually revise a national system plan – the National Plan of Integrated Airport Systems (NPIAS) – for the development of public-use airports in the United States. This requirement can be found in Public Law 49 United States Code § 47103. The NPIAS is a system that emphasizes system planning and development to meet current and future aviation needs. It includes the development considered necessary to provide a safe, efficient, and integrated airport system to meet the needs of civil aviation, national defense, and the United States Postal Service. It takes into account the relationship of each airport to the rest of the transportation system in a particular area, the forecast of technological developments in aeronautics, and the development forecast in other modes of transportation.

To be eligible for funding under the Airport Improvement Program (AIP), an airport must be included in the NPIAS. The FAA determines whether an airport can be included in the NPIAS and the requirements for inclusion in the NPIAS are defined by law and FAA policy. As general criteria, the airport must be a publicly-owned, public-use airport serving civil aviation (privately-owned, public use airports may be included under certain circumstances) with an eligible sponsor, must have at least 10 based aircraft, and must be located at least 20 miles from another NPIAS airport.

Although it is not a factor in determining an airport's classification in the NPIAS, it is important to note that, after an airport is included in the NPIAS and accepts a federal grant for AIP funds, the airport sponsor is contractually obligated to meet the terms and conditions of the AIP grant. These terms and conditions, typically called grant assurances, are established by federal law and define the requirements a sponsor must comply with in the safe and efficient operation and maintenance of the airport. The current grant assurance information can be found at www.faa.gov/airports/aip/grant_assurances.

NPIAS Airport Classification

The public law that created the NPIAS plan defines airports by categories of airport activities. Those categories are defined as Commercial Service, Reliever or General Aviation.

Commercial Service

Commercial Service airports are defined as publicly owned airports that have at least 2,500 passenger boardings each calendar year and receive scheduled passenger service. Commercial service airports are further categorized based on the number of annual passenger boardings. Primary airports have more than 10,000 passenger boardings each year and Nonprimary Commercial Service airports have at least 2,500 but no more than 10,000 passenger boardings each year. In 2013, there were 392 Primary airports and 114 Nonprimary Commercial Service airports.

Because of the wide range of passenger boardings in the United States, primary commercial service airports are further categorized by the percentage of total passenger boardings in the United States. The categories are Large, Medium, Small and Non Hub airports. The passenger boardings are typically above 8 million for Large Hub, 2 to 8 million for Medium Hub, 350,000 to 2 million for Small Hub and 10,000 to 350,000 for Non-Hub. In 2013, there were 30 Large hubs, 33 Medium hubs, 71 Small hubs and 258 Non-Hubs

Reliever

Reliever airports are general aviation airports designated by the FAA to relieve congestion at a commercial service airport and to provide more general aviation access to the overall community. The current FAA criteria for reliever airports includes more than 75,000 annual operations, a runway greater than 5,000 feet, a precision instrument landing procedure, more than 100 based aircraft, and relieving an airport with 20,000 hours of annual delays of commercial passenger aircraft operations.

General Aviation

Most airports that are not considered commercial service airports fall into this category. Although some general aviation airports do have scheduled passenger service, those with fewer than 2,500 annual boardings are not classified as commercial service airports. The following section provides greater details on the categorization of general aviation airports based on the FAA's ASSET 1 and 2 Studies from 2012 and 2014 respectively.

General Aviation Airports: A National Asset

This report, commonly known as the ASSET 1 Study, documented an 18-month study of the nearly 3000 general aviation (GA) airports, heliports, and seaplane bases identified in the FAA's National Plan of Integrated Airport Systems (NPIAS). The in-depth analysis highlighted the pivotal role GA airports play in our society, economy, and the aviation system. The study also aligned the GA airports into four categories – national, regional, local, and basic – based on their existing activity levels. The categories are a tool to help the FAA and state

aeronautical agencies make more consistent planning decisions for the nation's GA airports. They reflect the current aviation activity at GA airports, such as the number and type of based aircraft, the number of passenger boardings, and the number of flights.

During the initial study, the FAA found that almost 500 GA airports did not clearly fit into the four defined categories. As a result, the FAA initiated a second phase of the study in 2013 to define a category for those airports, as well as reassign airports to different categories, based on updated information. That study, known as the ASSET 2 study, assigned 212 previously unclassified airports to one of the four categories.

National Airports

These 84 GA airports are located in metropolitan areas near major business centers and support flying throughout the nation and the world. Currently located within 31 states, they account for 13 percent of total flying at the studied airports and 35 percent of all flights that filed flight plans at the airports in the four categories. These 84 airports support operations by the most sophisticated aircraft in the GA fleet. Many flights are by jet aircraft, including corporate and fractional ownership operations and air taxi services. These airport also provide pilots with an alternative to busy primary commercial service airports. There are no heliports or seaplane bases in this category.

The criteria used to define the National category is 5,000+ instrument operations, 11+ based jets, 20+ international flights, or 500+ interstate departures: or 10,000+ enplanements and at least 1+ charter enplanement by a large certificated air carrier: or 500+ million pounds of landed cargo weight.

Regional Airports

The 468 airports in the Regional Airport category are located in metropolitan areas and serve relatively large populations. These airports support interstate and some long distance (cross country) flying with more sophisticated aircraft. 49 states, with the exception of Hawaii, currently have Regional airports. These airports account for 37 percent of total flying at the studied GA airports and 42 percent of flying with flight plans. There is a substantial amount of charter (air taxi), jet flying, and rotorcraft at regional airports. There are no heliports or seaplane bases in this category.

The criteria used to define the Regional category is in a Metropolitan Statistical Area (Metro or Micro) and 10+ domestic flights over 500 miles, 1,000+ instrument operations, 1+ based jet, or 100+ based aircraft; or the airport is located in a metropolitan or micropolitan statistical area, and the airport meets the definition of commercial service.

Local Airports

The 1,263 airports in the Local category are the backbone of the general aviation system, with at least one Local airport in every state. They are typically located near larger population centers but are not necessarily in metropolitan or micropolitan areas. Local airports account for 42 percent of the general aviation airports eligible for Federal funding. They also account for approximately 38 percent of the total flying at the studied GA airports and 17 percent of flying with flight plans. Most of the flying is by piston aircraft in support of business and personal needs. In addition, these airports typically have flight training,

emergency services, and charter service, and the flying tends to be within a state or immediate region. There are no heliports, but there are 4 seaplane bases in the category.

The criteria used to define the Local category is 10+ instrument operations and 15+ based aircraft; or 2,500+ passenger enplanements.

Basic Airports
The 852 airports in the Basic category are often able to fulfill their role with a single runway, helipads, seaplane area, and limited infrastructure. 43 states have Basic airports and these airports fulfill the role of a community airport providing a means for private GA flying and linking the community to the national airport system. Basic airports account for approximately 7 percent of the total flying at GA airports and 2 percent of flying with flight plans. Most of the flying is self-piloted for business and personal reasons using propeller-driven aircraft. A fair amount of air charter (taxi) services is provided at these airports. There are also 3 heliports and 20 seaplane bases in this category.

The criteria used to define the Basic category is 10+ based aircraft; or 4+based helicopters; or the airport is located 30+ miles from the nearest NPIAS airport; or the airport is identified and used by the US Forest Service, US Marshals, US Customs and Border Protection (designated, international, or landing rights), or US Postal Service (air stops), or has Essential Air Service; or the airport is a new or replacement facility activated after January 1, 2001; and publicly or privately owned and designated as a reliever with at least 90 based aircraft.

Unclassified General Aviation Airports
There are 281 airports that did not fit into one of the four categories. Most of these airport have been in the NPIAS for decades and may have seen an erosion of based aircraft and activity (because of population or economic shifts or recession) or may have no based aircraft. 54 of these airports are privately owned and were originally included in the national system as relievers for commercial service airports, but no longer meet the entry criteria. Others may be seasonal airports, military airfields recently converted to general aviation use, or airports used to access important state airports with related national interests.

These airports account for approximately 6 percent of total flying at the studied GA airports and 2 percent of flying with flight plans. However, none are commercial service airports and none received scheduled air service through the Essential Air Service program.

FAA Asset Study Results for South Dakota Airports

The following **Table D-1** provides a summary of the ASSET categories and the numbers of these airports in South Dakota.

Table D-1 FAA ASSET 2 Study

FAA ASSET 2 Study			
Category	Description	U.S.	South Dakota
National	Supports the national and state system by providing communities with access to national and international markets in multiple states throughout the U.S.	84	0
Regional	Supports regional economies by connecting communities to statewide and interstate markets	468	2
Local	Supplements local communities by providing access primarily to intrastate and some interstate markets	1,263	11
Basic	Support general aviation activities such as emergency service, charter or critical passenger service, cargo operations, flight training and personal flying	852	35
Un Classified	Not otherwise classified	281	6
	Total	2,948	54

Source: FAA ASSET 2 Study March 2014

Black Hills Airport -Clyde Ice Field ASSET Classification

Black Hills Airport -Clyde Ice Field is classified as a local airport in the current ASSET report. The airport meets the local criteria because it has 68 based aircraft (based on the FAA Master Record) and 500 instrument approaches (based on 2014 flight operations data).

State Aviation System Plan

An integrated State airport system plan is the representation of facilities required to meet immediate and future needs as well as achieve overall goals of the State. It recommends the general role, location, and characteristics of new airports or the nature of expansion for existing ones. In order for an airport to be considered for inclusion in the NPIAS, it must first be included in the State's Aviation System Plan (SASP). Each SASP may use different terms or definitions for the role of an airport within the state, and those roles are defined below.

South Dakota State Aviation System Plan

Airports in South Dakota are organized in a variety of roles based on the users they serve and support. South Dakota airports are classified in one of five categories, each with a unique set of characteristics and Airport Reference Code (ARC). See **Appendix H – Airfield Design** for information on ARC codes. The airport classification categories are described in **Table D-2,** specific details for each category are listed in **Table D-3**, and the map in **Exhibit D-1** shows all airport categories in the South Dakota State Aviation System Plan.

Black Hills Airport - Clyde Ice Field is classified as a large general aviation airport in the current South Dakota State Aviation System Plan.

Table D-2 South Dakota SASP Roles

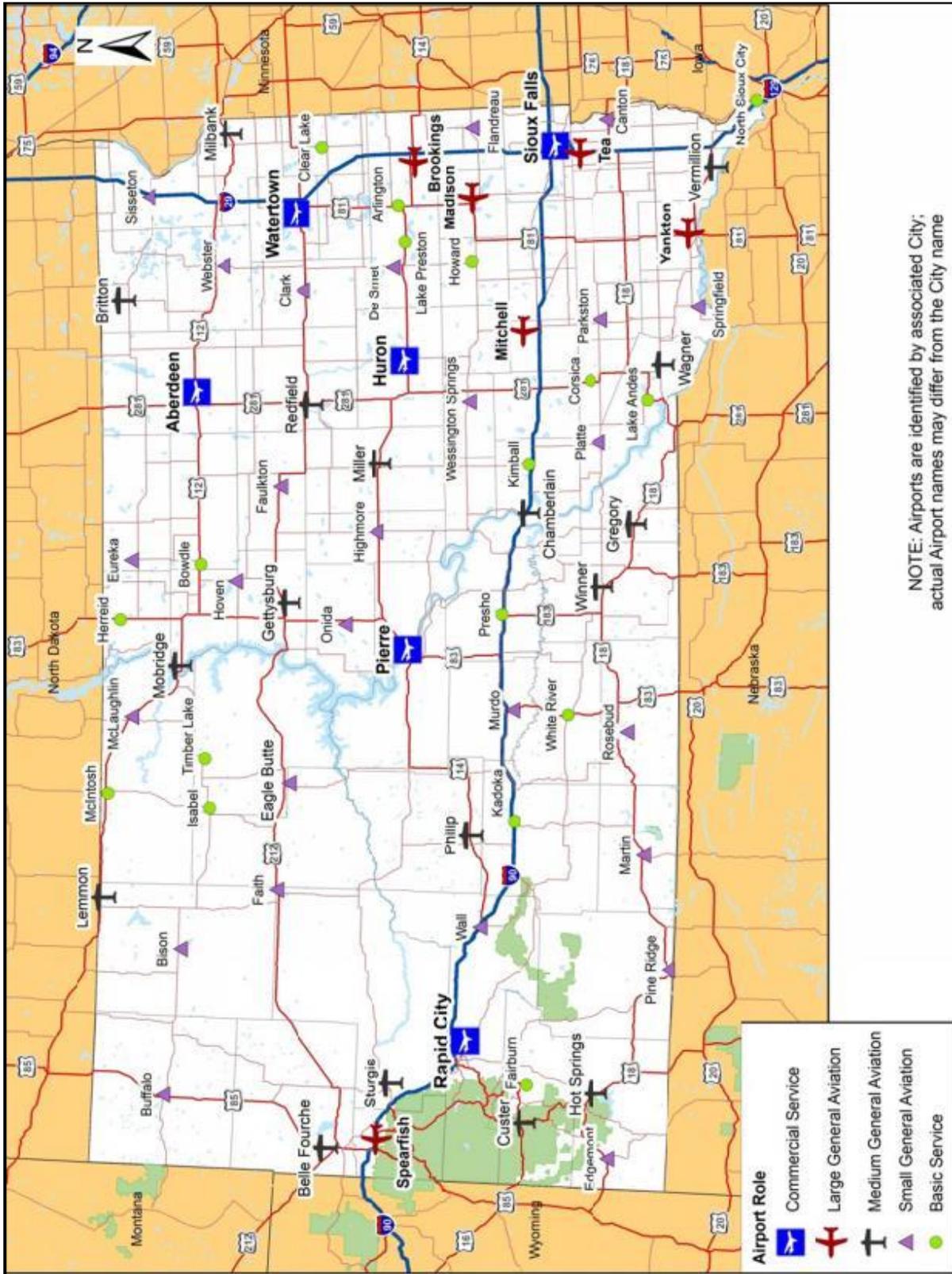| Role	Description	No. of Airports
Commercial Service	Supports some level of scheduled commercial airline service in addition to a full range of general aviation aircraft.	6
Large General Aviation	Supports all general aviation aircraft and corporate aviation activity. These airports' primary users are business related and serve a large geographic region or experience high levels of general aviation activity.	6
Medium General Aviation	Support most twin and single engine aircraft and may have occasional business jet activity. Support a regional transportation need.	17
Small General Aviation	Support primarily single-engine, general aviation aircraft, but are capable of accommodating smaller twin-engine general aviation aircraft. Support local transportation needs and special use aviation activities.	26
Basic General Aviation	Support primarily single-engine, general aviation aircraft, special use aviation activities, and access to remote areas or provide emergency service access.	17
	Total	72

Source: South Dakota State Aviation System Plan - 2010

Table D-3 South Dakota SASP Role Details

Role	Runway (minimum)	Approach	Weather	Services	Fuel	ARC
Commercial Service	6,500' +	Precision	Yes	Major	JetA/100LL	C-II
Large GA	5,000'	Non-Precision	Yes	Minor	JetA/100LL	C-I
Medium GA	4,200'	Non-Precision	Yes	On-Call	100LL	B-II
Small GA	3,000'	Visual	No	No	No	B-I
Basic GA	No Minimum	Visual	No	No	No	A-I

Source: South Dakota State Aviation System Plan - 2010

Exhibit D-1 South Dakota SASP Airports

Source: South Dakota State Aviation System Plan - 2010