Feasibility Study for FBO/Aviation Service Provider

Salt Lake City International Airport (SLC) Salt Lake City, Utah



Salt Lake City International Airport

Prepared for:

Mr. John Buckner, Jr. Director of Administration and Commercial Services Salt Lake City Department of Airports P.O. Box 145550 Salt Lake City, Utah 84114



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December 31, 2013

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> RE: Feasibility Study for FBO/Aviation Service Provider Salt Lake City International Airport (SLC) Salt Lake City, Utah

Dear Mr. Buckner:

Per the request by the Salt Lake City Department of Airports, we are pleased to present this document, which represents the Feasibility Study for an additional FBO/Aviation Service Provider at the Salt Lake City International Airport in Salt Lake City, Utah. The following report provides our assessment and analysis of various and potential issues related to the addition of another FBO/Aviation Service Provider, including the demand for such services and our recommendations for consideration.

In the development of this document, *Airport Business Solutions* researched many sectors of the local, regional and national airport market, expanding as necessary to gain sufficient and comprehensive data to yield adequate and supportable conclusions. Moreover, we reviewed SLC operational and market data from a number of reliable sources, as well as data from the *ABS* proprietary industry database. We met with the current FBO owner/managers, interviewed City officials and Airport staff, and interviewed industry executives regarding the prospectus for the Airport.

We appreciate the opportunity to provide our professional services to the Salt Lake City Department of Airports. If you should have any further questions, please advise.

Respectfully Submitted,

Michael A. Hodges, MAI President/CEO

Randy D. Bisgard

Randy D. Bisgard Senior Vice President

Solutions as Unique as the Problems ...



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I. BACKGROUND INFORMATION

1. Scope of the Assignment

Airport Business Solutions (ABS) has been engaged by the Salt Lake City Department of Airports, henceforth identified as SLCDA, to provide a detailed analysis of the general aviation marketplace and to determine the feasibility of having an additional full service Fixed

Base Operator (FBO) or other aviation service operator at the Salt Lake City International Airport (FAA Identifier SLC). As a part of this assignment, *ABS* has researched the local, regional and national marketplace in regards to the current and future trends for general aviation services.

2. SLCDA Goals

With regard to this assignment, and as background to the need for this report, it is important to understand the goals of the SLCDA and the impact these goals have on the recommendations herein and ultimately the final decision making process of the SLCDA.

a. Federal Aviation Administration (FAA) Requirements

As the Airport Sponsor, the SLCDA must conform to all FAA directives and guidelines with regard to any future development on the Airport. As such, in addition to the normal administrative analysis done internally by the Airport, the SLCDA has chosen to request this study to further analyze the implications of and feasibility of a second full service FBO on the Airport. It is within this context that this report has been researched and written.



As a recipient of Federal grant money, the Airport must provide certain assurances to the FAA that business on the field is performed on an equitable basis and that there is no situation whereby commercial tenants can be considered as having an undue competitive advantage, or that the playing field is tilted in favor of any entity on the Airport.



Salt Lake City International Airport



A key goal of the SLCDA is to address the FAA's position, since one of the most important elements to effectively evaluating a business proposal for a new FBO or specialized aviation service operation (SASO) is a thorough understanding of regulatory impacts promulgated by federal, state, and local government agencies having jurisdiction over an airport and its users. The federal government has had language on the books about competitive airport issues since 1938. Most frequently quoted as it relates to the number of FBOs at an airport is FAA Airport Sponsor Assurance 23. In short, it states: "(The airport sponsor) will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public." Despite the brevity of the statement, this assurance is frequently misinterpreted.

At an airport, the concept of exclusive rights prohibits an airport sponsor from granting an exclusive right for the use of the airport, as well as prohibiting the airport sponsor from providing an exclusive right to a person or entity providing aeronautical services to the public. In particular, the airport sponsor may not grant a special privilege or a monopoly to anyone providing aeronautical services or engaging in an aeronautical use on an airport. The FAA's intent of this restriction is to promote aeronautical activity and protect fair competition at federally obligated airports.

So what exactly is an "exclusive right"? FAA Advisory Circular 150/5190-6 defines Exclusive Rights: "A power, privilege, or other right excluding or debarring another from enjoying or exercising a like power, privilege, or right. An exclusive right can be conferred either by express agreement, by the imposition of unreasonable standards or requirements, or by any other means. Such a right conferred on one or more parties, but excluding others from enjoying or exercising a similar right or rights, would be an exclusive right." Airport sponsors may consider this to mean that they cannot limit their airport to a single FBO, while many prospective FBO's seeking to locate on an airport view this as giving them the unfettered right to commence business operations without restrictions. Neither of these assumptions is the case at all.

Before an airport sponsor entertains or solicits proposals from prospective operators, it is incumbent upon the airport sponsor and the airport management team to assess their ability to provide existing and prospective operators with the "opportunity to be successful". This does not



mean the airport sponsor has an obligation to "guarantee success"; however, there is a certain impetus on the airport sponsor to create an operating environment that is conducive to success, which, in turn, if successfully achieved, maximizes the benefit of the facility and level of services to the airport and the community it serves. In other words, if the businesses on an airport are successful, it generally translates to the airport itself being successful.

In the case of SLC, the Airport clearly exceeds the FAA requirements with its methodical analysis of the airport marketplace, including a number of processes regarding highest and best land use, long term planning, and other input, including the development of this report.

b. User Needs

Although this feasibility study has a significant impact on the general aviation service community and users of the Airport, it also has impacts on other users of the facility. The Airport must consider the implications of adding additional general aviation services to other segments of the industry including airlines, air cargo carriers and handling companies, rental car entities, and



any other aviation business that may at some time be vying for land on the Airport that will ultimately be needed for expansion or another highest and best use.

General aviation users currently have only one option for general aviation fuel and ground handling at SLC, which in general is typically perceived as an inferior alternative by the users of the airport. This is not to say that TAC Air/Keystone Aviation is not doing a good job for customers, but it does present a potential for pricing and service level erosion. Perception is sometimes reality, if the users of the field believe that pricing and service issues are because there is no competition, the overall perception can be negative. However, to the contrary, too many operators can also be detrimental to service levels if the operators indulge in a price war. This situation can erode margins, and limit the ability of FBOs to expand, hire new people, or provide the amenities needed to succeed and/or meet customer's needs and expectations. Those operators who have survived



the economic downturn have begun to re-imagine the business model to include creative ways to keep marketshare through value-added quality services as opposed to fuel price wars. These price war issues are typically more prevalent at fields with numerous FBO facilities, often four or more, where every gallon of fuel is negotiated and margins are poor. It is not believed that this will be the case at SLC, since the market is stronger than others in the nation, and the economy of Salt Lake City is outperforming many other regions of the nation.

Based upon our discussions, the goal of SLCDA is to ensure that customer service levels remain very high to keep the Airport in a position whereby general aviation users' needs are being met on a consistent and cost effective basis, and that the Airport is deemed a welcome place for corporate and general aviation. This connection of corporate aviation to the business climate of the City cannot be over-emphasized, since the FBOs are the gateway to the community in many ways.

c. Responsibility to Current Tenants

In the same context of user needs, it is the goal of the SLCDA to respect and understand the position of its existing tenants. In fact, the SLCDA wants to be sure the concerns of all existing tenants are taken into consideration regarding this study. *ABS* interviewed the current incumbent operator and also interviewed operators at similar airports to better determine the



implications of additional service providers in a highly competitive environment.

d. Fiduciary Responsibility

The SLCDA also has a specifically defined responsibility to the City, the County and the community as a whole, to make the Airport as self-sustaining and financially viable as possible, so as not to be a drain on other community resources. As such, it is critical that any new development on the field be sustainable solely on the part of the tenant. If this is not the case, and a new business entity were to fail, SLCDA would likely be required to take over facilities, manage, or otherwise



absorb the financial strain caused by the abrupt exit or failure of one of the general aviation providers should the market be over-saturated. This short-term impact could also be followed by long-term implications relative to operational aspects of general aviation service providers in the future. And, although a lending institution would try to recover its losses, it has been the experience of *ABS* that the airport sponsor often is required to assist the lender with interim management or upkeep and security of abandoned facilities. These situations always create a problem for the sponsor, and could likely cause an airport to expend staff time and out of pocket expenses to ensure that the property is in compliance with FAA guidelines and the airport's Master Plan.

3. Methodology

a. On-Site Review

ABS has considerable knowledge of the Airport from previous projects, which was complemented by the recent on-site visit of the field and its facilities on behalf of several *ABS* staff members. Meetings were conducted with Airport staff and management personnel. In addition, several Airport tenants were interviewed on-site, and tours of facilities were completed during the visit.

b. Airport Data

As a part of this engagement, *ABS* reviewed all pertinent data relevant to the Airport situation including operational data, general aviation fuel volumes, based aircraft, airport infrastructure, facility inventory, tenant leases, market drivers and customer profiles, competitive airports and operators, and other general airport data related to the community and future economic trends. *ABS* also looked at the expansion of aircraft manufacturing at the Airport, including the activities at the proposed Honda Jet facility and its implications for leased land and other support services.



c. ABS Proprietary Data

In addition to the data provided by SLCDA and others through interviews, *ABS* has also relied on information from its proprietary database of aviation service business appraisals, knowledge of transactions currently occurring in the industry, and other financial data from previous engagements to reach the conclusions herein.

d. Industry Data

ABS has reviewed general aviation industry data including trends in the fuel market, acquisition and consolidation of operations, pilot data, flight activity and overall changes in the general aviation marketplace. In addition, at a recent industry conference of FBOs, *ABS* researched the potential interest in the expansion of FBO services at SLC. Several industry leaders were interviewed including executives from several entities who are interested in expansion. All of those interviewed indicated that the SLC market is worth review and consideration, but all had similar questions regarding the marketplace. The predominate questions included inquiries as to the make-up of the fuel market, not just the quantity of fuel, but how much is retail jet fuel, how much is attributed to based aircraft, and how much is associated with fractional or other contract fuel deliveries. Other questions included the prospective cost of start-up, including the need to spend significant money in preparing a potential site and other issues related to the competitive situation on the field.



II. INDUSTRY OVERVIEW

1. History and Evolution of General Aviation

In order to fully understand the enclosed recommendations and outlook for the future for general aviation operations at SLC, both now and into the future, it is important to understand the history of the FBO industry, how it was conceived, and how it has evolved into today's complex marketplace. It should also be noted that *ABS* provides this background information to inform all

potential readers of this report as to the make-up of the industry. It is common in reports of this type, that numerous government and private entities may have interest in, or direct input, regarding the final implementation of the recommendations herein. As such, this background information is provided for those readers who may not have full knowledge of the various aspects of the general aviation service industry.



a. The Early Years

In the post World War 1 era, aviation was in its infancy. Aeronautical activity in this country was primarily related to limited airmail service and flying circus events utilizing what were then known as "barnstormers". These barnstormers were identified as such because they flew to and from farmers fields often utilizing a barn or other protected area to park their aircraft and perform refueling and maintenance services. During that period, in most areas of the country, airports were nonexistent and the pilots of the era relied on a chase vehicle or mobile operation to support their existence. These "mobile" bases of operation were typically small support vehicles or trucks with holding space for drums of gasoline, a few spare parts and some tools for maintenance. As the industry expanded, particularly airmail routes, it was quickly recognized that these chase vehicles were very impractical. It was determined that a fixed location for support services would be required to meet the needs of the aircraft transiting the country. These "fixed" bases of operation were established to provide the needed services, and therefore, the first Fixed Base Operations



(FBOs) were born. Essentially, these first FBOs, or Operators, also became the first airports. Later, hangars were built, terminals added, runways were paved and navigational aids became a part of the system. Regulatory control of airports and airspace came into being in 1938 with the Civil Aeronautics Authority (CAA), which in 1958 became the Federal Aviation Administration (FAA). As the airports grew, municipalities and other entities began to control the airport environs; however, the service entities that provided the fuel and maintenance continued to be called FBOs, and the term is still in use today.

b. Full Service FBOs

As the fledgling industry grew, and personal aircraft ownership/flying expanded, a new sector of aviation was formed called general aviation. This sector grew out of what was then either military air operations or commercial air carrier activity, including either mail/cargo or passengers. Today, general aviation is the largest segment of the industry and includes all air operations other than military and air carrier. This segment includes over 220,000 active aircraft which fly all types of missions including pleasure/personal flying, air ambulance, fight training, fire suppression, aerial surveillance/police work, charter, and business or corporate flying. Although FBOs, both then and now, regularly cater to all segments of the industry, it was the growth of the general aviation segment of the industry that created an explosion of FBOs across the country. At its peak in the late 1970s, there were nearly 10,000 FBOs in the U.S., and nearly all of them were considered "full service". There are few "full service" FBOs today that offer all of the services of the early days. During this peak historic period, there were often multiple FBOs on every field and the potential for growth seemed limitless. It is estimated that today, there are approximately 3,000 fixed base operators across the nation.

Like the early auto gas stations of the same era that not only provided gas, but windshield washes, fuel attendants, oil changes, repair, parts and tires, FBOs also offered a full line of services. In order to meet the demands of each airports users or aircraft owners, FBOs offered fuel sales, aircraft maintenance, aircraft refurbishing/painting, aircraft parts, pilot supplies, flight instruction, hangar rental and parking, avionics (radio) repairs, aircraft rental and/or charter, in-flight catering, car rentals, and the sale of new and used aircraft. Many of these operators were aligned with



aircraft manufacturers to be the regional sales offices for new aircraft. In addition to the services, these early operators also offered terminal facilities with restrooms, waiting areas and vending machines.

Later, these became known as "executive terminals" to cater to the boom in business aircraft ownership and corporate flying. These executive terminals, which are typical of today's



modern FBOs, include conference areas, private offices, passenger lounges, pilot lounges, quiet rooms, flight planning areas, restrooms, flight service counters, vending areas, and in some cases, sit-down restaurants. In addition to the terminals, these FBOs also offer ramp areas for staging and parking of aircraft, hangars for rental (daily and monthly), aircraft tie-down areas, auto parking and fuel storage facilities.

c. Fuel and Liability Issues in the 1980s

A significant event in the evolution of the FBO came in the early 1980s when the Organization of Petroleum Exporting Countries (OPEC) placed an embargo on crude oil destined for the U.S. As a result, the cost of aviation gasoline (avgas) and aviation jet fuel spiked to record highs. This high cost of fuel combined with the loss of product supply caused a major downturn in all of aviation, but particularly in general aviation. There were extensive periods when many auto gas stations could not get fuel, and as a result, the higher-end aviation fuels were refined in even smaller quantities. FBOs could not get fuel, particularly on weekends, when most of the flight training and pleasure flying took place. The overall downturn in the economy with this lack of fuel product sent the industry into a tailspin. Many corporate flight departments closed and simply walked away from hangar leases and aircraft operations. This downturn, combined with the oversupply of full service FBOs, caused a sudden loss of thousands of FBO entities across the country. Many just closed their doors and walked away leaving airports and other banking entities with abandoned facilities and airport leaseholds.



In addition to the loss of overall aviation activity, the aircraft manufacturing industry took a sharp downturn as well. The three major manufacturers, Cessna, Beechcraft and Piper, all saw an immediate cessation in the sale of new aircraft. The price of fuel had priced most prospective buyers out of the market, and also caused flight schools and other entities to stop buying new aircraft. This created a ripple effect that included no new aircraft entering the market, limited flying hours taking place, and a dramatic drop in new entry student pilots because the hourly cost of operating airplanes skyrocketed.

Another key issue that had a direct effect on aircraft sales, and indirectly to the FBOs, was the lack of what would later become Tort Reform legislation regulating the liability of manufacturers. During the peak periods of the 1970s and early 80s, when many aircraft were sold and large numbers of hours being flown, there were a number of fatal aircraft accidents that were primarily the cause of inexperienced pilots in older aircraft. In almost every case, even though the experience of the pilot was a key causal factor, the aircraft manufacturer, the engine manufacturer, the maintenance provider, and sometimes even the FBO who last fueled the aircraft, were all named in litigation by the survivors. During this period, regardless of the root cause of the accident, manufacturers were being found liable for damages because the aircraft, sometimes over twenty years old, were being held to the technology standards of the day, even though the aircraft were well maintained. Ultimately, the manufacturing of single engine aircraft in the late 1980s was ceased because the demand was low and the cost of liability insurance made it cost prohibitive to build these smaller aircraft.

All these factors combined to create a huge downturn in FBO activities. The lack of new aircraft, the loss of flight departments, and limited personal flying hit every department of the FBO. Fuel sales were down, maintenance was down, hangars were empty, and service operators were closing their doors almost daily. The higher cost of liability insurance, new environmental laws for fuel storage, and the skyrocketing cost of doing business on an airport became prohibitive for many businesses. By the early 1990s, the number of FBOs had decreased from 10,000 to around 4,000. Today, there are only about 3,000 businesses that can be officially called FBOs.



d. Consolidation

As a result of the heavy losses and abandoned facilities, there were opportunities for the FBOs that survived the 1980s. Once the industry began its slow emergence from this bleak period, those that survived were in a position to take over their competitors' facilities, either by default or purchase. Often, those airports that had multiple FBOs were consolidated into two competitors, and in many cases, just one surviving entity. Many of those lost were family owned or single entity operations that had limited capital resources to stay in business. This brought about the advent of the chain or multiple location FBOs. Also, in some cases, in order to compete, these individual FBOs became part of a group of franchise organizations to gain the marketing and support from the franchise organization.

This was a key period in the development of and definition of FBOs, because it was at this time that many of these new emerging chain entities began to slowly sell off, or eliminate, lines of business that were not profitable. At that time, the core chain FBOs began to concentrate on fuel sales, properties (tiedown, hangar and office rental), some aircraft maintenance, and ground services, to support fuel sales. This resulted in the selling off or elimination of flight schools, parts sales, charter, paint shops, avionics shops, and other services as parts of the FBO operation. In the past five years, further consolidation has resulted through the acquisition of both individual locations, and other chain operations, by investment banking groups. These groups have developed large chain organizations, which have further limited the lines of business they provide. In some cases, these operators offer fuel sales, ground services and properties as their key lines of business, and thereby rely on other surrounding businesses to provide the other requested services typically found at an airport.

At SLC, the past few years have seen the airport go from three FBOs to today's sole source operator. While this was partially market driven due to the poor economic conditions over the past five years, the loss of two FBOs has also been due to the acquisition of competitors and then the merger of TAC Air and Million Air (Keystone Aviation) into one full-service entity. With the stabilization of the economy and potential for general aviation recovery and growth in the long-term, it is the task of this report to analyze the equilibrium point for service providers at SLC.



e. A La Carte Services

With the emphasis on fuel sales and hangar revenue as their primary sources for revenue, current FBO entities often rely on others to provide support services. At many locations, the FBO has become the anchor tenant, much like a large chain store would be at the local mall. The FBO brought in the aircraft for fuel, but other services were offered a la carte through separate entities on the field or sometimes under that same roof. In many cases a subtenant of the FBO provides these other services, particularly aircraft maintenance. Often, the former FBO maintenance personnel either bought out, or took over the FBO's maintenance operation and ran it as a separate business. This resulted in the advent of the a la carte offering of many of the support services other than fuel, ground services, and properties. This change in business models allowed each entity to focus on their niche in the airport marketplace. It is at this point that the Specialized Aviation Service Operation (SASO) was formed. These other entities, which did not sell fuel or ground services, became known as SASOs.

Most airports are dotted with small maintenance, avionics, parts or other entities that meet the users demand for that airport or region. Because of the mobile nature of the aircraft, in some communities there may be various service providers (SASOs) with specialties at one particular airport that may not be available at other airports in the area. As such, it is key to note that both FBOs and SASOs compete locally, on the field, and also regionally, and sometimes nationally for services such as major maintenance, refurbishment, and charter.

2. Where We Are Today

a. Fixed Base Operators

Today's definition of an FBO is a little more complex because of the nature of the industry and the trend toward a la carte services. What once was called a full service FBO, which included every line of business available on the airport, are now almost nonexistent. However, the one key element to defining any FBO is fuel sales to the flying public. By definition, and by





the consensus of every sector of the industry including pilots, aircraft owners, airport users, air carriers, industry trade organizations, airport managers, regulatory agencies and FBO service providers, an FBO is recognized as follows:

- An FBO must provide fuel sales to based and itinerant flying public and have a commercial aeronautical lease or operating agreement with the airport sponsor. In most cases, this would include both 100LL/Avgas and Jet fuel.
- An FBO must provide terminal services and other facilities in support of fuel sales. At a minimum, the terminal must have passenger waiting areas, restrooms, vending areas, flight counters and weather briefing stations. Other minimum facilities would include aircraft parking, ramp access and staging areas, aircraft tiedown, hangar space, fuel storage and auto parking. The size and make-up of these areas to be dictated by the airport's Minimum Standards.
- In addition to fuel sales, an FBO must provide at least one (1) additional secondary service from the list of typical services provided at an airport including:
 - ✓ Properties Including hangar and office rental, or land leasing
 - ✓ Maintenance
 - ✓ Avionics
 - ✓ Parts Sales
 - ✓ Aircraft Sales
 - ✓ Flight Training and/or Aircraft Rental
 - ✓ Charter
 - ✓ Aircraft Refurbishment and/or Paint & Interior
 - ✓ Air Carrier Services
 - ✓ Cargo Handling
 - ✓ Ground Services* Including lavatory servicing, aircraft towing, oil servicing, oxygen servicing, deicing, catering, ground power, food/vending and ground transportation.



*In all cases the FBO must, at a minimum, offer the ground support services along with fuel sales as one of the additional secondary services.

At SLC, each FBO entity must provide fuel, ground services, terminal services, aircraft maintenance, aircraft sales and aircraft rental in accordance with Title 16.

The current situation at SLC is somewhat unique, in that TAC Air/Keystone Aviation has control of nearly all of the FBO-related facilities on the field. However, although their primary lease has an effective term through 2033, some of the general aviation facility leases obtained through their acquisition of Million Air will expire in the near term and will revert back to the SLCDA. As such, SLCDA is undertaking a review of these facilities, market conditions and general aviation demand to determine the highest and best use of these facilities. (It is significant to note that the intentions of the SLCDA to facilitate reversion of these facilities upon the expiration of the current lease was made known to TAC Air/Keystone Aviation at the time of the assignment of the Million Air lease.)

b. Specialized Aviation Service Operators

Specialized Aviation Service Operations (SASOs) would include other tenants or subtenants on the field who would typically have a commercial aeronautical lease or operating agreement, either directly or indirectly, with the airport sponsor and meet the following criteria:

- Each SASO must offer at least one of the secondary services listed above
- The offering of ground services alone does not qualify as a SASO
- The SASO designation would specifically exclude the sale of fuel

In the case of SLC, *Cornerstone Aviation*, a Part 141 Flight School, *Kings Avionics*, an Avionics sales and service entity, and *The Flying Wrench*, an aircraft maintenance operation, would all be examples of SASOs on the field. Currently, none of them would be considered an FBO because their commercial operating agreements do not allow for other types of services, including the dispensing of fuel.



It is important to note that a corporate flight department, or other airport tenant that has its own fuel storage and/or provides fuel to their own aircraft, or to other entities within or through that facility, would not be considered an FBO or a SASO because they do not meet the other service or facility requirements of an FBO. Furthermore, they would not typically have the commercial aeronautical lease terms to allow these operations, nor would they meet the typical airport minimum standards for FBO status.

3. Industry Statistical Data

a. National Airport System

The United States accounts for approximately 30 percent of all commercial aviation and 50 percent of all general aviation in the world, and an extensive system of airports throughout the United States has been developed to support these activities. Salt Lake City International Airport is an essential part of that national airport system. Updated every two years, the National Plan of Integrated Airport Systems (NPIAS) is submitted to Congress in accordance with the United



States Code. The 2013-2017 plan identified 3,355 airports (3,330 existing and 25 proposed) that are significant to national air transportation, and therefore, are eligible to receive funding grants under the Federal Aviation Administration's (FAA) Airport Improvement Program (AIP). The NPIAS is used by FAA management in administering the AIP, and is comprised of all commercial service airports, all reliever airports, and selected general aviation airports.

Salt Lake City International Airport is included in the NPIAS, and is designated as a Large Hub Commercial use airport. This puts the field in the top category for Federal support and availability of funding. It is important to note that all of the competitive airports listed in future sections of this document are all designated as regional or local general aviation facilities only. The 3,330 national general aviation landing facilities actually include 3,280 airports, 10 heliports, and



40 seaplane bases. Ninety-eight percent, or 3,253 facilities are public use, and 77 are private. Of the total 3,355 airports, 2,455 are considered primarily general aviation and have been identified under a newly developed FAA system to further define general aviation airports into four categories. The four categories include National, Regional, Local and Basic. The classification of Large Hub bodes well for future FAA funding and planning for SLC. The following table identifies the definition of the various general aviation categories and how many airports are within each group. For many reasons, business jet operators tend to gravitate towards larger commercial service airports particularly in Salt Lake City, due to the availability of quality services, airport infrastructure, ARFF availability and connection to national and international commercial flights.

2013 NPIAS - NEW GENERAL AVIATION AIRPORT CATEGORIES (Source: FAA)					
NATIONAL (84)	REGIONAL (467)	LOCAL (1,236)	BASIC (668)		
Supports the national airport system by providing communities with access to national and global markets. These airports have very high levels of activity with many jets and multiengine propeller aircraft. These airports average about 200 based aircraft, including 30 jets.	Supports regional economies by connecting communities to regional and national markets. These airports have high levels of activity with some jets and multiengine propeller aircraft. These airports average about 90 based aircraft including 3 jets.	Supplements local communities by providing access to local and regional markets. These airports have moderate levels of activity with some multiengine propeller aircraft. These airports average about 33 propeller-driven aircraft and no jets.	Supports general aviation activities, often serving critical aeronautical functions within the local community such as emergency response and access to remote communities. These airports have moderate levels of activity with an average of 10 propeller- driven aircraft and no jets.		
There are 84 airports that meet this definition.	There are 467 airports that meet this definition.	There are 1,232 airports and 4 seaplane bases that meet this definition	There are 645 airports, 20 seaplane facilities, and 3 heliports that meet this definition.		

b. Aircraft Manufacturing

One statistic that is often used to analyze the future business outlook of airports is the number of general aviation aircraft manufactured each year. The piston-engine aircraft industry, which makes up the majority of aircraft at Salt Lake City, enjoyed success in the 1960s and 1970s, but suffered a major decline in the 1980s. The



decline was largely due to the increase in liability lawsuits that raised insurance premiums beyond acceptable levels and the negative impact this imposed to aircraft manufacturing. Between 1978



and 1986, the annual United States' airplane shipments dropped from 17,811 to 4,000, and the manufacturers were spending more on lawsuits than on research and development.



In 1994, the General Aviation Revitalization Act was passed which limited the liability of aircraft manufacturers, and aircraft production began to moderately rise. According to the General Aviation Manufacturers Association (GAMA), since 1994, manufacturers of general aviation airplanes have produced and shipped close to 48,000 fixed-wing general aviation airplanes worth over \$240 billion. GAMA also estimates that there are over 223,000 active fixed wing and rotorcraft aircraft in operation in the United States and approximately 320,000 aircraft in operation around the world. The following table depicts the most recently reported historical aircraft shipments by type around the world.

HISTORICAL AIRCRAFT SHIPMENTS BY TYPE: MANUFACTURED WORLDWIDE Source: General Aviation Manufacturers Association							
Year	Grand Total	Single Engine	Multi Engine	Total Piston	Turboprop	Business Jet	Total Turbine
2000	3,147	1,877	103	1,980	415	752	1,167
2001	2,997	1,645	147	1,792	421	784	1,205
2002	2,677	1,594	130	1,721	280	676	956
2003	2,686	1,825	71	1,896	272	518	790
2004	2,963	1,999	52	2,051	321	591	912
2005	3,580	2,326	139	2,465	365	750	1,115
2006	4,053	2,513	242	2,755	412	886	1,298
2007	4,276	2,417	258	2,675	465	1,136	1,601
2008	3,970	1,943	176	2,119	538	1313	1,851
2009	2,279	893	70	963	446	870	1,316
2010	2,020	781	108	889	368	763	1,131
2011	2,120	761	137	898	526	696	1,222
2012	2,133	790	91	881	580	672	1,252

As depicted in the table, with the exception of slight upticks in 2011 and 2012 driven almost

solely by an increase in turboprop output, aircraft shipments around the world have decreased over

the past five years. The primary reason for the decline in aircraft shipments is the overall economic impact of the national and global financial collapse in 2008. According to GAMA, the most significant decrease in deliveries was in the Piston Aircraft market, which decreased by over 54% from 2008 to 2009. Turbine sales also decreased that same year by nearly 29%. In addition, during the first three years of the downturn, a large number of used aircraft flooded the



market. This further eroded the demand for new aircraft. Although the number of used aircraft on the market has slowly decreased in the past two years, the total percentage of used aircraft in 2011 was still over 13% of the active fleet. In 2011, used business jet sales increased by 7% over 2010 indicating a slow but steady absorption of the used aircraft fleet, while 2012 shows a stabilization and slow growth in turboprops and single engine aircraft.

In most cases, the only thing that will improve the financial and operational situation for aircraft manufacturers and airports is the passage of time. This includes time for the economic situation to improve, for fuel prices to stabilize, for additional flying hours and for additional aircraft manufactured and sold. This appears to be the case in 2013. Examples of this include aircraft such as the Cirrus SR-22, a high-end single engine piston driven aircraft manufactured in Duluth, Minnesota. In the first six months of 2013, over 130 Cirrus aircraft were delivered, which is up by 70% from the same period in 2012. In addition, according to the General Aviation Manufacturers Association (GAMA), multi engine turboprop aircraft sales were up by 70% in the first half of 2013. Overall worldwide general aviation shipments were expected to reach \$10 Billion this past year, which will be the first time manufacturing has reached this level since 2008. These increases include North American shipments, which also saw the highest deliveries in years. In addition to the recession, the slow growth in aviation is particularly due to the gridlock in Washington, D.C., particularly related to sequestration and funding for FAA projects. With 2016 being another election year, there will likely be continued economic issues tied to politics. However, the industry appears to be past it's low point, and many financial institutions and aviation associations see strong recovery in the next decade.



The number of general aviation aircraft registered in Utah has remained very stable over the past decade with current registrations listed at 6,314 aircraft in 2013. This stability should be framed within an aviation economy that has seen the worst conditions since the days of the Middle East fuel embargo of the 1970s when 100LL/Avgas was in short supply. This factor indicates that the Salt Lake City marketplace in in a good position to continue to grow, particularly with improvements to the economy.

Although our economy is currently experiencing a slight upturn, and there are signs of recovery of general aviation, throughout the recession there has been steadier demand for business jets outside North America. However, this seems to be showing a trend back to domestic deliveries. It should also be noted that the general aviation industry typically follows the national economy in terms of recovery. Historically, the industry begins to improve six to twelve months after the national trends begin to peak. This is because of several factors including buyer's reluctance to jump back into the market, and the volatile nature of the pricing of fuel. Currently, the industry is also faced with uncertainty in the future of aviation gasoline due to lead content. Like the housing industry, aviation is slowly but steadily increasing, particularly in areas of the country that have shown more resilience to the downturn, including areas such as the Salt Lake City.

One relatively new category of aircraft, which is not represented in the overall data listed above, is the emergence of light sport aircraft. Light sport aircraft are typically twoplace aircraft under 1,200 pounds (1,430 for float planes), including traditional primary flight trainers, powered gliders, and sophisticated light float planes that have the capability of both amphibious and hard surface landing operations. This new category had developed



because of the demand for low cost flight training aircraft; demand for personal use aircraft and also due to the proposed conversion of many traditional general aviation aircraft engines to burn Mogas or auto fuel. The EPA and the aviation engine manufacturers are working on plans for a



major push toward the reduction of the production and use of Avgas due to its lead content. (It should also be noted that there is active on-going litigation in the State of California regarding Avgas powered aircraft and allegations of violations to various State and Federal Clean Air Acts.) SLC and its surrounding general aviation airports are in a position to benefit from this trend since the region is popular for flight training.

c. Aviation Fuel Sales

In addition to the number of aircraft produced in the United States, the amount of aviation fuel sold annually should be reviewed to analyze trends. Although general aviation in the United States flies 166 million passengers each year, this segment of aviation consumes less than 7 percent of all aviation fuel burned annually. Jet fuel is the predominant type of aviation fuel used by civil aviation, but general aviation consumes just over 5 percent of this type of fuel each year. Domestic airlines use approximately 95 percent of the total jet fuel burned in the U.S. by nonmilitary operators. It is estimated that turbojets burn 62 percent of the total general aviation fuel, while piston-powered burn 20 percent. Turboprops are estimated to consume 13 percent of the total general aviation fuel and helicopters 5 percent. The following table provides insight into the total fuel consumed by general aviation aircraft a year and the gallons consumed.

TOTAL FUEL CONSUMED AND AVERAGE FUEL CONSUMPTION RATE BY FUEL TYPE (2010) (Source: GAMA)				
Fuel Type	Average Rate - Gallons Per Hour (GPH)	Estimated Fuel Use (U.S. Gallons)		
Jet Fuel	179.5	1,451,513,000		
100 LL (Low Lead)	13.0	200,482,000		
100/130 Octane	12.4	9,794,000		
Automotive Gas (On Airports)	6.7	6,589,000		
Other Fuel	16.2	1,750,000		
Total	33.5	1,670,128,000		

The following table depicts the historic and forecasted fuel consumption of general aviation aircraft across the United States. It appears from the data that the fuel consumption was impacted by the recession that occurred from 2001 to 2003. Although the price of fuel was high during 2004, Jet fuel sales rebounded after the recession and consumption reached over one billion gallons. It



should be noted that fuel sales in some areas of the nation have seen decreases of as much as 40%, particularly in Avgas sales due to the rapid increase in price in 2008. This is predicted to improve to previous levels once fuel prices decline, but recovery could take as much as 18 months or longer.

U.S. GENERAL AVIATION AIRCRAFT FUEL CONSUMPTION (In Million of Gallons) Source: FAA					
Voor	Total Fuel Consumed				
rear	100LL/Avgas	Jet Fuel	Total		
2000	332.8	972.0	1,304.8		
2001	279.2	918.3	1,197.6		
2002	276.7	938.3	1,215.0		
2003	272.4	932.3	1,204.7		
2004	272.9	1,230.9	1,503.8		
2005	295.0	1,526.7	1,821.7		
2006	283.4	1,642.6	1,926.0		
2007	273.6	1,485.6	1,759.2		
2008	248.1	1,705.7	1,953.8		
2009	227.4	1,447.0	1,674.4		
2010	220.7	1,434.8	1,655.6		
2011	215.5	1,490.7	1,706.2		
2012 (Est)	212.3	1,542.4	1,754.7		
Forecast					
2013	209.5	1,612.0	1,821.5		
2014	207.4	1,682.2	1,889.5		
2015	204.7	1,755.7	1,960.3		

Because general aviation fuel is a relatively small segment of the total petroleum products consumed in the U.S., it is highly susceptible to changes in the marketplace. The current volatility of fuel prices has most people in the industry concerned as to how high prices will ultimately go. (Fortunately, at the time of this report, fuel prices had stabilized and even receded to more reasonable levels in some markets.) Although it has been shown that business aircraft owners and operators have been absorbing the additional cost of fuel and continuing to fly, it has been reported that many flight departments are looking at ways to reduce costs. Many have indicated that the budgets of flight operations have reached levels that required significant changes to the types of aircraft utilized and new purchases have been deferred. The cost of fuel and its volatility always pose a significant threat to FBOs that are dependent on fuel margins, particularly those that are highly leveraged. However, those operators and airports that have survived the past five years of one of the worst economies in recent history are well positioned to grow in the future. Even though



the economy is moving slowly toward improvement, FBOs like TAC Air/Keystone Aviation at SLC have weathered the storm. With aggressive marketing, a sound business plan, and the financial strength to weather the first five years of growth, a new entrant would likely be in a position to continue to succeed in the long term.

In addition, in the future, fuel efficiency of both the recreational and business aviation fleet will continue to improve. Engine manufacturers are continually enhancing the fuel efficiency of the powerplants since they realize the need to lower the operating costs of their clients. In addition, aircraft manufacturers are searching for new designs to incorporate advances in aerodynamics and lightweight composite structures that reduce weight and drag and thus lower fuel consumption. This will also have an impact on service providers and the airports where they operate.

d. Flight Hours and Pilot Data

Each year it is estimated that the FAA and contract air traffic control services around 63 million operations at airports across the United States, of which a large percentage is general aviation. For instance, general aviation accounts for almost 39 percent of the 47 million instrument operations at FAA monitored facilities each year, the largest share of any segment of aviation. By comparison, air carriers account for 29 percent of instrument operations, air taxis comprise 25 percent, and military aviation is less than 7 percent of the total.



The United States' pilot population in 2012 was in excess of 610,000, including over 300,000 private pilots, 116,000 commercial pilots, 145,000 air transport pilots, and the remainder helicopter and sport pilots. Of these pilots, 90,000 also hold a flight instructor certificate. Since 1980, when the U.S. recorded the highest number of pilots (827,071), the total number has steadily declined and remained near 600,000 for the past decade.



FAA CERTIFICATED PILOTS (Source: GAMA)								
Year	ear 2005 2006 2007 2008 2009 2010 2011 2012						2012	
Total Pilots	609,737	597,109	590,349	613,746	594,285	627,588	618,660	610,576

The decline of pilots nationwide affects each airport differently. Based upon the number of pilots in the local area, the decline of pilots nationwide appears to have had minimal effect on SLC. In fact, it is interesting to note that after the terrorist events of September 11, 2001, several airports recorded an increase in operations due to the increase in student pilots. Many of these student pilots were business travelers that wanted to avoid the perceived hassle of commercial air service security, and enjoy the benefits, such as time and flexibility that general aviation offers. While the population of commercial/airline pilots has been increasing, the total number of pilots has remained relatively flat partly due to the considerable expense of achieving pilot certification due to the increased price of fuel and related flight training. However, the demand for new pilots is now growing rapidly, which bodes well for flight schools and associated aircraft operations.

e. Business Aviation and Fractional Ownership

While the past five years has seen flat line growth in aircraft ownership, prior to the down turn fractional ownership was the fastest growing segment of the general aviation industry. It is expected that this segment will continue to be a key growth segment as the economy improves. Over the years, a misunderstanding has evolved by the general public regarding the use of jets. A misconception exists across the country that jets such as a Gulfstream are used exclusively by celebrities and wealthy individuals to travel between their summer and winter homes. Corporate aircraft have consistently proven to increase productivity and enable corporations to manage geographically disbursed operations. Several companies with aircraft in this category are based in the region, and the number of business aircraft will likely increase if they receive the services and attention demanded.

Since business aviation plays such a strong role in the general aviation marketplace, it would be beneficial to identify all the different on-demand air transportation methods available to the



general aviation community and to begin to track and market transient aircraft. All of the following industry segments should be understood, as they are all current and potential users of SLC.

Aircraft Charter - Operators offering on-demand air transportation services to the public, and by law must be certified by the FAA by meeting stringent operational, maintenance, and safety rules.

Management Company - Under this method, an aircraft owner contracts with an aircraft management company to provide all necessary elements to operate the aircraft.

Joint Ownership - Under this arrangement, two or more entities become registered joint owners of an aircraft.

In-House Flight Department - Currently used by large companies, this method affords the user the highest level of control possible in regards to service quality, personnel, training, and security.

Interchange - Under this arrangement, an owned aircraft is leased to another entity in exchange for equal time in that entity's aircraft when needed. This would be done in order to have a backup aircraft for use when owned aircraft is either scheduled or in maintenance.

Time Sharing - A time-sharing agreement means an arrangement whereby a company leases its airplane with flight crew to another person, to whom direct operating expenses of the aircraft may be charged.

Fractional Ownership - Fractional ownership offers the option to purchase shares of a business aircraft, instead of buying an entire aircraft. Most fractional providers offer a variety of aircraft to choose from, ranging from small turboprops to large intercontinental turbojets.

As indicated, fractional ownership will continue to be a key factor in future business aircraft purchases and flight operations. By definition, fractional ownership offers the option to purchase shares of a business aircraft, instead of buying one outright. Most fractional providers offer a variety of aircraft to choose from, ranging from small turboprops to large intercontinental turbojets.



Companies such as Flexjets, NetJets, and Flight Options have made considerable advancements in the business aviation market. For instance, in 2007 NetJets had over 8,000 clients and flew over 390,000 flights to 145 countries. Fractional ownership attributes include joint-ownership, guaranteed availability, favorable response times, uniform service levels, and hassle-free operation. The major expenditure associated with fractional ownership is the value of the fractional share of the aircraft itself. Ranging from \$500,000 to \$10 million, depending on the aircraft type and fractional share, this expense entitles the fractional owner to the rights, benefits, and obligations of any owner of a major asset for a fraction of the full acquisition cost. Many companies who may not have considered private travel for executives have entered the market due to the low initial investment required.

Fractional Ownership Advantages and Disadvantages			
Advantages	Disadvantages		
Lower purchase price for aircraft	High hourly costs when compared with charter		
Depreciation and tax benefits of ownership (limited to the fraction purchased)	Rapidly escalating hourly fees after fractional share hours are used		
All costs stated up-front	Rarely ride in the same aircraft or use the same flight crew		
No waiting or positioning fees	Built in positioning fees – normally two-tenths of an hour for each actual flight hour		
Guaranteed rapid response time – normally 4 to 10 hours	Penalties apply for early termination of contract		
Consistent service standards	Aircraft maintenance performed by a variety of contractors		
Ability to trade up or down for other types of aircraft	Accelerated reduction in aircraft value due to heavy use		

Fractional ownership has been one of the fastest growing forms of on-demand air transportation. While this segment of the industry has slowed down, it is forecast that it will once again become a growth segment of the industry. This is due to several positive reasons including the continued hassles of flying commercially, overbooked flights, loss of commercial service at local airports, and the growth of smaller entrepreneurial companies who will find fractional aircraft ownership attractive and attainable.



In conclusion, it is suggested that the future of general aviation in and around the Wasatch Front area, including Salt Lake City International and the other regional airports managed by SLCDA, are in a strong position for the future. This includes increases in both piston driven aircraft and business jet operations. Other areas that should also improve include sport aviation, charter,

based aircraft and flight school activities. Specifically at SLC, business aircraft activity will increase and single engine aircraft activity will move to the reliever airports specifically Tooele Valley (TVY), and South Valley (U42). Improvement and increases in fuel sales at SLC will be closely tied to economic growth and increases in resort activity, including skiing.





III. LOCAL DEMOGRAPHICS, AIRPORT DATA AND ON-AIRPORT MARKET ANALYSIS

1. City and Regional Demographic Data

Salt Lake City covers a total area of 109.1 square miles and is located in the north-central part of Utah. Situated in between the Wasatch mountain range and the Great Salt Lake, the City of Salt Lake City is one of the largest cities in the great basin region of the intermountain west. Salt Lake City has been identified at the "crossroads of the west" going all the way back to the connection of the transcontinental railroad at Promontory Point just northwest of the region. Today, Salt Lake City is still a major hub for Amtrak passenger and rail freight transiting the country. The City is also located at the intersection of Interstate 15, which runs from San Diego north to Canada, and Interstate 80, which links San Francisco all the way east to New York. The City is also one of Delta Airlines hub airports, making Salt Lake City a true transportation oriented community. In addition to being a business, health and education center, the region is also known

for its recreational activities and superb skiing and was host to the Winter Olympics in 2002.



Salt Lake City is the County seat and the capital of the State of Utah. The City is the most populous community in the State. According to the U.S. Census Bureau in 2012, the population of Salt Lake City was an estimated 189,000, while the entire Wasatch Front - which includes an eighty-mile long area, from Ogden to the north through to Provo to the South, includes a total regional population of approximately 2.2 million. The City's population is young with over 22% of residents under the age of 18. Individuals in the community with a Bachelor's degree or higher accounted for over 41% of the population. Median household income is over \$44,500 annually, and retails sales average over \$4 billion every year.

In addition to transportation and government, the City has transitioned to a very diversified economy and become a major center for health care, higher education, technology, and energy. State Government is the largest industry in the area since Salt Lake City is the State Capital. Health



care and University programs are the 2nd and 3rd largest segments of the economy. *Forbes* recently identified Utah as the best state for business and careers, and ranked Salt Lake City as the 5th fastest growing city in the U.S. In addition, Provo ranked 7th and Ogden ranked 20th in the same survey. The region enjoyed a job growth rate of over 3% last year, and also boasted one of the lowest unemployment rates in the U.S. at only 4.8%. The overall Utah economy has increased at a rate of 2.3% since 2006, compared to a national average of only 0.5%. This shows the strength and diversity of the region by posting growth during a time when much of the nation was in a major recession.

As noted, State Government is one of the largest industries in the community. Health Care, Education, Trade, Transport, Utilities, Professional & Business Services, Energy and Mining are also prevalent in the area. Tourism is also big with some of the most beautiful national parks in the region along with world class skiing. A number of major companies are located in the area including Huntsman Corporation, Zions Bancorp, Questar, Alphagraphics, Genoa Steel, Brigham Canyon Mine, Overstock.com, Novus, FranklinCovey, Adobe, Intel and L3 Communications. To provide a perspective of the stable economy in the area, the following is a list of the largest employers in the Salt Lake City region.

Salt Lake City Economic Market - Top Employers				
Employer	Local Employees			
State of Utah	22,000			
Intermountain Health Care	22,000			
University of Utah	17,000			
Salt Lake County	6,000			
Smiths/Kroger Foods	6,000			
Delta Airlines	5,000			
Novus	5,000			
Salt Lake City Public Schools	4,000			
Cordant Technology	3,500			
CenturyLink	3,000			



2. Airport Neighborhood

Salt Lake City International Airport is located within Salt Lake County and is only 3 miles west of the City center. The immediate subject neighborhood reflects commercial development commonly found surrounding commercial service airports. To date, SLCDA and Salt Lake County have sustained compatible land uses around Salt Lake City International Airport. The surrounding community appears to be primarily airport friendly, with noise and or environmental issues typical of a major air carrier airport, but not a



threat to continuing operations. The Airport is conveniently located only 15 minutes from the Salt Palace Convention Center and is within a one-hour drive to 11 major ski resorts.

The Salt Lake City Airport was established in 1938, and has steadily grown to its' present land area of over 7,700 acres. According to the 20 Year Airport Master Plan documentation

prepared by HNTB, the general configuration of the Airport calls for several key areas to support the various segments of the industry that use the field. Air carrier facilities, including air cargo are generally to be located and expanded within the center field area between the two primary 16/34 parallel runways. The area between 16L/34R and 17/35 is programmed for the expansion and



realignment of 17/35. The extreme western side of the field is the long-term site for an additional 16/34 parallel runway. The remainder of the field includes the east side complex, which includes



all general aviation developments and the Utah Air National Guard (ANG) facilities. The two primary vehicular access points to the airfield are from the south, which includes the traffic for commercial airline access and public parking. The east side roadway systems provide good access to general aviation and the ANG. There is also a limited access from the southeast for cargo and air carrier service hangars. As such, it is the consensus of the SLCDA that all general aviation facilities now and in the future will need to remain on the east side of the field. While there are already significant general aviation structures on the east side, there are limited leasehold areas available. However, a significant number of existing general aviation facilities are underutilized and could be redeveloped into modern and useful executive terminals, hangars and ramp areas.

In addition, according to the Master Plan, no additional T-hangars are recommended for the field, and there is a slow but steady movement of T-hangar tenants, and thereby hangar facilities, toward the reliever airports (U42 & TVY), which are located 10 nautical miles south and 20 nautical miles west of SLC, respectively. The redevelopment of the vacant T-hangar properties should provide ample space for turbine and business related aircraft over the 20-year term of the Master Plan.

3. Airport Data

a. Infrastructure

Salt Lake City International Airport (FAA Identifier SLC), encompasses approximately 7,700 acres and serves as a commercial service and corporate general aviation airport to the entire Wasatch Front region. The Airport is owned by the City of Salt Lake, and operated by the Salt Lake City Department of Airports (SLCDA). SLC is major regional hub for Delta Airlines and also has scheduled service provided



by American/American Eagle, Alaska, JetBlue, Frontier, Sky West, United, US Airways, and



Southwest. Currently there are an average of over 650 daily passenger flights at SLC, and is the 26th busiest airport in the U.S. In addition to significant belly freight transported into and out of SLC by the passenger airlines, United Parcel Service and FedEx also have air cargo hub operations on the field.

The airfield at SLC contains four active runways, including three parallels and a single crosswind runway. The two primary runways are 16L/34R and 16R/34L. These two facilities are each 12,000 feet in length and 150 feet wide. Both runways have precision Cat III ILS/DME equipment for all four approaches. Each runway is capable of handling aircraft up to 850,000 pounds - dual double tandem wheel configuration. Runway 17/35 is located on the east side of the field and is 9,596 feet long and 150 feet wide. This runway is an asphalt grooved surface in good condition. This runway has an ILS/DME approach on each end and is also capable of supporting aircraft up to 850,000 pounds. The crosswind runway is 14/32 and is 4,892 feet long by 150 feet wide and is a non-precision landing facility. To enhance the ILS approaches, the airport has installed approach lighting systems with sequenced flashing lights (ALSF) for runway ends 16L & 16R, and 34L & 34R, while runway ends 17/35 contain medium intensity runway approach lighting (MALSR). Other enhancements that assist pilots on approaches include precision 4-light approach indicator lighting (PAPI) for all runways. The entire runway system is served by several active taxiways that are strategically designed to maximize safety and provide easy access to all areas on the Airport.

b. Airport Statistics

The following section describes the overall statistics regarding airport activity levels. This data includes aircraft operations (takeoffs & landings), based aircraft, and the number of air carrier passengers. In general, and as an overview, during the past five years the number of passengers, and aircraft operations have remained relatively consistent. No historical based aircraft data was available; however, according to the SLCDA, single engine based aircraft have been decreasing, with other types of aircraft remaining steady or increasing slightly, particularly jet aircraft.



Salt Lake City International Airport					
Calendar Year	Operations	GA Operations	Based Aircraft	Total Passengers	
2009	372,300	69,760	n/a	20,432,218	
2010	362,294	66,969	n/a	20,901,533	
2011	357,996	78,188	n/a	20,389,474	
2012	328,130	67,637	n/a	20,102,078	
2013*	166,011	38,483	170	9,929,356	

*First 6 Months - 2013

Based Aircraft

In terms of based aircraft, as indicated in the 2013 data compiled by the SLCDA, there were 170 aircraft based at SLC. This included 44 single engine aircraft, 22 multi engine piston aircraft, 32 turboprops, 40 corporate/private jets and 32 helicopters.

Aircraft Type	Total
Single Engine	44
Multi Piston	22
Turbo Prop	32
Jet	40
Helicopter	32
Total	170

Annual Aircraft Operations

The table on the following page depicts a further detailed analysis of the aircraft operations by category. As noted in the table, during the past ten years, the total aircraft operations decreased steadily from approximately 422,000 in 2007, to 328,000 in 2012. The most significant decreases were in air carrier and cargo operations. However, general aviation from 2008 through the projected levels for 2013 show a fairly level and consistent volume of activity. Based on the first six


months data for 2013, it is expected that operations for the year will easily reach over 75,000 with additional significant traffic near the end of the year due to excellent skiing conditions. This is an indication of the stability of the economy and the continued growth in the area for business and related activities.

Salt Lake City International Airport - Annual Aircraft Operations												
Year	Air Carrier	All Cargo	All Cargo General Aviation		Total							
2007	315,502	23,934	80,488	2,086	422,010							
2008	292,112	21,692	73,441	2,072	389,317							
2009	282,132	18,328	69,760	2,080	372,300							
2010	276,150	17,162	66,969	1,993	362,294							
2011	258,842	16,178	78,188	4,788	357,996							
2012	241,198	17,108	67,637	2,187	328,130							
2013*	117,418	9,040	38,579	974	166,011							

*First 6 Months - 2013

General Aviation Fuel Volume

The Airport is currently served by one full-service fixed base operator, TAC Air/Keystone Aviation, who provides fuel, oxygen, parking, aircraft hangar, passenger terminal services, miscellaneous ground handling services, aircraft maintenance, aircraft charter, and aircraft management/sales. The following table indicates the total general aviation fuel volume sold on the Airport, including both jet fuel and avgas (aviation gasoline) over the past ten years. (It should be noted that TAC Air purchased Million Air (Keystone) in 2012, subsequent to Keystone's purchase of the leasehold of Salt Lake Jet Center in 2011.) The fuel volume data provided by SLCDA for 2013 includes the general aviation sales through July 31st as indicated by the 2.5 million gallon figure. It should be noted, however, that fuel sales for SLC are somewhat seasonal, and year end sales, particularly November and December, are typically very active. Therefore, it is our projection that the CYE 2013 amounts will be well ahead of last year and easily above the 5,000,000 gallon mark.



Salt Lake City International Airport Historic General Aviation Fuel Volumes Source: SLCDA										
Calendar Year	Million Air/ TAC Air	% Change from Previous Year								
2004	3,075,540	2,911,038	5,986,578	n/a						
2005	2,922,782	2,966,246	5,889,028	-1.6%						
2006	3,303,642	2,774,775	6,078,417	+3.1%						
2007	3,603,847	2,992,370	6,596,217	+8.5%						
2008	3,603,771	2,304,086	5,907,857	-10.4%						
2009	2,791,217	1,642,848	4,434,065	-25.0%						
2010	2,882,890	1,712,017	4,594,907	+3.6%						
2011*	3,432,605	1,705,209	5,137,814	+11.8%						
2012**	5,014,935	0	5,014,935	-2.4%						
2013***	2,511,582	0	2,511,582	n/a						

* SLC Jet Center acquired by Million Air in September 2011

** Million Air acquired by TAC Air in May 2012

*** First 7 months only

The above table represents the fuel trends associated with the fluctuations in the national economy, particularly the downturn in 2008 to 2009. 2010 and 2011 show improvements with a slight downtrend in 2012, which is believed to be associated with the election year turmoil in Washington D.C. The trends for 2013 indicate that volumes will once again be rising. While only 7 months of fuel is reported for 2013, it is our projection that the year will end ahead of 2012 due to the fact that SLC traffic is somewhat seasonal. Significant year-end fuel deliveries, due to ski traffic, will lift the 2013 volumes back to levels above the 5,000,000 gallon mark. It is also important to note that other regions of the nation saw decreases in general aviation fuel sales of over 60% in years 2008 and 2009, some of which have not recovered. This data clearly indicates the stability and resilience of the SLC economy.

It is important to note that these volumes represent general aviation fuel sales only and are based on flowage fees paid to SLCDA by the FBOs. Air carrier fuel is contracted between the fueling company and the airlines and does not fall under the same fee structure as the FBOs. Included in these volumes is fuel delivered to contract users, local users (tenants), fractional owners, and other discounted sales. Also included are retail fuel sales that are non-discounted fuel amounts sold to high-end itinerant users of the field. These different markets within the Airport are typically not reported to the SLCDA and are highly proprietary in nature. As such, it is impossible to know the



exact number of gallons in each category. However, based on data provided by SLCDA and TAC Air/Keystone Aviation, reasonable and conservative estimates of the market have been calculated in this report.

4. General Aviation Fuel Market Analysis

Through our internal analysis of hundreds of FBOs, and the detailed sales data in *ABS*' files, from numerous aviation business financial reviews and appraisals, *ABS* has estimated the approximate levels of discount fuel sales versus retail sales at airports comparable, or equivalent, to SLC. In addition, based on input from TAC Air/Keystone Aviation management, they have



estimated that approximately 36% of their fuel sales are delivered to itinerant aircraft and the remaining 64% of fuel is sold to customer aircraft that are based at SLC.

As indicated by the number of based aircraft in 2013, particularly based turbine aircraft (40 jets and 32 turboprops), as well as the mix of operations, it is suggested that a significant amount of the fuel delivered to general aviation on the field is Jet-A. This is important because turbine aircraft typically take a larger up-lift of fuel and as such the profit margin per fuel transaction is higher. Based on the typical scenario for fuel sales at comparable operations, *ABS* has determined a range of fuel sales for the various categories listed. To analyze the fuel sales in terms of potential market share opportunities for a new FBO entity at SLC, the various segments of fuel sales have been projected. The estimates provided by TAC Air/Keystone Aviation would indicate that of the projected 5,000,000 gallon annual market at SLC, 36% or 1,800,000 gallons is itinerant, and 64% or 3,200,000 gallons is representative of the based aircraft fuel sales. While this ratio of itinerant versus based seems to be slanted somewhat low on the itinerant side of the equation, we will use this formula as a base line for this analysis. This analysis is to determine the fuel sales that are strongly tied to each leasehold, and what percentage of the market would be available for a competitor to acquire through normal marketing and pricing strategies. One area that would be



strongly tied to the incumbent operator would be based aircraft with long-term hangar leases, particularly in hangars that have terms that extend to 2033. Others would include some of the contract fuel through the fuel supplier and some itinerant fuel that may be tied to a national fractional owner contract. As such, the two primary market categories have been further divided based upon historical data and *ABS* experience as noted above.

Based upon our analysis, it is estimated that approximately 70% of the current based aircraft housed in hangar facilities will initially remain at TAC Air/Keystone Aviation. The remaining 30% would likely be absorbed by a new FBO since the current facilities or their replacements would house the remaining tenants and/or those wishing to change. Based on the 5,000,000 gallons delivered in 2012, the following estimates are derived:

Analysis of Competitive Market and Av	vailable Gallons
Local Based Aircraft Fuel (64% of Total Fuel = 3	,200,000)
TAC Air/Keystone Aviation Hangars (70%)	2,240,000 Gallons
Former Jet Center or New Hangars (30%)	*960,000 Gallons
Total Based Aircraft Fuel	3,200,000 Gallons
Itinerant Aircraft Fuel (36% of Total Fuel = 1,80	0,000)
Contract Fuel Through TAC Fuel Supplier (30%)	540,000 Gallons
Other Contract – Fractional (10%)	180,000 Gallons
Retail – Less Volume Discounts (40%)	*720,000 Gallons
Retail (20%)	*360,000 Gallons
Total Itinerant Aircraft Fuel	1,800,000 Gallons
Total Annual General Aviation Fuel	5,000,000 Gallons
Target Market Available to New Entrant	*2,040,000 Gallons

*Note: These are the fuel volume amounts conservatively estimated to be available, at least initially, to a new FBO entrant on the field. This is not to say that any new entrant would be able to immediately move this marketshare to their leasehold. What it does indicate is the customers and respective fuel purchases that would be more likely to be accessible to a new entrant. This represents approximately 40% of the total market. TAC Air/Keystone Aviation would likely command the remaining 60% for some time since they are a formidable competitor and the based tenants and contract fuel customers with long-term agreements will likely stay at TAC Air/Keystone Aviation. However, over time, a 40% share of the market for a new entrant appears to be attainable, since the Salt Lake Jet Center was serving this amount of the market prior to their



divestiture. (Potential marketshare attainment trends could also be positively impacted if the new FBO were a national chain with existing customer contracts.)

While this initial 2,000,000 gallons is only an initial estimate of potential market penetration, it is more than enough to attract another FBO entity to the field. Moreover, it should also be noted that the initial 5,000,000 gallon market does not account for new tenants on the field or additional gallons derived from improvements to the economy and increases in overall general aviation activity at SLC. It is conservatively estimated that the fuel volumes in the next 5 to 10 years could expand by as much as 3 to 5% annually, and much of this new market would be an attractive target of a new FBO. Also, the new FBO would also likely compete for air carrier ground handling, intoplane fuel, and air cargo refueling in addition to the general aviation market discussed herein. As such, it is the opinion of *ABS* that while it may take 18 to 24 months for a new FBO to be "up and running", this timing would likely be very good for the Airport and the service providers to meet the demands of the marketplace as it slowly grows back toward and even exceeds pre-recession levels.

Important key points to keep in mind regarding the SLC on airport market situation:

- The SLC economy is strong and growing.
- The Airport is trending towards more turbine powered aircraft, with smaller single engine aircraft slowly transitioning to the reliever airports in the region.
- Over 60% of the general aviation activity on the Airport is supported by customers based on the field. This is significant, since these customers are more stable, and as such the FBOs are not totally relying on itinerant fuel sales to survive, which has a much higher risk.
- The above analysis primarily discusses fuel sales only. There are other lines of business whereby a new FBO may also compete for marketshare.
- There is sufficient market to support two operators when considering the total aggregate aviation market segments on the field, including general aviation, air cargo, and air carrier activity.



IV. LOCAL AND REGIONAL COMPETITION

1. On-Airport Competition

One full-service fixed base operator, TAC Air/Keystone Aviation, currently serves the Salt Lake City International Airport (SLC). The TAC Air/Keystone Aviation operation provides aircraft refueling, deicing, oxygen servicing, aircraft parking, aircraft storage/hangar rental, and general aviation passenger terminal/ramp services. Keystone Aviation, a subsidiary entity to TAC Air/Keystone Aviation, provides aircraft maintenance, charter, sales and aircraft management. In terms of FBO, or general aviation, refueling services, TAC Air/Keystone Aviation is essentially the sole service provider. However, TAC Air/Keystone Aviation does compete for the refueling and ground handling services provided to commercial air carriers at SLC. The following section analyzes the on-airport situation.

a. Other Service Providers

In order to meet market demand, there are a number of other aeronautical service providers located at the Airport. These operators provide services such as ground handling to the airlines, aircraft deicing services, charter, flight instruction, aircraft sales, avionics repair and aircraft sales. However, fuel sales to general aviation aircraft are provided exclusively by TAC Air/Keystone Aviation. Nevertheless, it should also be noted that TAC Air/Keystone Aviation competes for itinerant fuel sales with other airports in the region as discussed in the upcoming section. There are numerous small service providers on the field, but the primary key entities are:

Aircraft Services International Group (ASIG) – Airline Refueling and Ground Handling *Cornerstone Aviation* – FAR Part 141 Flight School, Aircraft Rental, Pilot Supplies *Kings Avionics* – Avionics Sales, Aircraft Parts and Aviation Accessories

None of the other service providers on the airport would be considered a serious threat to the business model or market niche of TAC Air/Keystone Aviation.

Feasibility Analysis for FBO/Aviation Service Provider Salt Lake City International Airport December 31, 2013



2. Regional Competitive Airports and Service Providers

Salt Lake City International Airport (SLC) is surrounded by a number of airports serving the Great Salt Lake and Wasatch Front region. There are approximately 12 public use airports located within 50 miles of SLC, as well as a number of private fields, helicopter pads, and military facilities in the region. The majority of the public use airports are owned and operated by government agencies including cities, counties or other hybrid controlling entities.

Smaller single engine and other piston powered aircraft operators often find it difficult and expensive to gain access to air carrier airports, particularly hub airports such as SLC. In recognition of this, the FAA has encouraged the development of high capacity general aviation airports in and around major metropolitan areas such as Salt Lake City.



These specialized airports, called relievers, provide pilots with attractive alternatives to using congested hub airports. Large metropolitan areas usually have a system of reliever airports, one or more of which can accommodate corporate jet aircraft, and others designed for use by smaller, propeller-driven aircraft. Relievers have been very successful in many areas and specifically, the SLCDA operates two airports that would loosely fall into this category. They are South Valley Regional Airport, located 10 nautical miles south of SLC, and Bolinder Field – Tooele Valley Airport, located 20 nautical miles southwest.

Of the two airports managed by SLCDA, South Valley is by far the busier and the closer of the two SLCDA active airports. It is one of the most desirable locations for those smaller general aviation aircraft owners living in the City due to its convenient location and excellent infrastructure. *ABS* looked at all the airports in the region and identified seven key airports around SLC. The following airports have been designated as the key competitors within approximately 30 nautical miles of Salt Lake City.



- Bountiful Skypark (BTF)
- South Valley Regional Airport (U42)
- Bolinder Field Tooele Valley Airport (TVY)
- Morgan County Airport (42U)
- Ogden-Hinkley Airport (OGD)
- Heber City Municipal Airport (36U)
- Provo Municipal Airport (PVU)

The following analysis will focus on the airports in closest proximity to SLC, to include relievers and non-relievers, as well as those with instrument approaches and those without. These airports are within a reasonable distance to SLC, whereas customers may consider choosing optional airports and fixed based operators based upon airfield characteristics, services, and driving distance to their final destination or home. To provide insight, the primary use of each airport is summarized, as well as the airfield characteristics, based aircraft, annual operations and a fuel pricing comparison to SLC. Other airports within the region, that are not considered primary competitors, are listed in a summary table at the end of this section. However, all airports in the region compete at some level for various specialized services.

The comparable airports on the following pages are evaluated in ascending order based upon distance from SLC. An analysis of the how each of these airports ranks with SLC is evaluated in tabular form, following these general airfield descriptions.

a. Bountiful Skypark Airport



Feasibility Analysis for FBO/Aviation Service Provider Salt Lake City International Airport December 31, 2013



Bountiful Skypark Airport (FAA Identifier BTF) is privately owned and operated by the Skypark Airport Association and is the closest airport to SLC. This uncontrolled airport is located approximately 3 miles southwest of the city of Bountiful and 5 miles northwest of SLC at an elevation of 4,234 feet. The airport has one runway that is constructed of asphalt which is rated in fair condition. To assist pilots, the runway has a 2-light approach indicator lighting (PAPI) system. The single runway has a maximum weight bearing capacity of 12,500 pounds. According to the Airport Master Record, there are approximately 217 based aircraft on the field and there are an estimated 37,000 annual operations.

The fixed based operation (FBO) is Skypark Airport Aviation. The FBO offers customer amentities including a small passenger terminal, as well as aircraft servicing that includes aviation fuel, aircraft parking and hangar storage, and both full service and self service 100LL/Avgas and Jet A fuel. At the time of this writing, the average fuel prices at BTF, when compared to TAC Air/Keystone Aviation at SLC were \$0.49 per gallon lower for full service Avgas, and \$1.10 per gallon lower for full serve Jet A. Self Service fuel is also available at BTF.

b. South Valley Regional Airport

South Valley Regional Airport (U42)	HusNey.com
Type Airport: General Aviation	1100
<i>Longest Runway:</i> 16/34 – 5,862' Long x 100' Wide	tim times
Distance from SLC: 10 NM	
Based Aircraft: 197	
Annual Operations: 74,000	All Parts

South Valley Regional Airport (FAA Identifier U42) lies approximately 7 miles southwest of the Salt Lake City center and 10 miles south of SLC. This is an uncontrolled airport that sits at an elevation of 4,606 feet. It is a key reliever to SLC and also has extensive military helicopter activity.

The U42 Airport is home to approximately 197 aircraft, and according to the FAA had over 74,000 operations in 2012. To accommodate based and transient aircraft, the Airport maintains



one asphalt runway in good condition. Runway 16/34 is 100 feet wide and 5,862 feet in length. The single runway has a limiting weight bearing capacity of 43,000 pounds double wheel and contains 4-light PAPI visual slope indicatores on each approch end. Currently, there is no presicion instrument landing system at U42.

The sole source FBO on the field is Leading Edge Aviation. Leading Edge is a full service FBO offering aircraft refueling, executive terminal, hangar and ground handling. Leading Edge also offers flight instruction, aircraft rental, maintenance, and aircraft management. Leading Edge offers a clean and modern facility and also operates a sister operation in Logan, Utah. At the time of this writing, the average fuel prices at U42, when compared to TAC Air/Keystone Aviation were \$0.07 per gallon lower for full service Avgas, and \$0.51 per gallon lower for Jet A. Self Service fuel is also available at U42.

c. Bolinder Field - Tooele Valley Airport

Tooele Valley Airport (TVY)	TimNey.com
Type Airport: General Aviation	the second
<i>Longest Runway:</i> 17/35 – 6,100' Long x 100' Wide	
Distance from SLC: 22 NM	
Based Aircraft: 22	hitin
Annual Operations: 44,000	

Owned and operated by the SLCDA, the Tooele Valley Airport (FAA Identifier TVY) is located 5 miles northwest of the City of Tooele. TVY is 20 nautical miles southwest of SLC and is at an elevation of 4,322 feet. The airfield is composed of one active runway with a parallel taxiway and is uncontrolled. Runway 17/35 is 6,100 feet in length, 100 feet wide is asphalt and rated as in good condition. The weight bearing capacity of the runway is 43,000 pounds double wheel. This airport has a precision instrument landing system ILS on runway 17, and there is a 4-Light PAPI on both approaches.

Feasibility Analysis for FBO/Aviation Service Provider Salt Lake City International Airport December 31, 2013



According to the Airport Master Record, TVY has a total 22 based aircraft, and an estimated 20,000 annual opertions. The sole source fuel provider at TVY is the SLCDA, which only offers self service Avgas. Fuel prices at TVY, when compared to TAC Air/Keystone Aviation, were \$0.02 per gallon lower for self serve Avgas.

d. Morgan County Airport

Morgan County Airport (42U)	-10-10-
<i>Type Airport:</i> General Aviation	
<i>Longest Runway:</i> 3/21 – 3,904 Long x 50' Wide	1-1-5
Distance from SLC: 24 NM	
Based Aircraft: 78	
Annual Operations: 5,000	- Handward Date

Morgan County Airport (FAA Identifier 42U) is located 8 miles northwest of the City of Morgan and 24 miles northwest of SLC. The Airport is an uncontrolled facility that is owned and operated by Morgan County. 42U has one asphalt paved runway, 3/21 which is in fair condition according to the FAA. Runway 3/21 measures 3,904 feet in length and is 50 feet wide and contains no precison or approach ligting systems

According to the Airport Master Record, the Airport reported 5,000 annual operations and is home to 78 aircraft. According to the Airport Master Record, there are currently no published services available on the field. This field is primarily a home base for small single and multi engine, piston driven general aviation aircraft.



e. Ogden-Hinkley Airport

Ogden-Hinkley Airport (OGD)	And the self
<i>Type Airport:</i> General Aviation	AT BULLING
<i>Longest Runway:</i> 3/21 – 8,103Long x 150' Wide	
Distance from SLC: 24 NM	
Based Aircraft: 245	
Annual Operations: 64,000	

Ogden-Hinkley Airport (FAA Identifier OGD) is owned and operated by the Ogden City Corporation. At an elevation of 4,473 feet, Ogden-Hinkley is located 3 miles southwest of Ogden and is 24 nautical miles north of SLC. OGD is a controlled airport that is home to approximately 245 aircraft, and the FAA master record indicates that there are approximately 64,000 operations annually. To accommodate the based and transient aircraft, the Airport maintains three asphalt runways in a triangular configuration: Runway 2/21, which is 8,103 feet in length and 150 feet wide, 16/34 which is 5,195 feet long by 100 feet wide, and 7/25 which is 3,618 feet long by 150 feet wide. The longest runway, 3/21 has a maximum weight bearing capacity of 150,000 pounds. To assist pilots landing under varying conditions, there is a precision ILS/DME approach to runway 3, and a 4-light PAPI is located on both approach ends.

There are three FBO service providers on the field and each offers refueling servcies, hangars, and associated ground handling servies. There is also extensive flight training on the field provided by ATP Pilot Training Center. At the time of this writing, the average full service fuel prices at OGD, when compared to TAC Air/Keystone Aviation, were \$0.17 per gallon lower for full service Avgas, and \$0.74 per gallon lower for full service Jet A.



f. Heber City Municipal Airport - Russ McDonald Field

Heber City Municipal Airport (36U)	Ser user 19
<i>Type Airport:</i> General Aviation	
<i>Longest Runway:</i> 4/22 – 6,899' Long x 75' Wide	
Distance from SLC: 31 NM	
Based Aircraft: 89	
Annual Operations: 20,000	

Located 1 mile south of the city center of Heber City and approximately 31 nautical miles southeast of SLC, Heber City Municipal Airport (FAA Identifier 36U) is owned by Heber City. 36U is an uncontrolled airport that is located at an elevation of 5,637 feet. To accommodate air traffic, there is one paved runway. Runway 4/22 is 6,899 feet in length and 75 feet wide and is constructed of asphalt and listed as in good condition. Runway weight bearing capacity is listed as 30,000 pounds single wheel. To assist pilots during adverse weather conditions, the runway contains medium intensity runway edge lights and a 4-box PAPI system on the approach to runway 22.

According to the Airport Master Record, the Airport has approximately 89 based aircraft, and has approximatley 20,000 annual operations. The full service FBO on the field is OK3Air. This operation offers a wide range of services to airport users including aircraft refueling, de-icing, hangars, flight instruction, aircraft rental, charter, aerial tours, aircraft maintenance, parts, accessories and associated ground handling. As one of the closest airports to Park City, the FBO competes for corporate jet and ski traffic in the region. Terminal facilities are limited in size but are well maintained. The average full service Avgas fuel pricing at OK3Air is approximately \$0.60 higher than TAC Air/Keystone Aviation SLC, while Jet A is \$0.79 higher.



g. Provo Municipal Airport

Provo Municipal Airport (PVU)	
<i>Type Airport:</i> General Aviation	
<i>Longest Runway:</i> 13/31 – 8,599Long x 150' Wide	2021-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
Distance from SLC: 31 NM	
Based Aircraft: 111	a starter the
Annual Operations: 170,000	the state of the s

Provo Municipal Airport (FAA Identifier PVU) is located 2 miles southwest of downtown Provo, and 31 miles south of SLC. The Airport lies at 4,497 feet and is a controlled field that is owned and operated by the City of Provo. The Airport is home to approximately 111 based aircraft, and according to the FAA master record for 2013, has approximately 170,000 operations annually.

To accommodate based aircraft and transients, there are two asphalt runways, 13/31 which is 8,599 feet in length, 150 feet wide in fair condition, and runway 18/36 which is 6,641 feet long and 150 feet wide. The airfield has a precision ILS/DME approach on runway 13 and 2-Light PAPI on the other three approaches to the field. Runway 13/31 has a weight limit of 140,000 pounds double tandem.

There is one FBO entity on the field, TAC Air/Keystone Aviation, who operates a modern terminal facility. TAC Air/Keystone Aviation offers aircraft refueling, hangars, and all associatd ground handling for all types of aircraft. At the time of this writing, the average full service fuel prices at PVU when compared to SLC were listed at \$0.11 per gallon higher for Avgas and \$0.15 per gallon lower for Jet A.

3. Key Comparable Airports

While there are other landing facilities in the region, this analysis focused on key airports within approximately 36 miles of SLC. In this analysis, seven key airports stand out as the most influential in regards to proximity to SLC, comparable operations, pricing of services, and facilities.



These influential airports include those just described: Bountiful (BTF), South Valley (U42), Tooele Valley (TVY), Morgan County (42U), Ogden-Hinkley (OGD), Heber City (36U), and Provo (PVU). The following table indicates the overall status of these landing fields.

	KEY COMPARABLE AIRPORTS													
AIRPORT	PORT ID		LONGEST RWY A/C ANNUAL OPS* TOWER		MAX LANDING WEIGHT	APP	AVG. PRICE COMPARISON							
Salt Lake City	SLC	- 0 -	12,000'	170	350,000	No	850,000	ILS DME	- 0 -					
Bountiful	BTF	5 NM	4,700'	217	37,000	No	120,000	PAPI	Avgas – Lower Jet - Lower					
South Valley	U42	10 NM	5,862'	197	74,000	No	43,000	PAPI	Avgas - Lower Jet - Lower					
Tooele Valley	TVY	20 NM	6,100'	22	44,000	No	43,000	ILS	Avgas – Lower Jet – Not Avail.					
Morgan County	42U	24 NM	3,904'	78	5,000	No	N/A	None	No Fuel Avail.					
Ogden Hinkley	OGD	24 NM	8,103'	245	64,000	Yes	150,000	ILS DME	Avgas – Lower Jet – Lower					
Heber City	er 36U 31 NM 6,899' 89		89	20,000	No	30,000	PAPI	Avgas – Higher Jet – Higher						
Provo Municipal	PVU 36 NM 8,599' 111 170,000		Yes	140,000	ILS DME	Avgas – Higher Jet - Lower								

*Annual operations data, particularly from uncontrolled fields is derived from FAA 5010 Data and may be subject to estimates and/or data that may not be current.

4. Competitive Position and Ranking

The nature of this competitive analysis scenario is based on the overall lines of business and general aspects of the various complex relationships between service, airport infrastructure, community influence, business/industry in the area, pilot/passenger amenities and other subjective factors that may not be easily quantifiable. Airports compete on a number of levels particularly for different types of services and users. Business jet operators have a particular set of needs when compared to the small personal aircraft owner. This is an example of two distinct market segments within the same airport or regional marketplace. Likewise, aircraft maintenance is a competitive service that also has different issues that set one airport or FBO apart from others. This segment is unique because of the nature of the airplane and the ability of the pilot to get his maintenance done at any number of airports within a wide radius from home base. Also, the type of engine or other equipment on-board may determine where maintenance is performed. In other words, SLC may



compete with one airport for maintenance services, but competes with another for itinerant fuel services or other factors. Service levels being equal, airports may compete because of the length of the runway, the presence of a control tower or simply which one has the best food or closest to home/business. While many of these market factors and competitive situations are typically under the purview and ultimate control of the FBO operator or other service businesses on the field, it is critically important that the airport sponsor understand the different scenarios and how the Airport competes regionally for general aviation activity. In any competitive analysis is nearly impossible to factor in all of the variables of each scenario listed above and as such the following analysis is from an overall competitive environment, taking into consideration the unique nature of each airport and its general impact on SLC.

To assess Salt Lake City International Airport's competitive position and ranking in the region, these key comparable and competitive airports were further analyzed for analytical ranking. The seven key competitive airports were selected based upon their relative position in the marketplace and their direct impact on activity and pricing of services at SLC. To properly analyze these airports in comparison to Salt Lake City, a table was developed which ranks these competitive airports by their most important attributes. On a scale from 1 to 8, with 8 being the highest, each airport was ranked for each primary attribute they offer to the users. In order to decide which attributes are the most important, a priority list was created and "weighted" since each attribute may not be equal in the eyes of a particular type of user.

Location

• According to our analysis, the first priority many pilots consider is location. Since the airports in the study are spread across the region, the central point for this analysis is proximity to downtown Salt Lake City. This proximity means driving distance from Salt Lake City which impacts residents living in Salt Lake City and itinerant pilots who will likely be staying or doing business in the City. For instance, the closest airport to downtown Salt Lake City received a score of 8 and the location attribute received a weight of 35. This means the airport closest in driving time to Salt Lake City is SLC and received 280 points (8 x 35) and the one farthest away, Heber City received 35 points (1 x 35).



Infrastructure

The second priority is airfield infrastructure, such as runway lengths/pavement, control tower, and navigational aids. An airport without a runway capable of handling higher aircraft weight, takeoff distance, and/or approaches under adverse weather would not rank as well. Those with precision approaches, particularly Instrument Landing Systems (ILS) would rank higher. This attribute is calculated based on a weighted average of 25 points times the infrastructure rank of 1 through 8.

Facilities/Services

The third attribute was the facilities and services available and takes into account FBO amenities such as quality of terminal areas, pilot lounges, conference rooms, flight planning rooms, availability of overnight hangar, as well as the FBOs commitment to customer service. To compare with SLC, comparable facilities must be able to compete for corporate jet aircraft activity. Facilities/services received a weight of 25.

Fuel Availability/Pricing

• The final determining attribute was the availability of fuel, number of fuel providers, as well as the pricing of fuel. Since self-service fuel appeals to smaller aircraft users, the ability to self-fuel during non-manned times also receives consideration, as did the opportunity to provide Jet fuel with trained full service personnel and a mobile refuelling vehicle. This final attribute received a weighted average of 15. This self-fueling attribute relates primarily to the smaller Avgas burning aircraft. However, it should also be noted that Jet-A self-fueling is seen by most of the turbine/turboprop operators as a negative or "reason to avoid" a particular airport because of a real or perceived lack of other support services that a turbine aircraft needs. In addition, since these aircraft are often corporate or charter aircraft, the pilots are typically professional aircrews in formal uniforms, who are less likely to want to fuel their own aircraft for appearance reasons

The following table depicts the attributes of SLC and each of the other key competitive airports and shows the current ranking of each at the time of inspection by *ABS*.



KEY COMPETITIVE AIRPORTS - POSITION AND RANKING												
CATEGORY	SLC	BTF	U42	TVY	42U	OGD	36U	PVU				
LOCATION (WEIGHT 35)	8 = 280	6 = 210	7 = 245	5 = 175	4 = 140	3 = 105	1 = 35	2 = 70				
INFRASTRUCTURE (WEIGHT 25)	8 = 200	5 = 125	3 = 75	2 = 50	1 = 25	7 = 175	4 = 100	6 = 150				
FACILITIES/SVCS (WEIGHT 25)	8 = 200	5 = 125	4 = 100	3 = 75	1 = 25	6 = 150	2 = 50	7 = 175				
FUEL AVAIL/PRICE (WEIGHT 15)	7 = 105	3 = 45	5 = 75	4 = 60	1 = 15	8 = 120	2 = 30	6 = 90				
TOTAL WEIGHTED POINTS	785	505	495	360	205	550	215	485				
AVERAGE RANKING	7.75	4.75	4.75	3.50	1.75	6.00	2.25	5.25				

In addition to the other parameters, it is also important to note that the above rankings were also derived within the context of how each airport competes for high-end turbine aircraft. This is critical, because corporate aviation activity at SLC is one of the key ingredients in establishing the feasibility of a second FBO at SLC.

As indicated by the total points, SLC ranks 1st out of 8 with a total of 785 points out of a possible 800. The average ranking of 7.75 for SLC is derived by adding all the ranks from each category, and dividing by 4, which is the total number of categories (8+8+8+7 = 31÷4 or 7.75). The areas in which SLC ranked above average were location, airport infrastructure, FBO facilities and associated services. The airport facilities at SLC are far superior, particularly the overall airfield infrastructure, especially when comparing runway length and pavement strength compared to other airports. Only Ogden (OGD), ranking 2nd overall, rated higher in the fuel price/availability category because their fuel prices are slightly lower than SLC. Provo also ranked high, 3rd overall, because of excellent FBO facilities. This analysis clearly shows that the two most competitive airports along the Wasatch Front are Ogden (OGD) and Provo (PVU). These two airports compete with SLC on a high level, for based tenants and itinerant aircraft, primarily due to facilities, services and the fact that each airport has a control tower and all weather instrument approaches. The remaining airports are no factor in the future of SLC other than they do provide for a good alternative to small piston powered aircraft, which actually bodes well for SLC in the long term. In conclusion, none of the airports analyzed are considered an eminent threat to the future of SLC and



they are not likely to make any changes or additions in the future that would adversely affect the projected growth of corporate aviation activity at SLC.

5. Flight Activity, Routings and Destinations

Based on information provided by the SLCDA the aviation flight activity (operations) at SLC is divided into four categories. Air carrier operations accounted for 73%, all cargo aircraft are 5% of the operations, general aviation is approximately 21% of the total and military activity accounts for approximately 1% of the total. According to TAC Air/Keystone Aviation management, approximately 36% of the general aviation fuel at SLC is delivered to itinerant aircraft. As such, it is reasonable to determine that 36% of the general aviation operations are also itinerant. This concludes that 64% of the general aviation activity at SLC includes those aircraft that are based on the field. This is good news for SLC, because based aircraft operations are more dependable and less risky than a dependence on drop-in aircraft that are itinerant in nature. That is not to say that itinerant is not important, because these aircraft tend to purchase fuel at higher margins. It is also believed that with the improvements in the economy, additional itinerant aircraft will be utilizing SLC since business activity in the region will increase. This will not only improve fuel sales at SLC, it will also mean a bigger "pie" to be shared between the incumbent operator and a second entrant to the market.

While SLC would be considered primarily a destination airport, because of the ski resort activity and business travelers visiting the region, it is also a limited transient stop for aircraft transiting east and west across the country. While the ski resort traffic is seasonal, the marketplace is very stable with strong activity all year round. Like the air carrier activity, general aviation destinations span the entire country from coast to coast because of the longer-range nature of the aircraft in use today. From a long term planning perspective the nature of the diverse economy of the SLC area, the quality of service provided on the field, and the general positive trends in corporate aviation all bode well for the future of the Airport.



6. Local Aviation-Related Business

The most important main street in any community is not a street, but rather the local airport runway. There are a number of local businesses within any community, both on and off airport, that are impacted by the airport and its operations. In addition to the airlines who are the biggest employers, the other on-airport businesses that have the most direct impact on the community and airport are the FBOs. They are the front door to the business community and a significant impact on business travelers who frequent the area. These are travelers who not only spend a lot of money in the area for travel services such as hotels and restaurants, they also make decisions about housing their businesses in Salt Lake City based on the access to both commercial and general aviation airport services.

Key on-airport business includes, air ambulance, charter, flight training, aircraft sales, aircraft washing, aviation products/parts sales, catering, avionics (aircraft electronics and navigation) equipment repair, hangar construction, agricultural spraying, aerial firefighting, and miscellaneous ground handling services are all driven by the based and itinerant fuel service business at an airport.

The local businesses that are directly impacted by the vitality of the Airport include restaurants, hotels, resorts, car rental agencies and other service related businesses that cater to tourism. Businesses that are indirectly impacted would be those entities that support the tourism industry, such as laundry services, gas stations, restaurant and hospitality equipment providers, uniform suppliers, vehicle maintenance companies, banks, employment agencies, medical facilities, real estate, and government services.

In the case of Salt Lake City, the needs of both aviation and non aviation businesses near SLC can be directly tied to the vitality of the Airport, particularly with regard to attracting and ultimately bringing in itinerant aircraft, as well as improving services on the Airport to corporate aircraft who could be incentivized to base their aircraft at SLC, and in-turn operate their business from Salt Lake City because of the amenities and attractiveness of the Airport to attract customers business owners must have the confidence in the sustainability of the Airport to attract customers



to the area and to also serve their own business needs. It is important to note that most corporations, when deciding where to base their new or expanding business, utilize a business development model that researches the various demographics of the region, which includes the proximity of the local airport and the services and amenities offered there. In all cases, SLC meets these criteria and clearly, a second high-quality FBO chain operation would improve the perceived and actual service levels at SLC.



V. CONCLUSIONS AND RECOMMENDATIONS

1. Summary and Conclusions

Airport Business Solutions (ABS) has reviewed the statistical data, and evaluated the information and comments received from a number of valued sources during the process of this analysis. Initially, from an outsider's perspective general aviation may appear to some to still be in a decline or consolidation mode. In fact, in parts of the nation, general aviation is still somewhat flat or in very slow growth mode. However, many areas of the country remained steady during the recession over the past five years. This is particularly true for the Wasatch Front and Salt Lake City as noted in the data provided regarding the community and regional economic stability. While a preliminary cursory review of potential service providers has indicated that SLC is a potentially open market for expansion, there are some pitfalls and market conditions to consider regarding the future of SLC for expansion.

After detailed review, the marketplace at SLC is much more complicated than would be indicated by just the fuel volumes, and there are various other factors in play on the field and within the industry that must be taken into consideration. While there is a significant volume of fuel on SLC, and the community is one of the fastest growing in the nation, the existing FBO facilities are old and somewhat obsolete. A new entrant to the field would need to be very strong financially, in that some of the existing general aviation facilities, particularly those vacated by Salt Lake Jet Center in 2011, are in need of refurbishment and/or re-construction. While some hangars are in good condition and ready for take-over, the former terminal and adjacent hangar will likely need a major refurbishment or complete rebuild. However, those entities that have expressed an interest in the SLC marketplace are aware of this fact, and would likely still be very interested in providing SLCDA with various creative development options if the SLCDA were to issue an RFP for FBO services on the field.

There is a limited amount of land area on the east side for general aviation, and according to the SLCDA, the rest of the Airport is already spoken for or master planned for other commercial activities. In addition, the Airport is being considered for a new Honda Jet Delivery Center for the



western region of the nation. This development would be part of the TAC Air/Keystone Aviation leasehold. This bodes well for the future of general aviation on the field, but it will require some creative design and development of the existing facilities and utilization of the remaining open lease areas on the east side of the field. Ramp space is also at a premium on the field particularly during ski season. This will also need to be addressed, and a new entrant to the marketplace will need to show how this will be mitigated.

From a user's perspective, it is understandable that there may be a perception that the market is currently under-served (from a purely service perspective), since TAC Air/Keystone Aviation is the only service provider on the field, and the fact that they currently control most of the facilities and leasehold areas on the east side of SLC. It should be noted that TAC Air/Keystone Aviation has a reputation for excellent service levels at SLC and appears to provide fuel at pricing levels that would be considered competitive for an airport that offers the infrastructure of a major commercial size hub airport. (Although fuel discount levels typically offered to customers was not made available.) However, it is the goal of the SLCDA to make sure this holds true in the future, and that the demands of other national chains, regarding their interest in SLC, are considered and all options are explored.

In regard to the reduction of service providers at SLC, it should be noted that while the general consolidation of the industry over the past five years is part of this change at SLC, the recent consolidation of three FBOs to one is mostly a function of complicated acquisition scenarios. Through the purchase of the Salt Lake Jet Center facility by Million Air/Keystone Aviation, and then the subsequent acquisition of Million Air by TAC Air, the resulting situation is that there is currently only one fuel service provider on the field. It is also important to note that it is believed that the sale and departure of Salt Lake Jet Center was at least in part due to the unwillingness of the Jet Center Network to invest in facility improvements to continue to compete in the marketplace. Although not verified, it is our opinion that this is a viable assumption considering the state of the economy at the time negotiations began in 2010.

It should also be noted that, although there are other airports within 30 miles of SLC that also provide fuel and ground services to business aviation, they are not considered to be a threat or



serious competitors to SLC, primarily because SLC is a destination airport and the significantly greater infrastructure offered, especially to larger turbine aircraft.

In relation to the demands for ramp space, particularly for the projected Honda Jet facility at SLC, ABS had looked at the impact this has on additional service providers. A review of two scenarios for this facility, as provided by SLCDA and TAC Air/Keystone Aviation, has been accomplished and information provided to the SLCDA regarding this issue. The recent TAC Air/Keystone Aviation proposal includes a Honda Jet facility that would essentially be placed on what we would consider the front row of the east side of the Airport, in an area that would more typically be allocated to fuel providers and other FBO entities. As such, it is the recommendation of ABS that SLCDA strongly resist the placement of the Honda Jet Facility in the area that was previously the Salt Lake Jet Center's front ramp. This facility would be better located in the original programmed location east of TAC Air/Keystone Aviation's terminal building on the south side of 340 North Street. Utilizing the limited itinerant jet ramp along the front ramp area for delivering Honda Jets is not the highest and best use of this key ramp area. The front ramp must be maintained and available for transient aircraft utilizing the Airport as pointed out when discussing the shortage of ramp during major events and ski activity. Moreover, it is clear that the T-hangar and other ramp areas along the east perimeter of the field must be more effectively used for future corporate and community hangars.

As discussed, a significant volume of fuel at the Airport is delivered to based aircraft, including a significant number of tenants who own and operate turbine aircraft owned by individuals or businesses headquartered in the City. This is significant because based tenants provide a much more stable line of business to the bottom line of the FBOs in that based hangar revenue is stable, and the fuel volumes associated with the hangars is also more predictable. Unlike airports that rely mostly on itinerant fuel business, which while offering greater margin potential can be volatile depending on flight activity, SLC provides a more stable airport. In our opinion, this is one of many reasons why there is current interest in the field. While it is also understood that TAC Air/Keystone Aviation will make every effort to maintain their hold on based tenants, a new entrant will likely gain some of this based hangar business due to the current constraints of available hangars and land. Long term, new corporate hangar facilities are programmed for open



areas, and for areas that will likely be vacated by the movement of single engine aircraft to other reliever airports nearby.

While the goal of a new operator should be to facilitate new activity at SLC, the reality is that any entrant will be focused on moving a percentage of the SLC retail fuel market away from TAC Air/Keystone Aviation since the based aircraft operators and contract users are much less likely to change operators, at least in the short term. As such, any new entrant into the marketplace must have the ability to sustain losses over the first couple of years until the market shifts and/or additional fuel volumes are added on the field. Also, a second operator would need considerable financial strength and staying power in order to match the investment and facilities improvements required to compete.

ABS has interviewed a number of executives with various FBO chain entities interested in expansion. As such, *ABS* has taken into consideration the ability of new entrants to attract additional business to the field. It should be noted that SLC is primarily a destination airport and additional business is likely to come through natural economic growth and increased chain networking and associated marketing efforts. It is highly unlikely that a significant amount of new business will suddenly show up at SLC just because a new entity is based there. Any business model that is counting on incremental new business to be successful is highly suspect and likely to fail. However the combination of the potential to acquire some current based tenants, move some itinerant retail fuel, add a small amount of new incremental fuel, plus the opportunity to offer fuel and ground services to the airlines, makes the SLC market attractive to many FBO chains.

In summary, the key factors which must be considered with regards to the addition of a second full service FBO/general aviation service provider at SLC are as follows:

The national economy is predicted to continue its slow but steady climb, particularly in Salt Lake City where growth is expected to outpace much of the rest of the nation. This will likely create continued improvement to the general aviation business activity at SLC.



- Fuel volumes at the Airport have been more stable over the past five years than seen at most other airports in the nation. It is on pace to reach pre-recession levels in the next 12 to 24 months.
- The volatility of oil and gas prices has stabilized somewhat and barring any major international incidents is projected to continue this trend.
- Chain operators of FBOs are beginning to expand again and many are looking for airports to add locations to build new facilities. The current cost of money is low, and those operators with financing or access to internal funds, are making investments across the country at the present time.
- The SLCDA has received many unsolicited requests, from FBO entities of all sizes, for an opportunity to become the second general aviation service operator at SLC.
- The new Honda Jet facility entering the market will provide additional business on the Airport both directly and indirectly. However, the placement of this facility must not hinder a new entrant to the market or utilize key ramp space that is adjacent to the parallel taxiway in front of the current FBO facilities for activities other than the accommodation of transient aircraft.
- Slow and steady improvement to the stock market is projected to continue, particularly with the recent signing of the \$1.1 Trillion spending bill in Washington. This will provide funding for a number of things that will impact general aviation. Specifically, FAA funding will once again be available for aviation safety programs, aircraft certification, and research into a replacement for leaded aviation gasoline.
- The available sites for general aviation at SLC need improvements; however, the basic infrastructure is there for the addition of new and improved facilities.



- Air carrier demand in the future is not expected to be an impediment to future general aviation operations, as runway capacity appears to be adequate for the long term.
- > SLCDA must maintain a level playing field for existing and future operators.
- The investment of current tenants must be protected and the opportunity for new business on the Airport must also be supported.
- Infrastructure and amenities at competing airports in the community are not expected to significantly impact operations at SLC well into the future.
- Charter competition will remain strong and the need for additional charter capacity may begin to improve at SLC.

The history of the Airport shows that SLC has had as many as four full services fixed base operators. Through attrition and economic drivers, the number of fuel service providers has dropped to below what is believed to be the natural demand for at least two operators predicated upon current business levels and projected growth trends. The pendulum is beginning to swing back to this natural level of two major operators. This situation is due to a number of factors as discussed in the national trends associated with general aviation.

2. Recommendations

Customer demand and service provider interest will likely have a major influence on the status of future entrants into the marketplace. It is the opinion of *Airport Business Solutions* that the market is on the verge of supporting a second operator in the near future. It is suggested that SLCDA begin the process to encourage additional competition immediately. The development of a detailed Request for Proposals (RFP) that encourages the creative re-development of the east side general aviation areas, particularly the former terminal and attached hangar, is critical to the future of the Airport. The facility presentation and the financial strength of the submitting entities are the two key components of the future RFP analysis. The SLCDA is in a key position to take advantage of



the aggressive expansion plans of several major FBO chains at the present time. It is the opinion of *ABS* that the Airport will receive many high quality presentations and development plans for the future of SLC. Considering the fact that the initial RFP development, selection of a successful bidder, negotiation of leases, and construction of new or improved facilities, will take 12 to 18 months at minimum, will allow the market to further improve and mature. At that time, the SLC marketplace will be fully ready for a second Fixed Base Operator.

The above opinions are based on data and information provided by SLCDA and various industry sources considered to be highly reliable and accurate. However, *ABS* reserves the right to modify its conclusions if it is discovered that pertinent information was not made available.



VI. APPENDIX

1. SLCDA General Aviation Facilities

A graphic depiction of the general aviation facilities on the east side of SLC, including TAC Air/Keystone Aviation and the former Salt Lake Jet Center, is included on the following page.



Feasibility Analysis for FBO/Aviation Service Provider Salt Lake City International Airport December 31, 2013



2. SLCDA General Aviation Fuel Flow 2004 – 2013

General aviation fuel flow reports from the SLCDA for years 2004 through 2013 are provided on the following page.

Total General Aviation Fuel Flowage





Keystone Fuel Flowage Charges

	20)13 YTD	20	12	201	1	201	0	200	9	2	008	200)7	200	06	200	5	200	4
	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel
Jan	\$ 23,659.8	394,331.0	\$ 32,732.67	545,544.5	\$ 17,778.00	296,300.0	\$ 20,630.51	343,841.8	\$ 13,737.86	228,964.3	\$ 21,092.62	351,543.7	\$ 20,293.56	338,226.0	\$ 18,089.64	301,494.0	\$ 19,170.06	319,501.0	\$ 17,412.48	290,208.0
Feb	\$ 30,891.5	54 514,859.0	\$ 36,635.99	610,599.8	\$ 21,035.23	350,587.2	\$ 11,742.42	195,707.0	\$ 24,246.18	404,103.0	\$ 26,369.86	439,497.7	\$ 25,504.74	425,079.0	\$ 24,609.06	410,151.0	\$ 15,498.24	258,304.0	\$ 22,473.60	374,560.0
Mar	\$ 22,046.2	367,437.0	\$ 38,537.87	642,297.8	\$ 18,644.19	310,736.5	\$ 25,480.22	424,670.3	\$ 12,812.40	213,540.0	\$ 21,533.09	358,884.8	\$ 17,664.66	294,411.0	\$ 16,352.58	272,543.0	\$ 19,679.40	327,990.0	\$ 18,073.08	301,218.0
Apr	\$ 27,338.3	455,639.0	\$ 34,440.81	574,013.5	\$ 13,783.19	229,719.8	\$ 22,194.59	369,909.8	\$ 21,219.21	353,653.5	\$ 29,758.62	495,977.0	\$ 29,302.80	488,380.0	\$ 22,626.30	377,105.0	\$ 19,724.64	328,744.0	\$ 19,904.22	331,737.0
May	\$ 16,716.5	278,609.0	\$ 25,088.94	418,149.0	\$ 11,742.42	195,707.0	\$ 12,617.83	210,297.2	\$ 7,927.18	132,119.7	\$ 13,392.46	223,207.7	\$ 14,313.30	238,555.0	\$ 16,100.58	268,343.0	\$ 12,997.68	216,628.0	\$ 12,432.36	207,206.0
Jun	\$ 16,502.4	6 275,041.0	\$ 13,453.15	224,219.2	\$ 11,430.08	190,501.3	\$ 8,356.77	139,279.5	\$ 14,860.47	247,674.5	\$ 11,697.14	194,952.3	\$ 11,813.94	196,899.0	\$ 16,482.84	274,714.0	\$ 8,902.38	148,373.0	\$ 11,373.78	189,563.0
Jul	\$ 13,539.9	225,666.0	\$ 24,700.53	411,675.5	\$ 7,748.08	129,134.7	\$ 11,102.32	185,038.7	\$ 8,222.36	137,039.3	\$ 17,873.20	297,886.7	\$ 14,329.44	238,824.0	\$ 9,017.94	150,299.0	\$ 12,605.76	210,096.0	\$ 17,339.64	288,994.0
Aug	\$-		\$ 27,851.21	464,186.8	\$ 17,319.89	288,664.8	\$ 13,748.26	229,137.7	\$ 16,785.22	279,753.7	\$ 16,495.16	274,919.3	\$ 23,104.92	385,082.0	\$ 23,046.00	384,100.0	\$ 13,619.46	226,991.0	\$ 11,824.62	197,077.0
Sep	\$-		\$ 23,139.24	385,654.0	\$ 13,538.64	225,644.0	\$ 10,617.75	176,962.5	\$ 10,032.87	167,214.5	\$ 19,405.41	323,423.5	\$ 20,281.74	338,029.0	\$ 12,907.44	215,124.0	\$ 15,022.98	250,383.0	\$ 16,170.24	269,504.0
Oct	\$-		\$ 9,964.02	166,067.0	\$ 19,616.97	326,949.5	\$ 11,595.48	193,258.0	\$ 12,827.10	213,785.0	\$ 17,099.92	284,998.7	\$ 13,344.78	222,413.0	\$ 15,137.04	252,284.0	\$ 15,796.20	263,270.0	\$ 14,430.00	240,500.0
Nov	\$-		\$ 11,565.78	192,763.0	\$ 25,334.33	422,238.8	\$ 12,475.13	207,918.8	\$ 14,480.50	241,341.7	\$ 9,808.66	163,477.7	\$ 13,513.20	225,220.0	\$ 10,019.34	166,989.0	\$ 8,403.84	140,064.0	\$ 12,965.46	216,091.0
Dec	\$-		\$ 22,785.90	379,765.0	\$ 27,985.28	466,421.3	\$ 12,412.15	206,869.2	\$ 10,321.69	172,028.2	\$ 11,700.14	195,002.3	\$ 12,763.74	212,729.0	\$ 13,829.76	230,496.0	\$ 13,946.28	232,438.0	\$ 10,132.92	168,882.0
Total	\$ 150,694.9	2,511,582.0	\$ 300,896.11	5,014,935.2	\$ 205,956.30	3,432,605.0	\$ 172,973.43	2,882,890.5	\$ 167,473.04	2,791,217.3	\$ 216,226.28	3,603,771.3	\$ 216,230.82	3,603,847.0	\$ 198,218.52	3,303,642.0	\$ 175,366.92	2,922,782.0	\$ 184,532.40	3,075,540.0

jetCenter Fuel Flowage Charges

	2013		2012		2011		2010		2009		2008		2007		2006		2005		2005			
	Cha	arge	Fuel	Char	e	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel	Charge	Fuel
Jan	\$	-	-	\$	-	-	\$ 14,621	85 243,697.5	\$ 7,504.47	125,074.5	\$ 8,447.38	140,789.7	\$ 15,875.18	264,586.0	\$ 15,921.60	265,360.0	\$ 13,931.04	232,184.0	\$ 19,277.82	321,297.0	\$ 15,699.84	261,664.0
Feb	\$	-	-	\$	-	-	\$ 17,685	28 294,754.7	\$ 9,620.21	160,336.8	\$ 10,814.38	180,239.7	\$ 14,713.58	235,222.0	\$ 17,642.52	294,042.0	\$ 16,784.28	279,738.0	\$ 18,845.46	314,091.0	\$ 15,342.18	255,703.0
Mar	\$	-	-	\$	-	-	\$ 13,954	24 232,570.7	\$ 9,400.41	156,673.5	\$ 8,789.60	146,493.3	\$ 13,613.73	226,895.5	\$ 14,986.02	249,767.0	\$ 17,630.22	293,837.0	\$ 16,591.56	276,526.0	\$ 16,200.12	270,002.0
Apr	\$	-	-	\$	-	-	\$ 13,321	79 222,029.8	\$ 11,743.48	195,724.7	\$ 9,305.22	155,087.0	\$ 18,099.35	301,655.8	\$ 17,970.42	299,507.0	\$ 22,540.20	375,670.0	\$ 15,937.08	265,618.0	\$ 19,863.06	331,051.0
May	\$	-	-	\$	-	-	\$ 10,168	34 169,472.3	\$ 7,749.78	129,163.0	\$ 6,950.69	115,844.8	\$ 9,329.44	155,490.7	\$ 15,273.00	254,550.0	\$ 10,632.42	177,207.0	\$ 11,260.26	187,671.0	\$ 13,065.12	217,752.0
Jun	\$	-	-	\$	-	-	\$ 9,561	53 159,358.8	\$ 8,521.88	142,031.3	\$ 8,954.89	149,248.2	\$ 9,291.40	154,856.7	\$ 13,813.74	230,229.0	\$ 11,411.22	190,187.0	\$ 11,348.04	189,134.0	\$ 13,065.12	217,752.0
Jul	\$	-	-	\$	-	-	\$ 9,509	90 158,498.3	\$ 7,231.87	120,531.2	\$ 8,289.21	138,153.5	\$ 9,935.49	165,591.5	\$ 16,905.60	281,760.0	\$ 12,465.90	207,765.0	\$ 11,166.30	186,105.0	\$ 13,435.26	223,921.0
Aug	\$	-	-	\$	-	-	\$ 13,489	56 224,827.7	\$ 7,014.25	116,904.2	\$ 6,747.65	112,460.8	\$ 10,529.14	175,485.7	\$ 13,861.86	231,031.0	\$ 12,944.76	215,746.0	\$ 14,200.20	236,670.0	\$ 15,141.12	252,352.0
Sep	\$	-	-	\$	-	-	\$ -	-	\$ 10,726.41	178,773.5	\$ 8,998.99	149,983.2	\$ 12,214.52	203,575.3	\$ 14,640.00	244,000.0	\$ 15,038.52	250,642.0	\$ 15,964.50	266,075.0	\$ 14,079.24	234,654.0
Oct	\$	-	-	\$	-	-	\$ -	-	\$ 5,067.76	84,462.7	\$ 5,307.09	88,451.5	\$ 8,463.91	141,065.2	\$ 13,086.96	218,116.0	\$ 10,830.66	180,511.0	\$ 17,994.00	299,900.0	\$ 11,231.16	187,186.0
Nov	\$	-	-	\$	-	-	\$ -	-	\$ 9,404.65	156,744.2	\$ 7,656.17	127,602.8	\$ 9,194.20	153,236.7	\$ 13,267.14	221,119.0	\$ 11,893.98	198,233.0	\$ 12,498.06	208,301.0	\$ 11,818.92	196,982.0
Dec	\$	-	-	\$	-	-	\$-	-	\$ 8,735.86	145,597.7	\$ 8,309.62	138,493.7	\$ 7,585.49	126,424.8	\$ 12,173.34	202,889.0	\$ 10,383.30	173,055.0	\$ 12,891.48	214,858.0	\$ 15,721.14	262,019.0
Total	\$	-	-	\$	-	-	\$ 102,312	59 1,705,209.8	\$ 102,721.03	1,712,017.2	\$ 98,570.89	1,642,848.2	\$ 138,845.43	2,304,085.8	\$ 179,542.20	2,992,370.0	\$ 166,486.50	2,774,775.0	\$ 177,974.76	2,966,246.0	\$ 174,662.28	2,911,038.0
COMBINE	D		2,511,582.0		5	5,014,935.2		5,137,814.8		4,594,907.7		4,434,065.5		5,907,857.2		6,596,217.0		6,078,417.0		5,889,028.0		5,986,578.0

Feasibility Analysis for FBO/Aviation Service Provider Salt Lake City International Airport December 31, 2013



3. SLCDA General Aviation Operations 2007 – 2013

General aviation aircraft operations (takeoffs and landings) for the years 2007 to 2013 are included on the next page.

General Aviation Operations at SLC

	2007	2008	2009	2010	2011	2012	2013
Jan	6,370	5,677	5,415	5,066	5,161	5,211	5,176
Feb	6,833	6,379	5,183	5,728	5,876	5,336	6,634
Mar	8,049	6,894	5 <i>,</i> 808	6,010	5,840	5,618	7,409
Apr	6,853	6,133	5,399	5,451	4,752	5,401	6,540
May	6,979	5,731	6,233	5,496	5,920	5,514	6,534
Jun	6,762	6,877	5,818	6,234	9,263	4,931	6,190
Jul	6,891	6,395	6,661	5,952	8,544	5,266	5,266
Aug	7,172	6,517	6,717	5,977	8,873	5,892	5,892
Sep	6,458	6,171	6,600	6,879	7,649	6,966	6,966
Oct	6,867	6,298	5,378	5,746	6,975	6,870	6,870
Nov	6,294	5,331	5,739	4,687	4,746	5,802	5,802
Dec	4,960	5,038	4,809	3,743	4,589	4,840	4,840
Total	80,488	73,441	69,760	66,969	78,188	67,647	38,483
Projected	80,488	73,441	69,760	66,969	78,188	67,647	74,119



Note: Projection of remaining six months based on past year data.



4. Airport Business Solutions Curriculum Vitae

The following pages include background data and bio information for *Airport Business Solutions*.

CURRICULUM VITAE

NAME:	Michael A. Hodges, MAI
TITLE:	President/CEO
FIRM NAME:	ABS Aviation Consultancy, Inc. d/b/a Airport Business Solutions
ADDRESS:	13007 W. Linebaugh Avenue, #102, Suite B Tampa, Florida 33626-4489
PHONE:	(813) 855-3600

EDUCATION

Graduate of the University of Tennessee with a Bachelor of Arts Degree - Major in Philosophy.

PROFESSIONAL AND TECHNICAL COURSES

Currently certified in the program of continuing education as required by the Appraisal Institute.

Completed requirements for MAI member designation of the Appraisal Institute to include peer review of appraisal assignments, completion of a demonstration appraisal report on an income-producing property, experience rating, and educational courses.

Attended numerous professional courses and seminars relative to real estate appraisal such as Capitalization Theory and Techniques, Case Studies in Real Estate Valuation, Real Estate Appraisal Principles, Basic Valuation, Residential Valuation, Investment Analysis, Standards of Professional Practice, and Report Writing and Valuation Analysis, as presented by the American Institute of Real Estate Appraisers and the Appraisal Institute.

BACKGROUND AND EXPERIENCE

President and CEO of *ABS Aviation Consultancy, Inc. d/b/a Airport Business Solutions (ABS)*, a diverse aviation valuation and consulting firm which specializes in the analysis of airports, fixed base operations, and other aviation-related properties for lease negotiation, acquisition, litigation, leasehold and going-concern valuation, and bankruptcy, as well as providing specialized airport management consulting, to include policy development, to airports of all sizes. Additional expertise offered in the area of financial self-sufficiency analysis for general aviation airports and through-the-fence access agreements and operations.


BACKGROUND AND EXPERIENCE (Continued)

ABS has provided a myriad of services to airports throughout North and South America, Asia, and Europe. Using our extensive and diverse experience, *ABS* has assisted airports throughout the world in such areas as business plan development and implementation, concessions planning and management, air cargo assessments, airline agreement negotiation, terminal design analysis, parking assessment, rental car analysis, general aviation operations and management, non-aeronautical land development, financial modeling, and full or partial airport privatization assessments.

President and CEO of *ABS Aviation, Inc.*, an airport and FBO management services entity providing management of the Kinston Jet Center FBO at the Kinston Regional Airport in Kinston, North Carolina, and the Minden-Tahoe Airport in Minden, Nevada.

Vice President and Part Owner in the firm of Hodges, McArthur, & Dunn, P.C. Real Estate Appraisers and Consultants from 1990 through 1995. Hodges, McArthur and Dunn, P.C. was a full-service real estate appraisal and consulting firm with offices in Knoxville, Nashville, and Memphis, Tennessee, and Atlanta, Georgia. Responsibilities included appraisals, general feasibility studies, and market analyses on a variety of property types involved in financing, acquisition, condemnation, bankruptcy, litigation, and estate valuation.

Founder and President of HMD Aviation Appraisal Group in 1994, a division of Hodges, McArthur & Dunn, P.C. HMD Aviation Appraisal Group was a real estate appraisal and consulting firm which specialized in the valuation of the real estate aspect of fixed base operations and other aviation-related properties for lease negotiation, acquisition, litigation, leasehold valuation, and bankruptcy.

Staff Appraiser with Hodges and Wallace Appraisal Associates from 1982 through 1990. Responsibilities included research, appraisals, general feasibility studies and market analyses on a variety of property types involved in financing, acquisition, condemnation, bankruptcy, litigation, and estate valuation.

COURT EXPERIENCE

Qualified as an expert witness in various courts in Florida, Georgia, Tennessee, Kentucky, Arizona, Colorado, and California on various valuation, management, financial and operational issues on airports, aviation businesses and aviation-related properties.

TERRITORY

Airport Business Solutions is based in Tampa, Florida, with satellite offices in Denver, Colorado and Dayton, Ohio. The firm has completed a variety of assignments throughout the United States, Asia, Europe and Latin America, to include valuation, consultation, and miscellaneous advisory services.



AFFILIATIONS AND DESIGNATIONS

Elected to Membership in the Appraisal Institute with an MAI designation on April 20, 1994 - Member No. 10,333.

State of Florida - Certified General Appraiser - License No. RZ2770

Pennsylvania State Certified General Appraiser - Certificate No. GA-001626-R

State of Georgia - State Certified General Real Property Appraiser - License No. CG004018

Texas State Certified General Real Estate Appraiser - License No. TX-1338569-G

Member of the Appraisal Institute's Young Advisory Council in 1994, 1995 and 1996

Corporate Member of the National Air Transportation Association (NATA)

Corporate Member of the American Association of Airport Executives (AAAE)

Corporate Member of the National Business Aviation Association (NBAA)

Member of AAAE's Non-Hub/GA Airport Committee

Member of NATA's Airport Business Committee



CURRICULUM VITAE

NAME:	Randy D. Bisgard
TITLE:	Senior Vice President
FIRM NAME:	ABS Aviation Consultancy, Inc. d/b/a Airport Business Solutions
FIRM ADDRESS:	201 S. Gilpin Street Denver, Colorado 80209-2612
PHONE:	(303) 744-0261

EDUCATION

Attended Metropolitan State College of Denver – Achieved three years towards degree and major in Aviation Management. Interest and minors also included the areas of Architectural Drawing, Meteorology, and Business.

Attended numerous aviation related training and personal development programs through employers and industry trade associations.

Hold Private Pilots Certificate – Single Engine Land

BACKGROUND AND EXPERIENCE

Senior Vice President with *Airport Business Solutions*, a diverse valuation and consulting firm headquartered in Tampa, Florida, with satellite offices in Dayton, Ohio and Denver, Colorado. The firm specializes in the valuation and analysis of airports, fixed base operations, and other aviation businesses and properties for business planning, operational assessments, lease negotiation, acquisition, litigation, and valuation.

Senior Vice President and Director of Training for *ABS Aviation, Inc.*, an airport and FBO management services entity providing management of the Kinston Jet Center FBO at the Kinston Regional Airport in Kinston, North Carolina and the Minden-Tahoe Airport in Minden, Nevada.

Mr. Bisgard is a professional advisor to aviation management providing expertise in the area of facility design/development, financial analysis, valuation studies, marketing, advertising, and training. His career as a problem solver includes over 30 years continuous employment in the aviation industry including 16 years at an international air carrier airport.



BACKGROUND AND EXPERIENCE (Continued)

Director of Training for Integrated Airline Services, a national cargo handling company. Responsible for operational control of all safety and training functions for a nationwide network of 24 airline and cargo handling stations. Provided the development and overview of training and operations manuals, training procedures, "train-the-trainer" programs, and employee testing/certification. Developed a safety orientation and mentoring plan for new employees entitled the *BuddySafe System*. This program addresses personal safety and ramp awareness issues.

Senior Associate with Aviation Resource Group International - Consulted with aviation service company clientele regarding various business and operational issues such as facility design and development, operational reviews, financial analysis, valuation studies, regional market studies, and marketing and advertising. Conducted all marketing and advertising activities including the coordination of the firm's trade show and convention activities, resulting in a continuous expansion of client base every year.

Senior Associate with the Aviation Training Institute - Wrote, produced, and managed the development of a nine-module comprehensive video-based aviation safety and customer service training program. This award-winning program is recognized as the industry standard for ramp safety training and has contributed to a substantial reduction in employee turnover and ramp accidents for ATI clientele. Initiated training program development budget, and ultimately managed the sale and distribution of multiple training products to hundreds of aviation businesses around the world.

Corporate Manager of Marketing for Jet Aviation Denver, Inc.- Direct supervision of all customer service and facilities personnel. Developed additional customer base in the area of fuel sales to corporate flight departments. Established competitive fuel pricing structures and extensive direct mail and telephone call campaigns resulting in improved departmental revenues.

Corporate Manager of Marketing for Jet Aviation America - Responsible for system-wide corporate marketing that included over 20 domestic and international locations. Developed a new trade show display, new corporate brochure, pilot handouts, corporate slide presentation, and a new media advertising campaign which resulted in the repositioning of Jet Aviation as a major competitor in the U.S. marketplace.

Manager of Marketing/Construction Development for Jet Aviation – Randy was responsible for redeveloping the image and facilities of the former Atlas Aircraft facility in Denver, including a new marketing campaign, collateral materials, and new facilities. He also served as the Project Manager on a multi-million dollar facility improvement package including a new 10,000 square foot executive terminal and 300,000 square feet of ramp and site improvements. Responsibilities included design development work, direct interface with architects and engineers, selection of a general contractor, construction monitoring in the field, and controlling the disbursement of funds.



Director of Marketing Services at Combs Gates Denver - Managed the advertising and marketing support for the FBO division of the Gates Learjet Corporation, including media advertising, collateral materials, direct mail, promotional programs, and trade show activities. In addition, he was the Corporate Training Director and standardized the training programs and procedures for all Combs Gates locations. He developed and produced a seven-part audio-visual line service-training program for in-house use, and also produced a non-proprietary line-training program that was marketed to other aviation service organizations.

TERRITORY

Airport Business Solutions is based in Tampa, Florida, with satellite offices in Denver, Colorado, and Dayton, Ohio. The firm has completed a variety of assignments throughout the United States, Asia, Europe and Latin America, to include valuation, consultation, and miscellaneous advisory services.

AFFILIATIONS AND DESIGNATIONS

National Business Aviation Association

American Association of Airport Executives

National Air Transportation Association

Aircraft Owners & Pilots Association

National Safety Council

American Society for Training and Development

