Wyoming Aeronautics Commission Air Service Enhancement Program

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1. Executive Summary

Supporting rural air service in Wyoming is critical to economic development and diversity, tourism, and emergency support services. The recent downturn in Wyoming's energy sector highlights the increasing importance of promoting economic diversity throughout the state. Air service is an integral part in attracting new businesses and tourists to the state, while maintaining the diversity of our economy that exists today.

The majority of Wyoming's ten commercial airports face challenges in retaining and growing commercial air service. A lack of qualified airline pilots, airline consolidation, small aircraft retirements, and funding shortfalls continue to hinder adequate air service in many small communities across the country. Since 2013, more than 30 airports nationally have lost access to commercial air service while hundreds more have seen service level reductions.

In 2014, Cheyenne, Riverton, and Sheridan each lost \$850,000, for a total loss of \$2.6 Million, in Federal Airport Improvement Program (AIP) entitlement funding due to declining service levels at those airports. Sheridan lost all commercial air service for more than seven (7) months in 2015, and Worland will lose all air service in September 2016. A loss of air service removes access to a vital economic development tool for small communities, while the loss of AIP funding has forced airports to delay capital improvement projects that provide safety to aircraft operators, additional infrastructure, and jobs.

One (1) of the largest contributors to Wyoming's air service challenges stems from regulatory changes, enacted by Congress, as a result of the Colgan Airways accident in 2009. New rules now require first officers to have a minimum of 1,500 flight hours experience and an Airline Transport Pilot (ATP) certificate in order to fly. This new law was a six (6) fold increase in the number of flight hours previously required, and has had the unintended consequence in significantly reducing the pipeline of qualified pilots to the regional airline industry. While congress and the Federal Aviation Association (FAA) had the best safety intentions in mind, some safety experts are challenging the 1,500 hour minimum as an arbitrary number not suitable for determining commercial pilot competency or proficiency. At the same time, the number of prospective student pilots continues to decline. Fewer student pilots are opting for a future as a commercial airline pilot due to both the added time and expense of the 1,500 hour rule, and low entry-level pilot pay. Further exacerbating the issue are impending pilot retirements. Over 14,000 pilots are expected to retire through 2022 from the four (4) mainline

carriers as the pilots reach the mandatory retirement age of 65. As regional pilots move to fill positions vacated at the major carriers, the resources available to operate regional airline flights into rural communities will continue to decline.

Consolidation of the airline industry over the past 10 years has reduced the number of air service providers able to operate in rural communities. At the same time, these carriers continue to streamline their fleets, retiring older and smaller aircraft with newer, larger, and more efficient models. Wyoming has a large dependence on these smaller aircraft being retired as they exclusively serve eight (8) of Wyoming's 10 commercial airports, and more than 75% of all commercial flights in to and out of Wyoming. Communities will need to economically support larger aircraft with 70 or more seats, or risk losing commercial air service entirely.

Adequate funding to support air service in rural communities is increasingly necessary in maintaining air service, as competition among smaller communities has escalated to retain air service amid limited crew resources. The Essential Air Service (EAS) and Small Community Air Service Development (SCASD) federal funding programs provide assistance to eligible communities; however, these programs have recently experienced either tightening eligibility requirements, or declining budgets. At the state level, the Air Service Enhancement Program (ASEP), which provides funding for all Wyoming's commercial airports, forecasts a funding shortfall of \$2.8 Million through the end of the 2019/2020 biennium. Without appropriate funding, the Aeronautics Commission will face the difficult decision of determining which airports keep air service funding in the future. In 2015, the ASEP helped fund 23% of all Wyoming airline seat capacity, and generated an estimated \$26.5 Million in visitor spending to the state. These programs combined currently provide assistance to nine (9) of Wyoming's commercial airports.

This report will focus on these small community air service challenges as well as provide recommendations on how the Wyoming legislature can help support air service in the Wyoming.

2. Introduction

Amid record profits for commercial airlines, small and rural communities across the U.S. face several obstacles in retaining and growing commercial air service to help grow their economies. A lack of qualified airline pilots, small aircraft retirements, industry consolidation, and funding constraints jeopardize adequate air service to many small communities. Many small communities have lost all commercial air service access since 2013. Sheridan County Airport was one (1) of those airports without service from April 2015 to November 2015, and Worland Municipal Airport will lose all commercial air service in September 2016. Both Cheyenne Regional Airport (CYS) and Riverton Regional Airport (RIW) are two (2) of 64 airports across the nation that have lost more than 25% of their air service during this same period.

Regulatory changes enacted by the U.S. Congress in 2013 requiring first officers, or co-pilots, to obtain a minimum of 1,500 flight hours, with a few exceptions, in order to fly for a commercial airline has had the unintended consequence of constricting the pipeline of qualified pilots to the regional airline industry. In 2016 alone, two (2) regional airlines declared bankruptcy, specifically citing a shortage of pilots as the cause. At the same time, the number of prospective student pilots continues to decline, while mandatory pilot retirements are accelerating. As an already limited number of regional pilots move to fill positions vacated at the major carriers, the number of pilots available to operate flights into rural communities like those in Wyoming will continue to dwindle.

Additionally, small regional jets and turboprop aircraft are being retired at an accelerating rate. When coupled with increasing operational costs, regional airlines have reduced flight schedule frequency and capacity in small communities; instead prioritizing more profitable, higher traffic markets. Reliability and on-time performance have suffered as well, as some regional carriers have difficulty crewing flights consistently, leading to increased cancellations. Roughly half of Wyoming's passengers opt to use an out of state airport, which in many cases, is due to a decrease in flight reliability.

Commercial airline service is an essential economic and transportation resource for Wyoming. Adequate funding to support air service throughout the state is important for maintaining and growing economic diversity in Wyoming. Commercial airports and activities account for over 10 thousand jobs, \$1 billion in annual economic activity, and an estimated \$46.3 million in annual

local and state tax revenues (2013 Wyoming Airports Economic Impact Study). The Air Service Enhancement Program (ASEP) continues to provide support, address challenges, and find solutions for Wyoming's ten commercial airports.

3. Background

3.1 Pilot Shortage

In 2009, regional airline Colgan Airways flight 3407, marketed as Continental Connection, crashed while on approach to Buffalo, New York, killing all on board and four (4) on the ground. The National Transportation Safety Board (NTSB) determined the probable cause of the crash to be an "inappropriate response to the activation of the stick shaker, which led to an aerodynamic stall from which the airplane did not recover." The report cited the contributing factors to the accident as:

"(1) the flight crew's failure to monitor airspeed in relation to the rising position of the low speed cue, (2) the flight crew's failure to adhere to sterile cockpit procedures, (3) the captain's failure to effectively manage the flight, and (4) Colgan Air's inadequate procedures for airspeed selection and management during approaches in icing conditions."

While fatigue was not mentioned as a probable cause in the report, it was cited as one (1) of the other 46 NTSB findings:

"24. The pilots' performance was likely impaired because of fatigue, but the extent of their impairment and the degree to which it contributed to the performance deficiencies that occurred during the flight cannot be conclusively determined."

Therefore, in 2010 the Federal Aviation Administration (FAA) was mandated by congress to enact rules and regulations to address pilot training and rest requirements.¹ The new rules and regulations included:

Requiring first officers to hold an Airline Transport Pilot (ATP) certificate; and

¹ Congress, through Public Law 111-216, required the FAA to enact regulation requiring, in part, that all flight crewmembers operating under 14 CFR Part 121 obtain an Air Transport Pilot (ATP) license. Part 121 governs operating requirements for domestic carrier operators such as United, SkyWest, and Frontier.

Overhauling pilot rest requirements and duty rules.

In August of 2013, first officers or co-pilots were required to obtain an ATP certificate which necessitates a pilot must first accrue a minimum of 1,500 hours of flight time in order to be eligible for the ATP test. This is commonly referred to as the "1,500 hour rule". Prior to this rule, a pilot seeking an entry-level job with a commercial airline technically needed a minimum of 250 hours in order to be hired as a co-pilot, although they were most often hired with more than 500 hours. These changes have had the effect of decreasing the number of qualified pilots available to the regional airline industry to hire, and made those pilots already employed with less than 1,500 hours ineligible to continue flying. The establishment of the 1,500 hour rule has led to a serious pilot shortage, a dilution in the quality of pilot candidates to choose from, and a loss of air service at smaller communities across the nation.

The FAA was given discretion to change certain certification requirements, specifically through academic credits towards the number of hours a pilot needed to obtain an ATP. Limited credit for academic experience was granted by the FAA to an ATP candidate in the form of a "Restricted ATP" (See Table 1).

Table 1: Academic Credit towards a Restricted ATP

Hours	Minimum Flight Time Required for Restricted ATP Certificate
750	Military trained pilot
1,000	Bachelor's degree from an approved accredited program
1,250	Associate's degree from an approved accredited program

As regional airlines struggle to find pilots with the minimum number of hours to meet any of the ATP requirements, another set of pilot duty time limitations and rest requirements went into effect January 1, 2014. These requirements curtailed the number of hours a pilot could be on duty, and increased the number of hours of rest a pilot would require.² The duty hours and subsequent rest requirements under the new rules were based on the

² FAR Part 117 addresses pilot duty time limitations and rest requirements for Part 121 carriers.

number of legs or segments a pilot flew. This requirement did not have a large impact on the larger commercial carriers, with large aircraft that typically fly longer legs; however, a regional carrier flying smaller aircraft that fly more departures per day with shorter legs was affected much more severely. While this part of the new rule was a win for safety advocates, it compounded the pilot shortage by increasing existing regional pilot needs by 10-15%.

After the Colgan crash, the families of the victims understandably pushed for safety reforms that would ensure an accident like this would never happen again. The Air Line Pilots Union (ALPA) partnered with the victims' families to push Congress into action. The major airlines have been outsourcing flying to the regional airlines, through Capacity Purchase Agreements (CPA), since airline deregulation in the 1970's (Forbes, 2007). This allowed the regional carriers, operating smaller aircraft designed to serve small communities, to provide passengers to the major carriers who serve larger hub airports via code sharing. Code sharing occurs when a major airline like United's brand is used on a regional airline flight like SkyWest, and then is marketed as a United Express flight. According to the pilot unions, outsourcing took away flying and pilot jobs from the major airlines, however most major airlines did not have the appropriate aircraft to serve the smaller markets that regional airlines do (ALPA, 2014). This remains a sensitive subject today as Southwest Airlines pilots rejected a tentative agreement with the airline, due in part to verbiage that would have allowed the airline to code share flights with other airlines.

As the regional airlines struggle filling pilot vacancies, the major carriers continue to shift more flying back to themselves. This is good for pilots at the major airlines; however the small communities served by those struggling regional airlines continue to lose service due to the pilot shortage.

3.2 Pilot Training

The airline industry has proposed several alternatives to the 1500 hour rule, but most have met with varying degrees of opposition to develop a better, more encompassing, approach to the safety issues raised by the Colgan accident; an approach that would adopt recommendations stemming from low-fare and major carrier accidents both before and

after Colgan. Opposition to pilot training reforms surfaced when New York Congressional legislators called a press conference in February 2016, to raise concerns about provisions in pending Federal Aviation Administration (FAA) reauthorization legislation thought to roll back a key provision of the 2010 Airline Safety and Extension Act setting 1,500 hours as the minimum before a pilot can take the right seat of an airliner. The FAA reauthorization in the form of the Aviation Innovation, Reform, and Reauthorization (AIRR) Act does not suggest this; however, it does include a provision for the FAA to develop a more appropriate metric to include the quality of pilot training programs. The bill addresses growing concerns that pilot training reform is needed, a trend already being recognized by the airline industry. JetBlue recently introduced a program to train prospective pilots with no previous experience all the way through to the 1,500 hour requirement, and eventually leading to a first officer job within their company. United Airlines also recently announced extra training for its 12,000 pilots, in response to various safety incidents occurring over the past year. This came after an announcement from the U.S. Department of Transportation (USDOT) Office of Inspector General Study that recently highlighted the need to reform pilot training, while improving FAA oversight. Both of these ventures, and other initiatives like them already in place worldwide, improve safety by adopting advances in pilot training resulting from several crashes before and after Colgan.

Leading safety experts say the 1,500 hour minimum is arbitrary and ineffective considering both Colgan pilots exceeded that number. The FAA and the National Transportation Safety Board (NTSB) said hours alone are a poor metric for safety, advocating for a reliance on the quality of pilot training programs as a more appropriate metric. Safety experts and regional airline executives including Bryan Bedford, CEO of Republic Airways Holdings, say hours accrued by prospective pilots in pursuit of reaching 1,500 hours alone leaves too much to chance, as students are not building suitable hours for a future as an airline pilot because:

- Flying is done in clear weather, as insurance from the aircraft lease requires it;
- Flying is largely unstructured, and studies indicate a loss of skills and professionalism as
 a result; and

 Pilots are not gaining the right experience, as they are not flying in complex controlled airspace, around busy hubs in all weather conditions. (Bjerke, 2016), (Hilkevitch, 2013) (Bedford, 2014)

A growing number of indicators suggest that by focusing on a single accident, the industry missed a critical opportunity to develop meaningful safety reforms through better pilot training (Creedy, 2016). Addressing the shortcomings of the 1,500 hour rule would make strides in alleviating burdensome requirements for new pilots, while also improving safety.

3.3 Declining Student Pilots Numbers

Further compounding the pilot shortage is the decline in student pilots wanting to fly for U.S. airlines. The decline was confirmed through a University of North Dakota (UND) study, which conveyed that student interest in becoming an airline pilot has waned from 80% in 2000, to 65% in 2010 (Lovelace, 2013). The UND study also revealed that a third of student respondents were reconsidering their career choice, while 8% had already abandoned their flying careers. Many potential student pilots are deterred by the costs associated with flight training, as a four-year degree with the associated training required for 1,500 hours and an Airline Transport Pilot (ATP) certificate can exceed \$200,000; nearly the same amount to attend a four-year public medical school. Additionally, available data suggests that fewer students are completing pilot training since 2001 (Bjerke, 2016), as undergraduates of professional pilot-degree programs have decreased 23% through 2012. More students are opting to become corporate pilots, as hiring requirements are not as excessive as those in the airline industry. Others are opting to fly overseas for better pay, while some simply pursue other non-flight careers within the aviation industry (Bjerke, 2016).

In years past, the airline industry could meet their pilot demands by recruiting retired military pilots. With the armed services also facing a shortage of pilots, the Air Force has increased retention bonuses to keep their aviators following their ten year active-duty service commitment.

Compounding the pilot shortage is the issue of low entry level pay at the regional airlines. Before the 1,500 hour rule went into effect, new pilots were generally hired by regional

carriers after obtaining their pilot license and graduating from a 2-4 year college program. These pilots were then able to gain valuable flight time and airline experience in order to obtain their Airline Transport Pilot (ATP) license while earning an entry level wage. The experience once gained at regional carriers, is now a hiring requirement, which in some cases forces them to incur significant costs to pay for their own flight time in order to reach 1,500 hours. Over the past two years, many regional airlines have increased pay and incentives to compete for qualified pilots; however increased pay does not address the lack of qualified pilots (Fitzpatrick, 2016).

3.3 Impending Pilot Retirements

Compounding the challenges of new regulations and declining student numbers, is the flood of pilot retirements over the next several years at the major airlines as pilots reach the federally mandated retirement age of 65. Information from Boeing's 2015 Pilot and Technical Outlook Forecast indicates that between now and 2034 the aviation industry will need 558,000 new commercial airline pilots, including 95,000 pilots in North America alone. Today, 54,000 professional pilots are employed by U.S. airlines and by 2030 the majority, about 45,000, will reach the mandatory retirement age.

Kent Lovelace, professor and Director of Aviation Industry Relations at the University of North Dakota, concluded that American, United, Delta and Southwest Airlines, commonly referred to as the major carriers, will need 14,000 pilots over the next six (6) years to replace retiring pilots. Regional airlines employ about 18,000 pilots today, and serve as the primary source of pilots for major airlines to draw from. Without a steady influx of new pilots, regional airlines are left with increasing vacancies. Unless a pipeline of new pilots can be found to offset the impending loss of pilot labor at regional carriers, an entire industry and the communities they serve continue to be at risk.

3.4 Industry Trends Affecting Small Community Air Service

Shifts in the airline industry landscape over the past several years like consolidation, increasing labor costs, and fleet streamlining have also disproportionately affected rural air service. Airline consolidation over the past decade diminished the number of passenger options, and the number of potential service providers and new routes for airports. Seven

(7) major airlines operated in the U.S. in 2004, while only four (4) major carriers remain today. Subsequently, competition among the remaining regional airlines to win flying contracts, or Capacity Purchase Agreements (CPA), from the remaining major carriers to serve small communities has only intensified.

The CPA's by which regional carriers provide service on behalf of major airlines have increasingly become unsustainable as labor costs rise, and the major airline industry consolidates. Regional airlines typically bid for contractual flying with a major carrier via CPA's, under which the regional aircraft provider is reimbursed for all direct expenses like labor, fuel, and aircraft rental, leaving mitigated earnings risk. However, too many regional airlines amid four (4) major airlines has put major carriers at an advantage in negotiations, and created a "buyers market". Profit margins for the regional airlines that win these agreements leave little room for costs to increase. As many of these CPA's were agreed upon before regulatory changes affecting pilots took effect, regional carriers are being financially squeezed to their pay pilots more in order to retain them. Due to the pilot shortage, pilots can work at the airlines offering the highest pay, leaving those airlines who cannot afford labor cost increases with pilot vacancies. At the same time, the major airlines continue to capitalize on the surplus of regional airlines by shifting costs to their regional partners by negotiating contracts that are shorter in length and less lucrative than they were in the past.

Industry consolidation has also had the effect of limiting passenger choices. Major carriers continue to streamline their fleets, retiring smaller less profitable aircraft and moving to larger more fuel efficient models. This translates to more seats per departure, fewer departures throughout the day, and reduced need for crews. While this is an advantage to the airlines, small communities who can support larger aircraft are seeing fewer flight frequencies, while those who do not have the passengers to support larger aircraft will continue to lose service.

Aircraft with 50 seats or fewer, like those being retired, exclusively serve eight (8) of Wyoming's ten commercial airports, and more than 75% of all commercial flights into and out of Wyoming. Over the next five (5) years, many of these communities will need to support flights with 70 or more seats, or risk losing commercial air service entirely.

3.5 Air Service Funding Challenges

Federal regulations and industry changes have made air service funding critical in retaining commercial air service for many small communities. Federal programs that traditionally had been robust enough to provide wide-reaching assistance to small and rural communities continue to be financially challenged. The Essential Air Service (EAS) and Small Community Air Service Development (SCASD) programs provide assistance to eligible communities, however these programs continue to experience reduced funding levels and tightening eligibility requirements.

At the state level, the Air Service Enhancement Program (ASEP), designed to maintain and grow commercial air service in Wyoming, forecasts a funding shortfall of \$2.8 Million through the end of the 2019/2020 biennium. Since the inception of the ASEP in 2004, the standard budget appropriation has been reduced from 6 Million to less than 2.8 Million per biennium. All of these programs provide an economic lifeline to the many small communities they assist. At a time when the state is facing an economic downturn due to the decline of the energy sector, air service funding for our communities is even more important. Maintaining access to the national aviation transportation system is an important tool in promoting economic diversity and development in all of Wyoming's communities.

Over the past two (2) years, three (3) airports have received one-time grant funding through the Small Community Air Service Development (SCASD) program: Cheyenne, Riverton, and Sheridan. The SCASD program is designed to help small communities address air service and airfare issues through assistance with Minimum Revenue Guarantees (MRG), and marketing and promotional efforts. This program is highly competitive, and eligible airports may only apply for assistance every two (2) years. While this program can offer one-time assistance to struggling airports, it is not effective in helping those same airports maintain air service on a consistent basis.

The Essential Air Service (EAS) program does provide ongoing assistance for small, rural airports; however, the eligibility requirements continue to exclude more airports each year. To prevent air service from dissolving in small communities, the Essential Air Service (EAS) Program was put into place by Congress, and administered by the United States

Department of Transportation (USDOT), in order to guarantee that small communities served by commercial air carriers before deregulation would maintain a minimal level of scheduled air service. The U.S. Department of Transportation's (USDOT) mandate is to provide EAS communities with access to the national air transportation system. The USDOT currently subsidizes airlines to serve approximately 163 rural communities across the country that otherwise would not receive any scheduled air service.

When the program began in 1978, all Wyoming commercial airports, with the exception of Gillette – Campbell County Airport (GCC), were eligible to participate in the program should the need for funding arise³. With the signing of the Federal Aviation Administration (FAA) Modernization and Reform Act of 2012, that changed. The act contained several reforms to the Essential Air Service (EAS) program. First, the law capped the number of communities in the contiguous 48 states and Puerto Rico that are eligible to participate in the program. The law states that only those communities receiving subsidized service through the program, between September 30, 2010, and September 30, 2011, would remain eligible for the program. Therefore, no new Wyoming communities can re-enter the program should they lose their unsubsidized service. Secondly, as of FY2013, the law requires that in order to remain in the program, subsidized communities must maintain an average of 10 passenger enplanements per service day, and not exceed certain subsidy per passenger caps (FAA Modernization and Reform Act of 2012). Currently only two (2) airports in Wyoming are eligible to participate in the Essential Air Service (EAS) program; Cody-Yellowstone Regional Airport (COD), and Laramie Regional Airport (LAR). Worland Municipal (WRL) recently had their eligibility in the program terminated as they could not meet the new eligibility requirements during FY2015.

In February 2016, the U.S. Department of Transportation (USDOT) sent a notice to Worland Municipal Airport (WRL) to "Show Cause" why their eligibility in the EAS program should not be terminated. Service level reductions by Great Lakes Airlines as a result of the pilot shortage caused a significant downturn in passenger enplanements causing the subsidy per passenger to increase over the program maximum limit of \$1000 during FY 2015. The law states any community exceeding this particular threshold is no longer eligible for the

³ Gillette-Campbell County was ineligible as they did not have service at the time of deregulation.

program. As such Worland will lose all air service once their current contract with Great Lakes Airlines expires in September 2016 (DOT-OST-1997-2981).

State funding for air service in Wyoming, through the Air Service Enhancement Program (ASEP), is currently provided to six (6) commercial airports. While this program has helped many of our communities grow and sustain air service over more than a decade, current funding levels cannot keep pace with airport demand. The growing demand for air service support in the state stems from the small community challenges described above. Four (4) Wyoming airports have struggled over the past three (3) years with declining service levels and reliability issues with their air carrier, prompting two (2) of these communities to seek ASEP funding to bring in a new or additional airline.

Due to a projected funding shortfall of \$2.8 million through the 2019/2020 biennium for the ASEP, the Wyoming Aeronautics Commission approved the Air Service Priority Rating Model (ASPRM) in February 2016. This tool will help the Commission to make difficult funding decisions when faced with more airport funding requests than the ASEP budget can fulfill. Without additional funding for the program, the Commission will potentially be making these decisions for FY 2019's grant applications. Denial of funding to some airports will most likely result in a total loss of air service for those communities.

As state funding needs outpace available funding, some airport officials in Wyoming are calling for airport regionalization. The general idea of this concept is when facing a lack of funding for the program the Commission should exclude certain commercial airports from participating in the program, instead funneling available funding to a few "regional" airports in the state to maintain or grow their air service. While the program was designed for all commercial airports in Wyoming, and understands the importance of local air service to all of our communities and the state's economy, the Commission feels the ASPRM is the most appropriate way to prioritize available funding to the best projects when future funding is inadequate.

3.6 FAA Re-Authorization Bill

The Federal Aviation Administration (FAA) re-authorization bill was recently extended through September 2017, and includes a provision to generate more discussion around the

challenges of small community air service and funding. Earlier this year, the Wyoming Congressional Delegation and the Wyoming Department of Transportation (WYDOT) were instrumental in introducing verbiage to the extension that has the potential to help Wyoming air service. The extension includes creating a working group focused on improving air service to small communities, continuing Federal funding sources, and ultimately resulted in restoring passenger screening services in Sheridan.

A working group established by the United States Department of Transportation (USDOT) and the FAA will be tasked with identifying initiatives to improve air service in small communities. Such initiatives would include identifying ways to help support pilot training, potential improvements in the quality of pilot training, and any constraints affecting pilot career pathways that, if addressed, would increase both aviation safety and pilot supply. The group will also consider whether funding for current or new programs is sufficient for ensuring the continuation or improvement of air service in small communities.

The extension also maintains access to commercial air service for small communities by maintaining the Essential Air Service (EAS) and Small Community Air Service Development (SCASD) programs at current funding levels. Additional funding provisions include restoring \$850,000 in Airport Improvement Program (AIP) funding to airports that have seen passenger enplanements drop below 10,000 in recent years, as a result of declining service. In some instances, airports that have lost all air service have also lost passenger screening services provided by the Transportation Security Administration (TSA). The TSA has been reluctant to restore service at many of these airports, such as Sheridan, even after a commitment from an airline to return has been secured and implemented. Although a provision to restore service for these airports was not included in the extension, discussions during the re-authorization process did ultimately compel the TSA to restore screening services in Sheridan beginning this October.

3.7 Air Service and Economic Diversity for the Wyoming

According to the Economic Impact Study completed for Wyoming in 2013, the residents, businesses, and visitors to the state all benefit from adequate commercial air service. Tourism, energy producers, businesses, ranchers, hospitals, colleges, and government agencies, all reported benefitting from their local commercial air service. A statewide

survey, completed during this study, reported that over 90% of responding businesses indicated that they rely on commercial air service on a regular basis to improve the efficiency of their business and employees. Among 13 different factors that could be considered when a business expands or re-locates, proximity to an airport with adequate commercial air service tied for first.

With the decline of the energy sector in Wyoming over the past year, economic diversity becomes more essential to the state's financial health. Business travelers with offices in Wyoming noted commercial air service is very important to successfully recruit and retain talented employees. The Wyoming Business Council (WBC) travels extensively throughout the U.S. and abroad in order to attract high quality jobs to Wyoming. Without commercial air service their efforts would be adversely impacted.

An example of the importance of commercial air service to a local community:

"Cheyenne is a major retail center for southern Wyoming and northern Colorado. Its location at the junction of Interstates 25 and 80 makes it accessible to a large market area. Several major retailers have elected to build stores in Cheyenne. Information from these retailers indicates the ability of their management teams to travel to Cheyenne using airline service was critical in their decision making process to build in Cheyenne. Airline service at the airport was one (1) factor that attracted Kohl's, Dillard's, Lowe's, and Target to Cheyenne. These retailers help to support hundreds of jobs in the local area and airline service was important in bringing these retailers to Cheyenne."

The potential loss of air service at any of our commercial airports could have adverse consequences to both economic development and economic diversity for both the local community and the state.

4. The Air Service Enhancement Program (ASEP)

In 2003, the Wyoming State Legislature found that "an adequate and comprehensive system of air service in Wyoming is vital for economic development within Wyoming", and passed Senate File 120 appropriating money to the Wyoming Air Service Enhancement Program (ASEP). Today, the ASEP remains as one (1) of only two (2) state enabled programs focused on enhancing

commercial air service. Since the ASEP's inception, nine (9) of the 10 Wyoming communities with commercial airports have participated in the program with over \$26 million being granted in Minimum Revenue Guarantees (MRG) and marketing support to date. The ASEP provides a competitive advantage to Wyoming's commercial airports; in the past three (3) years, amid the issues facing small communities in attracting and sustaining air service, the ASEP has been able to help Wyoming airports mitigate some of these threats through funding assistance. Additionally, the ASEP has assisted several other Wyoming airports to grow and expand their air service.

In 2014, SkyWest Airlines, who exclusively provides service on behalf of United Airlines and Delta Airlines to Rock Springs and Gillette, began to retire their 30 seat turboprop aircraft in favor of larger regional 50 seat jets; the efforts of the ASEP and the local communities allowed both of these communities to upgrade and make the transition to all jet service. Six (6) other communities nationwide, in the same position as Rock Springs and Gillette, lost service entirely as they were unable to support the transition to the larger aircraft. Without the benefit of the ASEP, it's likely that SkyWest would have terminated service to at least one (1) of these Wyoming communities.

Sheridan, with the assistance of the ASEP, was able to attract Denver Air Connection (DAC) to provide service to Denver International Airport (DEN). Sheridan had been without any air service for over seven (7) months when the inaugural flight took off in November 2015.

Other notable recent successes include helping to establish additional winter service to Jackson Hole, and launching and growing successful seasonal summer service to Chicago from Cody. These seasonal efforts help provide economic benefit by bringing additional tourist traffic into our state at peak travel times.

4.1 ASEP Return on Investment (ROI)

Providing a ROI to the legislature and the local communities for the Air Service Enhancement Program (ASEP) is an important educational tool in understanding the value of the program to the state. Currently, the Wyoming Aeronautics Commission is conducting the Wyoming State Aviation System Plan (WYSASP) update, which will include a model for determining the ROI of state funding for the ASEP. The consulting firm working on this update is conducting a granular analysis of the value of Wyoming's ASEP, and

quantifying the economic impact of each flight funded through the program. The analysis

will include:

An estimate of the total economic impact for each ASEP flight using the data collected;

• An ROI analysis using the total state investment for each ASEP flight, and the total

economic impact for each ASEP funded flight;

• A comparative analysis that examines the ROI of an ASEP funded flight versus a

commercial flight without funding support; and

A program-wide ROI analysis that evaluates the total economic benefit to the state of

Wyoming for ASEP investments.

The WYSASP will also provide a detailed analysis of what a community stands to lose in

terms economic impact should it lose all commercial air service. Specifically the consultant

will analyze the effects of the complete air service loss in Sheridan for seven (7) months last

year. The initial results of this study will be shared during upcoming meetings for feedback

from the airports on the methodology and findings, and the final results will be delivered at

the end of 2016.

4.2 Fiscal Year 2016 Projects

During FY2016, \$4.3 million was granted to five (5) communities to enter into Minimum

Revenue Guarantees (MRG's) with an airline for commercial air service. In two (2) of those

communities, state funding was necessary in order to retain any level of air service.

4.2-1 Cody - Yellowstone Regional Airport

The current project in Cody will be completed in August 2016, and this report will be

updated with the appropriate information once the information becomes available in

late September.

4.2-2 Gillette - Campbell County Airport (GCC)

Service: Once daily, roundtrip flight to Salt Lake City International Airport

Service Provider: Delta Connection, Operated by SkyWest Airlines

Total Minimum Revenue Guarantee: \$1,600,000*

ASEP Granted Amount: \$1,104,000*

Contract period: July 1, 2015 to June, 30 2017

Aircraft: 50 seat Canadair Regional Jet (CRJ-1/200)

*2-Year agreement

Synopsis: The original agreement with SkyWest was to continue both the 13 weekly roundtrips to Denver International Airport (DEN) and seven (7) weekly roundtrips to Salt Lake City International Airport (SLC) for one (1) year starting July 1, 2015. Given the success and profitability of the Denver market, the Denver component of the agreement was no longer in need of financial support, and subsequently removed during the January 2016 Wyoming Aeronautics Commission meeting. agreement was then also amended to extend the once daily SLC flight for two (2) years, retroactive to the start date of the original agreement without any additional state funding. This enabled the community to lock in the same block hour, or flight time cost for two (2) years without any additional financial encumbrance. Through March, 2016, this project has provided an additional 6,000 passenger enplanements to GCC. Passenger retention, defined as Wyoming passengers who use their local airports rather than those outside of the state for their traveling needs, has improved 5% over the same period last year. This was the first entire fiscal year with all-jet service at the airport which is likely to be contributing to improved retention rates. Reliability and on-time performance of the service remain near industry standard rates of 99% and 85% respectively.

4.2-3 Jackson Hole Airport (JAC)

Service: Peak winter service to United Airlines hubs at Newark Liberty International Airport (EWR), and Washington Dulles International Airport (IAD).

Service Provider: United Airlines

Total Minimum Revenue Guarantee: \$600,000

ASEP Granted Amount: \$229,572

Contract Period: December 17th, 2015 through April 3, 2016.

Aircraft: Boeing 737-700

Synopsis: This project was in support of the Jackson Hole Air Improvement Resources (JHAIR) and United Airlines Minimum Revenue Guarantee (MRG), which

nearly doubled the capacity to EWR after the successful 2014/2015 winter season. This project maintained service levels to IAD for the second year after inauguration. The service is credited with adding an additional 4,078 passenger enplanements to a record breaking winter season for the airport. Passenger retention has largely remained flat year over year, but remained the highest in the state from December 2015 through March 2016 at 71%. Air fares, while the highest in the state, remain competitive with other winter destination resort airports. The EWR component of the MRG required no cash expenditure from the ASEP, while the IAD portion necessitated a state contribution of \$111,062.70. This will result in a reversion to

4.2-4 Rock Springs – Sweetwater County Airport (RKS)

Service: 13 weekly roundtrips to Denver International Airport (DEN)

Service Provider: United Express, operated by SkyWest Airlines

Total Minimum Revenue Guarantee: \$1,916,735

ASEP Granted Amount: \$1,323,792

the state of \$118,509.28.

Contract period: July 1, 2015 through June, 30 2016

Aircraft: 50 seat Canadair Regional Jet (CRJ-1/200)

Synopsis: This agreement represents the only scheduled airline service currently available at RKS, and is a continuation of the existing service between RKS and DEN. Through March 2016, this project has provided an additional 13,000 in passenger enplanements to RKS. Passenger retention has improved 1% over the same contract period last year, as this also was the first entire fiscal year with all-jet service at the airport, which is likely to be contributing to improved retention rates. Reliability and on-time performance of the service remain near industry standard rates of 98% and 82% respectively.

4.4-5 Sheridan County Airport (SHR)

Service: 13 weekly roundtrips to Denver International Airport (DEN)

Service Provider: Denver Air Connection, operated by Key Lime Air

Total Minimum Revenue Guarantee: \$3,877,036*

ASEP Granted Amount: \$2,327,212*

Contract period: November 19, 2015 through November, 18 2016; amended to

June 30, 2017

Aircraft: 30 seat, Fairchild-Dornier 328JET

*For 19 month period 11/19/15 to 06/30/17

Synopsis: Service to DIA on Denver Air Connection was inaugurated on November 19, 2015, more than seven (7) months after service terminated with Great Lakes Airlines. Prior to the cessation of service, SHR was granted a Federal Small Community Air Service Development (SCASD) grant to help attract another commercial service provider. Collaborative negotiations were held by the community, the state, and the airline in determining a feasible cost model. Through June 2016, the service has enplaned approximately 5,400 passengers, and has improved passenger retention levels estimated to near 2013 levels, before significant downsizing and operational issues by the previous carrier at SHR had taken effect. All pricing controls are overseen by the community, with input from the aeronautics staff, through an independent contractor. Earlier in the year, the project was amended to include an intermediate stop at Riverton Regional Airport (RIW) starting July 1, 2016, and extended the agreement through June 30, 2017.

5. Conclusion

Regulatory changes and funding shortfalls have shifted the commercial aviation landscape, and put hundreds of communities across the country at risk of losing their commercial access to the national air transportation system. Stemming from new co-pilot hiring rules, new crew rest requirements, and pilot retirements, the need for qualified pilots in the U.S. continues at an accelerated rate. The significant financial and time investments required by a prospective student in order to become a commercial airline pilot are deterring those students from pursuing a career in aviation. Meanwhile, the demand for pilots at regional commercial airlines has only increased since the regulatory changes were implemented. A concerted effort to find solutions, before this issue reaches a critical mass, is quickly approaching.

At a time in Wyoming where the economy is threatened by the downturn of the energy sector, economic diversification is even more important. Adequate, dependable air service in our state is an integral tool in maintaining and growing the State's economy. The Air Service

Enhancement Program (ASEP) is a critical tool for maintaining and growing air service in the state; without adequate funding to support the program air service in many of our commercial airports will reduced or lost all together.

6. Federal and National Engagement

Industry experts have several suggestions that could provide relief from the pilot shortage, while still maintaining passenger safety, including:

- More training credit towards the 1,500 hour requirement for highly structured college training programs;
- More student pilot loan guarantees or grants; and
- Increase the mandated pilot retirement age from 65 to 67 for temporary relief, as is the case in Europe.

The Wyoming legislature can directly support air service in the state, and mitigate the effects of the pilot shortage in several ways, including:

- Support air service funding: Support Wyoming communities in maintaining adequate air service, and taking advantage of growth opportunities by appropriately funding the ASEP.
- Seek out congressional support to loosen EAS eligibility requirements and increase the SCASD budget.
- Collaborate with and educate other policy makers: Work with federal delegations and Washington D.C. contacts to advocate for changes that directly improve rural air service and airport funding. Continue efforts that have already influenced current FAA Reauthorization extension, addressing challenges of small community air service, the pilot shortage, and Transportation Security Administration (TSA) screening requirements in small communities.
- Develop a multi-state coalition specifically tasked with finding solutions for rural air service challenges: Work with the National Conference of State Legislatures (NCSL) to develop a position on the importance of small community air service, and finding solutions to the pilot shortage.

- Pass a Legislative Resolution: Develop and implement a legislative resolution for the
 Wyoming legislature in support of rural air service and airport funding.
- Educate constituents: Highlight the direct economic benefits of air service to the local communities to create more community involvement and support for air service.

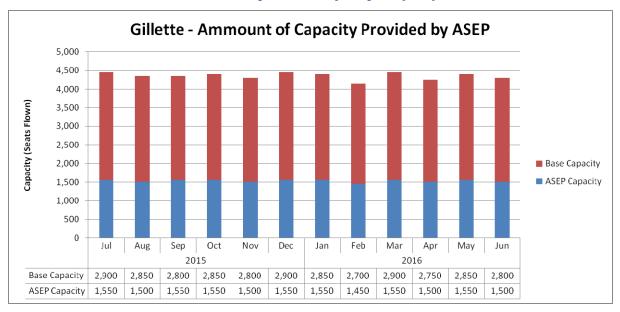
7. Appendix

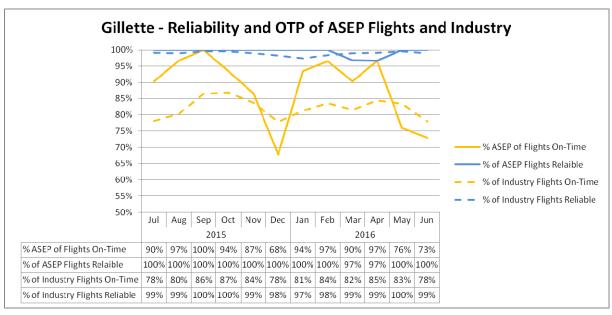
7.1 Fiscal Year 2016 ASEP Projects

7.1-1 Cody-Yellowstone Regional Airport (COD)

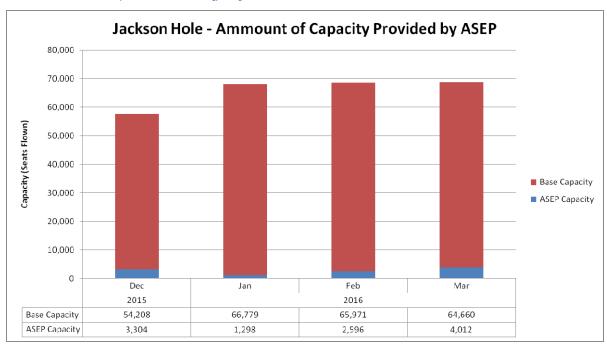
Data for this project will be generated when available after the project closes in September 2016.

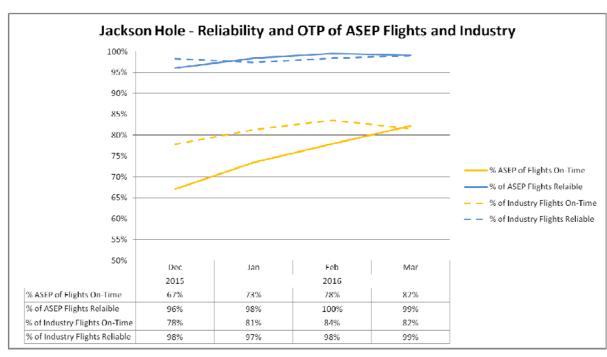
7.1-2 Gillette-Gillette Campbell County Airport (GCC)



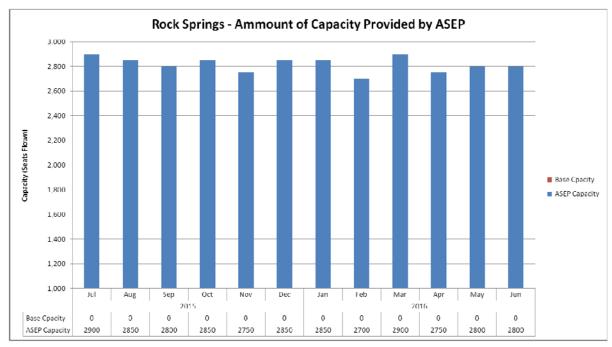


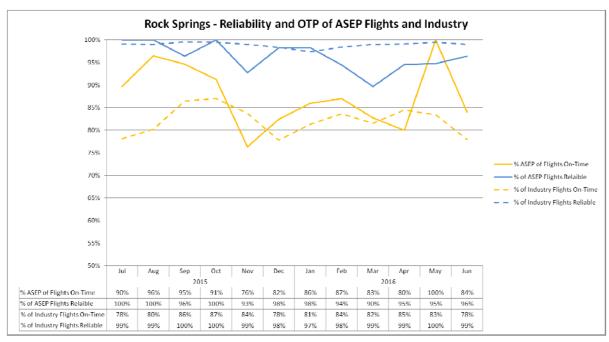
7.1-3 Jackson Hole (JAC)



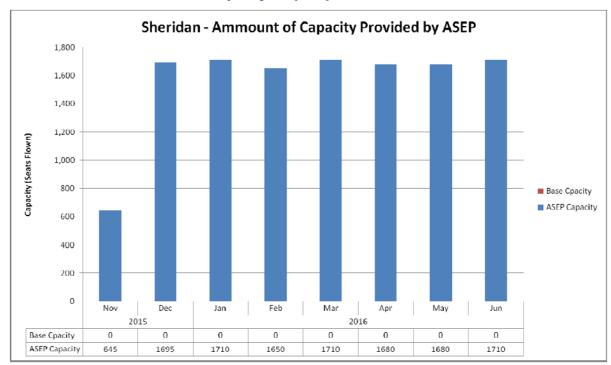


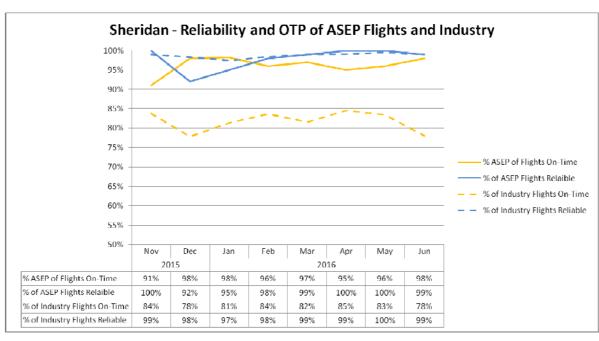
7.1-4 Rock Springs - Sweetwater County Airport (RKS)





7.1-5 Sheridan County Airport (SHR)





7.2 2015 Passenger Enplanements / Deplanements

Airport	2012	2013	2014	2015
COD	28,531	31,009	32,301	33,099
CPR	87,792	98,628	103,467	102,782
CYS	13,952	10,777	4,432	2,232
GCC	32,222	28,448	27,235	31,426
JAC	272,167	290,615	312,021	309,337
LAR	7,065	12,402	12,241	13,707
RIW	12,988	13,439	7,708	3,591
RKS	27,844	23,579	19,636	17,179
SHR	12,905	14,056	8,612	1,097
WRL	2,784	2,809	1,123	724
WY Total	498,250	525,762	528,776	515,174

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9. Acronyms, Abbreviations, and Definitions

AIRR: *The Aviation Innovation, Reform, and Reauthorization (AIRR) Act*. This is a proposed bill that could potentially reform pilot training.

ALPA: Airline Pilots Association. The largest pilot union in the world, ALPA represents more than 52,000 pilots.

ASEP: *Air Service Enhancement Program*. This program was established by the Wyoming Legislature in 2004 to provide assistance to Wyoming's commercial airports for air service.

ATP: Airline Transport Pilot License. This license is required of a pilot in order to be hired at most U.S. airlines.

Block Hour: This is the number of hours an aircraft operates from the time it leaves the gate to the time it arrives at the destination.

Capacity: Number of seats one-way or bi-directional that are provided to an airport by an airline; this statistic is used to measure changes in service levels.

CPA: Capacity Purchase Agreement. This is a structured agreement typically between mainline and regional airline carriers, whereby a regional carrier will operate and provide a level of capacity on behalf of a mainline carrier responsible for marketing and pricing.

DAC: *Denver Air Connection*. This is the marketing name of passenger airline service in Sheridan and Riverton operated by Key Lime Air.

EAS: *Essential Air Service*. A U.S. government program enacted to guarantee that small communities in the United States, which, prior to deregulation, were served by certificated airlines, maintained commercial service.

FAA: Federal Aviation Administration. They are the national aviation authority of the United States, with powers to regulate all aspects of American civil aviation including pilot licensing and requirements.

NTSB: *National Transportation Research Board*. An independent Federal agency charged by Congress with investigating every civil aviation accident the United States and significant accidents in other modes of transportation – railroad, highway, marine, and pipeline.

OTP: *On-time performance*. This statistic is the percentage of scheduled airline flights arriving each month within 15 minutes of the scheduled arrival time.

Passenger Retention: This statistic measures the percentage of passengers that use their local airport each month.

Reliability: *Flight Reliability*. This is the percentage of scheduled flights operated and completed each month; also called "completion factor."

SCASD: *Small Community Air Service Development Program*. This is a grant program designed to help small communities address air service and airfare issues; managed by the Associate Director, Small Community Air Service Development, under the Office of Aviation Analysis at the USDOT.

USDOT: *U.S. Department of Transportation*. They are a federal Cabinet department of the U.S. government concerned with transportation.

WYSASP: *Wyoming State Aviation System Plan*. This project is currently underway at the Aeronautics Division to determine Wyoming's aviation needs over the next two decades.