# Pullman – Moscow Regional Airport

# **Terminal Needs Summary**

## Passenger Terminal Design Phase I



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EXPERIENCE EXCEPTIONAL

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## **Need for Passenger Terminal Improvements**

This report has been prepared to support the development of a new passenger terminal at the Pullman-Moscow Regional Airport (the Airport, or PMRA). PMRA has experienced unprecedented enplanement growth over the last decade. In 2009, PMRA enplaned 30,128 passengers which increased to 70,061 by 2019, an increase of 133 percent (**Table 1**). As a result of the enplanement growth, a new passenger terminal has long been needed. However, the Runway Realignment Program that has brought the Airport into compliance with FAA design standards for C-III aircraft while significantly enhancing the all-weather capability of the Airport took priority. Now that the Runway Realignment Program is nearing completion, the Airport is focusing on providing adequate passenger terminal facilities to first meet the needs of existing passenger demand while also considering near-term and future demand requirements.

Table 1 Enplanement History		
Year	Enplanements	
2009	30,128	
2010	34,452	
2011	37,305	
2012	37,635	
2013	38,689	
2014	41,335	
2015	46,768	
2016	58,992	
2017	59,880	
2018	61,650	
2019	70,560	
Sources: FAA TAF, Airport Records		

### **Existing Passenger Terminal Constraints**

The existing passenger terminal building at PMRA was originally built in 1989 when the Airport was served by Fairchild Metroliner Aircraft that was replaced by the Bombardier Q200, which ultimately gave way to the Q400 aircraft. The passenger terminal is 8,785 square feet and is inadequate for the existing, near-term or long term forecasted passenger demand.

The existing terminal facility does not provide adequate public space. The secure hold room is 1,060 square feet and accommodates seating for 63 passengers. The Bombardier Q400 flown by Alaska Airlines seats 76. The secure passenger seating space also conflicts with passenger queuing at ticket counters and passenger screening. Similar constraints exist on the non-secure public area which consists of 6,693 square feet that is encroached by queuing for airline ticketing and rental car counters as well as entrance and exit of restrooms. **Table 2** highlights the deficiencies of the existing terminal facilities compared to the minimum requirements to accommodate 2019 enplanement levels.

Table 2: 2019 Enplanements – Minimum Terminal Facility Requirements				
Airside	Existing Terminal	Minimum Requirements		
Security Screening Checkpoint	790	2,800		
Concourse Public Space	1060	13,873		
Concourse Leased Space	0	342		
Gates: Passenger Boarding Bridges	0	3		
Gates: Ground Boarding	1	3		
Baggage Screening and Handling	168	4,000		
Landside				
Terminal (Public)	6,693	10,245		
Leased & Misc. Space	274	5,464		
Total				
	8,785	41,705		

Terminal facilities to accommodate near-term and future enplanement growth range from 52,000 to 68,000 square feet. The proposed new terminal facilities will be constructed in an undeveloped area of the Airport which was made available by the Runway Realignment Program.

In addition to the need for a larger terminal building, both landside and airside supporting facilities are also undersized. Existing and near-term demand require approximately 700 vehicle parking spaces compared to the 350 parking spaces that are currently available. The existing terminal apron is undersized and will not accommodate multiple scheduled aircraft and/or charter aircraft simultaneously.

This summary provides a brief overview of the terminal constraints that must be addressed to adequately support existing enplanement levels. **Table 3** compares terminal square footage of airports within the Northwest Mountain Region and Nationwide with similar enplanements. This comparison further highlights the deficiencies in PMRA's terminal facilities.

Table 3				
PMRA Terminal Needs Compared to Existing Terminal Facilities				
Airport	2019	Terminal Square		
Aliport	Enplanements	Footage		
Pullman-Moscow Regional	70,560	8,785		
Northwest Mountain Region Airports				
Pocatello Regional	46,303	38,790		
Walla Walla Regional	49,527	30,992		
Lewiston-Nez Perce County	57,957	29,649		
Pangborn Memorial	64,619	24,746		
Yakima Air terminal/McAllister Field	69,397	71,695		
Friedman Memorial	89,317	93,280		
Yampa Valley	100,079	71,695		
Helena Regional	115,438	134,000		
National Airports				
Lake Charles Regional	62,057	62,000		
San Angelo Regional / Mathis Field	66,390	30,496		
Ralph Wien Memorial	67,876	33,000		
Salisbury-Ocean Wicomico Regional	70,111	26,000		
Central Nebraska Regional	70,509	34,000		
Manhattan Regional Airport	81,307	42,000		
Abilene Regional	81,813	40,060		
Easterwood Field	83,832	27,600		
Williston Basin International	89,040	110,000		
Sitka Rocky Gutierrez	90,839	34,518		

# **Pre – Secure Public Seating and Ticketing**







Post – Secure Public Seating, TSA, and Boarding Gates













### Post - Secure Public Seating, TSA, and Boarding Gates









## **Limitations to Enplanement Growth**

#### **COVID-19 and PMRA Resiliency**

This forecast was developed during a time of uncertainty in the economy and aviation industry. The aviation industry in the United States has been greatly affected by the pandemic with both American and foreign airlines cutting back on domestic and international flights because of the sudden drop in demand for travel.

The aviation industry is expected to eventually recover from the effects of the COVID-19 pandemic and return to long-term growth as demand for travel returns. PMRA's market is resilient and is likely to return to pre-COVID-19 enplanement levels more quickly than the region and national averages. The COVID-19 pandemic and its impacts on aviation are unprecedented, but the September 11<sup>th</sup> attacks in 2001 and the Great Recession of 2008 are two examples of significant events impacting aviation and PMRA's resiliency and ability to recover. The historical rates of recovery for both events provide an insight into how quickly PMRA can expect to recover from the COVID-19 pandemic.

#### **September 11, 2001**

The effects of the September 11 attacks in 2001 resulted in a sharp decrease in air travel demand. This is not unlike the effects of COVID-19 and would provide insight into recovery scenarios for PMRA. Figure 1 shows monthly enplanement, seat, and load factor data from January 2001 to December 2003.

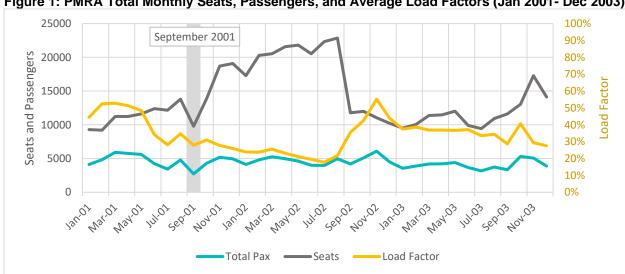


Figure 1: PMRA Total Monthly Seats, Passengers, and Average Load Factors (Jan 2001- Dec 2003)

Note that this chart shows total passengers, not just enplanements. Load factors here are calculated using airport records containing passenger counts and landing records which were doubled to estimate total scheduled flights. Source: PMRA Records

PMRA experienced a decrease of over 2,000 passengers, around 43 percent, from August to September 2001. This is a 48 percent decrease from September 2000 and a 52 percent decrease from September 1999. The decrease can be attributed to the immediate impacts of September 11th with flight being canceled and schedules changing along with the psychological impact the event had on travelers.

Immediately following a decrease in September, however, the number of passengers at PMRA increased. Note that the number of seats from November 2001 to August 2002 is near double of pre-September 11 levels due to the transition from the Q200 to the Q400 aircraft, which explains the lower load factors even as passenger numbers never fell below the September 2001 low. Thus, while September 11 had resulted in a decrease in enplanements at PMRA, it does not seem to have had a direct near-term or long-term impact.

#### 2008 Great Recession

The 2008 Great Recession did not impact PMRA as severely as the rest of the FAA Northwest Mountain Region and the United States. Enplanements at PMRA increased 0.9 percent between 2008 to 2009 while national enplanements decreased 7.3 percent during the same period. Figure 2 shows the indexed enplanement records for PMRA, the FAA Northwest Mountain Region (ANW), and the United States. ANW is comprised of 7 states: Colorado, Idaho, Montana, Oregon, Utah, Washington, and Wyoming.

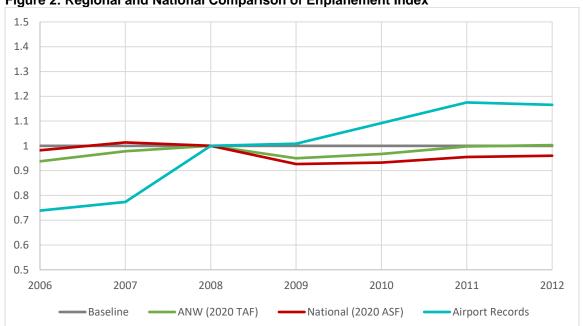


Figure 2: Regional and National Comparison of Enplanement Index

ANW: FAA Northwest Mountain Region (Colorado, Idaho, Montana, Oregon, Utah, Washington, Wyoming) Source: 2020 FAA Aerospace Forecast, 2020 FAA TAF, PMRA Records

The total number of passengers decreased from 48,407 in 2007 to 44,775 in 2008. Then 2009 saw total passenger numbers grow to 62,843. During the same period both regional and national enplanements declined. Figure 2 data also demonstrates PMRA recovered more quickly than the region and national trends by entering a 10-year period of passenger growth beginning in 2009 at an average 8.2 percent per year.

PMRA has shown precedence in recovering from significant events impacting demand. The communities and regional economies are resilient and have shown that with similar industry events they recover more quickly. Enplanements recovering quickly from 2008 to 2009 followed by sustained growth shows the effects of the inelastic demand for air travel to and from PMRA as well as the potential for PMRA to see a relatively quick recovery. This demand inelasticity comes from the presence of the two universities such that if in person learning is occurring, air travel demand at PMRA will be relatively consistent. Thus, while COVID-19 has had a significant impact on aviation, PMRA has the potential to recover from its effects quickly and continue growing.