

In total, the program is estimated to cost approximately \$100 million over the 20-year planning period. Approximately \$89 million is eligible for funding under the FAA Airport Improvement Program. The remaining \$11 million would be the responsibility of the Port of Moses Lake. The local portion may include funding from state grants or from private entities undertaking hangar/taxilane construction.

The primary issues and objectives upon which the Airport Master Plan is based will remain valid for many years. However, flexibility is built into the plan to allow Airport management to respond to changing needs or compliance requirements. Some projects, such as hangar construction, should only be undertaken as demand indicates. Each year, the Airport is required to submit an updated list of priority projects to the FAA and the WSDOT. The Airport Master Plan provides documentation and support for those projects identified in the capital improvement program.

	BASE YEAR (2013) ¹	SHORT TERM	INTERMEDIATE TERM	LONG TERM
ANNUAL OPERATIONS				
Air Carrier				
Itinerant	3,238	3,800	4,600	6,700
Local	4,856	5,800	6,900	10,000
General Aviation				
Itinerant	16,926	18,600	20,400	23,800
Local	27,915	30,700	33,800	40,500
Air Taxi				
Itinerant	2,459	2,700	2,900	3,500
Military				
Itinerant	9,930	10,400	11,800	14,300
Local	12,929	15,600	17,500	21,400
Total Itinerant Operations	32,553	35,500	39,700	48,300
Total Local Operations	45,700	52,100	58,200	71,900
TOTAL OPERATIONS	78,253	87,600	97,900	120,200
BASED AIRCRAFT	81	88	94	107
POTENTIAL ENPLANEMENTS²	0	11,790	14,564	21,142

¹ September 2012 through August 2013

² Passenger boardings if service returns

For further information, please contact:

The Port of Moses Lake
Grant County International Airport
509.762.5363
www.portofmoseslake.com



The Port of Moses Lake, Washington, would like to thank the individuals and organizations who participated in the development of the Grant County International Airport Master Plan.

AVIATION TECHNICAL ADVISORY COMMITTEE:

Jeff Akridge – General Manager
Columbia Pacific Aviation (FBO)

Gregory Crane - Instructor
Big Bend Community College

Gil Alvarado – Planning Director
City of Moses Lake

David Keimig – COO
Aviation Technical Services

Joe Carrigan – Tower Manager
Federal Aviation Administration

Nancy Eklund – Land Use Planner
The Boeing Company

Larry Godden – General Manager
Million Air (FBO)

Bill "Jesse" Hatfield – SSG Site Services
The Boeing Company

Damian Hooper – Director
Grant County Planning

Lee Human – President
AeroTEC

Eric Johnson – Program Manager
WSDOT

Jeffrey Johnson – Representative
Fairchild AFB

Delone Krueger – Representative
Aircraft Owners and Pilots Association (AOPA)

Stroud Kunkle – Commissioner
Port of Moses Lake

Lew Mason – Representative
Local GA Community

Robert Meade – Manager
U.S. Forest Service

Keith Otsuka – Chief Pilot
The Boeing Company

Deepa Parashar – Planner
Federal Aviation Administration

John Ryan – Representative
Joint Base Lewis-McChord

Jonathan Smith – Director
Grant County Economic Development Council

Corley McFarland – Consulting Engineer
Precision Approach Engineering

GRANT COUNTY INTERNATIONAL AIRPORT

Moses Lake, Washington

MASTER PLAN EXECUTIVE SUMMARY





On November 24, 1942, the federal government opened Moses Lake Army Air Base for P-38 and, later, B-17 pilot and crew training. In 1950, the facility was renamed Larson Air Force Base in tribute to the late aviator, Major Donald A. Larson from Yakima, who was killed in a mission over Germany during WWII. Larson AFB became a test flight center for the Boeing Company in the 1950s, an activity that continues to this day. In 1960, the base became a Strategic Air Command (SAC) facility under the 4170th Strategic Wing with 15 based B-52 bombers on combat readiness alert and also a Titan missile base.

It was announced that the base would close in 1966. In 1965, the community voted to create the Port of Moses Lake, which was granted the Airport property from the General Services Administration. At the same time, several hangars were also granted to Big Bend Community College.

The Airport supported commercial passenger service from the mid-1970s through 2010. The mid-to-late 1990s represented the peak commercial activity levels when more than 20,000 passengers annually used the Airport. In 1998, a state-of-the-art terminal building was constructed to support increasing passenger activity.

The Airport has evolved into an economic engine for the entire region. The long runways and favorable weather conditions have retained and attracted several aviation businesses catering to operators of large transport aircraft. The Airport also continues to experience extensive operations from military bases in the state, including C-17 Globemasters from Joint Base Lewis-McChord, KC-135 Stratotankers from Fairchild Air Force Base, and from Whidbey Island Naval Air Station, MH-60S Seahawk helicopters, EA-18G Growlers, EA-6N Prowlers, P-3c Orions, EP-3E Aries IIs, and C-9 Skytrains.

STUDY PROCESS AND RECOMMENDATIONS

The Federal Aviation Administration (FAA) desires airports to update their master plans every five to seven years or as necessary to account for changes in the local and national aviation economies. The last full Master Plan for the Airport was completed in 2005. Since then, the Airport experienced several significant events: Japan Airlines ended their pilot training programs, commercial service was discontinued, and the 2008-2009 national recession negatively impacted aviation demand across the country. In recent years, the Airport has recovered from these losses by attracting several aviation and non-aviation businesses. As a result, the Airport is poised for growth as evidenced by increases in operations during the past several years.

This study provided an opportunity for the Airport to develop a long range (20-year) vision for development based on forecast growth. This Master Plan for the Airport was begun in mid-2013 and finalized in mid-2014. The overall goal of the plan is to provide systematic guidelines for airport maintenance, development, and operation.

The Master Plan study was developed in three phases with an aviation technical advisory committee (ATAC) made up of community and Airport stakeholders reviewing draft working papers during the process. The FAA and Washington Department of Transportation – Aviation (WSDOT) were also active participants in the process. All draft materials were made available to the public via a dedicated project website and a public information workshop was held to involve the public and to present the major findings of the plan. With input from each of these constituencies, a final plan has been put forth, along with a 20-year capital improvement program.

DEVELOPMENT STAGING

PROJECT DESCRIPTION	PROJECT COST	FAA GRANT ELIGIBLE	TOTAL LOCAL
SHORT TERM PROGRAM (0-5 YEARS)			
2014			
1 Rehabilitate Taxiway C (Asphalt slurry seal)	\$495,000	\$445,500	\$49,500
2 Pavement Preservation Maintenance (NP)	\$50,000	\$0	\$50,000
2014 Subtotal	\$545,000	\$445,500	\$99,500
2015			
3 Rehabilitate ARFF Access Road	\$320,000	\$288,000	\$32,000
4 Pavement Preservation Maintenance (NP)	\$50,000	\$0	\$50,000
2015 Subtotal	\$370,000	\$288,000	\$82,000
2016			
5 Preliminary Design/Environmental Runway 14L-32R Hump	\$167,000	\$150,300	\$16,700
6 Pavement Preservation Maintenance (NP)	\$50,000	\$0	\$50,000
2016 Subtotal	\$217,000	\$150,300	\$66,700
2017			
7 Runway 14L-32R Hump Removal for Line-of-Sight, Full Design	\$600,000	\$540,000	\$60,000
8 Snow Plows (2) (NP)	\$840,000	\$756,000	\$84,000
9 Pavement Preservation Maintenance (NP)	\$50,000	\$0	\$50,000
2017 Subtotal	\$1,490,000	\$1,296,000	\$194,000
2018			
10 Runway 14L-32R Remove Hump for Line-of-Sight, Construction (Phase 1)	\$8,750,000	\$7,875,000	\$875,000
11 Pavement Preservation Maintenance (NP)	\$50,000	\$0	\$50,000
2018 Subtotal	\$8,800,000	\$7,875,000	\$925,000
2019			
12 Remove Runway 14L-32R Hump for Line-of-Sight, Construction (Phase 2)	\$8,750,000	\$7,875,000	\$875,000
13 Taxiway G Reconstruction (Phase 1 - Design)	\$350,000	\$315,000	\$35,000
14 Pavement Preservation Maintenance (NP)	\$50,000	\$0	\$50,000
2019 Subtotal	\$9,150,000	\$8,190,000	\$960,000
TOTAL SHORT TERM PROGRAM	\$20,572,000	\$18,244,800	\$2,327,200
INTERMEDIATE TERM PROGRAM (6-10 YEARS)			
1 Replace/Upgrade Rwy 4-22 Edge Lighting to LED	\$520,000	\$468,000	\$52,000
2 Taxiway G Reconstruction (Phase 1 - Construction)	\$4,900,000	\$4,410,000	\$490,000
3 Convert Runway 14R-32L to Taxiway	\$170,000	\$153,000	\$17,000
4 Relocate Runway 18-36	\$3,000,000	\$2,700,000	\$300,000
5 General Aviation Hangar Taxilanes, Design/Construction	\$410,000	\$369,000	\$41,000
6 Terminal Apron Rehabilitation (#2)	\$2,800,000	\$2,520,000	\$280,000
7 Terminal Apron Rehabilitation (#3)	\$6,100,000	\$5,490,000	\$610,000
8 Runway 32R End Pavement Rehabilitation	\$440,000	\$396,000	\$44,000
9 Install Wildlife Deterrent Fabric	\$310,000	\$279,000	\$31,000
10 Runway 14L-32R Edge Lighting and Shoulder Replacement	\$5,900,000	\$5,310,000	\$590,000
11 Snow Plows (2) (NP)	\$840,000	\$756,000	\$84,000
12 Acquire Property (3 Parcels)	\$0	\$0	\$0
13 Pavement Preservation Maintenance (NP)	\$250,000	\$0	\$250,000
TOTAL INTERMEDIATE TERM PROGRAM	\$25,640,000	\$22,851,000	\$2,789,000

NP - Not Pictured



CAPITAL IMPROVEMENT PROGRAM

PROJECT DESCRIPTION	PROJECT COST	FAA GRANT ELIGIBLE	TOTAL LOCAL
LONG TERM PROGRAM (11-20 YEARS)			
1 Master Plan Update - (NP)	\$400,000	\$360,000	\$40,000
2 Taxilane to South Terminal Area	\$1,900,000	\$1,710,000	\$190,000
3 South Terminal Area Aprons	\$16,200,000	\$14,580,000	\$1,620,000
4 Taxiway G Reconstruction (Phase 2)	\$4,400,000	\$3,960,000	\$440,000
5 Taxiway G Reconstruction (Phase 3)	\$7,300,000	\$6,570,000	\$730,000
6 Taxiway G Reconstruction (Phase 4)	\$6,900,000	\$6,210,000	\$690,000
7 Terminal Apron Rehabilitation (#5)	\$1,800,000	\$1,620,000	\$180,000
8 Fuel Apron Entrance Connectors to Taxiway A	\$750,000	\$675,000	\$75,000
9 Terminal Apron Rehabilitation (#6)	\$3,200,000	\$2,880,000	\$320,000
10 Terminal Apron Rehabilitation (#7)	\$100,000	\$90,000	\$10,000
11 East Apron Taxilane Connectors	\$360,000	\$324,000	\$36,000
12 Terminal Apron Reconstruction	\$8,800,000	\$7,920,000	\$880,000
13 Terminal Apron Rehabilitation	\$420,000	\$378,000	\$42,000
14 Terminal Apron Rehabilitation	\$740,000	\$666,000	\$74,000
15 Pavement Preservation Maintenance (NP)	\$500,000	\$0	\$500,000
TOTAL LONG TERM PROGRAM	\$53,770,000	\$47,943,000	\$5,827,000
TOTAL PROGRAM COSTS	\$99,982,000	\$89,038,800	\$10,943,200

Note: Totals may not equal due to rounding NP - Not Pictured

Overall, several specific development strategies emerged from the Master Planning process:

- 1) Remove the line-of-sight issue on primary Runway 14L-32R. There is a hump in the runway which does not meet FAA design standard; as a result, the runway is closed when the air traffic control tower is closed (10:00pm-6:00am).
- 2) Relocate Runway 18-36. This is the busiest runway at the Airport supporting most general aviation and training activity. This runway does not meet FAA design standards in that it is a dual use pavement also serving as a taxiway and it is positioned too close to the primary runway, necessitating a special operating procedure to ensure safe operations.
- 3) Identify appropriate hangar development areas. The south terminal area has been identified for large conventional hangar development. The west apron area is identified for general aviation hangars. A single large parcel, west of Taxiway G, has been identified for large scale aviation-related uses in the future.
- 4) Develop an on-airport land use plan to preserve appropriate land area for aviation uses and to identify those areas that can be considered for non-aviation economic development and revenue support purposes.
- 5) Develop a prioritized pavement preservation plan. Because of the expense to maintain the expansive runways, taxiways, and aprons at the Airport, a pavement prioritization plan has been included.