

## Table of Contents

CHAPTER 1 Existing Conditions	1-1
1.1 Background	1-1
1.1.1 Airport History	1-2
1.1.2 Airport Location, Setting, and Meteorological Conditions	1-2
1.1.3 Airport Role and Service Area	1-4
1.1.4 Prior, Ongoing, and Interrelated Studies, Projects, and Initiatives	1-8
1.2 Airside Facilities	1-9
1.2.1 Airport Property	1-9
1.2.2 Runway System	1-9
1.2.3 Taxiway Systems	1-12
1.2.4 Aircraft Parking Aprons	1-13
1.2.5 Pavement Condition Index (PCI)	1-14
1.2.6 Visual Aids	1-16
1.2.7 Navigational Aids	1-18
1.2.8 Aeronautical Environment	1-18
1.3 Commercial Service Passenger Terminal Facilities	1-22
1.3.1 Aircraft Gates	1-25
1.3.2 Airline Check-in Positions and Self Service Kiosks	1-25
1.3.3 Checked Baggage Security Screening	1-25
1.3.4 Passenger Security Screening	1-25
1.3.5 Passenger Departure Areas	1-25
1.3.6 Baggage Claim	1-25
1.3.7 Rental Car Facilities	1-26
1.3.8 Terminal Curbs Front	1-26
1.4 Landside Facilities	1-27
1.4.1 Surface Access	1-27
1.4.2 Vehicle Parking	1-30
1.4.3 Airport Landside Facilities	1-32
1.5 Support Facilities	1-34
1.5.1 Fixed Base Operators	1-36
1.5.2 Other Tenants	1-36
1.5.3 Air Cargo Facilities	1-37
1.5.4 Aircraft Storage Hangars	1-37
1.5.5 Aircraft Rescue and Fire Fighting	1-37
1.5.6 Maintenance Building	1-38
1.5.7 Fuel Storage	1-38
1.5.8 Deicing	1-39
1.5.9 Utilities	1-39
1.6 Airport Environs	1-41
1.6.1 Ownership and Management	1-41
1.6.2 Jurisdictional Boundaries	1-41
1.6.3 Community Economic and Demographic Overview	1-41
1.6.4 Land Use Compatibility	1-42
1.7 Environmental Conditions	1-45
1.7.1 Air Quality	1-45
1.7.2 Coastal Resources	1-45
1.7.3 Compatible Land Use	1-45

1.7.4	Section 4(f) Impacts	1-46
1.7.5	Farmlands	1-46
1.7.6	Fish, Wildlife, and Plants	1-48
1.7.7	Floodplains	1-49
1.7.8	Hazardous Materials	1-49
1.7.9	Historical, Architectural, Archaeological, and Cultural Resources	1-49
1.7.10	Light Emissions and Visual Impacts	1-50
1.7.11	Natural Resources, Energy Supply, and Sustainable Design	1-50
1.7.12	Noise	1-51
1.7.13	Socio-Economic Impacts	1-51
1.7.14	Water Quality	1-51
1.7.15	Wetlands	1-52
1.7.16	Wild and Scenic Rivers	1-52
 CHAPTER 2 Aviation Demand Forecasts		 2-1
2.1	The Regional Base for Aviation Activity	2-2
2.1.1	Identification of the Air Trade Area and Population	2-2
2.1.2	Air Trade Area Demographic and Economic Conditions	2-4
2.2	Historical Passenger Activity	2-8
2.2.1	Annual Enplaned Passenger Activity	2-8
2.2.2	Monthly and Other Seasonal Trends	2-10
2.2.3	Airlines Providing Service	2-10
2.2.4	Flight Schedule	2-10
2.3	Significant Factors Influencing Passenger Air Service	2-12
2.3.1	Location and Other Characteristics of Regional Airports	2-12
2.3.2	Airport Efforts to Improve Air Service	2-13
2.4	Passenger Forecast	2-14
2.4.1	Presentation of FAA Terminal Area Forecast – Base Case	2-14
2.4.1	Scenario One – Slower Growth Rate	2-16
2.4.2	Scenario Two – Aggressive Growth	2-18
2.4.3	Passenger Forecast Comparison and Summary	2-20
2.4.4	Passenger Forecast Qualifications and General Assumptions	2-20
2.4.1	Design Day / Design Hour	2-22
2.5	Annual Aircraft Operations Forecast	2-24
2.5.1	Instrument Operations Forecast	2-27
2.6	Design Aircraft	2-28
2.7	Air Cargo Forecast	2-29
2.8	Based Aircraft Forecast	2-30
2.9	Summary of Forecast	2-31
 CHAPTER 3 Facility Requirements		 3-1
3.1	Emerging Trends	3-2
3.2	Airport Design Classification	3-3
3.2.1	Airport Role and Service Level	3-3
3.2.2	Airport Design Classification and Airport Reference Code (ARC)	3-3
3.2.3	Primary Runway 3/21 ARC Designation (Critical Aircraft)	3-7
3.2.4	Runway 17/35 ARC Designation (Critical Aircraft)	3-8
3.3	Meteorological Conditions	3-9
3.3.1	Climate Summary	3-9
3.3.2	Runway Orientation and Wind Analysis	3-9
3.4	Airfield	3-11

3.4.1	Airfield Capacity	3-12
3.4.2	Runway Design	3-13
3.4.3	Taxiway Design	3-18
3.4.4	Pavement Strength & Condition	3-20
3.4.5	Modifications to Standards	3-22
3.5	Navigational And Visual Aids	3-23
3.5.1	Navigational Aids	3-23
3.5.2	Visual Aids	3-23
3.5.3	FAA NextGen	3-24
3.6	Airspace Requirements	3-25
3.7	Passenger Terminal Area	3-26
3.7.1	Passenger Terminal Building	3-26
3.8	Access, Circulation, and Parking Requirements	3-28
3.8.1	Off-Airport Access	3-29
3.8.2	On-Airport Access	3-30
3.8.3	Parking Facilities	3-32
3.8.4	Ground Transportation Services and Facilities	3-33
3.9	Aviation Support Facilities	3-34
3.9.1	General Aviation	3-34
3.9.2	Air Cargo Facilities	3-38
3.9.3	Aircraft Rescue and Fire Fighting (ARFF) Facility	3-38
3.9.4	Airport Maintenance and SRE Storage	3-38
3.9.5	Airport Fuel Storage	3-38
3.9.6	Deicing Facility	3-39
3.9.7	Air Traffic Control Tower	3-39
3.9.8	Safety Management System	3-40
3.9.9	Airport Geographic Information System	3-40
3.10	Utilities	3-41
3.10.1	Potable Water and Sanitary Sewer	3-41
3.10.2	Natural Gas and Electricity	3-41
3.10.3	Storm Water Drainage	3-41
3.10.4	Telephone/Communications	3-42
3.11	Summary of Major Airport Facility Needs	3-43
CHAPTER 4	Identification and Evaluation of Alternatives	4-1
4.1	Preferred Development Plan	4-1
4.2	Alternative Development and Evaluation Process	4-4
4.2.1	Identification of Alternatives	4-4
4.2.2	Evaluation of the Alternatives	4-6
4.3	Airfield	4-7
4.3.1	Runways	4-8
4.3.2	Taxiways	4-8
4.3.3	Visual/Navigational Aids	4-16
4.4	Support Facilities	4-18
4.4.1	General Aviation Facilities	4-18
4.4.2	Aircraft Rescue and Firefighting Facilities and Equipment	4-23
4.4.3	Airport Maintenance Facilities and Equipment	4-24
4.4.4	Airport Traffic Control Tower	4-24
4.4.5	Utilities, Fuels and Deicing facilities	4-24
4.5	Landside Facilities	4-25
4.5.1	Core Development Area	4-26

4.5.2	Passenger Terminal Building	4-26
4.5.3	Vehicle Access	4-26
4.5.4	Rail Access	4-28
4.5.5	Vehicle Parking	4-29
4.6	Conclusion	4-31
CHAPTER 5 Implementation		5-1
5.1	Overview	5-1
5.2	Development Phasing Plan	5-2
5.2.1	Short-Term Development Projects	5-3
5.2.2	Intermediate-Term Development Projects	5-6
5.2.3	Long-Term Development Projects	5-10
5.3	Project Responsibilities	5-14
5.4	Sources of Airport Capital Funding	5-14
5.4.1	FAA Funding	5-14
5.4.2	Passenger Facility Charge	5-15
5.4.3	State Funding	5-16
5.4.4	Airport Revenues	5-16
5.4.5	Other “Local” Funds	5-16
5.4.6	Other Sources	5-17
5.5	Capital Improvement Program	5-18
5.5.1	Capital Improvement Plan by Phase	5-18
5.5.2	Capital Improvement Plan Summary	5-24
5.6	Economic Impact	5-27
CHAPTER 6 Airport Layout Plan Drawing Set		6-1
6.1	Introduction	6-2
6.1.1	ALP Update Process	6-2
6.2	Modification to FAA Standards	6-3
6.3	Airport Layout Plan Drawing Set	6-3
6.3.1	Title Sheet	6-3
6.3.2	Technical Data Sheet	6-4
6.3.3	Airport Layout Plan Drawing	6-4
6.3.4	Terminal Area Plan	6-4
6.3.5	Facilities Layout Plan	6-4
6.3.6	Airport Airspace Drawing	6-4
6.3.7	Approach Plan and Profile Runway 3/21 and 17/35	6-5
6.3.8	Land Use Plan	6-5
6.3.9	Airport Property Map	6-5
6.4	Airport Layout Plan Highlights and Modifications	6-6
6.5	Airport Layout Plan Drawing Set	6-7

## Table of Tables

Table 1-1	Surrounding Commercial Service Airports	1-7
Table 1-2	Surrounding General Aviation Airports (within Idaho)	1-7
Table 1-3	Existing Runway Table	1-11
Table 1-4	Existing Taxiway Data	1-12
Table 1-5	Existing Aircraft	1-13
Table 1-6	Published Instrument Procedures	1-21

Table 1-7 Existing Terminal Square Footage Areas	1-22
Table 1-8 Fuel Flowage (in gallons)	1-38
Table 2-1 Historical and Projected Population Growth Rates	2-4
Table 2-2 Comparison of Per Capita Personal Income Averages (2004 \$)	2-4
Table 2-3 Comparison of Total Employment Growth Rates	2-5
Table 2-4 Pocatello’s Largest Employers	2-7
Table 2-5 Scheduled Passenger Airlines Serving the Airport	2-10
Table 2-6 Surrounding Regional Airport	2-12
Table 2-7 Peak Period Projection	2-23
Table 2-8 Instrument Operations Forecast	2-27
Table 2-9 Based Aircraft Projections	2-30
Table 2-10 Forecast Summary	2-31
Table 3-1 Airport Reference Code – Existing And Future	3-6
Table 3-2 Airport Reference Code Type and Representative Aircraft	3-7
Table 3-3 Capacity Analysis	3-12
Table 3-4 True Runway Bearing	3-14
Table 3-5 FAA Aircraft Runway Length Requirements	3-15
Table 3-6 Runway Protection Zone Dimensions	3-16
Table 3-7 Runway Design Standards	3-17
Table 3-8 Taxiway Design Standards	3-19
Table 3-9 Aircraft Weights	3-21
Table 3-10 Recommended Pavement Strengths	3-22
Table 3-11 Existing Terminal Square Foot Areas	3-26
Table 3-12 Public Parking Demand Projections	3-32
Table 3-13 Hangar Building Requirements	3-36
Table 3-14 Itinerant Aircraft Parking Apron Requirements	3-37
Table 3-15 Based Aircraft Apron Requirements	3-37
Table 3-16 Fuel Facility Requirements	3-39
Table 3-17 Summary of Major Airport Facility Needs	3-43
Table 5-1 Capital Improvement Plan – Short Term (2012 - 2016)	5-19
Table 5-2 Capital Improvement Plan – Intermediate Term (2017 -2021)	5-20
Table 5-3 Capital Improvement Plan – Long Term (2022 -2031)	5-22
Table 5-4 Capital Improvement Plan - Summary	5-24

## **Table of Figures**

Figure 1-1 Airport Location Map	1-3
Figure 1-2 Airports Within the Pocatello Region	1-6
Figure 1-3 Descriptive Airport Aerial	1-10
Figure 1-4 Existing Pavement Condition	1-15
Figure 1-5 Aeronautical Sectional Chart	1-19
Figure 1-6 Passenger Terminal Floor Plan – First Level	1-23
Figure 1-7 Passenger Terminal Floor Plan – Second Level	1-24
Figure 1-8 Airport Access	1-29
Figure 1-9 Vehicle Parking Locations	1-31
Figure 1-10 Airport Core Development Area	1-33
Figure 1-11 Facility Map	1-35
Figure 1-12 Prime and Unique Farmlands	1-47
Figure 2-1 Pocatello MSA and 2009 Population Estimate	2-3
Figure 2-2 Comparison of Air Trade Area Demographic Information	2-6

Figure 2-3 Historical Enplanements (FY 1990-2010)	2-9
Figure 2-4 Monthly Enplaned Passenger Traffic (CY 2005-2010)	2-11
Figure 2-5 2010 Terminal Area Forecast	2-15
Figure 2-6 Scenario One – Slower Growth	2-17
Figure 2-7 Scenario Two – Aggressive Growth	2-19
Figure 2-8 Enplaned Passenger Forecast Summary	2-21
Figure 2-9 December 2010, Airline Schedule By Gate	2-22
Figure 2-10 Forecast Annual Aircraft Operations	2-26
Figure 3-1 Operations By Airport Reference Code	3-5
Figure 3-2 Runway Crosswind Data (All-Weather Wind Coverage)	3-10
Figure 3-3 Airfield Design	3-11
Figure 3-4 Passenger Terminal Floor Plans	3-27
Figure 3-5 Airport Access	3-28
Figure 3-6 Terminal Loop Roadway System	3-31
Figure 4-1 Preferred Development Plan	4-3
Figure 4-2 Alternative Development Process	4-5
Figure 4-3 Existing Airfield	4-7
Figure 4-4 Taxiway G Alternatives	4-11
Figure 4-5 Future Parallel Taxiway Alternatives	4-14
Figure 4-6 Taxiway E Alternatives	4-16
Figure 4-7 Existing Support Facilities	4-18
Figure 4-8 General Aviation Development Recommendations	4-20
Figure 4-9 Air Cargo And Large Aircraft Operators Development Areas	4-23
Figure 4-10 Existing Landside Facilities	4-25
Figure 4-11 Vehicle Access Recommendations	4-28
Figure 4-12 Rail Access Alternatives	4-29
Figure 4-13 Vehicle Parking Recommendations	4-30
Figure 5-1 Short-Term Development Projects (2012-2016)	5-5
Figure 5-2 Intermediate-Term Development Projects (2017-2021)	5-9
Figure 5-3 Long-Term Development Projects (2022-2031)	5-13
Figure 5-4 Major Capital Development Projects	5-26
Figure 5-5 Economic Impact of Pocatello Regional Airport	5-27

## **Table of ALP Sheets**

Sheet 6-1 Title Sheet	6-8
Sheet 6-2 Technical Data Sheet	6-9
Sheet 6-3 Airport Layout Plan	6-10
Sheet 6-4 Terminal Area Plan	6-11
Sheet 6-5 Facilities Layout Plan	6-12
Sheet 6-6 Airport Airspace Drawing	6-13
Sheet 6-7 Airport Airspace Drawing Profiles	6-14
Sheet 6-8 Approach Plan and Profile Runway 03/21	6-15
Sheet 6-9 Approach Plan and Profile Runway 17/35	6-16
Sheet 6-10 Off-Airport Land Use Plan	6-17
Sheet 6-11 On-Airport Land Use Plan	6-18
Sheet 6-12 Airport Property Map	6-19

## Appendices

Appendix A – Glossary

Appendix B – National Plan of Integrated Airport Systems

Appendix C – Visual and Navigational Aids

Appendix D – National Airspace System

Appendix E – Planning for Compliance

Appendix F – Land Use Planning for Airports and Pocatello Regional Airport Land Use Compliance

Appendix G – Revenue Enhancement Opportunities (Technical Memos)

THIS PAGE INTENTIONALLY LEFT BLANK