

## **APPENDIX A: DETAILED TABLE OF THE WASHINGTON STATE AIRPORTS**

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A detailed table of the Washington State Airports is shown on the following pages.

Site	Airport Name	City	NPIAS Service Level	State Service Level
26433.C	American Lake SPB	Tacoma	N/A	Seaplane Base
26098.1A	Anacortes	Anacortes	Commercial Service, Non-Primary	Commercial Service
26123.1A	Anderson Field	Brewster	General Aviation	Local Service
26099.A	Arlington Municipal	Arlington	General Aviation	Regional Service
26103.11A	Auburn Municipal	Auburn	Reliever	Regional Service
26267.4A	Avey Field State	Laurier	N/A	Rural Essential
26104.A	Bandera State	Bandera	N/A	Rural Essential
26109.A	Bellingham International	Bellingham	Commercial Service, Primary	Commercial Service
26116.A	Blaine Municipal (Closed)	Blaine	General Aviation	Community Service
26396.A	Boeing Field/King County International	Seattle	Commercial Service, Primary	Commercial Service
26236.A	Bowerman Field	Hoquiam	General Aviation	Regional Service
26195.A	Bowers Field	Ellensburg	General Aviation	Regional Service
26120.*A	Bremerton National	Bremerton	General Aviation	Regional Service
26424.3*A	Camano Island Airfield	Stanwood	N/A	Rural Essential
26135.A	Cashmere Dryden	Cashmere	General Aviation	Community Service
26104.11*A	Cedars North Airpark	Battle Ground	N/A	Rural Essential
26144.A	Chehalis Centralia	Chehalis	General Aviation	Community Service
26147.A	Chelan Municipal	Chelan	General Aviation	Community Service
26159.A	Cle Elum Municipal	Cle Elum	General Aviation	Local Service
19614.*A	Columbia Gorge Regional/The Dalles	The Dalles	General Aviation	Regional Service
26165.A	Colville Municipal	Colville	General Aviation	Regional Service
26167.A	Concrete Municipal	Concrete	N/A	Community Service
26170.A	Copalis State	Copalis	N/A	Rural Essential
26252.1A	Crest Airpark	Kent	N/A	Rural Essential
26157.*A	Cross Winds	Clayton	N/A	Rural Essential
26180.A	Darrington Municipal	Darrington	N/A	Local Service
26181.A	Davenport Municipal	Davenport	General Aviation	Local Service
26184.A	Deer Park Municipal	Deer Park	General Aviation	Regional Service
26290.9A	Desert Aire	Mattawa	N/A	Rural Essential
26159.1A	DeVere Field	Cle Elum	N/A	Rural Essential
26333.A	Dorothy Scott Municipal	Oroville	General Aviation	Community Service

Site	Airport Name	City	NPIAS Service Level	State Service Level
26189.A	Easton State	Easton	N/A	Rural Essential
26437.A	Ed Carlson Memorial	Toledo	General Aviation	Community Service
26196.A	Elma Municipal	Elma	N/A	Community Service
26204.A	Ephrata Municipal	Ephrata	General Aviation	Community Service
26441.1A	Evergreen Field (Closed)	Vancouver	N/A	N/A
26417.A	Felts Field	Spokane	Reliever	Regional Service
26384.12A	Ferry County	Republic	N/A	Local Service
26304.21A	Firstair Field	Monroe	N/A	Community Service
26110.11C	Floathaven SPB	Bellingham	N/A	Seaplane Base
26444.4A	Fly For Fun	Vancouver	N/A	Rural Essential
26213.A	Forks Municipal	Forks	N/A	Rural Essential
26219.4A	Friday Harbor	Friday Harbor	Commercial Service, Primary	Commercial Service
26219.1C	Friday Harbor SPB	Friday Harbor	General Aviation	Seaplane Base
26104.1A	Goheen Field	Battle Ground	N/A	Rural Essential
26222.1A	Goldendale Municipal	Goldendale	N/A	Local Service
26193.1A	Grand Coulee Dam	Electric City	General Aviation	Regional Service
26307.A	Grant County International	Moses Lake	Commercial Service, Non-Primary	Commercial Service
26130.A	Grove Field	Camas	General Aviation	Community Service
26411.A	Harvey Field	Snohomish	Reliever	Regional Service
26222.*A	Hillcrest (Converted to Private Use)	Goldendale	N/A	N/A
26328.1*A	Hoskins Field	Olympia	N/A	Rural Essential
26240.5A	Ione Municipal	Ione	General Aviation	Local Service
26363.A	Jefferson County International	Port Townsend	General Aviation	Community Service
26096.*A	J-Z (Closed)	Almira	N/A	Rural Essential
26246.A	Kelso-Longview	Kelso	General Aviation	Regional Service
26395.5*C	Kenmore Air Harbor SPB	Seattle	N/A	Commercial Service
26248.C	Kenmore Air Harbor, Inc.	Kenmore	General Aviation	Commercial Service
26269.1A	Lake Wenatchee State	Leavenworth	N/A	Rural Essential
26271.*U	Lester State	Lester	N/A	Rural Essential
26273.A	Lind Municipal	Lind	N/A	Local Service
26424.5A	Little Goose Lock & Dam State	Starbuck	N/A	Rural Essential

Site	Airport Name	City	NPIAS Service Level	State Service Level
26274.7A	Lopez Island	Lopez	General Aviation	Community Service
26291.6*A	Lost River Airport	Mazama	N/A	Rural Essential
26162.1A	Lower Granite State	Colfax	N/A	Rural Essential
26243.5A	Lower Monumental State	Kahlotus	N/A	Rural Essential
26275.A	Lynden Municipal	Lynden	N/A	Rural Essential
26282.A	Mansfield	Mansfield	N/A	Local Service
26163.A	Martin Field	College Place	N/A	Community Service
26293.A	Mead Airport	Mead	N/A	Rural Essential
26477.A	Methow Valley	Winthrop	General Aviation	Local Service
26305.A	Moses Lake Municipal	Moses Lake	N/A	Community Service
26454.A	New Warden	Warden	N/A	Local Service
26323.21A	Ocean Shores Municipal	Ocean Shores	General Aviation	Local Service
26323.4A	Odessa Municipal	Odessa	General Aviation	Local Service
26324.A	Okanogan Legion	Okanogan	N/A	Local Service
26327.A	Olympia	Olympia	General Aviation	Regional Service
26330.A	Omak	Omak	General Aviation	Regional Service
26190.*A	Orcas Island	Eastsound	Commercial Service, Non-Primary	Commercial Service
26336.2A	Othello Municipal	Othello	General Aviation	Community Service
26341.A	Packwood	Packwood	General Aviation	Local Service
26461.A	Pangborn Memorial	Wenatchee	Commercial Service, Primary	Commercial Service
26444.A	Pearson Field	Vancouver	General Aviation	Community Service
26374.1A	Pierce County/Thun Field	Puyallup	General Aviation	Community Service
26354.*A	Point Roberts Airpark	Point Roberts	N/A	Rural Essential
26240.A	Port of Ilwaco	Ilwaco	N/A	Local Service
26162.A	Port of Whitman Business Air Center	Colfax	General Aviation	Community Service
26365.C	Poulsbo SPB	Poulsbo	N/A	Seaplane Base
26369.A	Prosser	Prosser	General Aviation	Community Service
26388.A	Pru Field	Ritzville	General Aviation	Local Service
26372.A	Pullman/Moscow Regional	Pullman / Moscow, ID	Commercial Service, Primary	Commercial Service
26376.5A	Quillayute	Quillayute	General Aviation	Local Service
26376.83A	Quincy Municipal	Quincy	N/A	Local Service

Site	Airport Name	City	NPIAS Service Level	State Service Level
26388.8*A	R & K Skyranch	Rochester	N/A	Rural Essential
26230.A	Ranger Creek State	Greenwater	N/A	Rural Essential
26381.A	Renton Municipal	Renton	Reliever	Regional Service
26386.1A	Richland	Richland	General Aviation	Community Service
26388.63C	Roche Harbor SPB	Roche Harbor	N/A	Seaplane Base
26098.6*A	Rogersburg State	Anatone	N/A	Rural Essential
26389.1A	Rosalia Municipal	Rosalia	General Aviation	Local Service
26389.4C	Rosario SPB	Rosario	N/A	Seaplane Base
26150.A	Sand Canyon	Chewelah	N/A	Local Service
26405.A	Sanderson Field	Shelton	General Aviation	Regional Service
26395.A	Sea-Tac International	Seattle	Commercial Service, Primary	Commercial Service
26393.*C	Seattle Seaplanes SPB	Seattle	N/A	Seaplane Base
26401.*A	Sekiu	Sekiu	N/A	Local Service
26402.1A	Sequim Valley	Sequim	N/A	Rural Essential
26414.1*A	Shady Acres	Spanaway	N/A	Rural Essential
26125.1A	Skagit Regional	Burlington/Mount Vernon	General Aviation	Regional Service
26425.8*A	Sky Harbor	Sultan	N/A	Rural Essential
26409.A	Skykomish State	Skykomish	N/A	Rural Essential
26098.23C	Skyline SPB	Anacortes	N/A	Seaplane Base
26210.A	Snohomish County/Paine Field	Everett	Reliever	Regional Service
26415.A	Spanaway	Spanaway	N/A	Rural Essential
26416.A	Spokane International	Spokane	Commercial Service, Primary	Commercial Service
26425.A	Stehekin State	Stehekin	N/A	Rural Essential
26304.8A	Strom Field	Morton	N/A	Local Service
26300.A	Sullivan Lake State	Metaline Falls	N/A	Rural Essential
26428.A	Sunnyside Municipal	Sunnyside	General Aviation	Local Service
26191.1A	Swanson Field	Eatonville	N/A	Rural Essential
26434.4A	Tacoma Narrows	Tacoma	General Aviation	Regional Service
26386.6A	Tieton State	Rimrock	N/A	Rural Essential
26438.A	Tonasket Municipal	Tonasket	N/A	Local Service
26345.A	Tri-Cities	Pasco	Commercial Service, Primary	Commercial Service

Site	Airport Name	City	NPIAS Service Level	State Service Level
26440.A	Twisp Municipal	Twisp	N/A	Community Service
26448.A	Vashon Municipal	Vashon	General Aviation	Rural Essential
26249.A	Vista Field	Kennewick	N/A	Community Service
26450.A	Walla Walla Regional	Walla Walla	Commercial Service, Primary	Commercial Service
26457.A	Waterville	Waterville	N/A	Local Service
26322.11A	Wes Lupien	Oak Harbor	N/A	Local Service
26485.01A	Western Airpark (Private Use)	Yelm	N/A	Rural Essential
26463.A	Westport	Westport	General Aviation	Local Service
26266.2A	Whidbey Airpark	Langley	N/A	Rural Essential
26471.A	Wilbur Municipal	Wilbur	General Aviation	Local Service
26381.01C	Will Rogers Wiley Post SPB	Renton	N/A	Seaplane Base
26412.A	Willapa Harbor	South Bend (Raymond)	N/A	Local Service
26436.A	Willard Field	Tekoa	N/A	Local Service
26471.5*A	Wilson Creek	Wilson Creek	N/A	Local Service
26357.A	Wm. R. Fairchild International	Port Angeles	Commercial Service, Primary	Commercial Service
26478.1A	Woodland State	Woodland	N/A	Local Service
26480.A	Yakima Air Terminal	Yakima	Commercial Service, Primary	Commercial Service

## **APPENDIX B: AVIATION STAKEHOLDERS**

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### **Federal Aviation Administration (FAA)**

The FAA represents the Federal government's role in the regulating, managing, planning, maintaining and funding, the national air transportation system. It supports airports listed in the National Plan of Integrated Airport Systems (NPIAS) and conducts research necessary to develop tools and methods that advance the safety and efficiency of the national air transportation system. In this capacity, the FAA carries a wide range of responsibilities including:

- Listing airports in the National Plan of Integrated Airport Systems (NPIAS).
- Provide airport planning and design guidance.
- Aeronautical safety and compliance.
- Allocate and disburse Federal funds.
- Assure environmental compliance.
- Conduct research on issues relevant to aviation and safety.
- Manage and maintain the national air transportation system.

### **WSDOT/Aviation Division**

Discussion of the role of Washington State is limited to WSDOT/Aviation. The Aviation Division of the Washington Department of Transportation is the State's counterpart to the FAA. The Washington State Department of Transportation's (WSDOT) Aviation Division is charged with helping to maintain and enhance the State of Washington's air transportation system. Public use airports in the system range in size from small, general aviation facilities to large hub commercial service airports. Specifically, as detailed in the General Powers element of the State of Washington's RCW 47.68.070:

*The department has general supervision over aeronautics within this state. It is empowered and directed to encourage, foster, and assist in the development of aeronautics in this state and to encourage the establishment of airports and air navigation facilities. It shall cooperate with and assist the federal government, the municipalities of this state, and other persons in the*

*development of aeronautics, and shall seek to coordinate the aeronautical activities of these bodies and persons.*

WSDOT Aviation Division provides vital financial assistance to public-use airports across the State of Washington in the form of airport development and maintenance grants. The agency is also responsible for the management of air search and rescue operations, the management of state managed airports, and providing technical assistance and training in relation to the value and protection of public use airports. This also includes the promotion of the aviation industry within the State. As such, WSDOT Aviation plays a key role in the operation and development of the State's system of airports.

In addition to its responsibilities, the Division carries out a variety of additional functions and services in support of the state aviation system as follows:

- Construct and maintain facilities for 17 state-operated airports.
- Provide technical assistance to airports, cities, and counties.
- Conduct search and rescue operations.
- Prepare and maintain Washington Aviation System Plan.
- Conduct Height Hazard Obstruction reviews.
- Conduct special studies, including:
  - Pavement Conditions Assessment 2005 (3-year cycle)
  - Economic Benefits Analysis of Airports in Washington State 2001
  - Rural Airport Study 2002
  - Airport Conditions Assessment, 2006, Phase I LATS
- Administer the Grant Assistance Program.
- Administer Airport Land Use Compatibility Program and provide technical assistance in accordance with RCW 36.70.547 and 36.70A.510.

## ***Washington State Transportation Goals***

The Washington transportation system policy goals are set forth in the Revised Code of Washington (RCW) Section 47.04.280. The policy goals are applicable to all modes of transportation within Washington and state the following:

- (1) It is the intent of the legislature to establish policy goals for the planning, operation, performance of, and investment in the state's transportation system. The policy goals established under this section are deemed consistent with the benchmark categories adopted by the State's blue ribbon commission on transportation on November 30, 2000. Public investments in transportation should support achievement of these policy goals:
  - (a) Preservation: To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services;
  - (b) Safety: To provide for and improve the safety and security of transportation customers and the transportation system;
  - (c) Mobility: To improve the predictable movement of goods and people throughout Washington state
  - (d) Environment: To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment; and
  - (e) Stewardship: To continuously improve the quality, effectiveness, and efficiency of the transportation system.
- (2) The powers, duties, and functions of state transportation agencies must be performed in a manner consistent with the policy goals set forth in subsection (1) of this section.
- (3) These policy goals are intended to be the basis for establishing detailed and measurable objectives and related performance measures.
- (4) It is the intent of the legislature that the office of financial management establish objectives and performance measures for the department of transportation and other state agencies with transportation-related responsibilities to ensure transportation system performance at local, regional, and state government levels progresses toward the attainment of the policy goals set forth in subsection (1) of this section. The office of

financial management shall submit initial objectives and performance measures to the legislature for its review and shall provide copies of the same to the commission during the 2008 legislative session. The office of financial management shall submit objectives and performance measures to the legislature for its review and shall provide copies of the same to the commission during each regular session of the legislature during an even-numbered year thereafter.

(5) This section does not create a private right of action.

## **Regional Agencies**

There are 14 Regional planning organizations (RTPOs, RPCs, RTCs and COGs) in Washington State. These planning organizations fulfill a variety of roles relative to the Washington State Multimodal Transportation system. According to RCW 47.80 regional transportation planning organizations are responsible for coordinating and facilitating the regional transportation facilities together with local comprehensive plans throughout the state. Some of their primary functions include the following:

- Inter-governmental coordination
- Integration of local comprehensive plans and regional goals with state and local transportation programs.
- Certification of the transportation element of local comprehensive plan
- Compatibility planning between land use and transportation
- Development of regional transportation plans that address alternative transportation modes, as well as transportation demand management policies and implementation measures.
- Development of transportation investment strategies for the region that will enhance local and state objectives for effective comprehensive planning, economic development strategies, and clean air policies.

## Local Jurisdictions

Local jurisdictions are the cities and counties within which the airports are located. These jurisdictions, as well as Port Districts, Airport Authorities and other recognized local agencies are authorized to own and operate airports under RCW 14.08. Local jurisdictions may also have a variety of additional interests in or responsibilities to airports within their boundaries including:

- Comprehensive Planning including application of statewide planning goals
- Land Use Zoning
- Transportation Planning
- Utilities and Infrastructure
- Public Safety
- Coordination with Special Districts
- Economic Development
- Taxation and Licensing

## Airport Sponsors

Airports included in the State's aviation system include those that are Publicly Owned/Public Use facilities and Privately Owned/Public Use airports. Publicly owned facilities may enjoy certain advantages over privately owned facilities relative to the potential availability of public finance or federal/state grants for funding improvements. However, public funding can also carry long-term obligations and/or grant assurances which may reduce flexibility or place conditions on the management and operation of the facility.

General responsibilities and obligations of the airport sponsor include:

- Compliance with FAA safety, development and operating requirements.
- Meet FAA or state grant assurances as applicable.
- Comply with local, regional, state and federal planning and environmental requirements.
- Promote airport compatibility with community.
- Manage day-to-day airport operations and maintenance.

- Manage airport finances and requests for state and/or federal funding.
- Respond to market demands and conditions – particularly aviation oriented needs.
- Provide for/respond to economic development opportunities.

## **APPENDIX C: LIST OF LATS TECHNICAL REPORTS AND TECHNICAL MEMORANDUMS**

Technical Memorandums not included in this volume.

Phase I Technical Report. Washington State Department of Transportation September 30, 2006.

Phase II Technical Report. Washington State Department of Transportation June 30, 2007.

Air Cargo Forecasts. SH&E, Inc. March 19, 2007.

Air Transportation Revenue and Expenditure Report. WSDOT Aviation. November 26, 2008.

Aircraft Storage Capacity Analysis. WHPacific. June 12, 2007.

Airfield, Passenger Terminal, and Air Cargo Capacity Analyses. URS Corporation. May 25, 2007.

Airport Classification and Evaluation Criteria. WHPacific. June 26, 2007.

Airspace Analysis. URS Corporation. May 16, 2007.

Availability of Alternate Airports to Accommodate Excess Future Demand at Capacity Constrained Airports. SH&E, Inc. August 1, 2008 (Updated May 12, 2009).

Aviation Policy White Paper. PRR. March 5, 2008.

Commercial Service Passenger Traffic and Operations Forecasts. SH&E, Inc. May 17, 2007.

Estimate of Capital Costs for Performance Objective Improvements. WHPacific. June 19, 2007 (Updated January 23, 2009).

General Aviation Activity Forecasts. SH&E, Inc. March 20, 2007.

High-Speed Passenger Transportation Facilities and Services. Cambridge Systematics, Inc. June 29, 2007.

State Block Grant Program White Paper. WHPacific. February 13, 2009.

State Legislation for Funding of Private Airports. WSDOT Aviation. May 22, 2009.

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## APPENDIX D: GLOSSARY

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<b>AC</b>	- Advisory Circular
<b>ADF</b>	- Automatic Direction Finder
<b>ADIZ</b>	- Air Defense Identification Zones
<b>ADPM</b>	- Average Day of the Peak Month
<b>AFB</b>	- Air Force Base
<b>AGL</b>	- Above Ground Level
<b>AIP</b>	- Airport Improvement Program
<b>ALP</b>	- Airport Layout Plan
<b>ALS</b>	- Approach Lighting System
<b>ALSF-1</b>	- Approach Light System with Sequence Flasher Lights
<b>AOC</b>	- Airfield Operation Capacity
<b>ARC</b>	- Airport Reference Code
<b>ARFF</b>	- Airport Rescue and Fire Fighting
<b>ARP</b>	- Airport Reference Point
<b>ARTCC</b>	- Air Route Traffic Control Center
<b>ASDA</b>	- Accelerate-Stop Distance Available
<b>ASOS</b>	- Automated Surface Observation System
<b>ASR</b>	- Airport Surveillance Radar
<b>ASV</b>	- Annual Service Volume
<b>ATC</b>	- Air Traffic Control
<b>ATCT</b>	- Air Traffic Control Tower
<b>AVGAS</b>	- Aviation Gasoline
<b>AWOS</b>	- Automated Weather Observation System
<b>BRL</b>	- Building Restriction Line
<b>CIP</b>	- Capital Improvement Program
<b>dBA</b>	- A-weighted Decibels
<b>DH</b>	- Decision Height
<b>DME</b>	- Distance Measuring Equipment
<b>DNL</b>	- Day-Night Sound Levels
<b>DOT</b>	- Department of Transportation
<b>EA</b>	- Environmental Assessment
<b>EAS</b>	- Essential Air Service
<b>EIS</b>	- Environmental Impact Statement
<b>EP</b>	- Enplaned Passenger
<b>EPA</b>	- The United States Environmental Protection Agency
<b>EPF</b>	- Essential Public Facility
<b>ESSB</b>	- Engrossed Senate Substitute Bill

<b>FAA</b>	- Federal Aviation Administration
<b>FAR</b>	- Federal Aviation Regulation
<b>FBO</b>	- Fixed Based Operator
<b>FIS</b>	- Federal Inspection Service
<b>FRA</b>	- Federal Railroad Administration
<b>FSS</b>	- Flight Service Station
<b>GA</b>	- General Aviation
<b>GMA</b>	- Growth Management Act
<b>GPS</b>	- Global Positioning System
<b>HAT</b>	- Height Above Threshold
<b>HIRL</b>	- High Intensity Runway Lights
<b>ICAO</b>	- International Civil Aviation Organization
<b>IFR</b>	- Instrument Flight Rules
<b>ILS</b>	- Instrument Landing System
<b>INM</b>	- Integrated Noise Model
<b>LATS</b>	- Long Term Air Transportation Study
<b>LCC</b>	- Low-Cost Carrier
<b>LDA</b>	- Landing Distance Available
<b>LIRL</b>	- Low Intensity Runway Lights
<b>MALS</b>	- Medium Intensity Approach Light System
<b>MALSF</b>	- Medium Intensity Approach Light System with sequence flashing Lights
<b>MALSR</b>	- Medium-Intensity Approach Lighting System with Runway Alignment Indicators
<b>MGW</b>	- Maximum Gross Weight
<b>MIRL</b>	- Medium Intensity Runway Lights
<b>MLS</b>	- Microwave Landing System
<b>MOA</b>	- Military Operations Area
<b>MPO</b>	- Metropolitan Planning Organization
<b>MSL</b>	- Mean Sea Level
<b>NAS</b>	- Naval Air Station
<b>NAVAID</b>	- Air Navigation Facility/Aid
<b>NBAA</b>	- National Business Aircraft Association
<b>NDB</b>	- Non-Directional Beacon
<b>NPIAS</b>	- National Plan of Integrated Airport Systems
<b>OAG</b>	- Official Airline Guide
<b>ODO</b>	- Overall Development Objectives
<b>OFA</b>	- Object Free Area
<b>OFZ</b>	- Obstacle Free Zone
<b>PAPI</b>	- Precision Approach Path Indicator
<b>PCI</b>	- Pavement Condition Index
<b>PFC</b>	- Passenger Facility Charge

<b>PIR</b>	- Precision Instrument Runway
<b>RAIL</b>	- Runway Alignment Indicator Lights
<b>RCW</b>	- Revised Code of Washington
<b>REIL</b>	- Runway End Identifier Lights
<b>RPM</b>	- Revenue Passenger Mile
<b>RTPO</b>	- Regional Transportation Planning Organizations
<b>RSA</b>	- Runway Safety Area
<b>RPZ</b>	- Runway Protection Zone
<b>RVR</b>	- Runway Visual Range
<b>SPB</b>	- Sea Plane Base
<b>TAF</b>	- FAA Terminal Area Forecasts
<b>TODA</b>	- Take-Off Distance Available
<b>TORA</b>	- Take-Off Run Available
<b>VASI</b>	- Visual Approach Slope Indicator
<b>VFR</b>	- Visual Flight Rules
<b>VHF</b>	- Very High Frequency
<b>WAAS</b>	- Wide Area Augmentation System
<b>WTP</b>	- Washington Transportation Plan
<b>WSCASP</b>	- Washington State Continuous Airport System Plan
<b>WSDOT</b>	- Washington State Department of Transportation
<b>WSTC</b>	- Washington State Transportation Commission

## Airport Abbreviations

Airport Name	Airport Id	Airport Name	Airport Id
<b>NPIAS – Primary Airports</b>			
Bellingham International	BLI	Spokane International	GEG
Boeing Field/King County International	BFI	Tri-Cities	PSC
Friday Harbor	FHR	Walla Walla Regional	ALW
Pangborn Memorial	EAT	Wm. R. Fairchild International	CLM
Pullman/Moscow Regional	PUW	Yakima Air Terminal	YKM
Sea-Tac International	SEA		
<b>NPIAS – Commercial Airports</b>			
Anacortes	74S	Orcas Island	ORS
Grant County International	MWH		
<b>NPIAS - Reliever Airports</b>			
Auburn Municipal	S50	Renton Municipal	RNT
Felts Field	SSF	Snohomish County/Paine Field	PAE
Harvey Field	S43		
<b>NPIAS – General Aviation Airports</b>			
Anderson Field	S97	Ed Carlson Memorial	TDO
Arlington Municipal	AWO	Ephrata Municipal	EPH
Blaine Municipal	4W6	Friday Harbor SPB	W33
Bowerman Field	HQM	Grand Coulee Dam	3W7

Airport Name	Airport Id	Airport Name	Airport Id
Bowers Field	ELN	Grove Field	1W1
Bremerton National	PWT	Ione Municipal	S23
Cashmere Dryden	8S2	Jefferson County International	0S9
Chehalis Centralia	CLS	Kelso-Longview	KLS
Chelan Municipal	S10	Kenmore Air Harbor, Inc.	S60
Cle Elum Municipal	S93	Lopez Island	S31
Columbia Gorge Regional/The Dalles	DLS	Methow Valley	S52
Colville Municipal	63S	Ocean Shores Municipal	W04
Davenport Municipal	68S	Odessa Municipal	43D
Deer Park Municipal	DEW	Olympia	OLM
Dorothy Scott Municipal	0S7	Omak	OMK
Othello Municipal	S70	Rosalia Municipal	72S
Packwood	55S	Sanderson Field	SHN
Pearson Field	VUO	Skagit Regional	BVS
Pierce County/Thun Field	1S0	Sunnyside Municipal	1S5
Port of Whitman Business Air Center	S94	Tacoma Narrows	TIW
Prosser	S40	Vashon Municipal	2S1
Pru Field	33S	Whidbey Airpark	W10
Quillayute	UIL	Wilbur Municipal	2S8
Richland	RLD		
Non-NPIAS Airports			
American Lake SPB	W37	New Warden	2S4
Avey Field State	69S	Okanogan Legion	S35
Bandera State	4W0	Point Roberts Airpark	1RL
Camano Island Airfield	13W	Port of Ilwaco	7W1
Cedars North Airpark	W58	Poulsbo SPB	83Q
Concrete Municipal	3W5	Quincy Municipal	80T
Copalis State	S16	R & K Skyranch	8W9
Crest Airpark	S36	Ranger Creek State	21W
Cross Winds	C72	Roche Harbor SPB	W39
Darrington Municipal	1S2	Rogersburg State	D69
Desert Aire	M94	Rosario SPB	W49
DeVere Field	2W1	Sand Canyon	1S9
Easton State	ESW	Seattle Seaplanes SPB	0W0
Elma Municipal	4W8	Sekiu	11S
Evergreen Field	59S	Sequim Valley	W28
Ferry County	R49	Shady Acres	3B8
Firstair Field	W16	Sky Harbor	S86
Floathaven SPB	0W7	Skykomish State	S88
Fly For Fun	W56	Skyline SPB	21H
Forks Municipal	S18	Spanaway	S44
Goheen Field	W52	Stehekin State	6S9
Goldendale Municipal	S20	Strom Field	39P
Hillcrest	9P7	Sullivan Lake State	09S
Hoskins Field	44T	Swanson Field	2W3
J-Z	1W0	Tieton State	4S6
Kenmore Air Harbor SPB	W55	Tonasket Municipal	W01
Lake Wenatchee State	27W	Twisp Municipal	2S0
Lester State	15S	Vista Field	S98
Lind Municipal	0S0	Waterville	2S5
Little Goose Lock & Dam State	16W	Wes Lupien	76S
Lost River Airport	W12	Western Airpark	92W
Lower Granite State	00W	Westport	14S

Airport Name	Airport Id	Airport Name	Airport Id
Lower Monumental State	W09	Will Rogers Wiley Post SPB	W36
Lynden Municipal	38W	Willapa Harbor	2S9
Mansfield	8W3	Willard Field	73S
Martin Field	S95	Wilson Creek	5W1
Mead Airport	70S	Woodland State	W27
Moses Lake Municipal	W20		

## Definitions

**Active Aircraft** - Aircraft registered with the FAA and reported to have flown during the preceding calendar year.

**Activity** - Used in aviation to refer to any kind of movement, e.g., cargo flights, passenger flights, or passenger enplanements. Without clarification it has no particular meaning.

**Activity Forecasts** - Projections of future levels of airline passengers, aircraft operations, air cargo and other aviation metrics that were prepared during the LATS study.

**Advisory Circular (AC)** - A series of Federal Aviation Administration (FAA) publications providing guidance and standards for the design, operation and performance of aircraft and airport facilities.

**Airport Classification** – (1) The FAA classifies all airports included in the National Plan of Integrated Airport Systems (NPIAS) (2) Washington State classifies all airports that are open to public use. Classifications are determined by the following criteria:

### Federal Airport Classification

1. **Primary:** Airports with scheduled commercial passenger service that have more than 10,000 annual passenger boardings (also called enplanements). Primary airports are further subdivided by their percentage of total U.S. passenger boardings: large hubs (at least 1%), medium hubs (0.25 to 1%), small hubs (0.05 to 0.25%), and non hubs (less than 0.05%)
2. **Commercial Service:** Airports with scheduled commercial passenger service that have at least 2,500, but fewer than 10,000, annual passenger boardings
3. **Relievers:** High capacity general aviation airports in major metropolitan areas, with at least 100 based aircraft or 25,000 annual itinerant aircraft operations

4. **General Aviation:** Airports not meeting the other criteria, typically with at least 10 based aircraft

#### **Washington State Airport Classification**

1. **Commercial Service:** Accommodates at least 2,500 annual scheduled passenger boardings for at least three years
2. **Regional Service:** Serves large or multiple communities, all NPIAS relievers; at least 40 based aircraft and 4,000-foot long runway, with exceptions
3. **Community Service:** Serves a community; at least 20 based aircraft; paved runway
4. **Local Service:** Serves a community; fewer than 20 based aircraft; paved runway
5. **Rural Essential:** Other land-based airports, including residential airparks and remote back country airports.
6. **Seaplane Base:** Identified by FAA as a seaplane base, unless it is a Community Service airport

**Airport Improvement Program (AIP)** - A congressionally mandated program through which the FAA provides funding assistance for the development and enhancement of airport facilities.

**Air Cargo** - Commercial freight, including express packages and mail, transported by passenger or all-cargo airlines.

**Air Carrier** - An airline providing scheduled air service for the commercial transport of passengers or cargo.

**Air Freight** - items principally transported by all-freight carriers and as belly freight on scheduled passenger services, including heavy-weight items as well as routine palletized shipments.

**Air Mail** - Air mail is carried as belly freight on some commercial carriers and is carried as freight by FedEx under contract with the US Postal Service.

**Air Navigation Facility (NAVAID)** - Although generally referring to electronic radio wave transmitters (VOR, NDB, ILS), it also includes any structure or mechanism designed to guide or control aircraft involved in flight operations.

**Air Route Traffic Control Center (ARTCC)** - FAA-manned facility established to provide air traffic control services to aircraft operating in controlled airspace, en route between terminal areas. Although designed to handle aircraft operating under IFR conditions, some advisory services

are provided to participating VFR aircraft when controller work loads permit.

**Air Taxi** - An air carrier certificated in accordance with FAR Part 135 and authorized to provide, on demand, public transportation of persons and property by aircraft. Air taxi operators generally operate small aircraft "for hire" for specific trips.

**Air Traffic Hub** - The FAA groups U.S. commercial airports into four hub classes – Large Hubs, Medium Hubs, Small Hubs, and Non-Hubs – based on their level of passenger enplanements. Hub designations are determined by the following criteria:

1. Large Hub: 1.00 percent
2. Medium Hub: 0.25 percent to 0.99 percent (cont.)
3. Small Hub: 0.05 percent to 0.249 percent
4. Nonhub: Less than 0.05 percent.

**Aircraft Approach Category** - A grouping of aircraft based on a speed of 1.3 times the stall speed in the landing configuration at maximum gross landing weight. The aircraft approach categories are:

- Category A - Speed less than 91 knots;
- Category B - Speed 91 knots or more but less than 121 knots;
- Category C - Speed 121 knots or more but less than 141 knots;
- Category D - Speed 141 knots or more but less than 166 knots; and,
- Category E - Speed 166 knots or more.

**Aircraft Mix** - The classification of aircraft into groups which are similar in size, noise, and operational characteristics.

**Aircraft Operations** - The airborne movement of aircraft. There are two types of operations: local and itinerant defined as follows:

1. Local Operations are performed by aircraft which:
  - (a) operate in the local traffic pattern or within sight of the airport;
  - (b) are known to be departing for or arriving from a local practice area.
2. Itinerant operations are all others.

**Airfield** - A defined area on land or water including any buildings, installations, and equipment intended to be used either wholly or in part for the arrival, departure or movement of aircraft.

**Airplane Design Group** - A grouping of airplanes based on wingspan. The groups are:

- Group I: Up to, but not including 49 feet
- Group II: 49 feet up to, but not including 79 feet
- Group III: 79 feet up to, but not including 118 feet
- Group IV: 118 feet up to, but not including 171 feet
- Group V: 171 feet up to, but not including 214 feet
- Group VI: 214 feet up to, but not including 262 feet.

**Airport Layout Plan (ALP)** - An FAA required map of an airport depicting existing and proposed facilities and uses, with clearance and dimensional information showing compliance with applicable standards.

**Airport Master Plan** – A plan for the short-, medium-, and long-term development of an airport.

**Airport Reference Code (ARC)** - A coding system used to relate airport design criteria to the operational and physical characteristics of the airplanes intended to operate at the airport. It is a combination of the aircraft approach category and the airplane design group.

**Airport Service Area** - The geographic area that generates demand for aviation services at an airport.

**Airport Surveillance Radar (ASR)** - Radar providing position of aircraft by azimuth and range data without elevation data. It is designed for a range of approximately 50 miles.

**Airside** - That portion of the airport facility where aircraft movements take place, airline operations areas, and areas that directly serve the aircraft (taxiway, runway, maintenance, and fueling areas). Also called the airport operations area.

**Airspace** - The area above the ground in which aircraft travel. It is divided into corridors, routes, and restricted zones for the control and safety of aircraft.

**All-Cargo Carrier** - An air carrier certificated in accordance with FAR Part 121 to provide scheduled air freight, express, and mail transportation over specific routes, as well as the conduct of nonscheduled operations that may include passengers.

**Alternate Airport** - An airport that could function as a complement or alternative to a particular constrained airport, accommodating a portion of the excess demand at the constrained airport.

**Annual Service Volume (ASV)** - A reasonable estimate of an airport's annual capacity. It accounts for differences in runway use, aircraft mix, weather conditions, etc., that would be encountered over a year's time.

**Approach End of Runway** - The near end of the runway as viewed from the cockpit of a landing aircraft.

**Approach Surface** - An imaginary surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of the runway based upon the planned approach. The inner edge of the approach surface is the same width as the primary surface and expands uniformly depending upon the planned approach.

**Approved Instrument Approach** - Instrument approach meeting the design requirements, equipment specifications, and accuracies, as determined by periodic FAA flight checks, and which are approved for general use and publication by the FAA.

**Apron** - A defined area where aircraft are maneuvered and parked and where activities associated with the handling of flights can be carried out.

**AVGAS** - Aviation gasoline. Fuel used in reciprocating (piston) aircraft engines. Avgas is manufactured in the following grades; 80/87, 100LL, 100/130, and 115/145.

**Aviation Planning Council** – A ten-member Council appointed by the Governor of Washington State pursuant to legislation adopted in 2005 as Engrossed Substitute Senate Bill (ESSB) 5121.

**Automated Surface Observing System (ASOS)**. The ASOS is the primary surface weather observation system of the U.S. The ASOS has more sophisticated capabilities than the AWOS. The observation system of the U.S. The ASOS has more sophisticated capabilities than the AWOS. The ASOS provides continuous minute-by-minute observations and performs the basic observing functions necessary to generate a

Surface Aviation Observation (SAO) and other aviation weather information.

**Automated Weather Observing System (AWOS)** - Automated Weather Observing System (AWOS). This equipment automatically gathers weather data from various locations on an airport and transmits the information directly to pilots by means of computer-generated voice messages over a discrete frequency.

**Based Aircraft** - Aircraft stationed at an airport on an annual basis.

**Belly Cargo** - Freight which is carried in the hold below the main passenger deck.

**Capacity** - Level of activity that can be accommodated. The types of capacity analyzed in the system plan include:

**Airfield Capacity:** The theoretical maximum number of annual aircraft operations that can be accommodated by an airport's runway/taxiway system without incurring unacceptable levels of congestion or delay—known as the Annual Service Volume (ASV) of the airport

**Terminal Capacity:** Number of passengers that can be processed through an airport's terminal facilities in an hour during peak periods of activity while maintaining an acceptable level of customer service and convenience.

**Aircraft Storage Capacity:** The number of aircraft that can be stored in hangars and parked on aprons.

**Airspace Capacity:** The ability of available airspace to safely accommodate aircraft in transit between airports.

**Capital Improvement Program (CIP)** - A scheduled of planned projects and costs, often prepared and adopted by public agencies.

**Ceiling** - The height above the ground of the base of the lowest layer of clouds or obscuring phenomena aloft that is reported as broken or overcast and not classified as scattered, thin, or partial. Ceiling Exhibits in aviation weather reports may be determined as measured, estimated, or indefinite.

**Charter** - A nonscheduled flight offered by either a supplemental or certificated air carrier.

**Circling Approach** - An instrument approach procedure in which an aircraft executes the published instrument approach to one runway, the

maneuvers visually to land on a different runway. Circling approaches are also used at airports that have published instrument approaches with a final approach course that is not aligned within 30 degrees of any runway.

**Clearway** - A clearway is an area available for the continuation of the take-off operation which is above a clearly defined area connected to and extending beyond the end of the runway. The area over which the clearway lies need not be suitable for stopping aircraft in the event of an aborted take-off. Clearways are applicable only in the take-off operations of turbine-engined aircraft.

**Commercial Air Carriers** - An air carrier certificated in accordance with FAR Parts 121 or 127 to conduct scheduled services on specified routes. These air carriers may also provide nonscheduled or charter services as a secondary operation. Four carrier groupings have been designated for statistical and financial data aggregation and analysis:

1. Majors: Air carriers with annual operating revenues greater than \$1 billion.
2. Nationals: Air carriers with annual operating revenues of between \$100 million and \$1 billion.
3. Large Regionals: Those carriers whose revenues are between \$10 million and \$99,999,999.
4. Medium Regionals: Air carriers with annual revenues less than \$10 million.

**Commodity** -A commodity is something that is relatively easily traded, that can be physically delivered, and that can be stored for a reasonable period of time.

**Commuter Air Carrier** - An air carrier certificated in accordance with FAR Part 135 which operates aircraft with a maximum of 60 seats, and provides at least five scheduled round trips per week between two or more points, or carries mail.

**Commuter/Air Taxi Operations** - Those arrivals and departures performed by air carriers certificated in accordance with FAR Part 135.

**Control Tower** - A central operations facility in the terminal air traffic control system consisting of a tower cab structure using air/ground communications and/or radar, visual signaling, and other devices to provide safe and expeditious movement of air traffic.

**Controlled Airspace** - Airspace designated as continental control area, control area, control zone, or transition area within which some or all aircraft may be subject to air traffic control.

**Critical Aircraft** - The aircraft which controls one or more design items based on wingspan, approach speed and/or maximum certificated take off weight. The same aircraft may not be critical to all design items.

**dba** - Decibels measured on the A-weighted scale to factor out anomalies.

**Decibel (dB)** - The standard unit of noise measurement relating to a logarithm scale in which 10 units represents a doubling of acoustic energy.

**Declared Distances** - The distances the airport owner declares available and suitable for satisfying an airplane's take-off distance, accelerated-stop distance, and landing distance requirements. The distances are:

**Take-off run available (TORA)** - The runway length declared available and suitable for the ground run of an airplane taking off.

**Take-off distance available (TODA)** - The TORA plus the length of any remaining runway and/or clearway (CWY) beyond the far end of the TORA.

**Accelerate-stop distance available (ASDA)** - The runway plus stopway (SWY) length declared available and suitable for the acceleration and deceleration of an airplane aborting take-off.

**Landing distance available (LDA)** - The runway length declared available and suitable for a landing airplane.

**Demand** - Level of activity that needs to be accommodated.

**Demand Management** - The art or science of controlling demand as a strategy to avoid congestion.

**Design Hour** - The design hour is an hour close to the peak but not the absolute peak, which is used for airport planning and design purposes. It is usually the peak hour of the average day of the peak month.

**Displaced Threshold** - Actual touchdown point on specific runways designated due to obstructions which make it impossible to use the actual physical runway end.

**Distance Measuring Equipment (DME)** - An airborne instrument which indicates the distance the aircraft is from a fixed point, usually a VOR station.

**Effective Runway Gradient** - The maximum difference between runway centerline elevations divided by the runway length, expressed as a percentage.

**Environmental Assessment (EA)** - A report prepared under the National Environmental Policy Act (NEPA) analyzing the potential environmental impacts of a federally funded project.

**Environmental Impact Statement (EIS)** - A report prepared under NEPA fully analyzing the potential significant environmental impacts of a federally funded project.

**EAS** - The Essential Air Service program administered by the U.S. Department of Transportation is designed to ensure that small communities that were served by one or more air carriers prior to airline deregulation would retain a minimum level of scheduled airline service, even if such service requires the payment of subsidy.

**EPA** - The United States Environmental Protection Agency.

**ESSB (Engrossed Substitute Senate Bill) 5121** – Legislation signed into law by the governor of Washington State in 2005. The bill authorized a statewide long-term air transportation planning study for general aviation and commercial service airports in Washington State, with a primary focus on commercial aviation.

**FAR Part 77** - Federal Aviation Regulations which establish standards for determining obstructions in navigable airspace.

**Federal Aviation Administration (FAA)** - A branch of the U.S. Department of Transportation responsible for the regulation of all civil aviation activities.

**Fixed Base Operator (FBO)** - An individual or company located at an airport providing commercial general aviation services.

**Final Approach** - The flight path of an aircraft which is inbound to the airport on an approved final instrument approach course, beginning at the point of interception of that course and extending to the airport or the point where circling for landing or missed approach is executed.

**Fixed Wing** - For the purposes of this report, any aircraft not considered rotorcraft.

**Flight Plan** - A description or outline of a planned flight which a pilot submits to the FAA, usually through a Flight Service Station.

**Flight Service Station (FSS)** - Air traffic facility operated by the FAA to provide flight service assistance such as pilot briefing, en route communications, search and rescue assistance and weather information.

**General Aviation** - All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire. General aviation accounts for the majority of aviation activity and encompasses a wide range of private and commercial purposes. General aviation aircraft can be of almost any size or type, ranging from gliders to large jets.

**Global Positioning System (GPS)** - GPS uses a group of many satellites orbiting the earth to determine the position of users on or above the earth's surface. This system will provide at least non precision approach capability to any airport having published instrument approach procedures.

**Incompatible Development** – Development that should not be near an airport because of its sensitivity to aircraft noise or because it creates a potential hazard to aviation safety, due to height, glare or smoke production, interference with navigation and communication equipment, or attraction of wildlife.

**Instrument Flight Rules (IFR)** - These rules govern the procedures for conducting instrument flight. Pilots are required to follow these rules when operating in controlled airspace with visibility of less than three miles and/or ceiling lower than 1,000 feet.

**Instrument Landing System (ILS)** - ILS is designed to provide an exact approach path for alignment and descent of aircraft. Generally consists of a localizer, glide slope, outer marker, middle marker, and approach lights. This type of precision instrument system is being replaced by Microwave Landing Systems (MLS).

**Instrument Runway** - A runway equipped with electronic and visual navigation aids for which a precision or non precision approach procedure having straight-in landing minimums has been approved.

**Itinerant Operation** - All aircraft operations at an airport other than local.

**Jet Capable** – For the purpose of assessing the Washington State Regional Service Airport Classification, an airport with a runway at least 4,000 feet long.

**Land Use Encroachment** – Incompatible development located too close to an airport..

**Landing Area** - That part of the movement area intended for the landing and takeoff of aircraft.

**Leakage** - Refers to passengers that travel outside their market area to access airline or other services.

**Load Factor** -The ratio of revenue passenger miles to available seat miles of a particular flight.

**Local Operation** - Aircraft operation in the traffic pattern or within sight of the tower, or aircraft known to be departing or arriving from flight in local practice areas, or aircraft executing practice instrument approaches at the airport.

**Low-Cost Carrier (LCC)** - an airline that offers generally low fares in exchange for eliminating many traditional passenger services.

**Medium-Intensity Approach Lighting (MALSR)** -This system includes runway alignment indicator lights. An airport lighting facility which provides visual guidance to landing aircraft.

**Microwave Landing System (MLS)** - An instrument landing system operating in the microwave spectrum which provides lateral and vertical guidance to aircraft with compatible equipment.

**Minimums** - Weather condition requirements established for a particular operation or type of operation.

**Movement Area** - The runways, taxiways and other areas of the airport used for taxiing, takeoff and landing of aircraft, exclusive of loading ramps and parking areas.

**National Plan of Integrated Airport Systems (NPIAS)** - The National Plan of Integrated Airport Systems (NPIAS) identifies more than 3,300 airports that are significant to national air transportation and thus eligible to receive Federal grants under the Airport Improvement Program (AIP). It also includes estimates of the amount of AIP money needed to fund

infrastructure development projects that will bring these airports up to current design standards and add capacity to congested airports. FAA is required to provide Congress with a 5-year estimate of AIP eligible development every 2 years. The NPIAS comprises all commercial service airports, all reliever airports, and selected general aviation airports.

**Navigational Aid (NAVAID)** - Any visual or electronic device airborne or on the surface which provides point to point guidance information or position data to aircraft in flight.

**Non-Directional Beacon (NDB)** - Transmits a signal on which a pilot may "home" using equipment installed in the aircraft.

**Non precision Instrument Approach** - An instrument approach procedure with only horizontal guidance or area-type navigational guidance for straight-in approaches.

**Non-NPIAS** – Public use airports that are within the Washington Aviation System, but are not identified within National Plan of Integrated Airport System.

**Object Free Area (OFA)** - A two dimensional ground area surrounding runways, taxiways, and taxilanes which is clear of objects except those whose location is fixed by function.

**Object Free Zone (OFZ)** - The airspace defined by the runway OFZ and, as appropriate, the inner- approach OFZ and the inner-transitional OFZ, which is clear of object penetrations other than frangible NAVAIDS.

**Runway OFZ** - The airspace above a surface centered runway centerline.

**Inner-approach OFZ** - The airspace above a surface centered on the extended runway centerline. It applies to runways with an approach lighting system.

**Inner-transitional OFZ** - The airspace above the surfaces located on the outer edges of the runway OFZ and the inner-approach OFZ. It applies to precision instrument runways.

**Obstruction** – A natural or manmade object, such as a tree, hill, building, or tower, which penetrates an imaginary surface described in Title 14 of the Code of Federal Regulations, Part 77, Objects Affecting Air Navigation.

**Pavement Condition Index (PCI)** - Numerical index between 0 and 100 used to indicate the condition of a roadway.

**Peak Hour** - Part of the day with the busiest traffic.

**Peaking Factor** - The factor applied to the annual operations to determine the peak hour activity.

**Performance Objective** - Desired facilities, services or policies provided at an airport. Used in conjunction with the state airport classification system for performance measurement.

**Precision Approach Path Indicator (PAPI)** - Provides visual approach slope guidance to aircraft during approach to landing by radiating a directional pattern of high intensity focused light beams.

**Precision Instrument Approach** - An instrument approach procedure in which electronic vertical and horizontal guidance is provided, e.g. ILS and MLS.

**Primary Surface** - A surface longitudinally centered on the runway, extending 200 feet beyond each end of the runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.

**Residential Airpark** - Also known as a "fly-in community." An airport that integrates housing into the design.

**Rotorcraft (e.g. Helicopter)** - A heavier-than-air aircraft supported in flight by the reactions of the air on one or more power-driven rotors on substantially vertical axis.

**RPM** - Revenue passenger mile. A measure of airline passenger traffic corresponding to the transport of one revenue passenger for one mile.

**RTPO** - Regional Transportation Planning Organizations, authorized by Chapter 47.80 RCW.

**Runway End Identifier Lights (REIL)** - These lights aid in early identification of the approach end of the runway.

**Runway Protection Zone (RPZ)** - The ground area under the approach surface which extends from the primary surface to a point where the approach surface is fifty feet above the ground. This was formerly known as the clear zone.

**Runway Safety Area (RSA)** - A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.

**Seaplane** – A fixed wing aircraft capable of taking off and landing in water.

**Segmented Circle** - A system of visual indicators designed to provide traffic pattern information at airports without operating control towers.

**Special Emphasis Regions** – Four regions that were specifically identified within Engrossed Substitute Senate Bill (ESSB) 5121 legislation authorized by the governor in 2005. These regions include Southwest Region, Spokane Region, TriCities Region, and the Puget Sound Region.

**Study Team** – Simat, Helliesen & Eichner, Inc. (SH&E), URS Corp., WHPacific (WHP), Cambridge Systematics, Inc., and PRR.

**Threshold Siting Surface** - Utilized to locate runway threshold in order to meet approach obstacle clearance requirements. The dimensions of TSS vary with the type of aircraft operations, the approach visibility minimums, and the types of navigational instrumentation.

**Super Unicom** - The Super Unicom is FAA certified for altimeter settings among other weather data, which is required for GPS approach implementation.

**Tiedown** - An apparatus used to secure an aircraft while parked on the apron.

**Touch and Go Operation** - Practice flight performed by a landing touch down and continuous take off without stopping or exiting the runway.

**Visual Approach Slope Indicator (VASI)** - A system of lights on the side of an airport runway that provides visual descent guidance information during the approach to a runway.

**Visual Flight Rules (VFR)** - Flight rules by which aircraft are operated by visual reference to the ground. Weather conditions for flying under these rules must include a ceiling greater than 1,000 feet, three-miles visibility and standard cloud clearance.

**Washington Aviation System Plan (WASP)** - The state-interest component of the statewide multimodal transportation plan that fulfill the statewide aviation planning requirements of the federal government, coordinate statewide aviation planning, and identify public use and state airports.

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