

2 Purpose and Need

The purpose of the proposed action is to bring the Airport into compliance with FAA design standards for the Airport's existing airport reference code (ARC) of A-I (small), while complying with Federal and State environmental regulations. The proposed action is needed to protect airport operation areas and keep them free from obstructions to ensure the safe operation of the existing and future fleet mix. From a local perspective, the proposed action is needed to maintain the Airport as an essential public facility and economic resource for eastern Clark County. Airports are classified according to ARC, which takes into account aircraft wingspan and approach speeds. The ARC designation of A-I (small) represents aircraft with approach speeds under 91 knots and wingspans up to 49 feet and a maximum weight of 12,500 pounds.

The future ARC for the Airport is B-I (small) and as such, the proposed action will be designed to that standard. There are no differences in design standards between A-I (small) and B-I (small), only that B-I (small) allows for aircraft with approach speeds between 91-121 knots. **Therefore, the size of the aircraft that can utilize this airport does not change.** The existing conditions at the Airport are shown in **Exhibit 2A**¹.

The FAA has identified several existing deficiencies to design standards that need to be addressed. Design standards are meant to enhance safety at Airports. These include the runway/taxiway centerline separation, runway width, runway length, runway safety area (RSA), object free area (OFA), runway protection zone (RPZ), and Part 77 *Imaginary Surfaces* as shown in **Table 2A**. If the airport accepts FAA funding, the design standards for all safety items must be met.

¹ The Airport Layout Plan shows future acquisition of the mobile home park. Acquisition of the mobile home park is not a component of the proposed action and is not being pursued by the Port of Camas-Washougal at this time.

Table 2A. FAA Design Standards²

FAA Design Standard	Definition	Does Grove Field meet the FAA Criteria?
Runway/Taxiway Centerline Separation	The horizontal distance between the runway centerline and the taxiway centerline.	No
Runway Width	Width of the runway usable for aircraft operations	No
Runway Length	Usable length of the runway for aircraft operations	No
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 an excursion from the runway.	No
Runway Object Free Area (OFA)	An area on the ground centered on the runway centerline provided to enhance the safety of aircraft operations. No above-ground objects are permitted in the OFA, except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.	No
Runway Protection Zone (RPZ)	An area off the runway end to enhance the protection of people and property on the ground. The existence of Delp Road on the west end and the Oak Meadows Mobile Home Park on the east end are not consistent with RPZ recommendations.	Yes; however, roads within the RPZ are discouraged by the FAA.
Part 77 Imaginary Surfaces	Part 77 surfaces are intended to establish standards for determining obstructions in navigable airspace that include the following surfaces: primary, transitional, approach, horizontal and conical.	No, penetrations to the transitional and approach surfaces exist.

The airport improvements are needed because the airport has these deficiencies:

- *Runway/Taxiway Centerline Separation:* The standard separation is 150 feet, while the existing condition varies from 75 feet to 125 feet
- *Runway width:* The standard is 60 feet and the existing condition is 40 feet.
- *Runway length:* The FAA’s recommended runway length to accommodate 95% of small aircraft with less than ten passenger seats is 3,070 feet. Currently, available runway length at the Airport is 2,620 feet with threshold displacements at each end. Only 1,804

² Per FAA Advisory Circular 150/5300-13.

feet of runway is available at night because the displaced thresholds are not lit. A displaced threshold marks the point where all normal landing operations are permitted; the area behind the displaced threshold is available for taxiing, takeoff and landing rollout.

- *RSA penetration:* The RSA width is currently deficient by 40 feet; the RSA length is deficient by 240 feet and 130 feet at the ends of Runway 7 and Runway 25, respectively.
- *OFA penetration:* Delp Road and a number of trees penetrate the runway OFA. The standard OFA width is 250 feet and currently the OFA is only 120 feet wide. The OFA length beyond the runway ends is 240 feet. The existing Runway 25 OFA is only 110 feet, while the Runway 7 OFA is currently only 100 feet (**Exhibit 2B**).
- *RPZ penetration:* The Port does not own or control, through an avigation easement, the RPZ property to either Runway 7 or Runway 25.
- *Part 77 Imaginary Surfaces:* Penetrations to the transitional and approach surfaces exist to the north, south and east of the Airport. Some of the penetrations (vegetation) exists on private property. The Port will work with the property owners individually to secure avigation easements to remove the penetrations.

2.1 Grove Field Airport's Economic Vision

The Airport is well established in Clark County, a growing area and home to about 400,000 residents. The airport currently has 79 hangars, 21 tie-down spaces, a modernized fueling facility and security, but operates below FAA minimum safety standards and generally lacks up-to-date facilities. The Airport has no full-time, well-equipped Fixed Base Operator (FBO) services and no direct supplies or sales of aviation products available. Pilots based at the Airport must take their aircraft to better-equipped facilities when repairs, maintenance or upgrades are needed. Moreover, twice in the last 25 years, serious proposals to site and build new airports in the county were not supported.

The Airport is not envisioned to be a commercial-scale airport. The geography, community dynamics and size of the regional general aviation market limits what is feasible or practicable at this site. The Port has strategically acquired and rezoned adjacent lands in past years, but modest annual revenues do not allow the substantial funding for necessary safety improvements and modernization over a reasonable timeframe. There is interest from private developers to build additional hangars, but the permanent placing of many more aircraft at an airport in need of safety improvements seems imprudent.

The ability to maximize the economic potential of the Airport is dependent on whether pilots will want to continue to base their aircraft there, or otherwise regularly use the field. Short and narrow runways, misaligned taxiways, displaced thresholds, aging hangars, outdated lighting and inadequate facilities are all negative factors to pilots

looking for a place to base their aircraft. Aviation-related businesses and pilots are attracted to stable, modernized airports that conform to FAA safety standards.

The Port's opportunity for economic development over a reasonable timeframe is directly tied to investments made locally in partnership with the FAA and WSDOT-Aviation. The first critical step is implementation of the Airport Layout Plan.

The target aircraft market, A-I (small) & B-I (small), is critically underserved in Clark County and there are no plans to create any new general aviation or commercial airports. There are hundreds of displaced aircraft in the area due to airport closures and residential land use decisions over the past 30 years. These displaced aircraft have moved to other airports, often in Oregon, which significantly adds inconvenience and cost to owners. Local pilots will certainly prefer to have their planes based at a local airport. The Airport is ideally located to meet local demand and has already acquired much of the necessary land to serve this displaced general aviation market if it can *first* become safer and more user-friendly.

The Port-owned land directly adjacent to the operational area is heavily treed; trees removed for airport safety can yield land for new hangar development and modern FBO facilities. The ability to attract existing displaced local pilots and future pilots will generate demand for modern FBO services and other beneficial aviation-related facilities to pilots and other local businesses.

These long-term positive market factors, combined with focused investment, will stabilize the Airport in the area and allow the Port to develop new small business opportunities, aviation jobs, and related indirect and induced economic development for the local communities.

The Airport enjoys a unique advantage: it is the only airport in the region that is not in the Columbia River's 100-year floodplain. The City of Camas, Clark County, WSDOT-Aviation and the FAA have all acknowledged the Airport as an Essential Public Facility and the geographic desirability of the Airport for emergency readiness capability. At 420' MSL, the Airport is a natural base for emergency communications and flood or other disaster response capability for the region and is currently used for Life Flight operations.

There is an established strong interest in general aviation with students in the community. For many years, the local pilot group, CWAA (Camas-Washougal Aviation Association), has funded up to six Embry-Riddle aviation scholarships annually to local students who have a desire to pursue commercial flight-related careers.

Only about 350 communities in the United States have scheduled air service; for the remainder, general aviation is the only option for the movement of persons or cargo by air. General aviation airports provide specialized air services, such as air ambulance and traffic patrol, to communities that do not have scheduled air service. Without modernized, well-maintained airports compliant with safety standards, these services

would be limited at best. Whether it is fixed-based operators, charter services, fuel suppliers, aircraft maintenance, emergency services, recreational flying or flight training providers, general aviation contributes to the economic development of communities throughout America. Their tax dollars (property tax, sales tax, employment tax) are sustainable revenue sources.

The long history of the Airport combined with timely responsible investments will provide increased public safety, economic development and maintain a vital public resource for the region's future. The Proposed Action is a critical step in securing the Airport's future role in the community.

2.2 Requested Federal Action

The requested Federal Action is the approval of FAA funding for the construction of the proposed improvements.

2.3 Timeframe of the Proposed Action

The Proposed Action is anticipated to be constructed in phases, over two to four years, depending on funding availability. Tree removal and the Delp Road relocation will occur during the first construction season. The runway relocation and extension will occur in the second phase, when funding is available.

2.4 Proposed Action

The proposed action is further described in Chapter 3, *Alternatives*. Three build alternatives address the deficiencies of runway/taxiway centerline separation, runway width, runway length, and penetrations to the OFA, RSA and RPZ. The difference in the alternatives is in how Delp Road is relocated to address runway lengthening and penetration of the OFA by Delp Road. Specifically, the alternatives, with the exception of the No Action alternative, will:

- Relocate the runway to reach a 150-foot runway centerline / taxiway centerline separation.
- Extend the runway to 3,070 feet; will be designed to meet OFA and RSA design standards. (Alternative 2 does not include runway extension.)
- Widen the runway to 60 feet.
- Build a southern parallel taxiway, commensurate with runway extension.
- Relocate Delp Road outside of the OFA.
- Purchase land west of the Airport to ensure land use compatibility within the RPZ (approx. 5 acres).
- Clear obstructions (vegetation) in the Airport's OFA and Part 77 surfaces.

FAA will make an environmental finding based upon the analysis in this document and the comments received from the public on the Draft EA.