Chapter 8 – Airport Land Use Compatibility





Chapter 8 – Airport Land Use Compatibility



Introduction

This chapter describes land use associated with Bowers Field and its surroundings, including current comprehensive plan land use designations, zoning, and airport overlay zoning for each local jurisdiction.

Government Roles in Airport Land Use

FEDERAL

Since land use regulation is a local responsibility, the federal role in community land use is limited. The Federal Aviation Administration (FAA) has a technical advisory role based on its interest in protecting the national airspace system, including the airspace associated with individual airports.

Under 14 Code of Federal Regulations (CFR), Part 77, the FAA has the authority to review proposed construction through its 7460-1 (Notice of Construction or Alteration) process. The FAA review is advisory and addresses compatibility both on and off airport based on the potential for creating a "hazard to air navigation" associated with obstructions/penetrations in the defined airspace. FAA airspace reviews include FAR Part 77 surfaces; Terminal Instrument Procedures (TERPS) surfaces; visual runway traffic patterns; and protected surfaces for visual navigation aid and facilities (e.g., VASI, PAPI, AWOS, etc.). The FAA may also review the proposed action for consistency with the current FAA-approved Airport Layout Plan (ALP), where applicable. Based on its review, the FAA will issue a letter for the consideration of local authorities either objecting or not objecting to the proposal. It is important to note that the FAA analysis is based on an obstruction and is not intended to address land use compatibility in terms of noise exposure or proximity to an airport or runway.





The FAA recommends that local jurisdictions include the following language in their development codes: "Nothing in this chapter shall diminish the responsibility of project proponents to submit a Notice of Construction or Alteration to the Federal Aviation Administration if required in accordance with Federal Aviation Regulations Part 77, "Objects Affecting Navigable Airspace."

It is noted that when a federally-obligated airport (NPIAS) sponsor is also the local land use authority, local land use actions are reviewed for compliance with the FAA grant assurances intended to protect airports from incompatible land uses. The FAA effectively regulates on-airport land use through approval of the Airport Layout Plan (ALP).

FAR Part 150 (Airport Noise Compatibility Planning) provides guidance for land use compatibility around airports. The 1990 <u>Airport Noise and Capacity Act (ANCA)</u> defines federal policy on the regulation of airport noise (operating curfews, aircraft restrictions, etc.), with the intent of standardizing noise controls throughout the national system.

STATE

Washington State's goals for land use planning are defined by the Growth Management Act (GMA), adopted by the Washington State Legislature in 1990. In 1996, the GMA was amended to assist in preserving the social and economic benefits of aviation. The GMA requires towns, cities, and counties to address airport land use compatibility, and identifies airports as "essential public facilities" (EPF).

The following summary developed by the Washington Department of Transportation – Aviation Division (WSDOT Aviation) explains the intent of GMA, as codified in Revised Code of Washington (RCW) Chapter 36.70:

"RCW 36.70.547 and RCW 36.70A.510 require all cities and counties to adopt comprehensive plan goals, policies, and regulations to discourage development of incompatible land uses adjacent to public use airports. Local jurisdictions must consult with aviation interests, including WSDOT Aviation, when adopting comprehensive plan amendments to address airport land use compatibility during GMA updates, subject to the schedule designated by state law."

WSDOT Aviation Division reviews comprehensive plans and regulations; provides technical assistance on aviation issues; and provides land use compatibility guidelines to help local jurisdictions protect airports from incompatible uses. The Aviation Division recommends that local jurisdictions consider three primary areas in determining potential land use compatibility: height hazards, noise, and safety. The specific measures used by each jurisdiction are locally determined based on the guidelines provided by the Aviation Division. Although local compliance with RCW 36.70 is required, the means and degree to which local jurisdictions (cities and counties) achieve compliance are not mandated.

An airport's surrounding land use may extend beyond the immediate jurisdiction to include unincorporated county land areas or nearby municipalities. It is critical that effective communication and coordination occur between the airport owner and all local jurisdictions since the responsibility for land use controls may involve more than one jurisdiction. WSDOT Aviation provides airspace protection and land use compatibility guidance for local jurisdictions, including several best practices, which are summarized in Table 8-1.





TABLE 8-1: SUMMARY OF WSDOT AVIATION RECOMMENDED LAND USE MEASURES

RECOMMENDED AIRPORT PROTECTION MEASURES FOR LOCAL JURISDICTIONS

Airspace Protection. Airspace protection can be accomplished by:

- Incorporating FAR Part 77 airspace surface layers into GIS mapping to automatically flag land parcels located beneath a defined surface to determine whether a new development will impact the airspace.
- Requiring that applicants for all proposed development located within the boundaries of the defined FAR Part 77 airspace surfaces submit FAA Form 7460-1 Notice of Proposed Construction or Alternation and receive a "no hazard" finding from FAA, prior to issuing local permits.

Land Use Controls. Consider adding or modifying language to the Comprehensive Plan to strengthen airport protection:

- Establishing the airport as an Essential Public Facility "EPF", WAC 365-196-550 to protect the airport and surrounding areas. Cities and counties should create their own lists of EPFs to include the minimum set forth in RCW 36.70A.200;
- Include the airport in the Transportation System Inventory;
- Recognize the significance of the airport for economic development;
- Create policies that discourage the development of incompatible land uses adjacent to the airport.

LOCAL

The role of local government is to ensure their comprehensive plans, goals, policies, and development regulations discourage incompatible land uses near airports. As noted earlier, these rules are codified in RCW 36.70.547 and 36.70A.510 for all local jurisdictions in Washington.

Land Use Jurisdiction

Bowers Field Airport is located within the City of Ellensburg Urban Growth Area (UGA), but outside the Ellensburg city limits. The southeast section of the airport abuts the Ellensburg city limits.

The airport and lands immediately surrounding the airport on all sides, except the southwest section, are under Kittitas County jurisdiction. This includes unincorporated county lands and areas located within the Ellensburg UGA, but outside the city limits. The City of Ellensburg has land use authority for areas inside the city limits, which includes portions of the airport's FAR Part 77 airspace and airport traffic patterns.

Kittitas County and City of Ellensburg land use, zoning, and airport overlay zoning for Bowers Field Airport are summarized in the following sections. See **Appendix D** for locally-adopted airport-related ordinances and related land use elements.

KITTITAS COUNTY

Figure 8-1 depicts current Kittitas County Comprehensive Plan land use designations in the vicinity of Bowers Field Airport and within the Ellensburg UGA. Table 8-2 summarizes airport goals, policies, and objectives (GPO) contained in the Kittitas County Comprehensive Plan.





Comprehensive Planning - Land Use

The current Kittitas County Comprehensive Plan was adopted in December 2016.¹The comprehensive plan is a policy document that defines long term planning for the county, which translates into specific development regulations and zoning. The primary focus of the Kittitas County Comprehensive Plan is on rural areas and the interface with expanding urban areas. In Kittitas County, five incorporated cities account for approximately 55 percent of county population, but represent less 1 percent of total land area.

The airport and adjacent areas located southwest and southeast of the airport are inside the Ellensburg UGA and have "Urban" comprehensive plan land use designations. The intent of the "Urban" land use designation is to provide effective development guidance that is consistent with the long-term expectations for incremental urban growth into adjacent rural areas. Kittitas County Comprehensive Plan **Section 2.3 (Urban Growth Areas)** notes "The areas included within the urban growth area boundaries are intended to urbanize and become annexed in the proceeding 20 years."

Areas located west, north and east of Bowers Field Airport are outside the Ellensburg UGA (unincorporated Kittitas County). The areas immediately adjacent to the airport and the UGA form a ring of **"Rural Residential"** land use, then transition into areas of **"Rural Working"** and **"Commercial Agriculture"** land use. These areas are intended to remain "rural" in nature with low development densities. Rural Working lands are generally intended to encourage farming, ranching and storage of agriculture products. Some commercial and industrial uses compatible with the rural environment and supporting agriculture and/or forest activities can be present. Rural Working areas often have low population densities with larger parcel sizes compared to Rural Residential areas.

Kittitas County Comprehensive Plan December 2016, Adopted by Ordinance No. 2016-023, Effective Date: December 6, 2016.



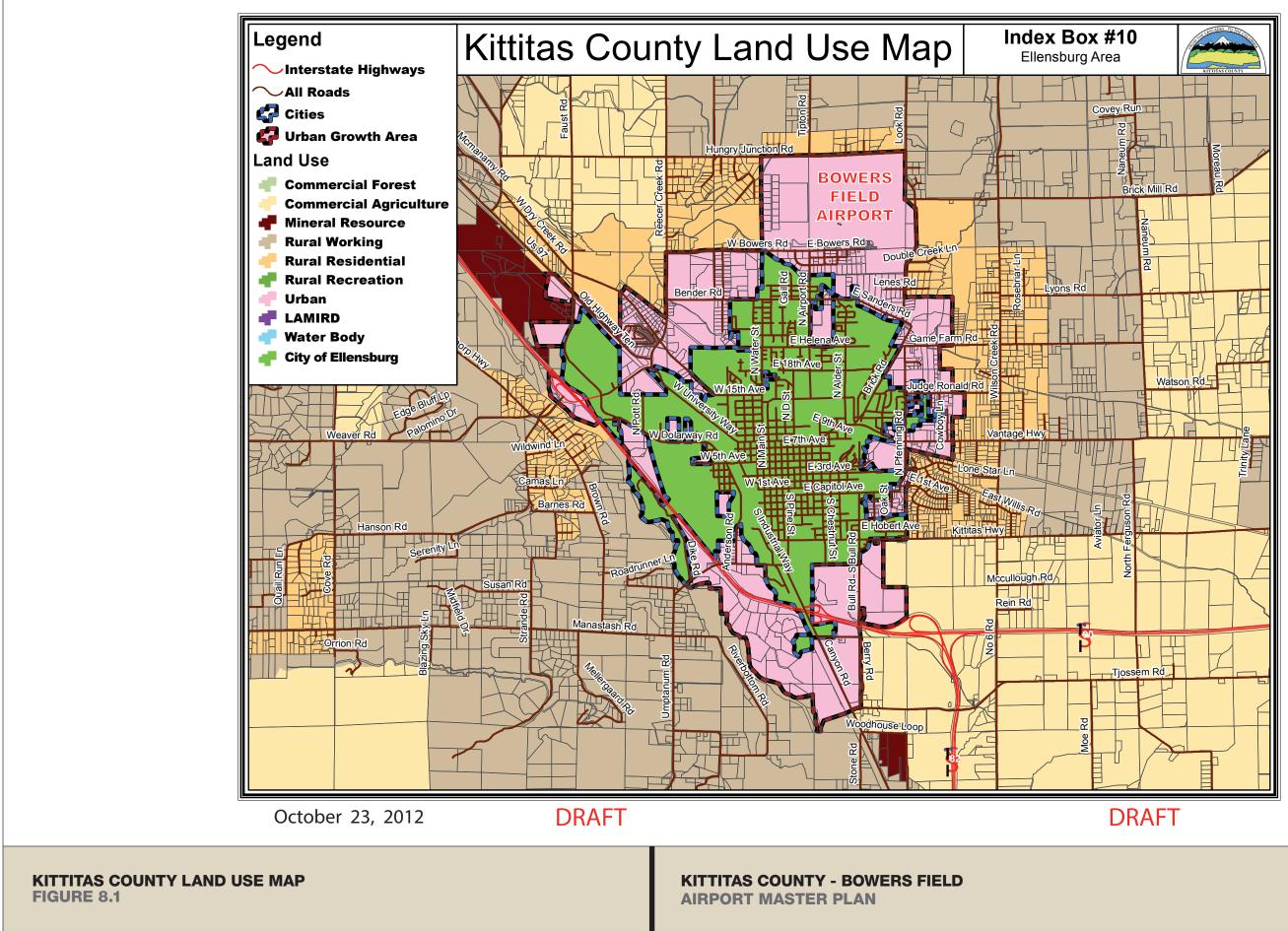






TABLE 8-2: KITTITAS COUNTY COMPREHENSIVE PLAN AIRPORT GOALS, POLICIES, AND OBJECTIVES (GPO)

CHAPTER TWO – LAND USE

Section 2.3.4 - Kittitas County Airport

- **GPO 2.46A** The County shall maintain an Airport Layout Plan for the Kittitas County Airport (Bowers Field) in conformance with the Federal Aviation Administration which provides for new height restrictions that will allow for precision landing approach. The area contained in the FAR Part 77 should designated as the Airport Overlay Zone.
- GPO 2.46B The County should consider aviation easements in the Airport Overlay Zone.
- **GPO 2.46C** The County should consider notifying all property owners within the Airport Overlay Zone of airport activities.
- GPO 2.46D The County should adopt the following safety zones within the Airport Overlay Zone:
 - o Inner Safety Zone
 - o Inner Turning Zone
 - Outer Safety Zone
 - Sideline Zone
 - o Traffic Pattern Zone
- **GPO 2.46E** All aviation related land uses should be considered acceptable in the area designated as "industrial" and provided that the FAA airport design criteria is met.
- **GPO 2.46F** The County should promote economic development and employment opportunities for the Airport Industrial Zone and Bowers Field Overlay Zone.
- **GPO 2.46G** The County should establish zoning standards which will insure that the industrial uses will not impact airborne aircraft because of height structures, smoke, glare, lights which shine upward, and radio transmissions, nor any water impoundments or sanitary landfills which would create hazards from waterfowl to airborne aircraft.
- **GPO 2.46H** The County should promote renewable energy developments and industries within the Bowers Field Overlay Zone.

Chapter Four – Transportation

Section 4.8 - Multi-Modal Transportation System, Arterial System, and System Maintenance

- GPO 4.15D To recognize air transport and airports as an important element.
- *GPO 4.15E* Recognize public-use airports as essential public facilities.
- **GPO 4.15F** Protect Kittitas County Airport (Bowers Field), Cle Elum Municipal, DeVere Field and Easton State airports from adjacent incompatible land uses and/or activities that could impact the present or future use of the airports as essential public facilities.
- **GPO 4.15G** A notice to title or disclosure statement should be required for new or substantial redevelopment of lots, buildings, structures, and activities located adjacent to public-use airports. The notice should indicate that the property is located adjacent to the airport and may experience low overhead flights, odor, vibrations, noise and other similar aviation impacts.
- **GPO 4.15H** Protect public-use airports from height hazards by developing a height overlay district what will prohibit buildings or structures from penetrating Federal Aviation Regulations (FAR) Part 77 "imaginary Surfaces."





Essential Public Facilities (EPF)

Kittitas County recognizes public use airports, including Bowers Field Airport, as Essential Public Facilities (EPF), in accordance with RCW 36.70A. The current countywide planning policies related to EPFs were adopted in July 2016 as part of the comprehensive plan update process.²

Airport Zoning

Bowers Field Airport is zoned "I-L - Light Industrial." I-L zoning is included among several implementing zones identified for "Urban" land use designations in the comprehensive plan. According to the Kittitas County Code (KCC) Title 17 Zoning, the I-L zone "is established to preserve areas for industrial and related uses of such a nature that they do not create serious problems of compatibility with other kinds of land uses and to protect such zones from encroachment by conflicting land uses."

KCC Chapter 17.15 Allowed Uses (Section 17.15.080 - Allowed uses in urban lands) includes "Airport" among eleven uses allowed under the "industrial" category of land use in the I-L zone. However, "Airport" is listed as a "conditional use" in the I-L zone, which would normally require approval of a conditional use permit by the county planning commission for routine airport-related development such as aircraft hangars. It appears that the binding site plan for Bowers Field and airport leases have been used in lieu of conditional use permits for approval of new hangar developments. Modifying the county code to recognize airport-related development in the I-L zone as an "outright permitted use" should be considered to ensure consistency when evaluating future proposed airport development.

Figure 8-2 depicts current Kittitas County zoning, including the Ellensburg UGA and city limits boundaries.

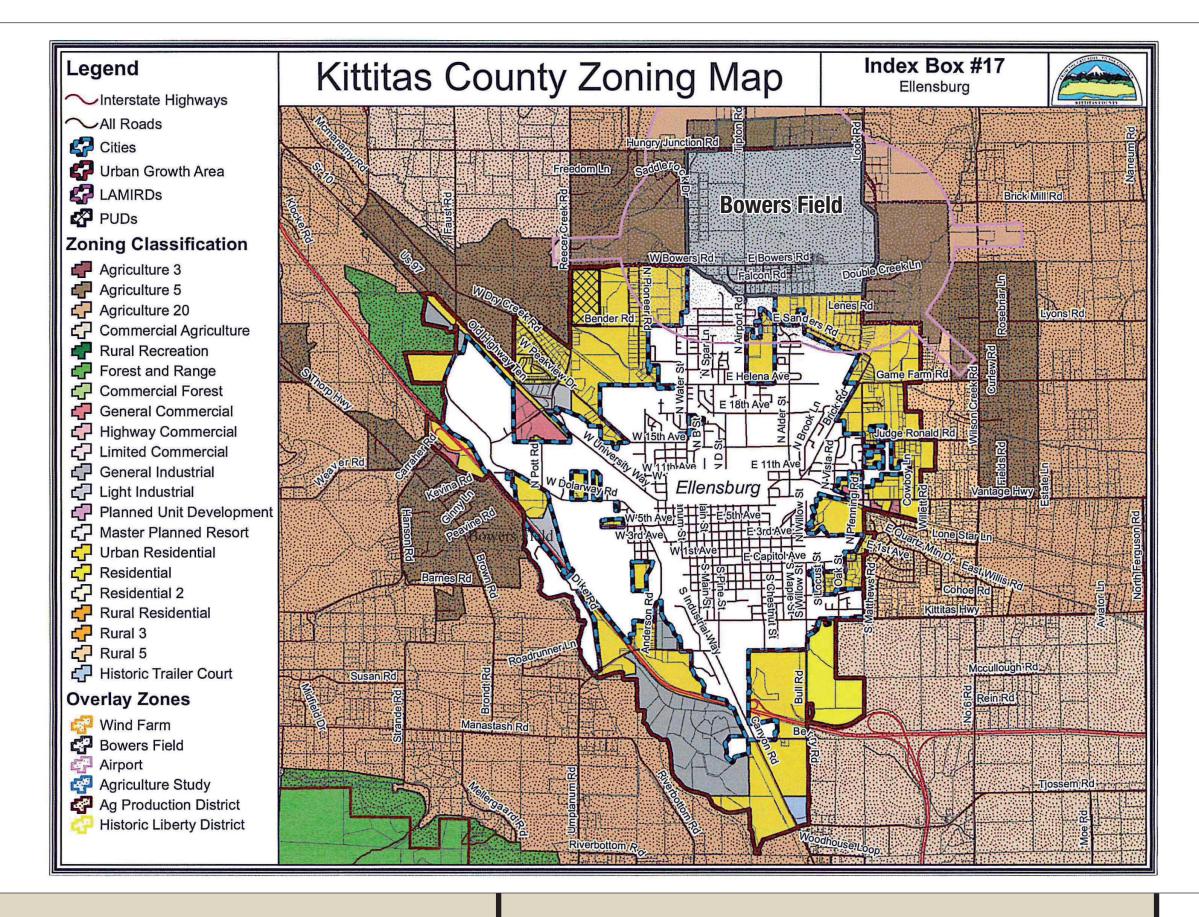
Airport Vicinity Zoning

As noted earlier, Kittitas County zoned lands in the vicinity of Bowers Field Airport include areas located inside and outside the Ellensburg UGA.

The UGA land areas located between the airport and northern boundary of the Ellensburg city limits are zoned "UR- Urban Residential." The UR zone has minimum lot sizes of 7,000 square feet for single family dwellings and 10,000 square feet for two-family dwellings. It is noted that a portion of these UR zoned lands are subject to the airport overlay zones adopted by Kittitas County and the City of Ellensburg, which applies more restrictive density limits than normally allowed in the underlying UR zone. The Bowers Field Airport Overlay zone is described later in this chapter.

² Kittitas County Comprehensive Plan Countywide Planning Policies, Adopted by Ordinance No. 2016-013, Effective Date: July 5, 2016





KITTITAS COUNTY ZONING MAP FIGURE 8.2

KITTITAS COUNTY - BOWERS FIELD AIRPORT MASTER PLAN





Lands outside the Ellensburg UGA in the vicinity of Bowers Field Airport are zoned Agriculture (A-5 and A-20). These zones have minimum lot sizes of 5 and 20 acres respectively, and are intended to support agricultural activities. The A-5 zone provides areas where agriculture and low density residential developments "co-exist compatibly," whereas the A-20 zone is used where "farming, ranching, and rural life styles are dominant characteristics." A-5 zoned lands abut Bowers Field Airport on the majority of its north, west, and east sides. A small area of A-20 abuts the airport's northeast corner (east of Look Road), and in areas beyond the A-5 in all directions. Areas of CA- Commercial Agriculture zoning are located within three miles of the airport.

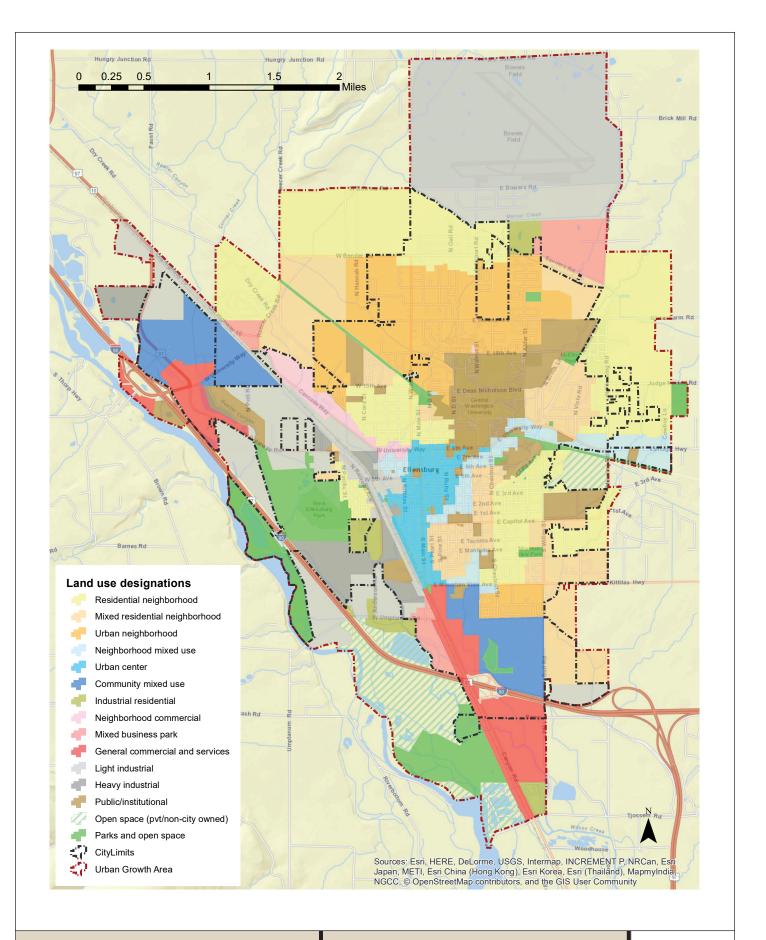
CITY OF ELLENSBURG

Comprehensive Planning - Land Use

The City of Ellensburg Comprehensive Plan was updated in 2016-2017 and is scheduled for adoption by the end of 2017. There are no changes to the existing urban growth area (UGA) boundary for Ellensburg from the previous comprehensive plan. **Figure 8-3** depicts City of Ellensburg land use designations, both within the Ellensburg city limits and UGA boundaries. As noted earlier, Bowers Field Airport is located within the Ellensburg UGA.

Bowers Field Airport has a Light Industrial land use designation on the updated Comprehensive Plan Land Use Map. Residential, Industrial Residential, and Mixed Business Park future land uses are identified for areas south of Bowers Field Airport. The Residential areas are located both within the Ellensburg city limits and within the Ellensburg UGA (outside city limits). The Industrial Residential and Mixed Business Park land use areas are located in the UGA. These areas are currently zoned Urban Residential by Kittitas County and have an "Urban" (county) land use designation plan.





KITTITAS COUNTY - BOWERS FIELD AIRPORT MASTER PLAN





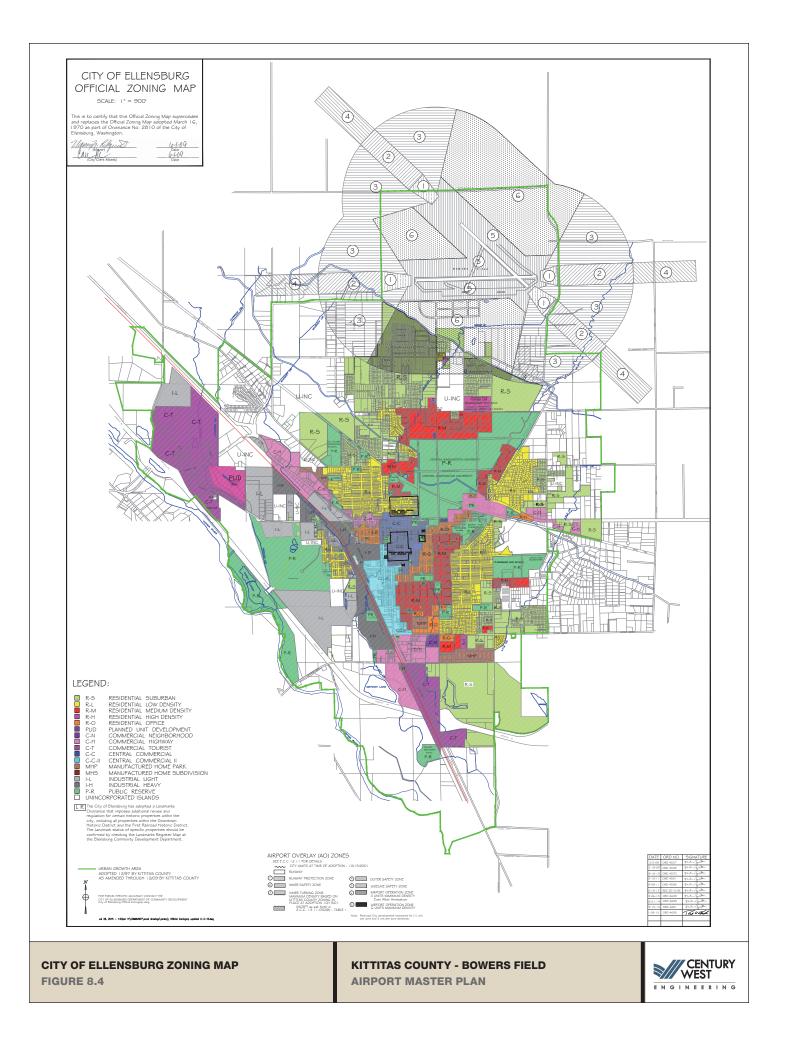
Airport Vicinity Zoning

The nearest City of Ellensburg zoning abuts the southern edge of Bowers Field Airport, along the major irrigation canal that also defines a portion of the airport's southwest property line. The zoning in this area is predominantly **R-S** - **Residential Suburban**. Two small areas of **R-L** - **Residential Low Density** and **R-H** - **Residential High Density** are also located in this area. Portions of these residential areas are located in the vicinity of the airport traffic patterns on the south side of the runways and are subject to the density restrictions established in the airport overlay zone. **Figure 8-4** depicts current City of Ellensburg zoning and the current airport overlay zone. The Ellensburg UGA boundary is also depicted.

R-S zoning is intended to provide for a mix of predominantly single detached dwelling units with options to integrate other compatible housing types in a relatively low urban density and within a walkable neighborhood setting. **R-L** zoning is intended to protect and enhance the character of existing low density residential neighborhoods while allowing for compatible infill development. **R-L** zoning allows detached single-family dwellings as the predominate use, with options to integrate accessory dwelling units and duplexes and cottage housing on larger lots. **R-H** zoning is intended to include areas for high density multifamily residential development in areas served by transit and within walking distance of commercial services. Appropriate uses in the **R-H** zone include:

- Areas designated high density or mixed residential in the comprehensive plan;
- Areas within one-quarter mile of Central Washington University;
- Areas characterized by multifamily buildings;
- Areas adjacent to commercial zoned property; or
- Areas located along corridors served by transit.







AIRPORT OVERLAY ZONING

Overlay zoning for Bowers Field Airport was jointly adopted by the City of Ellensburg (ECC Chapter 15.350) and Kittitas County (KCC Chapter 17.58) in 2001. The locally-adopted airport overlay is consistent with the airport overlay zones defined by WSDOT Aviation. The **WSDOT Airports and Compatible Land Use Guidebook** was updated in 2011. The update included minor changes in designations for zones 2, 4, and 6, although the underlying geometry for the zones was not changed.

The locally adopted Airport Zone/Airport Overlay Zone (A-O) establishes six overlay safety zones surrounding the airport, which relate to the runway's protected surfaces and common flight paths. The safety zones are depicted on the Ellensburg zoning map (Figure 8-4). The six zones include:

- 1. Runway Protection Zone
- 2. Inner Safety Zone
- 3. Inner Turning Zone
- 4. Outer Safety Zone
- 5. Sideline Zone
- 6. Airport Operations Zone

 Table 8-2 summarizes the land uses and densities allowed for each safety zone, as defined by county and city code.

Airport Safety Zones	Kittitas County Use & Density Limits (a)		City of Ellensburg Use & Density Limits (a)	
	Inside UGA	Outside UGA	In City Limits	In UGA
Zone 1–Runway Protection Zone	Restricted to unoccupied uses	Restricted to unoccupied uses	Restricted to unoccupied uses	Restricted to unoccupied uses
Zone 2 – Inner Safety Zone	1 DU Per Acre	1 DU Per 3 Acres	n/a	Maintain underlying county zoning density when annexed
Zone 3 – Inner Turning Zone	1 DU Per 3 Acres (b) 1 DU Per Acre (c)	1 DU Per 3 Acres	6 DU Per Acre (d)	Maintain underlying county zoning density when annexed, except as noted (e)
Zone 4 – Outer Safety Zone	1 DU Per Acre (c)	1 DU Per 3 Acres	n/a	Maintain underlying county zoning density when annexed
Zone 5 – Sideline Zone	1 DU Per Acre (c)	1 DU Per 3 Acres	n/a	n/a
Zone 6 – Airport Operations Zone	1 DU Per Acre	1 DU Per 3 Acres	6 DU Per Acre (d)	3 DU Per Acre; Minimum lot size (f)

TABLE 8-2: SUMMARY OF AIRPORT SAFETY ZONES (BOWERS FIELD)

(a) Average density within development

- (b) For lands zoned AG-3 at date of adoption (7/17/2001)
- (c) For lands zone Urban Residential or Rural Residential at date of adoption
- (d) Maximum residential density per gross acre with no density bonuses available
- (e) Properties with frontage on Sanders Road will be allowed to maintain a maximum residential density of 1 DU per acre

(f) Minimum lot size for future subdivisions after annexation is 7,000 gross square feet, however when any future subdivision creates a lot smaller than 14,520 sf, a plat note is required indicating that no further subdivision will be allowed for property within the airport overlay

(g) Schools, play fields, hospitals, nursing homes, and churches prohibited in safety zones 1-5 DU = Dwelling Unit





The County-defined density restrictions for each safety zone are established based on the property's location inside or outside the Ellensburg UGA. The City-defined density restrictions are established for property annexed into the city limits prior to the 10/15/2001 date of adoption and properties that are annexed into the city limits after the date of adoption. In general, residential land uses are permitted with varying densities in all zones except Zone 1.

The safety zones associated with Runway 11/29 anticipated a future north extension of the runway, which is largely consistent with current airport planning. The future configuration of Runway 7/25 is not reflected in the current ordinance or mapping, and should be updated for consistency once the master plan update is adopted.

Kittitas County Code, Chapter 17.58 "Airport Zone" "establishes an airport overlay district on properties located on, adjacent to, and in the vicinity of [four] public-use airports ... including Kittitas County Airport (Bowers Field), in order to protect the health, welfare, safety, and quality of life of the general public, property owners, airport operators, and aviation community; and also to ensure compatible land uses in the vicinity of the affect environments of the airport overlay zoning district." Chapter 17.58 .040A defines specific zoning parameters for Bowers Field Airport.

The City of Ellensburg "Land Development Code" (Chapter 15.350) establishes Airport Overlay Zone (A-O) standards for Bowers Field Airport. The A-O zone "encompasses properties located on, adjacent to, and in the vicinity of Bowers Field, in order to protect the health, welfare, safety, and quality of life of the general public, property owners, airport operators, and aviation community." The intent of the A-O zone is to ensure compatible uses in the vicinity of the affected environments of the airport overlay zone. The FAR Part 77 Airspace for Bowers Field Airport is located primarily over lands in County jurisdiction, with portions extending south over the City of Ellensburg.

LAND USE RECOMMENDATIONS

A review of existing land use and zoning related to Bowers Field Airport was conducted to identify the adequacy of existing protections and to identify potential action items for consideration by Kittitas County and the City of Ellensburg.

Kittitas County

Chapter 17.48 I-L Light Industrial Zone.

- Section 17.15.080 Allowed Uses in Urban Lands lists "Airports" as a "Conditional Use" for the I-L Light Industrial Zone. Based on the overall compatibility of aeronautical land uses within an airport, Kittitas County should consider making all airport-related land uses "permitted" outright.
- Adding a definition of airport-related uses to Section 17.15.080.2 Footnotes Associated with Urban Use Table is also recommended in conjunction with the "permitted" designation. A conditional use approval would be appropriate for any proposed uses not included in the definition of airport-related uses.





• Kittitas County has adopted a binding site plan for Bowers Field Airport that defines lot sizes and configurations within the airport boundary. Although the I-L zone has no height restrictions, the Airport Zone (Chapter 17.58) provides an overlay zone that effectively limits heights based on protection of airport airspace.

Chapter 17.58 Airport Zone.

• This chapter defines the airport overlay zone for Bowers Field Airport and three other public use airports in Kittitas County. The chapter contains significant obsolete or incorrect content related to both Bowers Field and the other public use airports in Kittitas County. A thorough review and revision of the chapter is recommended.

City of Ellensburg

Chapter 15.350 Airport Overlay Zone (A-O).

The city's A-O Zone is similar to the county's Airport Zone; however, the land density requirements in each safety zone differ. Prohibited uses and maximum property densities for each safety zone inside and outside of the Ellensburg UGA are defined.

- It is recommended that the Airport Zone be updated to reflect current FAA airport and airspace criteria and the recommendations of the Bowers Field Airport Master Plan regarding the future runway configuration. Specific elements to be addressed include:
 - o Runway extensions or changes in configuration; and
 - o Terminology consistent with FAR Part 77 and associated surfaces.
- The City of Ellensburg should ensure that Bowers Field is identified as an Essential Public Facility (EPF) in its Comprehensive Plan prior to any future annexation.

