



PLANNING COMMISSION MEETING AGENDA

Tuesday, April 19, 2016, 7:00 PM

City Municipal Center, 616 NE 4th Avenue

I. CALL TO ORDER

II. ROLL CALL

III. MINUTES

- A. Approval of the Minutes from the March 15, 2016 Planning Commission Meeting

 [March 15, 2016 Planning Commission Minutes](#)

IV. MEETING ITEMS

- A. Continued Public Hearing to Consider Airport Overlay Zoning
Details: Proposed Camas Municipal Code, Chapter 18.34 Airport Overlay Zoning includes draft development regulations that would be applicable to properties within one mile of Grove Field. The regulations would restrict certain land uses, limit building height, and provide notice of aircraft noise, in order to minimize and resolve potential land use conflicts with the airport. Public hearing was continued from March 15, 2016.
Presenter: Sarah Fox, Senior Planner
Recommended Action: Staff recommends that Planning Commission conduct a public hearing, deliberate, and make a motion to forward a recommendation of approval to Council.

 [Staff Report for Airport Overlay Zoning \(MC16-03\)](#)

[Draft Chapter 18-34 Airport Zoning - Version 2](#)

[Attachment A Letter from WSDOT](#)

[Attachment B Flight Patterns](#)

[Attachment C Letter from Building Dept](#)

[Attachment D Noise Levels](#)


[Attachment E Response from WSDOT to Port](#)

[Attachment F Appendix E WSDOT Airports and Compatible Land Use](#)

[Attachment G Staff Report from March 8, 2016](#)

[Draft Camas Zoning Map Revised from Previous Public Hearing](#)

- B. Continued Public Hearing to Consider Amendments to the Camas Zoning Map and Camas Comprehensive Plan Map (File No. CPA16-01)
Details: A public hearing was continued from March 15, 2016, to consider amending the Camas Zoning Map and the Camas Comprehensive Plan Map. The proposed map amendments are part of the Camas 2035 Comprehensive Plan Update project, which must be adopted this June.
Presenter: Sarah Fox, Senior Planner
Recommended Action: Staff recommends that Planning Commission conducts a public hearing, deliberates and moves to forward a recommendation of approval to City Council.

 [Staff Report to Planning Commission - Edition 2.0](#)
[Draft Camas Zoning Map](#)
[Draft Comprehensive Plan Map](#)
[Staff Report to Planning Commission - Edition 1.0](#)
[Attachment: Table of Proposed Map Amendments](#)

V. MISCELLANEOUS UPDATES

- A. Miscellaneous Updates

VI. NEXT MEETING DATE

The next regularly scheduled Planning Commission Meeting will be held on Tuesday, May 17, 2016, in the City Council Chambers at 7:00 p.m.

VII. ADJOURNMENT

NOTE: The City of Camas welcomes and encourages the participation of all of its citizens in the public meeting process. A special effort will be made to ensure that persons with special needs have opportunities to participate. For more information, please call 360.834.6864.



PLANNING COMMISSION MEETING MINUTES - DRAFT

Tuesday, March 15, 2016, 7:00 PM

City Municipal Center, 616 NE 4th Avenue

I. CALL TO ORDER

Chair Hull called the meeting to order at 7:00 p.m.

II. ROLL CALL

Present: Frank Hood, Troy Hull, Jim Short, Lloyd Goodlett, Jaima Johnson and Timothy Hein

Excused: Bryan Beel

Staff Present: Phil Bourquin, Jan Coppola, Sarah Fox, Lauren Hollenbeck, Robert Maul, David Schultz and John Frias (intern)

Council Liaison: Bonnie Carter

III. MINUTES

- A. Approval of the Minutes from the February 17, 2016 Special Planning Commission Meeting

 [February 17, 2016 Planning Commission Minutes](#)

It was moved by Commissioner Hein, seconded by Commissioner Johnson to approve the minutes from the February 17, 2016 Planning Commission Meeting. The motion carried unanimously by roll call vote.

IV. MEETING ITEMS

- A. Public Hearing to Consider Amendments to the Camas Zoning Map and Camas Comprehensive Plan Map (File No. CPA16-01)
Details: A public hearing was held to consider amending the Camas Zoning Map and the Camas Comprehensive Plan Map. The proposed map amendments are part of the Camas 2035 Comprehensive Plan Update project, which must be adopted this June.
Presenter: Sarah Fox, Senior Planner

 [Staff Report to Planning Commission - Edition 1.0](#)

[Attachment: Table of Proposed Map Amendments](#)

[Draft Camas Zoning Map](#)

[Draft Camas Comprehensive Plan Map](#)

Sarah Fox briefly summarized the staff report and highlighted the proposed changes in the draft comprehensive plan and zoning maps.

Staff responded to inquiries from the Commissioners.
Chair Hull opened the public testimony portion of the hearing at 7:26 p.m.

The following members of the public spoke:
Debra McClure, 21320 NE Dole Valley Rd, Yacolt [property owner at 26605 SE 8th Street]
Hank Midles, 710 SE Everett Road, Camas
Steve Day, North Lake Church, 500 SE Everett Road, Camas


Chair Hull closed the public testimony portion of the hearing at 7:47 p.m.

Staff responded to the concerns expressed by the public.

Ms. Fox elaborated on the public outreach process for the Camas 2035 Comprehensive Plan Update and the proposed changes to the maps.

After a lengthy discussion, it was moved by Commissioner Hein, seconded by Commissioner Goodlett to table the recommendation to City Council for the proposed amendments to the Camas Zoning Map and Camas Comprehensive Plan Map (File No. CPA 16-01) until after the Airport Overlay Zoning public hearing. The motion carried unanimously by roll call vote.

- B. Public Hearing for Amendments to Camas Municipal Code (CMC), Chapter 18.19 Design Review and to Camas Design Review Manual (DRM)
Details: The proposed amendments to the DRM, specifically the section Gateways Principles & Guidelines, include the addition of corridors and a table that identifies unique features within a gateway and corridor. Other minor edits include clarification to some of the Commercial and Multi-Family design principles. Proposed amendments associated with Chapter 18.19 of the CMC will remove the redundancy of the standards, which are identified in the DRM.
Presenter: Sarah Fox, Senior Planner and Lauren Hollenbeck, Senior Planner

 [Design Review Staff Report \(MC16-04\)](#)
[Draft CMC 18.19.050 Design principles](#)
[Draft DRM amendments redlined version](#)
[Draft DRM amendments clean version](#)
[Draft Camas Zoning Map](#)

Ms. Fox briefly summarized the staff report and highlighted the proposed amendments to the Camas Design Review Manual and to the CMC, Chapter 18.19 Design Review.

The public testimony portion of the hearing opened and closed at 7:57 p.m., as there were no members of the public who wished to speak.

It was moved by Commissioner Goodlett, seconded by Commissioner Short to forward a recommendation to City Council to approve the amendments to the Camas Design Review Manual and Camas Municipal Code, Chapter 18.19 (File No. MC16-04). The motion carried unanimously by roll call vote.

- C. Public Hearing to Consider Airport Overlay Zoning
Details: Proposed Camas Municipal Code, Chapter 18.34 Airport Overlay Zoning includes draft development regulations that would be applicable to properties within one mile of Grove

Field. The regulations would restrict certain land uses, limit building height, and provide notice of aircraft noise, in order to minimize and resolve potential land use conflicts with the airport.

Presenter: Sarah Fox, Senior Planner

 [Staff Report for Airport Overlay Zoning \(MC16-03\)](#)

[Draft CMC Chapter 18.34 Airport Overlay Zone](#)

[Draft Airport Overlay Zoning Areas](#)

[Letter from WSDOT](#)

[Email from Warren Hendrickson, AOPA](#)

[Avigation Easement - Sample](#)

[Email from Laurie Lebowsky, Clark County](#)

[Email from Lynn Johnston, Property Owner](#)

[RCW 36 70 547 General Aviation Airports](#)

Ms. Fox stated that the proposed Airport Overlay Zoning development regulations are part of the Camas 2035 Comprehensive Plan Update and elaborated on the proposed zoning.

Chair Hull opened the public testimony portion of the hearing at 8:22 p.m.

The following members of the public spoke:

David Ripp, 558 NW Viewridge Lane, Camas

Neil Cahoon, 26300 NE 3rd Street, Camas

Scott Price, 3439 NW Sierra Drive, Camas

John Spencer, 2103 SE 303rd Avenue, Washougal

Chair Hull closed the public testimony portion of the hearing at 8:33 p.m.

Staff responded to the concerns expressed by the public.

After a lengthy discussion, it was moved by Commissioner Johnson, seconded by Commissioner Goodlett to table the public hearing for the Airport Overlay Zoning to the April 19, 2016 Planning Commission Meeting, to allow staff to obtain additional input from interested parties and to reopen the public testimony portion of the hearing. The motion carried unanimously by roll call vote.

It was moved by Commissioner Johnson, seconded by Commissioner Short to table the public hearing for the Amendments to the Camas Comprehensive Plan and Zoning Maps (CPA16-01) to the April 19, 2016 Planning Commission Meeting and to reopen the public testimony portion of the hearing. The motion carried unanimously by roll call vote.

V. MISCELLANEOUS UPDATES

A. Miscellaneous Updates

Phil Bourquin briefly updated the Commissioners on the progress of the Parklands at Camas Meadows development applications.

VI. NEXT MEETING DATE

- A. The next scheduled Planning Commission Meeting will be held on Tuesday, April 19, 2016, in the City Council Chambers at 7:00 p.m.

VII. ADJOURNMENT

Chair Hull adjourned the meeting at 8:45 p.m.

NOTE: The City of Camas welcomes and encourages the participation of all of its citizens in the public meeting process. A special effort will be made to ensure that persons with special needs have opportunities to participate. For more information, please call 360.834.6864.



Staff Report for Airport Overlay Zoning (File #MC16-03)

To: Bryan Beel, Chair
Planning Commissioners
From: Sarah Fox, Senior Planner
Date: April 14, 2016

Applicable law: Revised Code of Washington (RCW) 36.70.547 and 36.70A.510; Camas Comprehensive Plan (version 2004) Policy TR-29 and Strategy TR-10; and CMC Title 18 Zoning.

WSDOT Aviation: Fulfilled state requirements on March 2, 2016, to consult with airport owners, managers, private airport operators, general aviation pilots, ports, and the Aviation Division of WSDOT prior to adoption of comprehensive plan policies or development regulations that may affect property adjacent to public use airports. Comments are attached to this report.

Public Notices: Notice of the public hearing was published in the Post Record on March 8, 2016 (Legal Publication #555485)

Note: *Camas Municipal Code (CMC) citations are in italic type throughout this report.*

Summary:

The draft Chapter 18.34 Airport Overlay Zoning proposes regulations on land uses, height and noise in order to minimize and resolve potential land use conflicts with the airport, which is required by state regulation RCW 36.70.547. Grove Field is located in Clark County, adjacent to the eastern city limits (632 NE 267th, Camas). The proposed airport overlay was also a project on the Community Development 2016 Work Plan that was approved by Council.

This staff report responds to the issues that were raised at the public hearing before Planning Commission on March 15, 2016, which was continued to April 19, 2016.

Concerns raised at the public hearing:

1. Did the city comply with state law concerning airport zoning, in particular the requirement for consultation per RCW 36.70.547.

Response: Staff worked closely with Washington State Department of Transportation (WSDOT) Aviation and sent requests for consultation to the contacts provided by WSDOT. A letter confirming that the city was in compliance with RCW 36.70.547 was Attachment 2 of the Staff Report dated March 8th. At the public hearing, it was brought to the city's attention that the Camas-Washougal Port was not included in the contact list. Attachment A of this report confirms the city's efforts to comply and the inadvertent exclusion of the Port.

Staff remedied this oversight by meeting with the Port and with general aviation pilots connected with Grove Field on March 24, 2016. The amendments to the map and to draft Chapter 18.34 are intended to capture the edits suggested at that meeting.

Attendees at meeting with Staff on March 24, 2016:

David Ripp, Port Director
Neil Cahoon, Grove Field Manager

Mark Paras
Scott Price, V.P. Immelman Hangers at Grove Field
Jim Gray, Captain (Ret.)
John Spencer, Port Commissioner
Michael Hampel, CWA
Aggie Blackmer, CWA

2. There was discussion in regard to the proposed development standard at Section 18.34.06 to provide additional noise attenuation for residential and commercial construction.

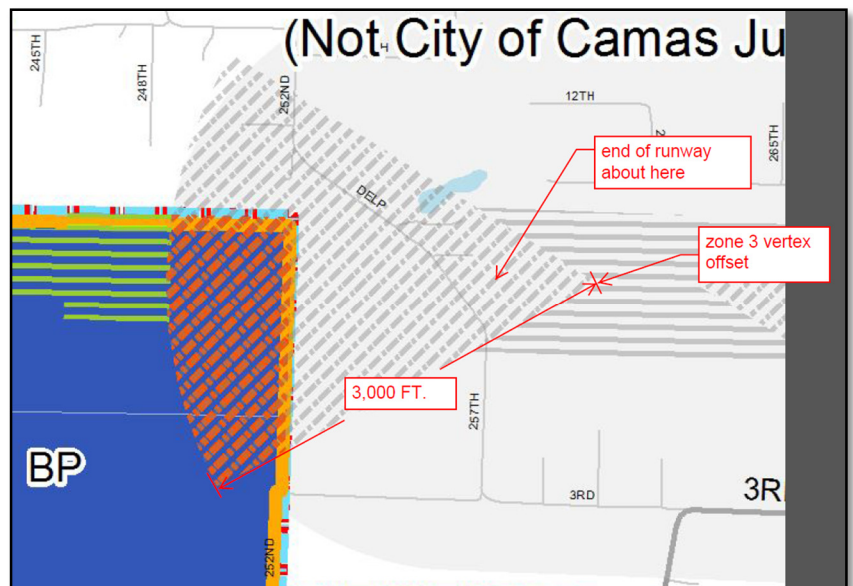
Response: After consultation with the city's Building Official, Bob Cunningham, it was suggested that the development standard at Section 18.34.06, which would require a "five decibel noise reduction" be removed from the draft code. Mr. Cunningham found that 50 decibels (dBA) is the industry accepted standard for noise levels within a building. For that reason an amendment was included in the current draft to reflect that information.

Further, Attachment D provides the relative decibel levels for common sources of noise. A five decibel sound would be quieter than the sound of breathing. Lawn mowers and trucks are provided as points of reference for noise in the 90 dBA range. Attachment D indicates that exposure to noise over 110 dBA is damaging after one minute and 29 seconds. Without more details of the noise level of aircraft, staff proposes to eliminate that regulation or change the decibel level.

3. Questions were raised in regard to the extent of the Airport Overlay Zoning, to include location and purpose of the three overlay zones.

Response: To better describe the extent of the overlay areas, Section 18.34.05 Airport Overlay Zones was amended to add more location details. Only Zone C was modified on the map from the version presented at the March 15th hearing. Zone C was expanded to the north on the recommendation of the general aviation pilots who identified that area as a heavily used air traffic corridor for several airports. Attachment B was provided by the pilots to better illustrate these high traffic corridors.

The extent of Airport Overlay Zone A was not modified from the map presented at the first public hearing, however the graphic (right) is an effort to better illustrate the pie-shaped overlay zone. The city's Zone A is considered by WSDOT to be the area with the highest risk for collisions. Appendix E of the WSDOT Airports and Compatible Land Use Guidebook is attached to this report to provide more details to support their safety zone model. The city's Zone A corresponds to WSDOT's Zones 1 and 3.



Conclusion:

- Staff met with the Port and general aviation pilots to discuss the proposed zoning and land use regulations. The proposed amendments to the map and the draft code are in response to the meeting.
- Staff consulted with the city's Building Official in regard to standard noise level attenuation for structures. An amendment to the draft code was a result of this consultation.

Recommendation:

Staff recommends that Planning Commission forward a recommendation of approval for the proposed Chapter Airport 18.34 Overlay Zoning, based on the findings within the Staff Report dated March 8, 2016.

Attachments:

- A. Letter from WSDOT to confirm that the city met the consultation requirements of RCW 36.70.547 (March 2, 2016)
- B. Aeronautical Information Manual
- C. Email from Bob Cunningham, Building Official (April 14, 2016)
- D. Common Environmental Noise Levels, handout
- E. Email from WSDOT in response to consultation concerns (March 16, 2016)
- F. Appendix E, WSDOT Airports and Compatible Land Use Guidebook
- G. Staff Report to Planning Commission (March 8, 2016)

The following are red-lined changes to the version presented at the Planning Commission public hearing on March 15, 2016. The proposed changes reflect comments from a meeting with Grove Field pilots and the Camas-Washougal Port on March 24, 2016.

Chapter 18.34 - Airport Overlay Zoning

18.34.01 PURPOSE. It is the purpose of this ordinance to regulate the use of property and to regulate and restrict the height of structures and objects of natural growth in the vicinity of the Grove Field Airport, to promote the public health, safety, convenience and general welfare to increase safety in the use of the airport and to protect persons and property within the airport affected area and zoning.

- A. STATUTORY AUTHORIZATION. This ordinance, designed to protect the approaches, airspace and hazard areas of the Grove Field Airport is adopted pursuant to RCW 36.70A.510 and RCW 36.70.547.
- B. APPLICABILITY. The jurisdiction of this ordinance shall extend over all lands and waters within one (1) statute mile from the end of the runways at the Grove Field Airport. (Airport Affected Area), or as depicted on the Camas Zoning Map, whichever offers greater protection.
- C. DEFINITIONS. All distances, unless otherwise specified, shall be measured horizontally.
 - 1. "Airport." The Grove Field Airport located in Clark County, WA, owned and managed by the Port of Camas-Washougal.
 - 2. "Airport Affected Area." The area located within one (1) statute mile of the end of the runways of the airport.
 - 3. "Airport Hazard." Any structure or object, whether man-made or natural, or use of land which obstructs the airspace required for the flight of aircraft in landing or taking off at the airport or is otherwise hazardous to such landing and taking off.
 - 3-4. "Avigation Easement." An easement or right of overflight in the airspace above or in the vicinity of a particular property. It also includes the right to create such noise or other effects as may result from the lawful operation of aircraft in such airspace.
 - 4-5. "Construction." The erection or alteration of any structure or objects either of permanent or temporary character.
 - 5-6. "Runway." A portion of the airport having a surface specifically developed and maintained for the taxiing, landing and taking off of aircraft.
 - 6-7. "Variance." An authorization granted by the Board of Adjustments to construct, alter, or use a building or structure in a manner that deviates from the standards of this chapter.

18.34.02 GENERAL PROVISIONS. Use Restrictions.

- A. Notwithstanding any other provisions of this ordinance, no use may be made of the land or water within any zones established by these zoning regulations in such a manner as to create electrical or electronic interference with navigational signals or radio or radar communication between the airport and aircraft; or use of which emit or discharge smoke or which would otherwise be detrimental or injurious to the health, safety and welfare of the public in use of the airport.

- B. Within Airport Overlay Zones an aviation easement notice recorded on the title/disclosure statement is required for new or substantial redevelopment of lots, buildings, structures, and activities. The notice-aviation easement should will indicate provide notice that the property is located adjacent within an air traffic area, and is near to Grove Airfield, and as such and may experience low overhead flights, odor, vibrations, noise and other similar aviation impacts.

18.34.03 VARIANCES ~~AND APPEALS~~.

- A. Applications for variances shall be made-submitted to the Director. Major variance applications and shall be forthwith transmitted to the Airport Manager Port of Camas- Washougal and Washington State Department of Transportation, Aviation Division for review and comment. The city will allow 14 days for receipt of comments prior to issuance of decision.
- B. Variances shall be handled in accordance with CMC Chapter 18.45 Variances.

18.34.04 HEIGHT OF STRUCTURES.

- A. No person, firm or corporation shall erect or cause to be erected any structure over 150 feet in height, as measured at the highest point at the object site, within all airport overlay zones, unless otherwise specified in this chapter. Any structure proposed over 100-feet must provide an approved 7460-1 from the FAA.
- B. A non-conforming structure may be repaired, rebuilt, altered or extended provided the structure will not be higher than the limits established on the effective date of this ordinance.

18.34.05 AIRPORT OVERLAY ZONES.

- A. Purpose. Mapping of the overlay zone takes into account the need to protect the approaches to the airport from incompatible land uses that would limit or adversely affect the airport's ability to serve its present and future air transportation needs.
- B. For the purpose of this ordinance, the lands and waters within one (1) statute mile from the end of the runways of the airport and divided into the following zoning airport overlay zone-Location and extent of Airport Overlay Zones within city limits as depicted on the Camas Zoning Map.
 - 1. Airport Overlay Zone A is a pie-shaped area that includes lands that are within a 2,000 foot radius from the end of the runway. The vertex of the radius is 1,000 feet east of the end of the runway and the pie-shaped arc encompasses a 30-degree central angle.
 - 2. Airport Overlay Zone B generally includes lands that are 3,000 feet west of Zone A, and is 750 feet wide for the first 500 feet, then 500 feet wide for the remaining length of 2,500 feet.
 - 3. Airport Overlay Zone C generally includes lands that are within one (1) statute mile from the end of the runway, and extends to include lands to the northern city limits and east of Lacamas Lake.

18.34.06 Zone A HEIGHT/NOISE/APPROACH AND DEPARTURE ZONE.

A. Permitted uses. In addition to the limitations on development and uses contained in the underlying zone, following additional development standards are required:

- ~~1. Residential construction must provide a minimum of five (5) decibel noise reduction over the industry standard for similar structures.~~
- ~~2.1.~~ All enclosed office, sales and work areas that will be subject to a minimum of four (4) hours of continuous human occupancy per workday, must utilize construction techniques that provide a minimum of twenty (20) decibels noise reduction over the industry standards ~~for similar projects of 50 decibels.~~
- ~~2.~~ Density. New lots shall be a minimum of one (1) acre in size, with the exception of lots in existence prior to the date of this ordinance.
- ~~3. Landscaping (e.g. trees and bushes) for new development may not include plant species that will exceed a height of 45 feet when mature.~~

B. Uses specifically prohibited are:

1. Churches, hospitals, schools, theaters, amphitheaters, stadiums, campgrounds, wireless communication towers or structures (cell towers) and wildlife hunting facilities.
2. Places of public assembly and any other use, which may be susceptible to being adversely affected by loud and extensive noise or would interfere in the operation of the airport.
3. Landfills, garbage dumps, offal dump sites and other similarly licenses or titled facilities used for operations to process, bury, store or otherwise dispose of waste, trash, and refuse that would attract birds or rodents. Any facility, that would when ignited, discharge smoke and be considered to be a hazard to navigation of aircraft in taking off and landing phases of flight at the airport.
4. Signs Prohibited. Use or installation of flashing or illuminated advertising or business signs, billboards, lights, or other types of illuminated structures, which would be hazardous for pilots in distinguishing between airport lights and others, or which result in glare in the eyes of pilots using the airport, thereby impairing visibility in the vicinity of the airport or endangering the landing, taking off, or aircraft operations.

Commented [SF1]: Building Official provided decibel information that indicated that a 5dBA noise reduction would not offer a discernable difference. If provisions is kept, then it should provide protection from 110 dBA levels. Refer to Attachment D.

18.34.07 Zone B HEIGHT/OVERFLIGHT/NOISE

A. Zone B shall be mapped to include areas subject to noise levels resulting from frequent overflights of aircraft and to encourage land uses which, with proper noise reduction techniques incorporated into construction, will not be adversely affected by such noise and are compatible with the airport's activities and operations.

B. ~~Prohibited~~ Permitted uLand Uses. All uses ~~permitted in prohibited in~~ Zone A ~~shall be are~~ permitted-prohibited in Zone B.

C. Permitted uses. In addition to the limitations on development and uses contained in the underlying zone, the following additional development standards are required in Zone B:
~~with the following additional development standards:~~

1. Commercial activity that is allowed within the underlying zoning including: manufacturing, transportation facilities, retailing services, utilities, warehousing and wholesaling, provided the following criteria is met;

Commented [SF2]: Zone A and Zone B regulations are essentially the same. Suggest combining them into one section

- a. Density. New lots shall be minimum of one (1) acre in size, with the exception of lots in existence prior to the date of this ordinance.
- b. All enclosed office, sales and work areas that will be subject to a minimum of four (4) continuous hours of human occupancy per working day is suggested that construction techniques provide a minimum of ~~five-twenty (520)~~ decibel noise reduction over the industry standard ~~for similar structures of~~ 50 decibels.

2. Industries that meet the use requirements must be one (1) acre lot size minimum.

18.34.08 Zone C NOISE

~~A. Zone C includes Zones A and B.~~

~~B.~~ Whenever a property owner within ~~one (1) statute mile~~ Zone C applies for a building permit, it is recommended that the owner be informed of construction or remodeling techniques that would decrease the noise associated with the airport operation and heavy air traffic areas.

~~C.~~ B. Permitted uses. All uses permitted in the underlying zone.



March 2, 2016

Sarah Fox, Senior Planner, AICP
Community Development Department
616 NE 4th Avenue
Camas, WA 98607

Dear Sarah:

This correspondence is to confirm that the City of Camas has formally consulted with the Washington State Department of Transportation (WSDOT) Aviation Division regarding draft Chapter 18.34 - Airport Overlay Zoning. WSDOT appreciates the City's efforts and recognizes the substantial time and resources this product represents.

RCW 36.70.547 and 36.70A.510 requires local jurisdictions to formally consult with airport owners, managers, private airport operators, general aviation pilots, ports, and the Aviation Division of WSDOT prior to adoption of comprehensive plan policies or development regulations that may affect property adjacent to public use airports. The main goals of formal consultation are to avoid, minimize, and resolve potential land use conflicts with airports through the comprehensive plan and development regulations. WSDOT strongly recommends that formal consultation be initiated by local jurisdictions as early as possible in the planning process. This is to assure that all parties have an opportunity to work together to find comprehensive solutions of mutual benefit that fulfill the intent of the legislation, consistent with local jurisdictions' land use planning authorities and obligations under law.

The following is a general summary of observations and recommendations discussed during the formal consultation meeting:

- WSDOT supports the adoption of the draft Chapter 18.34 - Airport Overlay Zoning. The overlay is consistent with best management practices found in the *Airports and Compatible Land Use Guidebook* 2011.

The City of Camas should work with Clark County to promote a consistent approach to compatibility planning for Grove Field.

- Chapter 18.34 identifies the airport influence area and addresses incompatible development consisting of, but not limited to, height hazards, high intensity uses and special function uses.
- WSDOT supports the addition of an aviation easement to promote awareness and compatibility between uses.
- Stormwater facilities should be consistent with WSDOT's Aviation Stormwater Design Manual.
- The airport overlay and underlying zoning must work together to promote airport land use compatibility. Rezones that result in incompatible development should be prohibited.

The importance of Grove Field to the region and state's transportation system and economy cannot be overstated. It is critical that every effort be made to discourage incompatible land uses that impair the airport's ability to operate as an essential public facility. We thank you again for the opportunity to formally consult, and remain available to provide technical support and assistance. Please don't hesitate to contact me at 360-709-8019 or timmerc@wsdot.wa.gov if you have any questions.

Sincerely,



Carter Timmerman
Aviation Planner

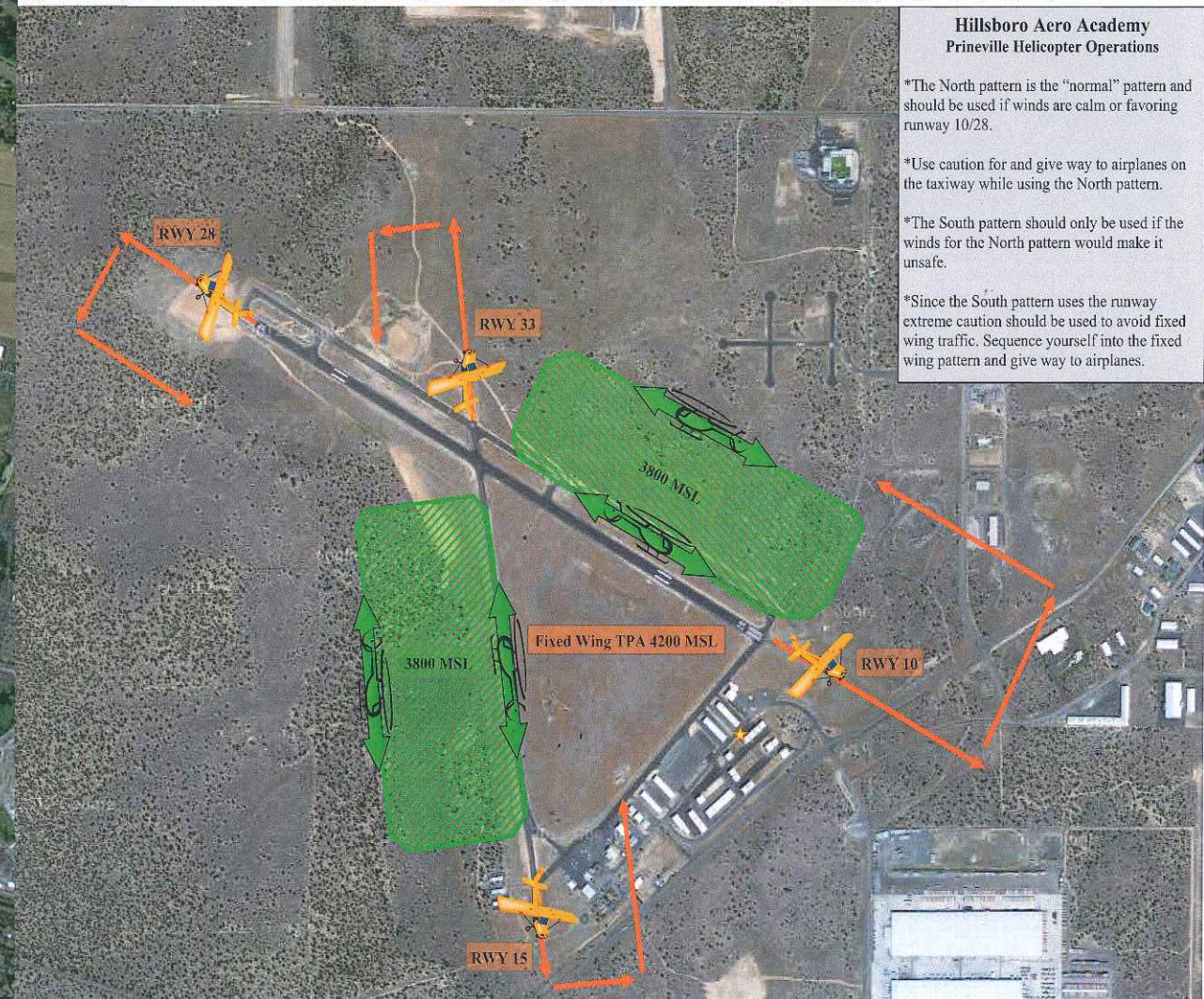
cc: Warren Hendrickson, Northwest Mountain Regional Manager, AOPA
Laurie Lebowsky, Planner III, Clark County

Manual

Official Guide to Basic Flight Information and ATC Procedures

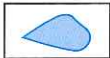
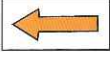
c. Scanning for Other Aircraft.

*Since the South pattern uses the runway extreme caution should be used to avoid fixed wing traffic. Sequence yourself into the fixed wing pattern and give way to airplanes.

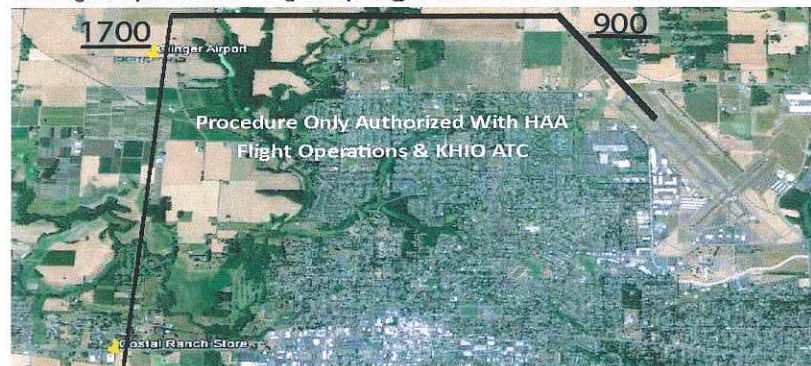


NOT A REPLACEMENT FOR FAA APPROVED SECTIONAL

Use CAUTION near, from or to the UBG VOR. Flying at & below 2700' MSL advise traffic on Frequency 122.9. Above 2700' MSL use Portland Approach Frequency.

- | | | | |
|--|---|---|------------------------------|
|  | Water |  | Roads |
|  | Cities |  | Airports |
|  | Terrain |  | Sky Diving Area |
|  | Practice Areas |  | RW Off Airport Landing Areas |
|  | Transitioning Aircraft Use Indicated Routes |  | Reporting Points |
|  | High Traffic Caution Area | | |
|  | Uncontrolled Airport Advisory Area Within 3 sm & 2000' AGL. Report & Monitor Airport Traffic on CTAF Frequency. | | |

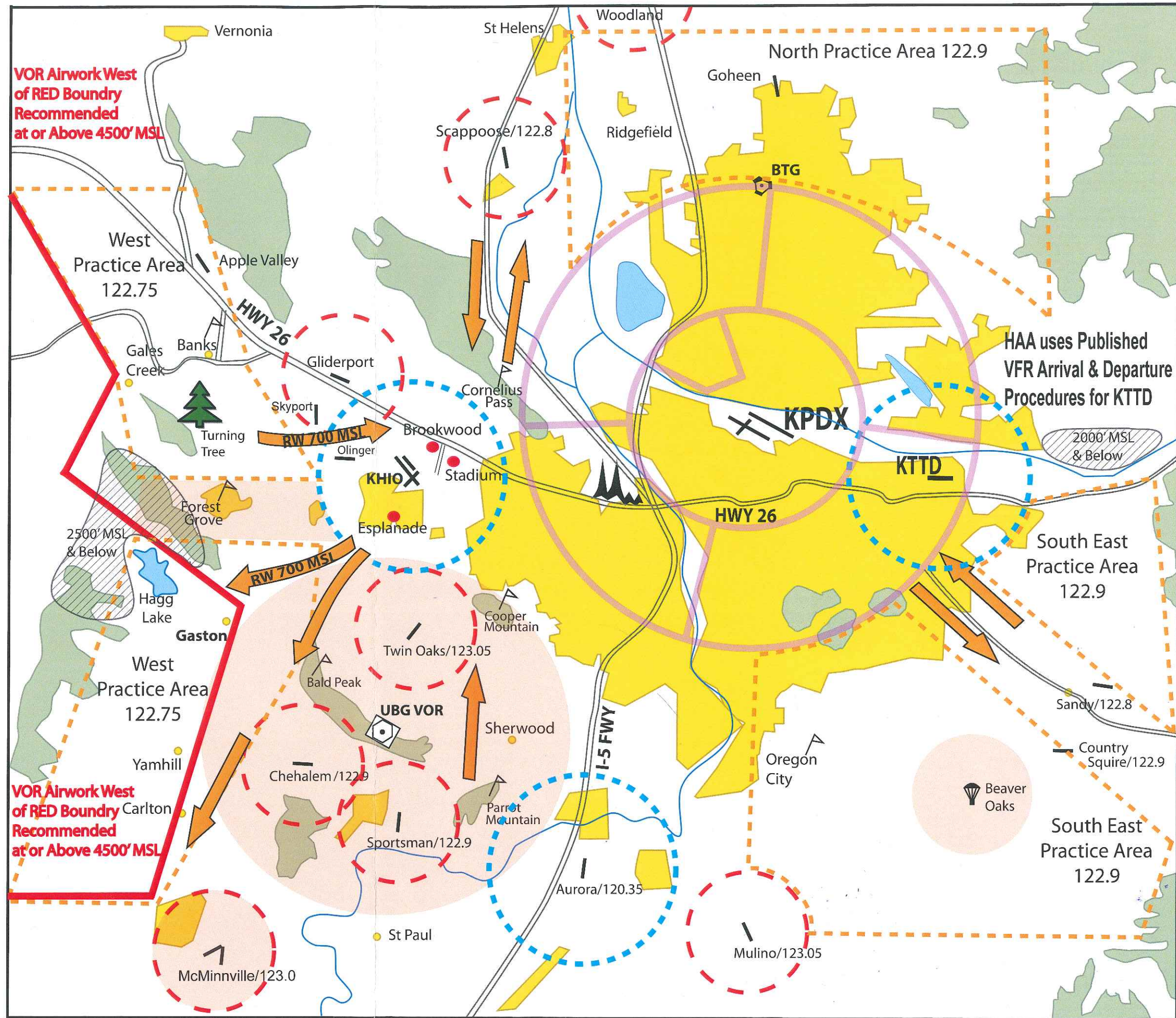
KHIO Bald Peak Departure (RWY 31L)
Climb RWY heading (308°) to 900' MSL. Past departure end of RWY then climbing left turn to Olinger Airport. Cross Olinger Airport @ or above 1700' MSL direct to Bald Peak.



KHIO Turning Tree Departure (RWY 31L)
Climb RWY Heading (308°) 900' MSL. Past departure end of RWY make climbing left turn to 1700' direct to Turning Tree.



KHIO Forest Grove Arrival (RWY 31L)
Enter Class "D" Airspace at 1200' MSL Altitude Restriction



From: Bob Cunningham
Sent: Thursday, April 14, 2016 11:14 AM
To: Sarah Fox
Subject: Industry standards for air-borne sound
Attachments: Common noise levels.pdf

Was the sample ordinance for a small plane airport or a larger commercial airport? If it was an example from a larger airport then I'd strike both.

For commercial and multi-family building walls, partitions and floor/ceiling assemblies separating dwelling units from each other or from public or service areas shall have a sound transmission class (STC) of not less than 50 (45 if field tested) for air-borne noise when tested in accordance with ASTM E 90.

For detached single family dwellings air-borne sound insulation for wall and floor-ceiling assemblies shall meet a sound transmission class (STC) rating of 45 when tested in accordance with ASTM E 90.

Bob Cunningham
Building Official
360.817.1568 Ext 4243



Common environmental noise levels

How loud is too loud?

Continued exposure to noise above 85 dBA (adjusted decibels) over time will cause hearing loss. The volume (dBA) and the length of exposure to the sound will tell you how harmful the noise is. In general, the louder the noise, the less time required before hearing loss will occur.

According to the National Institute for Occupational Safety and Health, the maximum exposure time at 85 dBA is eight hours. At 110 dBA, the maximum exposure time is one minute and 29 seconds. If you must be exposed to noise, it is recommended that you limit the exposure time and/or wear hearing protection. A three dBA increase doubles the amount of noise, and halves the recommended amount of exposure time.

The following decibel levels of common noise sources are typical, but will vary. Noise levels above 140dBA can cause damage to hearing after just one exposure.

Points of Reference *measured in dBA or decibels

- 0 The softest sound a person can hear with normal hearing
- 10 normal breathing
- 20 whispering at 5 feet
- 30 soft whisper
- 50 rainfall
- 60 normal conversation
- 110 shouting in ear
- 120 thunder

Home	Work	Recreation
<ul style="list-style-type: none"> • 50 refrigerator • 50 – 60 electric toothbrush • 50 – 75 washing machine • 50 – 75 air conditioner 	<ul style="list-style-type: none"> • 40 quiet office, library • 50 large office • 65 – 95 power lawn mower • 80 manual machine, tools 	<ul style="list-style-type: none"> • 40 quiet residential area • 70 freeway traffic • 85 heavy traffic, noisy restaurant • 90 truck, shouted

- 50 – 80 electric shaver
- 55 coffee percolator
- 55 – 70 dishwasher
- 60 sewing machine
- 60 – 85 vacuum cleaner
- 60 – 95 hair dryer
- 65 – 80 alarm clock
- 70 TV audio
- 70 – 80 coffee grinder
- 70 – 95 garbage disposal
- 75 – 85 flush toilet
- 80 pop-up toaster
- 80 doorbell
- 80 ringing telephone
- 80 whistling kettle
- 80 – 90 food mixer or processor
- 80 – 90 blender
- 80 – 95 garbage disposal
- 110 baby crying
- 110 squeaky toy held close to the ear
- 135 noisy squeeze toys
- 85 handsaw
- 90 tractor
- 90 – 115 subway
- 95 electric drill
- 100 factory machinery
- 100 woodworking class
- 105 snow blower
- 110 power saw
- 110 leafblower
- 120 chain saw, hammer on nail
- 120 pneumatic drills, heavy machine
- 120 jet plane (at ramp)
- 120 ambulance siren
- 125 chain saw
- 130 jackhammer, power drill
- 130 air raid
- 130 percussion section at symphony
- 140 airplane taking off
- 150 jet engine taking off
- 150 artillery fire at 500 feet
- 180 rocket launching from pad
- conversation
- 95 – 110 motorcycle
- 100 snowmobile
- 100 school dance, boom box
- 110 disco
- 110 busy video arcade
- 110 symphony concert
- 110 car horn
- 110 -120 rock concert
- 112 personal cassette player on high
- 117 football game (stadium)
- 120 band concert
- 125 auto stereo (factory installed)
- 130 stock car races
- 143 bicycle horn
- 150 firecracker
- 156 capgun
- 157 balloon pop
- 162 fireworks (at 3 feet)
- 163 rifle
- 166 handgun
- 170 shotgun

Sarah Fox

From: Timmerman, Carter <TimmerC@wsdot.wa.gov>
Sent: Wednesday, March 16, 2016 3:31 PM
To: John Spencer
Cc: Port of Camas-Washougal: David Ripp; worldwideflyer@gmail.com; Phil Bourquin; Sarah Fox
Subject: RE: Emailing - Agenda.pdf
Attachments: Camas Overlay Letter.pdf
Categories: Planning Department

Hello John,

My apologies for any miscommunication with the Port of Camas staff. This was the first consultation held by the jurisdiction, so if anyone is to blame, it should be me. For your review, I have attached our correspondence regarding the proposed airport overlay.

I want to let you that Sarah Fox has been an exceptional planner to work with, and has made a sincere effort to protect Grove Field from height hazards and the encroachment of incompatible land uses. During the consultation process, Sarah reached out to the Presidents of the Washington Pilots Association, the Washington Airport Management Association, the Washington Community Airports Association and the Northwest Mountain Regional Manager for AOPA. Only Warren Hendrickson from AOPA was available to participate. The intent was never to exclude the Port from any conversation regarding the proposed overlay. At WSDOT, we try encourage community engagement and cooperative working relationships between the Ports and Cities.

My apologies again for the miscommunication.

Respectfully yours,



**Washington State Department of Transportation
Aviation Division**

"Innovative leadership in state aeronautics"

Carter Timmerman | Aviation Planner
Program Manager | [Aviation Land Use Compatible Program](#)
7702 Terminal Street SW | Tumwater, WA 98501
360.709.8019
timmerc@wsdot.wa.gov

From: John Spencer [mailto:john@portcw.com]
Sent: Wednesday, March 16, 2016 11:17 AM
To: Timmerman, Carter
Cc: Port of Camas-Washougal: David Ripp; worldwideflyer@gmail.com
Subject: Re: Emailing - Agenda.pdf

Carter,

I encourage you to help ensure that municipalities work with airport owners and local pilots as well as state and municipal officials when designing overlays.

The City of Camas neglected to contact the Port of Camas-Washougal in this process and we were caught by surprise yesterday! We made it to the hearing and they have agreed to delay the process so we can meet and discuss the overlay later this month, so no harm was done.

They asserted that they received a letter from you stating that they had complied with RCW 36.70. If so, you sent the letter in error. I wanted to make you aware of this to help avoid similar missteps in the future.

Best regards,

John Spencer, Commissioner
Port of Camas-Washougal
360-839-7575

From: David Ripp
Sent: Tuesday, March 15, 2016 3:49 PM
To: John Spencer
Subject: FW: Emailing - Agenda.pdf

FYI...I plan on attending this meeting tonight after the Port's meeting....

- *David*
~~~~~



*David Ripp*  
*Executive Director*  
Port of Camas-Washougal  
24 South 'A' Street, Washougal, WA 98671  
Direct 360-835-5560 / 360-909-5126 (mobile)  
[Website](#) | [Facebook](#) | [Twitter](#) | [YouTube](#)

*All e-mail communications with the Port of Camas-Washougal and related attachments and any response are subject to disclosure under the Public Records Act and should be presumed to be public.*

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**From:** Scott Price [<mailto:worldwideflyer@gmail.com>]  
**Sent:** Monday, March 14, 2016 8:01 PM  
**To:** David Ripp  
**Subject:** Emailing - Agenda.pdf

David,

Here is the Agenda for the Planning Commission meeting tomorrow night. On the surface, I think this is a good thing, but as I said earlier tonight, I only found out about this a couple of hours ago. It appears that Camas is creating an Airport overlay, not trying to change one as I was lead to believe. My only objection at this point is the notion by the city's staff (Sarah Fox) that talking to WSDOT and AOPA meets the consultation requirements of [RCW 36.70.547](#). There are a couple of minor issues that should be addressed before this

moves forward. It is clear that this was designed from a text book and not based on the local flight patterns, especially with all the traffic that flies across that property from Troutdale. Neil Cahoon and I will be at the meeting tomorrow night. It might be nice if John Spencer was there since he is a pilot as well as Port Commissioner.

I'll talk to you tomorrow,

Scott



### Aircraft Accident Data

#### Location Patterns

For airport land use compatibility planning purposes, the most essential information to have about aircraft accidents is data showing where accidents have historically occurred around airport runways. For general aviation aircraft accidents, the most comprehensive database currently available is the one compiled for the *California Airport Land Use Planning Handbook* published in 2002 by the California Division of Aeronautics. This database contains data on nearly 900 accidents that took place within 5 miles of an airport, but not on the runway itself. The data is from accidents nationwide and covers the 10 years from 1983 to 1992, though not all accidents during this period are included.



Historic accident distribution contours were georeferenced and overlayed on this community airport's runway end using GIS. Data Source California Airport Land Use Planning Handbook, 2002

Figures E-1 and E-2 depict the geographic distribution of arrival and departure accidents relative to the end of the runway that was used or intended to be used. These figures show all the accidents in the database. The California handbook also presents a variety of subset of this data—the distributions for runways of different lengths, for example.

Along with the accident location points, the two figures also show a set of risk contours. The purpose of these contours is to indicate the relative concentration of the accident points. The contours simply divide the data points into five equal groups. The innermost contour indicates the shape that encompasses 20 percent of the points in the least possible area. The remaining contour contain 40, 60, and 80 percent of the points, with the balance of the points lying beyond the 80 percent contour.

---

#### Critical Concept

Historic accident locations apply to both runway ends since accidents can occur at either.

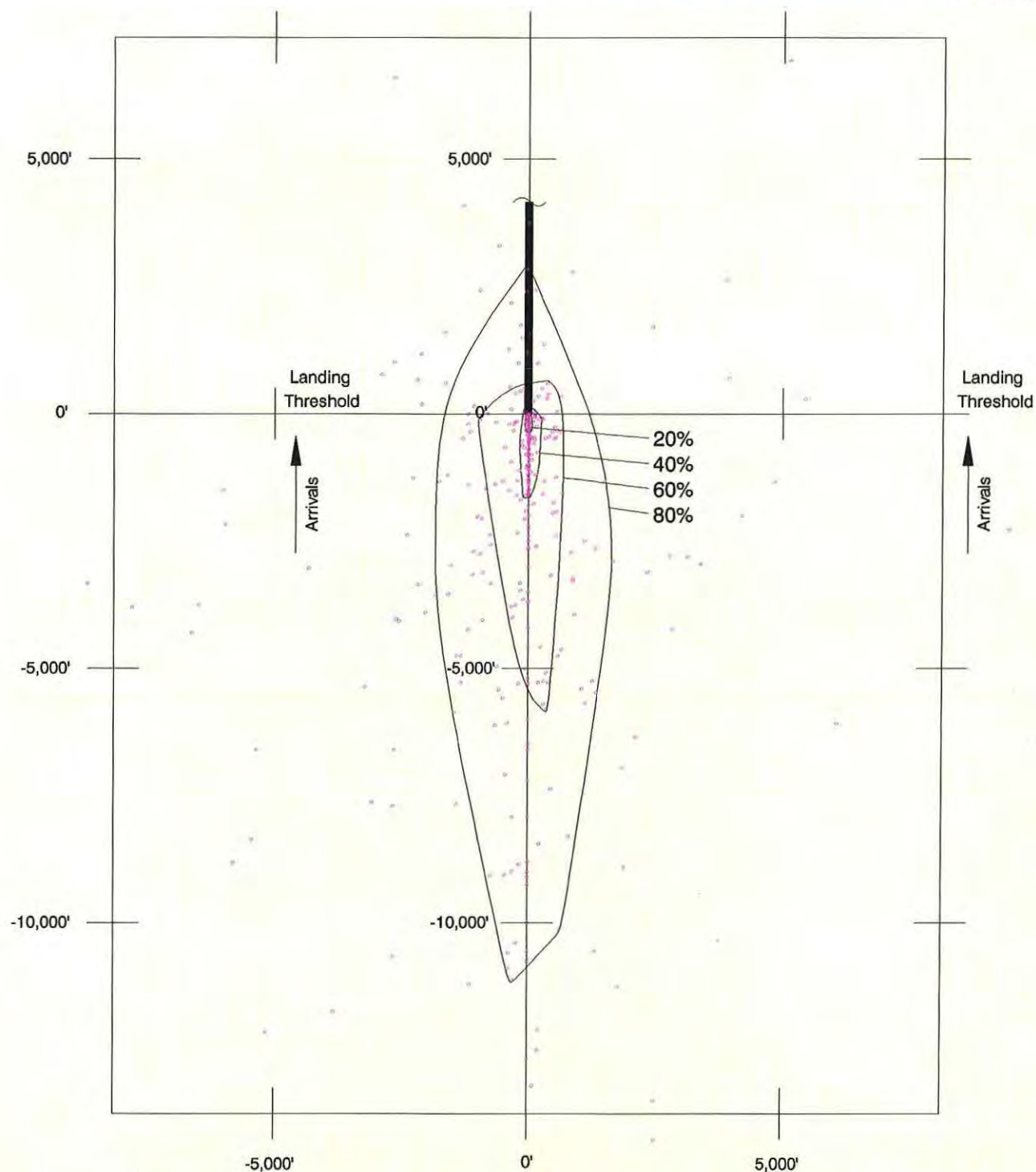
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Among the key findings apparent from the data are these:

- About half of arrival accidents and a third of departure accidents take place within the FAA-defined runway protection zone for a runway with a low-visibility instrument approach procedure (a 2,500-foot-long trapezoid, varying from 1,000 feet wide at the inner edge to 1,750 feet in width at the outer end). This fact lends validity to the importance of the runway protection zones as an area within which land use activities should be minimal.
- Although the runway protection zones represent the locations within which risk levels are highest, a significant degree of risk exists well beyond the runway protection zone boundaries. Among all near-airport accidents, over 80 percent are concentrated within 1.5 to 2.0 miles of a runway end.
- Arrival accidents tend to be concentrated relatively close to the extended runway centerline. Some 80 percent occur within a strip extending 10,000 feet from the runway landing threshold and 2,000 feet to each side of the runway centerline.



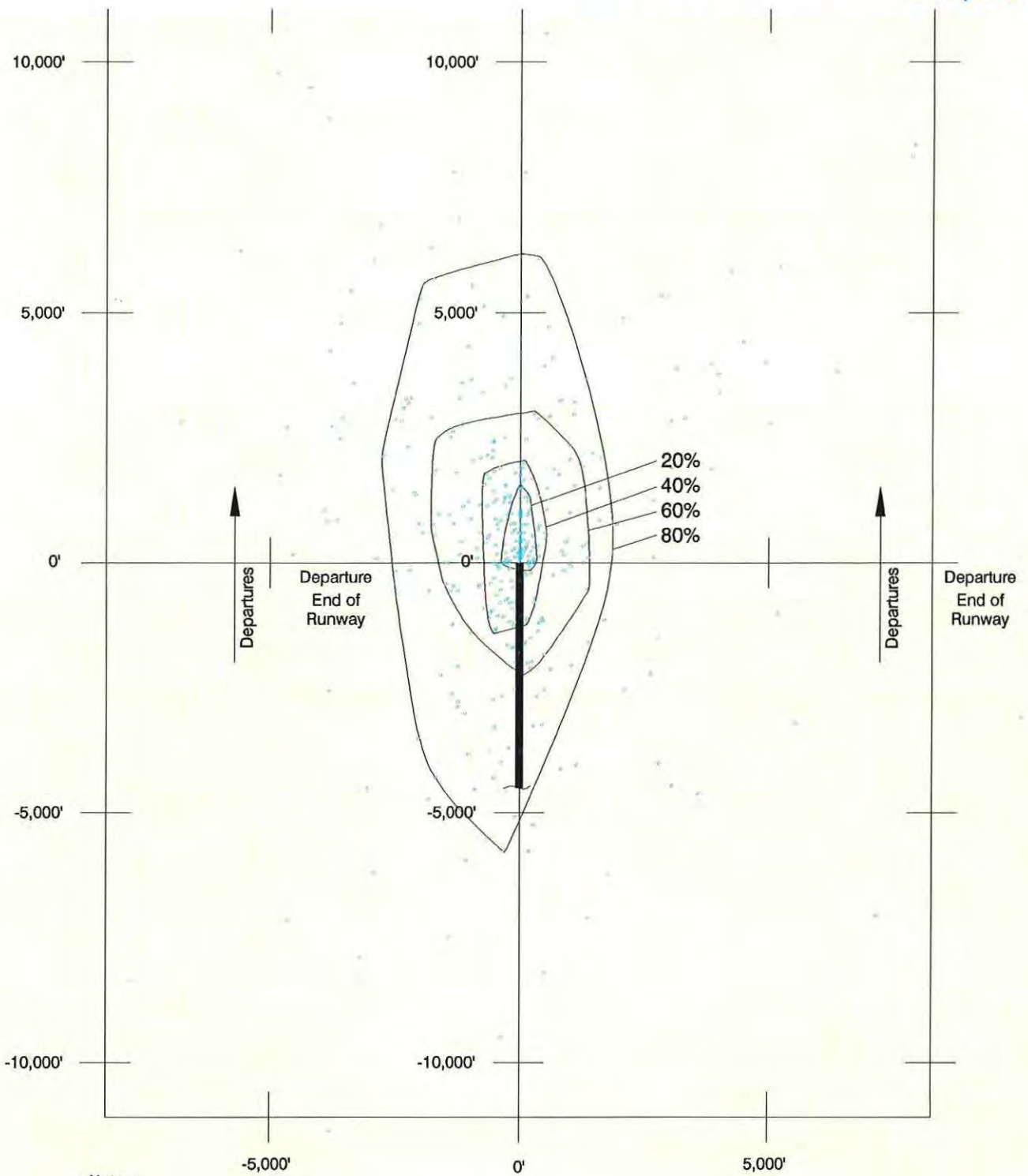
**Figure E-1**  
**General Aviation Accident Distribution Contours**  
**All Arrivals**



Notes:  
 445 arrival accidents in database - each dot represents one accident site.  
 contours represent relative intensities (highest concentrations) of points in 20% increments.

Source: *California Airport Land Use Planning Handbook* (2002)

**Figure E-2**  
**General Aviation Accident Distribution Contours**  
**All Departures**



Notes:  
 428 departure accidents in database - each dot represents one accident site.  
 contours represent relative intensities (highest concentrations) of points in 20% increments.

Source: California Airport Land Use Planning Handbook (2002)



- Departure accidents are comparatively more dispersed laterally from the runway centerline, but are concentrated closer to the runway end. Many departure accidents also occur lateral to the runway itself, particularly when the runway is long. Approximately 80 percent of the departure accident sites lie within an area 2,500 feet from the runway centerline and 6,000 feet beyond the runway end or adjacent to the runway.
- Runway length affects the distribution pattern of accidents. Arrival and departure accident locations tend to be clustered closer to the runway ends of short runways than is the case with longer runways.

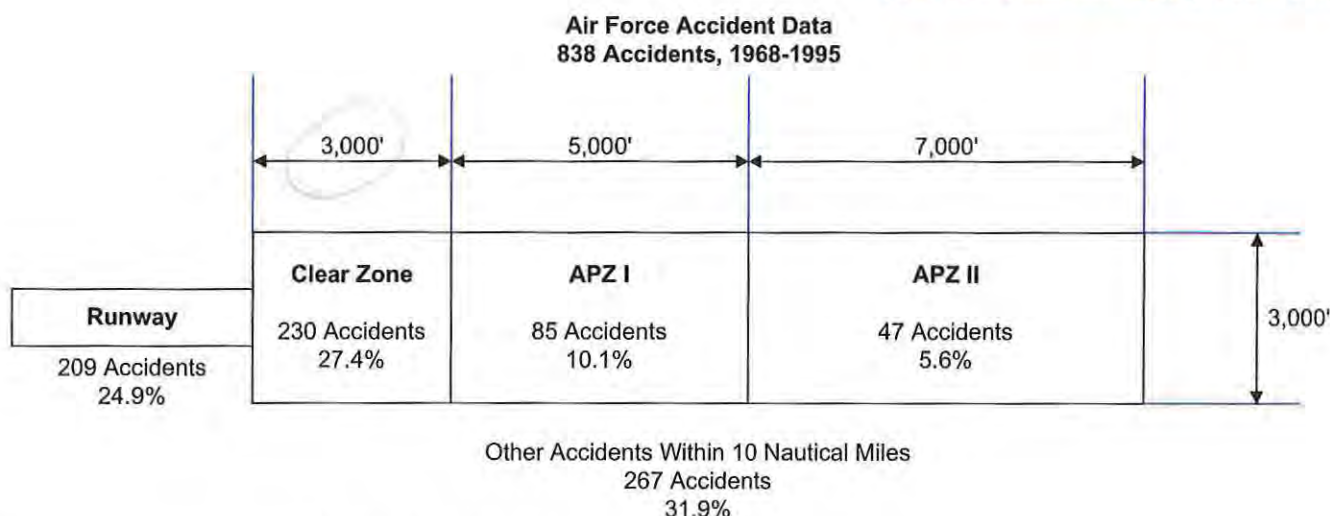
For more detail, see Appendices E and F of the *California Airport Land Use Planning Handbook* (2002) available at: [www.dot.ca.gov/hq/planning/aeronaut/documents/alup/ct%20alup%20appendix%20e.pdf](http://www.dot.ca.gov/hq/planning/aeronaut/documents/alup/ct%20alup%20appendix%20e.pdf) and [www.dot.ca.gov/hq/planning/aeronaut/documents/alup/ct%20alup%20appendix%20f.pdf](http://www.dot.ca.gov/hq/planning/aeronaut/documents/alup/ct%20alup%20appendix%20f.pdf)

The FAA has summarized similar data for commercial aircraft operations. The database, though, is limited in size and has not been updated to include accidents that have taken place over the last 20 years. As Figure E-3 shows, all of the accidents represented are located within 2 miles of the runway end. The arrival accident sites are heavily concentrated along the extended runway centerline, while the departure accident sites are comparatively more scattered. The pattern is similar to that for general aviation accidents, particularly those associated with long (6,000 feet or more) runways.

The DOD data on military aircraft accident locations is presented in a more summarized format as illustrated in Figure E-3.

The database represents 838 Air Force aircraft accidents over a 28-year period ending in 1995. Equivalent data for Navy and Marine aircraft is not available. The diagram indicates the percentages of accidents on the runway and within distinct zones near the runway ends. As with general aviation and commercial aircraft accidents, the highest concentrations are close to a runway end. Excluding the accidents on the runway itself, a 3,000-foot by 3,000-foot area accounts for 36 percent of the accidents within 10 nautical miles of the runway. Approximately 57 percent of the off-runway accidents have historically occurred within a 3,000-foot-wide strip extending 15,000 feet from a runway. The remainder have taken place farther away including an unknown percentage that can be considered en route accidents beyond the 10-nautical-mile distance from a runway.

**Figure E-3**  
**Air Force Accident Data (1968–1995)**



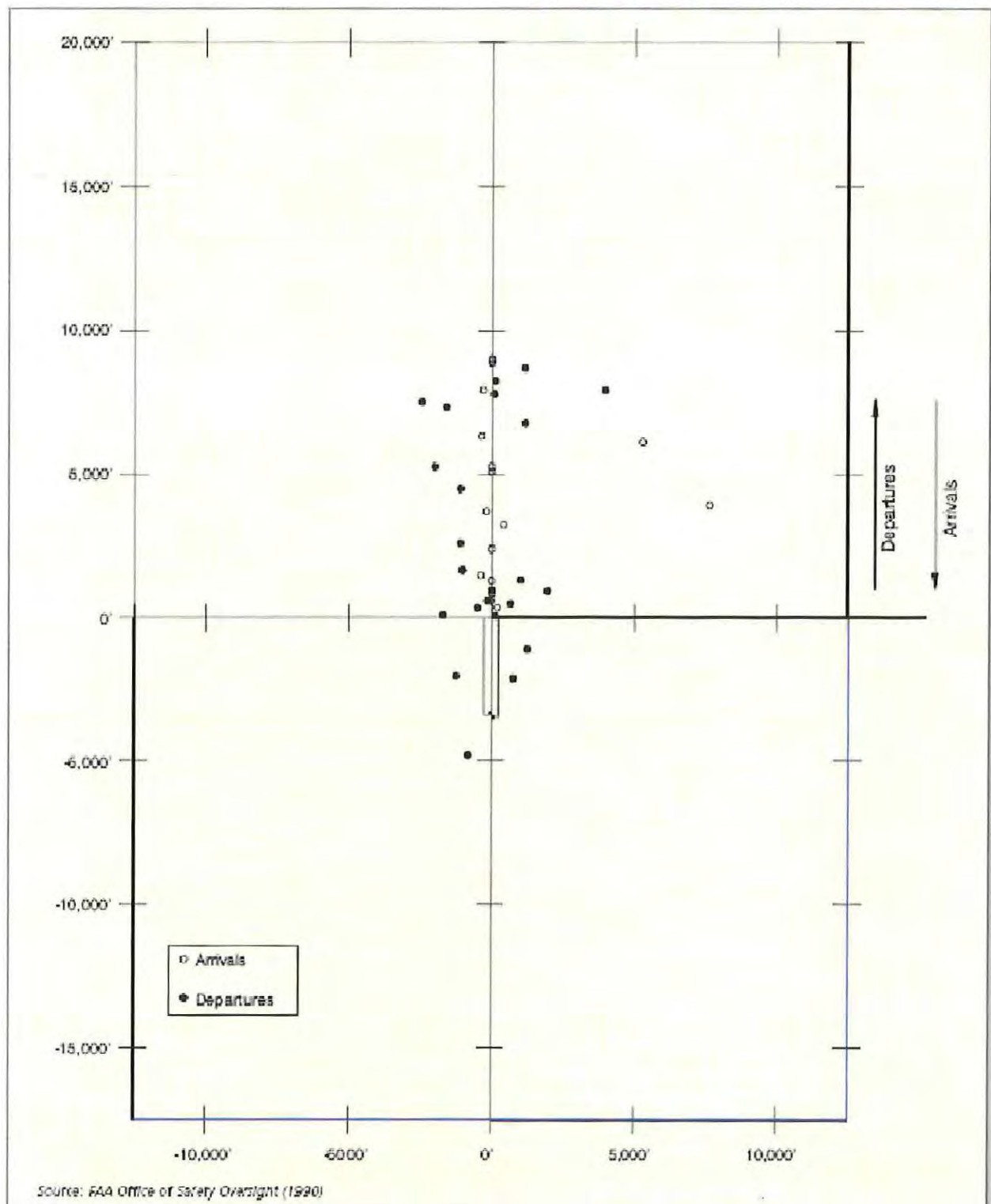
Source: AICUZ Program Manager's Guide. Air Force Handbook 32-7084 (March 1999)

## Other Characteristics of Aircraft Accidents

A variety of other data regarding the characteristics of aircraft accidents is available in the California handbook and from Federal Aviation Administration and National Transportation Safety Board (NTSB) websites. A few pieces of information of value to airport land use compatibility planning are summarized below.

- **Aircraft Types** – The type of aircraft operated at an airport or on an individual runway at a multi-runway airport is an important compatibility planning consideration. Large, heavy aircraft, especially jets, have the potential to cause major destruction on the ground if an accident occurs. However, all of the aircraft operated by airlines, as well as most business jets operated by corporations, are flown by professional pilots and are maintained at high standards that significantly reduce the frequency of accidents compared to small, private airplanes. On the other hand, these small planes generally produce much less damage on the ground when accidents happen. From a land use compatibility perspective, these differences somewhat balance each other out and other factors—particularly where the accidents occur—become the dominant planning considerations.
- **Relative Frequency of Arrival Versus Departure Accidents** – On the whole, more aircraft accidents occur during the approach/landing phase of operation than during the takeoff/departure phase. However, many landing accidents take place on or immediately adjacent to the runway. Among off-runway, near airport accidents, arrival and departure accidents happen in about equal numbers. This is explicitly true for general aviation, but the more limited data for air carrier accidents suggests it is true for them as well.
- **Controlled versus Uncontrolled Accidents** – In planning for land use compatibility near airports, consideration must be given to the two different forms of aircraft accidents: those in which the aircraft is descending, but is flying and under directional control of the pilot; and those in which the aircraft is out of control as it falls. Available data indicates that a substantial percentage, if not the majority, of general aviation aircraft accidents fall into the former category. Moreover, these data do not include the incidents in which the pilot made a successful emergency landing.
- **Accident Swath** – Swath size is another useful piece of information, especially with respect to planning around general aviation airports. It indicates the area over which accident debris is spread. Swath size in turn depends upon the type of aircraft and the nature of the accident: was the aircraft in controlled flight (an engine failure for example), but then collided with something on the ground or did a catastrophic event (such as a mid-air collision or stall-spin) result in the aircraft making an uncontrolled descent? For small general aviation aircraft, the swath size data suggests that a controlled emergency landing in which the aircraft occupants have a strong chance of surviving is possible in an area about the size of a football field: 75 feet by 300 feet or about 0.5 acre. For larger aircraft, the minimum flight speed is so much higher that the consequences for people on board and anyone in the path on the ground are likely to be severe regardless of the land use or terrain characteristics.

Figure E-4  
Commercial Aircraft Accident Location Pattern




## Risk Concepts

Central to the task of addressing the safety aspects of airport land use compatibility is the concept of risk. Locations near airport runways are exposed to a greater risk of being involved in an aircraft accident than sites farther away. As development increase the number of structures and people on the ground exposed to risk increases. The question is: how much and what type of development is reasonable? To put it another way: what level of risk is acceptable?

There is no easy answer to these questions; no formula into which all the data can be inserted and a set of safety zones and criteria will result. While the probability of an aircraft accident occurring near an airport can be calculated—see the discussion in the following sections—the real issue is what the response to that risk should be. This aspect of risk is not quantifiable.

It is beyond the scope of this Guidebook to provide a comprehensive discussion of risk concepts. Nevertheless, several points are important to highlight.

 A more in-depth review can be found in the *California Airport Land Use Planning Handbook* (2002) available at: [www.dot.ca.gov/hq/planning/aeronaut/landuse.html](http://www.dot.ca.gov/hq/planning/aeronaut/landuse.html)

### Judging Risk Acceptability

The risk of something negative resulting from an otherwise desirable activity can be measured in terms of two variables:

- The anticipated frequency of the negative event occurring.
- The potential consequences associated with the event's occurrence.

Frequency is calculated in terms of the number of events within a specific time period and location. Consequences can be physical or financial. Physical consequences can be measured in various ways depending on the nature of the event: injuries, fatalities, lost productivity, property damage, etc.

The combination of these two variables can then be used to judge whether the risk is:

- Negligible or acceptable risk (no action is necessary to reduce or protect against the risk).
- Significant, but tolerable risk (the cost of reducing or protecting against the risk must be weighed against the benefits to be gained).
- Intolerable risk (the risk cannot be justified except in extraordinary circumstances).

Intolerable risks are usually associated with events that have both high likelihood of occurrence and high consequences. Significant risks can result from events that have high frequency or high consequences or moderate levels of both, but not high levels of both. The table below illustrates the relationship between the two variables and the overall level of risk.



|                                     |               | Potential Consequences     |       |                            |        |                  |
|-------------------------------------|---------------|----------------------------|-------|----------------------------|--------|------------------|
|                                     |               | Negligible                 | Minor | Major                      | Severe | Disastrous       |
| Anticipated Frequency of Occurrence | Frequent      |                            |       |                            |        |                  |
|                                     | Occasional    |                            |       |                            |        |                  |
|                                     | Uncommon      |                            |       |                            |        |                  |
|                                     | Rare          |                            |       |                            |        |                  |
|                                     | Extraordinary |                            |       |                            |        |                  |
| Legend                              |               | Negligible/Acceptable Risk |       | Significant/Tolerable Risk |        | Intolerable Risk |

In this chart, aircraft accidents can be considered to fall into the range of rare to extraordinary frequency. To hold the risks to an acceptable level therefore means that actions should be taken to avoid potential consequences that are disastrous or, where accidents are comparatively common, severe. The question to be answered thus becomes: what land use actions are appropriate in response to a significant risk?

### Cost of Risk Response

One means of answering this question is to consider not just the risk itself, but the cost of the response. Risks that are deemed intolerable warrant a response almost irrespective of the cost. An acceptable risk on the other hand generally needs no specific action. It is in the middle range of risks—those that are merely tolerable—that costs become important. While avoidance of the risk may be desirable, society has limited resources for addressing risks and priorities often must be set. Risks that fall toward the intolerable end of the spectrum may warrant a response unless the cost is very high; whereas, if the risk is close to being acceptable, action may be appropriate only if the cost is relatively minimal.

When considering this issue in the context of aircraft accidents, two key variables are apparent.

- **Existing Versus Proposed Uses** – One clear distinction is that the cost of reducing or limiting risks is usually greater where development already exists than where land is undeveloped. The cost of removing an incompatible development is greater than the cost of avoiding its construction in the first place. An implication of this point is that allowing an existing incompatible use to remain may be considered tolerable, but permitting a similar new use may be unacceptable.
- **Urban Versus Rural Areas** – A second difference is between urban and rural environments. In urban locations, land values and other development costs typically are higher than in rural areas. The cost—represented by lost opportunity—of limiting development to what might, if not for airport compatibility concerns, otherwise be the land's highest and best use is thus typically greater in urban areas. Also a factor is that, in urban areas, there are often fewer options as to where land uses that are needed in the community can be placed. Less than ideal location choices consequently may be the best choices. Land uses that may not be entirely compatible with each other may nevertheless be considered as acceptable neighbors. People living in urban areas usually consider these risks as reasonable tradeoffs for the benefits that cities also provide. For these reasons, a particular use may be acceptable near an urban airport, but be inappropriate in an identical location near a rural airport.

## Risk Perceptions

Another factor that greatly affects the response to risk is how the risk is perceived. This factor accounts for why two different risks that have very similar likelihood of occurrence and potential consequences may produce very different responses. Public response to a risk is usually driven more by the perception of the risk than by the actual risk based on historical experience or mathematical calculations.

A related factor is perspective—that is, who benefits from the activity and who bears the risk? Risks that may be acceptable to society as a whole, may not be acceptable to an individual or vice versa.

Some of the key variables that affect risk perception are listed in the tabulation below. Also noted is where aircraft accident risks fit with regard to these variables. When looked at in this manner, it is difficult to think of any other types of risks that are highly comparable to those posed to people and property on the ground by the threat of aircraft accidents. To be comparable to aircraft accident risks, not only must the likelihood of occurrence be similarly low, but the character of the risks must be qualitatively similar.

| <b>Risk Perceptions</b>                                                                                                                                                         |                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><i>A risk is perceived to be higher if:</i></b>                                                                                                                              | <b><i>Aircraft accidents are perceived as:</i></b>                                                                                              |
| The general public has limited understanding of how the technology or system operates                                                                                           | Involving a form of transportation that is not well understood by most people because they don't fly airplanes                                  |
| After a failure in the technology or system, no one, including experts in the field, seems to know and understand the cause (as opposed to events for which the cause is clear) | Not well understood—and even if experts may eventually ascertain the cause of an accident, the public may not see or understand the conclusions |
| The possible consequences of the hazard evoke feelings of dread, especially concerns about death                                                                                | Giving no advance warning (and people don't tend to look upward for potential danger)                                                           |
| The possible consequences seem unbounded (in magnitude or persistence over time) or are believed to be potentially catastrophic                                                 | Including consequences which are unpredictable and potentially catastrophic                                                                     |
| The activity is not under one's own control (the risks are not affected by one's own skills)                                                                                    | Not controllable as a function of the individual's skills                                                                                       |
| The risk exposure is not on a voluntary basis (the exposure cannot readily be reduced by changes in one's lifestyle)                                                            | Not voluntary except to the extent that people choose to live near an airport                                                                   |
| The hazard is unnatural (not an act of nature)                                                                                                                                  | Not an act of nature                                                                                                                            |
| The potential personal or societal benefits to be gained from the activity involved appear to be minimal or nonexistent                                                         | Involving an activity (flying) that provides little or no benefit to the people and property owners on the ground who bear the risk             |
| The distribution of risks and benefits among groups or geographically is inequitable                                                                                            | Placing the cost of mitigating the risk on owners of property near the airport                                                                  |
| The groups at risk include children, elderly, the infirm, or others regarded as having comparatively little control over their own lives                                        | Placing greater risk on these groups because they would have greater difficulty getting away from the site of an aircraft accident              |
| Highly negative imagery about the technology or system is widespread in the media (especially pictures on television and in newspapers)                                         | Often worthy of nationwide media coverage                                                                                                       |



Also evident is that for all of the variables listed, aircraft accidents fall at the end of the spectrum that causes the perception of the risk to be greater than the mathematical risk. Even though the frequency of aircraft accidents is low, people focus on the consequences as they have historically occurred and potentially could happen again. For these reasons, a stronger response can be justified for aircraft accident risks than might be warranted for other accident risks.

## Establishing Safety Compatibility Policies

### Safety Zones

The discussion in this appendix focuses on aircraft accidents and how this data should be used in addressing the safety compatibility of new development around airports. On this basis, we call the zones described here “safety zones.” However, for Washington airports noise, airspace protection, vibration, odors, annoyance, and other impacts of regular aircraft overflights, can be folded into the safety zones to create composite “compatibility zones” and a composite set of compatibility criteria created to match.

---

**Critical Concept**

When considering the locations of aircraft accidents relative to the typical traffic patterns at the airport, it is important to recognize that where aircraft normally fly may not be where they fly under emergency conditions. Aircraft accidents often occur in locations that might not be expected merely from examination of flight tracks.

---

While the risk contours described above are helpful as means of portraying the geographic pattern of aircraft accident risks near an airport, they are difficult to directly use as the basis for defining safety compatibility policies. Their irregular shape is one drawback—although, in that respect, they are no different from noise contours. More important is the lack of precision that results from the modest size of the database. Also a consideration is that the irregular shapes do not specifically reflect the different phases of aircraft flight around and airport and the different risk characteristics associated with each phase.

More useful for compatibility planning purposes is to define a set of safety zones based upon the accident location distribution data and risk contours, but having regular geometric shapes. Diagrammed below is a set of six zones originally recommended in the California handbook and utilized in Washington and other states. These zones were defined using the nationwide database of general aviation aircraft accidents described earlier (see Figure E-5).

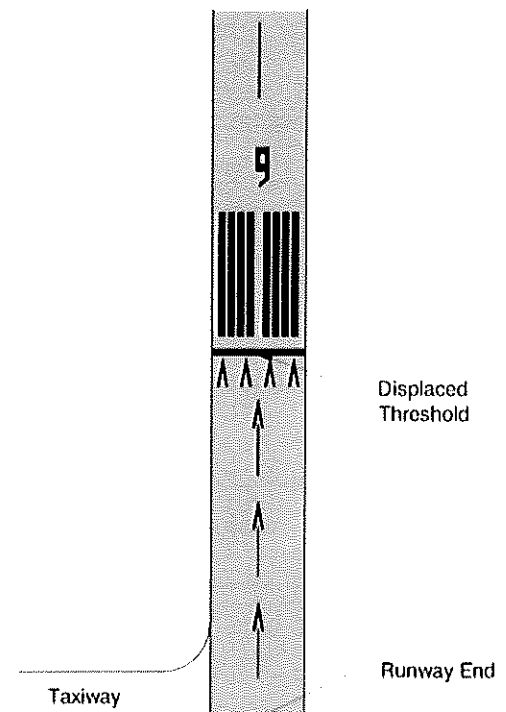
The California handbook recommends variations on the zones to take into account different runway lengths, types of approach procedures, traffic pattern location, and other factors. As shown in the following diagrams, the suggested zones are larger for longer runways that accommodate larger, faster aircraft than for short runways used only by light aircraft. The same basic shapes and characteristics of the zones apply, however. The six zones can be characterized as follows:

- **Zone 1 – Runway Protection Zone** – This zone encompasses the runway protection zone (RPZ) at each end of the runway and should use the RPZ dimensions established in accordance with FAA standards (RPZ dimensions depend mostly on the visibility minimums for the approach to that runway end). Also included in the zone are the strips of land immediately adjacent to the runway where FAA standards preclude structures. Zone 1 is where the greatest concentration of accidents take place.

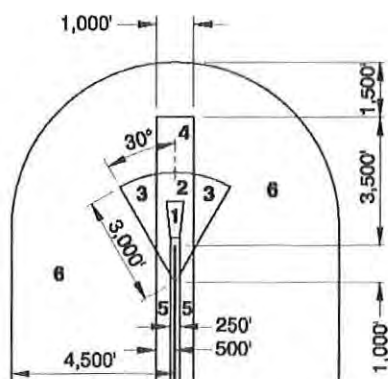
- **Zone 2 – Inner Approach/Departure Zone** – This zone wraps around and extends beyond Zone 1 along the runway centerline. Next to the RPZ, it represents the area where the risk of aircraft accidents is the greatest. On departure, aircraft are typically at full power in the initial phase of climb. On approach, they are at low altitude as they prepare for landing.
- **Zone 3 – Inner Turning Zone** – This zone is a wedge-shaped area lying along the sides of Zone 2. It is primarily significant at general aviation airports where most of the flights are visual. At airports where most aircraft approach and depart on instrument flight plans, then the close-in turns which are the concern with Zone 3 can be a narrow wedge. When operating visually, departing aircraft may begin turning over this area to fly toward their destination or to remain in the traffic pattern. Arriving aircraft often overfly this area as well, especially if they are flying a tight pattern. One type of accident known to occur in this area is a low-altitude stall-spin that can happen if a pilot attempts to make too tight of a turn.
- **Zone 4 – Outer Approach/Departure Zone** – This area lies beyond Zone 3 along the extended runway centerline. Aircraft flying straight out or in overfly this area at low-altitude. The zone is particularly significant on runways where much of the operations are on instrument procedures and at busy airports where elongated traffic patterns are common. The risks in this area are moderate, but less than in Zones 1 through 3.
- **Zone 5 – Sideline Zone** – Lying in narrow bands along each side of the runway, aircraft do not normally fly over the sideline zone. The principal risk is from aircraft that lose directional control while landing or just after takeoff. The risks are lower than in Zones 1 through 3 and similar to those of Zone 5.
- **Zone 6 – Traffic Pattern Zone** – The final zone contains the remainder of the airport environment where aircraft fly as they approach and depart the airport or are engaged in flight training. In area, Zone 6 is typically larger than the other zones combined. A substantial percentage of accidents take place here, but they are scattered over the large area.

Each airport is unique. Thus, it is essential to adjust safety zones to fit the airfield configuration, usage characteristics, and other factors associated with a specific airport. Adjusting for runway length is the first step. Additionally, adjustments for approach type, fleet mix, traffic pattern location, etc., may be appropriate for individual runways. For example, adjustments could be considered for runways having displaced landing thresholds, particularly if most landings are made at that end of the runway and few takeoffs come toward that end. Runways having traffic patterns only on one side may dictate some adjustment to Zone 3. Regular use of a runway by special-purpose airplanes such as agricultural, fire attack, and military or by helicopters also may warrant consideration.

Beyond these types of adjustments, reliance on nationwide rather than airport-specific accident data is essential. Because aircraft accidents are infrequent occurrences, the pattern of accidents at anyone airport cannot be used to predict where future accidents are most likely to happen around that particular airport.



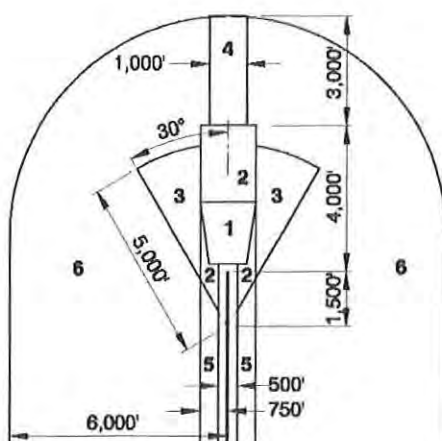
**Figure E-5**  
**Safety Compatibility Zone Examples**  
**General Aviation Runway**



**Example 1:**  
**Short General Aviation Runway**

**Assumptions:**

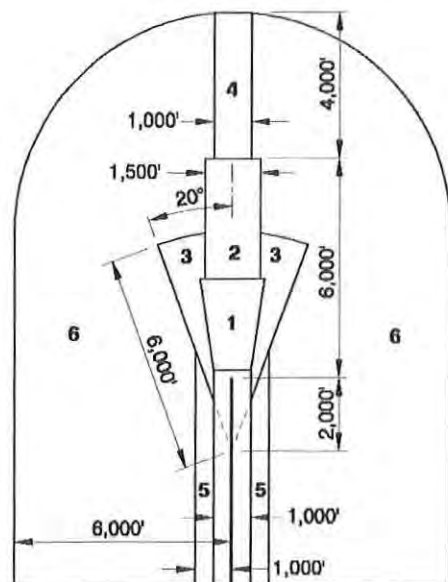
- Length less than 4,000 feet
- Approach visibility minimums  $\geq 1$  mile or visual approach only
- Zone 1 = 250' x 450' x 1,000'



**Example 2:**  
**Medium General Aviation Runway**

**Assumptions:**

- Length 4,000 to 5,999 feet
- Approach visibility minimums  $\geq 3/4$  mile and  $< 1$  mile
- Zone 1 = 1,000' x 1,510' x 1,700'



**Example 3:**  
**Long General Aviation Runway**

**Assumptions:**

- Length 6,000 feet or more
- Approach visibility minimums  $< 3/4$  mile
- Zone 1 = 1,000' x 1,750' x 2,500'

Source: California Airport Land Use Planning Handbook (2002)

## Safety Criteria

The second half of the process of establishing safety policies is to decide upon the criteria that should apply within each of the zones you have delineated. Even more than for the mapping of the zones, there are no absolute rules here, only general guidance. Ultimately, the decision comes back to the issue of acceptable risk.

Several types of land use characteristics are particular concerns with regard to safety compatibility. Criteria should be written to address each of these.

- **High-Intensity Uses** – Given that the potential for injury or death to people on the ground is usually considered the greatest potential land-use-related consequence that could result from aircraft accidents, then limiting the number of people in harm's way is the foremost safety compatibility objective. Typically, the limit is defined in terms of a maximum acceptable number of people per acre of a project site and referred to as a “usage intensity” limit. Deciding upon a specific limit for each safety zone can be challenging, so you may want to instead emphasize land use types. See Chapter 3 for guidance on what land use types are compatible or incompatible with the airport.
- **Residential Uses** – Residential development is usually described in terms of density—the number of dwelling units per acre—rather than intensity or people per acre. Mathematically, a relationship can be drawn between the two by knowing the average number of persons per household. For safety compatibility purposes, however, residential density limitations should not be equated to the usage intensity limitations for nonresidential uses. Society tends to seek a higher degree of protection for people's homes than for most other types of land uses. On this basis, restricting residential development to a density lower than the equivalent nonresidential intensity limit is desirable. Better yet, because of noise and overflight impacts, the best choice is to not introduce new residential development in the approach safety zones (Zones 1 through 5) except perhaps if the densities are very low (less than 1 unit per 5 acres).
- **Uses Having Vulnerable Occupants** – These uses are those in which the majority of occupants are children, elderly, and/or disabled—people who have reduced effective mobility or may be unable to respond to emergency situations and get out of harm's way. Primary uses in this category include: children's schools (grades K–12); day care centers; hospitals and other health care facilities, especially where anesthesia is used during operations or patients remain overnight; and nursing homes.
- **Hazardous Materials Storage** – Aboveground storage of large quantities of hazardous materials (flammable, explosive, corrosive, or toxic) poses special concerns to the extent that an aircraft accident could cause release of the materials and thereby pose dangers to people and property in the vicinity. Avoidance of such uses or ensuring that the facilities are adequately protected against the consequences of an aircraft accident are recommended.
- **Critical Community Infrastructure** – This category pertains to facilities the damage or destruction of which would cause significant adverse effects to public health and welfare well beyond the immediate vicinity of the facility. Particular examples include: emergency services facilities such as police and fire stations, emergency communications facilities, and power plants and other utilities.

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While the criteria outlined here are all safety related, creation of a combined set of criteria that also considers noise, airspace protection, vibration, odors, and other impacts of regular aircraft overflights is highly encouraged.

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# Staff Report for Airport Overlay Zoning (File #MC16-03)



To: Bryan Beel, Chair  
Planning Commissioners  
From: Sarah Fox, Senior Planner  
Date: March 8, 2016

**Applicable law:** Revised Code of Washington (RCW) 36.70.547 and 36.70A.510; Camas Comprehensive Plan (version 2004) Policy TR-29 and Strategy TR-10; and CMC Title 18 Zoning.

**WSDOT Aviation:** Fulfilled state requirements on March 2, 2016, to consult with airport owners, managers, private airport operators, general aviation pilots, ports, and the Aviation Division of WSDOT prior to adoption of comprehensive plan policies or development regulations that may affect property adjacent to public use airports. Comments are attached to this report.

**Public Notices:** Notice of the public hearing was published in the Post Record on March 8, 2016 (Legal Publication #555485)

**Note:** *Camas Municipal Code (CMC) citations are in italic type throughout this report.*

## Summary:

Owned and operated by the Port of Camas-Washougal, Grove Field is located in Clark County, adjacent to the eastern city limits (632 NE 267th, Camas). Proposed Chapter 18.34 Airport Overlay Zoning proposes regulations on land uses, height and noise in order to minimize and resolve potential land use conflicts with the airport, which is required by state regulation RCW 36.70.547 (attached). The proposed airport overlay was also a project on the Community Development 2016 Work Plan that was approved by Council.

## Analysis:

There is no criteria within CMC for approval of zoning code amendments, however Site Specific Rezones, CMC§ 18.05.010(D) applies to the city's zoning map. The proposed overlay zone is site specific, given that it generally extends a mile from the airport runway, but it also includes development regulations. The guidelines are generally applicable, and therefore are addressed as follows:

*CMC§ 18.05.010(D) Site Specific Rezones. A site specific rezone involves an application of an owner of a specific parcel or set of contiguous parcels that does not require modification of the comprehensive plan. Site specific rezones are decided by the hearing officer after a public hearing. The criteria for reviewing and approving a site specific rezone are as follows:*

*1. The use or change in zoning requested shall be in conformity with the adopted comprehensive plan, the provisions of this title, and the public interest.*

**Discussion:** The proposed Airport Overlay Zone does not require modification of the comprehensive plan, rather the proposed amendments support the strategies and goals of the current (2004) comprehensive plan. Within the Transportation Element, Policy TR-29 states, "*Consider existing railroad and air transportation facilities to be city resources and reflect the needs of these facilities in land use decisions.*" The proposed development regulations will contribute to the long-term viability of the airport, and will encourage future development to be more compatible and safely designed. Strategy TR-10, "*Enhance safety by prioritizing and mitigating high collision locations within the City.*" This strategy was likely intended to apply only to roadways, however it is applicable to this application given that Airport Overlay Zone A is considered to be an area with the highest potential for aircraft collisions and crashes. For this reason, the proposed code includes more restrictions on land uses in Zone A than the other two zones, such as prohibiting school development.

*2. The proposed zone change shall be compatible with the existing established development pattern of the surrounding area in terms of lot sizes, densities and uses*

**Discussion:** Generally, the land that is nearest to the airport runway is zoned Business Park. The uses and intensity of development within this zone are relatively compatible with the airport uses, with a few exceptions that are proposed to be prohibited. The overlay zone would also provide additional guidance and protection, if the development standards for the Business Park change, as this happens from time to time. For example, the potential zoning code changes, may be focused on an area of the city that is not within the airport overlay zone, and the use or development standards might unintentionally not be considered in light of airport compatibility.

**Findings:** The proposed development regulations are intended to ensure that there is long-term compatibility between new development and the adjacent airport.

#### Findings of Fact and Conclusions of Law:

- As proposed, the purpose stated in Section 18.34.05 (A) is consistent with the transportation element of the city's comprehensive plan (2004).
- As proposed, the development regulations of Sections 18.34.06, 07, and 08 will ensure compatibility with adjacent land uses pursuant to CMC§ 18.05.010.
- As required by RCW 36.70.547, staff consulted with aviation groups and WSDOT Aviation.

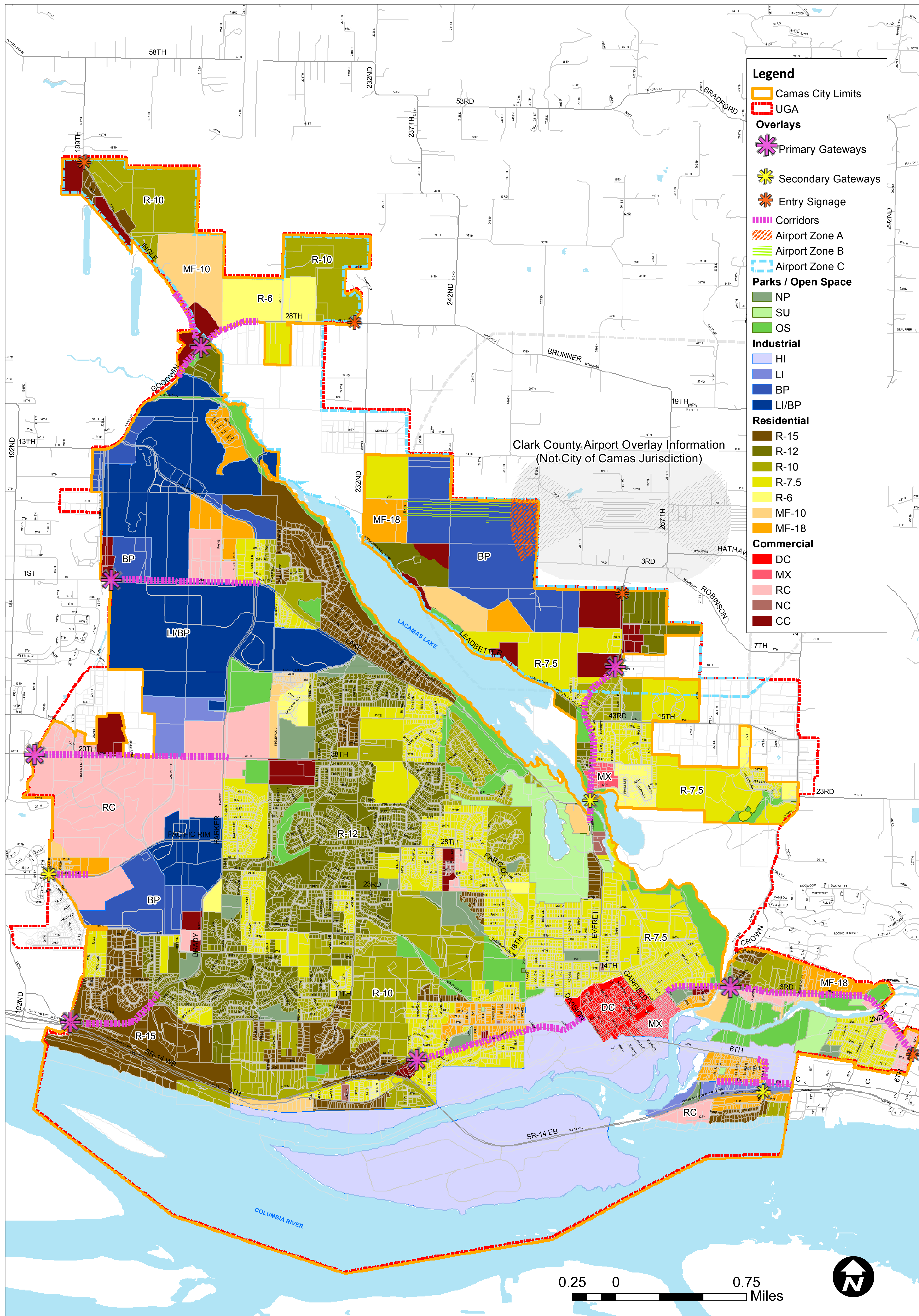
#### Recommendation:

Staff recommends that Planning Commission forward a recommendation of approval for the proposed Chapter Airport 18.34 Overlay Zoning.

#### Attachments:

1. Airport overlay zone map (Note: The overlay area is shown on the draft Camas Zoning Map)
2. Letter from Carter Timmerman, WSDOT Aviation (March 2, 2016)
3. Email from Warren Hendrickson, Northwest Mountain Regional Manager, AOPA, suggesting that the city include an aviation easement (February 9, 2016)
4. Email from Laurie Lebowsky, Clark County Planning, declining to collaborate on zoning amendments (February 29, 2016)
5. Email from Lynn Johnston, property owner, in support of the airport overlay zoning on his property (February 9, 2016)
6. Revised Code of Washington (RCW) 36.70.547









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# 2035 COMPREHENSIVE PLAN

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File #CPA16-01  
Edition 2.0

Attachments

Staff Report to Planning Commission

Draft Comprehensive Plan Map

Draft Camas Zoning Map

APRIL 14, 2016



## 2035 COMPREHENSIVE PLAN

### STAFF REPORT – EDITION 2.0

TO: Bryan Beel, Chair  
Planning Commission

BY: Sarah Fox, Senior Planner

DATE: April 14, 2016

HEARING DATE: April 19, 2016

Continued from March 15, 2016

**Public Notice:** Notice of a public hearing to consider proposed map amendments was published in the Camas Post Record on March 8, 2016 (Legal publication #555492)

#### I. SUMMARY

This Staff Report (Edition 2.0) is part of a series of reports on the final draft of the Camas 2035 Comprehensive Plan update. Given the scope of this update, public hearings will be held on parts of the project, with a final hearing that will be held to render a consolidated decision on the update by June 2016.

This edition (2.0) will respond to issues and concerns that were raised at the March 15, 2016 public hearing that was continued to the next regular meeting of the Planning Commission on April 19, 2016.

As a community, we have been preparing a cover-to cover update of the Camas Comprehensive Plan, which is required by the Revised Code of Washington (RCW) Chapter 36.70A, the Growth Management Act (GMA). The last cover-to-cover update was in 2004. Counties and cities must be in compliance with the requirements of GMA to be eligible for grants and loans from certain state infrastructure programs.

#### II. QUESTIONS AND CONCERNS RAISED AT THE PUBLIC HEARING

A staff report (Edition 1) was provided at the public hearing on March 15, 2016, which included an analysis and findings of support for the proposed amendments to the draft Comprehensive Plan Map and Camas Zoning Map.

This staff report (Edition 2.0) will respond to the concerns that were raised by citizens at the public hearing on March 15, 2016. In brief, the testimony included the following questions and concerns:

- What outreach has the city conducted to inform the citizens of these proposed changes? Why is this the first time that I have heard about it?
- How does a commercial designation affect the current residential use of my property?
- Why has the draft map changed from the Open House on January 14, 2016?

### III. What outreach has the city conducted on the proposed changes?

It was unfortunate that members of the public expressed dissatisfaction with the city's outreach efforts. The primary goal of the city's public involvement plan was to involve a wide range of citizenry into the comprehensive plan update, at all phases of the project. Although, it would be unrealistic to contact every citizen in Camas, strategic efforts have been made at all stages of this project to identify those who might be affected by proposed changes, and to solicit feedback. For this reason, hundreds of citizens have been directly involved in this update by their attendance at open houses, membership on an advisory committee, or commenting online through surveys.

The comprehensive plan update effort began in the summer of 2014 with a kick-off campaign at Camas Days. The update was named "Camas 2035" to better inform and engage Camas citizens that this is a 20-year plan. The project includes two phases, visioning and implementation. Through the visioning phase in 2014, the community developed the Camas 2035 Vision, which was adopted by City Council. Throughout 2015, this Vision was used to develop policies and implementation tools which were included in the draft comprehensive plan document and supporting maps. Since 2014, the city has maintained a website and Facebook page on the project and has over 300 residents that joined an email list for updates. What follows is a brief summary of outreach and milestones of the project to date:

#### 2014

- Conducted surveys both online and met with small groups (e.g. Lacamas Lake Walking Group) 417 participants
- Held two Vision Summits that drew over 300 participants
- Conversations with key stakeholder groups, including the Camas Youth Advisory Committee (CYAC), Port of Camas/Washougal, Camas Parent Teacher Organization Leaders, Helen Baller Parent Teacher Association, Camas Farmers' Market customers, and the Camas/Washougal Economic Development Association
- Vision kick-off at Camas Days where the community recorded what they love most about Camas

#### 2015

- Met with citizens at Camas Days for the second year in a row
- Multiple work sessions with the Technical Advisory and Steering Committees on drafting comprehensive plan goals and policies to be consistent with the community's vision
- Work sessions with Planning Commission and City Council to fine-tune the goals and policies proposed by both committees
- Mailers were sent to over 370 properties regarding proposed map changes

#### 2016

- Open House on January 14<sup>th</sup> at Lacamas Lake Lodge
- City Council Annual Planning Conference at Lacamas Lake Lodge on January 30<sup>th</sup>
- Survey on proposed goals and policies in January had over 180 residents participate
- Planning Commission conducted a public hearing on map amendments on March 15<sup>th</sup>, which was continued to April 19<sup>th</sup>
- Project update flyer mailed to over 600 residents on April 15, 2016. This mass mailing included all those who attended meetings, public hearings, and signed up online. Also an email providing an update was sent to over 300 citizens.

### IV. How does a commercial designation affect the current residential use of my property?

From time to time the city will adopt changes to the city's comprehensive plan map or zoning map, either through an individual request or through a broader city-lead planning effort.

There are provisions in the city code to provide protections to the properties whose current use is not consistent with the newer zoning. Those protections can be found within Camas Municipal Code, Chapter 18.41 Nonconforming Lots, Structures and Uses. The main purpose of this chapter is to allow current and active uses to continue without any requirement to make changes, such as demolition of a structure or



connecting to city services (if currently not connected to sewer or water). Chapter 18.41 requires that if the property redevelops or the use changes (e.g. residential to commercial), then the current regulations (at that time) apply to the property.

The proposed amendments, if adopted, will not require property owners to abandon their current, lawfully established use.

#### V. Why has the draft map changed from the Open House on January 14, 2016?

As described in detail at Section III of this Staff Report, the city responds to feedback received at every stage of the project. For example, the first draft map of the Camas 2035 project was to fine-tune the proposed Gateways and Corridors overlay zones, which was developed with the advisory committees and discussed at workshops before the Commission and Council in 2015. The first (full) draft zoning map with the proposed overlay zones (dated 11/9/15) was attached to the Planning Commission agenda on December 15, 2015. Feedback from this meeting resulted in staff revising the map to correct areas on the comprehensive plan map that should have been designated as Park not Residential.

The next draft versions of the comprehensive plan and zoning maps were presented at the Open House on January 14, 2016. Staff received considerable input regarding the zone changes proposed along NE Everett, and less comments about the proposed comprehensive plan changes. Together with the identification of a misalignment of the future north-south arterial, additional changes were made to the draft zoning map.

The draft version presented at the March 15<sup>th</sup> hearing included adjustments to the zoning to better match the future alignment of the north-south arterial. The changes from the previous version were also a result of further analysis of the properties along the Everett Street corridor and individual site conditions.

Staff anticipates that there will be more changes to the draft maps as they are presented at the upcoming public hearings. Those changes will be prompted by the decision makers and public testimony. Staff will provide recommendations on each new version of the draft maps to the decision makers based on consistency with the 20 year planning efforts.

#### VI. RECOMMENDATIONS

Planning Commission's recommendations on the proposed map amendments may include the following actions which will be forwarded to Council for a final decision, pursuant to CMC§18.51.050 (B) (1-5) in part,

- (1) Approve as recommended;
- (2) Approve with additional conditions;
- (3) Modify, with or without the applicant's concurrence;
- (4) Deny; or
- (5) Remand











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# 2035 COMPREHENSIVE PLAN

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File #CPA16-01

Edition 1.0

Attachments

Staff Report to Planning Commission

Table 1 - Residential and Employment Capacity

Table 2 - Proposed Map Amendments – Acreage by Zone

Draft Comprehensive Plan Map

Draft Camas Zoning Map

MARCH 8, 2016



## 2035 COMPREHENSIVE PLAN

### STAFF REPORT – EDITION 1.0

TO: Bryan Beel, Chair  
Planning Commission

BY: Sarah Fox, Senior Planner

DATE: March 8, 2016

HEARING DATE: March 15, 2016

**Public Notice:** Notice of a public hearing to consider proposed map amendments was published in the Camas Post Record on March 8, 2016 (Legal publication #555492)

#### I. SUMMARY

This Staff Report (Edition 1.0) is the first in a series of reports on the final draft of the Camas 2035 Comprehensive Plan update. Given the scope of this update, public hearings will be held on parts of the project, with a final hearing that will be held to render a consolidated decision on the update by June 2016.

As a community, we have been preparing a cover-to cover update of the Camas Comprehensive Plan, which is required by the Revised Code of Washington (RCW) Chapter 36.70A, the Growth Management Act (GMA). The last cover-to-cover update was in 2004. Counties and cities must be in compliance with the requirements of GMA to be eligible for grants and loans from certain state infrastructure programs.

The update project has spanned two years. Beginning in 2014, the city conducted extensive outreach to include several public forums, surveys, and a Steering Committee to craft a new community vision, which was adopted as Resolution 15-002 in February 2015. Following adoption of the vision, staff worked with a Technical Advisory Committee (TAC) to review every required element of the comprehensive plan document. Each element is a chapter that is guided by the Vision Statement and establishes goals and policies to ensure the community vision is upheld. Surveys of the draft goals and policies were conducted along with smaller focus groups on specific elements. Public work sessions with legislative bodies were held to review the draft goals and policies of each element, prior to the final document being compiled. On January 14, 2016, an open house was held at Lacamas Lake Lodge to present the first full draft of the Camas 2035 Comprehensive Plan document and draft maps.

## II. ANALYSIS

As described in the summary of this report, the City began a two-year, cover-to-cover update of the Comprehensive Plan in accordance with the requirements of the Growth Management Act, RCW Chapter 36.70A("GMA"). The Department of Commerce set June 2016 as the deadline for completion of the update. The plan in effect was enacted with Ordinance 2361 in 2004, and portions have been amended annually.

The Board of Clark County Commissioners adopted the Office of Financial Management (OFM) medium population increase projection of 1.12% for the twenty year period ending in 2035, for a total county population of 562,207 (Res. 2014-01-09). The county allocated a portion of the population growth and job creation to each city and town. Camas was allocated a total population of 34,098, and 11,182 new jobs by 2035. Although, not yet adopted, the City has been working closely with the County during this update process. In brief, the city can demonstrate that there is adequate land area to accommodate the minimum residential and employment growth. The table below (Table 1) indicates that there is an excess of acreage available for both housing and employment.

**Table 1- Residential and Employment Capacity**

|                                                                                                                                                                                                                                                                                                                                                                                       | 2035<br>Projection   | Residential<br>Unit Increase | Assumed<br>Units or<br>Jobs/Acre         | Acres Needed         | Capacity <sup>1</sup><br>Acres |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------|------------------------------------------|----------------------|--------------------------------|
| Population                                                                                                                                                                                                                                                                                                                                                                            | 34,098               | 3,868 <sup>2</sup>           | 6 units/acre                             | 645                  | 876                            |
| Employment                                                                                                                                                                                                                                                                                                                                                                            | 11,182<br>(increase) | N/A                          | IND: 9 jobs/acre<br>COM: 20<br>jobs/acre | IND: 493<br>COM: 337 | IND: 660<br>COM: 464           |
| Source: Clark County Buildable Lands Report, unless otherwise noted. See Appendix B.<br><sup>1</sup> Capacity calculated as net developable acreage using the County Vacant Buildable Lands Model and further refined based on GIS analysis conducted by the City.<br><sup>2</sup> Based on 2013 American Community Survey data, consistent with Clark County Buildable Lands Report. |                      |                              |                                          |                      |                                |

In order to ensure the City's land use goals are achieved as projected, land use designations are used to assign a variety of development uses and building densities to land throughout the City. The draft Camas Comprehensive Plan Map and Camas Zoning Map identify areas for residential, commercial, and industrial development as well as community gateways and areas appropriate for a mix of uses. The maps also identify areas for parks and open space to support recreation and enhance natural areas. The proposed amendments to the acreages of the land use designations are intended to maintain that balance.

In response to the extensive community involvement throughout the Camas 2035 update, the draft maps include several amendments that are intended to be consistent with the Camas 2035 goals and policies. The following section includes a description of some of the proposed map amendments.

### Everett Street Amendments

The proposed amendments are generally focused in the area of the city that is along NE Everett Street, between the intersection of Lake Road and the northern city limits. The purpose of amending the land use designations in this area was to be consistent with the proposed gateway and corridor areas, which are proposed as a new overlay on the city's zoning map. Also, the intersection of the future north-south arterial road will be located just north of the intersection with SE Leadbetter Road.

Currently there is a mix of land use designations along this corridor, which from the south includes low-intensity commercial and single-family high (R-6). Heading northward the properties on both sides of the road are designated as single-family medium, and terminates at the north end with a westerly parcel that is designated as Light-Industrial Business Park. The city sent a letter to 267 property owners along both sides of Everett Street on December 4, 2015 to explain the potential land use designation changes, and to



increase awareness and participation in the Camas 2035 project. After receiving public comments, and conducting further analysis, the new commercial areas have changed slightly. Staff sent a letter with the current proposed configuration to all of the potentially affected property owners (17 properties) on March 2, 2016, with the same goal of raising awareness and requesting input.

**Potential Impacts:** At present, there are 13 commercially-zoned properties on Everett Street, and only three of them have active commercial uses. The community felt as if this commercial area had a lot of potential to revitalize given the outdoor amenities of the nearby trail network and the lake. The proposed amendment would rezone the commercial area and adjacent R-6 properties to Mixed Use (MX). It is anticipated that this amendment would encourage more development at a pedestrian-scale, which would serve the current residents, along with potentially providing an economic incentive for new development.

The new commercial node that is proposed at the northern end of Everett Street is intended to compliment the (future) intersection area of the north-south arterial. This area would be zoned Community Commercial (CC) and would cater to a higher volume of traffic, given that the intersection will primarily manage traffic from the new business park areas north of the lake, and from schools to the east.

### Downtown Amendments

The proposed amendments are limited to the properties that are generally north of 6<sup>th</sup> Avenue, between Adams Street and Garfield Street, and are currently designated as Multi-family (MF-24) and Regional Commercial (RC). There are 42 lots that are zoned MF-24 in this area. The majority of the area has existing multi-family developments. There is also a church, a convalescent home, and 15 single family lots. There are 26 lots that are zoned RC, with ten of the lots being vacant and four parking lots. There is one single family lot and four duplex lots that are zoned RC.

One of the reasons for this proposed amendment is that in 2014, the city adopted a Multi-housing Tax Exemption program, which identified this area as one of the applicable target areas [Refer to CMC Section 3.86.030(C)(1)]. Another reason is that the design and development standards of the downtown commercial zone are more distinctive than other commercial and multi-family districts, such as requiring awnings, and color pallets. The area of downtown that is south of the Mill Ditch and north of the railroad tracks is essentially the walkable downtown core, and this amendment would make the zoning the same throughout.

**Potential Impacts:** On December 4, 2015, the city sent a letter to 97 property owners within this area to increase awareness of the potential zoning amendments, and to request feedback. Several property owners and residents provided comments during the Planning Commission's regular meeting in December. Most property owners are in support. Reasons for support included an interest in adding a live/work unit to their properties, or selling their properties to promote redevelopment.

### Light Industrial /Business Park Amendments (LI/BP)

The proposed amendments would apply to all properties that are currently designated as Light Industrial/Business Park (LI/BP) with zoning of the same name---LI/BP. With minor exceptions, most of the LI/BP designated lands are located in the northwest area of the city, also known as Grass Valley. All but, ten acres would be amended to the comprehensive plan designation of "Industrial". LI/BP would join the other zones within the Industrial designation, which include Heavy Industrial (HI), Light Industrial (LI), and Business Park (BP). The following is an excerpt from the draft comprehensive plan, *"Grass Valley is home to several national and international technology and manufacturing firms. Land uses in Grass Valley include large technology and manufacturing campuses, surrounded by retail and commercial services and*

*residential development. The City has invested in significant infrastructure improvements in Grass Valley in support of high-tech industrial development, which is still the focus for this area.”*

Through the Camas 2035 update, Grass Valley was identified as an area which would benefit from a subarea plan. A subarea plan must be consistent with the elements of the comprehensive plan. However, a sub-area planning process will allow for more specific planning based on the individual needs of an area. A subarea plan can include goals, objectives, actions, address design standards, and target densities on a smaller scale than the original comprehensive plan. In the draft Camas 2035 plan, the Grass Valley Economic Development Goal states, *“Promote a cooperative industrial business park in which businesses and the City share resources efficiently to achieve sustainable development, with the intention of increasing economic gains and improving environmental quality.”*

**Potential Impacts:** Over the past several years, the city has reviewed piecemeal requests from property owners for comprehensive plan changes from LI/BP to another commercial or industrial designation. The findings for support of these amendments have generally been due to the development standards of the LI/BP zone being too restrictive, to include in excess of 100-foot building setbacks from property lines. Rather than continue to approve comprehensive plan amendment proposals from individuals, the city would prefer to retool the development standards of the zone, as part of a subarea planning process.

### Multi-family (MF-24) Amendments

The proposed amendments would apply to 132 acres that are zoned Multi-family 24 (MF-24). All but 12 acres of MF-24 land would be amended to MF-18 zoning (18 units per acre), as the other 12 acres are within the downtown area that is proposed to be amended to DC. The areas highlighted with “X” in the map section below, provides the general location of MF-24 zoned properties throughout the city. The current MF-24 zoned properties are either currently developed, or have an active land use application that is vested in the MF-24 standards.



The intent of this amendment is to continue to allow for high density housing development within MF-10 and MF-18 zones. Given that Cottage Development overlay standards allow up to 24/units per acre, it is expected that more cottage development may be proposed as a result of this change.

**Potential Impacts:** All current MF-24 zoned properties are developed or will soon be developed under the vested standards. The anticipated effect would be to increase the diversity of housing types and affordability when housing is redeveloped.

### Residential 20,000 (R-20) Amendments

The 126 acres of Residential 20,000 (R-20) properties are located at the west side of NE Ingle Road and south of NW McIntosh Road. All properties within this designation are developed. The Clark County Buildable Lands Report (2015) includes a planning assumption for the city's available residential acreage to be developed at 6 units per acre. The city is meeting (and exceeding) housing targets, however the R-20 zone caps density at 2.1 units per acre, and allows for lots to be a half acre in size. For these reasons the R-20 zone is not consistent with city targets or the GMA. The 126 acres of R-20 are proposed to be amended to R-15 at this time.

**Potential Impacts:** Staff is unaware of any development proposals for properties within R-20 zoning. This means that removing the R-20 development standard would only prohibit new developments from requesting a zone change to R-20.

### Residential 5,000 (R-5) Amendments

There are 41 acres zoned Residential 5,000 (R-5), and all but five acres are developed. The undeveloped property is surrounded by Single-family Medium designated parcels, zoned R-7.5. The properties that are developed in the R-5 zone are located at Lacamas Meadows PRD (next to Grass Valley Elementary), and within an area south of SR-14, between SW Trout and SW Sierra.

The primary reason for amending the R-5 zone to R-6 is that the development standards are more similar to multi-family standards, in terms of density and lot dimensions. The R-5 lot size range is 4,000 to 6,000 square feet with a density maximum of 8.7 units per acre. Unlike multi-family properties, single-family developments are not subject to a Design Review permit with the associated design considerations for neighborhood compatibility. The lot size range for R-6 zoning is 4,800 to 7,000 square feet.

**Potential Impacts:** The city is unaware of any development proposals on the remaining vacant acreage. The R-6 zone is still within the Single-family High comprehensive plan designation, and could be developed at that density in the future. Also the maximum lot size of 7,000 square feet would better match that of the adjacent 7,500 square foot properties.

## III. CRITERIA OF APPROVAL CMC§ 18.51.010 - Comprehensive Plan Amendments

*(CMC citation is in italics.)*

A. *A detailed statement of what is proposed and why;*

**Findings: Staff has brought forward a draft of the city's comprehensive plan and zoning maps in order to be consistent with city's comprehensive plan; county population allocations, and state mandates.**

B. *A statement of the anticipated impacts of the change, including the geographic area affected, and issues presented by the proposed change;*

**Findings: Staff provided a full analysis of the anticipated impacts at Section II of this report. The geographic area includes all lands within the city and the urban growth areas.**

C. *An explanation of why the current comprehensive plan is deficient or should not continue in effect;*

**Findings: The city's current comprehensive plan does not reflect the revised goals and policies of GMA and county population allocations. In 2035, the City of Camas is expected to have a population of 34,098, an 11,255-person increase from the 2015 population of 22,843.**

D. *A statement of how the proposed amendment complies with and promotes the goals and specific requirements of the growth management act;*



**Findings:** The proposed comprehensive plan map amendments will maintain the balance of employment and residential land in the City, while addressing specific elements of the (draft) Camas 2035 Plan.

*E. A statement of what changes, if any, would be required in functional plans (i.e., the city's water, sewer, stormwater or shoreline plans) if the proposed amendment is adopted;*

**Findings:** The proposed Camas 2035 Plan will provide a description of the city's current capacity and future needs. It is not anticipated that the proposed map amendments will require a change to the functional plans that are soon to be adopted.

*F. A statement of what capital improvements, if any, would be needed to support the proposed change which will affect the capital facilities plans of the city;*

**Findings:** The proposed Camas 2035 Plan will provide a description of the city's current capacity and future needs. It is not anticipated that the proposed map amendments will require a change to the capital facilities.

*G. A statement of what other changes, if any, are required in other city or county codes, plans, or regulations to implement the proposed change; and*

**Findings:** The proposed amendments to the Camas Zoning Map will require amendments to the city's development regulations in order to implement the new zoning overlays. Public hearings for both the Airport Overlay Zone, and Gateways and Corridors are anticipated to be adopted prior to final adoption of the comprehensive plan update.

*H. The application shall include an environmental checklist in accordance with the State Environment Policy Act (SEPA).*

**Findings:** The SEPA checklist and determination will include the map amendments along with the comprehensive plan document, and will be issued within 60-days of anticipated adoption.

#### IV. RECOMMENDATIONS

Planning Commission's recommendations on the proposed map amendments may include the following actions which will be forwarded to Council for a final decision, pursuant to CMC§18.51.050 (B) (1-5) in part,

- (1) Approve as recommended;
- (2) Approve with additional conditions;
- (3) Modify, with or without the applicant's concurrence;
- (4) Deny; or
- (5) Remand

| <b>Proposed Map Amendments</b><br><br><b>Comprehensive Plan Designations</b><br><br><b>Zoning</b>                                                                                                                                                                | ACREAGE BY ZONE |       |                                                        |         |        |                        |                      |       |     |                |          |         |        |         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------|--------------------------------------------------------|---------|--------|------------------------|----------------------|-------|-----|----------------|----------|---------|--------|---------|
|                                                                                                                                                                                                                                                                  | SFH             | SFH   | SFM                                                    | SFL     | SFL    | COM                    | COM                  | COM   | COM | COM            | LI/BP    | IND     | MF     | MF      |
|                                                                                                                                                                                                                                                                  | R-5             | R-6   | R-12                                                   | R-20    | R-15   | CC                     | MX                   | NC    | RC  | DC             | LI/BP    | LI/BP   | MF-18  | MF-24   |
| <b>Current Zoning Acreage</b>                                                                                                                                                                                                                                    | 41              | 154   | 941                                                    | 126     | 434    | 207                    | 27                   | 12    | 509 | 45             | 1025     | 0       | 187    | 132     |
| <b>Everett Street:</b> Amendment will generally create a more robust commercial area at a future intersection and gateway.                                                                                                                                       |                 | -9.73 | -7.26<br>(Note that another 18.19 acres is in the UGA) |         |        | -1.58<br>7.26<br>10.03 | 1.58<br>1.34<br>9.73 | -1.34 |     |                |          |         |        |         |
| <b>Downtown:</b> Amendment would expand to match the tax incentive program area for affordable housing.                                                                                                                                                          |                 |       |                                                        |         |        |                        |                      |       |     | 12.08<br>-8.85 |          |         |        | -12.08  |
| <b>LI/BP to IND Comprehensive Plan Designation</b><br>Developments within the LI/BP zone would still be subject to the development standards as zoned. The difference will be that the properties could be rezoned to another industrial zone, such as BP or LI. |                 |       |                                                        |         |        |                        |                      |       |     |                | -1014.97 | 1025.00 |        |         |
| <b>MF-24 zone changing to MF-18</b><br>Amendment is intended to encourage cottage development.                                                                                                                                                                   |                 |       |                                                        |         |        |                        |                      |       |     |                |          |         | 119.92 | -119.92 |
| <b>R-20 zone changing to R-15</b><br>The lot sizes of 20,000 square feet is not consistent with Growth Management Act goals.                                                                                                                                     |                 |       |                                                        | -126.00 | 126.00 |                        |                      |       |     |                |          |         |        |         |
| <b>R-5 zone changing to R-6</b><br>The development standards for the R-5 zone are denser than the multi-family zones. Also, MF zoning developments are subject to design review whereas single family developments at R-5 density are exempt.                    | -41.00          | 41.00 |                                                        |         |        |                        |                      |       |     |                |          |         |        |         |
| <b>Proposed Acreage</b>                                                                                                                                                                                                                                          | 0               | 195   | 934                                                    | 0       | 560    | 223                    | 40                   | 11    | 500 | 66             | 0        | 1025    | 307    | 0       |