



**PLANNING COMMISSION WORK SESSION AGENDA**

**Monday, January 08, 2018 - 6:00 PM**

**City Hall, Conference Room A, 169 SW Coast Hwy, Newport, OR 97365**

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The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired, or for other accommodations for persons with disabilities, should be made at least 48 hours in advance of the meeting to Peggy Hawker, City Recorder at 541.574.0613.

The agenda may be amended during the meeting to add or delete items, change the order of agenda items, or discuss any other business deemed necessary at the time of the meeting.

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1. CALL TO ORDER
  
2. UNFINISHED BUSINESS
  - 2.A Finalize Vacation Rental Ad-Hoc Committee Interviews
  
  - 2.B Draft Amendments to NMC Chapter 14.22 Airport Protection Overlay  
[NMC Chapter 14.22.pdf](#)
  
3. NEW BUSINESS
  - 3.A DLCD Tsunami Resiliency/Time and Distance Modeling Project  
[DLCD Update-a.pdf](#)
  
4. ADJOURNMENT

# Memorandum

To: Planning Commission/Commission Advisory Committee  
From: Derrick I. Tokos, AICP, Community Development Director   
Date: January 5, 2018  
Re: Repeal and Replacement of NMC Chapter 14.22, Airport Restricted Area

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Enclosed is a copy of a new Newport Municipal Code (NMC) Chapter 14.22 related to the City's "Airport Restricted Area." It is intended to replace the existing provisions listed in the same chapter. Based upon our discussion at the December 11, 2017 work session, where the Commission reviewed a comparison of the existing and model codes, I have tailored the new draft to:

- (1) Eliminate off-site use limitation contained in the model code;
- (2) Limit the restriction of water impoundments to airport property; and
- (3) Simplify the list of permitted uses and add a category of conditional uses.

Please look over the draft and let me know if it is generally consistent with the direction provided at the work session. I anticipate that the new code language will need to be revised as a result of further internal city review and feedback from the Federal Aviation Administration. My hope is that this version is complete enough that you will feel comfortable initiating the legislative amendment process, as required under NMC Chapter 14.36. This will allow us to send the Department of Land Conservation and Development the 35-day advance notice we are required to provide prior to the first evidentiary hearing. Any changes to the draft would be flagged for your inspection in the version we put together for your hearing packet.

### Attachments

New Chapter 14.22 Airport Restricted Area

## CHAPTER 14.22 AIRPORT RESTRICTED AREA

### 14.22.010 Purpose

The purpose of this overlay zone is to encourage and support the continued operation and vitality of public use airports with instrument approaches by establishing compatibility and safety standards to promote air navigational safety at such public use airports and to reduce potential safety hazards for persons living, working or recreating near such public use airports.

### 14.22.020 Definitions

- A. Airport. The strip of land used for taking off and landing aircraft, together with all adjacent land used in connection with the aircraft landing or taking off from the strip of land, including but not limited to land used for existing airport uses. Refers to the Newport Municipal Airport.
- B. Airport Development Zoning. The areas around an airport identified for airport related and dependent uses. Often replaces industrial, public facility or other designations currently given to the airport site and immediate vicinity. Based on a zoning district that identifies outright and conditionally permitted uses on airport property. Include areas used or needed for airport operations, areas needed for anticipated facility growth, airport-related industry and commercial operations and airport-related industrial, commercial or recreational activities. According to OAR 660-013- 0160, local governments must update their zoning and land use regulations to conform to this division at periodic review. Amendments to plan and land use regulations may be accomplished per OAR 660-013-0160 (5) through the plan requirements of ORS 197.610 to 197.625 in advance of periodic review, where such amendments are in full compliance with Division 13 of OAR 660.
- C. Airport Elevation. The highest point of an airport's usable runway, measured in feet above mean sea level (with respect to the North American Datum of 1988 (NAVD-88).
- D. Airport Imaginary Surfaces. Imaginary areas in space and on the ground that are established in relation to the airport

and its runways. Imaginary areas are defined by the primary surface, runway protection zone, approach surface, horizontal surface, conical surface and transitional surface.

- E. Airport Noise Impact Boundary. Areas located within 1,500 feet of an airport runway or within established noise contour boundaries exceeding 55 Ldn.
- F. Airport Sponsor. The City of Newport. The owner, manager, or other person or entity designated to represent the interests of an airport.
- G. Approach Surface for Instrument Approaches. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface.
  - 1. The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:
    - a. 2,000 feet for a utility runway having a non-precision instrument approach;
    - b. 3,500 feet for a non-precision instrument runway, other than utility, having visibility minimums greater than three-fourths statute mile;
    - c. 4,000 feet for a non-precision instrument runway, other than utility, having visibility minimums at or below three-fourths statute mile; and
    - d. 16,000 feet for precision instrument runways.
  - 2. The approach surface extends for a horizontal distance of:
    - a. 5,000 feet at a slope of 20 feet outward for each foot upward for all utility runways;
    - b. 10,000 feet at a slope of 34 feet outward for each foot upward for all non-precision instrument runways, other than utility; and
    - c. 10,000 feet at a slope of 50 feet outward for each one foot upward, with an additional 40,000 feet at

- slope of 40 feet outward for each one foot upward, for precision instrument runways.
3. The outer width of an approach surface will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.
- H. Approach Surface for Visual Only Approaches. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface.
1. The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:
    - a. 1,250 feet for a utility runway; or
    - b. 1,500 feet for a runway other than a utility runway.
  2. The approach surface extends for a horizontal distance of 5,000 feet at a slope of 20 feet outward for each foot upward.
  3. The outer width of an approach surface will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.
- I. Conical Surface. A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.
- J. Department of Aviation. The Oregon Department of Aviation, formerly the Aeronautics Division of the Oregon Department of Transportation.
- K. FAA. The Federal Aviation Administration.
- L. FAA's Technical Representative. As used in this ordinance, the federal agency providing the FAA with expertise on wildlife and bird strike hazards as they relate to airports. This may include, but is not limited to, the USDAAPHIS- Wildlife Services.
- M. Height. The highest point of a structure or tree, plant or other object of natural growth, measured from mean sea level (with respect to the North American Datum of 1988 (NAVD-88)).

- N. Horizontal Surface. A horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is:
1. 5,000 feet for all runways designated as utility.
  2. 10,000 feet for all other runways.
  3. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000 foot arc is encompassed by tangents connecting two adjacent 10,000 foot arcs, the 5,000 foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.
- O. Non-precision Instrument Runway. A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in nonprecision instrument approach has been approved, or planned, and for which no precision approach facilities are planned or indicated on an FAA-approved airport layout plan or other FAA planning document.
- P. Obstruction. Any structure or tree, plant or other object of natural growth that penetrates an imaginary surface.
- Q. Other than Utility Runway. A runway that is constructed for and intended to be used by turbine driven aircraft or by propeller-driven aircraft exceeding 12,500 pounds gross weight.
- R. Precision Instrument Runway. A runway having an existing instrument approach procedure utilizing air navigation facilities that provide both horizontal and vertical guidance, such as an Instrument Landing System (ILS) or Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA-approved airport layout plan or other FAA planning document.
- S. Primary Surface for Instrument Approaches. A surface longitudinally centered on a runway. When a runway has a specially prepared hard surface, the primary surface

extends 200 feet beyond each end of that runway. When a runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface is:

1. 500 feet for utility runways having non-precision instrument
2. approaches, 500 feet for utility runways having non-precision instrument approaches, with visibility minimums greater than three-fourths statute mile, and
3. 1,000 feet for non-precision instrument runways with visibility minimums at or below three-fourths statute mile, and for precision instrument runways.

T. Primary Surface Visual Only Approaches. A surface longitudinally centered on a runway. When a runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway. When a runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface is:

1. 250 feet for utility runways
2. 500 feet for other than utility runways.

U. Public Assembly Facility. A permanent or temporary structure or facility, place or activity where concentrations of people gather in reasonably close quarters for purposes such as deliberation, education, worship, shopping, employment, entertainment, recreation, sporting events, or similar activities. Public assembly facilities include, but are not limited to, schools, churches, conference or convention facilities, employment and shopping centers, arenas, athletic fields, stadiums, clubhouses, museums, and similar facilities and places, but do not include parks, golf courses or similar facilities unless used in a manner where people are concentrated in reasonably close quarters. Public assembly facilities also do not include air shows, structures or uses approved by the FAA in an adopted airport master plan, or places where people congregate for short periods of time such as parking lots or bus stops.

- V. Runway. A defined area on an airport prepared for landing and takeoff of aircraft along its length.
- W. Runway Protection Zone (RPZ). An area off the runway end used to enhance the protection of people and property on the ground. The RPZ is trapezoidal in shape and centered about the extended runway centerline. The inner width of the RPZ is the same as the width of the primary surface. The outer width of the RPZ is a function of the type of aircraft and specified approach visibility minimum associated with the runway end. The RPZ extends from each end of the primary surface for a horizontal distance of:
1. 1,000 feet for utility runways.
  2. 1,700 feet for other than utility runways having non-precision instrument approaches.
  3. 2,500 feet for precision instrument runways.
- X. Significant. As it relates to bird strike hazards, "significant" means a level of increased flight activity by birds across an approach surface or runway that is more than incidental or occasional, considering the existing ambient level of flight activity by birds in the vicinity.
- Y. Structure. Any constructed or erected object which requires location on the ground or is attached to something located on the ground. Structures include but are not limited to buildings, decks, fences, signs, towers, cranes, flagpoles, antennas, smokestacks, earth formations and overhead transmission lines. Structures do not include paved areas.
- Z. Transitional Surface. Those surfaces that extend upward and outward at 90 degree angles to the runway centerline and the runway centerline extended at a slope of seven (7) feet horizontally for each foot vertically from the sides of the primary and approach surfaces to the point of intersection with the horizontal and conical surfaces. Transitional surfaces for those portions of the precision approach surfaces which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at a 90 degree angle to the extended runway centerline.

- AA. Utility Runway. A runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight or less. Visual Runway. A runway intended solely for the operation of aircraft using visual approach procedures, where no straight-in instrument approach procedures or instrument designations have been approved or planned, or are indicated on an FAA-approved airport layout plan or any other FAA planning document.
- BB. Visual Runway. A runway intended solely for the operation of aircraft using visual approach procedures, where no straight-in instrument approach procedures or instrument designations have been approved or planned, or are indicated on an FAA-approved airport layout plan or any other FAA planning document.
- CC. Water Impoundment. Includes wastewater treatment settling ponds, surface mining ponds, detention and retention ponds, artificial lakes and ponds, and similar water features. A new water impoundment includes an expansion of an existing water impoundment except where such expansion was previously authorized by land.

#### 14.22.030 Airport Areas, Surfaces, and Zones

- A. Runway Protection Zone (RPZ). An area off the runway end used to enhance the protection of people and property on the ground. The RPZ is trapezoidal in shape and centered about the extended runway centerline. The inner width of the RPZ is the same as the width of the primary surface. The outer width of the RPZ is a function of the type of aircraft and specified approach visibility minimum associated with the runway end. The RPZ extends from each end of the primary surface for a horizontal distance of:
1. 1,000 feet for utility runways.
  2. 1,700 feet for other than utility runways having non-precision instrument approaches.
  3. 2,500 feet for precision instrument runways.
- B. Utility Runway Visual Approach Surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface.

1. The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:
    - a. 2,000 feet for a utility runway having a non-precision instrument approach;
    - b. 3,500 feet for a non-precision instrument runway, other than utility, having visibility minimums greater than three-fourths statute mile;
    - c. 4,000 feet for a non-precision instrument runway, other than utility, having visibility minimums at or below three-fourths statute mile; and
    - d. 16,000 feet for precision instrument runways.
  2. The approach surface extends for a horizontal distance of:
    - a. 5,000 feet at a slope of 20 feet outward for each foot upward for all utility runways;
    - b. 10,000 feet at a slope of 34 feet outward for each foot upward for all non-precision instrument runways, other than utility; and  
10,000 feet at a slope of 50 feet outward for each one foot upward, with an additional 40,000 feet at slope of 40 feet outward for each one foot upward, for precision instrument runways.
  3. The outer width of an approach surface will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.
- C. Conical Surface. A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.
- D. Direct Impact Area. The area located within 5,000 feet of an airport runway, excluding lands within the runway protection zone and approach surface.
- E. Non-Precision Instrument Approach Surface Approach Surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface.

1. The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:
  - a. 2,000 feet for a utility runway having a non-precision instrument approach;
  - b. 3,500 feet for a non-precision instrument runway, other than utility, having visibility minimums greater than three-fourths statute mile;
  - c. 4,000 feet for a non-precision instrument runway, other than utility, having visibility minimums at or below three-fourths statute mile.

F. Precision Instrument Approach Surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface.

1. The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of
  - a. 16,000 feet for precision instrument runways.

G. Secondary Impact Area. The area located between 5,000 and 10,000 feet from an airport runway.

H. Transitional Surface. Those surfaces that extend upward and outward at 90 degree angles to the runway centerline and the runway centerline extended at a slope of seven (7) feet horizontally for each foot vertically from the sides of the primary and approach surfaces to the point of intersection with the horizontal and conical surfaces. Transitional surfaces for those portions of the precision approach surfaces which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at a 90 degree angle to the extended runway centerline.

#### 14.22.040 Imaginary Surface and Noise Impact Boundary Delineation

The airport elevation, the airport noise impact boundary, and the location and dimensions of the runway, primary surface, runway protection zone, approach surface, horizontal surface, conical surface and transitional surface shall be delineated for

each airport subject to this overlay zone and shall be made part of the Official Zoning Map. All lands, waters and airspace, or portions thereof, that are located within these boundaries or surfaces shall be subject to the requirements of this overlay zone.

#### 14.22.050 Notice of Land Use Permit Applications within Overlay Zone Areas

Except as otherwise provided herein, written notice of applications for land use or limited land use decisions, including comprehensive plan or zoning amendments, in an area within this overlay zone, shall be provided to the City of Newport in the same manner as notice is provided to property owners entitled by law to written notice of land use or limited land use applications.

##### A. Instrument Approaches:

1. Notice shall be provided to the City of Newport when the property, or a portion thereof, that is subject to the land use or limited land use application is located within 10,000 feet of the sides or ends of a runway:
2. Notice of land use and limited land use applications shall be provided within the following timelines.
  - a. Notice of land use or limited land use applications involving public hearings shall be provided prior to the public hearing at the same time that written notice of such applications is provided to property owners entitled to such notice.
  - b. Notice of land use or limited land use applications not involving public hearings shall be provided at least 20 days prior to entry of the initial decision on the land use or limited land use application.
3. Notice of the decision on a land use or limited land use application shall be provided to the City of Newport within the same timelines that such notice is provided to parties to a land use or limited land use proceeding.
4. Notices required under Paragraphs A-C for instrument approaches need not be provided to the City of Newport where the land use or limited land use application meets all of the following criteria:
  - a. Would only allow structures of less than 35 feet in height;

- b. Involves property located entirely outside the approach surface;
- c. Does not involve industrial, mining or similar uses that emit smoke, dust or steam; sanitary landfills or water impoundments; or radio, radiotelephone, television or similar transmission facilities or electrical transmission lines; and
- d. Does not involve wetland mitigation, enhancement, restoration or creation.

**B. Visual Only Approaches:**

1. Notice shall be provided to the City of Newport when the property, or a portion thereof, that is subject to the land use or limited land use application is located within 5,000 feet of the sides or ends of a runway.
2. Notice of land use and limited land use applications shall be provided within the following timelines.
  - a. Notice of land use or limited land use applications involving public hearings shall be provided prior to the public hearing at the same time that written notice of such applications is provided to property owners entitled to such notice.
3. Notice of land use or limited land use applications not involving public hearings shall be provided at least 20 days prior to entry of the initial decision on the land use or limited land use application.
4. Notice of the decision on the land use or limited land use application shall also be provided to the City of Newport within the same timelines that notice is provided to parties to the proceeding.
5. Notices required under Paragraphs A-C of this section need not be provided to the City of Newport where the land use or limited land use application meets all of the following criteria:
  - a. Would only allow structures of less than 35 feet in height;
  - b. Involves property located entirely outside the approach surface;

- c. Does not involve industrial uses, mining or similar uses that emit smoke dust or steam; sanitary landfills or water impoundments; or radio, radiotelephone, television or similar transmission facilities or electrical transmission lines; and
- d. Does not involve wetland mitigation, creation, enhancement or restoration.

#### 14.22.060 Height Limitations on Allowed Uses in Underlying Zones

All uses permitted by the underlying zone shall comply with the height limitations in this Section. When height limitations of the underlying zone are more restrictive than those of this overlay zone, the underlying zone height limitations shall control.

- A. Except as provided in subsections B and C of this Section, no structure or tree, plant or other object of natural growth shall penetrate an airport imaginary surface.
- B. For areas within airport imaginary surfaces but outside the approach and transition surfaces, where the terrain is at higher elevations than the airport runway surfaces such that existing structures and permitted development penetrate or would penetrate the airport imaginary surfaces, the City of Newport may authorize structures up to 35 feet in height.
- C. Other height exceptions or variances may be permitted when supported in writing by the City of Newport and the FAA. Applications for height variances shall follow the procedures for other variances and shall be subject to such conditions and terms as recommended by the City of Newport and the FAA.

#### 14.22.070 Submittal Requirements

An applicant seeking approval of a land use action on an area within this overlay zone shall provide the following information in addition to any other information required in the permit application:

- A. A map or drawing showing the location of the property in relation to the airport imaginary surfaces. The Planning Department shall provide the applicant with appropriate base maps upon which to locate the property.

- B. Elevation profiles and a site plan, both drawn to scale, including the location and height of all existing and proposed structures, measured in feet above mean sea level.
- C. If a height variance is requested, letters of support from the City of Newport and the FAA.

#### 14.22.080 Land Use Compatibility Requirements

Applications for land use or building permits for properties within the boundaries of this overlay zone shall comply with the requirements of this chapter as provided herein. [ORS 836.619; ORS 836.623(1); OAR 660-013-0080]

- A. Noise. Within airport noise impact boundaries, land uses shall be established consistent with the levels identified in OAR 660, Division 13, Exhibit 5. A declaration of anticipated noise levels shall be attached to any subdivision or partition approval or other land use approval or building permit affecting land within airport noise impact boundaries. In areas where the noise level is anticipated to be at or above 55 Ldn, prior to issuance of a building permit for construction of a noise sensitive land use (real property normally used for sleeping or as a school, church, hospital, public library or similar use), the permit applicant shall be required to demonstrate that a noise abatement strategy will be incorporated into the building design that will achieve an indoor noise level equal to or less than 55 Ldn.
- B. Outdoor Lighting. No new or expanded industrial, commercial or recreational use shall project lighting directly onto an existing runway or taxiway or into existing airport approach surfaces except where necessary for safe and convenient air travel. Lighting for these uses shall incorporate shielding in their designs to reflect light away from airport approach surfaces. No use shall imitate airport lighting or impede the ability of pilots to distinguish between airport lighting and other lighting.
- C. Glare. No glare producing material, including but not limited to unpainted metal or reflective glass, shall be used on the exterior of structures located within an approach surface or on nearby lands where glare could impede a pilot's vision.
- D. Industrial Emissions. No new industrial, mining or similar use, or expansion of an existing industrial, mining or

similar use, shall, as part of its regular operations, cause emissions of smoke, dust or steam that could obscure visibility within airport approach surfaces, except upon demonstration, supported by substantial evidence, that mitigation measures imposed as approval conditions will reduce the potential for safety risk or incompatibility with airport operations to an insignificant level. The review authority shall impose such conditions as necessary to ensure that the use does not obscure visibility.

- E. Communications Facilities and Electrical Interference. No use shall cause or create electrical interference with navigational signals or radio communications between an airport and aircraft. Proposals for the location of new or expanded radio, radiotelephone, and television transmission facilities and electrical transmission lines within this overlay zone shall be coordinated with the City of Newport and the FAA prior to approval. Approval of cellular and other telephone or radio communication towers on leased property located within airport imaginary surfaces shall be conditioned to require their removal within 90 days following the expiration of the lease agreement. A bond or other security shall be required to ensure this result.

#### 14.22.090 Water Impoundments on Airport Property

No new or expanded water impoundments of one-quarter acre in size or larger are permitted on land owned by the City of Newport that is necessary for airport operations.

#### 14.22.100 Nonconforming Uses

- A. These regulations shall not be construed to require the removal, lowering or alteration of any structure not conforming to these regulations. These regulations shall not require any change in the construction, alteration or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this overlay zone.
- B. Notwithstanding subsection A. of this section, the owner of any existing structure that has an adverse effect on air navigational safety as determined by City of Newport shall install or allow the installation of obstruction markers as deemed necessary by the City of Newport, so that the structures become more visible to pilots.

- C. No land use or limited land use approval or other permit shall be granted that would allow a nonconforming use or structure to become a greater hazard to air navigation than it was on the effective date of the overlay zone.

#### 14.22.110 Avigation Easements

Within this overlay zone, the owners of properties that are the subjects of applications for land use or limited land use decisions, for building permits for new residential, commercial, industrial, institutional or recreational buildings or structures intended for inhabitation or occupancy by humans or animals, or for expansions of such buildings or structures by the lesser of 50% or 1000 square feet, shall, as a condition of obtaining such approval or permits, dedicate an avigation easement to the City of Newport. The avigation easement shall be in a form acceptable to the City of Newport and shall be signed and recorded in the deed records of the County. The avigation easement shall allow unobstructed passage for aircraft and ensure safety and use of the airport for the public. Property owners or their representatives are responsible for providing the recorded instrument prior to issuance of building permits.

#### 14.22.120 Airport Development Overlay Zone

The purpose of the Airport Development Overlay Zone is to encourage and support the continued operation and vitality of the municipal airport in the City of Newport by allowing certain airport-related commercial and recreational uses in accordance with state law.

- A. Application. The provisions of this section applies to publicly owned land within the boundary of the Newport Municipal Airport.
- B. Conformance with Airport Overlay Zones. All uses, activities, facilities and structures allowed in the Airport Development Overlay Zone shall comply with the requirements of this chapter (i.e. Chapter 14.22 Airport Restricted Area). In the event of a conflict between the requirements of the Airport Development Overlay Zone and those of the Airport Restricted Area, the requirements of the Airport Restricted Area shall control.
- C. Uses Permitted Outright. The following uses and activities are permitted outright in the Public Use Airport Zone:

1. Customary and usual aviation-related activities, including but not limited to takeoffs and landings; aircraft hangars and tie-downs; construction and maintenance of airport facilities; fixed based operator facilities; a residence for an airport caretaker or security officer; and other activities incidental to the normal operation of an airport. Except as provided in this ordinance, "customary and usual aviation-related activities" do not include residential, commercial, industrial, manufacturing and other uses.
2. Air passenger and air freight services and facilities, at levels consistent with the classification and needs identified in the Oregon Department of Aviation Airport System Plan.
3. Emergency medical flight services, including activities, aircraft, accessory structures, and other facilities necessary to support emergency transportation for medical purposes. Emergency medical flight services do not include hospitals, medical offices, medical labs, medical equipment sales, and other similar uses. D. Law enforcement and firefighting activities, including aircraft and ground-based activities, facilities and accessory structures necessary to support federal, state or local law enforcement or land management agencies engaged in law enforcement or firefighting activities. Law enforcement and firefighting activities include transport of personnel, aerial observation, and transport of equipment, water, fire retardant and supplies.
4. Search and rescue operations, including aircraft and ground based activities that promote the orderly and efficient conduct of search or rescue related activities.
5. Flight instruction, including activities, facilities, and accessory structures located at airport sites that provide education and training directly related to aeronautical activities. Flight instruction includes ground training and aeronautic skills training, but does not include schools for flight attendants, ticket agents or similar personnel.
6. Aircraft service, maintenance and training, including activities, facilities and accessory structures provided to teach aircraft service and maintenance skills and to maintain, service, refuel or repair aircraft or aircraft components. "Aircraft service, maintenance and

training" includes the construction and assembly of aircraft and aircraft components for personal use, but does not include activities, structures or facilities for the manufacturing of aircraft or aircraft related products for sale to the public.

7. Aircraft rental, including activities, facilities and accessory structures that support the provision of aircraft for rent or lease to the public.
8. Aircraft sales and the sale of aeronautic equipment and supplies, including activities, facilities and accessory structures for the storage, display, demonstration and sales of aircraft and aeronautic equipment and supplies to the public but not including activities, facilities or structures for the manufacturing of aircraft or aircraft related products for sale to the public.
9. Crop dusting activities, including activities, facilities and structures accessory to crop dusting operations. Crop dusting activities include, but are not limited to, aerial application of chemicals, seed, fertilizer, defoliant and other chemicals or products used in a commercial agricultural, forestry or rangeland management setting.
10. Agricultural and Forestry Activities, including activities, facilities and accessory structures that qualify as a "farm use" as defined in ORS 215.203 or "farming practice" as defined in ORS 30.930.
11. Aeronautic recreational and sporting activities, including activities, facilities and accessory structures at airports that support recreational usage of aircraft and sporting activities that require the use of aircraft or other devices used and intended for use in flight. Aeronautic recreation and sporting activities authorized under this paragraph include, but are not limited to, fly-ins; glider flights; hot air ballooning; ultralight aircraft flights; displays of aircraft; aeronautic flight skills contests; and gyrocopter flights, but do not include flights carrying parachutists or parachute drops (including all forms of skydiving).
12. Flights carrying parachutists, and parachute drops (including all forms of skydiving) onto an airport, but only upon demonstration that the parachutist business has secured approval to use a drop zone that is at least 10 contiguous acres. The configuration of the drop

zone shall roughly approximate a square or a circle and may contain structures, trees, or other obstacles only if the remainder of the drop zone provides adequate areas for parachutists to land safely.

D. Conditional Use. The following uses and activities and their associated facilities are permitted in the Public Use Airport Zone upon demonstration of compliance with the standards of this subsection.

1. Airport related and dependent uses not listed in subsection 14.22.120(C).
2. Buildings and uses of public works, public service, or utility nature.
3. Uses permitted outright or conditionally in the C-1, C-2, C-3 and I-1 zoning districts when located in areas designated as suitable for non-aeronautical development in the Newport Municipal Airport Master Plan.

# Memorandum

To: Planning Commission/Commission Advisory Committee  
From: Derrick I. Tokos, AICP, Community Development Director   
Date: January 5, 2018  
Re: Desired Outcomes for DLCD Tsunami Resiliency/Time Distance Modeling Project

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Meg Reed with the Department of Land Conservation and Development (DLCD) will be attending the work session to participate in a discussion about a grant funded project that they are working on with a number of coastal communities, including Newport, that seeks to:

- (1) improve capacity of coastal jurisdictions to prepare and plan for, absorb impacts of, recover from, and/or adapt to extreme weather events and climate-related hazards; and
- (2) identify activities that restore habitat to strengthen the resilience of coastal ecosystems and decrease the vulnerability of coastal communities to extreme weather events and climate-related hazards.

In March of 2017 the Newport City Council authorized the Mayor to sign a letter in support of the grant application (attached). DLCD announced in mid-July that their grant application was approved.

Grant funds will be used to prepare "beat the wave" time/distance maps for tsunami inundation areas within the partner jurisdictions. The maps and modeling will be undertaken by the Department of Geology and Mineral Industries (DOGAMI), which is the same agency that prepared the City's tsunami inundation area maps. DOGAMI will perform socio-economic vulnerability and potential structural damage assessments for the affected areas. A second phase of the project, and the primary topic for this work session, will entail local adoption of Comprehensive Plan policies that take into account the information developed by DOGAMI and put in place a zoning overlay that factors in tsunami risk. Attached is Chapter 4 from DLCD's 2015 publication titled "Preparing for a Cascadia Subduction Zone Tsunami: A Land Use Guide for Oregon Coastal Communities." It recommends three focus areas, as follows:

- (1) Limiting uses which present a high potential for life safety risk in a manner that is more expansive and restrictive than the existing prohibitions on new essential facilities and special occupancy uses contained in ORS Chapter 455; and
- (2) Integrating the development and improvement of tsunami evacuation infrastructure into the land use and development review processes; and
- (3) Providing incentives for development design that reduce risk and increase resiliency.

We are looking for your feedback regarding these topic areas, if there are some that should be focused on more than others, and if there are other related topics that we should explore that do not fall within one of these categories. I'll have tsunami inundation maps at the meeting for visual reference. Your comments will help inform the scope of work. In terms of a schedule, additional details about recommended code changes are expected to be available for Commission review in the fall/winter, with the project being wrapped up by the end of next fiscal year.

### Attachments

Mayor's support letter  
DLCD grant award notice  
Chapter 4, DLCD publication titled "Preparing for a Cascadia Subduction Zone Tsunami: A Land Use Guide for Oregon Coastal Communities." (2015)

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March 6, 2017

Meg Reed, Coastal Shores Specialist  
DLCD/Oregon Coastal Management Program  
810 SW Alder Street, Suite B  
Newport OR 97365

**Re: NOAA Coastal Resilience Grant Proposal: Building Tsunami Resilience at the Oregon Coast through Land Use Planning Strategies**

Dear Ms. Reed,

The City of Newport supports and is very interested in participating in the above referenced project. The following serves to highlight our interest and underscores the critical need for the products that this project would produce.

As a coastal community, Newport is subject to a range of potential natural hazards and, as an organization, we have taken prudent steps to increase our resilience to these hazards. One of the most significant risks that we face is the potential of a catastrophic Cascadia Subduction Zone tsunami. It is a risk that we have been particularly attune to since the earthquake and tsunami that devastated Japan in 2011. The city has worked collaboratively with state and federal agencies to update the tsunami inundation maps for our community and to retrofit a tsunami evacuation assembly area in our South Beach neighborhood known as Safe haven Hill. There is a growing awareness among Oregon coast communities of the urgent need to be better prepared for this catastrophic event, and working to increase resilience to this potential devastating tsunami is a high priority for Newport.

For our work to provide the greatest value, it is critical to have the best available coastal hazard information. This grant will provide information (time/distance modeling) we currently lack and that is absolutely critical to our ability to accurately plan for and address life safety issues for a tsunami event. For example, in our South Beach neighborhood, the analysis will inform us as to which populated areas should be directed to Safe Haven Hill as opposed to assembly areas further to the south, such as our community college. Having a better understanding of the number of individuals that are likely to reach our various assembly areas will be of great value in helping us to right-size the emergency caches established at these locations. In addition, the time/distance modeling will assist us in developing approaches needed for improved risk communication, and will provide us a complete set of tools necessary for assessment of risk and vulnerability for planning and decision-making within our organization.

The completion of the time/distance evacuation modeling makes possible the second major component of this project: developing and implementing a robust set of land use resilience measures. This grant will provide the needed resources to help implement the DLCDC guidance, "Preparing for a Cascadia Subduction Zone Tsunami: A Land Use Guide for Oregon Coastal Communities" through our local land use planning program. Such work will represent a major step toward increasing the resilience of our community to tsunami hazards. Finally, this project will help implement specific important recommendations for local government actions set forth in the Oregon Resilience Plan, which we support.

We work closely with DLCDC and DOGAMI and feel confident and comfortable working on these important issues with our state partners. We fully support this project.

Thank you for the opportunity to comment on this proposal. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Sandra Roumagoux". The signature is written in a cursive, flowing style.

Sandra Roumagoux, Mayor  
City of Newport



# Oregon

Kate Brown, Governor

Department of Land Conservation and Development

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## NEWS RELEASE

FOR IMMEDIATE RELEASE: July 19, 2017

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Meg Reed, (541) 574-0811, [meg.reed@state.or.us](mailto:meg.reed@state.or.us)



### **Federal Grant Money Awarded to Coastal Communities for Tsunami Preparation**

Federal grant money awarded to the Department of Land Conservation and Development (DLCD) will support the efforts of five coastal communities in preparing for a local Cascadia tsunami. The project, which will begin in January 2018, will result in new tsunami evacuation maps, improved evacuation actions, and innovative land use strategies for Port Orford, Newport, Lincoln City, Rockaway Beach, and Gearhart, Oregon. Local leaders and citizens will work together to learn about community vulnerabilities and identify land use tactics to minimize the loss of life and property from a catastrophic tsunami. DLCD will lead this effort in partnership with the Oregon Department of Geology and Mineral Industries (DOGAMI).

The grant money comes from the National Oceanic and Atmospheric Administration's (NOAA) Coastal Resilience Grants Program. Oregon's project is one of nineteen selected from a nationwide applicant pool of over 160 proposals seeking to aid communities in coastal preparedness and recovery.

"Lincoln City is very excited to partner with DLCD on this tsunami study. We think the results will provide valuable input to our Cascadia event mitigation and preparedness activities," said Debra Nicholson, Senior Planner for Lincoln City, "The results will inform our evacuation strategy and long range planning efforts for appropriate redevelopment."

Oregon's coastal communities are exposed to many extreme weather events and natural hazards: winter storms, coastal erosion, landslides, and flooding. However, the greatest hazard facing these coastal communities is the occurrence of a Cascadia Subduction Zone earthquake and tsunami that could occur at any time just offshore. The resources provided by this grant will help support community planning efforts specific to this hazard, such as identifying evacuation route improvements and thoughtful development siting and design.

The project will build upon an effort already underway that DLCD is leading with eight other coastal communities (Cannon Beach, Tillamook County, Waldport, Reedsport, Florence, Coos Bay, North Bend, and Coos County) to address local tsunami preparedness through land use planning. In combination, these projects will provide a significant foundation for advancing the

**DLCD Coastal Resilience Grant – Press Release**

July 19, 2017

Page 2 of 2

ability of Oregon’s coastal communities to plan, prepare, and recover from a local source tsunami event.

For a full list of the 2017 projects and to learn more about the Coastal Resilience Grants Program, visit [www.coast.noaa.gov/resilience-grant](http://www.coast.noaa.gov/resilience-grant).

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Prepared by  
The Department of  
Land Conservation  
and Development

April 2015

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## **Preparing for a Cascadia Subduction Zone Tsunami: A Land Use Guide for Oregon Coastal Communities**

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# CHAPTER 4: Development Code Provisions





## Chapter 4: Development Code Provisions

Implementation of comprehensive plan policies and other related community development goals is typically accomplished through the specific regulations of the development code. The model code sections of this chapter are intended to provide templates for communities to follow in incorporating land use regulations addressing tsunami risk in their local development codes. Most of the substantive provisions are incorporated into the Tsunami Hazard Overlay. The use of a tsunami-specific overlay provides a mechanism to apply standards within the defined tsunami hazard area. This approach thus provides an additional tier of regulations specifically addressing tsunami risk, which are applied to new development in conjunction with the standards of the underlying zone.

As with any model code, not all of the approaches or standards incorporated into the Land Use Guide will be suitable for use in every community. Local governments should carefully consider the community's exposure to tsunami hazard, acceptable level of risk, and support for tsunami preparation in evaluating the appropriate use of the development code provisions. In general, most of the individual sections of the overlay zone are "severable", that is they can be used on an individual basis, or in any combination, when being adapted for use in a community's land use code.

### 4.1 Tsunami Hazard Overlay Zone

The Tsunami Hazard Overlay zone is designed to serve as the principal implementation mechanism for land use measures addressing tsunami risk. As the name indicates, it is designed to be applied in the form of an overlay zone, i.e. in combination with underlying base zones. The boundaries of the overlay would correspond to the area of the jurisdiction subject to inundation from a local source tsunami as indicated in Section 4.1.2 below. In form and application, it is similar to the flood hazard overlay zones in place in most jurisdictions.

The model overlay focuses on three main approaches to reducing risk and increasing resilience:

- Placing restrictions and limitations on certain categories of uses.
 

These limitations apply primarily to uses which present a high potential for life safety risk, or to uses which provide an essential function during and after a disaster event. ORS 455, which is implemented through the state building code, currently prohibits certain facilities and structures in the tsunami inundation zone as defined by the Oregon Department of Geology and Mineral Industries as indicated in Section 4.1.2 below. The model overlay incorporates these requirements, and also provides examples for local jurisdictions which may choose to limit other uses, or provide a higher margin of safety for some essential facilities.
- Integrating the development and improvement of evacuation infrastructure into the land use and development review process.

**Tip:** The model code sections of this chapter are intended to provide examples for communities to follow in incorporating land use regulations addressing tsunami risk into their local development codes.

**Tip:** See Chapter 6 for more information on evacuation route planning.

**Tip:** A development overlay zone can provide incentives for development designs which reduce risk and increase resiliency.

These provisions establish requirements to incorporate appropriate evacuation measures and improvements in most new development, consistent with an overall evacuation plan for the community. It is important to note that effectiveness of this component of the overlay is largely dependent upon the development and adoption of an Evacuation Route Plan. This plan identifies evacuation needs, designates routes, establishes system standards, and identifies needed improvements to the local evacuation system. Such a plan is essential to the implementation of evacuation route development/improvement in conjunction with the land use review and approval process. Evacuation route plans may be simple or more complex, depending on the circumstances and needs of the jurisdiction. Every jurisdiction is urged to develop such a plan as a tool to enhance the development of evacuation infrastructure. Please see Chapter 6 of the guide for detailed guidance on the development of an Evacuation Route Plan.

- Providing incentives for development designs which reduce risk and increase resiliency.

The overlay incorporates an optional development process which would permit modifications to many code standards when an overall design incorporates higher degrees of risk reduction. Similar in concept to a planned development, this approach permits deviation from the standard, prescriptive dimensional requirement of the code in order to encourage designs and development measures that achieve higher levels of risk reduction.

### **4.1.1 Tsunami Hazard (TH) Overlay Zone**

#### **1.100 Definitions for Section 1.110**

As used in Section 1.110:

(1) “Essential Facilities” means:

- (a) Hospitals and other medical facilities having surgery and emergency treatment areas;
- (b) Fire and police stations;
- (c) Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures;
- (d) Emergency vehicle shelters and garages;
- (e) Structures and equipment in emergency preparedness centers; and
- (f) Standby power generating equipment for essential facilities.

(2) “Hazardous facility” means structures housing, supporting or containing sufficient quantities of toxic or explosive substances to be of danger to the safety of the public if released.

(3) “Special occupancy structures” means

- (a) Covered structures whose primary occupancy is public assembly with a capacity greater than 300 persons;
- (b) Buildings with a capacity of greater than 250 individuals for every public, private or parochial school through secondary level or child care centers;

(c) Buildings for colleges or adult education schools with a capacity of greater than 500 persons;

(d) Medical facilities with 50 or more resident, incapacitated persons not included subsection (a);

(e) Jails and detention facilities; and

(f) All structures and occupancies with a capacity of greater than 5,000 persons.

(Note: The above definitions are taken from ORS 455.446)

(4) “Substantial improvement” means any repair, reconstruction, or improvement of a structure which exceeds 50 percent of the real market value of the structure.

(5) “Tsunami vertical evacuation structure” means a building or constructed earthen mound that is accessible to evacuees, has sufficient height to place evacuees above the level of tsunami inundation, and is designed and constructed with the strength and resiliency needed to withstand the effects of tsunami waves.

(6) “Tsunami Inundation Maps (TIMs)” means the map, or maps in the DOGAMI Tsunami Inundation Map (TIM) Series, published by the Oregon Department of Geology and Mineral Industries, which cover(s) the area within [jurisdiction name].

#### 4.1.2 Tsunami Hazard Overlay Zone

##### (1) Purpose

The purpose of the Tsunami Hazard Overlay Zone is to increase the resilience of the community to a local source (Cascadia Subduction Zone) tsunami by establishing standards, requirements, incentives, and other measures to be applied in the review and authorization of land use and development activities in areas subject to tsunami hazards. The standards established by this section are intended to limit, direct and encourage the development of land uses within areas subject to tsunami hazards in a manner that will:

(a) Reduce loss of life;

(b) Reduce damage to private and public property;

(c) Reduce social, emotional, and economic disruptions; and

(d) Increase the ability of the community to respond and recover.

Significant public and private investment has been made in development in areas which are now known to be subject to tsunami hazards. It is not the intent or purpose of this section to require the relocation of or otherwise regulate existing development within the Tsunami Hazard Overlay Zone. However, it is the intent of this section to control, direct and encourage new development and redevelopment such that, over time, the community’s exposure to tsunami risk will be reduced.

##### (2) Applicability of Tsunami Hazard Overlay Zone

All lands identified as subject to inundation from the XXL magnitude local source tsunami event as set forth on the applicable Tsunami Inundation Map(s) (TIM) published by the Oregon Department of Geology and Mineral Industries (DOGAMI) are subject to the requirements of this section.

**Tip:** This section includes sample code provisions that may be customized for your community.

Note: The overlay zone should include all of the area subject to inundation by the highest local source tsunami event, XXL, depicted on the DOGAMI TIMs. By using the limits of the XXL event, all of the area subject to tsunami risk will be included.

However, the regulatory and other standards may be applied differentially within the overlay, based on the different levels of risk for the five modeled events, the purpose of the standard, and overall community objectives.

### (3) Tsunami Depth Information Required

Except for single family dwellings on existing lots and parcels, all applications for new development, substantial improvements and land divisions in areas subject to the requirements of this section shall include, in addition to the other information required by this chapter, data specifying the maximum depth of inundation on the subject property from the M, L, XL and XXL local source tsunami events as modeled on the applicable Tsunami Inundation Map (TIM) and other data products available from the OR Department of Geology and Mineral Industries (DOGAMI).

### (4) Uses

In the Tsunami Hazard Overlay Zone, except for the prohibited uses set forth in subsection (5), all uses permitted pursuant to the provisions of the underlying zone may be permitted, subject to the additional requirements and limitations of this section.

### (5) Prohibited Uses

Unless authorized in accordance with subsection (6), the following uses are prohibited in the specified portions of the Tsunami Hazard Overlay Zone:

Note: Under ORS 455.446, the uses listed in subsection (a) are prohibited within the tsunami inundation zone as adopted by the DOGAMI governing board, currently the Tsunami Regulatory Maps or “SB 379 Maps.” The governing board is reconsidering the limit of the prohibition area and may choose the “L” local source event as the regulatory area in the future. Based on individual circumstances and overall risk to the community, local governments may consider establishing further limits on uses based on the need to reduce exposure to tsunami risk. This could include extending the prohibition to include other important and/or high risk uses, expanding the area subject to the prohibition by specifying a larger (e.g. XXL) design event, or some combination of these methods. The provisions of subsection (b) provide one example of an approach to extending use limitations beyond the minimum prohibitions of ORS 455.446. In any case, use prohibitions and/or limitations beyond the minimum requirements of ORS 455.446 should be based on the risk tolerance, overall exposure to risk, and individual needs of the community.

(a) In areas identified as subject to inundation from the [specify design event; see ORS 455.446 for the minimum] magnitude local source tsunami event as set forth on the Tsunami Inundation Map (TIM), the following uses are prohibited:

- (A) Hospitals and other medical facilities having surgery and emergency treatment areas.
- (B) Fire and police stations.
- (C) Structures and equipment in government communication centers and other facilities required for emergency response.
- (D) Buildings with a capacity greater than 250 individuals for every public, private or parochial school through secondary level or child care centers.
- (E) Buildings for colleges or adult education schools with a capacity of greater than 500 persons.
- (F) Jails and detention facilities.

Note: The following Essential Facilities and Special Occupancy Structures are currently permitted in the tsunami inundation zone, subject to consultation with DOGAMI regarding mitigation for tsunami risks. See ORS 455.447 (4). It is recommended that local governments evaluate these uses and relative levels of risk to determine whether it is appropriate to place additional limitations on these uses in higher risk areas, as provided in the example below.

(b) In areas identified as subject to inundation from the [choose design event; recommend “M”] magnitude local source tsunami event as set forth on the Tsunami Inundation Map (TIM), the following uses are prohibited:

- (A) Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures.
- (B) Emergency vehicle shelters and garages.
- (C) Structures and equipment in emergency preparedness centers.
- (D) Standby power generating equipment for essential facilities.
- (E) Covered structures whose primary occupancy is public assembly with a capacity of greater than 300 persons.
- (F) Medical facilities with 50 or more resident, incapacitated patients.

Note: The following uses are not subject to regulation or review under ORS 455.446-447, but in adopting land use standards for tsunami risk reduction, it is suggested that local governments consider placing limitations on some or all of these uses, particularly in higher risk areas (e.g. M event), based on the overall needs of their community.

(G) Residential uses, including manufactured home parks, of a density exceeding 10 units per acre;

(H) Hotels or motels with more than 50 units.

(c) Notwithstanding the provisions of [cite non-conforming use section of code], the requirements of this subsection shall not have the effect of rendering any lawfully established use or structure nonconforming.

**Note:** The Tsunami Hazard Overlay is, in general, not intended to apply to or regulate existing uses or development. A provision such as (c) is recommended to preclude the application of nonconforming use restrictions.

#### (6) Use Exceptions

A use listed in subsection (5) of this section may be permitted upon authorization of a Use Exception in accordance with the following requirements:

(a) Public schools may be permitted upon findings that there is a need for the school to be within the boundaries of a school district and fulfilling that need cannot otherwise be accomplished.

(b) Fire or police stations may be permitted upon findings that there is a need for a strategic location.

(c) Other uses prohibited by subsection (4) of this section may be permitted upon the following findings:

(A) There are no reasonable, lower-risk alternative sites available for the proposed use;

(B) Adequate evacuation measures will be provided such that life safety risk to building occupants is minimized; and,

(C) The buildings will be designed and constructed in a manner to minimize the risk of structural failure during the design earthquake and tsunami event.

(d) Applications, review, decisions, and appeals for Use Exceptions authorized by this subsection shall be in accordance with the requirements for a Type III procedure as set forth in Section [cite administrative/procedural section of code].

#### (7) Evacuation Route Improvement Requirements

**Note:** The following provisions are largely dependent upon an adopted Evacuation Route Plan that identifies evacuation needs, designates routes, establishes system standards, and identifies needed improvements to the local evacuation system. Such a plan is essential to the implementation of evacuation route development/ improvement in conjunction with the land use review and approval process. Evacuation route plans may be simple or more complex, depending on the circumstances and needs of the community. Every jurisdiction is urged to develop such a plan as a tool to enhance the development of evacuation infrastructure. Please see Chapter 6 of the Guide for detailed guidance on the development of an Evacuation Route Plan.

Except single family dwellings on existing lots and parcels, all new development, substantial improvements and land divisions in the Tsunami Hazard Overlay Zone shall incorporate evacuation measures and improvements, including necessary vegetation management, which are consistent with and conform to the adopted Evacuation Route Plan. Such measures shall include:

(a) On-site improvements:

(A) Improvements necessary to ensure adequate pedestrian access from the development site to evacuation routes designated in the Evacuation Route Plan in all weather and lighting conditions.

(B) Frontage improvements to designated evacuation routes that are located on or contiguous to the proposed development site, where such improvements are identified in the Evacuation Route Plan. Such improvements shall be proportional to the evacuation needs created by the proposed development.

(C) Where identified in the Evacuation Route Plan as the only practicable means of evacuation, tsunami evacuation structure(s) of sufficient capacity to accommodate the evacuation needs of the proposed development.

(b) Off-site improvements:

Improvements to portions of designated evacuation routes that are needed to serve, but are not contiguous to, the proposed development site, where such improvements are identified in the Evacuation Route Plan. Such improvements shall be proportional to the evacuation needs created by the proposed development.

(c) Evacuation route signage consistent with the standards set forth in the Evacuation Route Plan. Such signage shall be adequate to provide necessary evacuation information consistent with the proposed use of the site.

(d) Evacuation route improvements and measures required by this subsection shall include, at a minimum, the following:

(A) Improved streets and/or all-weather surface paths of sufficient width and grade to ensure pedestrian access to designated evacuation routes in all lighting conditions;

(B) Improved streets and paths shall provide and maintain horizontal clearances sufficient to prevent the obstruction of such paths from downed trees and structure failures likely to occur during a Cascadia earthquake; and

(C) Such other improvements and measures identified in the Evacuation Route Plan

(e) When it is determined that improvements required by this subsection cannot be practicably accomplished at the time of development approval, payment in lieu of identified improvements shall be provided in accordance with [cite applicable section of code establishing standards and requirements for payment-in-lieu].

(8) Tsunami Evacuation Structures

(a) All tsunami evacuation structures shall be of sufficient height to place evacuees above the level of inundation for the XXL local source tsunami event.

**Note:** Depending on individual circumstances, some communities may find that building evacuation structures to the elevation of the XXL event is impracticable. In such cases, communities may choose to consider a case-by-case process to allow for exceptions to this elevation requirement. It is recommended that tsunami evacuation structures not be permitted to a standard lower than the L local source tsunami event and anything below XXL may be at some risk.

(b) Tsunami evacuation structures are not subject to the building height limitations of this chapter.

### (9) Flexible Development Option

(a) The purpose of the Flexible Development Option is to provide incentives for, and to encourage and promote, site planning and development within the Tsunami Hazard Overlay Zone that results in lower risk exposure to tsunami hazard than would otherwise be achieved through the conventional application of the requirements of this chapter. The Flexible Development Option is intended to:

(A) Allow for and encourage development designs that incorporate enhanced evacuation measures, appropriate building siting and design, and other features that reduce the risks to life and property from tsunami hazard; and

(B) Permit greater flexibility in the siting of buildings and other physical improvements and in the creation of new lots and parcels in order to allow the full realization of permitted development while reducing risks to life and property from tsunami hazard.

(b) The Flexible Development Option may be applied to the development of any lot, parcel, or tract of land that is wholly or partially within the Tsunami Hazard Overlay Zone.

**Note:** Subsection (c) is intended to provide maximum flexibility for development and for achieving risk reduction by permitting any type or mix of uses, notwithstanding the underlying zoning. Local governments should evaluate this allowance to determine if it is appropriate for application within their jurisdiction. The other provisions of this section may still be fully utilized without including this provision.

(c) The Flexible Development Option may include any uses permitted outright or conditionally in any zone, except for those uses prohibited pursuant to subsection (5) of this section.

(d) Overall residential density shall be as set forth in the underlying zone or zones. Density shall be computed based on total gross land area of the subject property, excluding street right-of-way.

(e) Yards, setbacks, lot area, lot width and depth, lot coverage, building height and similar dimensional requirements may be reduced, adjusted or otherwise modified as necessary to achieve the design objectives of the development and fulfill the purposes of this section.

(f) Applications, review, decisions, and appeals for the Flexible Development Option shall be in accordance with the requirements for a Type II [or Type III] procedure as set forth in Section [cite administrative/procedural section of code].

(g) Approval of an application for a Flexible Development Option shall be based on findings that the following criteria are satisfied:

(A) The applicable requirements of sub-paragraphs (b) and (d) of this subsection are met; and

(B) The development will provide tsunami hazard mitigation and/or other risk reduction measures at a level greater than would otherwise be provided under conventional land development procedures. Such measures may include, but are not limited to:

(i) Providing evacuation measures, improvements, way finding techniques and signage at a level greater than required by subsection (7) of this section;

- (ii) Providing tsunami evacuation structure(s) which are accessible to and provide capacity for evacuees from off-site;
- (iii) Incorporating building designs or techniques which exceed minimum structural specialty code requirements in a manner that increases the capacity of structures to withstand the forces of a local source tsunami; and
- (iv) Concentrating or clustering development in lower risk portions or areas of the subject property, and limiting or avoiding development in higher risk areas.

(10) Hazard Acknowledgement and Disclosure Statement

(a) All applications for new development or substantial improvements in the Tsunami Hazard Overlay Zone shall be accompanied by a Hazard Acknowledgement and Disclosure Statement, executed by the property owner, which sets forth the following:

(A) A statement that the property is subject to inundation by a local source Cascadia event tsunami, including the DOGAMI scenarios (S, M, L, XL, or XXL) that could potentially flood the site, and that development thereon is subject to risk of damage from tsunami;

(B) A statement that a local source tsunami poses a potential life safety threat to occupants of the property, and that the protection of life safety will require occupants to evacuate to high ground in the event of a local source tsunami; and

(C) A statement acknowledging that the property owner accepts and assumes all risks of damage from tsunami associated with the development of the subject property.

(D) A statement that [jurisdiction], its agents and employees are released from any and all claims which may arise as a result of damages, losses, or injuries sustained by the property owner and his/her heirs, successors and assigns from local tsunami hazards affecting the subject property.