House Bill 2605

Sponsored by Representatives GOMBERG, SMITH DB (Presession filed.)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure **as introduced**.

Imposes tsunami design standards for certain buildings and other structures. Allows local government to impose vertical evacuation standards for new or existing buildings and other structures as part of local tsunami evacuation plan.

Requires that sites for new structures be evaluated for vulnerability to seismic geologic hazards if structures are major structures or are designated as having specified tsunami risk for design.

Requires developer of building owned by public body and designated as having specified tsunami risk for design to request determination, scientific evidence and recommendations from State Department of Geology and Mineral Industries. Requires department to report annually regarding requests, determinations and suggestions.

A BILL FOR AN ACT

2 Relating to tsunami risk; creating new provisions; and amending ORS 455.447.

3 Be It Enacted by the People of the State of Oregon:

4 <u>SECTION 1.</u> (1) As used in this section:

5 (a) "ASCE" means the American Society of Civil Engineers.

6 (b) "ASCE 7" means the ASCE Minimum Design Loads and Associated Criteria for

7 Buildings and Other Structures that appear in the Oregon Structural Specialty Code.

8 (2) Notwithstanding any contrary standard under the structural specialty code, the fol-9 lowing must be designed to meet or exceed the tsunami loads and effects design standards 10 applicable under the provisions related to tsunamis in ASCE 7:

(a) Risk Category III buildings and structures, as defined in "Risk Category of Buildings
 and Other Structures," Table 1604.5 of the Oregon Structural Specialty Code, as in effect on
 the effective date of this 2021 Act. Buildings and other structures described in this paragraph
 must be designated as Tsunami Risk Category III for design.

(b) Risk Category IV buildings and structures, as defined in "Risk Category of Buildings
 and Other Structures," Table 1604.5 of the Oregon Structural Specialty Code, as in effect on
 the effective date of this 2021 Act. Buildings and other structures described in this paragraph
 must be designated as Tsunami Risk Category IV for design.

(3) This section does not make any buildings or other structures subject under the state
 building code to ASCE 7 standards for refuge structures for vertical evacuation.

21 SECTION 2. (1) As used in this section:

22

1

(a) "ASCE" means the American Society of Civil Engineers.

(b) "ASCE 7" means the ASCE Minimum Design Loads and Associated Criteria for
 Buildings and Other Structures that appear in the Oregon Structural Specialty Code.

(2) The state building code does not impose, or apply to, vertical evacuation planning and
 design requirements. A local government may adopt ASCE 7 standards for refuge structures

27 for vertical evacuation for buildings or other structures as part of a local tsunami plan. A

HB 2605

local government may apply standards adopted as provided in this subsection to all or part 1 2 of new or existing buildings or structures within the jurisdiction of the local government. SECTION 3. ORS 455.447 is amended to read: 3 455.447. (1) As used in this section, unless the context requires otherwise: 4 [(a) "Essential facility" means:] 5 [(A) Hospitals and other medical facilities having surgery and emergency treatment areas;] 6 [(B) Fire and police stations;] 7 [(C) Tanks or other structures containing, housing or supporting water or fire-suppression materi-8 9 als or equipment required for the protection of essential or hazardous facilities or special occupancy 10 structures;] [(D) Emergency vehicle shelters and garages;] 11 12[(E) Structures and equipment in emergency-preparedness centers;] 13 [(F) Standby power generating equipment for essential facilities; and] [(G) Structures and equipment in government communication centers and other facilities required 14 15 for emergency response.] 16 [(b) "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.] 17 18 [(c)] (a) "Major structure" means a building over six stories in height with an aggregate floor area of 60,000 square feet or more, every building over 10 stories in height and parking structures 19 as determined by Department of Consumer and Business Services rule. 20[(d)] (b) "Seismic hazard" means a geologic condition that is a potential danger to life and 2122property that includes but is not limited to earthquake, landslide, liquefaction, tsunami inundation, 23fault displacement, and subsidence. [(e) "Special occupancy structure" means:] 24[(A) Covered structures whose primary occupancy is public assembly with a capacity greater than 25300 persons;] 2627[(B) Buildings with a capacity greater than 250 individuals for every public, private or parochial school through secondary level or child care centers;] 28[(C) Buildings for colleges or adult education schools with a capacity greater than 500 persons;] 2930 [(D) Medical facilities with 50 or more resident, incapacitated patients not included in subpara-31 graphs (A) to (C) of this paragraph;] [(E) Jails and detention facilities; and] 32[(F) All structures and occupancies with a capacity greater than 5,000 persons.] 3334 (2) The Department of Consumer and Business Services shall consult with the Seismic Safety 35 Policy Advisory Commission and the State Department of Geology and Mineral Industries prior to adopting rules. Thereafter, the Department of Consumer and Business Services may adopt rules as 36 37 set forth in ORS 183.325 to 183.410 to amend the state building code to: 38 (a) Require new building sites [for essential facilities, hazardous facilities, major structures and special occupancy structures] to be evaluated on a site specific basis for vulnerability to seismic 39 geologic hazards if the sites are for structures that are: 40 (A) Major structures; or 41 (B) Designated under section 1 of this 2021 Act as Tsunami Risk Category III or IV for 4243 design. (b) Require a program for the installation of strong motions accelerographs in or near selected 44

45 major buildings.

HB 2605

1 (c) Provide for the review of geologic and engineering reports for seismic design of new

2 [buildings of large size, high occupancy or critical use] major structures or buildings that have

3 been designated under section 1 of this 2021 Act as Tsunami Risk Category III and IV for

4 design.

5 (d) Provide for filing of noninterpretive seismic data from site evaluation in a manner accessible6 to the public.

(3) For the purpose of defraying the cost of applying the regulations in subsection (2) of this
section, there is hereby imposed a surcharge in the amount of one percent of the total fees collected
under the structural and mechanical specialty codes for [essential facilities, hazardous facilities,]
major structures and [special occupancy structures] buildings that have been designated under
section 1 of this 2021 Act as Tsunami Risk Category III or IV for design, which fees are retained by the jurisdiction enforcing the particular specialty code as provided in ORS 455.150 or enforcing a building inspection program under ORS 455.148.

[(4) Developers of new essential facilities, hazardous facilities, major structures and special occupancy structures that are located in an identified tsunami inundation zone, as described in ORS 455.446 (2), shall consult with the State Department of Geology and Mineral Industries for assistance in determining the impact of possible tsunamis on the proposed development and for assistance in preparing methods to mitigate risk at the site of a potential tsunami. Consultation must take place prior to submittal of design plans to the building official for final approval.]

20(4) Before submitting design plans for a proposed building owned by a public body, as defined in ORS 174.109, and designated under section 1 of this 2021 Act as Tsunami Risk 2122Category III or IV for design, the developer shall request consultation from the State De-23partment of Geology and Mineral Industries with respect to the impacts from potential tsunami activity on the proposed building and the department shall provide the developer 24 25with the best available scientific evidence of potential impacts. The department shall make a determination as to the likely impacts and recommend any design or other changes to 2627mitigate the impacts that the department deems advisable or necessary. The department shall notify the developer and the official responsible for approving the development not later 28than 45 days after receiving the developer's request. An official that approves the develop-2930 ment shall include the department's determination and recommendations with permit docu-31 ments for the building.

<u>SECTION 4.</u> The State Department of Geology and Mineral Industries shall report regarding requests, determinations and recommendations made under ORS 455.447 (4) to an interim committee of the Legislative Assembly related to general government in the manner provided by ORS 192.245, no later than September 15 of each year.

36 **SECTION 5.** ORS 672.107 is amended to read:

37 672.107. (1) For purposes of this section:

38 (a) "Essential facility" means:

39 (A) Hospitals and other medical facilities having surgery and emergency treatment areas;

40 (B) Fire and police stations;

41 (C) Tanks or other structures containing, housing or supporting water or fire 42 suppression materials or equipment required for the protection of essential or hazardous
 43 facilities or special occupancy structures;

44 (D) Emergency vehicle shelters and garages;

45 (E) Structures and equipment in emergency-preparedness centers;

HB 2605

(F) Standby power generating equipment for essential facilities; and 1 2 (G) Structures and equipment in government communication centers and other facilities required for emergency response. 3 (b) "Hazardous facility" means structures housing, supporting or containing sufficient 4 quantities of toxic or explosive substances to be of danger to the safety of the public if re-5 leased. 6 [(a)] (c)(A)) "Significant structure" means: 7 8 [(A)] (i) Hazardous facilities and special occupancy structures[, as defined in ORS 455.447]; 9 [(B)] (ii)Essential facilities[, as defined in ORS 455.447,] that have a ground area of more than 4,000 square feet or are more than 20 feet in height; 10 [(C)] (iii)Structures that the Director of the Department of Consumer and Business Services de-11 12 termines to have irregular features; and 13 [(D)] (iv)Buildings that are customarily occupied by human beings and are more than four stories or 45 feet above average ground level. 14 15 [(b)] (B)"Significant structure" does not mean: 16 [(A)] (i)One-family and two-family dwellings and accompanying accessory structures; [(B)] (ii)Agricultural buildings or equine facilities, both as defined in ORS 455.315; or 17 18 [(C)] (iii)Buildings located on lands exempt from Department of Consumer and Business Services enforcement of building code regulations. 19 20(d) "Special occupancy structure" means: (A) Covered structures whose primary occupancy is public assembly with a capacity 2122greater than 300 persons; 23(B) Buildings with a capacity greater than 250 individuals for every public, private or parochial school through secondary level or child care centers; 24(C) Buildings for colleges or adult education schools with a capacity greater than 500 2526persons; 27(D) Medical facilities with 50 or more resident, incapacitated patients not included in subparagraphs (A) to (C) of this paragraph; 28(E) Jails and detention facilities; and 2930 (F) All structures and occupancies with a capacity greater than 5,000 persons. 31 (2) Consistent with ORS 672.255, the State Board of Examiners for Engineering and Land Surveying shall adopt rules establishing standards of competence in structural engineering analysis and 32design relating to seismic influence. 33 34 (3) An engineer may not provide engineering services for significant structures unless the engi-35 neer possesses a valid professional structural engineer certificate of registration issued by the 36 board. 37 SECTION 6. Section 1 of this 2021 Act, and the amendments to ORS 455.447 by section 3 38 of this 2021 Act, apply to buildings for which a building permit is initially issued on or after July 1, 2022. 39 40