H. R. 11

To direct the Administrator of the Federal Emergency Management Agency to carry out a plan for the purchase and installation of an earthquake early warning system for the Cascadia Subduction Zone, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. DeFazio introduced the following bill; which was referred to the Committee on ________________________

A BILL

To direct the Administrator of the Federal Emergency Management Agency to carry out a plan for the purchase and installation of an earthquake early warning system for the Cascadia Subduction Zone, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; DEFINITION.

(a) Short Title.—This Act may be cited as the “Pacific Northwest Earthquake Preparedness Act of 2019”.

January 8, 2019 (11:01 a.m.)
(b) **Cascadia Subduction Zone Defined.**—In this Act, the term “Cascadia Subduction Zone” means the landward-dipping fault that is approximately 684 miles long, separates the Juan de Fuca and North America plates, and stretches along a portion of the western coast of the United States beginning off Cape Mendocino, California, along the State of Oregon, the State of Washington, to Northern Vancouver Island, British Columbia.

**Sec. 2. Earthquake Early Warning System for Cascadia Subduction Zone.**

(a) **Plan for Purchase and Installation.**—

(1) **Development and Funding.**—The Administrator of the Federal Emergency Management Agency shall—

(A) develop a plan for the purchase and installation of an earthquake early warning system for the Cascadia Subduction Zone; and

(B) identify the funds necessary for implementation of the plan.

(2) **Submission to Congress.**—Not later than 90 days after the date of enactment of this Act, the Administrator shall submit to the appropriate committees of Congress a copy of the plan.

(b) **Report to Congress.**—Not later than 1 year after the date of enactment of this Act, the Administrator...
shall submit to the appropriate committees of Congress a report that summarizes the actions taken to implement the plan.

(c) DEFINITIONS.—In this section, the following definitions apply:

(1) APPROPRIATE COMMITTEES OF CONGRESS.—The term “appropriate committees of Congress” means the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Homeland Security and Governmental Affairs of the Senate.

(2) EARTHQUAKE EARLY WARNING SYSTEM.—The term “earthquake early warning system” includes—

(A) improvements to regional and geodetic networks that support building a capability for an earthquake early warning system; and

(B) seismometers, Global Positioning System receivers, and associated infrastructure.

SEC. 3. EARTHQUAKE AND TSUNAMI TASK FORCE.

(a) IN GENERAL.—The President shall establish an Earthquake and Tsunami Task Force for the purpose of developing a comprehensive strategy and recommendations on how the Nation should prepare and plan for, mitigate against, respond to, recover from, and more success-
fully adapt to a covered event in the Cascadia Subduction Zone.

(b) Task Force.—

(1) Membership.—The membership of the Task Force shall include a cross section of subject matter experts representing the following:

(A) Relevant Federal agencies.

(B) The States of Oregon, Washington, and California.

(C) Indian tribes, local governments, and private sector representatives that may be impacted by a covered event in the Cascadia Subduction Zone.

(D) Universities, academia, and research institutions with expertise in topics relevant to the work of the Task Force.

(2) Chairperson.—The Administrator (or the Administrator’s designee) shall serve as the chairperson of the Task Force.

(3) Detailed Employees.—Members of the Task Force may detail employees to assist the Administrator (or the Administrator’s designee) in fulfilling the responsibilities of the Task Force.

(c) Comprehensive Strategy.—
(1) **Strategy.**—The comprehensive strategy to be developed under subsection (a) shall include the following:

(A) A description of how Federal agencies will coordinate to develop the ability to prepare and plan for, mitigate against, respond to, recover from, and more successfully adapt to the impacts of a covered event in the Cascadia Subduction Zone.

(B) A strategy to ensure collaboration between the Department of Transportation, the Department of Energy, the Coast Guard, the Corps of Engineers, and other Federal agencies, as appropriate, for purposes of—

(i) completing a needs assessment of Federal facilities in need of hardening for a covered event; and

(ii) developing a strategic plan to mitigate and retrofit Federal, State, tribal, and local critical assets for freight, energy, and transit purposes to withstand a covered event and to help save lives during and immediately after a covered event.

(C) A strategy—
(i) to assist State, tribal, and local governments in developing and implementing a coordinated and comprehensive plan to prioritize Federal, State, tribal, local, and private investments and activities to develop the ability to prepare and plan for, mitigate against, respond to, recover from, and more successfully adapt to the impacts of a covered event in the Cascadia Subduction Zone; and

(ii) to link any existing statewide mitigation plan with such a coordinated and comprehensive plan.

(D) With respect to the strategy described in subparagraph (C), an examination of the feasibility of the public sector, the private sector, and individuals to acquire earthquake insurance.

(E) An identification of funding opportunities to implement the comprehensive strategy and any recommendations made by the Task Force, including—

(i) existing funding opportunities across Federal agencies and other sources; and
(ii) potential new funding opportunities.

(F) An identification of barriers to obtaining funding for the implementation of the comprehensive strategy and recommendations on how to remove the barriers.

(G) A strategy for appropriate Federal agencies to collaborate with and assist State, tribal, and local governments in developing recommendations for cost-effective mitigation alternatives for aging State, tribal, and locally owned critical infrastructure.

(H) A strategy for assisting State, tribal, and local governments in developing a recovery plan prior to a covered event in the Cascadia Subduction Zone that addresses how State, tribal, and local governments may want to rebuild after the event.

(I) An identification of the steps taken to date to develop an onshore and offshore earthquake early warning system and a description of the purpose and scope of such a system.

(J) An evaluation of the types of offshore earthquake early warning systems and recommendations and a cost estimate for an earth-
quake early warning system appropriate for the Cascadia Subduction Zone.

(K) Recommendations on how an earthquake early warning system should operate, including whether and how the system should interface with the private sector.

(L) A description of appropriate roles and responsibilities for Federal, State, local, and tribal governments, including who should operate and maintain an earthquake early warning system, the cost of the system, and possible funding sources for the system.

(M) A plan on how to integrate an earthquake early warning system into existing and new public alert warning systems and technologies, including mobile systems.

(2) USE OF EXISTING PLANS.—In developing the comprehensive strategy, the Task Force may use existing plans, studies, and other resources.

(d) RECOMMENDATIONS.—The recommendations to be developed by the Task Force under subsection (a) shall include recommendations on—

(1) potential administrative or legislative changes required to implement the comprehensive strategy;
(2) the funding required to implement the comprehensive strategy and the recommendations; and

(3) the order of priority for implementation of the comprehensive strategy.

(e) NATIONAL ACADEMIES.—

(1) COLLABORATION.—The Task Force shall work simultaneously and collaboratively with the National Academies.

(2) AGREEMENT.—The Task Force shall enter into an agreement with the National Academies under which the National Academies shall develop recommendations for a Federal research strategy to advance scientific understanding of a Cascadia Subduction Zone earthquake and resulting tsunami preparedness, including the following:

(A) Geologic conditions, ground motions, and tsunami hazards.

(B) Implications of an effective automated early warning system.

(C) Effects of mega-earthquake and tsunami events on the built and natural environment.

(D) Social and behavioral factors for effective disaster preparedness and response.
(E) Cost-effective mitigation alternatives for legacy and aging infrastructure.

(F) Strategic planning for freight, energy, and transit network robustness.

(G) Tools that help communities invest their resources for the greatest benefit.

(H) Any other topics identified as necessary by the Task Force or the National Academies.

(f) REPORT.—Not later than 18 months after the date of enactment of this Act, the Administrator shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Homeland Security and Governmental Affairs of the Senate a report of the Task Force that includes the following:

(1) The comprehensive strategy to be developed under subsection (a).

(2) The recommendations to be developed under subsections (a), (d), and (e).

(g) DEFINITIONS.—In this section, the following definitions apply:

(1) ADMINISTRATOR.—The term “Administrator” means the Administrator of the Federal Emergency Management Agency.
(2) COVERED EVENT.—The term “covered event” means an earthquake, tsunami, or combined earthquake and tsunami event.

(3) TASK FORCE.—The term “Task Force” means the Federal interagency task force to be established under subsection (a).

SEC. 4. NATIONAL PREPARATION AND RESPONSE EFFORTS RELATING TO EARTHQUAKES AND TSUNAMIS.

The Administrator of the Federal Emergency Management Agency shall be responsible for the Nation’s efforts to reduce the loss of life and property, and to protect the Nation, from an earthquake, tsunami, or combined earthquake and tsunami event by developing the ability to prepare and plan for, mitigate against, respond to, recover from, and more successfully adapt to such an event.