



Testimony of Sean Loughran, Planning and Development Director
Port of Portland
House Bill 2883
Hearing before the House Committee on
Veterans and Emergency Management
February 4, 2021

Thank you for the opportunity to provide testimony on House Bill 2883, which would establish the Oregon Public Places are Safe Places Investment Fund managed by the Office of Emergency Management and create an advisory committee to provide recommendations and advice regarding fund infrastructure. I'm Sean Loughran, Planning and Development Director for the Port of Portland. I have over 20 years of planning, development, and facility management experience.

Establishing staging areas to support emergency response is essential to effective response, recovery, and rebuilding operations. Emergency Management is a priority for the Port, and we appreciate the Office of Emergency Management's (OEM) sustained efforts and partnership in preparing Oregon for an uncertain future. The Port is pleased to support HB 2883. We ask the Committee to consider amending the bill to include the Port of Portland on the advisory committee that the bill would establish. This would enable us to further coordinate with the State of Oregon and OEM when it comes to emergency management.

Whether it is quickly adapting how the Port operates at the Portland International Airport (PDX) in response to COVID-19, sending firefighters to help communities around Oregon, or helping OHSU set up a drive-through vaccination clinic at PDX, the Port of Portland is deeply committed to providing public services and meeting community needs during a crisis. We take a holistic, programmatic approach to resilience and emergency response. That means the Port is not preparing to address one event but working to build the adaptability and flexibility to perform well under a variety of challenging conditions. The Port's approach is both long-term and short-term—and both strategic and tactical.

The Port owns three airports, including PDX, the only large hub commercial airport serving Oregon and SW Washington. In addition to airports that support passenger, business, and air cargo service, the Port also owns four marine terminals and industrial business parks. Our assets represent critical facilities that provide operational support for Oregon's export and manufacturing economy, everyday commerce, and travel. They are also essential lifelines during disaster response and recovery.

Emergency Response Support

Currently, the Port is working in partnership with Oregon Health & Science University (OHSU) to vaccinate as many Oregonians against COVID-19 as quickly as possible. In mid-January, the Port and OHSU began a collaborative project to design and open a vaccination point of distribution (POD) at PDX. The POD opened on January 21. Nearly 7,000 people have received a vaccination to date with another 8,000 doses expected to be provided on February 6-7. The Port is providing the site and coordinating logistics, and American Red Cross volunteers are helping keep the site moving smoothly.

Every summer, Port firefighters voluntarily deploy to combat wildfires throughout the region. Most recently, last September, a team of Port of Portland firefighters deployed as part of the State's efforts to Jackson County, where they worked with other firefighters to combat the Almeda Fire in Phoenix and the South Obenchain Fire in Shady Cove. Port emergency responders are routinely called on to support local and state agencies in emergency response.

Additionally, the Port has an established Emergency Operations Center (EOC) exercise and training program. The Port follows National Incident Management System (NIMS) guidance and ensures FAA Part 139 regulations are met by conducting regular trainings and exercises, including a full-scale Triennial exercise to test the Airport Emergency Plan. The Port will also be participating in the 2022 Cascadia Rising full scale Cascadia Subduction Zone earthquake exercise.

PDX Seismic Resilience

The Port focuses on increasing our ability to provide immediate emergency response, as well as our ability to lessen the impacts of catastrophic events through investments, operational changes, and partnerships. The Port's long-term resilience vision includes significant investments in seismic safety.

As part of PDX Next, the Port's five-year expansion project, the Port is developing a new Response Operations Coordination Center (ROCC). The ROCC, located on a seismically resilient floor that will be immediately occupiable following a major earthquake, will be home to the 9-1-1 Communications Center, the TSA, the Port's Emergency Operations Center, Aviation Security, and other field staff. The ROCC will allow the Port to quickly coordinate a response with our key partners after an earthquake and other emergencies. These coordinated functions will serve the Port and the community in the event of a disaster. Construction of the ROCC is underway and it is expected to be fully operational by fall 2021. PDX Next also includes numerous seismic safety improvements to the airport terminal.

- The newly expanded terminal will be constructed to a high seismic safety standard, which will not only protect life safety, it will significantly reduce harm to the building and simplify the return to operations.
- Last summer, the Port opened the extension to Concourse E. This new concourse, which supports Southwest Airlines—one of the major carriers at PDX—is constructed on a resilient structural slab. This will significantly reduce the harm caused by a catastrophic earthquake and allow a timely return to operations.
- Additionally, the Port is improving equipment and utility resilience. Along with more robust equipment for essential building services (heating/cooling/air circulation), the Port is bringing in a new power feed to provide redundancy and installing new emergency power generation in the Terminal expansion.

These critical investments are among the key elements of the Port's plan to facilitate the return to operations following a significant Cascadia Subduction Zone earthquake. But, the most transformational investment the Port is advancing is the development of a seismically resilient runway at PDX.

The Resilient Runway

Federal and State response operations for a Cascadia Subduction Zone earthquake will be based in Redmond, Oregon—on the east side of the Cascades. In the event of a major Cascadia Subduction Zone earthquake, those in the Willamette Valley can expect to be isolated by landslides in the Cascade and Coast ranges, and by road and bridge failures in all directions. A resilient runway at PDX—one that can withstand the effects of liquefaction—would be an essential lifeline for many Willamette Valley residents.

Following an earthquake of significant magnitude, the ground beneath the runways at PDX is likely to settle and spread, cracking and breaking the runway pavement surface and rendering it unusable for aircraft. A resilient runway at PDX will make it possible to:

- Save lives by completing more medical evacuations from Oregon's most populous region and bringing in medical staff and supplies to support medical operations.
- Help people get back into their homes and businesses by flying in certified building safety inspectors to determine which damaged buildings are safe to re-enter and re-occupy and which are not. The region will need thousands of inspectors to complete the work in a timely fashion. There are fewer than 200 certified inspectors in the northern Willamette Valley.
- Speed up the delivery of needed rebuilding supplies and aid and fly in construction workers to support the work.
- Reduce business interruption and make it easier to begin economic recovery.

If the runway is not mitigated prior to a major earthquake, it may take approximately one year, potentially more, to rebuild a runway that meets standards for large commercial flight operations, including air cargo. Without a runway that can serve large aircraft during response, aid will largely need to be brought in by helicopter and small planes until landslides to the east and south are cleared, and bridges are deemed safe or repaired for truck traffic.

Inspired by the runway at Sendai Airport in Japan, and based on in-depth, on-site research completed by Oregon State University and the Port's geotechnical consultant GRI, the Port has completed 30% design for rebuilding 6000-feet of PDX's South Runway.

In 2019, the Port also began working with the National Institute of Building Sciences (NIBS) to complete a cost-benefit analysis of constructing the resilient runway. Preliminary results from the NIBS cost-benefit analysis indicate that a resilient runway will help Oregon avoid \$7.4 billion in losses. The resilient runway has an estimated 50:1 cost-benefit ratio. The final report will be complete this spring.

In addition to understanding the dollar-for-dollar benefits of a resilient runway, the Port is working with Portland State University to complete an equity study. The PSU Portland Resilient Runway Equity Study will complement NIBS' economic analysis with quantitative and qualitative demographic analyses. The equity study will highlight which workers and communities will stand to suffer due to job loss and business activity interruption due to a potential airport shutdown. This is consistent with Port values and

the Port's commitment to building shared prosperity in the region.

Critical to taking full advantage of the Port's past, current, and future investments in PDX is identifying and building connections between PDX and local, regional, and statewide response planning and operations to ensure that goods and services can move to and from PDX. Staging areas supported by this bill are essential to the response and recovery infrastructure network.

Marine Seismic Resilience

The Port's investment in resilience and response is not limited to PDX. In 2019, the Port completed a marine facilities resilience plan, highlighting the Columbia River's role in response operations and identifying projects to improve resilience at the Port's marine facilities.

One critical role for the Port's Marine Terminal 6 is emergency fuel distribution. Fuel shortages will likely be a significant issue following a Cascadia Subduction Zone earthquake. Located near the confluence of the Columbia and Willamette Rivers, T6 is poised to serve as a critical fuel distribution point. The Port has made seismic safety improvements at Terminal 6 to secure the terminal as an essential operations resource after a major seismic event.

More work around identifying needed debris clearing and dredging capabilities and resources is required to support maritime response and recovery operations. Maritime operations hold significant promise for improving emergency response and recovery.

The Port of Portland is committed to playing a critical role in protecting the health and safety of Oregonians during and after emergencies. Thank you again for the opportunity to testify in support of HB 2883.