



# Cascadia Rising

## Presentation to the Washington State Transportation Commission

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## Cascadia Rising 16

- Joint Federal, State, Local Exercise conducted 7 to 10 June, 2016
- National Linkage
- Focus Areas:
  - Operational Coordination
  - Operational Communication
  - Situational Awareness
  - Mass Care
  - Public Health and Medical Services
  - Critical Transportation



## Cascadia Rising 16 Strategic Observations

- Time is of the essence
  - Massive National/International response required
  - Needs and immediacy are overwhelming
- Detailed Planning is imperative
- Transportation infrastructure is the lynchpin of successful response
- Effective, survivable communication is essential
- Public preparedness is crucial
- CSZ is a National Issue

Hurricane Maria has validated the importance of these



## What Has Been Done So Far

- Regional Catastrophic Planning
- Statewide Catastrophic Incident Planning Team
- WSDOT Lifeline Corridor Initiative
- Resilient Washington
- National Guard Response Plan



## Our Focus Going Forward

- Response Planning
  - ESF-6 Mass Care and Sheltering
  - ESF-8 Public Health and Medical
  - ESF-1 Transportation
  - ESF-2 Communications
  - ESF-12 Energy
- Mitigation Planning
  - Focused on building resiliency in our critical infrastructure, in particular our lifeline sectors - transportation, communications, energy
  - Family and personal preparedness/resiliency
- Recovery Planning
  - Washington Restoration Framework





## Planning Concept

- State-led detailed planning, coordinated across all levels of government (tribal, local, state, federal) and whole of community
- Pre-identify resource needs and develop plans to deliver the required commodities where and when needed
- Build a logistics database
- Ensure enabling capabilities (transportation, communications, fuel)
- Timeline – 3 to 4 years to accomplish baseline plans for the 5 ESFs, exercise the plans in 2021
- Continue to refine plans and focus on additional ESFs
  - 12 years to accomplish appendices for all ESFs



## Regional Resiliency Assessment Program (RRAP)

The Regional Resiliency Assessment Program (RRAP) is a **cooperative assessment of specific critical infrastructure within a designated geographic area** and a regional analysis of the surrounding infrastructure to address a range of infrastructure resilience issues that could have regionally and nationally significant consequences. These voluntary, nonregulatory RRAP projects are led by the Department of Homeland Security and are selected each year by the Department with input and guidance from federal, state, and local partners.



## Regional Resiliency Assessment Program (RRAP)

- **Objective 1:** Analyze and identify priority **multi-modal transport routes** and facilities that would likely be utilized in the CSZ response phase and determine capacity of existing, most-viable routes
  - Connectivity between Incident Support Bases (ISBs) and regional Federal Staging Areas (FSAs) and grocery Distribution Center (DC) cluster
  - Connectivity between seaports and regional FSAs and DC cluster
  - Corridor and route focus; no facility-level focus at this phase
  - Physical viability of routes, not what goods on which routes
- **Objective 2:** Identify and prioritize **transportation routes and facilities for potential investments** of hardening, retrofitting, and mitigation measures
  - Focus on priority route hazard vulnerabilities (e.g., liquefaction, landslide, seismic forces, tsunami) to corridors
  - System-level analysis of infrastructure physical impacts
  - Assessment of potential infrastructure system viability post-disaster; prioritization of corridors and facilities to mitigate damage to systems most valuable to response operations





# Resilient Washington Subcabinet



## Resilient Washington Subcabinet

- Purpose & Timeframe of Governor Directive 16-19, November 2016 :
  - To **better enable preparedness and response** to earthquakes and tsunamis in Washington State
  - **Capitalize on the work from the 2012 Resilient WA report**, and the Cascadia Rising exercise, with the goal of making the state resilient **over the next 50 years.**
  - **Provide a draft report** with initial findings by June 30, 2017. Time was extended to Aug 30, 2017 due to added recommendations from mid term meeting with Governor.
  - Accomplished by a collaborative effort from more than 20 different State agencies, and organizations
- The RW Subcabinet report was to report out on the following:
  - What has been done
  - What is currently being done
  - What needs to be done
  - Funding shortfalls



## Resilient Washington Subcabinet Snapshot of Subcabinet recommendations

- Make **schools** resilient: structurally, socially, and educationally
- Require that **utility providers** identify the vulnerabilities in their systems and mitigate the deficiencies
- Strengthen **business continuity planning** efforts by providing education, tools, and training.
- Improve the **resilience of buildings in areas of high seismic hazard** to improve life safety and increase the number of people who will be able to shelter in place
- **Strengthen regional transportation networks**
- Make **hospitals** resilient – structurally and functionally
- Identify and map in greater detail sources of seismicity and geologically hazardous areas and develop plans for mitigation of identified hazards
- Plan for the distribution of **bulk fuel**
- Develop a **Mass Care** Operational Coordination Plan Annex
- Improve life safety in communities at risk of local tsunamis
- Build **resilient communication systems** and develop the relevant procedures to ensure reliable communications with clear protocol following a catastrophic seismic event.



## Resilient Washington Recommendations

- Governor briefed on 27 SEP 2017 on draft report findings
- Overarching recommendations:
  - Establish a Governor's Office of Resiliency
  - Establish a Legislative Task Force
  - Integrate RW report recommendations into Results WA



## Resilient Washington Subcabinet Perception vs Reality

Perception	Reality
This is just another report or study, nothing will come of it.	This is the first, continued step in a long process, 25-50 year efforts – it all has to start somewhere.
Resilience Office/Officer should be in EMD; EMD is most logical choice.	Should be at a higher level (Governors office) – similar to other states. EMD is least logical – there are several cabinet members who are elected officials, EMD has NO authority to direct activities, establish priorities, allocate resources, etc.
Recommendations in report are final.	Each recommendation requires more detailed work to be completed.
Cost estimates are exact.	Each cost recommendation is an estimate.
Lead agencies for recommendations are moving forward on all the tasks and suggestions.	Many of the tasks are suggestions and have not been prioritized by agency leadership.
State agencies are doing nothing to make the state more resilient	The report highlights several great things that individual agencies are already doing

\* This is not an all inclusive list





## RW Transportation Findings/Recommendations

- Current/Ongoing Actions
  - Regional devolution plan
  - Seismic Lifeline Route/Seismic Retrofit Program
  - Interagency coordination
- Gaps and Barriers
  - Need for expanded research to identify seismic risk to transportation infrastructure
  - Lifeline plan needs to extend beyond urban core
  - Coordination with other jurisdictions needed to identify alternate routes
  - Current construction and retrofitting does not ensure usability, repairs may be necessary
  - Retrofitting does not include subsurface work to mitigate liquefaction
  - Inadequate resources to address landslides following a CSZ event
  - Additional research to identify tsunami impacts to transportation facilities



## RW Transportation Findings/Recommendations

- Subcabinet priority recommendations:
  - Conduct research to thoroughly analyze the effects of a CSZ event on WSDOT Structures
    - Determine if current building standards for 1,000-year and 2,500-year events allow structures to withstand the full effect of a CSZ event.
  - Expand Seismic lifeline into a comprehensive North-South route from Oregon to British Columbia and East-West from the coast to beyond the Cascades
- Other recommendations
  - Conduct unstable slope mitigation research
  - Liquefaction susceptibility and mitigation research
  - Tsunami mitigation



## ESF-1 Appendix to Catastrophic Annex

- Identify lifeline routes, route clearing strategies, and alternate routes to bring commodities into the impacted area
- Develop an airspace control plan and a plan for rapidly assessing and opening airfields
- Partner with rail owners to develop rail restoration plans
- Partner with ports to develop port restoration plans



## Questions?

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