


Emergency Management Council

Statewide Emergency Preparedness Annual Report to the Governor

2020/2021 Annual Report

Contents

June 30, 2022

The Honorable Jay Inslee
Governor of Washington
P.O. Box 40002
Olympia, WA 98504-0002

Dear Governor Inslee:

On behalf of the Washington State Emergency Management Council (EMC), I am honored to present the 2020-2021 EMC Annual Report on the status of statewide emergency preparedness. This document fulfills the Council's responsibility to provide an annual assessment of statewide emergency preparedness (RCW 38.52.040) and contains recommendations that the Council believes will improve the state's preparedness. The EMC members, constituents, and stakeholders value the opportunity to inform you on the status of emergency management in our state and to provide recommendations that address identified issues.

This report provides recommendations to address issues affecting statewide disaster preparedness. The EMC, through its committees and workgroups, continues to support activities that strengthen our ability to respond and to reduce the threat of the risks we face in the state from natural, technological, and human-caused hazards.

We remain appreciative of your support of the Council's work, and we intend to provide you status updates and additional recommendations on state and local emergency management issues over the coming years. We appreciate any feedback you or your staff have on this report. If you would like to discuss further, please email Sharon Wallace at Sharon.Wallace@mil.wa.gov.

Sincerely,

Jason Biermann, EMC Chair
Director, Snohomish County Department of Emergency Management

Washington Emergency Management Council

RCW 38.52.040 lists the membership of the EMC as follows:

Representatives of City and County Governments

Sheriffs and Police Chiefs

The Washington State Patrol

The Military Department

The Department of Ecology

State and Local Fire Chiefs

Seismic Safety Experts

State and Local Emergency Management Directors

Search and Rescue Volunteers

Medical Professions with Expertise in Emergency Medical Care

Building Officials

Private Industry

Office of the Superintendent of Public Instruction

Representatives of Federally Recognized Tribes

Coroners and Medical Examiners

Two Members at Large

Executive Summary

Purpose: In accordance with RCW 38.52.040, this report fulfills the Emergency Management Council's responsibility to provide an annual assessment of statewide emergency preparedness to the Governor and the Adjutant General (TAG).

Scope: This report covers the period of 2020 through 2021 and contains recommendations that the Council believes will improve the state's preparedness.

Background: Washington's emergency management community faced a myriad of challenges in 2020 and through 2021. These included the COVID-19 pandemic, severe winter storms, extensive wildfires, and civil unrest. The members of the Emergency Management Council (EMC) identified four critical issues salient to the state's emergency management community and analyzed them to provide recommendations to the Governor's Office and TAG.

Issue #1: Use of Incident Management Teams (IMTs) During the COVID-19 Response
Synopsis: The EMC solicited feedback via survey to determine the value of IMT's capabilities; the survey results clearly indicated that jurisdictions and agencies that utilized IMTs found great value in their ability to organize a response.

Recommendation: Provide resources, guidance, and direction that ensures IMTs are readily available to county governments, local health jurisdictions, and state agencies.

Issue #2: **Public-Private Partnerships During the COVID-19 Response**

Synopsis: The EMC looked closely at two examples of public-private partnerships formed during the COVID-19 response: Procurement of personal protective equipment (PPE) and distribution of vaccines.

Recommendations:
1. Create a public-private sector task force charged with the development of an inclusive preparedness and response operational coordination strategy, and that incorporates a statewide public-private partnership model (e.g., the Challenge Seattle model) into the strategy.

2. Provide resources to the Washington State Emergency Management Division (EMD) for the development and implementation of a Business Emergency Operations Center (BEOC) environment to enhance response and recovery operations; concurrently, direct the EMD to examine the feasibility of a new ESF 14 consistent with the new private sector focused Federal ESF 14 (cross-sector business and infrastructure).

3. Establish and implement a joint effort between the Military Department and the Department of Commerce to connect local emergency managers and private sector partners, so that they can work more closely on local capability assessment and all-hazard planning initiatives.

4. Encourage local jurisdictions and tribes to invite and incorporate private sector partners, who elect to opt-in to local core capability assessment (THIRA/SPR - planning, organizing, and equipment elements) and all-hazard (including catastrophic) planning initiatives.

Issue #3: All Risk Mobilizations

Synopsis: The frequency of All-Risk Mobilizations continues to increase, as does their cost; concurrently, the type of incidents requesting support via Mobilization continues to expand. The duration and number of mobilized incidents pose a significant challenge as there are no additional staff and Mobilization costs have exceeded the appropriation each of the last five biennia.

Recommendations:
1. Authorize the WSP, through the legislative process, to request additional staff dedicated to the Mobilization program through the legislative process. This would require an increase in GF-S appropriation (or other dedicated funding) to the WSP.

2. Authorize the WSP to request, through the legislative process, an increase to the Disaster Response Account appropriation form its current level to $20 million per biennium.

3. Provide resources to WSP to support the development of a robust community risk reduction program and provide funding to incentivize that program's implementation by local jurisdictions.

4. Encourage, perhaps through grant guidance, that local and/or multicounty regions develop and exercise their own incident management organizations (i.e., IMTs). This would reduce the stress on teams needed primarily for wildland firefighting.

Issue #4: Hazard Mitigation and Reduction

Synopsis: Risk reduction efforts targeting storms, flooding, tsunamis, earthquakes, and cybersecurity progressed; unfortunately, 93 percent of the 561 school buildings assessed have one-star Structural Safety Sub-Ratings (one star represents building that are the most vulnerable) based on the information available. The Legislature did fund the Office of the Superintendent of Public Instruction (OSPI) $13 million in 2019 and $40 million in the 2021–2023 biennium for the School Seismic Safety Retrofit Program (SSSRP).

Recommendations:
1. Continuing to prioritize state funding in support of addressing school seismic safety retrofits and for construction of vertical evacuation structures in communities with high tsunami risk.

2. Establishing a funding mechanism and/or tax incentives for retrofitting older unreinforced masonry buildings, which would dramatically reduce the impact of an earthquake to densely populated areas.

3. Establishing guidelines for the newly approved transportation package that encourage the use of that funding for highway, bridge, and marine infrastructure improvements.

4. Construction of resilient transportation infrastructure that can be a redundant lifeline for the movement of emergency supplies and services from east to west and north to south.

5. Enhance the capability of EMD to assess risks of climate-related natural hazards and develop risk mitigation strategies.

Introduction

This is the Washington State Emergency Management Council's annual report to the Governor. It fulfills the Council's responsibility to provide an annual assessment of statewide emergency preparedness (RCW 38.52.040) and contains recommendations that the Council believes will improve the state's preparedness.

This report covers the period of 2020 through 2021. In 2020, the response to the COVID-19 pandemic placed severe constraints on Council members, constraints that precluded an annual assessment. The recommendations contained herein are based on assessments of certain events and activities that occurred during this two-year period, some of which reiterate recommendations from past incidents and reports.

In 2020 and 2021, a series of major incidents tremendously impacted emergency management throughout the State of Washington. In mid-January 2020, state and local jurisdictions responded to severe winter storms and floods that resulted in a Presidential Major Disaster Declaration. While already supporting the needs of impacted jurisdictions from the severe winter storms, emergency operations centers around the state activated to support the COVID-19 response. Governor Inslee issued an Emergency Proclamation and the President followed with a Major Disaster Declaration due to the significant adverse impacts.

For the remainder of 2020 and in the midst of the ongoing pandemic response, Washington's emergency management system simultaneously responded to multiple incidents that included civil unrest, a major cybersecurity incident, elections security, inauguration security, and yet more major storms.

Washington also experienced the second worst wildfire season in state history in 2020, and the third worst in 2021. In the devastated Whitman County towns of Malden and Pine City, recovery from the Babb Road Fire continues. The legislature appropriated a $1 million grant program to provide financial assistance for fire survivors in Douglas, Okanogan, Pierce, and Whitman Counties to replace household appliances lost when their homes were destroyed. The state also received Public Assistance from FEMA; unfortunately, Individual Assistance was not approved.

In 2021, as the pandemic response continued, local and state emergency managers also endured another challenging wildfire season and more significant storms. In late November 2021, an atmospheric river brought severe wind and rain across the state, prompting Governor Inslee to declare a state of emergency for most of western Washington. State and local emergency operations centers responded to flooding, landslides, mudslides, and straight-line winds that caused widespread failures to infrastructure such as public utilities and roads, impacted drinking water, and damaged homes.

The Emergency Management Council recognizes that our state experienced clear challenges throughout this period. We also know that there are equally clear opportunities ahead of us. The following report focuses on some specific areas that we prioritized. We know that there are many current and ongoing initiatives that, if expanded and resourced, could yield significant benefits for our residents by improving preparedness and resiliency across the state in the years to come. We certainly support these, including the development of a state-level individual assistance program, improvements to the earthquake early warning system, and enhancing monitoring on all our volcanoes. We believe that the recommendations in this report should also be considered for their benefit to our residents.

Skamania County Community Health members delivered COVID-19 vaccinations to more than 250 people at an appointment-only drive-through vaccination event in Skamania County, Washington last week. The event was planned by the interagency Pacific Northwest Incident Management Team. The IMT is part of a federal response to help support a tri-county COVID-19 vaccination effort in Southwest Washington.

Incidents and Issues Considered

Issue: Use of Incident Management Teams (IMTs) During COVID-19 Response

Background: An incident management team provides a command and control infrastructure required for the effective and efficient conduct of response activities for complex incidents.

Regardless of type, IMTs are a resource that provides substantial support to local agencies and/or jurisdictions facing a crisis. IMT arrive as an experienced, ready-made organization, armed with a well-defined process for response. This process, utilizing the Incident Command System (ICS), helps to identify priorities, define response objectives, and brings order to chaos.

Agencies and jurisdictions may request assistance from an IMT for reasons that include lack of trained personnel, lack of expertise in the specific hazard, limited response resources, level of incident complexity, and/or extended incident duration.

IMTs are defined by types that generally correspond to the level of government at which the team is formed and to different levels of incident complexity. The five types of IMTs are:

- Type 5. Usually formed by a single agency, city, or county. Responds to the lowest level of incident complexity.

- Type 4. Usually formed by multiple agencies within one jurisdiction. Responds to increasing incident complexity.

- Type 3. Usually formed by multiple agencies and jurisdictions, sometimes at the state level. Responds to incidents of increasing complexity that extend beyond one operational period.

- Type 2. Usually formed by state or federal agencies. Responds to manage incidents of regional significance and other incidents requiring many local, regional, state, and national resources. This includes incidents where operations section personnel approach 200 per operational period and total incident personnel approach 500. Several dozen Type 2 IMTs are currently in existence.

- Type 1. Usually formed at the federal or state level. Responds to manage incidents of national significance and other incidents requiring many local, regional, state, national, and federal resources over multiple operational periods. This includes incidents where operations section personnel may exceed 500 per operational period and total incident personnel may exceed 1000. Eighteen Type 1 IMTs are now in existence.

While primarily associated with wildland fire response, IMTs are routinely deployed to assist with hurricanes severe weather, earthquakes, floods, and other disasters. During the response to COVID-19, several entities throughout Washington requested IMT assistance. These entities included county governments, local health jurisdictions (LHJ), and state agencies.

"The organization and structure the IMT brings is critical to setting the stage."
Deanna Davis, Benton County Emergency Management

Evaluation of Issue: To better understand how and why these entities chose to utilize IMT during the pandemic response, the EMC conducted a brief survey directed to the agencies that requested IMT assistance. The survey responses revealed that IMTs Types 4, 3, 2, and 1, as well as single ICS position resources, were requested and deployed. Benton, Cowlitz, and Spokane Counties all utilized Type 3 IMTs to assist with the initial set-up, staffing, and response organization. All three of these Counties leveraged their existing Regional/ Local Teams for this support. Type 2 and Type 1 teams were utilized by counties, LHJ, and state agencies for complexity analysis and planning, operational coordination, oversight, and operation of mass vaccination sites/ programs, and focused support for PPE distribution.

Some of the most significant challenges brought by the pandemic are the sheer scope and scale of the incident, and the difficulty in identifying incident objectives and the desired end state. The expectation of an on-going and worsening crisis functioned as a driver for both operational and strategic planning. All the survey respondents noted that the provision of organizational structure and implementation of the defined planning process by the IMT was of primary importance in addressing these challenges.

The survey also revealed that IMT resources were deployed to support Joint Information Centers (JIC); and Public Information Officer single resources were also provided. With its unprecedented nature, the pandemic required clear, consistent, and accurate public messaging. Several of the survey respondents indicated that they lacked internal resources that could support that need.

Recommendation: The EMC recommends that IMTs be readily available to county governments, local health jurisdictions, and state agencies. The State Fire Service Mobilization process is currently limited to provide support to local fire service agencies. Modifying the State Fire Service Mobilization laws and process to support local, county, and state jurisdictions, while providing access to funding, would be a step forward to ensure these important resources can be deployed in a timely manner.

The use of IMTs as force multipliers, operational coordination, and planning Subject Matter Experts (SME) can greatly enhance a jurisdiction's or agency's ability to mount a successful response and recovery effort. Leveraging the Incident Command System (ICS) structure, Command and Control tenets, and well-defined planning processes allows an IMT to assist the home agency in setting priorities, defining objectives, and identifying milestones and decision points.

The successful deployment of IMT throughout the COVID-19 response should be regarded as an important lesson learned from this extraordinarily challenging incident.

"They were helpful in assisting us in navigating the multiple aspects of response from operations, organization and politics." Tiffany Turner, Spokane Regional Health District

The Department of Enterprise Services (DES), the state's lead procurement agency, procured hundreds of millions of dollars' worth of PPE.

Issue: Public/Private Partnerships During the COVID-19 Response

Background: COVID-19's onset and its rapid proliferation around the world in early 2020 left Washington, as most U.S. states, with a severe and immediate shortage of personal protective equipment (PPE) for health care workers and first responders. The pandemic presented an opportunity to demonstrate how successful integration of public-private partnerships could be in providing a full range of services, to include vaccine distribution and PPE procurement, in response to a crisis.

Evaluation of Issue: The increasing need for PPE led procurement teams to jump into the volatile global PPE marketplace in 2020. Through strong public-private partnerships, the state was able to successfully face the challenge of finding, procuring, and distributing PPE statewide.

The February 29, 2020, declaration of a state of emergency created special market conditions for many of the goods and services that assist in fighting against the spread of the virus. The declaration provided an opportunity to grant exception from competitive procurement requirements to allow direct negotiations for purchases for goods and services related to the state's response to the pandemic.

Faced with the daunting task to purchase vast quantities of PPE for Washington in competition with literally the rest of the world, private partners stepped up to prioritize the state as a customer for their limited PPE supplies, including Costco and Amazon. By May 2020, the state's supplier database grew to 2,259 distinct suppliers and manufacturers.

By the end of 2020, Washington built enough operational reserves of most of the highest-need PPE commodities. Navigating the complexities in coordination, inventory, and distribution required the efforts of all levels of government and a mixture of private sector partners, including unions, businesses, and the healthcare system.

These partnerships were vital when the problem at hand required innovative solutions and expertise in response to a rapidly changing landscape. In response to the need, regional manufacturers and companies shifted their production and inventory to meet the ever growing need for PPE. In collaboration with health organizations, the private sector created PPE the state was able to utilize for front line workers.

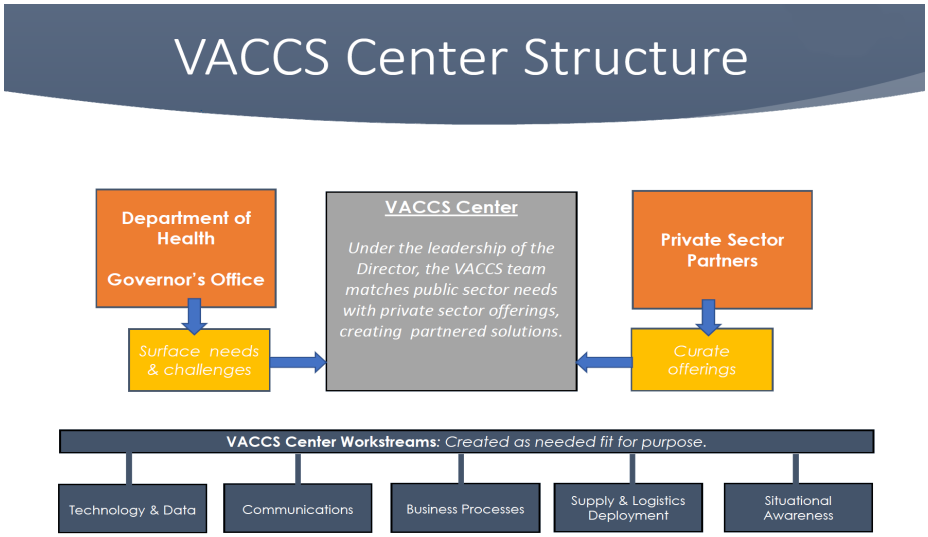
Harnessing the knowledge and resources of the private sector have been critical in the fight against COVID-19 and without these partnerships, the procurement and distribution of PPE would not have materialized so quickly and successfully. In so doing, the state could claim success in securing a working level of critical PPE for front-line workers – and learned lessons that will help the state prepare for and operate effectively in the next pandemic.

Testing and Vaccine Distribution: Robust public-private partnerships were strengthened in the efforts of detection, testing, surveillance, tracing, and treating citizens suffering from COVID-19. One of these highly regarded efforts is the Washington State Department of Health (DOH) Vaccine Act on Command and Coordination System (VACCS) Center.

The VACCS Center arose in early 2021 to support efficient and equitable access to COVID-19 vaccinations across Washington state. In support of VACCS, Challenge Seattle was able to leverage the talent and resources of the private sector to support the state's vaccine distribution effort.

Stakeholders included government entities; health care organizations, including Kaiser Permanente; and businesses, including Amazon, Costco, Microsoft, and Starbucks.

Through this effort, Challenge Seattle created a Vaccine Playbook for Public-Private Partnerships, presenting a model for any public-private collaboration. The VACCS Center established a governance model and workgroup process (see below) to identify the needs of the public sector and then leveraged the resources and expertise of private sector partners for solutions to those needs.(1)



Recommendation: Build bridges between the public and private sectors. The demands of the COVID-19 pandemic highlighted the needed capacity and benefit from an integral relationship of public and private sectors. Utilizing expertise and resources from both segments can fill identified gaps and resources needed to address all-hazard incidents statewide.

(1) Source: https://www.challengeseattle.com

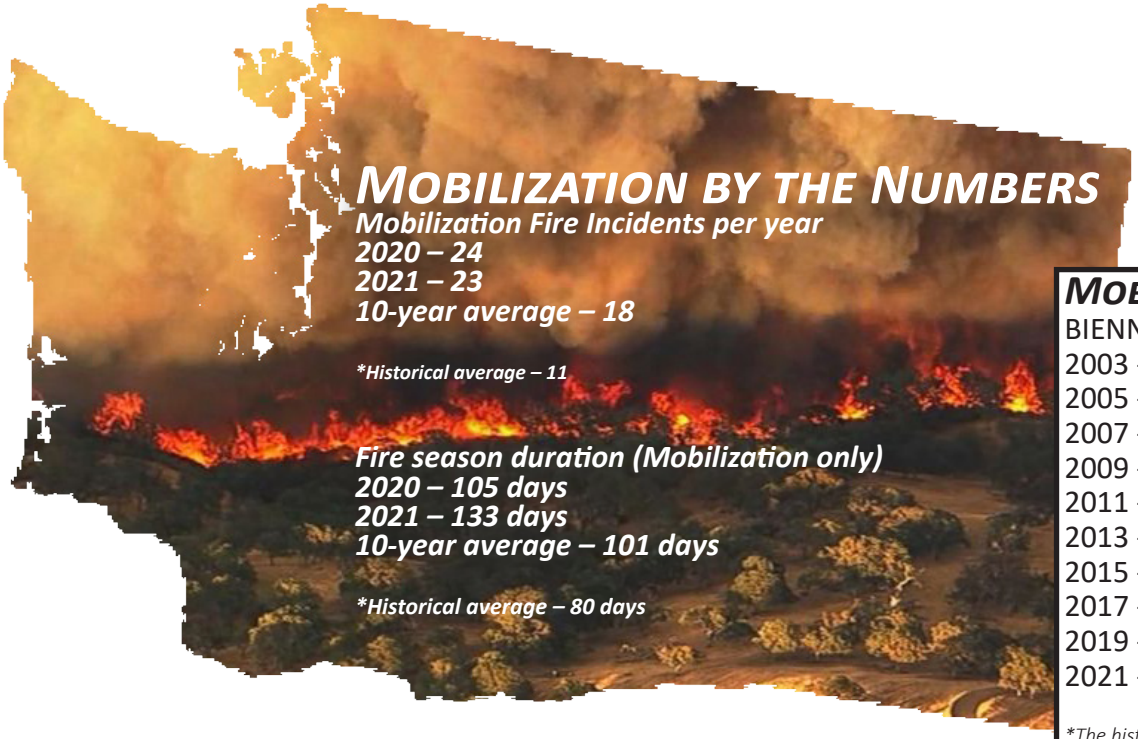
The EMC recommends the establishment of an inclusive government and private preparedness and response operational coordination strategy. Washington state should consider a public-private sector task force designed to enhance strategic and operational capabilities. This could include adopting and developing a statewide and inclusive public-private partnership model (such as the Challenge Seattle model) into the operational coordination strategy.

The EMC also recommends the development and implementation of a Business Emergency Operations Center (BEOC) environment to enhance response and recovery operations by improving the ability of the government and private sector to share information and collaborate in real time using the Public Private Partnership Platform (P4). The P4 Platform is currently being piloted during the FEMA Region 10 (including Idaho, Oregon, and Washington) and the National Exercise Division (NED) exercise series.

Another recommendation for consideration is to examine the feasibility of a new ESF 14 consistent with the new private sector focused Federal ESF 14 (cross-sector business and infrastructure). The current Washington state ESF 14, Long-Term Recovery, would transition to a new ESF 16, Long-Term Recovery. As well, consider enhancing EMD capacity to assist smaller jurisdictions, rural jurisdictions, tribes, and special municipalities with comprehensive cyber incident preparedness and response support services.

A final recommendation is to encourage local jurisdictions and tribes to invite and incorporate private sector partners, who elect to opt-in, to local core capability assessment (THIRA/SPR - planning, organizing, and equipment elements) and all-hazard (including catastrophic) planning initiatives.

"The talent and professionalism of the IMT resources in Washington state is amazing and served our state well." Nathan Weed, WA Dept. of Health



MOBILIZATION COST

BIENNIUM	COST
2003 - 05	$ 4,380,668
2005 - 07	$ 12,322,395
2007 - 09	$ 12,349,671
2009 - 11	$ 6,581,984
2011 - 13	$ 15,648,256
2013 - 15	$ 21,220,721
2015 - 17	$ 43,611,430
2017 - 19	$ 21,132,000
2019 - 21	$ 16,850,000
2021 - 23	$ 13,965,000**

*The historical average ranges from program inception (1994) to present.

**The 2021-23 cost only represents incidents from 7/1/21 to present.

Issue: All Risk Mobilizations

Background: The average number of wildfire incidents requiring All-Risk Mobilization continues to increase, with corresponding increases in cost, acres burned, and duration. Fire incidents requiring mobilization continue to start earlier in the year than normal, and fire seasons continue to extend into autumn. Both the 2020 and 2021 fire seasons had more mobilized incidents over the 10-year average, and the duration of those two fire seasons (for mobilized fires only) exceeded 100 days.

Additionally, the Mobilization program was impacted by long duration activations, first to support the initial COVID-19 response in the spring of 2020, and again to support mass vaccination efforts in the spring of 2021.

Evaluation of Issue: The Mobilization program continues to succeed based on the program's relationship with its current stakeholders: the Washington state fire service and its interagency partners, principally the Department of Natural Resources, and the federal land management agencies (United States Forest Service and Department of Interior agencies) involved in fire management. The program would not be successful without the high level of engagement and cooperation with the state's fire service and interagency partners.

Through consistent, meaningful, and transparent communication between partners, agencies were able to meet the needs of incidents and Incident Management Teams during back-to-back fire seasons where there was a high level of competition for resources shared on a national level. In 2021, the State Fire Marshal's Office (SFMO) - Mobilization program staff processed and staffed two "pre-positioning" requests, one for a wildfire and one for a flood rescue response. Pre-positioning was authorized as a pilot project by the 2021 Legislature.

The program also faces challenges. The duration of fire season and number of mobilized incidents per year has continued to increase significantly year after year, without a corresponding increase in staffing. Wildfire agencies now use the term "fire year," rather than "fire season," to describe the duration of wildfire responses.

Non-wildfire activations have an impact on both SFMO staff and the fire service members who participate on organized Incident Management Teams. The long duration activations to support the initial COVID-19 response and subsequent vaccination activities resulted in additional, unanticipated workload for both of those groups.

The increasing number of incidents and the duration of fire season, without corresponding increases in staff or budget, continues to impact employees and their other work responsibilities. All IMT members have a primary role in their organization that is not incident management. Continued increases in the number of incidents affects their regular work activities, which impacts the availability of those personnel to staff IMTs.

The legislature typically appropriates $8 million per biennium into the Disaster Response Account for Mobilization. Mobilization costs have exceeded that appropriation each of the last five biennia, resulting in multiple supplemental appropriation requests in order to fund activities.

During the 2021 fire season, there was significant competition for shared national resources with other geographic areas. During a typical fire season, other regions of the country are not as active as the Pacific Northwest, and competition for IMTs, aircraft, and more highly qualified hand crews is not as intense. During late July and August of 2021, there was as much or more fire activity in other regions, which made those resources difficult to procure.

The Washington State Patrol (WSP) anticipates challenges in the number of available firefighters to respond to mobilized incidents due to the COVID-19 vaccine mandate. Less than 33 percent of fire departments and less than 10 percent of volunteer firefighters who typically participate in the Mobilization program have submitted the appropriate documentation to the WSP.

Recommendations: Staffing – the WSP may request additional staff dedicated to the Mobilization program through the legislative process. This would require an increase in GF-S appropriation (or other dedicated funding) to the WSP.

Budget – the WSP may request through the legislative process, an increase to the Disaster Response Account appropriation form its current level to $20 million per biennium.

Fire Prevention – it is recommended that a robust community risk reduction program be developed and implemented by local jurisdictions. Community risk reduction programs, with an emphasis on wildfire prevention, may positively affect the number and severity of wildfires.

Incident Management – local jurisdictions and state agencies who do not routinely participate in IMT activities should be encouraged to develop and exercise their own incident management organizations, which would reduce the reliance on IMT typically configured to respond to wildfires during the fire season.

Funding should be requested to establish All Hazard IMTs across the state to promote rapid and equitable responses, recovery, and mitigation.

Issue: Hazard Mitigation and Reduction

Background: Hazard mitigation in Washington in 2020-2021 saw multiple successes despite the challenges presented by COVID-19. Progress included risk reduction efforts targeting storms, flooding, tsunamis, earthquakes, and cybersecurity. Resilience to climate change also became a higher priority for statewide mitigation efforts.

Evaluation of Issue: Mitigation efforts occurred to address multiple hazards. Flooding remains one of Washington's most persistent hazards and repetitive loss and severe repetitive loss (RL/SRL) properties in the state's floodplains remained a priority in 2020-2021. EMD's Mitigation and Recovery section began developing a strategy for addressing RL/SRL properties, including how to make better use of FEMA's Flood Management Assistance grant program via partnerships with local governments and the Department of Ecology.

The State also continues to leverage partnerships across multiple agencies and the federal government via FEMA's Risk MAP coordination and the Washington Silver Jackets (maintained by the US Army Corps of Engineers). Reducing storm-related impacts was the goal of the Resilience Action Demonstration project, headed by the Department of Ecology, which used local stakeholder engagement to develop mitigation project ideas along the Pacific coast. The projects are fully scoped and ready to be submitted as grant applications to one of FEMA's Hazard Mitigation Assistance programs.

A very successful local mitigation project to highlight is the completion of the flood wall in downtown Mount Vernon. A multiyear project that spanned multiple mayoral administrations, the flood wall proved its worth during the near-historic flooding in November of 2021. Multiple downtown business owners expressed their appreciation for this effort.

Earthquakes and tsunamis represent some of the most severe threats facing Washingtonians. The School Seismic Safety Project (SSSP), led by the Washington Geological Survey (WGS) and the Office of Superintendent of Public Instruction, wrapped up a four-year project that assessed 561 school buildings for seismic risk. The project highlighted the high potential for loss of life in and significant damage in schools from a large "design-level" earthquake.

Ninety-three percent of the 561 school buildings assessed have one-star Structural Safety Sub-Ratings (this is out of a five-star system. One being the lowest, and most vulnerable, and five being the highest, or safest) based on the information available. Four percent of the school buildings assessed have two-star ratings and three percent of the school buildings have three-star ratings. Following the Phase 1 report and project, the Legislature funded the Office of the Superintendent of Public Instruction (OSPI) $13 million in 2019 and $40 million in the 2021–2023 biennium for the School Seismic Safety Retrofit Program (SSSRP).

ShakeAlert, an earthquake early warning (EEW) system, went live for the first time in Washington in 2021. It is designed to provide residents with extra seconds to drop, cover, and hold on, and potentially save lives. For coastal residents, this also provides warning and precious extra time preceding the tsunami expected after a large Cascadia Subduction Zone (CSZ) earthquake.

Regarding tsunamis, in 2020 Washington's Department of Natural Resources published new inundation and current velocity simulations for Grays Harbor Bay and Willapa Bay. The State's Emergency Management Division (EMD) installed 22 new AHAB (all hazard alert broadcasting) tsunami sirens, distributed 120 NOAA Weather Radios to local jurisdictions and the public, and 35 tsunami evacuation wayfinding signs to local jurisdictions.

In 2021, EMD also finalized the state's first-ever tsunami maritime response and mitigation strategy for the Port of Bellingham and finished its vertical evacuation structure gap assessment in partnership with University of Washington. Vertical evacuation remains the only option for survival in many coastal communities and the assessment determined that the state needs upwards of 85 Vertical Evacuation Structures (VES) in coastal counties. Unfortunately, there is just one completed vertical evacuation structure in Washington (Ocosta Elementary School) and one currently under construction on the Tokeland Peninsula (led by the Shoalwater Bay Indian Tribe and funded by FEMA).

Recommendations: The EMC offers several recommendations to improve or enhance mitigation efforts around the state, most of which center on increased funding. Specifically, we recommend prioritizing state funding in support of addressing school seismic safety retrofits and for construction of Vertical Evacuation Structures in communities with high tsunami risk. Funding or tax incentives are also needed to offest costs of retrofitting older structures such as unreinforced masonry buildings.

We appreciate the recently approved transportation package and recommend establishing guidelines that encourage the use of that funding for highway, bridge, and marine infrastructure improvements. Finally, we recommend that there be direction and resources needed to improve Washington's coordination with NOAA and the National Tsunami Warning Center, as these relationships are critical to enhancing the early warning capabilities for Washington State.

We also recommend the construction of resilient transportation infrastructure for the movement of emergency supplies and services from east to west and north to south to ensure that we have roads and structures that will hold through a significant earthquake.

The EMC also recommends enhancing the capability of state EMD to assess risks of climate-related natural hazards and develop risk mitigation stragies.

Conclusion

These EMC recommendations are representative of the most important issues affecting statewide disaster preparedness in 2020 and 2021. This is not an exhaustive list and rather serves as a guide for the Governor to assist the state in bridging these identified gaps.

Summary of Recommendations

Issue	Recommendation
Use of Incident Management Teams (IMT) during COVID-19 Response	1. Provide resources, guidance, and direction that ensures IMTs are readily available to county governments, local health jurisdictions, and state agencies. 2. Modify the State Fire Service Mobilization laws and process as a step toward ensuring these important resources can be deployed in a timely manner for non-fire service agencies.
Public/Private Partnerships During the COVID-19 Response	1. Create a public-private sector task force charged with the development of an inclusive preparedness and response operational coordination strategy, and that incorporates a statewide public-private partnership model (e.g., the Challenge Seattle model) into the strategy. 2. Provide resources to the State EMD for the development and implementation of a Business Emergency Operations Center (BEOC) environment to enhance response and recovery operations; concurrently, direct the Washington EMD to examine the feasibility of a new ESF 14 consistent with the new private sector focused Federal ESF 14 (cross-sector business and infrastructure). 3. Establish and implement a joint effort between the Military Department and the Department of Commerce to connect local emergency managers and private sector partners, so that they can work more closely on local capability assessment and all-hazard planning initiatives. 4. Encourage local jurisdictions and tribes to invite and incorporate private sector partners, who elect to opt-in to local core capability assessment (THIRA/SPR - planning, organizing, and equipment elements) and all-hazard (including catastrophic) planning initiatives.

Issue	Recommendation
All-Risk Mobilizations	1. Authorize the WSP, through the legislative process, to request additional staff dedicated to the Mobilization program through the legislative process. This would require an increase in GF-S appropriation (or other dedicated funding) to the WSP. 2. Authorize the WSP to request, through the legislative process, an increase to the Disaster Response Account appropriation form its current level to $20 million per biennium. 3. Provide resources to WSP to support the development of a robust Community Risk Reduction program and provide funding to incentivize that program's implementation by local jurisdictions. 4. Encourage, perhaps through grant guidance, that local and/or multicounty regions develop and exercise their own incident management organizations (i.e., IMTs). This would reduce the stress on teams needed primarily for wildland firefighting.
Hazard Mitigation and Reduction	1. Continuing to prioritize state funding in support of addressing school seismic safety retrofits and for construction of Vertical Evacuation Structures in communities with high tsunami risk. 2. Establishing a funding mechanism and/or tax incentives for retrofitting older unreinforced masonry buildings, which would dramatically reduce the impact of an earthquake to densely populated areas. 3. Establishing guidelines for the newly approved transportation package that encourage the use of that funding for highway, bridge, and marine infrastructure improvements. 4. Construction of resilient transportation infrastructure that can be a redundant lifeline for the movement of emergency supplies and services from east to west and north to south. 5. Enhance the capability of EMD to assess risks of climate-related natural hazards and develop risk mitigation strategies.

The EMC welcomes feedback or further discussion on this report and any other statewide emergency preparedness topics. We stand ready to assist you in the next steps to create more resilient and prepared state.

EMC Annual Report - 2020 / 2021