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SEATTLE OFFICE OF EMERGENCY MANAGEMENT

ANNUAL REPORT

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A Note from the Director

Looking back at 2018, I am filled with gratitude.

I am specifically thankful for a Mayor, City Council, and Department Directors that support emergency preparedness through planning, training and exercising.

I am thankful for professional staff who facilitate countless meetings, projects, activations and coordination calls. That includes volunteers and interns who expand our public outreach and contribute to our greater understanding of best practices in emergency management. It includes 140 ham radio operators whose dedication to our mission is unparalleled.



Thanks also to senior executives who have retired from City service but have not retired from serving their City and augmenting our staff in activations of the Emergency Operations Center.

I am thankful for the hundreds of agency representatives that work right beside us in making our community better ready to handle a wide variety of disasters. Our plans are more realistic and our respect for one another's capabilities is much richer for their willingness to identify solutions to unthinkable problems.

I am grateful for the hundreds of City Department representatives who refresh their Emergency Operations Center training with us so that we function well in low-frequency high-impact events. I am equally grateful for the thousands of people who attend our preparedness training every year and increase their self-sufficiency and therefore the community's resiliency.

I am indebted to the Seattle Public Utilities for helping our program address long-needed updates to city-wide emergency communication protocols, practice, and experience by loaning us a communications professional.

I am especially glad we went another year without a major earthquake but given their recurrence cycle my final thanks goes to everyone who moved the ball on addressing earthquake risk: consultants who helped research financial incentives for seismic mitigation, developers who harnessed private sector ideas to address the problem, legislative advocates who continue to work on state financing mechanisms, our partner on this issue – Seattle Department of Construction and Inspections, and the State Department of Commerce for conducting a state-wide inventory study. Our luck will not hold out much longer; the earthquake is on its way and what we do about it today is how we will be remembered tomorrow.

Sincerely,

Director Barb Graff

Seattle Office of Emergency Management

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MILESTONES

This year, Seattle Office of Emergency Management (OEM) continued its work to address the risk posed by Unreinforced Masonry Buildings (URMs), one of the most vulnerable building types for earthquake-prone regions. A typical URM is a brick building built prior to 1940 that lacks the steel reinforcement and structural connections needed to stand up to seismic motion. Seattle has more than of 1,100 such buildings.

National Development Council (NDC)

With an understanding that funding poses the greatest barrier to promoting seismic retrofit of URM buildings, the City engaged the National Development Council (NDC). Under the guidance of OEM and Seattle Department of Construct and Inspections (SDCI), NDC employed its unique skill sets in the areas of finance and public policy to identify funding mechanisms and strategies to assist property owners pay for life-safety seismic retrofits of their buildings. With the completion of this project, we look forward to further work to turn the analysis into the foundation of a URM retrofit program.

Other partners in the city, region, and state have joined forces to assess the problem and generate potential solutions.

State-wide URM Survey

In early 2018, the Legislature directed the Washington State Department of Commerce to conduct a statewide study of URM buildings. The effort focused on using existing data sources to create a list and map of known and suspected URMs in cities, towns, and counties. This study is a good start to understanding the extent of the problem, and clearly demonstrates that risk posed by URMs should be addressed with regional resources. In a related effort, Senate bill 5557 was introduced with the purpose to reduce seismic risk, including the intention to establish a grant program for URM retrofit.

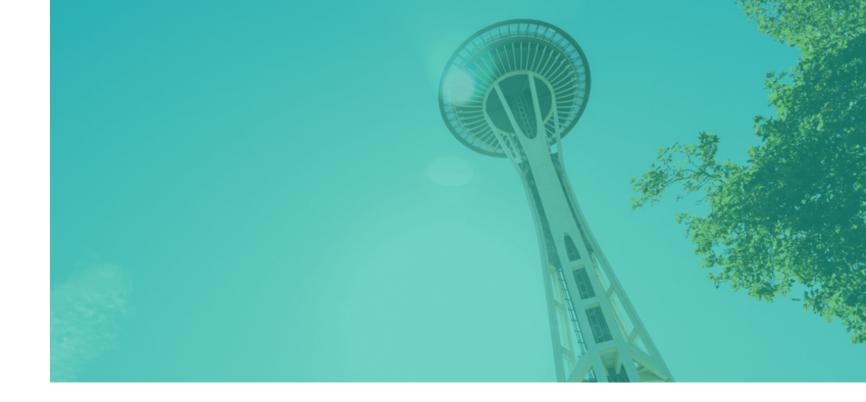
Property Assessed Clean Energy (PACE) Financing

A growing coalition of economic development, private industry and environmental stakeholders called Shift Zero came together to support legislation enabling PACE financing. Nation-wide, PACE programs offer long-term private financing for renewable energy and energy efficiency upgrades to homes and businesses. It can also be used to finance a wide variety of hazard mitigation measures – earthquake, flood, wildfire – which is why "R" has been added to emphasize the Resilience benefits. This represents an important new financing tool to improve buildings, including URMs. State legislation to enable "C-PACER" financing for commercial buildings has been introduced in both the House and Senate.

Private Developer-Convened Working Groups

Last year also saw the private sector engage locally on the topic of URM retrofit. The property development firm of Nitze-Stagen convened a series of subcommittees in the fall and winter to consider and recommend incentives and remove barriers to retrofit. One output has been a Retrofit Credit Proposal, presented as a modification of and improvement on the existing Transfer of Development Rights (TDR) program.

Our hope is that all of these ideas will continue to be honed and brought together to create a larger robust program to incentivize a safer city for us all.



Seattle Hazards Identification and Vulnerability Analysis Update

The Seattle Hazard Identification and Vulnerability Analysis (SHIVA) is the foundation for all the City's emergency plans. OEM updated the SHIVA as part of a regular update cycle occurring every four years. The update reassessed hazards based on new science, changing social conditions, new infrastructure and expert analysis. Special attention was given to cyber disruptions including cyber-attacks. Seattle's top three hazards are earthquakes, snow and ice storms, and wind storms. OEM hired an intern from the University of Washington to assist in the SHIVA update.

One Concern Partnership

The Office of Emergency Management entered into an agreement with OneConcern to pilot the company's new earthquake loss estimation tool, SeismicConcern. The software allows the City to gain a better understanding of the magnitude, locations, and impact where major damage will occur in different earthquake scenarios. OEM engaged partners from six departments- Finance and Administrative Services (FAS), Seattle Department of Construction and Inspections (SDCI), Human Services Department (HSD), Seattle Department of Transportation (SDOT), Seattle Public Utilities (SPU), Seattle Fire Department (SFD)- to develop projects to use SeismicConcern to generate models that feed into emergency response planning. These projects include a supply chain analysis, better serving people with access and functional needs, and analyzing earthquake effects that create inequity. The projects will be completed in 2019.

Plan Updates

The City's emergency management planning partners revised all 13 Emergency Support Function (ESF) Annexes as part of the City's Comprehensive Emergency Management Plan. OEM facilitated a series of meetings with ESF coordinators and shared recommendations that enhanced consistency in planning assumptions and identified supporting agencies for each ESF. The ESF Annexes, along with CEMP Introduction, Continuity of Government (COG) and Emergency Operations Plan (EOP) were finalized and promulgated by Mayor Durkan in September.

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Activations & Coordinated Events



Staff Duty Officer Coordinated Events

Seattle Office of Emergency Management Staff Duty Officers monitored **59** events in 2018. Notable events include:

- 01/31 First Student Bus Strike
- 02/18 Winter Weather Response
- 03/13 Seattle Schools Walk Out
- 05/07 Chase Bank Demonstration
- 06/15 Phishing Incident
- 07/01 Special Olympics

- 08/01 Tanker Truck Rollover
- 08/20 Air Quality Alert
- 09/05 Seattle Schools Contingency Planning
- 10/10 British Columbia Natural Gas Disruption
- 10/18 Seattle Municipal Tower Power Outage
- 12/28 9-1-1 Outage

In 2018, the Seattle Emergency Operations Center activated five times for events.

06 07

202

department and agency representatives and volunteers completed the eoc fundamentals course.

149

department and agency representatives and volunteers completed the eoc fundamentals course.

department representatives completed joint information center (JIC) training.

Training and Exercise

In 2018, OEM launched a new and improved Emergency Operations Center (EOC) Fundamentals training, which enables key city and agency representatives to be prepared to carry out their duties in the EOC. A total of 351 City department representatives, agency representatives, and volunteers received training on EOC response.

The Joint Information Center training was also improved and presented to 36 public information representatives to enable them to use their communication skills to address public information, social media, and news conferences during citywide emergencies.

Tailored response training was delivered to specific departments and partner agencies.

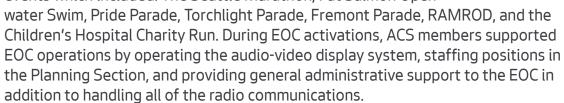
In addition to training, OEM Staff designed, managed, and hosted the following exercises for City departments and community partners:

- Mayor's Proclamation Exercise
- Reporting to Work Following a Catastrophic Incident Exercise
- EOC Relocation Exercise at the Bill & Melinda **Gates Foundation**

VOLUNTEER PROGRAMS

Seattle Auxiliary Communications Service (ACS)

Last year the ACS team registered 16 new members and contributed approximately **7,750 hours of volunteer service** in support of city departments and community organizations. This included: 5 EOC activations, 2 city wide field training exercises, 52 radio nets, 6 radio system and 2 data systems improvement projects. Additionally, ACS supported multiple public services events which included: The Seattle Marathon, Fat Salmon Open-



ACS: National Amateur Radio Field Day

During the last full weekend in June, amateur radio teams from across the US and Canada conduct what is known as Field Day, an event where amateur operators set up their radio equipment in field environments and operate for at least 24 continuous hours performing local and long-distance communications. This provides an opportunity to practice emergency communications in conditions similar too would occur in a major disaster. Seattle ACS volunteers, along with members of the Western Washington Medical Services Team (WWMST), the Puget Sound Repeater Group (PSRG) and the West Seattle Amateur Radio Club (WSARC) participate in Field Day every year. During the 2018 exercise, a team of 80 volunteers operated continuously off the utility grid for over 50 hours using solar and battery power.







New Staff - Lucia Schmit

Lucia Schmit joined OEM as the new Planning Coordinator. Lucia came to us from FEMA, where she led the 2017 revision of the National Incident Management System (NIMS). Prior to her time with FEMA, she worked in emergency management at the local, state, and international levels. Lucia has a Master of Science degree from George Washington University's Crisis, Emergency, and Risk Management program.

Public Education & Outreach Volunteer Program

The Public Education & Outreach Volunteer Program is made up of community members with a passion for delivering emergency preparedness education to a breadth of audiences within the City of Seattle. In 2018, there were seven public education & outreach volunteers, all of whom are trained with the necessary skills and information to assist the community in preparing for disasters.

Emergency Operations Center Responder Program

Dedicated EOC volunteer responders report to the Seattle Emergency Operations Center during times of local and regional disasters and events. Skilled volunteers serve in various roles that support mission-critical planning, operations, and administrative responsibilities.

in 2018 \$300,336 dollars of labor*

0.8 09

COMMUNITY OUTREACH & PUBLIC EDUCATION



Community Safety Ambassador (CSA) Program

The Community Safety Ambassador (CSA) program works with traditionally hard-to-reach communities including Non-English speaking populations around emergency preparedness and CPR education. The Office of Emergency Management accomplishes this by providing CSAs with the skills and knowledge needed to deliver training to their communities.

CSAs are trusted individuals from diverse communities who are multilingual. Last year was the second year of the program, with 14 CSAs, fluent in the following languages: English, Amharic, Oromo, Tigrinya, Cantonese, Mandarin, Somali, Spanish, Thai, Lao, Khmer and Vietnamese.

Their combined efforts resulted in outreach to over 60 community and organization events. CSAs are vital to the fabric of the community as they work to equip immigrants and refugees with the most up to date information on emergency preparedness.



14

seventeen community safety ambassadors

1 4

speaking twelve languages



5000

taught or met with five thousand community members in 218

OUTREACH

Stop the Bleed

In 2018 the Office of Emergency Management began offering Stop the Bleed training to the community. OEM's team of volunteer instructors includes EMTs and nurses who donate their time and expertise to educate the community on how to recognize and control life threatening bleeding. OEM hosted three classes in the Fall and had 78 people complete the Stop the Bleed training. In 2019, OEM plans to offer monthly Stop the Bleed training throughout the city and train over 300 community members.

Workplace Preparedness Guide

A Workplace Preparedness Guide was developed in consultation with the Seattle Office of Economic Development, and informed by focus groups of small business owners. The guide provides important tips on developing life-safety procedures and business continuity strategies. It includes easy to follow tip sheets, links to videos and planning tools, and forms for documenting important contact information and continuity strategies.

Disaster Skills Workshops

In 2018 OEM continued to offer the Disaster Skills training series. After a major disaster, when first responders are overwhelmed, people will rely first on those immediately around them. It is important that they have the necessary skills and knowledge to respond effectively in their homes and neighborhoods. Disaster skills training are offered with the following courses:

- Disaster Skills Workshop
- Disaster Basic Aid
- Light Search & Rescue
- Stop the Bleed

SUMMARY



264
programs taught to

11823

people reached through face-to-face interactions at programs





1017

people attended disaster skills training

125
people attended a
home retrofit class



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