



NWRTC

Northwest Regional
Technology Center
@PNNL



OPPORTUNITIES

Events current at time of publication. Have a virtual resource or event to share? Email us!

- September 1-30 – [National Preparedness Month](#)
- September 15 – [Supply Chain and Cybersecurity Conference](#)
- October 1-31 – [Cybersecurity Awareness Month](#)
- October 6 – [Pacific Northwest Maritime Defense Conference](#)
- October 13 – [Oregon Cyber Resilience Summit 2022](#)
- October 18-20 – [International Association of Fire Chiefs Technology Summit](#)
- November 3-5 – [National Conference on EMS](#)

CONTACT

Want to know more? Visit us at pnnl.gov/projects/nwrtc. Contact the NWRTC with questions and comments at nwrtc@pnnl.gov.

AROUND THE REGION IN HOMELAND SECURITY

The Northwest Regional Technology Center (NWRTC) is a virtual resource center, operated by Pacific Northwest National Laboratory (PNNL), to support regional preparedness, resilience, response, and recovery. The center enables homeland security solutions for emergency responder communities and federal, state, and local stakeholders in the Northwest.

TECHNOLOGY FOCUSED ON TAMING TOMORROW'S WILDFIRES

Wildfires have ravaged the Western United States throughout the last decade. Over five million acres have already burned across the country this year. From predicting big blazes to preventing future fires, researchers at PNNL are tackling the problem of increasingly intense wildfires from numerous scientific angles. And they're keeping our lights on in the process.



PNNL data scientist [Andre Coleman](#) leads RADR-Fire, the satellite image processing system that maps active fires. RADR-Fire helps wildland firefighting personnel, utilities operators, and other decision makers better understand a fire's behavior so they can make informed choices in the midst of a natural disaster. It is also a planning tool. The same information gathered by the RADR-Fire system can help utility operators assess risk by identifying areas that are most prone to wildfire and which energy infrastructure needs protection. Sensors riding aboard many different satellites—one of them an experimental sensor aboard the International Space Station—enable a sweeping view of Earth's surface.

"At its core, RADR-Fire is about monitoring active wildfires. But we've extended our tools using satellite remote sensing to now understand the condition of fuels, so we get the most current and updated picture of what's going on," Coleman said.

RADR-Fire was featured in a recent [White House fact sheet](#) highlighting ongoing efforts to address wildfire threats. To learn more about PNNL wildfire research, you can read [the web feature](#) and [watch the video](#).



FIRST RESPONDERS PREPARE FOR CASCADIA SUBDUCTION ZONE EARTHQUAKE, TSUNAMI RESPONSE

Over three days earlier this summer, more than 200 federal, state, and tribal partners gathered to evaluate and walk through the Federal Emergency Management Agency (FEMA) Region 10 Cascadia Subduction Zone Earthquake and Tsunami Response Plan. Among the participants was Russ Haffner of PNNL. Haffner is a Department of Energy (DOE) Emergency Support Function #12 (ESF#12) emergency responder and serves as one of two DOE ESF#12 regional coordinators for FEMA Region 10, which covers Washington, Oregon, Idaho, and Alaska.



Participants in the event included tribal partners, FEMA, U.S. Department of Defense, American Red Cross, and Emergency Management British Columbia, and emergency management representatives from the states of Alaska, Idaho, Oregon, and Washington. They all had the same goal—finding gaps in the current plan.

“No matter how good our planning is in our heads and on paper, until you actually exercise the plan, there are things you can’t see,” said Haffner. “This type of exercise helps us find those gaps and also confirms the things we have right.”

For the exercise, the partners walked through the plan using a massive 35-by-26-foot map, which displayed the affected areas and allowed each representative to demonstrate resource allocation, staging, and movement in response to the event.

The exercise also helped the representatives coordinate directly with the local and regional partners to build relationships and help establish a culture of preparedness across the region.

To learn more, [read the PNNL web story](#).

WORKSHOP FOCUSES ON THE FUTURE OF SCHOOL SECURITY

PNNL is working with the Department of Homeland Security (DHS) [Soft target Engineering to Neutralize the Threat Reality \(SENTRY\) Center of Excellence](#) led by [Northeastern University](#), which focuses on developing engineered solutions to protect soft targets and crowded places. One of the first areas of focus is school safety.



On July 19 and July 21, PNNL and SENTRY coordinated the Future of School Security virtual workshop, taking a 5- to 10-year look into the future of school security, specifically envisioning how a Virtual Sentry Framework supports a safe, learning-conducive environment. The invite-only workshop hosted an open exchange of ideas on the art of the possible with respect to the future of school security. Attendees represented a cross section of the subject matter expertise anticipated to have an impact on school security, to include first responders, federal/state/local government, industry technologists, school administration, and school security personnel.

Feedback from the workshop will drive future SENTRY science and technology visioning and development in this field.

PARTNERSHIP AWARD RECOGNIZES COLLABORATION, INNOVATION

The DHS Science and Technology Directorate (S&T) [Screening at Speed Program](#) received the Federal Laboratory Consortium’s Interagency Partnership Award for their collaborative work to develop and commercialize the High Definition-Advanced Imaging Technology and Shoe Scanner systems for air travelers. The national award also named S&T’s Transportation Security Laboratory, the DHS Transportation Security Administration, PNNL and Sandia National Laboratories, and the NASA Center of Excellence for Collaborative Innovation for their combined effort with Screening at Speed to develop and commercialize these technologies. See the [press release](#) for details.