

## International Homeland and Nuclear Security PMU

The International, Homeland, and Nuclear Security (IHNS) Program Management Unit (PMU) oversees a broad portfolio of Sandia's programs in areas ranging from global nuclear security to critical asset protection. We use science and technology, innovative research, and global engagement to counter threats, reduce dangers, and respond to disasters.

The PMU draws on the skills of scientists and engineers from across Sandia. Our programs focus on protecting US government installations, safeguarding nuclear weapons and materials, facilitating nonproliferation activities, securing infrastructures, countering chemical and biological dangers, and reducing the risk of terrorist threats. We conduct research in risk and threat analysis, monitoring and detection, decontamination and recovery, and situational awareness. We develop technologies for verifying arms control agreements, neutralizing dangerous materials, detecting intruders, and strengthening resiliency.

Our programs use Sandia's High-Performance Computing resources for predictive modeling and simulation of interdependent systems, for modeling dynamic threats and forecasting adaptive behavior, and for enabling decision support and processing large cyber data streams. In this report, we highlight four advanced computation projects that illustrate the breadth of the IHNS mission space.

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