

## President Obama announces 3D Elevation Program

July 16, 2014

President Obama announced the launch of the 3D Elevation Program (3DEP) on July 16. The 3D Elevation Program, a partnership program led by the U.S. Geological Survey (USGS), aims to map the lower 48 states, Hawaii, and the U.S. territories with a laser technology called lidar (light detection and ranging) in an eight-year period. Alaska will be mapped with a technology called ifsar (interferometric synthetic aperture radar), which better maps terrain through cloud cover. The President requested \$13.1 million for the 3DEP program in his fiscal year (FY) 2015 budget request.

The Federal Emergency Management Agency (FEMA) and the National Oceanic and Atmospheric Administration (NOAA) are primary partners in 3DEP, but the National Enhanced Elevation Assessment estimates that 34 federal agencies would benefit from using the resulting data. The assessment predicts that 3DEP has the potential to generate \$13 billion in new benefits annually through applications that include flood risk management, precision agriculture, and aviation safety. USGS and its partners plan to collect data for areas at high risk for natural disasters on a continuing basis.

Data from 3DEP is considered highly accurate, with resolution two or three times better than average existing data. This improved accuracy is important to better identify flood risks, landslide hazards, and coastal erosion. In the past, lidar data has been a critical tool for USGS scientists; for instance, it allowed them to identify a surface rupture of a fault that led to the redesign of a \$735 million bridge over Washington's Tacoma Narrows. Newer, more accurate data from 3DEP could allow for similar successes. USGS held a congressional briefing on July 25 to explain the goals and applications of 3DEP.

Sources: U.S. Geological Survey, White House

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