

The EarthScope National Office and our many partners cordially invite congressional staff, agency personnel and other interested parties to attend a public briefing on:

EarthScope: A Decade of Research To Understand Earth Processes in the United States and Broader Societal Benefits

WEDNESDAY, MAY 14, 2014
ROOM 1334, LONGWORTH HOUSE OFFICE BUILDING
3:00–4:00 PM
LIGHT SNACKS

In cooperation with the Congressional Hazards Caucus,
co-chaired by Representative Zoe Lofgren, Senator Lisa Murkowski and Senator Mary Landrieu

ABOUT EARTHSCOPE

EarthScope, a major Earth observing program for ten years, funded by the National Science Foundation, will continue for another five years to examine the Earth's atmosphere, surface and subsurface across the United States. Additional support and collaborations continue with USGS, NASA, NOAA, FEMA, DOE and other Federal agencies.

EarthScope includes:

- Plate Boundary Observatory (PBO) – More than 1,100 GPS stations, 145 meteorological instruments, 78 borehole geophysical instruments and other tools
- USArray – 400 seismometers moving across the U.S., plus flexible seismic and magnetotelluric arrays
- San Andreas Fault Observatory at Depth (SAFOD) – two-mile deep hole drilled into the San Andreas Fault

EarthScope broader impacts include:

- Earthquake early warning, volcanic eruptions and volcanic ash plume warnings
- Understanding induced seismicity
- Deciphering ground changes due to fluid injections (i.e., fracking fluid disposal) or extractions (e.g., groundwater or petroleum)
- Measuring soil moisture, snow depth or aquifer levels
- Enhancing weather forecasts, hurricane tracking, tsunami warnings, forest fire potential alerts, and space weather tracking
- Open access to data
- Education and outreach
- Land-use planning and development, such as for surveying or engineering

PROGRAM

INTRODUCTIONS

J Ramon Arrowsmith, EarthScope National Office Director and Professor of Geology, Arizona State University

MODERATOR

William Leith, Ph.D., U.S. Geological Survey, Senior Advisor on Earthquake and Geological Hazards

Mark Simons, Professor of Geophysics, California Institute of Technology, **Overview of Research Success and Societal Benefits of EarthScope**

Rowena Lohman, Assistant Professor of Geophysics and Tectonics, Cornell University, **Overview of Research Success and Societal Benefits of the Plate Boundary Observatory – GPS and Imaging**

Hersh Gilbert, Associate Professor, Purdue, **Overview of the Research Success and Societal Benefits of the USArray – Seismology**

ORGANIZERS

- EarthScope National Office, Professor J Ramon Arrowsmith, ESNO Director, Arizona State University, Tempe, AZ
- Incorporated Research Institutions for Seismology (IRIS), Bob Detrick, President, Washington, DC
- UNAVCO, Inc., M. Meghan Miller, President, Boulder, CO
- American Geophysical Union
- Geological Society of America
- American Geosciences Institute
- Seismological Society of America

The EarthScope National Office and our many partners cordially invite congressional staff, agency personnel and other interested parties to attend a public briefing on:

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THURSDAY, MAY 15, 2014
ROOM 385, RUSSELL SENATE OFFICE BUILDING
10:00–11:00 AM
LIGHT SNACKS

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Meghan S. Miller, Assistant Professor of Earth Sciences, University of Southern California, **Overview of the Research Success and Societal Benefits of the USArray – Seismology**

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