



Education, Outreach & Training Activities

NSF Site Review, San Diego 17-18 March 2011

NEES Strategic Aims for EOT

1. Building Community
2. Enable unique and innovative research
3. Knowledge Transfer
4. Workforce Development
5. Public Awareness

EOT Activities

>SITE TOURS

>ANNUAL SITE EVENTS

- Structural Engineers Association of Southern California (SEAOSC)
- Society of Hispanic Professional Engineers (SHPE)
- Association of Structural and Civil Engineers (ASCE) UCSD Chapter

>WORKSHOPS

- Calibration Methods Compliant with ISO Standards
- A User’s Perspective on Seismic Testing (presented jointly by UB, UNR, UCSD)

>FILM DOCUMENTARIES of SELECTED PROJECTS (in collaboration with UCSD-TV)

- PCI – Three story precast concrete parking structure
- Wind Turbine
- Metal Industrial Building

>VIDEOS of ALL TESTS

- Recorded and Edited by Site IT Team for all Projects Performed on LHPOST

>PROMOTIONAL MATERIALS

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SITE TOURS

The NEES@UCSD site is becoming a popular destination for many engineering and scientific groups and individual practitioners. The numbers of visiting groups, participants and walk-in visitors are summarized in the table below.

	FY 08	FY 09	FY 10	FY 11
No. of Groups	36	50	76	16*
No. of Participants	308	379	812	75*
No. of walk-in	N/A	N/A	120	38*

* First Quarter

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SITE TOURS

Examples of these visiting groups include:

FY11

- PSSI, NASA, National Instruments, Hilti, NSW, CEMCO, BSNF.

FY10

- visits by 95 children from the Alpine School District
- 60 visitors from AISI
- 70 visitors from the National Council of Structural Engineers Association (NCSEA).
- Fifty attendees to the NSF Large Scale Facilities Workshop visited the NEES@UCSD site.
- 75 attendees to the Fifth International Conference on Geotechnical Earthquake Engineering and Soil Dynamics visited the site on May 29, 2010 and we had presentations given by NEES@UCSB, NEES@UCLA, NEES@UT, and NEES@UCSD. Each site presented their equipment.

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SITE TOURS

EERI Annual Conference

Post Conference Site Visit February 12, 2011



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SITE TOURS

EPRI SQURT Group Post conference site visit
January 14, 2011



The group is EPRI SQRSTS Program. The group was founded in 1993 to share seismic testing costs for seismic qualification of replacement parts in nuclear plants. The group representatives are mainly civil and mechanical engineers. We perform testing in accordance with IEEE 344, IEEE Recommended Practices for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations.

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SITE TOURS

Summer Camp organized by Institute of Americas
August 5, 2010



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Fifth International Conference on
**Recent Advances in Geotechnical
 Earthquake Engineering and Soil Dynamics**
 and Symposium in Honor of Professor I.M. Idriss

May 24-29, 2010 • San Diego, California • Marriott Mission Valley

- [Home](#)
- [Themes](#)
- [Speakers \(SOAP/OSP\)](#)
- [Exhibitor Information](#)
- [Registration](#)
- [Conference Schedule](#)
- [Soil Dynamics Short Course](#)
- [Spouse Program](#)
- [Post-Conference Tour](#)
- [Author Instructions](#)
- [Poster Session Information](#)
- [List of Papers](#)

Post-Conference Tour

Continue your conference experience with the post-conference technical tour. Participants will assemble immediately following the closing session of the conference. Plan to join us for this event on Saturday, May 29, 2010. Register now - spaces are limited!

The post-conference tour provides a rare and exciting opportunity to view an impressive array of large-scale earthquake engineering testing equipment. We will visit the University of California San Diego Englekirk Center, which is home to the Network for Earthquake Engineering Simulation (NEES) large Outdoor Shake Table, large-scale soil-foundation-structure-interaction testing equipment, and a blast simulator. In addition, there will be live demonstrations of the University of Texas NEES T-Rex mobile shaker and UCLA's NEES eccentric mass shaker, and a virtual tour of UCSB's Wildlife Liquefaction Array test site. Participants from industry will be on-site to demonstrate geophysical equipment and other equipment for seismic site characterization.

Tour guests will enjoy refreshments while observing some of the most impressive and significant large-scale earthquake engineering research equipment in the U.S.

Register Online

Register online for this program

\$110 includes lunch and transportation

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SITE TOURS

Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics. Post conference NEES@UCSD site tour - May 29, 2010



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SITE TOURS

NSF Large Scale Facilities Workshop.
Site Tour May 6, 2010



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SITE TOURS

COSMOS Group August 4, 2010



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SITE TOURS

The Society of Naval Architects and Marine Engineers
October 6, 2009



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SITE EVENTS

SEAOSC Annual Site Visit

Young engineers members of Structural Engineers Association of Southern California (SEAOSC) visit each year our site. During the visit they have the opportunity to learn about the dynamic testing using shake tables. Also, graduate students which are involved in past and present tests are presenting the results of different test. The event is always scheduled on a Saturday.

Pictures below show participation in FY11 November 6, 2010.



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SITE EVENTS

SHPE Annual Site Visit

Young engineers members of the Society of Hispanic Professional Engineers (SHPE) Structural visit each year our site. During the visit they have the opportunity to learn about dynamic testing using shake tables.

Pictures below show participation in FY08 December 06, 2007.



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SITE EVENTS

Seismic Outreach Field Trip organized by NEES@UCSD and Association of Structural and Civil Engineers (ASCE) UCSD Chapter

The project is a collaborative, multi-months effort in which undergraduate students of the UCSD ASCE Chapter reach out to elementary school students to introduce them to structural engineering, engineering skills, earthquakes, earthquake engineering, and civil and structural engineering careers. The main goal of this project is to encourage younger students (6th grade) to start thinking about higher education and studies in science by integrating an introductory presentation on earthquakes and engineering with a KthNEX Building competition. The program is split in two phases:

- In Class Presentations
- Field trips

This program started in 2007 as part of the NEES4KIDS program.

Project Participation in January 2011 (Number of people):

- Elementary schools: 4
- Elementary students: 530+
- Faculty Advisor: 1
- Volunteer students: 50
- Total volunteer-Hours spent on the project: 1000+

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SITE EVENTS

Seismic Outreach Field Trip organized by NEES@UCSD and Association of Structural and Civil Engineers (ASCE) UCSD Chapter
January 14, 2011



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SITE EVENTS

Seismic Outreach Field Trip organized by NEES@UCSD and Association of Structural and Civil Engineers (ASCE) UCSD Chapter
January 14, 2011



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SITE EVENTS

NEES4KIDS event organized in March 2007 received >1000 6th grade students.



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SITE EVENTS

An important outreach event was held at our Equipment Site on 13 May, 2006. A delegation of thirty-five people of the Southern California Tribal Chairman Association SCTCA visited our facility. This group received first hand instruction on seismic design, sensors and testing. They were instructed about the ongoing test program on the seven-story building and on the implications the test findings would have on the community.



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EOT WORKSHOPS

- NEES@UCSD hosted the workshop “A Users Perspective on Seismic Testing” organized in cooperation with NEES@UB and NEES@UNR.
 - The workshop was held at NEES@UCSD on September 16-17, 2010.
 - We had 14 presentations and 16 participants.
 - The .pdf presentations are posted on NEES@UCSD website
 - A memory stick with a compilation of videos from recent tests has been prepared as a NEES/UCSD site promotion tool.



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EOT WORKSHOPS

Workshop on “Calibration Methods compliant with ISO Standards” – April 6, 2009.
Fourteen participants from six NEES sites attended the workshop in San Diego.
NEES@UCSD was the first NEES site to obtain accreditation by ICC-IAS in 2008.
Two year later NEES@UB obtained the same accreditation.



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EOT WORKSHOPS

The NEES Shake Table Training Workshop for Advanced Users took place in our Equipment site on 22 March, 2006. This was a three day event. Twenty-two participants from across the nation and two from UNAM Mexico joined the workshop. Participants received advanced instruction on the MTS 496U shake table controller and had hands on experience controlling the LHPOST.



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EOT WORKSHOPS

Workshop and seminar on "Reinforced Concrete Wall Modeling". The workshop was held at UC San Diego on December 15, 2006. It attracted members from 17 of the 21 groups that participated in the blind prediction. The workshop had a balanced representation from Structural Engineers, Researchers and Students from Italy, Slovenia, France, Switzerland, Canada, Mexico, Taiwan, New Zealand and the US.



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EOT FILM DOCUMENTARIES in collaboration with UCSD-TV

- Collapse Vulnerability and Seismic Design of Metal Buildings Phase I, Phase II
 - A Seismic Study of Wind Turbines for Renewable Energy
 - Development of a Seismic Design Methodology for Precast Building Diaphragms
- High definition of these movies can be obtained from UCSD-TV or YouTube.



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EOT VIDEOS of ALL PROJECTS

- Demonstration Test – Wind Turbine
- Seismic Response of a Seven Story Building
- Dynamic Test of New Line of Seismic Base Isolators.
- Seismic Performance of Bridge Systems with Conventional and Innovative Materials.
- Performance-based Design of New Masonry Structures.
- Development of a Seismic Design Methodology for Precast Building Diaphragms.



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EOT VIDEOS of ALL PROJECTS

- Development of a Seismic Design Methodology for Precast Building Diaphragms.
- Seismic Performance Assessment and Retrofit of Non-Ductile RC Frames with Infill Walls Phase I
- Performance Based Design of New Masonry Structures
- Seismic Performance Assessment and Retrofit of Non-Ductile RC Frames with Infill Walls Phase II
- Seismic Design Guidelines for Retaining Walls with/without Sound Walls



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EOT VIDEOS of ALL PROJECTS

- A Seismic Study of Wind Turbines for Renewable Energy
- Collapse Vulnerability and Seismic Design of Metal Buildings Phase I and Phase II
- Large Scale Validation of Seismic Performance Of Bridge Columns
- Performance Based Seismic Design of Reinforced Masonry Structures



Copies of these videos can be obtained from NEES@UCSD.

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OTHER EOT ACTIVITIES FOR FY11

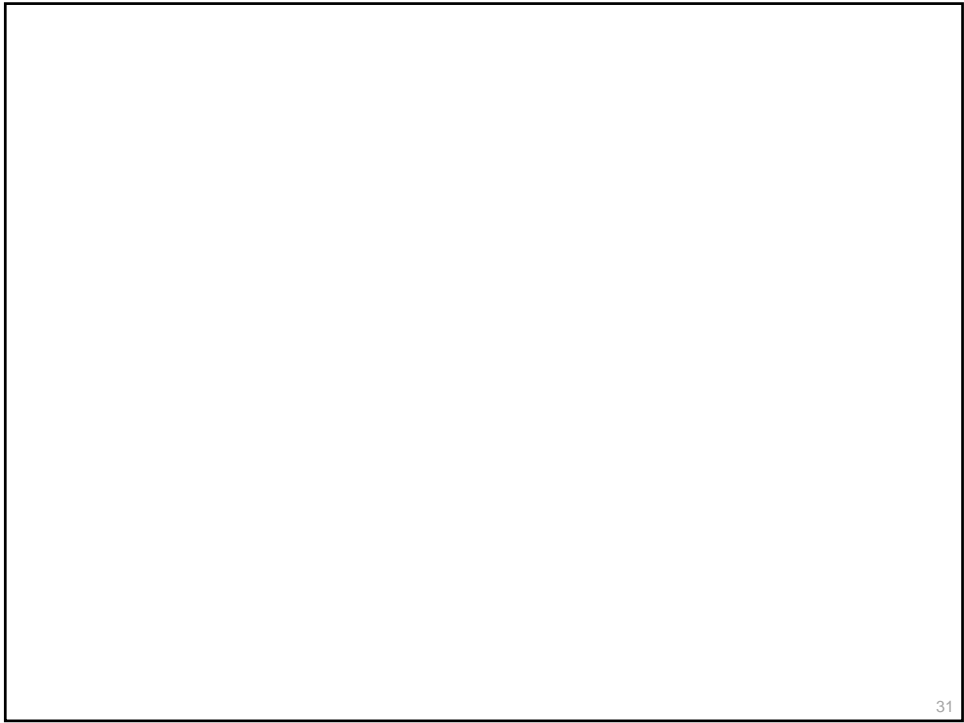
- Joint NEEScomm/UCSB/UCSD/UCLA Media/Demo Day at UCSD, for the Hutchinson NEESR Project, Summer 2011

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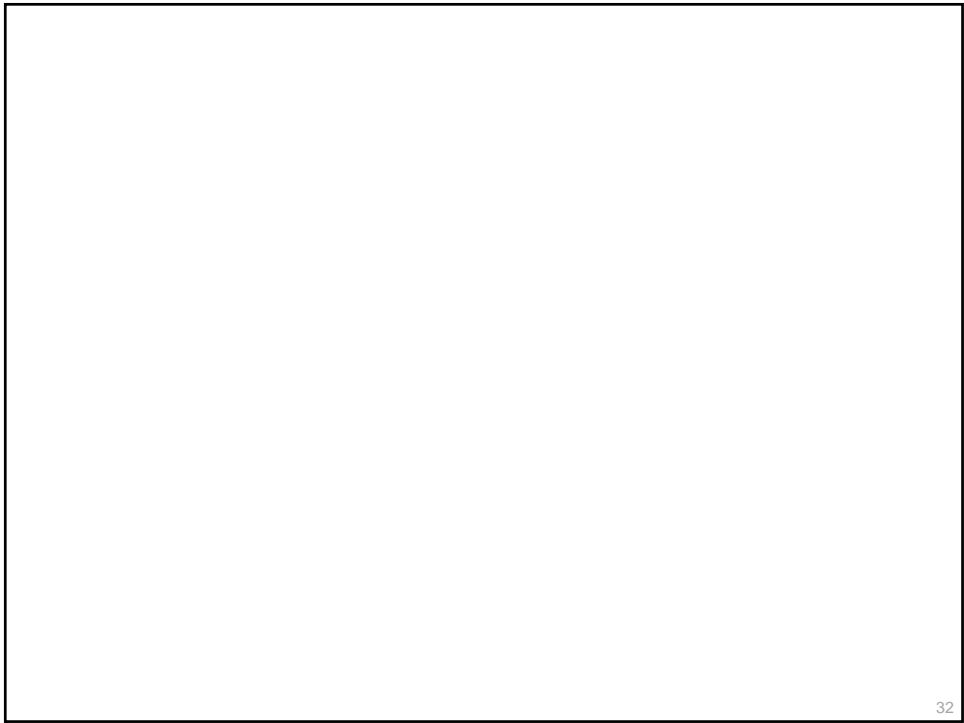
PROMOTIONAL MATERIALS

- A memory stick with a compilation of videos from recent tests has been prepared as a NEES/UCSD site promotion tool.

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