



Communication, Education, and Outreach SCEC5 Approach & CEO PC Discussion

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SCEC CEO Planning Committee



Tim Sellnow
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Kate Long
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CalOES (Retired)



TBD
SCEC Planning Committee Rep.
Focus Area: Implementation Interface



Tim Dawson
SCEC Board Rep.
Focus Area: Implementation Interface
California Geological Survey



Danielle Sumy
Focus Area: K-14 Earthquake Education Initiative
IRIS



Sally McGill
Focus Area: Experiential Learning and Career Advancement
CSU San Bernardino

SCEC5 CEO Long-Term Outcomes

- Improved application of earthquake science in policy and practice
- Reduced loss of life, property, and recovery time
- Increased science literacy
- Increased diversity, retention, and career success in the scientific workforce

SCEC5 CEO Focus Areas

Knowledge Implementation

Engagement of Practicing Professionals

Engagement with Public and Private Decision Makers

Public Education & Preparedness

National and Global Preparedness Drills and Resources

Earthquake Country Alliance

SCEC Public Relations and Risk Communication

K-14 EQ Education Initiative

Quake Heroes Film and Toolkit

Quake Catcher Network

Educator Professional Development

Experiential Learning & Career Advancement

SCEC Internship Programs

Career Advancement / Transitions Program

SCEC5 CEO Strategy

- **SCEC5 Theme:** *Partner Globally, Prepare Locally*
- **Evidence-based, Outcome-oriented program design**
 - Engage social science & geoscience education researchers, others
 - Activities will apply established models
(Communicating Actionable Risk, Collective Impact, etc.)
 - Evaluation results will be presented and published

SCEC5 CEO Evaluation Components

- Comprehensive Logic Model for all major activities, by focus area
- Data Collection System
 - Possibly an internal SurveyMonkey process
- *Output Metrics Report*
 - 1-page display of 2-3 essential metrics for each activity with yearly targets (milestones), with an appendix deliverable list (updated quarterly)
- *Outcomes Report*
 - Evidence-based narrative: annual summary of qualitative and quantitative outcomes

CEO Logic Model

	Programs	Key Activities	Outputs Actual (Target)	Short-Term Outcomes (Anticipated and Observed)	Mid-Term Outcomes (Anticipated and Observed)	Long-Term Outcomes (Anticipated)
Knowledge Implementation	<ul style="list-style-type: none"> Knowledge Transfer w/ Practicing Professionals 	<ul style="list-style-type: none"> Trainings and workshops with practicing engineers, and others; partner with CGS, SEAOC, ASCE, etc. 	<div style="border: 1px solid orange; padding: 5px;">Practice engineers attending SCEC annual meeting</div> <div style="border: 1px solid orange; padding: 5px;">Practice engineers, etc. in the ECA</div>	<p>Increase awareness of SCEC science among technical audiences</p>	<p>Improve coordination between EQ science and technical audiences</p>	<p>Improved application of earthquake science in policy and practice</p>
	<ul style="list-style-type: none"> Engagement with Public and Private Decision Makers 	<ul style="list-style-type: none"> Workshops, webinars, online and printed materials 	<div style="border: 1px solid blue; padding: 5px;">Decision makers participating in activities</div>	<p>Policies proposed or other actions implemented</p>	<p>Results of policies and actions documented; best practices published for others to adopt</p>	<p>Reduced loss of life, property, recovery time</p>
Public Education & Preparedness	<ul style="list-style-type: none"> National and Global Preparedness Drills and Resources 	<ul style="list-style-type: none"> Marketing/participant engagement Conducting the drills Education and training Regional coordination 	<div style="border: 1px solid blue; padding: 5px;">National participants</div> <div style="border: 1px solid blue; padding: 5px;">Global participants</div>	<p>Increase knowledge about earthquake safety; increase discussion of drill</p>	<p>Increase preparedness and mitigation actions</p>	<p>Reduced loss of life, property, recovery time</p>
	<ul style="list-style-type: none"> Earthquake Country Alliance 	<ul style="list-style-type: none"> Program planning Public education Statewide coordination 	<div style="border: 1px solid orange; padding: 5px;">ECA Associates</div> <div style="border: 1px solid orange; padding: 5px;">Participants of functional and sector-based committees</div>	<p>Establish and maintain partnerships with key stakeholders throughout the state</p>	<p>Provide leadership and statewide coordination of for public education and preparedness activities</p>	
	<ul style="list-style-type: none"> SCEC Public Relations and Risk Communication 	<ul style="list-style-type: none"> Press releases and media events SCEC.org Media trainings Social media 	<div style="border: 1px solid orange; padding: 5px;">Articles about SCEC Science</div> <div style="border: 1px solid orange; padding: 5px;">Social Media followers</div> <div style="border: 1px solid orange; padding: 5px;">Non-English language SMEs</div>	<p>Increase SCEC media coverage</p>	<p>Increase public awareness and knowledge of SCEC</p>	<p>Increased science literacy</p>

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K-14 EQ Education Initi.	• Quake Heroes (Toolkit)	• Provide science and preparedness resources	# toolkits distributed # Teen CERT programs initiated	Increase awareness of EEW, seismology concepts, seven steps to earthquake safety	Increase EQ readiness	Increased science literacy
	• Quake Catcher Network (with IRIS)	• Recruit participating organizations	Participating organizations	Bring and real EQ data for public good into classrooms	Pave way for next generation science standards, contributes to NGSS	Increased diversity, retention, and career success in the science workforce
	• Educator Workshops (w/ CGS, IRIS, etc.)	• Conduct educator workshops • Develop materials	Educator workshops	Teachers obtain high quality, current materials to use	Build community among teachers for teaching science, strengthening SCEC relationships	
Experiential Learning & Career Advancement	• SCEC Internship Programs	• Recruit, place, and evaluate UseIT, SURE, InSight, and CEO interns	Undergraduate interns Women interns Under-rep. minority interns Mentors	Increase knowledge of EQ/computer science, communication/marketing skills	Improve career readiness Building connections to SCEC w future professionals	Increased diversity, retention, and career success in the science workforce
	• Career Advancement	• Career advancement, transition advice • Leadership opportunities for emerging experts	Grad students on SCEC awards Early career research presentations supported	Increase readiness for career advancement at all points of career	Increase tenure rates for earthquake scientists, including among women and underrepresented minorities	Improved application of earthquake science in policy and practice

SCEC5 CEO Evaluation Components

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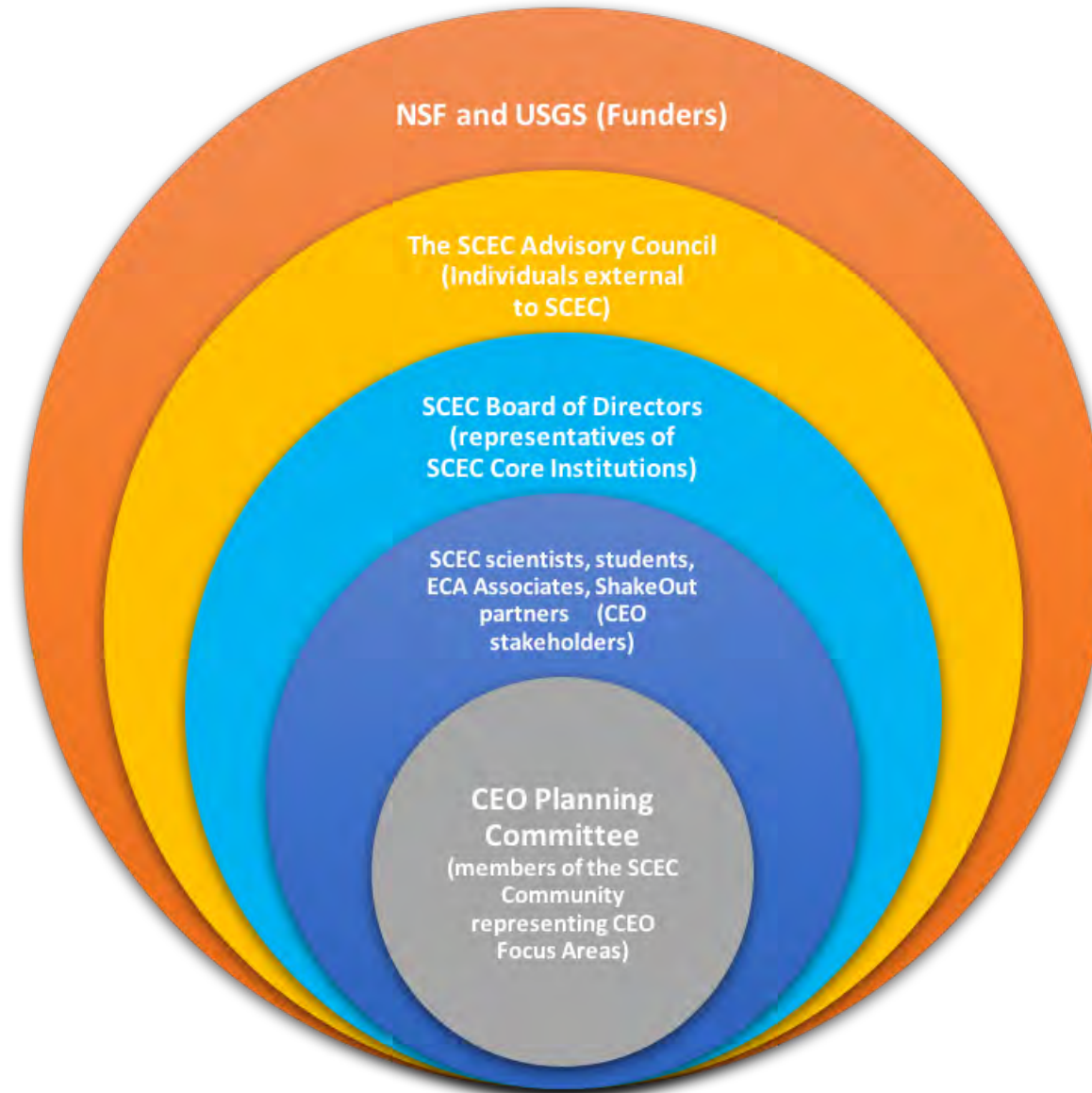
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CEO Evaluation Audiences



SCEC5 CEO Evaluation Results

Goal	When
Develop long term outcome measures and anticipated milestones	Year 1
Publish evaluation framework and engage more researchers in publishing results based on analysis of CEO datasets	Year 2
Coordinate publication (by CEO staff and by other researchers) of initial results of major projects along with a mid-term report	Year 3
Prepare data and reports and identify funding for a major external evaluation (in anticipation of the “SCEC6” proposal)	Year 4
Publish additional results of major projects and prepare final report based on long-term outcome evaluation	Year 5

Other CEO Planning Committee Discussion

- Gather data about self-protective actions during earthquakes
 - Design survey for after earthquakes, particularly in ShakeOut regions
 - Work with USGS to add additional aspects to "Did You Feel It"
 - other self-protective actions
 - questions about ShakeOut participation
- Rebuild/update Wallace Creek Interpretative Trail
- New California Geological Survey Simplified Geologic and Fault Maps coming soon

Other CEO Planning Committee Discussion

- Post-Earthquake Response
 - Discussion of how to support scientists' mental health when responding to earthquakes, including how to be sensitive with people who have experienced losses
 - Raise awareness of California Post-Earthquake Clearinghouse data sharing and available tools, as an option in addition to SCEC's response.scec.org website.
 - Offer Disaster Service Worker certification training again at SCEC Annual Meetings.

SC/EC

AN NSF+USGS CENTER

*Southern California
Earthquake Center*



Southern California Earthquake Center