SCEC | SiERRa WORKSHOP

WELCOME

2026 SiERRa Workshop

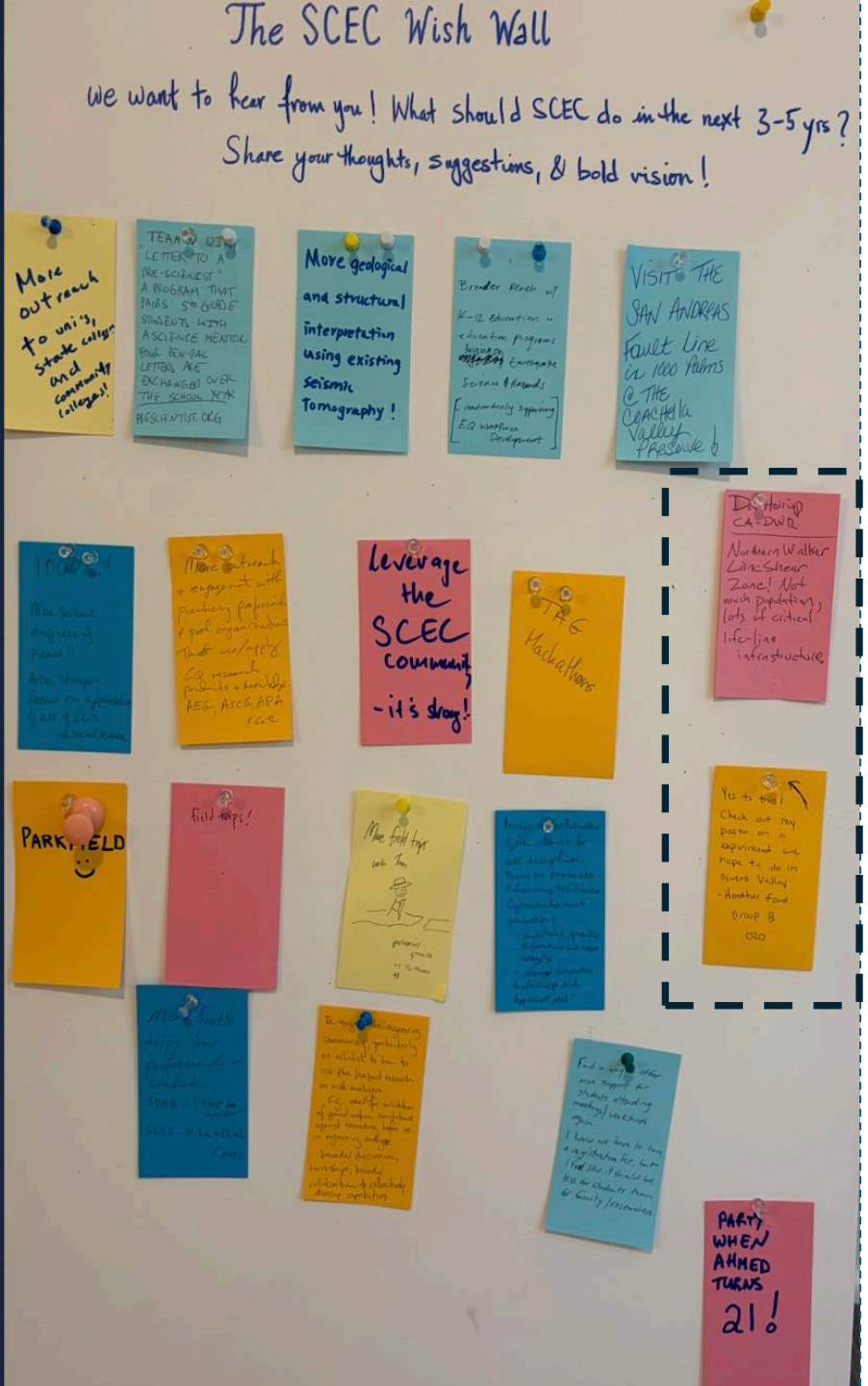
Science for Infrastructure Resilience and Risk Reduction

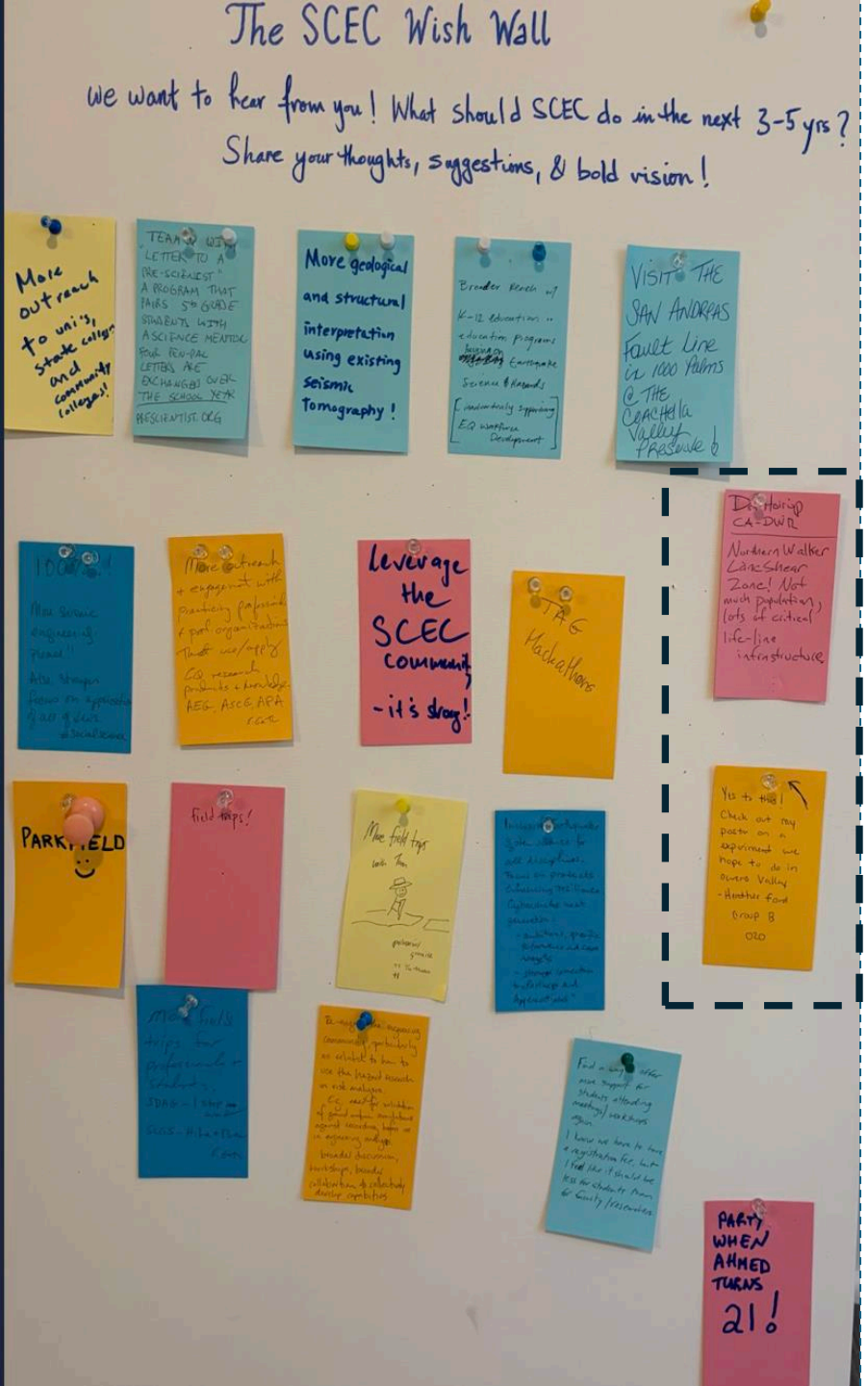
October 20–22, 2026

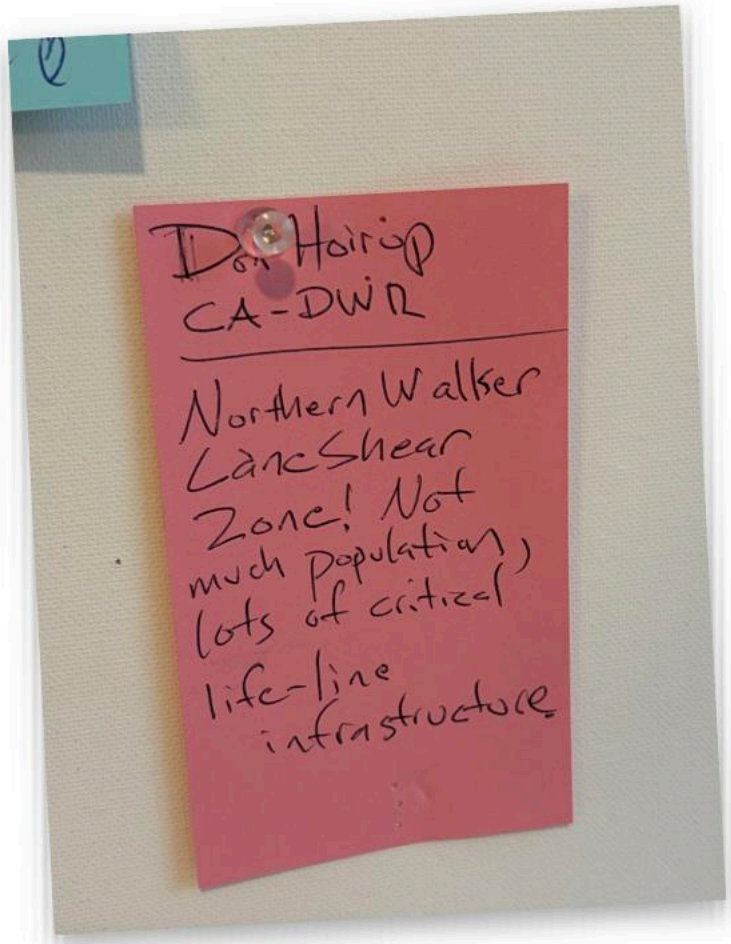
University of Nevada, Reno – Lake Tahoe Campus
Incline Village, Nevada

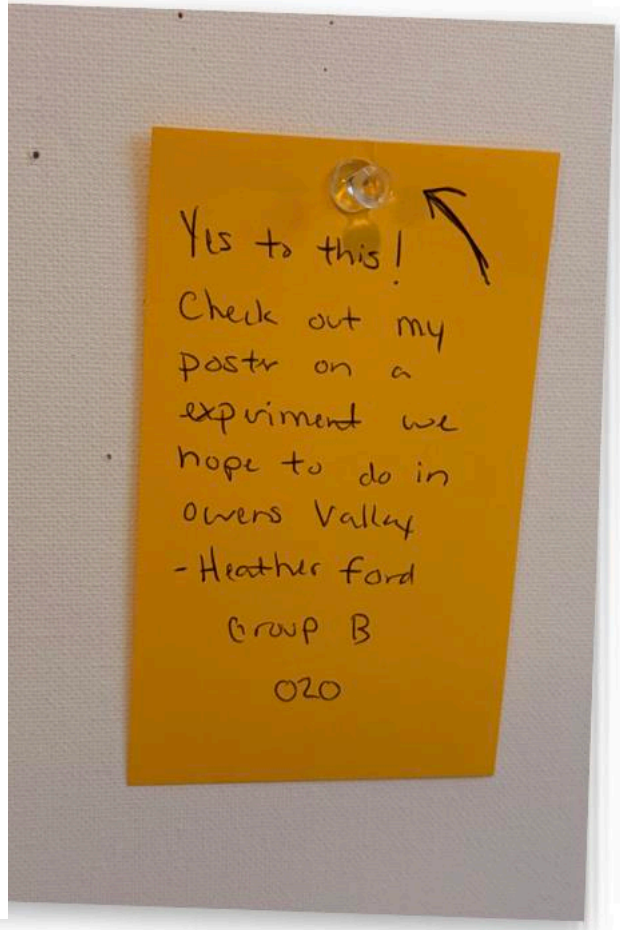


www.SCEC.org | U.S. National Science Foundation | USGS science for a changing world | U.S. Department of Energy | NASA | FEMA | Cal OES Governor's Office of Emergency Services | PG&E | USC


The SCEC Wish Wall
we want to hear from you! What should SCEC do in the next 3-5 yrs?
Share your thoughts, suggestions, & bold vision!
More outreach to uni's, State colleges and community colleges!
More geological and structural interpretation using existing seismic tomography!
VISIT THE SAN ANDREAS Fault Line in 1000 Palms @ THE COACHELLA Valley PRESERVE
leverage the SCEC community - it's strong!
TAG
Northern Walker Lane Shear Zone! Not much population, lots of critical life-line infrastructure
Yes to this!
Field trips!
PARTY WHEN AHMED TURNS 21!

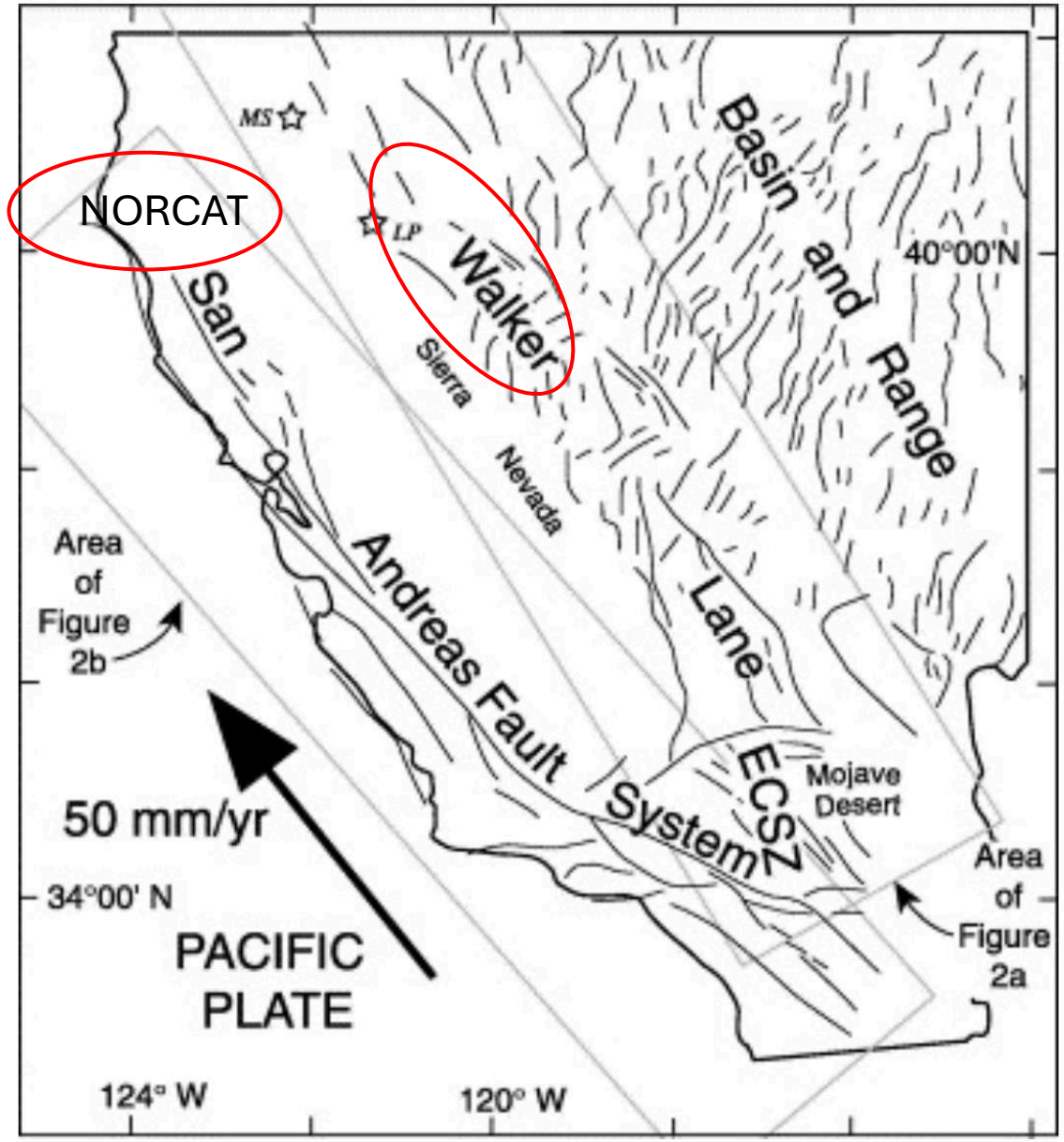

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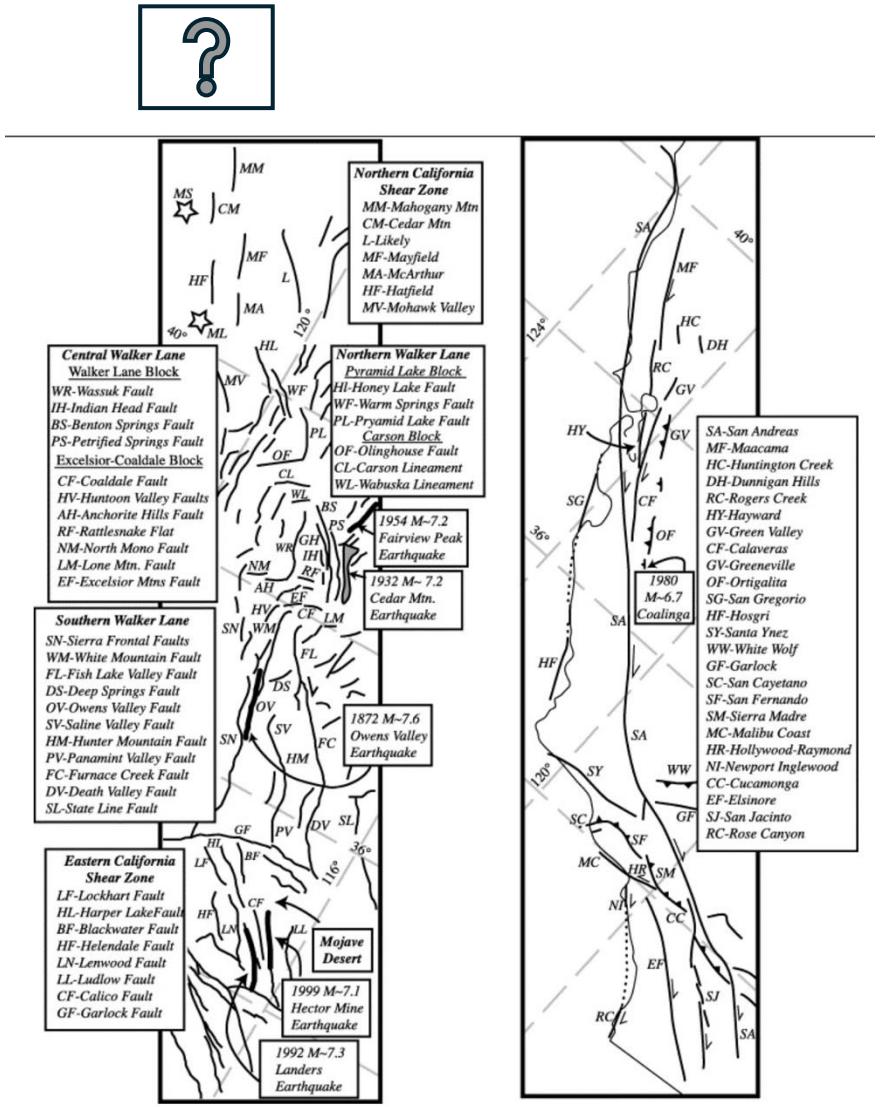

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020

It was not surprising that the SiERRa TAG proposal was well-received suggesting that it meets an important need that is aligning with major SCEC objectives

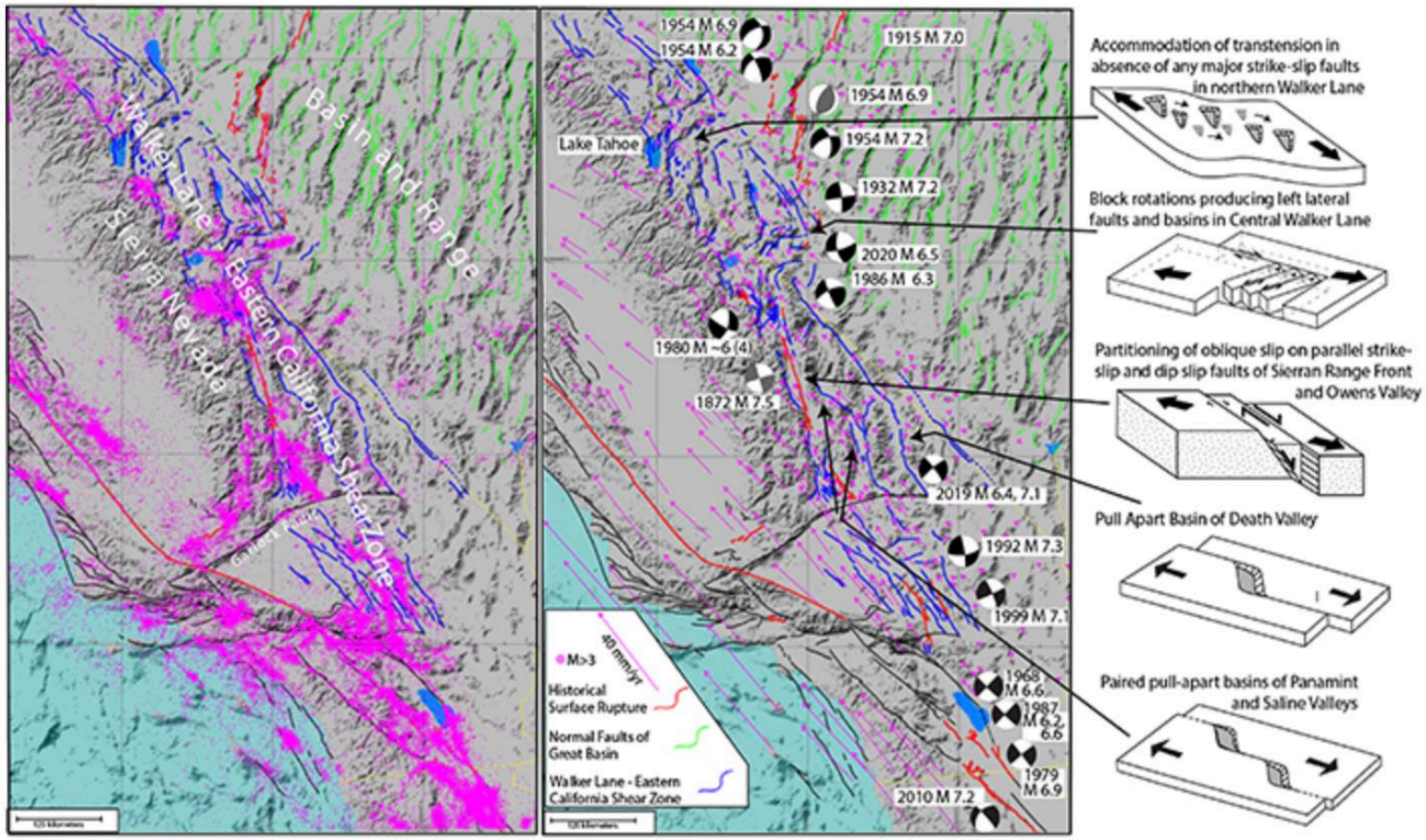
Reinforcing SCEC's Statewide Expansion



A Potential Digital Twin Site For Scientific Discovery: Heterogeneous sensing and new modeling



The Walker Lane: A Potential Target for SCEC Studies?

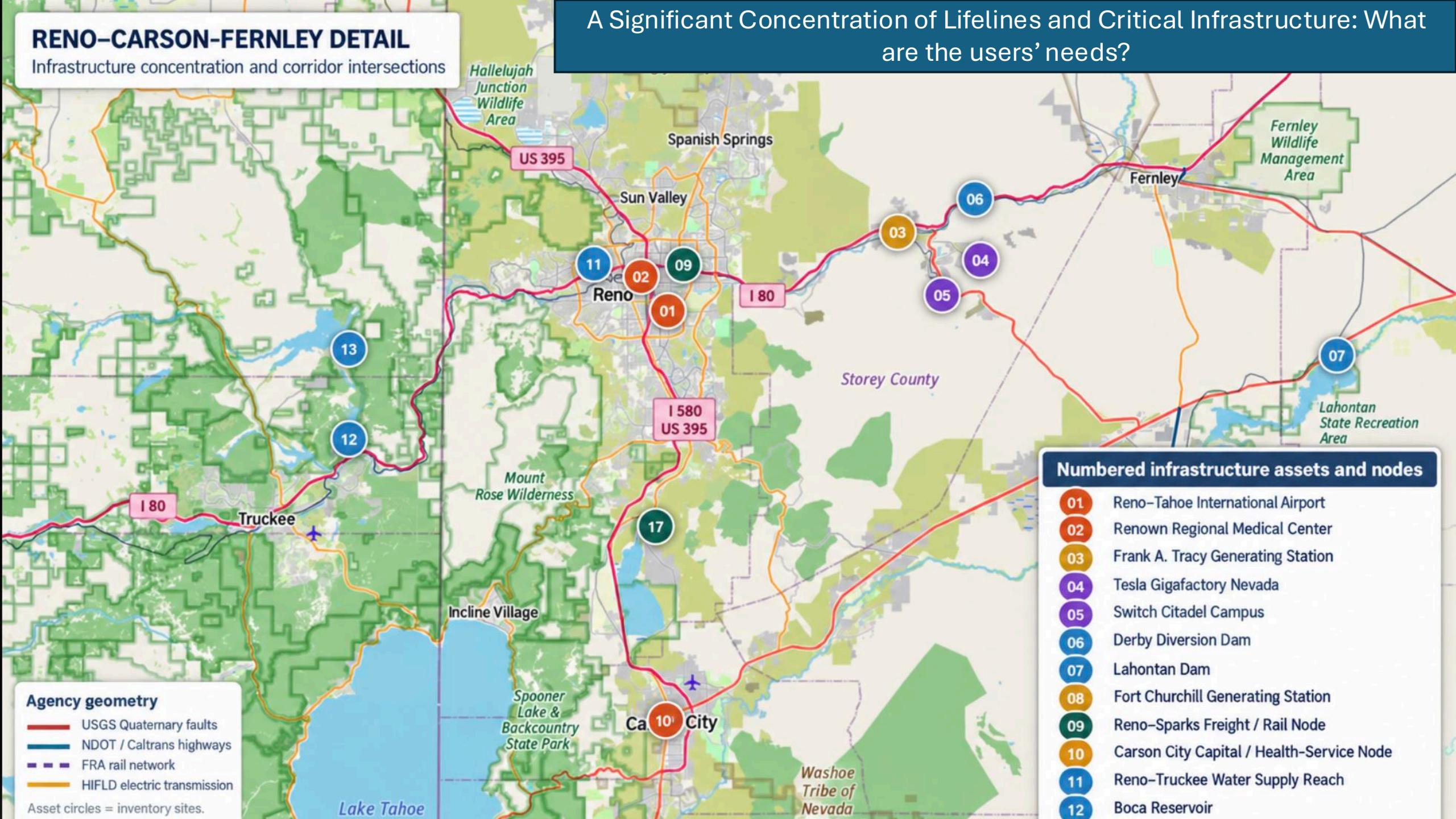


Seismicity, faults, and geodetic vectors along the Walker Lane - Eastern California Shear Zone with sketches illustrating how Pacific-North America motion is accommodated along its length. Data from: USGS, 2020a; USGS, 2020b; and Zeng and Shen, 2016.

17 October 2021 8:42am

By Steven Wesnousky

A Significant Concentration of Lifelines and Critical Infrastructure: What are the users' needs?



WATER, DAM SAFETY & ELECTRIC UTILITIES

California Department of Water Resources

Pacific Gas and Electric Company

Nevada Division of Water Resources

Los Angeles Department of Water and Power

U.S. BUREAU OF RECLAMATION

GEOLOGICAL SCIENCE & HAZARDS

USGS science for a changing world

CALIFORNIA GEOLOGICAL SURVEY

My Wish List From This Group

What does the user community need from earthquake science?

01 Decisions

Which decisions matter most?

Design, retrofit, operations, investments, emergency planning.

02 Uncertainties

Where does current science fall short?

What do you wish we knew better—and why does it matter?

03 Useful products

What would help you act?

Scenarios, shaking estimates, site data, maps, or uncertainty bounds.

REPORT BACK One important decision → one limiting gap → one useful science product

FOR ALL PARTICIPANTS

Which three questions should SiERRa tackle?

Name and rank three specific open science questions.

01

PRIORITY 1

What is the consequential open science question?

02

PRIORITY 2

What is the consequential open science question?

03

PRIORITY 3

What is the consequential open science question?

FOR EACH QUESTION

Why does it matter? • What evidence is missing? • What is a credible first step?

01

Priority question

What is the specific question or decision gap?

02

Why it matters

What hazard, asset, or decision would be affected?

03

First step

What data, analysis, field study, or test comes next?

04

Who can help?

Which researchers, agencies, or operators should partner?

Thank You

Pacific Gas and Electric Company

USGS science for a changing world



Rich



Ben



Christie



Tran



Edric



Deborah



Phoebe



There is no problem we can't solve together!