# United States Department of the Interior

U.S. GEOLOGICAL SURVEY
Reston, Virginia 20192

March 9, 2026

Dr. Michael Hamburger
Chair, Scientific Earthquake Studies Advisory Committee

Dear Dr. Hamburger,

Thank you and the members of the Scientific Earthquake Studies Advisory Committee (SESAC) for your September 2025 letter report, which addressed current activities of the U.S. Geological Survey (USGS) Earthquake Hazards Program (EHP) and its responsibilities as part of the National Earthquake Hazards Reduction Program (NEHRP). The SESAC plays a critical advisory role for the EHP, and the program appreciates this input as a continuation to a pattern of consistent committee engagement with the program. Since the delivery of your letter to Acting Director Sarah Ryker, a new USGS Director, Ned Mamula, has been sworn in following confirmation by the Senate. Director Mamula has reviewed your feedback and welcomes the input. As required by statute, he has initiated the process of forwarding the letter report to the relevant congressional committees. Below, I provide more detailed responses to SESAC's feedback from the EHP Office. Responses are listed in the order that recommendations appeared in the September letter. First, I repeat the recommendation; the response then follows.

1. We believe that the program is now operating below the critical level of financial and personnel support required for sustainable operation. We urge the USGS Director to work with the Department of Interior administration and Congressional supporters to ensure the level of support that would guarantee consistent and sustainable operation of the Earthquake Hazards Program for the coming year. For the short term, we encourage the EHP to explore partnerships with other federal and state agencies and academic groups that may offer opportunities to fill in key gaps in their mission-critical work.

The USGS utilizes every mechanism available to ensure continued support for mission critical activities, including those within the Earthquake Hazards Program, and in accordance with priorities established by the Administration and associated guidelines provided by the Department of Interior.

The EHP appropriated budget for the current fiscal year FY 2026 is $94.9M, which represents more than a $2M increase from FY 2024 levels. Despite this budget increase from Congress, the FY 2026 appropriation comes with significant new congressional direction (~$7M of new direction, predominantly for ShakeAlert earthquake early warning focused activities).

EHP will continue leveraging partnerships to execute its mission, which we believe is a fundamental and high priority component of the program, as expressed in the recently published USGS EHP Decadal Science Strategy (USGS Circular 1544). Examples of recently executed partnerships include new cooperative agreements with the Cascadia Coastline and Peoples Research Hub (https://www.usaspending.gov/award/ASST_NON_G25AC00529_014) and the Cascadia Region Earthquake Science Center (https://www.usaspending.gov/award/ASST_NON_G25AC00531_014). EHP will continue to explore partnership opportunities to advance critical gaps as opportunities arise.

2. Human Resource shortfalls have reached a critical level. Sustainable operation of the EHP requires replacement of leadership staff in key administrative positions; strengthening the workforce development chain through revitalization of the EHP's internship program for promising undergraduate and graduate students, active participation in the Mendenhall postdoctoral program for post-graduate students, recruitment of staff among the best and brightest of the domestic and global scientific and engineering community, and continuity of training and professional development for USGS staff.

In recognition of these staffing shortfalls, the USGS is working with the Department of the Interior on filling these critical positions.

3. We recommend that the USGS administration strive to ensure that any new monitoring initiatives are not added at the expense of effort in core research programs—and to work toward an approximate parity of expenditures for monitoring and earthquake-related research. The diminishing budgets for fundamental and applied science are increasingly limiting progress on earthquake hazard mitigation as well as the training of the next generation of earthquake researchers.

The EHP continues to leverage opportunities to emphasize the importance of a healthy research program to support monitoring operations, and to articulate that the only way to ensure monitoring efforts remain cutting edge is through support for both applied and fundamental research efforts. The EHP continues to incorporate this guidance from SESAC in annual budget preparation discussions and associated briefings.

4. We recommend that the EHP expand its work to incorporate newly developing technologies into its earthquake hazard mitigation workflow. This involves committing USGS resources toward basic scientific research while still supporting progress on ongoing applied earthquake hazard programs. These new technological innovations can benefit from directed partnership with other federal agencies, research consortia, and academic institutions.

The EHP recognizes the importance of newly developing technologies and their potential benefits to the program mission. The program office will continue to seek opportunities to support relevant efforts, as resources allow.

5. We recommend that the Earthquake Hazards Program continue to engage with and support the collaborative efforts of the US academic research community and, where possible, take a leadership role in regional and topical earthquake research initiatives.

For many years, the EHP has sustained investment in external research support, which predominantly involves the U.S. academic community. This investment is distributed across both regional and topical earthquake research priorities.

As the SESAC is aware, EHP is in the process of executing a joint internal and external review of the external research portfolio, with hopes of further improving the effectiveness of this program. The EHP will report on the outcomes of this portfolio review at the Fall 2026 SESAC meeting.

The EHP is grateful for the committee's engagement on these topics, and thanks you all for your time and dedication to the USGS Mission.

Sincerely,



Gavin Hayes
Senior Science Advisor for Earthquake and Geologic Hazards