John J. Metesh State Geologist and Director, Montana Bureau of Mines and Geology President of the Association of American State Geologists

H.R. 7003, the National Landslide Preparedness Act Reauthorization Act of 2024 SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES NATURAL RESOURCES COMMITTEE UNITED STATES HOUSE OF REPRESENTATIVES

Question from Rep. DelBene:

From the perspective of the Association of American State Geologists, what are the key parts of the act that state geological surveys would like to see implemented to make an immediate impact on landslide hazard preparedness at the local level?

Response:

The following components of the act would have important immediate impacts on landslide preparedness at the local level, in order of priority to state surveys:

Section 3.e.1: Many states have begun landslide/geohazard inventories in response to recent geohazards events; climate change as well as housing and transportation development in hazard-prone areas will likely increase the frequency of such events. The Cooperative Landslide Hazard Mapping and Assessment Grant Program, when implemented, will provide direct support to state geologic surveys to map and compile a digital inventory of landslide hazards in each state. The grant program funds will be matched by state funds – a model that has proven very successful in other programs in the USGS (eg National Cooperative Geologic Mapping Program).

Section 5.a.1: The 3D Elevation Program ("3DEP") has proven to be crucial to state geologic surveys; these data have greatly enhanced our ability to map hydrologic features, seismic hazards/faults, aquifers, and pre-historic landslides as well as probability assessment of new landslides. Timely collection of Light Detection and Ranging (LiDAR) data are critical for identification of new and immediate threats to public safety. Of particular interest to state geologic surveys, clarification that 3DEP is intended to include ongoing refresh and improve resolution of 3D elevation data; repeated elevation surveys document how the landscape is changing over time and will help identify high-risk areas.

Section 3.b.5: Local emergency managers are reliant upon the National Landslide Preparedness Act Debris Flow Early Warning System. Large storm / large snowmelt events are becoming commonplace throughout the western states; housing and transportation development is debris-flow prone areas is increasing as is the need for early warning systems. Similarly, wildland fires in upland areas require calibration of post-fire debris flow models to regional climates to inform timely evacuations.