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STATE OF ALASKA

PRESS RELEASE

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State, USGS Expand Cutting Edge Lidar to Map Hazards & Resources

(Fairbanks, AK) – The State of Alaska and the U.S. Geological Survey (USGS) are advancing a long-standing partnership to improve mapping across the state, with a focus on acquiring high-resolution lidar (light detection and ranging) data, assessing landslide hazards, and mapping active and abandoned mine lands. Lidar is a cutting-edge mapping technology that captures highly detailed elevation data, supporting a wide range of public and private uses, including identifying critical mineral resources, planning infrastructure, guiding land development, improving aircraft navigation, and responding to natural disasters.

This partnership builds on over a decade of collaboration through the Alaska Mapping Executive Committee (AMEC), which includes federal agencies and the State, to map Alaska. Under AMEC leadership, the first statewide elevation dataset was completed in 2020 through a 10-year, \$68 million joint investment. As technology has advanced, partners now shift focus to updated lidar data that will offer even greater accuracy, value, and applications. As of May 2025, close to 50,000 square miles have been mapped, with continued investments this year under the USGS 3D Elevation Program and Earth Mapping Resources Initiative – a national effort to map critical mineral resources. These efforts are coordinated through the Alaska Geospatial Office where the data are also made publicly accessible via the State Geoportal (gis.data.alaska.gov) – further supporting a wide application of use cases across sectors.

"The USGS is proud to partner with the State of Alaska over the past decade to update the elevation and other key mapping data for the State. We understand how important these data are for critical minerals and energy resource development in Alaska and are excited to continue pressing forward under Alaska Mapping Executive Committee leadership to support current and future needs," **said Michael Tischler, Acting Associate Director for the USGS Core Science Systems.**

Scientists from the Alaska Division of Geological & Geophysical Surveys (DGGS) and the USGS are using the new elevation data to understand landslide hazards and mineral exploration potential. For the federal and state landslides programs, new data will be used to identify unstable terrain, analyze past slope movement, and evaluate future landslide risks to communities and infrastructure. Work that is part of a larger effort to develop a comprehensive landslide inventory for Alaska, which is vital for prioritizing mitigation and response efforts. Similarly, DGGS, USGS, and industry minerals exploration programs will utilize new data to identify active and abandoned mine lands and produce more accurate geologic maps to assess mineral potential, including critical minerals.

As the availability of this data—and the ability to act on it—is dependent on continued investment, partnerships such as these demonstrated between the USGS and DGGs are essential to reducing redundant spending and streamlining processes across public sectors; ensuring Alaska's communities and infrastructure are protected; and that economic development is supported by timely, reliable, and easily accessible data.

The Department of Natural Resources' mission is to develop, conserve, and maximize the use of Alaska's natural resources consistent with the public interest.

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