



## Case Study

### Organization

Alaska Division of Geological & Geophysical Surveys

### Location

Alaska, United States

### Industry

Map, Chart, and Data Production

# Facilitating Better Analysis using Lidar

The Alaska Department of Natural Resources, Division of Geological & Geophysical Surveys (DGGS), collected high-resolution lidar topographic data for swaths of land that would likely be used if new natural gas pipelines were constructed in Alaska. The pipelines would be designed to deliver Alaska North Slope natural gas to out-of-state and Alaska customers. Collection of lidar data was supported by the State of Alaska Gas Pipeline Project Office, the Office of the Federal Coordinator, and the Alaska Gasline Development Corporation.

## What did they do?

The data—covering approximately 3,000 square miles along the proposed pipeline routes—was acquired to facilitate analysis during the design, permitting, and construction of the pipelines. Staff can evaluate active faulting, slope instability, thaw settlement, erosion, and other engineering constraints along the proposed pipeline routes. The data will also provide an Esri® ArcGIS® base map for the state-federal GIS database and to evaluate permit applications and construction plans.

## Do I need this?

Massive, three-dimensional spatial data requires software that can accurately manage, represent, and analyze its feature information. The ArcGIS platform provides an innovative, specific solution for lidar, no matter the scale.

For more information, visit [esri.com/lidar](http://esri.com/lidar)

“Managing and creating spatial analytics from three-dimensional data requires software that can accurately manage, represent, and analyze its feature information. We found that ArcGIS provided the platform needed to ensure the data is ready.”

**James Weakland**

GISP, GIS Analyst, DGGS



Understanding our world.