Results from the 2026 DGGS Mineral Resources section public data survey

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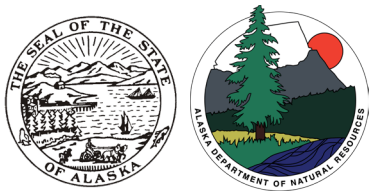
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Results from the 2026 DGGS Mineral Resources section public data survey

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EXECUTIVE SUMMARY

The Alaska Division of Geological & Geophysical Surveys (DGGS) conducts geologic mapping, geophysical surveying, and mineral industry reporting as part of its mission to "determine the potential of Alaskan land for production of metals..." (AS 41.08.020). To assess the impact of this work and guide the direction of future priorities, DGGS solicited stakeholder feedback via an online survey. Survey respondents—mostly geologists, geophysicists, and managers involved in the mining industry—rated the usefulness of both existing DGGS products and those that may be offered in the future. Respondents were also asked to prioritize geographic areas for future geophysical surveys.

The survey results indicate that DGGS is relatively well aligned with the priorities of its mineral industry stakeholders. Most respondents reported high or moderate awareness of DGGS resources and how to access them. Respondents rated geologic mapping, geophysical surveys, and the Alaska Mineral Industry Report as DGGS's most valued offerings. For future work, stakeholders requested district-scale geologic mapping, magnetic and electromagnetic surveying, geochemical surveying, and exploration activity reporting. Respondents also expressed interest in further modeling and interpretation of geophysical datasets.

Geographic areas most favored by respondents for future DGGS work included the Eastern Alaska Range, Yukon-Tanana Upland, and Southcentral Alaska—regions relatively close to road infrastructure. Respondents showed least interest in remote regions of Northwest Alaska and the Alaska Peninsula.

Respondents also had the opportunity to make additional comments; many credited DGGS's geophysical and geologic survey programs with a cumulative positive impact on Alaska's exploration industry.

INTRODUCTION

From February to May 2026, the Alaska Division of Geological & Geophysical Surveys (DGGS) Mineral Resources section conducted an opinion survey targeting end users of its public data. The survey assessed the impact of existing data products and gathered opinions on how future work can best serve users. A secondary objective was to raise awareness of the publications, data products, and resources DGGS maintains. Links to those were included throughout the survey and at its conclusion.

Responses were collected from 55 participants, all of whom affirmed the importance of geologic mapping and geophysical surveying work done by DGGS. Respondents were

encouraged to provide detailed feedback, including comments on specific techniques and data products of interest, report timeliness, and regions to prioritize. This report summarizes and synthesizes the feedback to guide future activities by the DGGS Mineral Resources section.

METHODS

Survey Design

The survey was prepared and implemented using SurveyMonkey, an online survey platform that allows for participation via desktop and mobile devices. The introductory text on the landing page stated the survey's purpose and confirmed the confidentiality of individual responses. The survey comprised sixteen questions across four survey pages grouped by (1) existing DGGS resources, (2) data products/publications desired in the future, (3) focus regions of future work, and (4) demographics (role/organization/contact info). A concluding page thanked participants for their time and provided contact information, along with links to relevant DGGS web resources. The full script for the survey is provided as an Appendix to this report.

When drafting survey questions, we consciously balanced readability and ease of completion with the need to collect information at the desired level of detail. The survey was designed to include a minimal number of questions by combining candidate questions when possible and removing questions deemed either too niche or not sufficiently high priority. Ten (out of sixteen) questions were multiple-choice; the others were open-ended text box questions phrased as opportunities to provide more detailed feedback, e.g., “Feel free to expand upon…”

All questions were optional except Question 9, “Please select 3 regions that DGGS should prioritize for geologic mapping and geophysical surveys,” which required respondents to select one to three regions. This requirement had an unintended effect: two respondents answered only Question 9, selecting either the first region or the first three regions in the list. These responses likely came from people who wanted to view the questions without answering them, so we removed both. Of the 57 responses received, this report analyzes 55.

Advertising and Outreach

The survey opened on February 20, 2026. A link was posted to DGGS webpages (front page, news & highlights, and mineral resources section pages) and the DGGS Facebook page. On February 24, the Alaska Miners Association (AMA) emailed its members to advertise the survey. In the following weeks, the Mineral Resources section staff directly solicited their industry contacts, federal agencies, academia, Native corporations, and collaborating institutions to take the survey. On March 27, DGGS Director Erin Campbell presented initial survey results to the AMA statewide Zoom meeting and included a QR code link to the survey (Campbell, 2026). DGGS staff then promoted the survey at the DGGS booth at the AMA spring conference in Fairbanks, April 6–10. The survey closed on May 6; the last response was received on April 18.

RESULTS

Participation and Retention

Fifty-five participants responded to the survey. Responses clustered tightly around the AMA email: half arrived within two days and three-quarters within a week (fig. 1). Later responses were sparse, with two following Director Campbell's March 27 presentation and a few more arriving the week after the AMA spring conference.

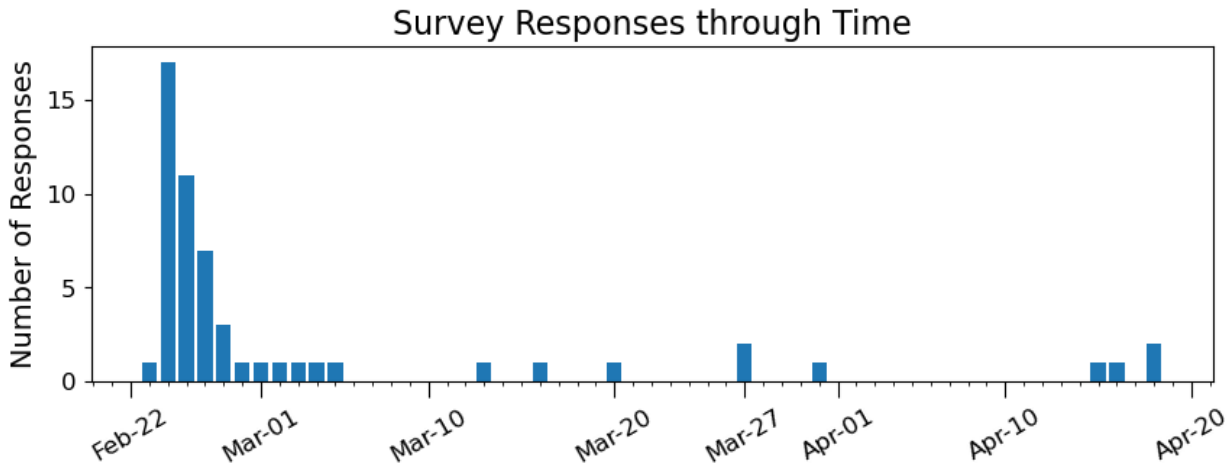


Figure 1. Plot displaying the number of survey responses received during the survey comment period.

Of the 55 participants, 91% finished the survey and 89% answered every selection-based question (fig. 2). One participant skipped a question. Because all but one of the questions were optional and most of the survey consisted of selection-based questions, we consider the survey to have a 91% retention rate. The 9% loss (5 participants) occurred when participants moved from the first to the second page of the multi-page survey.

The optional open-ended questions had much lower participation, at 15–36%. Just over half of participants provided contact information, and three-quarters answered whether they wanted to be contacted (71% indicating "Yes" and 29% indicating "No").

Participants provided additional detailed feedback through the optional open-ended questions. Most participants completed the full survey, possibly because selection-based questions were easy to answer quickly.

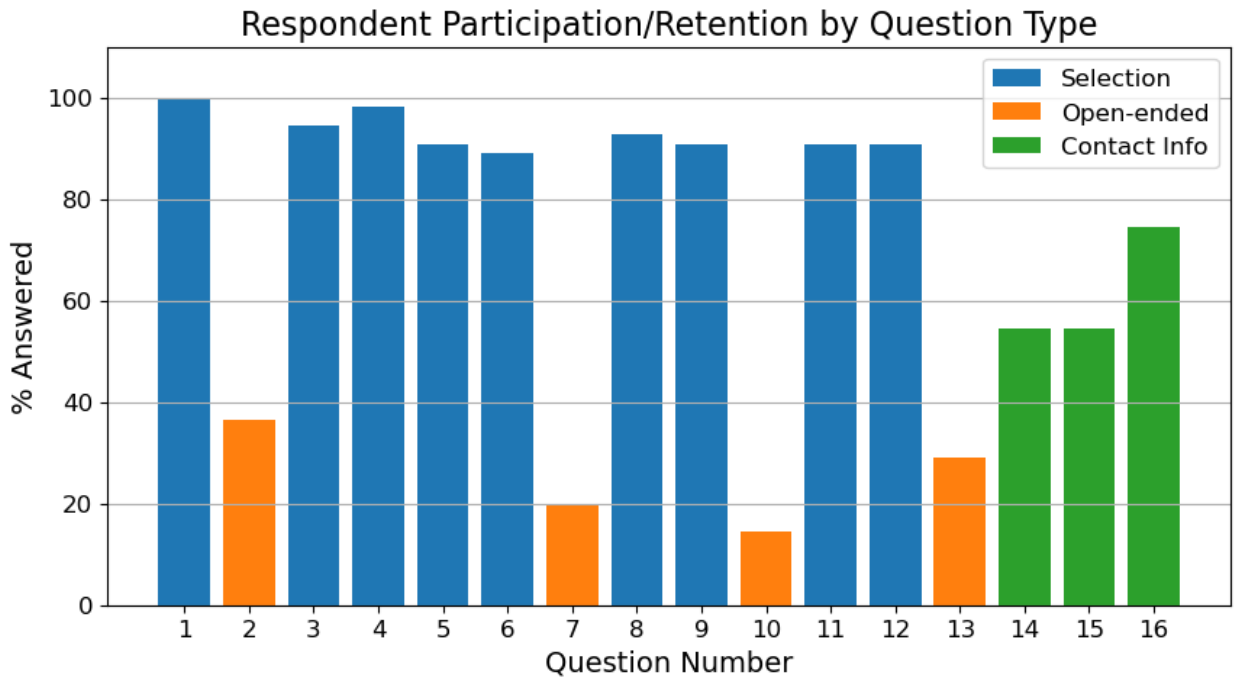


Figure 2. Plot displaying percentage of respondent participation for each survey question, differentiated by question type.

Importance of existing data/past DGGS efforts

Question 1: "What DGGS resources have been most useful in your work? (You may select multiple options)" (fig. 3). The most useful resource to the community by far has been Geologic Maps (78.2% of respondents), followed by Geophysical Surveys (58.2%) and the Mineral Industry Report (56.4%). Geologic reports, geochemical data, and DGGS online tools follow, with 43-47% of respondents indicating their usefulness. Geologic Materials Center was selected by 32.7% of respondents. Only a single respondent noted that they haven't used DGGS resources. Two respondents highlighted "working directly with DGGS minerals staff" in the "Other" field.

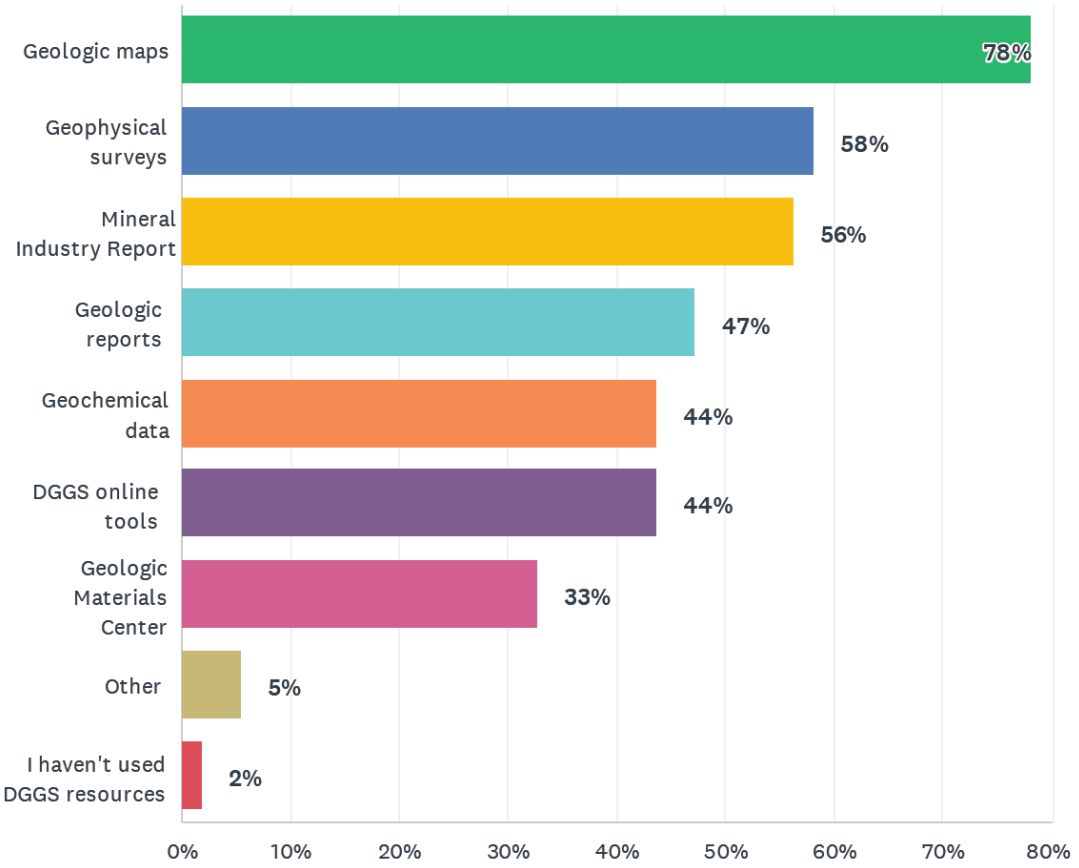


Figure 3. Plot displaying answers to Question 1 regarding DGGS resources which are most useful to respondents' work. Results are presented as a percentage of total participants; respondents could select multiple options.

Question 2: "Feel free to expand on your use of DGGS resources." Eight respondents (out of 20 who filled the field) remarked on DGGS as an authoritative or first-step source for public geologic and mineral data—"DGGS is our first (and often final) source… for gathering published geologic and mining information;" "DGGS has been my go-to source for anything related to geology in Alaska." Four respondents mentioned the utility of the Mineral Industry Report: "The mineral industry report is my go-to source for mineral development activity on a year-to-year basis," while one noted it "is too many years behind," and another was unaware of the report. Respondents also specifically called out geophysical surveys (7 responses), geologic maps (6 responses), DGGS online tools (4), geochemical data (3), the Geologic Materials Center (1), and historical geologic reports (1). One respondent wrote that DGGS "geophysical surveys are the single most important improvement in the last 30 years for Alaskan geology." Online tools that respondents found useful include the publications catalog and GIS-based data portals.

Question 3: "What do you find most useful about the Mineral Industry Report? (You may select multiple options)" (fig. 4). Elements of the annual Alaska Mineral Industry Report that respondents found most useful were the Project and Mine Narratives (71.2%), followed by the Mineral Resources Table (53.9%), Exploration Spending (46.2%), Total Economic Impact

(40.4%), and Estimated Total Employment (25.0%). Five respondents (9.6%) indicated that they don't use the report. Entries to the "Other" category included "Government Revenues" and "it is all very useful." One respondent referred erroneously to the Report's "current reduced state as a 1- or 2-page document"—indicating a lack of awareness as to where to access the full report document.

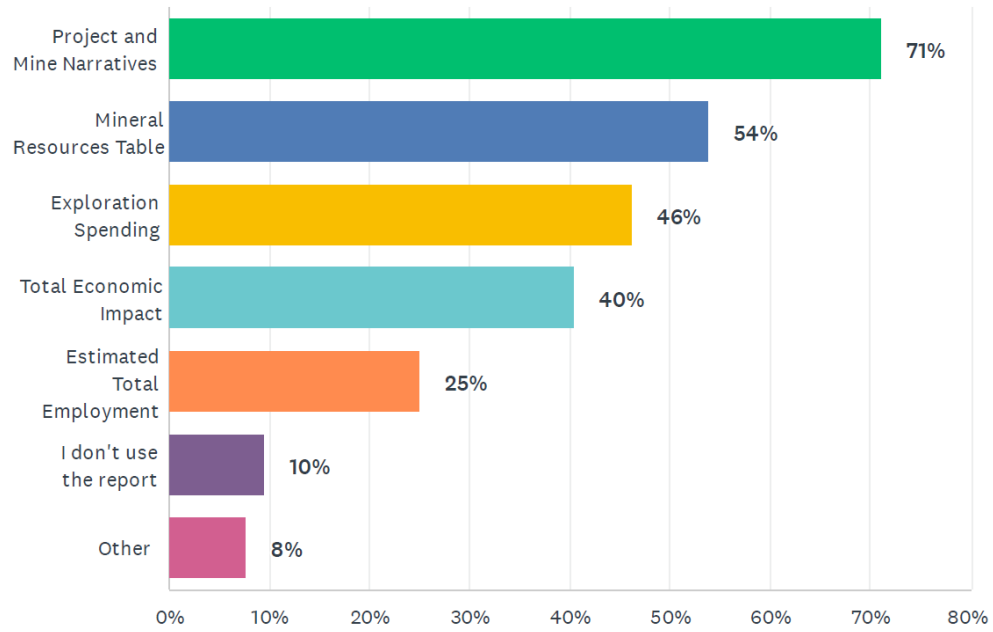


Figure 4. Plot displaying answers to Question 3 regarding Mineral Industry Report elements deemed most useful. Results presented as a percentage of total participants; respondents were permitted to select multiple options.

Question 4: "Assess your awareness of and ability to access DGGS data products" (fig. 5). The vast majority of respondents rated their "awareness of available DGGS data" as high (55.6%) or medium (37.0%); they rated the "ease of finding & accessing data" as high and medium in equal portions (44.2% each). Only four respondents selected a low rating for each category, and two selected "Not Sure" for the "ease of finding & accessing data."

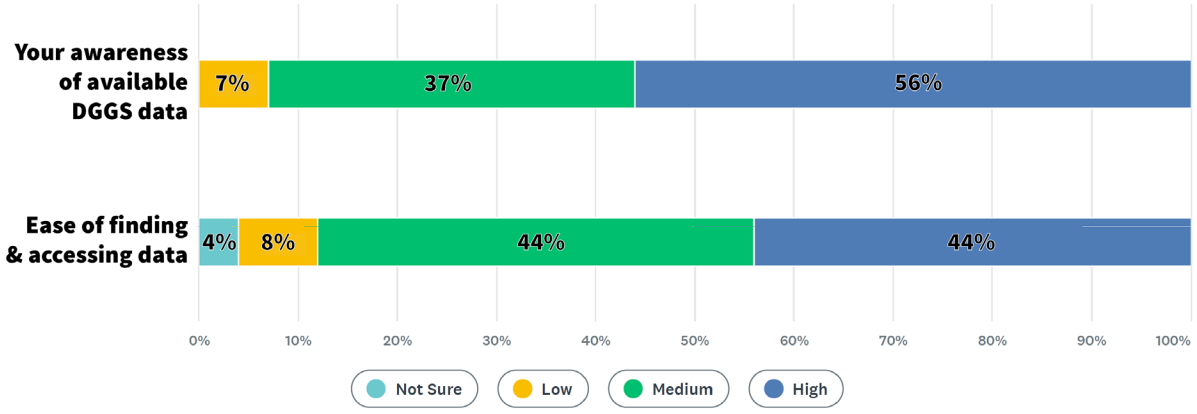


Figure 5. Plot summarizing answers to Question 4, where participants were asked to rate their awareness of available DGGS data as well as the ease of finding and accessing that data. Results are presented as a percentage of total responses.

Opinions on data DGGS should be collecting going forward

Question 5: "What types of geologic data would you like to see from DGGS in the future?" (fig. 6). The types of geologic data that the public rated most highly (majority of responses indicating "high priority") include district- and regional-scale geologic maps, historical and current exploration activity, and stream geochemistry, in order of preference. Rock geochemistry was also rated highly, with a plurality of responses indicating "high priority." Geochronology was rated mostly "medium priority," with a mixed response across ratings. Hyperspectral logs and raw field notes were decisively rated "low priority" by the largest share of respondents.

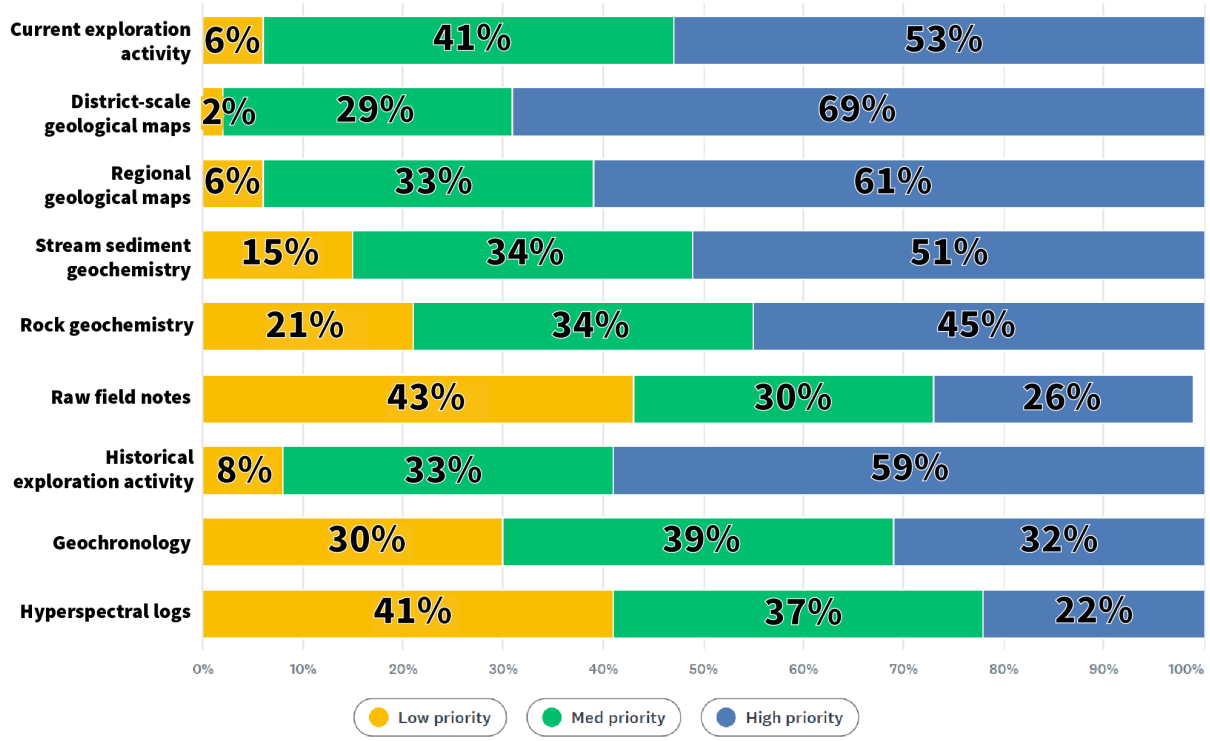


Figure 6. Plot summarizing answers to Question 5, which asked participants to rate, by priority, types of geologic data they would like to see from DGGS in the future. Results are presented as a percentage of total responses. Note: "geo maps" is written as shorthand for "geologic maps."

Question 6: "What types of geophysical data would you like to see from DGGS in the future?" (fig. 7). The types of geophysical data that the public rated most highly (majority of responses indicating "high priority") were aeromagnetic (64% high priority) and airborne electromagnetic (EM) (60% high priority). 3D models from survey data were also rated highly (43% high priority; 30% mid priority). Magnetotelluric, gravity, and radiometric methods were rated decisively as a medium priority by respondents (51%, 50%, and 49% respectively). Airborne hyperspectral received very mixed results with a similar number of votes for each of low (35%), medium (33%), and high (33%) priority.

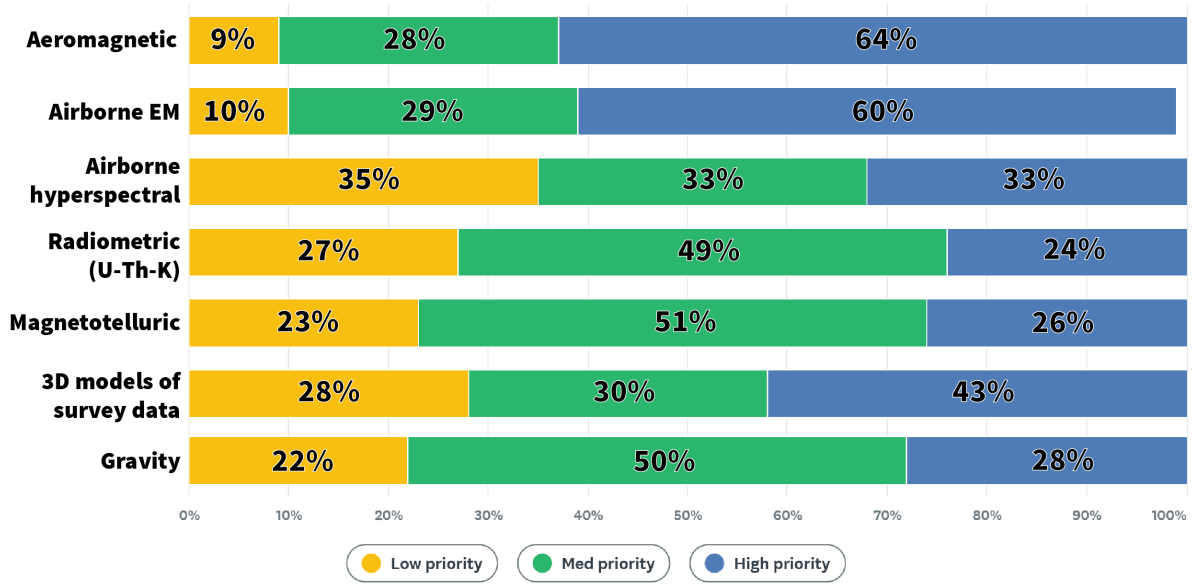


Figure 7. Plot summarizing answers to Question 6, which asked participants to rate, by priority, types of geophysical data they would like to see from DGGS in the future. Results presented as a percentage of total responses.

Question 7: "Feel free to expand upon your ranking or suggest other methods; describe what would be ideal for your exploration program." Out of the eleven respondents who wished to provide further thoughts on data that should be collected, many focused on geophysical methods. Each geophysical data option presented for ranking in Q6 was mentioned by at least one response on Q7—EM was mentioned four times and magnetic data three times. Two responses highlighted that of utmost importance is the quality of collected magnetic/geophysical data—one made a direct comparison to Finland's comprehensive aeromagnetic/EM dataset with 200-meter line spacing, arguing "this should be the standard that Alaska follows." While one respondent expressed interest in "the more novel hyperspectral data," two others expressed skepticism about its utility given the "level of foliage across Alaska." Two respondents said they would like to see seismic data, a technique not included as an option, from DGGS for alteration zones and major geologic boundaries. One response indicated that "the more interpretation the DGGS can do, the better for me," while conversely another suspected that "third party [interpretation] is likely going to happen… regardless of the [interpretation] work done by DGGS."

Other responses included recommendations to work on "[increasing] awareness of new information/research" and "[preserving] exploration data developed by private parties on the public lands." Another requested more "samples for geochemistry, mineralization, and lithology."

Question 8: "What level of interpretation do you value in our publications?" (fig. 8). The majority of respondents valued regional interpretations (66.7%), raw data/databases (62.8%), exploration-focused interpretations (60.8%), and interpretive reports on geophysics (52.9%) in DGGS publications. Nearly half (47.1%) valued ore deposit model reviews while over a third

(35.3%) valued tectonic syntheses and models. In the "other" category, one respondent specified "records… from exploration efforts," noting "the lack of a mineral assessment system in Alaska is a major hindrance to progress when compared to foreign jurisdictions."

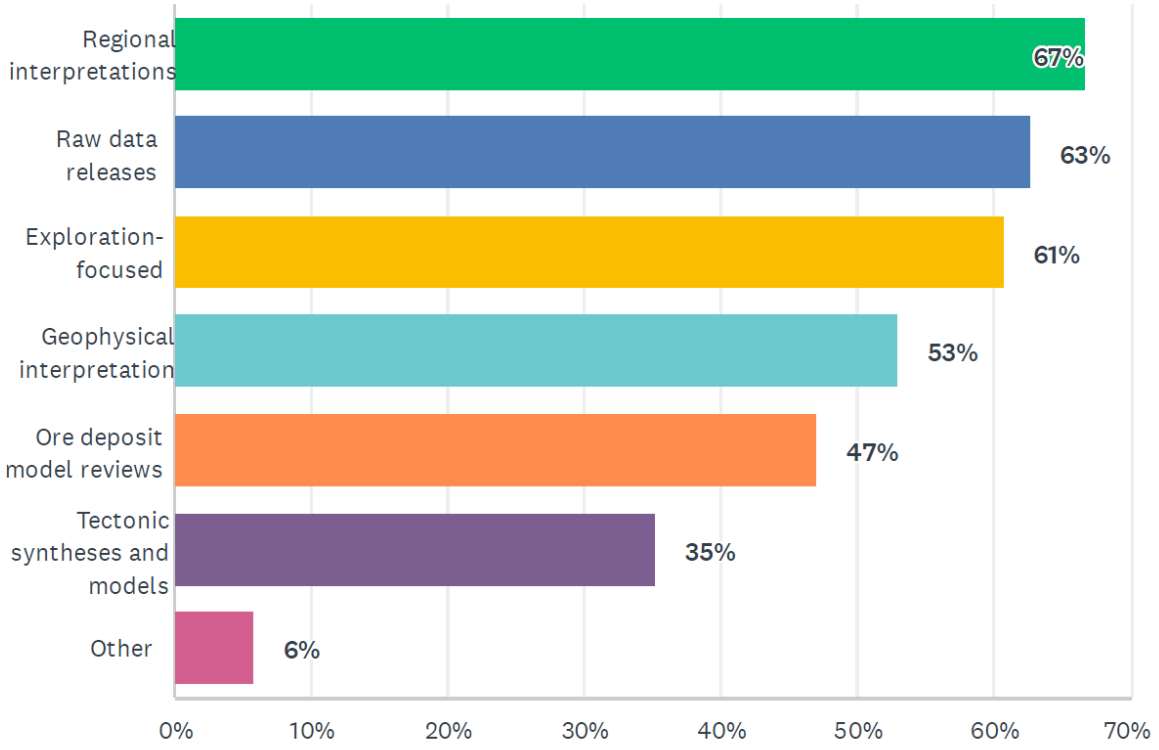


Figure 8. Plot summarizing answers to Question 8, which asked what level of interpretation respondents value in DGGS publications. Results presented as percentage of total responses; multiple selections were permitted.

Question 9: "Please select 3 regions that DGGS should prioritize for geologic mapping and geophysical surveys" (fig. 9). The Eastern Alaska Range came out as the clear favorite (46% of responses), with the Yukon-Tanana Upland second-most popular (40%) and Southcentral Alaska third-most (32%). The Southern Brooks Range, Kuskokwim Mineral Belt, Seward Peninsula, and Western Alaska Range then occupy a similar fourth-place tier (24-28%). Regions which garnered less interest are Southeastern Alaska (18%), Alaska Peninsula (10%), and Northwestern Alaska (8%). Under "Other," respondents specified a preference for areas with existing or planned road access (e.g., the Ambler Road). Others pushed for areas where the economic potential has not yet been "fully recognized," with one pushing to fill the "big data hole in northeast Alaska." One respondent simply responded, "Statewide."

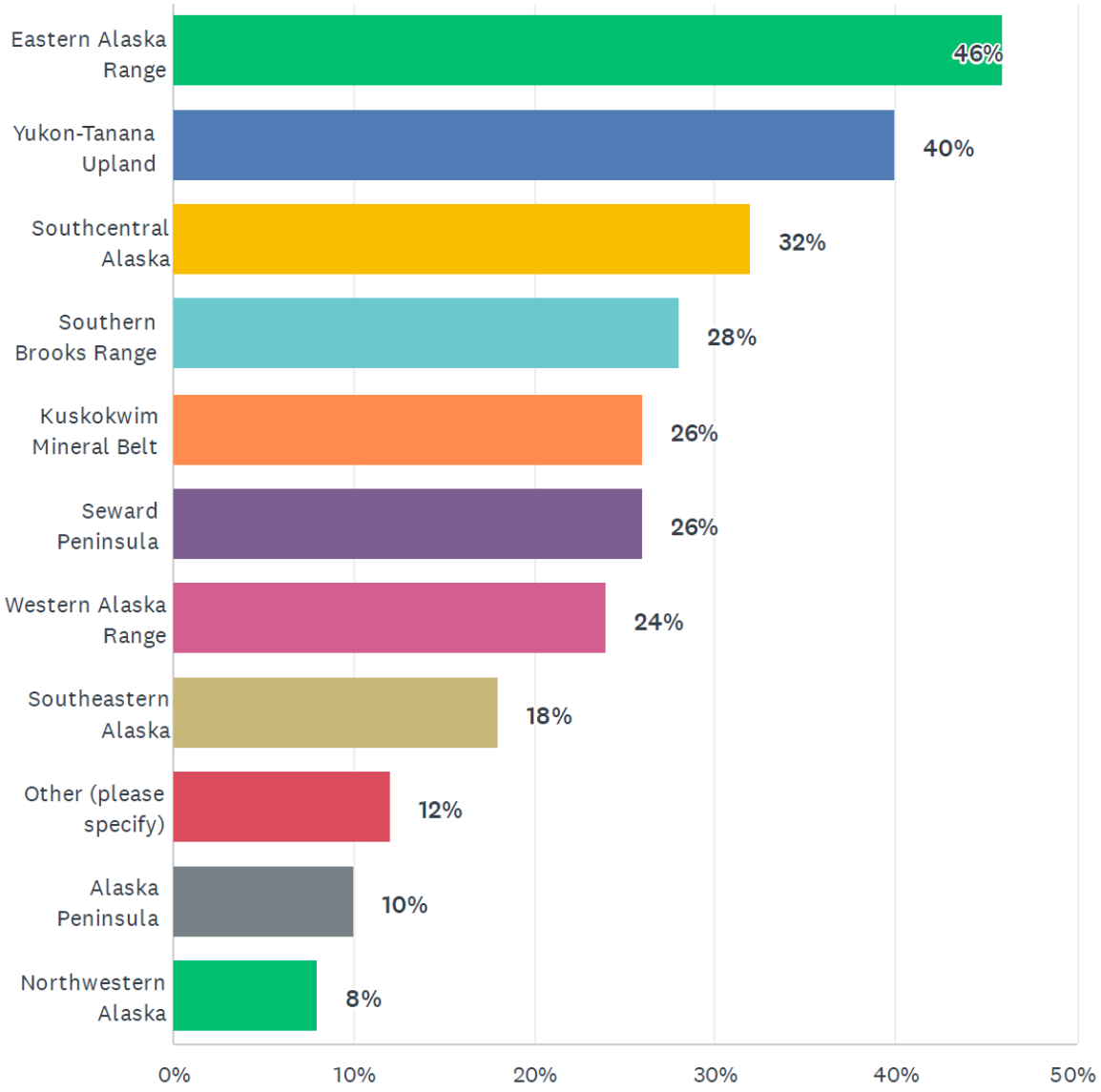


Figure 9. Plot summarizing answers to Question 9, which asked participants to select up to three regions that DGGS should prioritize for geologic mapping and geophysical surveys. Results are presented as a percentage of total responses.

Question 10: "Feel free to expand on your selected regions, including specific mineral districts." Eight participants responded to this question. One highlighted the challenging balance between prioritizing known districts vs. exploring new and emerging districts, summing up that the priority is "to encourage exploration in these areas… lead[ing] to new discoveries and mining investment." Other respondents advocated for regions with "zero or very minor geophysical survey data coverage" (this respondent highlighted specifically the Southern Brooks Range, Eastern and Western Alaska Range, which do in fact have some coverage in DGGS DIGHEM data), regions with "porphyry [copper] potential" including "western Alaska, outside of the Bristol Bay drainage", "areas along the road network" (driving "the most near term production

and exploration"), and the "Talkeetna Mtns and east toward Copper Center." One participant cheered on DGGS's ongoing work in Interior Alaska and called for infilling and finishing that regional campaign. Another simply advocated for "all" regions. One respondent pointed out possible synergies with "the next cycle BLM Resource Management Plans" in the Seward Peninsula, Central and Eastern Interior.

Who are the survey respondents?

Question 11: "What best describes your organization?" DGGS received survey participation from a wide range of organizations—of the options provided, only "Media" was unrepresented. The majority were either involved in Exploration (34%; 20% Greenfields, 12% Advanced, 2% Mine site) or Consultants (20%). Government (12%) and Academic Institutions (4%), Retired (12%), Mine Operators (8%), and ANCSA Corporations (6%) were also represented. Under the category of "Other," a leaseholder and a chemical provider were identified.

Question 12: "How would you describe your role?" (fig. 10). Over half of the survey participants identified as geologists. The next most prevalent categories were Management (16%), Engineers (10%), Business/Finance (8%), Prospectors (6%), and Geophysicists (4%). The "Other" category included two participants who co-identified as geologist and another category (CEO, beneficiation/extraction engineer), and a VP Exploration.

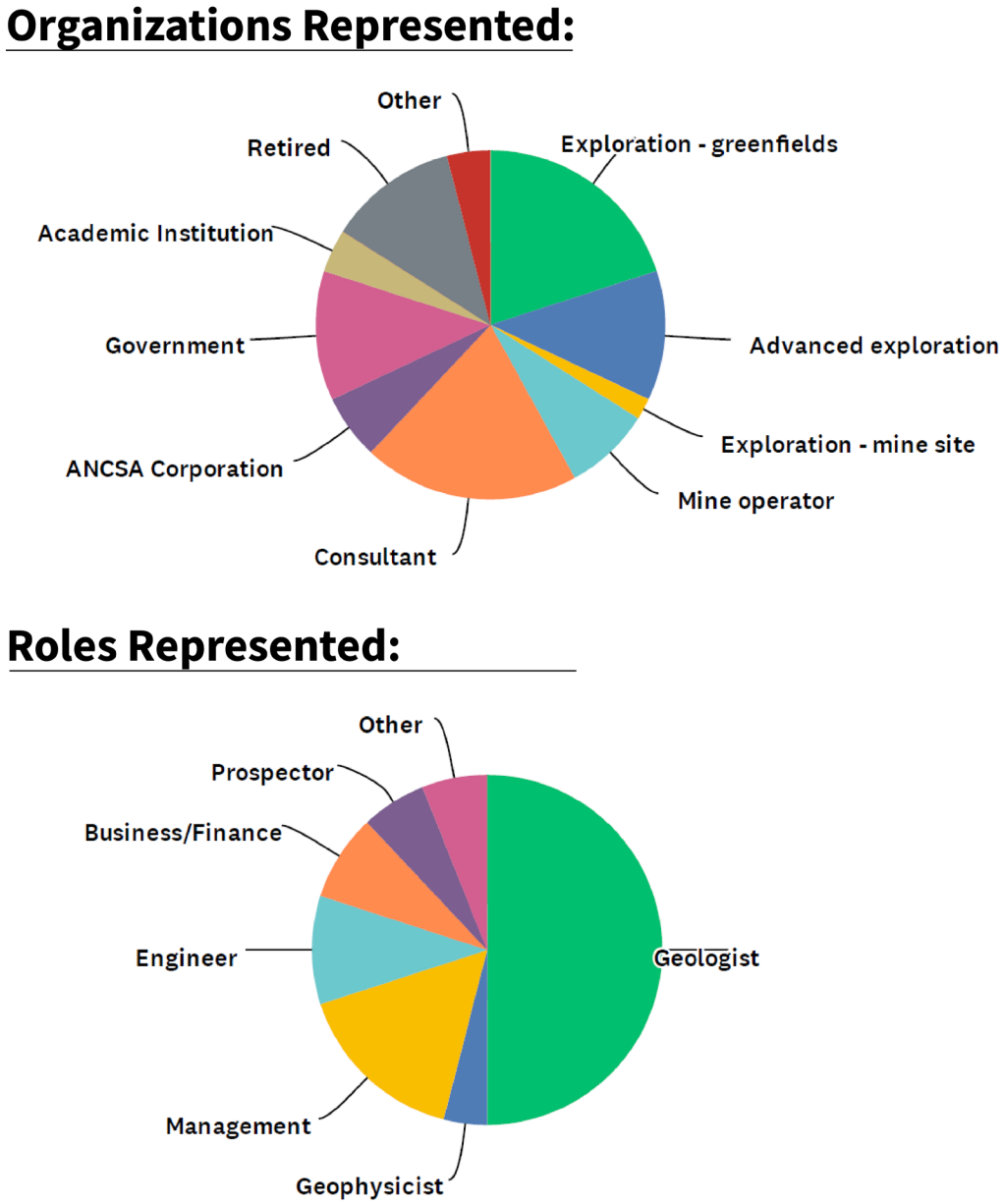


Figure 10. Charts summarizing answers to Questions 11 and 12, displaying the organizations and roles represented by survey respondents.

Question 13: Sixteen respondents commented on the final open-ended question, "Do you have any additional thoughts you would like to share?" Seven of those reiterated, in some fashion, their appreciation for and approval of the work DGGS does to provide data to the public. Three expressed a strong need for a "comprehensive data management vision" for "forfeited or older exploration data including… formerly proprietary information," to include the publication/curation of a data repository. "Far too much data is lost over the years due to its remaining proprietary indefinitely." Two respondents asked for more timely publication of data—one specifically with regard to GIS data while another noted: "interim publications are

helpful." Two respondents specifically mentioned critical minerals/metals; one proffered their "opinion that a lot of federal dollars directed at [critical metals] are not focused on the right priorities" and suggested a "round table with industry and the USGS." One wrote, "continue to integrate with explorationists and production folks." One response expressed concern about aeromagnetic data collection at 400-m line spacing, noting "one could miss significant magnetic features." Further individual responses lauded the Alaska Mineral Industry Report, noted the recent lack of "geochemical surveys," and requested high-resolution LiDAR and satellite images.

DISCUSSION

Geologic Mapping and Data

Unsurprisingly, geologic maps at both district and regional scales are the most in-demand datasets DGGS provides, forming the core of its public data offerings. Survey respondents praised DGGS's geologic mapping efforts and offered few suggested changes. Feedback included a desire to see data on a faster timeline (possibly by means of interim publications) as well as a desire to see more of the state covered as the work continues.

Geochemistry data trends are a high- to medium-priority concern for survey respondents, with stream sediment geochemistry rated higher than rock geochemistry. Geochemistry was mentioned several times across various optional/open-ended responses, with requests for more geochemical samples and surveys to be integrated into DGGS ongoing and future work.

Raw field notes were rated low (43% of respondents) to medium (30%) priority in terms of desirability for future data products. Likely, most end users are interested only in final products that distill relevant information into an easily digestible, well-presented format and do not need ancillary raw data. However, for those digging deeper or producing updated geologic maps and interpretations (including future generations of geologists at DGGS), raw field notes may provide key context not yet realized. Twenty-six percent of respondents still consider raw field notes to be high priority. For these reasons, DGGS will continue to publish raw field notes as supplemental data within larger publications.

Hyperspectral logs were likewise rated low (41% of respondents) to medium (37%) priority, with only 22% of respondents rating them a high priority. DGGS recently began its hyperspectral program centered around its core scanning capability at the Geologic Materials Center, with the scanner going online in June 2026 and data to be released soon. Because this is a completely new data type available from the State of Alaska, DGGS is developing outreach and educational materials to raise awareness of the utility of hyperspectral core scan data, which may increase industry interest.

The Geologic Materials Center (GMC) was rated lower than all other DGGS resources listed in the survey, with only 33% of respondents indicating it had been useful in their work. As the DGGS hyperspectral program grows and the data finds use cases in industry, awareness and

use of GMC resources will likely increase for the mineral industry. DGGS will thus integrate communication about GMC resources into its hyperspectral outreach efforts.

Mineral Industry Report

Survey questions about the annual Alaska Mineral Industry Report were designed to determine whether various aspects of the report were more useful than others to the intended audience. Survey results indicate that most components of the report were useful to respondents. Report authors found it surprising that project narratives were deemed most useful, as these narratives are generally readily available on company websites and other sources. Also surprising was the lowest ranking for total industry employment, as those data are not readily available and must be compiled from many sources, including confidential company responses.

One response indicates some confusion as to how to access the full Mineral Industry Report—referring erroneously to its "current reduced state as a 1- or 2-page document." This respondent possibly viewed the yearly summary of Alaska's mineral industry released by the Alaska Miners Association for DGGS's detailed report. DGGS will work with AMA to be consistent in messaging and disambiguation of these reports.

While survey respondents rated the Mineral Industry Report highly, several noted the current lag in publication—the 2022 industry report was published in 2026. DGGS recognizes the reporting lag and is working to bring the report up to date.

Geophysical Data

The most highly valued geophysical datasets (aeromagnetic and airborne EM) are those DGGS is already most involved in collecting, indicating general alignment of industry and DGGS geophysical priorities. Mixed survey responses on other techniques, such as hyperspectral data, could reflect respondents' varying knowledge of the method, differing levels of optimism, and/or different levels of utility across industry use cases. The survey responses here may be largely a reflection of the types of public data industry is most familiar with, through the decades of magnetic and EM survey work at DGGS. Hyperspectral remote sensing depends heavily on rock exposure and is limited by cloud and snow cover, reducing its utility in polar regions and areas with extensive vegetation cover.

The survey results indicate strong interest in "3D models from survey data," with most respondents saying they would value "interpretive reports on geophysics." This would benefit smaller mining companies and startup operations, which do not have the broad interpretive resources of larger corporations. One respondent noted, "I'm just a geologist, so the more interpretation the DGGS can do, the better for me and other non-geophysical types."

This feedback validates the DGGS geophysics program's goal of incorporating more modeling and interpretive studies into publications. The challenge will be determining appropriate scopes of work so models can produce useful insights without introducing too much risk of misinterpretation. To do so, DGGS must effectively quantify and communicate

uncertainties associated with the models produced and ground them in the realities of the local geologic setting.

Two respondents specifically mentioned line spacing and data quality for aeromagnetic surveys, advocating for 200-m line spacing as used for comprehensive survey coverage in Finland. This validates the DGGS geophysics program's recent decision to move to "Rank 1" aeromagnetic data acquisition with the EarthMRI program (starting with the 2026 survey season), providing 200-m line spacing and tight terrain following for the best possible aeromagnetic data collection currently possible at the regional scale.

Regions to Focus on

The regions of Alaska to prioritize in future DGGS work that were most popular with respondents—Eastern Alaska Range, Yukon-Tanana Upland, and Southcentral Alaska—also tend to be the most accessible from the road system. DGGS has done extensive work in the Yukon-Tanana Upland in recent years, including geophysical surveys and geologic mapping campaigns that have been wrapping up.

While the results from this survey provide a general sense of where industry would like to see more mapping data, the survey was not designed to collect the reasons for prioritizing those areas. In future public survey efforts, DGGS plans to seek out details on mineral systems of interest and perceived relevant data gaps for specific regions.

RESULTING ACTION ITEMS FOR DGGS MINERALS SECTION

- Continue high-quality work in geologic mapping and geophysical surveys.
- Design future public surveys to gather more detailed information on respondent motivations and mineral systems of interest and use this feedback to inform the selection of regions for future work and guide DGGS strategy for regional campaigns.
- Continue to provide a comprehensive view of the Alaska mineral industry on an annual basis.
- Work to bring the annual Alaska Mineral Industry Report up to date.
- Work with the DGGS hyperspectral program to raise awareness in the Alaska mineral industry about hyperspectral data and its utility.
- Prioritize Rank 1 aeromagnetic data acquisition for future regional aeromagnetic geophysics work.
- Work towards producing and publishing interpretive geophysics data products, providing better value for companies without in-house geophysics capability. This may include:
    - The production of resistivity-depth models for historic airborne frequency-domain electromagnetic surveys acquired by DGGS.

- The production of magnetic susceptibility models in 2D and/or 3D for select aeromagnetic survey data.
- Working closely with the geologic mapping team to interpret geophysical data and contribute to reports based on results of said work.

ACKNOWLEDGMENTS

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