

GDA Implementation Subcommittee Report

National Geospatial Advisory Committee Meeting April 11, 2023

Review of GDA Implementation Subcommittee

Membership:

• Cy Smith (Chair), Maggie Cawley (Vice-Chair), Nadine Alameh, Byron Bluehorse, Garet Couch, Tony LaVoi, Tim Trainor

Subcommittee Role:

- Identify agreed upon outcomes from GDA implementation and measure implementation going forward based on those outcomes.
- Provide high level evaluation of GDA implementation toward outcomes; recommendations for improvements to be incorporated as NGAC input to FGDC GDA Report to Congress next spring.
- Develop more detailed evaluation and recommendations regarding GDA implementation as part of a template for such a biennial evaluation going forward.
- Conduct an evaluation of NGAC's role as authorized in the GDA and provide recommendations for improvements in the implementation of that role.



Contents:

- Introduction
- Aspirational Outcomes
- Progress Towards the Aspirational Outcomes
- Need for Improved NSDI Governance
- Need for Improved Data Management
- Need for Reporting Improvements
- Recommendations
- Summary and Next Steps



Aspirational GDA Outcomes

- 1. Make NSDI data available to all stakeholders, including Congress, to improve and support policy making and operations, respond to national priorities and circumstances, and support the national economy. The return on the Federal investment in the NSDI must be realized in a substantial way to justify continued investment, principally through improved Federal agency operations. Similarly, the return on investment for all stakeholders, including Congress, must be substantially realized to justify continued investment, meaning that improvements to operations and policy making by all stakeholders must be shown. As such, the technology, policies, and standards to promote geospatial data sharing must be recognized as a key part of the necessary investment.
- 2. Develop and foster meaningful partnerships with all NSDI stakeholders. Specific stakeholder communities are identified several times in the GDA. Partnerships among and between all stakeholder communities are intended to increase collaboration in development and maintenance of the NSDI across the entire country. These partnerships must be mutually beneficial to all parties involved. Related to this outcome and the first noted above, FGDC could work with the stakeholder community to develop examples (climate, infrastructure, business opportunities, government programs, etc.) that show the value of ready-for-use data and demonstrate the value of greater collaboration across agencies and among national geospatial stakeholders.



Aspirational GDA Outcomes

- **3.** Complete and maintain NSDI data content nationwide. The usefulness of the NSDI is severely diminished if the content is not complete and maintained nationwide. It is critical going forward to understand how to define and measure completeness of NSDI data content. It is likely that the content does not need to be of the same accuracy nationwide for all data sets. It is also likely that the periodicity (temporal timeframe) of all data sets nationwide does not need to be the same.
- **4. Improve management of NSDI data**. NSDI data is derived from multiple sources that include all stakeholders identified in the GDA. If the NSDI data is to be properly managed, it must be collaboratively managed.



Aspirational GDA Outcomes

- 5. Improve accessibility and availability of NSDI data. This means the FAIR principles must be realized to optimize the openness and reuse of the NSDI data. In combination with a focus on standardization, maintenance and interoperability, FAIR principles will significantly improve the usefulness of the NSDI.
- 6. Ensure NSDI compliance to established data standards. This is called out directly in the GDA now and will result in reusability of the NSDI data, following the FAIR data principles. Content and exchange standards and criteria should be developed and maintained for each NSDI data set.



Need for Improved NSDI Governance – Recommendations:

- 1. The FGDC should participate in ongoing efforts to design a national organizational framework that will facilitate greater collaboration and coordination on the NSDI. All stakeholders would be represented in the design process and in the national organizational framework. The design process should be informed by the results of previous FGDC NSDI governance studies and activities.
- 2. The FGDC should re-examine the process for identifying NGDAs. NGAC recommends a tiered approach that would identify NGDAs based on priority, scope, and value of the data.



Need for Improved Data Management – Recommendations

- 3. FGDC member agencies should define and agree on comprehensive best practices and capabilities required to establish, enable, and sustain mature data governance and management programs for geospatial data.
- 4. FGDC member agencies should comply with all applicable international, national, sector, and voluntary standards and best practices for making geospatial data, information, and assets Findable, Accessible, Interoperable, and Reusable (FAIR), to ensure maximum use and value from agency geospatial programs.
- 5. NGAC and FGDC leadership should institute a comprehensive review and evaluation of the business case and existing governance and management practices of the GeoPlatform to ensure alignment with GDA requirements and benefit to the national geospatial community of users and the larger user community dependent on geospatial information.



Need for Reporting Improvements – Recommendations

- 6. The FGDC should work with Congress to modify the GDA reporting requirements to include criteria for collaboration, governance, benefits, and outcomes, shifting the focus from reporting about general process-oriented compliance to an outcome-oriented reporting process that identifies and encourages collaboration among geospatial data providers, data managers, disseminators, and users of geospatial data. This kind of reporting would require explaining how an agency has coordinated with non-federal entities, with the NGDA elevation theme annual reports used as an example.
- 7. The FGDC should require agencies to conduct full baseline reports every 2 years, with any change to particular datasets reported annually, working with Congress to modify the GDA for this purpose if necessary. Significant changes by an agency in collecting, managing, and disseminating geospatial information rarely occurs during a single reporting period. Establishing a baseline often reflects a similar state of progress with negligible changes from year to year. Having agencies report on annual changes within a timeframe that the agency specifies for particular data sets and activities before requiring a subsequent baseline full report adds to efficiency in reporting.



Need for Reporting Improvements – Recommendations

8. The FGDC should work with Congress to change GDA requirements to have each respective Inspector General conduct program evaluations of an agency's performance every two years rather than full audits. Full audits should be only done every four years, not every two years as currently required. While external reviews of geospatial data responsibility of an agency are beneficial, the extent to which the review occurs will have an impact on limited agency resources. This change will meet the intent of external reviews while potentially reducing resource requirements for both the agency and its Inspector General's Office.



Summary and Next Steps

Through this evaluation process, the subcommittee recognized that to fully understand the impacts of the GDA, further exploration would be beneficial. The NGAC will undertake a more in-depth review of GDA implementation, again with a focus on outcomes, in the coming year to include an evaluation of NGAC's role as authorized in the GDA.



Discussion/Questions?

Action: NGAC consideration for approval of paper

