

Interpreting and Applying the FAIR Principle Checks

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Agenda

- **Overview:** Background and Key Objectives of the “FAIR Assessment” Project at the USGS
- **Methodology:** Considerations and Strategy for Interpreting and Applying the FAIR Principles
- **Lessons Learned (so far):** Preliminary Results and Challenges Encountered
- **Q&As**

Key Takeaway

Being able to “localize” FAIR is a useful first step, and being able to converge with the community will help FAIR grow.

Overview:

Background and Key Objectives of the “FAIR Assessment” Project at the USGS

USGS “FAIR Assessment” Project

- **Background:**

- The project is a part of a larger effort to understand the maturity of USGS data.
- The project is a pilot program that is currently in progress and is designed with the intention to be scalable.

- **Key Objectives:**

- To understand the available approaches/options for assessing (meta)data’s FAIRness per the FAIR Principles.
- To learn what potential results and challenges there might be when evaluating the USGS (meta)data’s FAIRness.
- To generate viable strategy and actionable steps for improving the FAIRness of the USGS (meta)data.

Methodology: Considerations and Strategy for Interpreting and Applying the FAIR Principles

Process Summary

- **Collected Available Resources from the Community:**
 - As of February 2020, the project team was aware of the following five efforts for developing FAIR implementations:
 - DataONE FAIR Checks
 - DataONE FAIR Quality Suite
 - Research Data Alliance FAIR Data Maturity Model Indicators
 - FAIR Metrics
 - Go FAIR
- **Consolidated the Available Resources:**
 - A high-level crosswalk was performed to determine the unique “checks” from the above five resources.
 - Findable: 33
 - Accessible: 22
 - Interoperable: 30
 - Reusable: 25
- **Assessed Sample Datasets from USGS Using the Unique “Checks”.**

Lessons Learned (so far): Preliminary Results and Challenges Encountered

Current Project Status

- **Preliminary Results:**

- The sampled datasets showed promising characteristics in FAIRness according to the unique “checks”.
 - Findable: 73%
 - Accessible: 68%
 - Interoperable: 53%
 - Reusable: 68%

- **Challenges Encountered:**

- The “newness” of the resources.
- Assessment focus: metadata versus data.
- Methodology: quantitative (machine) versus qualitative (human).

- **Next Steps:**

- Further define the unique checks using the USGS’ context.
- Apply the checks to additional USGS datasets.
- Continue to engage with the community to learn about the FAIR implementation development.

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Thank You!

Questions? Feedback?

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