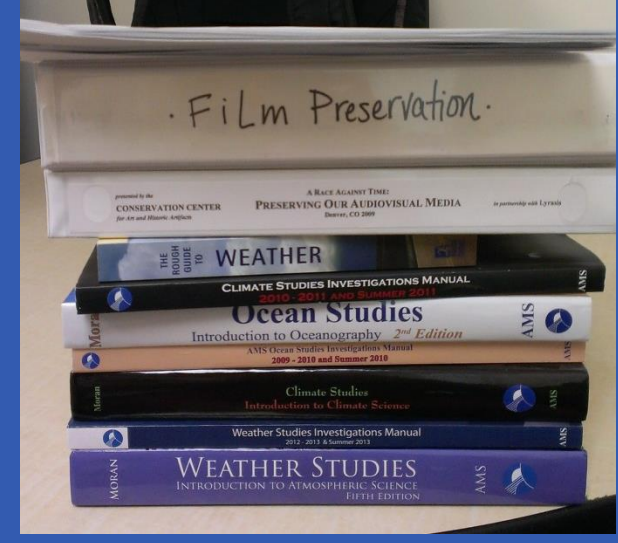# Unlocking GATE:
Gaining Access to Analog Data in a Digital World

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Step 1: Gain Intellectual Control

- Read project documentation
- Internalize names, dates, and types of data collected.
- Interview Subject Matter Experts (SMEs).

Step 2: Item Level Inventory

- Record all information on each label for every item.
- Spot check items to ensure labels are correct.

Step 3: Organize

- Create datasets in digital inventory by grouping like items together using advice from SMEs.
- Move physical items into the newly created data groupings.

Step 4: Standardize

- Apply standard titles, names, and day ranges using advice from SMEs.
- Re-create missing metadata from documentation.

Step 5: Appraise/Select

- Evaluate for duplicates, missing items, or items needing to be prioritized for preservation.
- Decide which items, if any, to dispose of with the help of SMEs.

Step 6: Assign Identifiers

- Choose an identifier scheme, working with existing internal standards if applicable.
- Assign dataset-level and item-level IDs. Attach identifiers to each item.

Step 7: Ingest/Digitize

- Make inventory accessible for user community.
- Digitize, if desired.
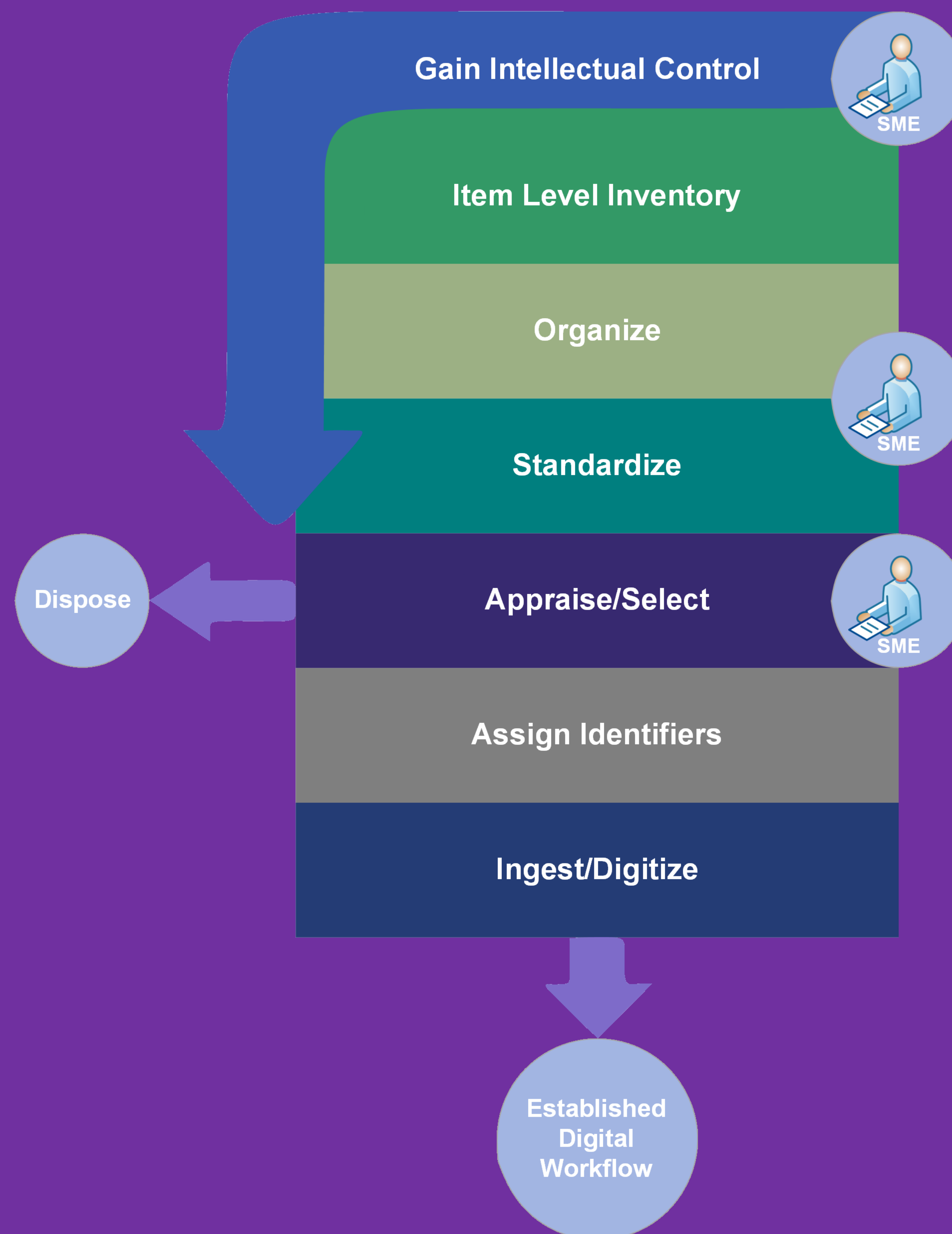- New digital objects can proceed into established workflow.

Overview of GATE

The **G**lobal Atmospheric Research Program's **A**tlantic **T**ropical **E**xperiment was a 3 month-long international field project conducted in 1974 to understand more about the role of scale interaction in the evolution of tropical weather patterns and hurricane formation. It included participation of 72 countries and over 50 data-collecting platforms (13 aircrafts and 40 ships).

Overview of This Project

With responsibility for the stewardship of GATE data extending into 2050, the goal of this project was to make GATE data holdings accessible online and to recommend further steps. The project also investigated the application of born-digital data curation practices to analog data holdings and examined the potential overlap of archival principles to these practices.
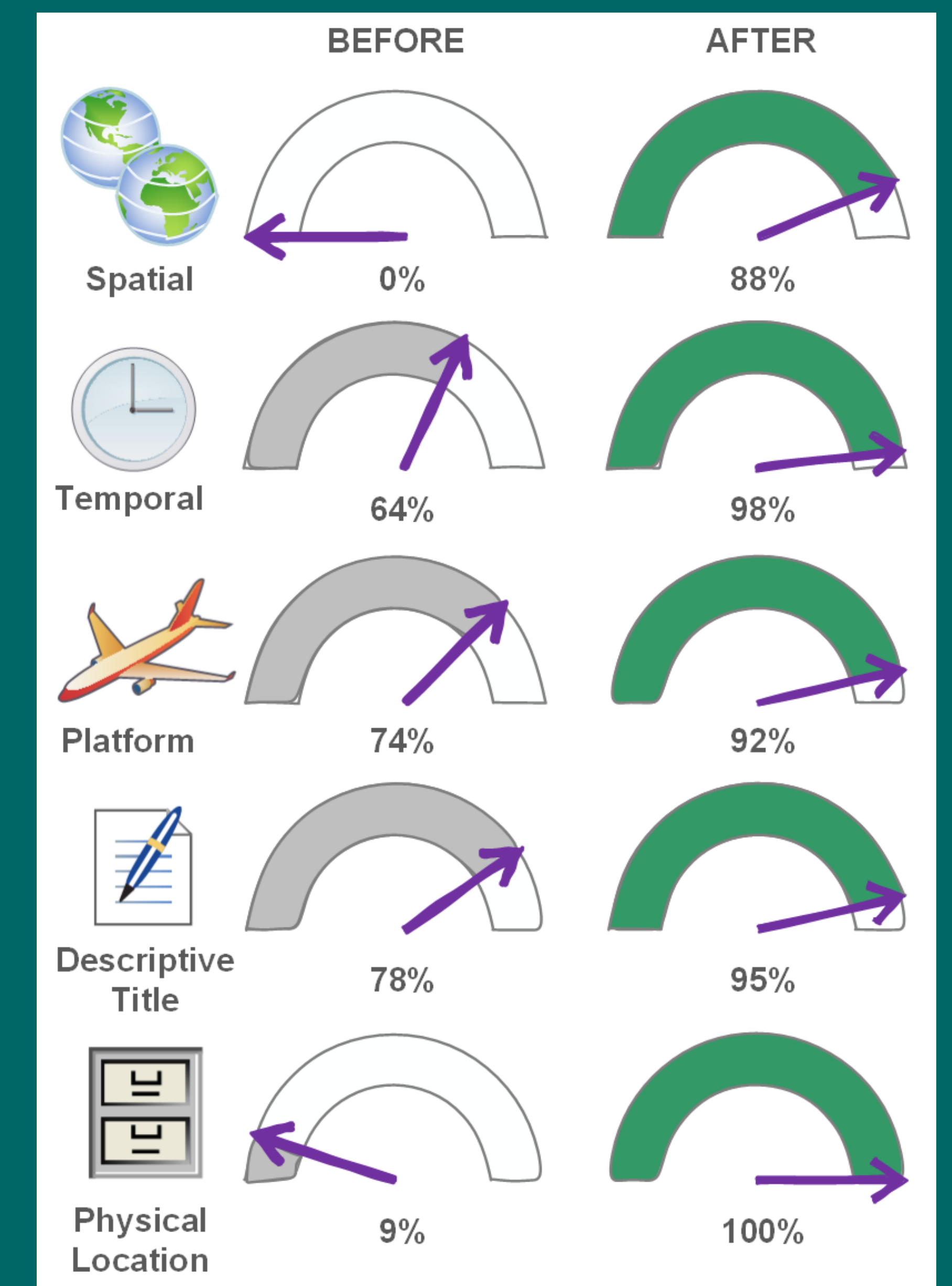
Data Rescue Process

Gain Intellectual Control — SME

Item Level Inventory

Organize

Standardize — SME

Appraise/Select — SME

Dispose

Assign Identifiers

Ingest/Digitize

Established Digital Workflow

Results

Metadata Improvements for Increased Access

Because a large portion of the project focused on re-creating and standardizing metadata, five essential elements for quality metadata were measured for improvement. The graphic outlines the percentage of items that included these characteristics in the metadata prior to the data rescue process versus the percentage of items that included these elements in the metadata after re-creation.

	BEFORE	AFTER
Spatial	0%	88%
Temporal	64%	98%
Platform	74%	92%
Descriptive Title	78%	95%
Physical Location	9%	100%

Data Holdings

Chart 1: 20, 16, 119, 442, 637, 81

- Paper
- 16mm
- Microfilm
- 35mm
- Tapes
- Slides

Chart 2: 79, 57, 615, 272, 20, 271, 1

- Aircraft
- Land
- Upper Air
- Surface
- Radar
- Satellite
- Misc

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