

# Toward an Improved Understanding of Research Data Management Needs

## The **DART** Project and Repository Services

### The Project

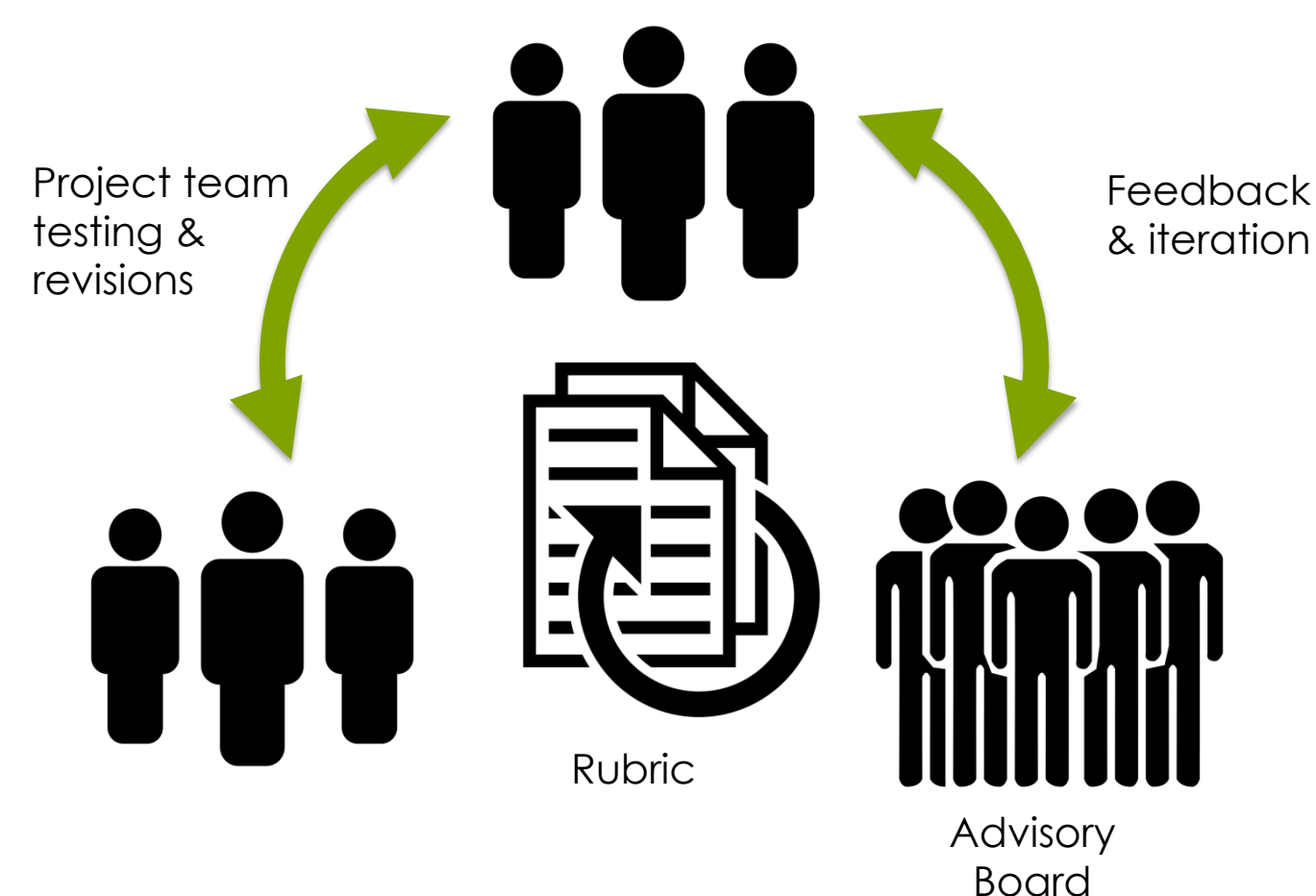
A multi-institutional project to develop and use an analytic rubric to evaluate data management plans that have been submitted to the National Science Foundation (NSF) at five academic research institutions.

### Outputs

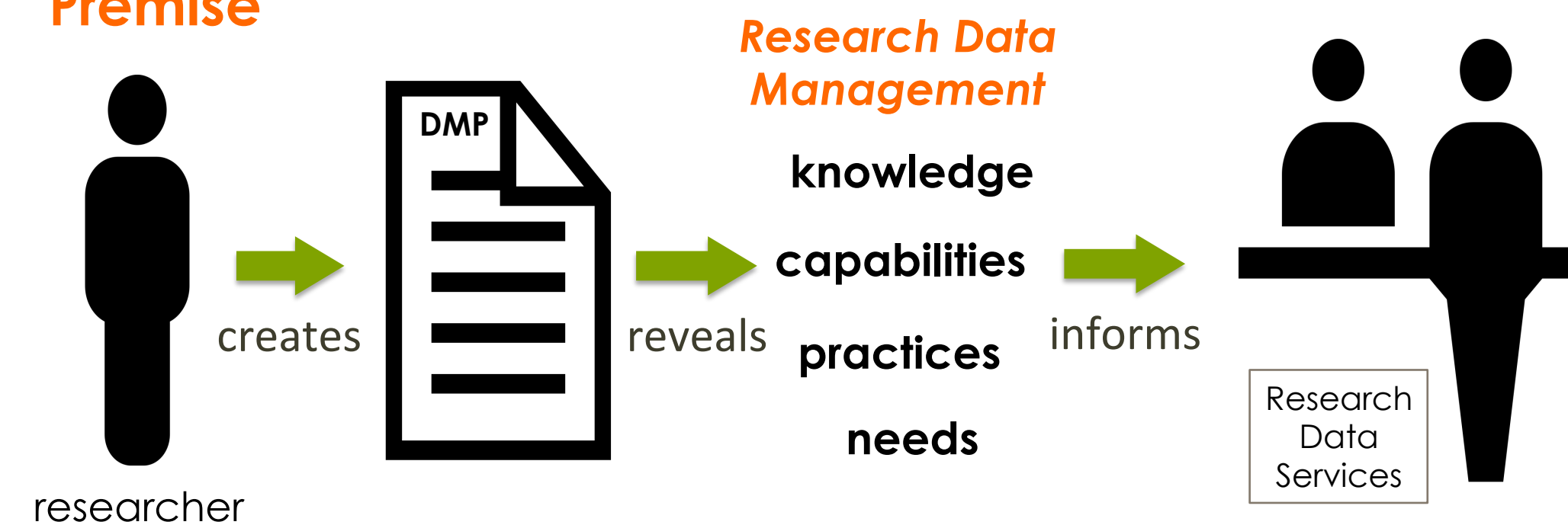
- 1) An **analytic rubric** to standardize the review of data management plans as a means to inform research data services at academic institutions and other research organizations.
- 2) A study utilizing the rubric that presents the results of **data management plan analyses** at five universities.

### Project Process and Progress

- 1) DMPs were acquired from each of the six institutions (Oregon State, U. Michigan, U. Oregon, Georgia Tech, and Penn State).
- 2) The team prototyped, tested, and refined the rubric.
- 3) We developed a survey using questions posed throughout the rubric and implemented it via Qualtrics.
- 4) Through the survey, we will use the rubric to review and analyze 100 DMPs.
- 5) Georgia Tech and Penn State have reviewed 50 each thus far and in this poster report briefly on the analysis.



### Premise



### Rubric Excerpts – Questions on Sharing & Archiving

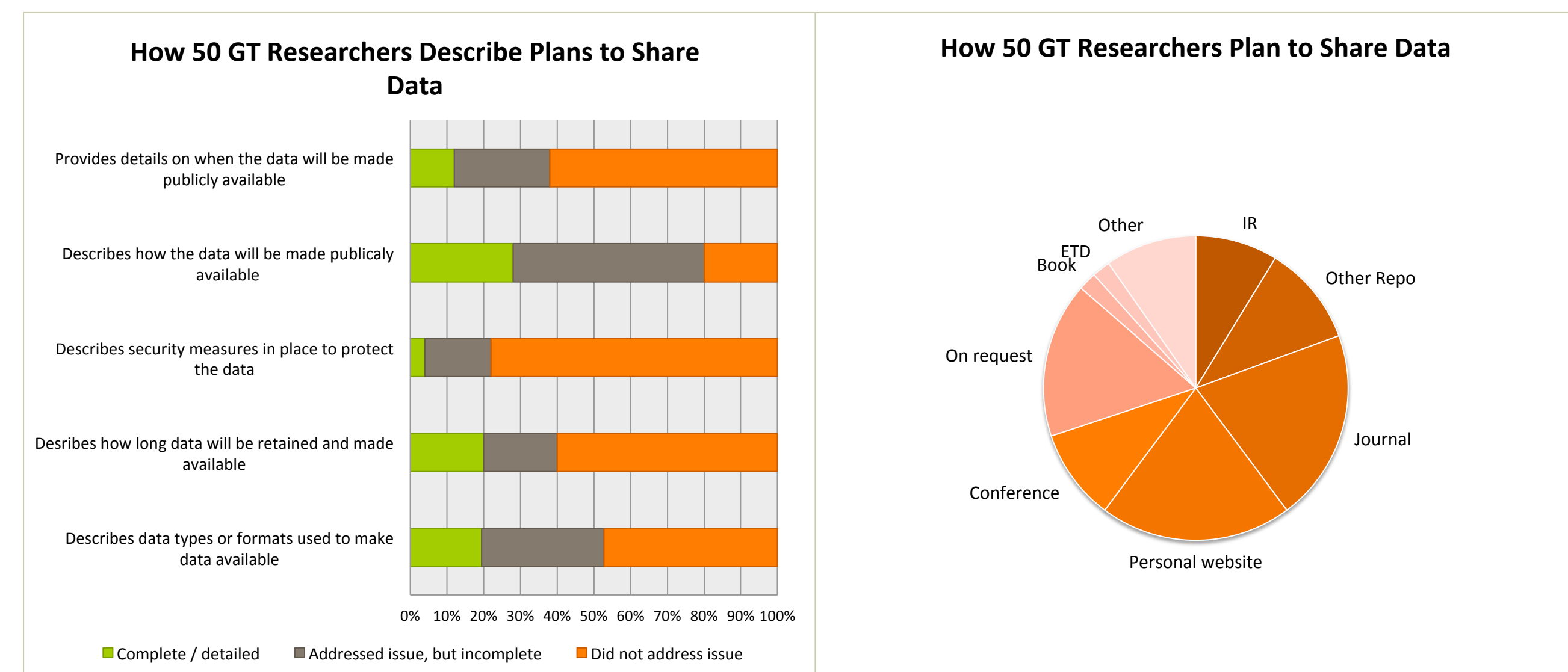
Q12. Section 3: Policies for access and sharing			
	Performance Level		
	Complete / detailed	Addressed issue, but incomplete	Did not address the issue
Provides details on <b>when</b> the data will be made publicly available <i>All directorates</i>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Describes <b>how</b> the data will be made publicly available <i>All directorates</i>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Describes <b>security</b> measures that will be in place to protect the data from unauthorized access <i>All directorates</i>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Describes <b>how long</b> the data will be retained and made available to people outside of the project <i>CISE; EHR; ENG GEO AGS; MPS AST; MPS PHY; SBE</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Describes <b>data types or formats</b> that will be used for <b>making data available</b> . <i>CISE; ENG; EHR; SBE; BIO; GEO OCE; GEO EAR SGP; GEO AGS; MPS AST; MPS CHE</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17. Section 5: Plans for data archiving and preservation of access			
	Performance Level		
	Complete / detailed	Addressed issue, but incomplete <i>If plan mentions a repo but doesn't describe this info, pick this</i>	Did not address the issue
Indicates <b>whether or not</b> the data will be archived <i>All directorates</i>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Describes how <b>access</b> to the archived data will be <b>maintained</b> <i>CISE, EHR, GEO AGS, GEO EAR, MPS AST, MPS CHE</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Describes <b>plans for archiving</b> and preserving digital data <i>BIO, CISE, EHR, ENG, GEO AGS, GEO EAR, GEO OCE, MPS AST, MPS CHE, SBE</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identifies a <b>time frame</b> for how long data will be archived <i>CISE, ENG, SBE, MPS CHE, GEO AGS, MPS AST, GEO EAR SGP</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Plan discusses the <b>types or formats</b> of data the investigator expects to <b>retain in their possession</b> <i>CISE, ENG, SBE</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### DMP Reviews: A Brief Notes on Recurring Trends

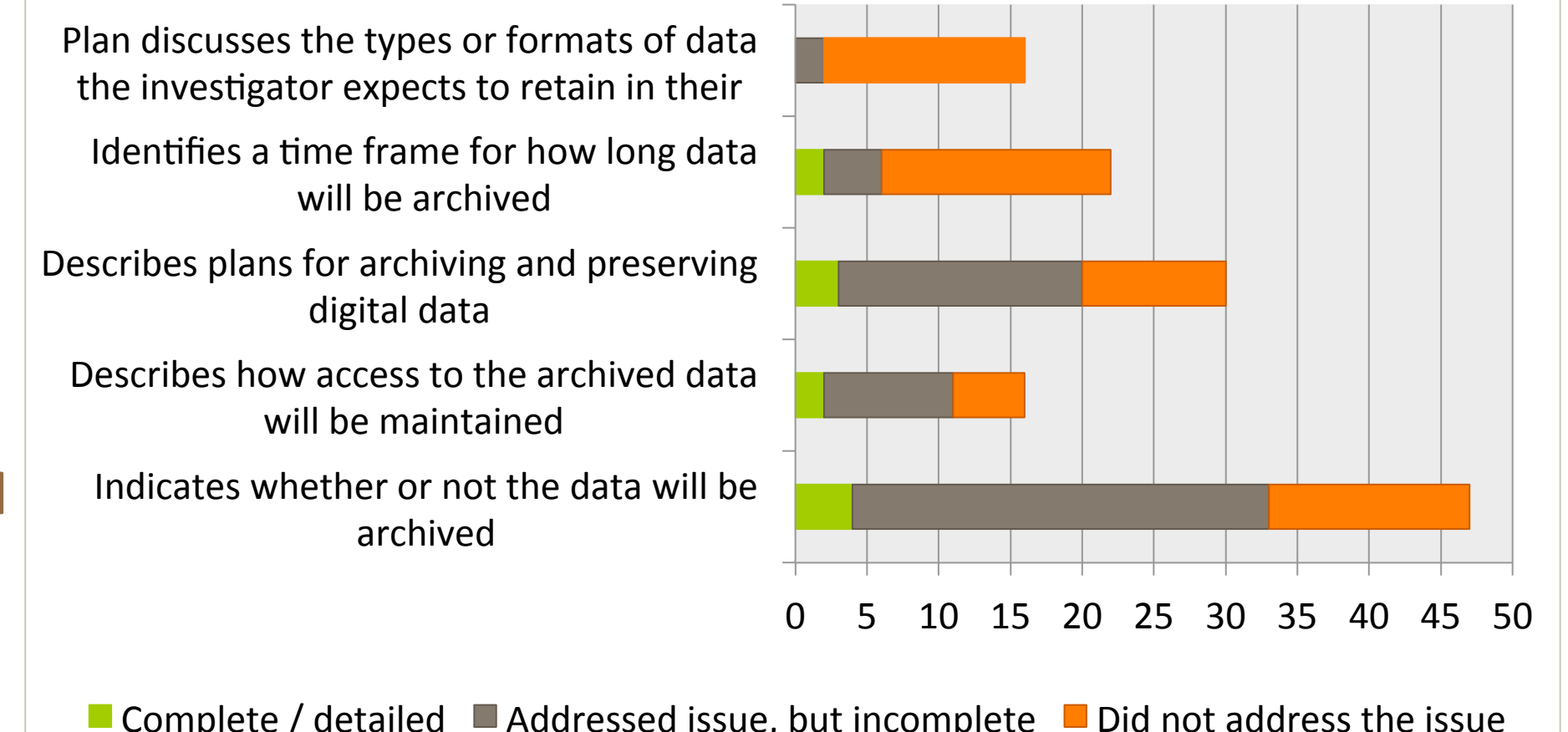
Project team members at Georgia Tech and Penn State reviewed 50 DMPs each for awarded NSF proposals. Among the trends observed (perhaps not surprisingly): 1) Minimal mention and understanding of metadata and metadata standards; 2) An overwhelming yet restrictive view of data sharing as publication of research results in a journal; 3) Confusion between archiving and keeping data on a computer or a server; and 4) Almost nonexistent awareness of the library as a locus of support for data management. The implications for improving and expanding repository services provided by academic libraries are telling, particularly in terms of instruction, outreach, and other learning opportunities whether for one's own institution or for other data repositories and centers.

### Results from Georgia Tech and Penn State on Data Sharing & Archiving



Georgia Tech researchers' ideas on data sharing, as reflected in a review of 50 DMPs.

### Data archiving from the perspective of Penn State researchers, via a sample of 50 reviewed DMPs.



**Project Team**  
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Data management plans as **A Research Tool**  
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**OR2015 | June 8-11**  
**Indianapolis, IN**

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