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## 2022 PTIE Conference Abstract

**Title:** Accelerating Public Access to Research Data (APARD): A Guide for Change in Research Universities

**Authors:** Kacy Redd\*, Sarah Nusser, Tobin Smith, Emily Miller

**Institution:** Association of Public and Land-grant Universities, Iowa State University, Association of American Universities

**Address:** Washington, District of Columbia, 20005, United States of America

**Corresponding Author contact information:** kredd@aplu.org

### Abstract:

With funding from the National Science Foundation (NSF# 1939279) and National Institutes of Health, APLU and AAU released a Guide to Accelerate Public Access to Research. The guide is designed to help institutions develop and promote systems to support sharing of research data. It also contains information concerning the infrastructure and support that may be required to facilitate data access, and it offers specific examples of how various institutions are approaching challenges to sharing research data and results. The guide is based upon previous workshops and conferences that convened teams from campuses, including two National Summits held in February 2019 and March 2020.

Summary Information:

<https://www.aplu.org/news-and-media/blog/aplu-and-aaus-accelerating-public-access-to-research-data-initiative>



# Accelerating Public Access to Research Data (APARD)

## *A Guide for Change in Research Universities*

*July 26, 2022*

Kacy Redd, Associate Vice President, Research and STEM Education, Association of Public and Land-grant Universities

# Overview

- Why data access is important (high-level language)
- Past AAU & APLU data access activities
- *Guide to Accelerate Public Access to Research Data* (process mechanics/culture change)
- Achieving cultural change to accelerate data access (meta process mechanics)
- Challenges in accelerating data access

# Who We Are



The Association of American Universities (AAU) is an association of 63 U.S. and two Canadian leading research universities that transform lives through education, research, and innovation. AAU member universities collectively help shape policy for higher education, science, and innovation; promote best practices in undergraduate and graduate education; and strengthen the contributions of leading research universities to American society.



The Association of Public and Land-grant Universities (APLU) is a research, policy, and advocacy organization with a membership of over 247 public research universities, land-grant institutions, state university systems, and affiliated organizations in the U.S., Canada, and Mexico, that is dedicated to strengthening and advancing the work of public universities.

# APARD Project Team and Steering Committee

## Project Team

Toby Smith, AAU

Kacy Redd, APLU

Emily Miller, AAU

Katie Steen, formerly AAU

Sarah Nusser, AAU senior fellow

Bob Samors, AAU senior scholar/consultant

## Steering Committee

Jeff Chasen, U Kansas

Tom Cramer, Stanford

Kevin Gardner, U Louisville

Heidi Imker, U Illinois at Urbana-Champaign

Jim Luther, Duke

Greg Madden, formerly Penn State U

Sarah Nusser, Iowa State U

Pegah Parsi, U California, San Diego

Lawrence Sutter, Michigan Tech

Tyler Walters, Virginia Tech

Jim Wilgenbusch, U Minnesota

# Importance of public access to research data

- Accelerating discovery and innovation
  - Science advances through sharing what we know and what we don't know
  - Want scholarship to be used
- Increasing rigor and public trust
  - Addressing “reproducibility” concerns
  - Scientific accountability through transparency
- Meeting sponsor requirements
  - Institutional polices ensure consistency of data management plans across campus

# APARD: Facilitating institutional change for data sharing

## 1. Align the community

- **2017** AAU/APLU Public Access Working Group Report

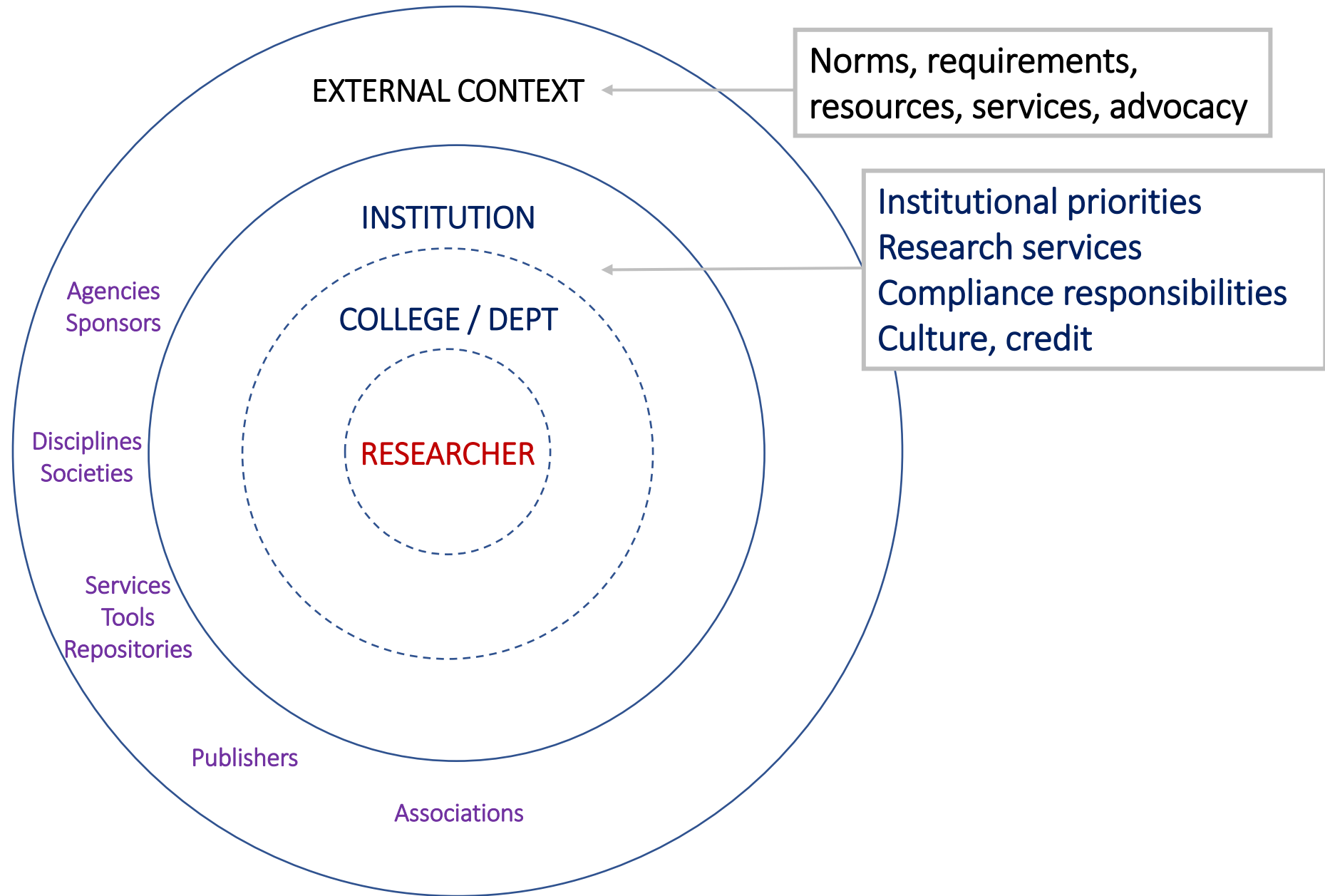
## 2. Galvanize implementation (APARD I, NSF (#1837847))

- **2018** Accelerating Public Access to Research Data Workshop with 30 U teams

## 3. **Institutional Guide** and strategic planning (APARD II, NSF (1939279) with NIH)

- **Feb. 2020 Conference (30 Us) and 1<sup>st</sup> National Summit (75 Us)** to broaden participation and provide input to a guide for campus data sharing support
- **April 2021** – Guide released
- **March 2022** – AAU/AGU/APLU Workshop on the role of disciplinary societies

# Ecosystem influencing researcher actions

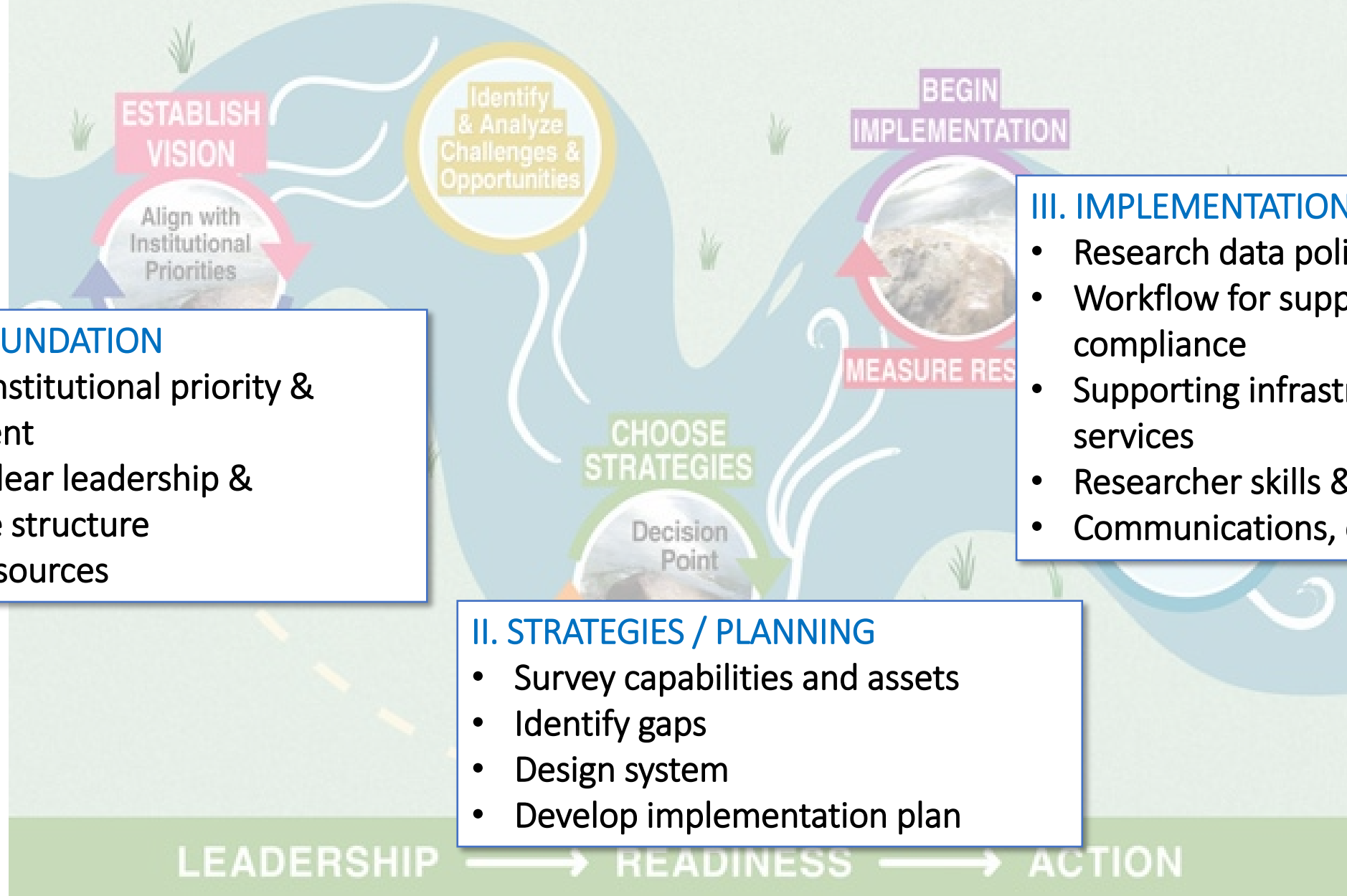




# MODEL FOR SYSTEMIC INSTITUTIONAL CHANGE



# MODEL FOR SYSTEMIC INSTITUTIONAL CHANGE



## 01 | Data Sharing Task Force and Charge at Iowa State University

In October 2017, Iowa State University established a Data Sharing Task Force (DSTF) to develop a framework for implementing services and policies necessary to support research data sharing. The sponsors of the Task Force were the Vice President for Research (VPR), University Library Dean, and Chief Information Officer (CIO). It was co-chaired by the Associate VPR, Associate Dean of Library, and Associate Director of Information Technology Services. Its membership included faculty from diverse fields; Property and Technology Transfer, Office of the CIO, Office of Intellectual Programs Administration, Office of the VPR; associate dean of the University Library; and research counsel from the University Counsel.

The DSTF was charged with considering the actions and guidance needed to support researchers and the institution in providing public access to research data. These considerations included support for quality research practices; policies related to data sharing and credit; awareness of and compliance with sponsor requirements, processes and workflows; and the information systems to support these processes and data sharing. The members were also asked to consider researchers' needs for proposal development, designing and conducting a study, evaluating the data products for sharing, and data dissemination and documentation.

The charge had expected deliverables, which included the need to pilot elements of a data repository system. It also included goals and responsibilities of task force members regarding key aspects of this pilot.

DOMAIN	PILOT GOALS	TASK FORCE MEMBERS
Policy	Research data, repository	Research counsel, IT systems lead, IP lead, AVPR for research ethics
Compliance	Awareness and prevention, monitoring, noncompliance	Research ethics and sponsored programs staff
Research practice	Understanding requirements, rigor and reproducibility, workflow and documentation	Faculty
Systems and services	Systems (repository, master record, Quali, workflow)	Library, IT security lead, AVPR for research ethics

Over the following two years, the DSTF guided development of the Iowa State University DataShare repository, research data policies, workflows, training and other resources. In 2020, the DSTF outlined the next phase of development, and task force's work was considered completed.

Full charge is here: <https://www.research.iastate.edu/wp-content/uploads/2021/02/Iowa-State-University-Data-Sharing-Task-Force.pdf>

# APARD Guide Overview

- Resource for university administrators to accelerate progress
- Articulates how public access to research products is aligned with the mission of a research institution
- Outlines major steps in developing robust data sharing support systems
  - Description
  - Initial actions
  - Examples from other campuses



# Guide to Accelerate Public Access to Research Data



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## Introduction

### PART I: Framing a Campus Initiatives to Accelerate Public Access to Research Data

- Why Public Access to Research Data is Important
- Accelerating Public Access to Research Data will Require Cultural Change

### PART II: Making Priorities Visible and Establishing A Plan

- Establish Data Sharing as a Campus Priority
- Create a Structure to Guide Campus Initiative and Provide the Required Support to Ensure its Success
- Develop Plan for an Effective Research Data Stewardship System

### PART III: Key Implementation Areas to Consider

- Establish or Update Institutional Research Data Policy and Related Guidelines and Procedures
- Identify Research Data Services and Expertise for Supporting Public Access to Research Data
- Identify Costs and Resources to Address Them
- Build Capacity and Skills for Good Research Data Stewardship Practice
- Build Support for Embracing the Research Data Policy and Research Data Sharing

## Conclusion with Essential Questions

# AAU's and APLU's Unique Role in Facilitating Institutional Change

- Convening power
  - AAU & APLU represent over 250 public & private research universities
- Help identify and share university practices and policies
  - Utilize 'coopetition' as a lever for change
- Cultural change
  - Top down is important, but not sufficient

# Challenges in accelerating data sharing

1. **Leadership** – who is responsible for providing data access?
2. **Money** – who pays to facilitate data access?
3. **Policy** – what data to share, retain, and for how long?
4. **Recognition** – faculty incentives and rewards
5. **Infrastructure** – repositories, researcher services, compliance review
6. **Disciplines** – variation in data access practices and requirements
7. **Sponsors** – lack of harmonization of federal agency policies
8. **Cross-winds** – growing tension between security and scientific openness



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UNIVERSITIES

*Thank you!*

**Tobin Smith**

PI, APARD project, AAU

Toby.smith@aau.edu

**Sarah Nusser**

Co-PI, Iowa State University

**Emily Miller**

Project Manager, AAU

**Kacy Redd**

Co-PI, APLU

**Robert Samors**

Co-PI, AAU Senior Scholar/Consultant