

# Data Archiving & Access:

## The Australian Data Archive & CADRE Platform

Preserving research data

&

Facilitating secure access

## The Australian Data Archive: Overview

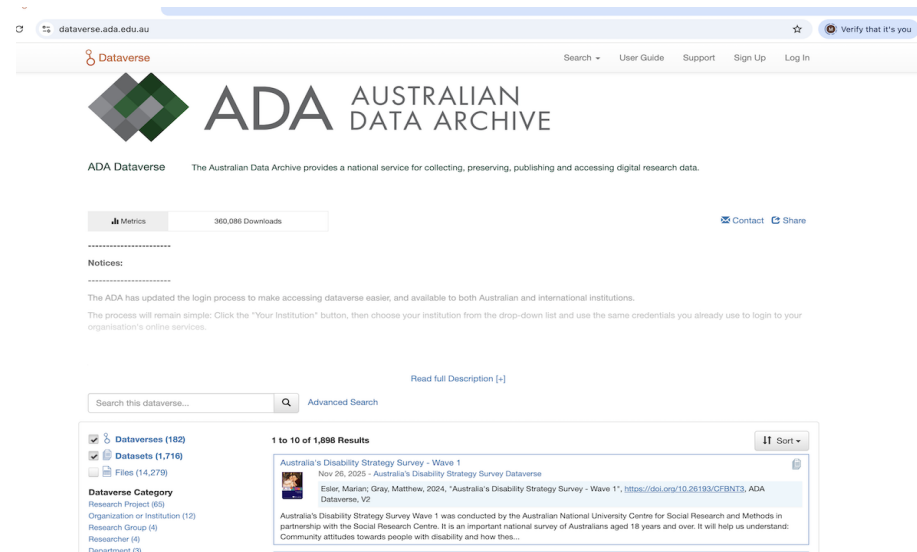
A national service for the collection, preservation and dissemination of digital research data in the social sciences and related disciplines

### **ADA's Mission is to:**

- Strengthen evidence-based research and policy by ensuring the long-term preservation and access to high-quality research data from Australia and the Asia-Pacific region.
- Deliver trusted infrastructure and services that enable secure, sustainable data reuse.
- Maximise the value, transparency, and impact of social-science data through collaboration with researchers, government, and the wider community.
- Applies OAIS standard (Open Archival Information System) to archiving process
- Applies FAIR principles (Findable, Accessible, Interoperable & Reusable) to data
- ADA Core Trust Seal Certification: Application submitted 2025, pending review

# The Australian Data Archive: Catalogue

Primary catalogue: <https://dataverse.ada.edu.au>



## ADA's Scale of Operations:

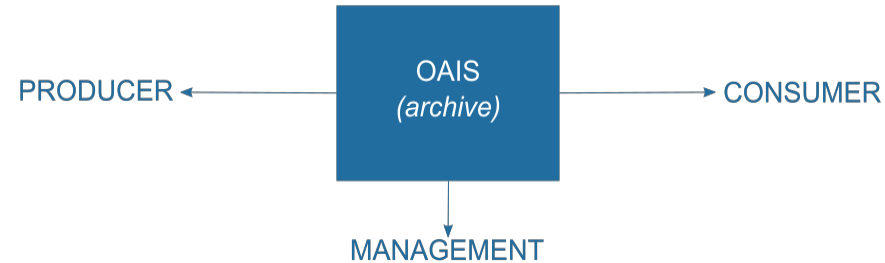
**1700+** Datasets

**7000+** Data files preserved

**4000+** Access requests per year – 1 Full-time Ticket/Access Manager

# The Australian Data Archive: Preserving Research Data

## Open Archival Information System (OAIS)



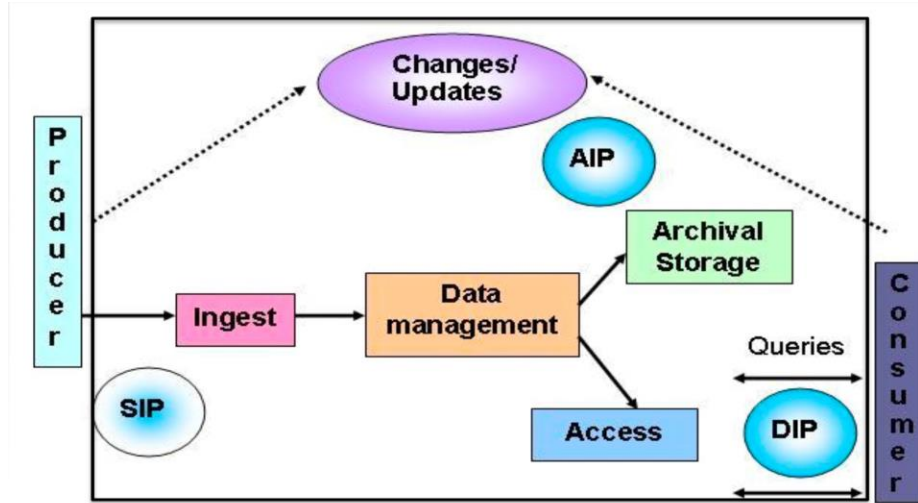
[https://en.wikipedia.org/wiki/Open\\_Archival\\_Information\\_System](https://en.wikipedia.org/wiki/Open_Archival_Information_System)

ADA operates on the internationally recognised OAIS model for digital preservation:

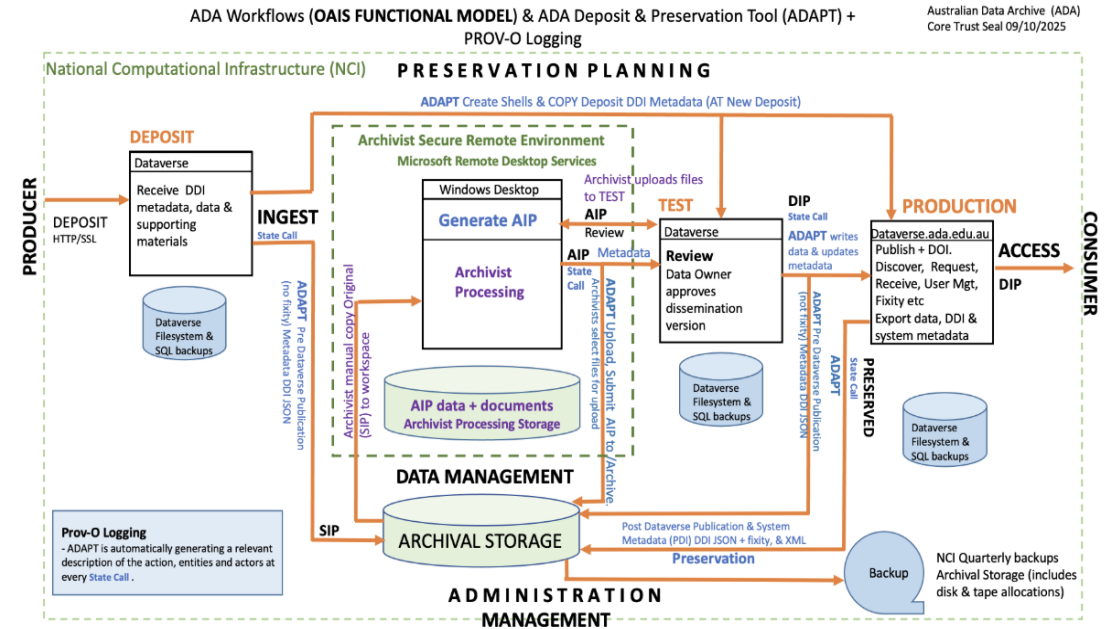
- **SIP (Submission Information Package):** Project materials and metadata submitted by depositors in a form that can be processed and ingested
- **AIP (Archival Information Package):** Stable preservation copies ensuring data can be maintained and accessed in the future
- **DIP (Dissemination Information Package):** Materials and metadata needed for secondary users to interpret and understand the data

# The Australian Data Archive: OAIS Archival Model

## ADA's Generalised OAIS Workflow



## ADA's Actual OAIS Workflow



## The Australian Data Archive: Archival Process

Professional data archivists manage the preservation workflow through four major steps:

1. **Deposit:** Accepting project materials (SIP) from depositors – <https://deposit.ada.edu.au>
2. **Data Processing:** Creating archival (AIP) and access (DIP) versions
3. **Metadata Creation:** Documenting data for discovery and understanding
4. **Publishing:** (DIP) Making data available through appropriate access levels; assigning persistent Datacite DOIs automatically; applying the FAIR Principles (Findable, Accessible, Interoperable, Reusable) to the DIP

Primary catalogue (Dataverse): <https://dataverse.ada.edu.au>

Visit <https://docs.ada.edu.au> for more information on ADA's deposit and archival process.

## The Australian Data Archive: Archivist Services Provided

### **General:**

- Data management and curation
- Licensing support
- Data usage reporting
- Support for both quantitative and qualitative data
- Long-term secure data storage via National Computational Infrastructure

### **Quality Assurance (QA):**

- ADA archivists utilise a combination of digital tools and manual processes for quality assurance, aiming to both minimise disclosure risk and maximise utility of the data for secondary users (following the FAIR principles).

## The Australian Data Archive: Facilitating Access to Research Data

### 2 possible data versions published:

- **General Release:** Data suitable for a general audience. Direct and indirect identifiers removed.
- **Restricted Release:** Data only suitable for a limited audience. Direct identifiers are removed, but an appropriate number of indirect identifiers are still present.

A user will have to request access for either version. To gain access to the restricted release, the user must answer additional questions.

### 3 basic types of access management from which data owners can choose:

- **Open Access:** users simply download data from your Dataverse dataset
- **ADA Managed:** ADA grants or declines access based on business rules set by you
- **ADA Facilitated:** ADA forwards data requests to you and you let ADA know which to grant and which to decline



## Managing Data Access: Introducing CADRE

**Coordinated Access for Data, Researchers, and Environments:** <https://cadre.ada.edu.au>

### What is CADRE?

- A standalone data access decision-making platform supported by the Australian Data Archive
- ADA integrates CADRE with [dataverse.ada.edu.au](https://dataverse.ada.edu.au)

### What does CADRE do?

- Decreases the risk, time and costs associated with providing access to data through a shared and distributed sensitive data management platform
- Facilitates a single request for multiple resources, with or without collaborators
- Uses the Five Safes framework
- Provides a purpose-built UI for data users and data owners/custodians.

**Supported by:** Australian Research Data Commons (ARDC), an NCRIS-funded initiative

## Managing Data Access: CADRE + 5 Safes Framework

The 5 Safes Framework is a risk management framework supporting data custodians.

**Safe People** - Can the researchers be trusted? The researchers will handle the data in an appropriate manner relative to the data's level of sensitivity.

**Safe Data** - Is there a disclosure risk? Appropriate and proportionate protections are applied to the data.

**Safe Projects** - Is this use of the data appropriate, ethical and lawful?

**Safe Settings** - Does the access facility limit unauthorised use? The environment minimises risk of unauthorised use or disclosure.

**Safe Outputs** - Are the results non-disclosive? The output is appropriately safeguarded before any further sharing or release.

<https://fivesafes.org>

## Managing Data Access: Roles in CADRE

### **Applicants/Users (Researchers and prospective data users)**

- Submit coordinated requests with or without collaborators
- Track applications
- Manage project details

### **Approvers (Handlers assigned by data custodians)**

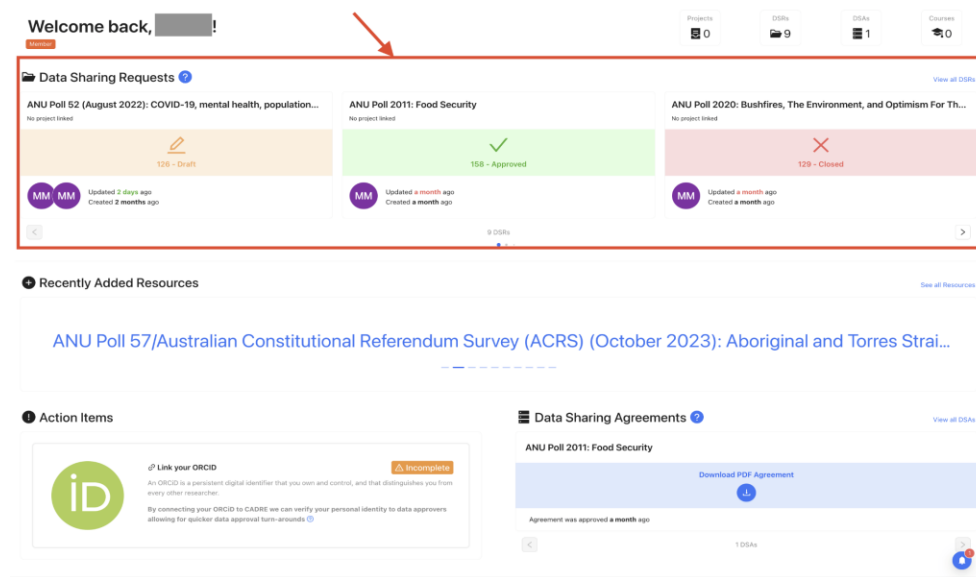
- Review applications
- Assess data access requests against Five Safes compliance
- Approve (or reject) data access

### **Providers (Data custodians and service providers)**

- Share data
- Develop custom workflows
- Set access conditions

# CADRE: Role-Based User Interface

## Applicant Dashboard



Welcome back, [User]!

Projects: 0 | DSRs: 9 | DSAs: 1 | Courses: 0

### Data Sharing Requests

- ANU Poll 52 (August 2022): COVID-19, mental health, population...   
 126 - Draft
- ANU Poll 2011: Food Security   
 156 - Approved
- ANU Poll 2020: Bushfires, The Environment, and Optimism For Th...   
 129 - Closed

### Recently Added Resources

ANU Poll 57/Australian Constitutional Referendum Survey (ACRS) (October 2023): Aboriginal and Torres Strai...

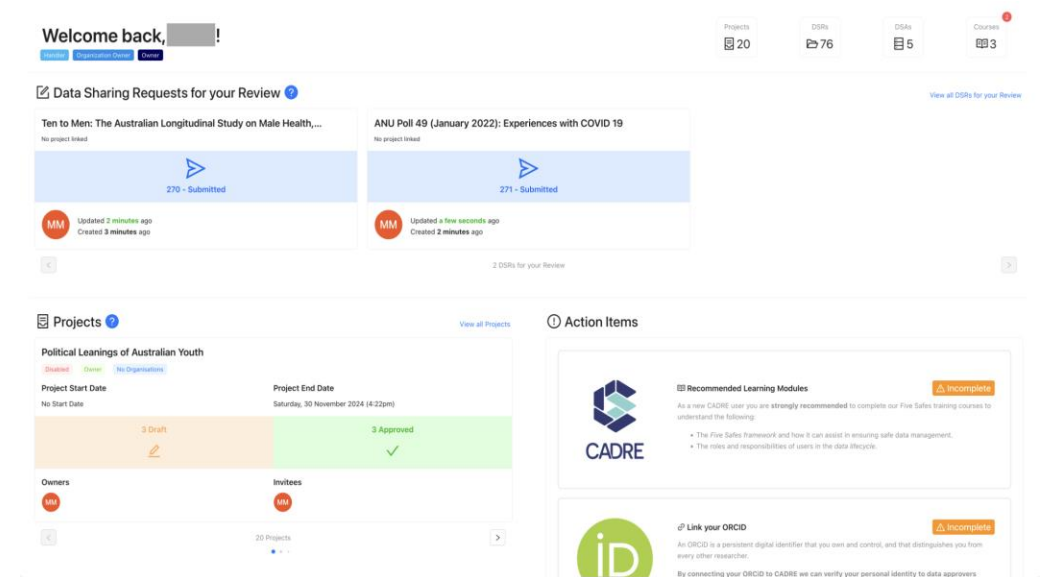
### Action Items

- Link your ORCID   
 Incomplete

### Data Sharing Agreements

ANU Poll 2011: Food Security   
 Download PDF Agreement   
 Agreement was approved a month ago

## Approver Dashboard



Welcome back, [User]!

Projects: 20 | DSRs: 76 | DSAs: 5 | Courses: 3

### Data Sharing Requests for your Review

- Ten to Men: The Australian Longitudinal Study on Male Health...   
 270 - Submitted
- ANU Poll 49 (January 2022): Experiences with COVID 19   
 271 - Submitted

### Projects

Political Leanings of Australian Youth   
 Project End Date: Saturday, 30 November 2024 (4:23pm)   
 3 Draft | 3 Approved

### Action Items

- Recommended Learning Modules   
 Incomplete
- Link your ORCID   
 Incomplete

## Applicant DSR Queue

My Dashboard | My DSRs

My DSRs Delete Selected

<input type="checkbox"/>	DSR ID	Resource	Projects	Applicant	Date Created	Date Modified	Status	Action
<input type="checkbox"/>	33	Lowy Institute Poll 2020	0 Projects	[User]	Thu, 06 Jun 2024	Thu, 06 Jun 2024	SUBMITTED	[Icon] [Icon]
<input type="checkbox"/>	35	Ten to Men: The Australian Longitudinal Study on Male Health, Release 4 (Waves 1-4)	0 Projects	[User]	Thu, 06 Jun 2024	Thu, 06 Jun 2024	DRAFT	[Icon] [Icon]

## Approver Review Queue

Dashboard | Review Queue

Review Queue Close Selected Pending Archived All

<input type="checkbox"/>	DSR ID	Resources	Stage	Status	Applicant	Submission	Action
<input type="checkbox"/>	270	Ten to Men: The Australian Longitudinal Study on Male Health, Release 4 (Waves 1-4)	NEW APPLICATION	SUBMITTED	[User]	12 minutes ago	[Icon] [Icon]
<input type="checkbox"/>	271	ANU Poll 49 (January 2022): Experiences with COVID 19	NEW APPLICATION	SUBMITTED	[User]	10 minutes ago	[Icon] [Icon]

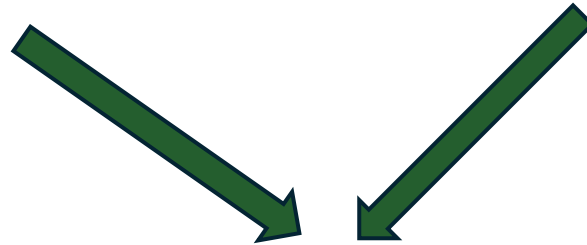
## Summary: Complete Data Lifecycle

### ADA: Archiving Data for Reuse

- Professional curation
- OAIS-compliant preservation
- FAIR principles
- Long-term storage
- Quality metadata

### CADRE: Coordinated Access to Data

- Five Safes framework
- Streamlined requests
- Coordinated approvals
- Shared infrastructure
- Trust and transparency



Creating a comprehensive ecosystem for preserving research data and facilitating its secure reuse.

## For Further Reference

ADA website: <https://ada.edu.au>

ADA's primary data dissemination platform: <https://dataverse.ada.edu.au>

Depositing Data Documentation: <https://docs.ada.edu.au>

Quick Deposit Guide: [https://docs.ada.edu.au/index.php/Quick\\_Deposit\\_Guide](https://docs.ada.edu.au/index.php/Quick_Deposit_Guide)

Cadre: <https://cadre.ada.edu.au>

CADRE Documentation: <https://documentation.cadre.ada.edu.au>

5 Safes Training: <https://learning.cadre.ada.edu.au>

## QUESTIONS?

Australian Data Archive  
[ada@ada.edu.au](mailto:ada@ada.edu.au)

## The Australian Data Archive: Research Data Coverage

ADA holdings span diverse social science disciplines including:

- Ageing
- Business & Management
- Census Data
- Culture
- Demography
- Drugs, Alcohol & Tobacco
- Economics
- Education & Employment
- Environment & Land Use
- Family Studies
- Foreign Affairs
- Gambling
- Health
- Housing
- Law, Crime & Courts
- Mass Media
- Migration
- Politics & Elections
- Public Opinion
- Psychology
- Quality of Life
- Science & Technology
- Social Welfare
- Sociology
- Tourism & Leisure
- Travel & Transport

## The Australian Data Archive: Types of Data Resources

- **Unit Record Files:** Microdata about individuals and households
- **Data Cubes:** Aggregate statistical tables for online manipulation
- **Image Files:** Digitized documents and photographs
- **Audio Visual Files:** Audio and video recordings
- **Text Files:** Interview transcripts and written materials
- **User Guides:** Documentation and metadata
- **Software Tools:** Dataverse and statistical packages
- **URL Links:** International archives and additional resources



## Applying FAIR Principles to Data: Findable, Accessible, Interoperable, Reusable

1. **Findable:** Data and metadata should be easy to discover for both humans and machines.
2. **Accessible:** Once found, users need to be able to retrieve the data through standardized, open protocols.
3. **Interoperable:** Data must work seamlessly with other datasets, applications, and workflows.
4. **Reusable:** Optimising data reuse across different contexts.

(Much!) More detailed information: <https://www.go-fair.org/fair-principles/>