# **Acknowledgement of Country**



I acknowledge the Traditional Owners of the land on which this training is taking place, the land of the Gadigal of the Eora Nation and pay my respect to their Elders past, present and emerging. I also acknowledge that I join you from the land of the Ngunnawal and Ngambri people.



# Coordinated Access for Data, Research and Environments



#### Partners





# Polling





SCAN ME

#### Join by Web



- Go to PollEv.com 1
- Enter CADRE 2











Text in your message



# Data Who s data? Who is scared of data?



Image credit: Jochen Wolters CC BY-NC-ND 2.0





Research	/S	Administrative
Documents		Social Security
Lab notes, diaries		Education results
Questionnaires		Health records
Audio		Court records
Video		Tax records
Photographs		Medicare claims
Geospatial		Sales records
Test responses		Membership records



Primary	VS	Secondary
Diaries		Other researcher's data
Letters		Books
Memoirs		Magazine articles
Autobiographies		Reviews
Interviews		Census data
Speeches		Electoral statistics
Oral histories		Scholarly journals
Personal stories		Labour statistics



Qualitative vs	Quantitative
Observation notes	Weight – kg's
Semi-structured interviews	Length – cm's
Open-ended survey questions	Number of days in the year
Concept maps	Age in years
Case studies	Income
Focus groups	Group size



Tabular data – Rows and columns Source: ABS

				Estimated Resident		Estimated Resident	Estimated Resident		Estimated Resident	
	Estimated Resident	Estimated Resident	Estimated Resident	Population ; Female	Estimated Resident	Population ; Female	Population ; Female	Estimated Resident	Population ;	Estimated Resident
	Population ; Female	Population ; Female	Population ; Female	; Western Australia	Population ; Female	; Northern Territory	; Australian Capital	Population ; Female	Persons; New	Population ;
	; Victoria ;	; Queensland ;	; South Australia ;	;	; Tasmania ;	;	Territory ;	; Australia ;	South Wales ;	Persons ; Victoria ;
Data Type	STOCK_CLOSE	STOCK_CLOSE	STOCK_CLOSE	STOCK_CLOSE	STOCK_CLOSE	STOCK_CLOSE	STOCK_CLOSE	STOCK_CLOSE	STOCK_CLOSE	STOCK_CLOSE
Frequency	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter
Collection Month	3	3	3	3	3	3	3	3	3	3
Series Start	Jun-1981	Jun-1981	Jun-1981	Jun-1981	Jun-1981	Jun-1981	Jun-1981	Jun-1981	Jun-1981	Jun-1981
Series End	Mar-2020	Mar-2020	Mar-2020	Mar-2020	Mar-2020	Mar-2020	Mar-2020	Mar-2020	Mar-2020	Mar-2020
No. Obs	156	156	156	156	156	156	156	156	156	156
Jun-1981	1988200	1166761	664829	642807	214659	57223	113976	7474993	5234889	3946917
Sep-1981	1993194	1177531	666099	648237	215063	58470	114567	7506556	5249455	3957333
Dec-1981	1999049	1187439	668162	652840	215348	59695	114930	7539778	5266894	3968398
Mar-1982	2005209	1196227	669830	657427	215968	60570	115616	7572432	5286119	3980826
Jun-1982	2011251	1205217	671042	662007	216166	60926	116671	7603333	5303580	3992870
Sep-1982	2016142	1214121	672421	666557	216440	61492	117026	7630430	5315846	4002731
Dec-1982	2021155	1220927	674142	670200	216806	62113	117626	7655712	5328221	4012687
Mar-1983	2027264	1227373	676120	673872	217122	62909	118539	7683368	5344027	4025254
Jun-1983	2032562	1233616	677833	677369	217715	63580	119541	7707126	5352959	4035702
Sep-1983	2037204	1239125	679701	680421	218274	64531	120076	7730040	5363744	4045185

"Microdata" or "unit record data" refers to "datasets of unit records where each record contains

information about a person, organisation or other type of unit – it can include individual responses to a census, survey or administrative form" (<u>ABS, n.d.</u>)

#### Aggregate data –

"produced by grouping information into categories and combining values within these categories Example: a count of the number of people of a particular age (obtained from the question 'In what year were you born?'). also known as tabular data or macrodata

Sales Rep 🗾	Client 🛛 🔼	Month 💌	Units sold	٣
John	Example Inc	Jan		4
John	Example Inc	Jan		3
John	Idea LLC	Jan		6
John	Idea LLC	Jan		4
John	Example Inc	Jan		3
John	Idea LLC	Feb		5
John	Idea LLC	Feb		4
Mike	Idea LLC	Feb		3
Mike	Idea LLC	Feb		2
John	Idea LLC	Feb		3
John	Idea LLC	Feb		7

Sales Rep 🚬	Client 🛛	Month 📩	Units sold 🞽
John	Example Inc	Jan	7
John	Idea LLC	Jan	10
John	Example Inc	Jan	3
John	Idea LLC	Feb	9
Mike	Idea LLC	Feb	5
John	Idea LLC	Feb	10



### Sensitive Data



### CLASSIFYING YOUR RESEARCH DATA



Types of Research Data	Highly Sensitive	Sensitive	Private	Public
Data containing information involving minors/at-risk participants or culturally sensitive groups	The data is classified as <b>Highly Sensitive</b>			
Data subject to regulatory controls	The data is classified as <b>Highly Sensitive</b>			
Data containing personal information	The data is cl Sensitive c			
Data containing confidential information	The data i	s classified as Private	or higher	
Data collected from human and/or animal participants	The data i	s classified as <b>Private</b>	or higher	
Unpublished research data	The data i	s classified as <b>Private</b>	or higher	

It is possible that the data may have other requirements that are not covered in the current data classification. Please contact **rdm@unsw.edu.au** if you have such unique requirements or doubts about classifying your data.



# The Five Safes (plus Two)



A/Prof Steven McEachern Director of Australian Data Archive Project Lead, CADRE

#### Partners





# CADRE

#### **A SYSTEM TO**

Increase the speed at which social sciences and related disciplines get access to sensitive data.

Decrease the risk, time and costs associated with providing access to data (for data holders) and accessing data (for researchers)

#### **BY MEANS OF**

The development of a shared and distributed sensitive data management platform using the **Five Safes** framework and common accreditation and information exchange protocols.

#### **IN ORDER TO**

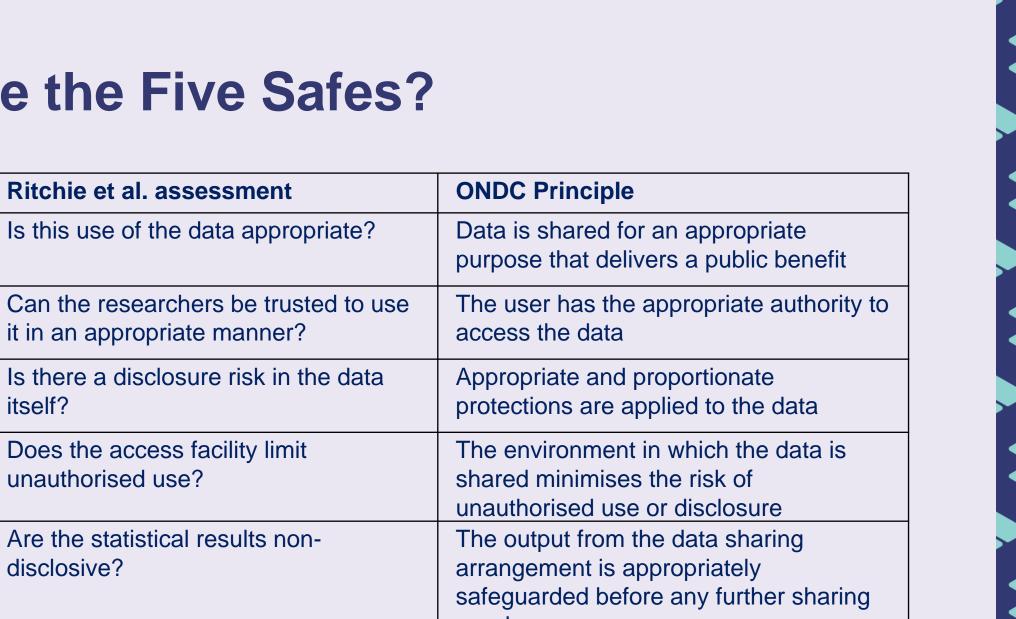
Enable data owners and users to address the core concerns around governance, creation, management and sharing of sensitive data for research.

Share and move sensitive data safely between higher education, national research and government facilities and services.



## **The Five Safes**





## What are the Five Safes?

Safe dimension

Sale unitension		
Safe projects	Is this use of the data appropriate?	Data is shared for an appropriate purpose that delivers a public benefit
Safe people	Can the researchers be trusted to use it in an appropriate manner?	The user has the appropriate authority a access the data
Safe data	Is there a disclosure risk in the data itself?	Appropriate and proportionate protections are applied to the data
Safe settings	Does the access facility limit unauthorised use?	The environment in which the data is shared minimises the risk of unauthorised use or disclosure
Safe outputs	Are the statistical results non- disclosive?	The output from the data sharing arrangement is appropriately safeguarded before any further sharing or release

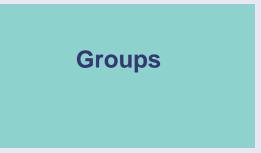


### **Two Additional Safes**





Organisations





## **Safe Organisations + Groups**

### **Organisations**

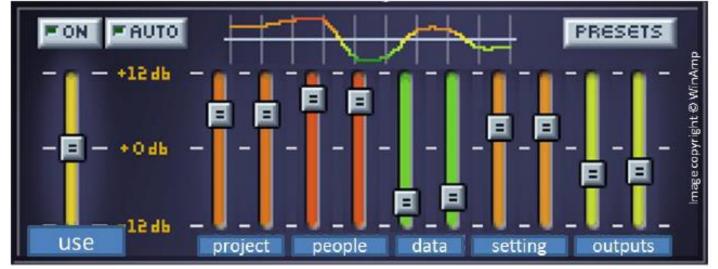
- Legal implications
- Resources and infrastructure
- Legal and ethical controls
- Data sharing

### Groups

Five Safes Dimension	Grouping
Safe people	People working in Research teams
Safe Projects	Projects completed as part of larger Work Programs
Safe Data	A linked dataset resulting from linkage or integration of multiple upstream Datasets
Safe Settings	Use of data from multiple sources, located in multiple settings
Safe Outputs	Multiple publications outputs resulting from a completed analysis

## Joint and severable

- Dimensions are designed so that each can be evaluated independently of the others, as far possible.
- All five dimensions need to be considered jointly to evaluate whether a data access system can provide an 'acceptable' solution.



## **Five Safes Video**

• <a href="https://youtu.be/VeHDtSGEaJQ">https://youtu.be/VeHDtSGEaJQ</a>

## Safe Project



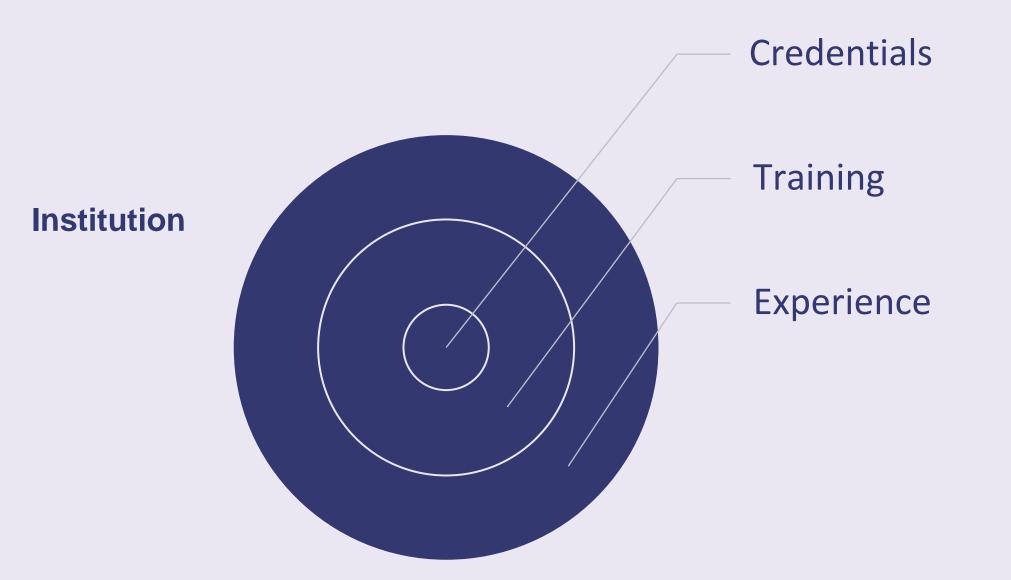
### Is this a safe use of the data for public benefit?

CADRE Consideration	
Intended use	Fitness for purpose; public benefit; academic contribution and commercial benefit
Context	
Ethics	Has an ethics approval been completed?
Risks	Confidentiality risks; reputational and commercial risks
End user of the project	Who is the sponsor of the research? Who is the research being conducted for? Who is funding the research?

## Safe People

Appropriate authority to access the data





# Safe People

# Desai, Ritchie and Welpton (2016):

- Do the users have the necessary technical skills?
- Do the users need training in handling confidential data?
- Are users likely to follow procedures?

### CWG additions:

- Past track record
- Institutional affiliation
  - Institutional rules
  - Institutional support
  - Institutional legitimacy
  - Considered further under "Organisations"
- Examples: GA4GH and ICPSR "Researcher Passports"





### Appropriate and proportionate protections are applied to the data

### Data Lifecycle



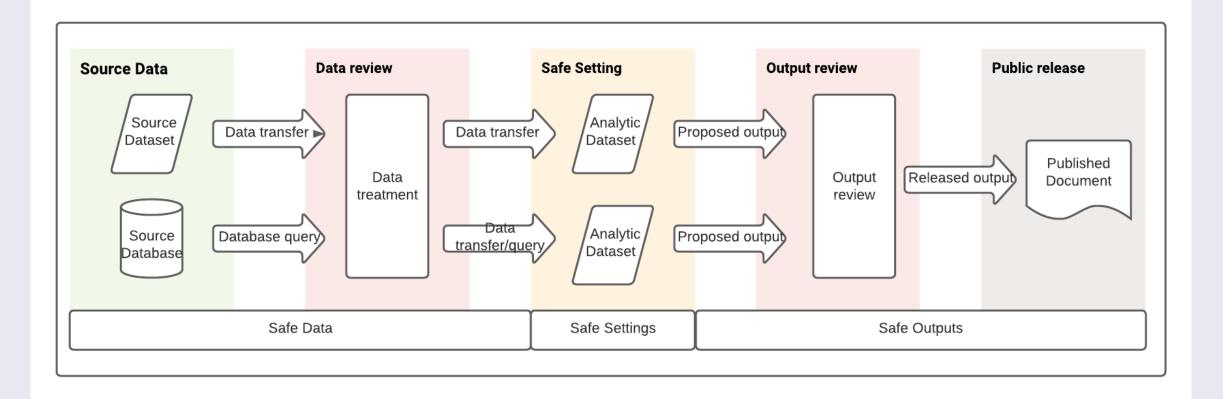


Physical, technical and informational context for data access

- "whether all parties have taken reasonable steps to ensure data will be used in an appropriately safe and secure environment, i.e. one that minimises unauthorised use, access or loss of data"
- Physical environment
- IT environment
- (Training in use of settings)



## Safe data, settings and outputs





## Why does this matter?

Researchers/Academics are experts in their fields but not necessarily in all things data.

Five Safes provides guidance on how sensitive data accessed safely.

Builds confidence & trust among the whole community – data users, data owners, data custodians and the public.

Upskilling and supporting those who use sensitive data.

#### **Data Availability and Transparency Act Scheme**

National Data Commissioner

 $\Delta \Delta$  Data Availability and Transparency Act 2022 Provides a legislative authorisation and override with appropriate safeguards

#### **DATA Scheme Safeguards**

#### Data Sharing Purposes

Sharing of Australian Government data must be in the public interest and for one of three purposes:

- Government service delivery
- Informing government policy and programs
- Research & development.

Data can not be shared for the purpose of enforcement or compliance.

#### Accreditation

- · Commonwealth, state and territory government bodies and Australian universities can be an Accredited User or Accredited Data Service Provider.
- The Minister or National Data Commissioner may grant accreditation.

#### Data Requests

 Data Custodians have no duty to share, but must provide reasons to Accredited Users if refusing a data sharing request.

	TA Scheme Operation
ACCREDITED USERS	DATA CUSTODIANS
Commonwealth, state and territory government bodies and Australian universities can obtain and use Australian Government data.	Data Custodians are Australian Government bodies. Some bodies and their data are excluded from the scheme, such as the Australian Federal Police.
	ACCREDITED DATA SERVICE PROVIDERS
gove unive data integ secur	Imonwealth, state and territory ernment bodies and Australian ersities who can provide specialised a services such as complex data gration, de-identification and/ or re access data services to support
	sharing projects.
Data Sharing Principles	Privacy protections
Data Sharing Principles	
Data Sharing Principles	Privacy protections The DATA Scheme works with the Privacy Act 1988 to

#### **DATA Scheme Safequards Regulation and compliance**

♀ National Data Advisory Council

- National Data Commissioner handles complaints conducts monitoring and assessment activities and investigations.
- National Data Commissioner can issue directions and seek civil and/or criminal penalties.

#### Transparency and reporting

National Data Commissioner must:

- keep public registers of Data Sharing Agreements, Accredited Users and Accredited Data Service Providers.
- prepare an Annual Report on participation and operation of the DATA Scheme.

#### Data Sharing Agreements

- Arrangements, including the application of the data sharing principles, must be documented in a Data Sharing Agreement.
- Agreements that meet scheme requirements must be registered by the National Data Commissioner to take effect.

#### Data Discovery

Supporting agencies to develop data inventories Australian Government Data Catalogue to help users find data

A digital platform for scheme participants and others to manage data requests and support administration of the DATA Scheme

May 2022



### **Questions?**





## **Thank You**

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