

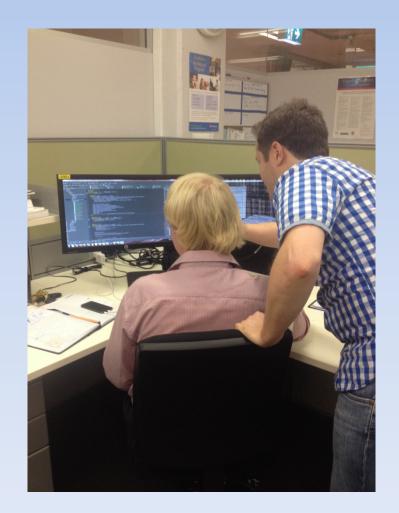
Digital State Archive
OpenGov NSW
Data NSW



 2011: we started the project to build infrastructure and processes that would enable us to accept, preserve and make available digital Government records as State archives



 Mid-2014: we move from 'project phase' to 'business as usual' status





What are we archiving?

- Any digital information that is kept by a government entity as evidence of official business, that:
 - is 'required as State archives' in an authorised retention and disposal authority.
 - is no longer in active use
 - has access rules in place
- Could be in the form of:
 - documents, spreadsheets, PPTs;
 - case management systems;
 - email
 - scanned copies of paper records or digitised A/V material
 - EDRMS records



What we are not about

- We are not about digitisation (conversion of paper to digital images) – although some agencies who do this may send the digital copies to us eventually
- Our value is not in storage or back up. These things can be done by lots of providers.
- We are about analysing, migrating, preserving, contextualising and providing access to digital records in digital recordkeeping systems



Pilot projects

- Records of former Premier Kristina Keneally
- Special Commission of Inquiry into Electricity Transactions database
- Business Registration System / Business Registration Imaging System
- Records of former Premier Nathan Rees
- Records of former Premier Bob Carr
- Farrer Memorial Oration
- Public Works Oral History recordings
- Thredbo Landslip Coronial Inquiry database



The Challenges of Digital Preservation



Vint Cerf

"I worry a great deal about that... Old formats of documents that we've created or presentations may not be readable by the latest version of the software because backwards compatibility is not always guaranteed.

"And so what can happen over time is that even if we accumulate **vast archives of digital content**, we may not actually know what it is."

http://www.bbc.com/news/science-environment-31450389 (13 Feb
15)



Example: Special Commission of Inquiry into Electricity Transactions

- 40,813 file objects (approx 35 Gb):
 - .ZIP/JAR File, 1
 - Adobe Acrobat (PDF), 28,920
 - Compuserve GIF, 235
 - Generic Password Protected Microsoft Office 2007 Document, 13
 - Internet HTML, 14
 - Internet Mail Message, 6
 - JPEG File Interchange, 12
 - Microsoft Access 7, 2
 - Microsoft Excel 2000, 901
 - Microsoft Excel 2002, 2
 - Microsoft Excel 2007/2008, 396
 - Microsoft Excel 2007/2008 Macro Enabled Workbook, 16
 - Microsoft Excel 5.0/7.0, 6
 - Microsoft Excel 97/98/2004, 1
 - Microsoft PowerPoint 2007/2008, 85
 - Microsoft PowerPoint 97-2004, 77
 - Microsoft Project 2000/2002/2003, 3

- Microsoft Word 2000, 85
- Microsoft Word 2002, 82
- Microsoft Word 2003/2004, 1,570
- Microsoft Word 2007/2008, 281
- Microsoft Word 2007/2008 Macro Enabled Document, 1
- Microsoft Word 97/98, 4
- MS Outlook, 7,689
- Password Protected Microsoft Excel 2007/2008, 3
- Portable Network Graphics Format, 1
- Progressive JPEG, 3
- Tagged Image File Format, 39
- Text Mail, 2
- Unknown format, 335
- vCard, 23
- Windows Bitmap, 4

Relativity database metadata export in XML (100 Mb)



COI_Electricity Transactions - Relativity - Windows Internet Explorer

elaw.com.au

Yew Favorites Tools Help









💶 " 🔝 " 🔤 👘 " Bage " Safety " Tgols " 🕡 "

X 5 ting

Robinson]; Wee, S[Abens

[Allens Arthur Robinson]

Robinson]; Mansour, A[Aliens

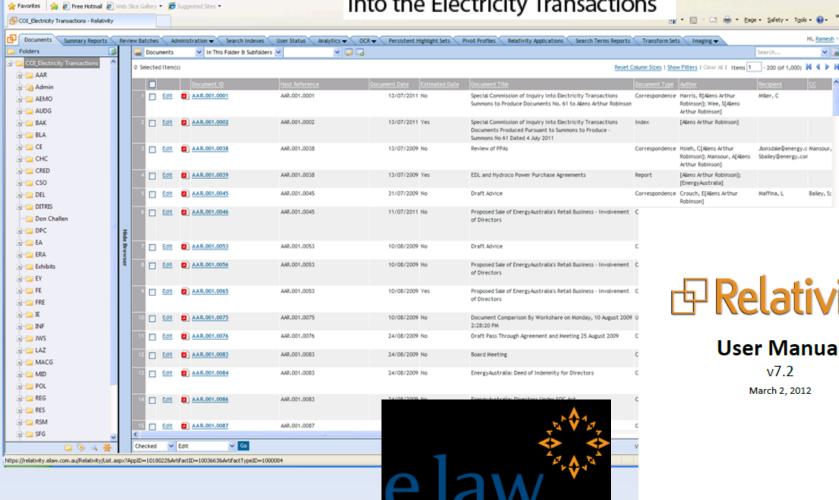
[Aliens Arthur Robinson]:

[EnergyAustralia]

Arthur Robinson]

HI, Ramesh

Balley, S;





JonsdaleBenergy,c Mansour,

Sbatley@energy.com

Maffina, L

User Manual

v7.2

March 2, 2012





The challenges we encountered

- Diversity: huge variety of systems, formats and dependencies in use in the NSW Government
- Quality: some very well managed systems, lots of documentation, some very poorly managed
- Interconnected systems, not individual objects
- Integration: the need for us to manage and search across all these diverse systems
- Support: commitment to undertake the work necessary to preserve and migrate



Evgeny Morozov

"Imperfection, ambiguity, opacity, disorder, and the opportunity to err, to sin, to do the wrong thing: all of these are constitutive of human freedom, and any concentrated attempt to root them out will root out that freedom as well"

To Save Everything Click Here: The Folly of Technological Solutionism

Migration Methodology

State Records

Project Planning Phase

The Project Planning phase establishes a framework for the migration project.

The purpose of this phase is to define the project. goals and identify stakeholders, risks, and resources. The depth of planning required in this phase will vary depending on the complexity of the assisct. For example, a project involving the transfer of a single audio file might be very small in comparison with a project involving the transfer of a business or email.

The key deliverable of this phase is the project plan.



Tools

Basecamp Adopted

Basecamp is a web-based project management tool. It is used to collaborate with project participants, plan and schedule actions, and share documentation.



Digital Archives Higration Hethodology Guilt

Key Relationships

State Records Act 1998

S. 29 of the State Records Act allows State Records to issue guidelines about how records are to be made available to it. The guidelines apply to records in any format, including digital records.

Migration **Planning** Phase

The goal of the Migration Planning phase is to develop the migration plan. The migration plan is a document that identifies and documents the activities to be carried out during the migration of a recordkeeping system into the Digital State Archive. These activities include file format migration, metadata mapping, and data transformation.

Like project plans, migration plans are tailored to suit the requirements of the particular project. But this doesn't mean re-inventing the wheel each time, the decisions and lessons learned in each project are documented and can be reused in subsequent ornieds.

Tools

DROID/PRONOM Adopted

The National Archives UK's technical registry and file format identification tool are used for canonical identification of file formats.

Apache Tika Adopted



ExitTool Adapted

Metadata extraction tools such as Tika and ExiTool are used to supplement agency-provided metadata.

Preservation Pathways Registry Suit

When digital records are migrated to the digital archives, file formats are assessed for their longevity and accessibility. In some cases a transformation is recommended. Transformations are registered in Preservation Pathways with information about the input and target file formats (using IDs from the National Archives UK's PRONOM registry as well as information about the tool or process used to perform the transformation). If file format IDs are not available from the PRONOM registry, then temporary State Records NSW IDs are registered pending. the creation of a PRONOM ID.

The Preservation Pathways Registry is a Java web application.



Metadata Registry Buit

The Digital Archives Metadata Registry allows Digital Archives staff to progressively register preferences for published metadata terms (e.g. Dublin Core) to represent common metadata elements in the digital archives. It also allows Digital Archives staff to progressively coin new terms (by providing a URI and description) to represent metadata elements in the digital archives for which no suitable published term can be identified.

The Metadata Registry is implemented with JSON Schema and using Github.

Key Relationships

Disposal authorities

Part 3 of the State Records Act 1998 prohibits the disposal of State records. except where it is authorised. Under the Act, State Records can give permission for disposal. The usual means by which State Records permits disposal is through the approval of retention and disposal authorities.

Only digital records required as State archives under an authorised disposal authority may be transferred to the Digital State Archive.

Access Directions

Part 6 of the State Records Act creates a framework for regulating public access. to State records which have been in existence for at least 30 years (the 'openaccess period'). Public offices are required to make an access direction (to determine whether the records are open or closed to public access) for all their records which are in the open access period.

Agencies transferring records to the Digital State Archive must ensure that those records are covered by current access directions.

State Records implements the Australian Series System to describe and control the State Archives. Digital archives are linked to this system by links to agencies

Migration Phase

During Migration phase, the migration plan is executed. It is in this stage that any necessary preservation activities are performed.

Tools

Aspose Adopted

A set of file format APIs for Java. Used for transformation of a number of common file formats.



EMC Isilon scale-out network-attached storage is used to store digital archives. Advantages of this system include scalability, integrity, and automated replication.

Paintree Adopted

A modified version of California Digital Library's Pairtrees for Object Storage protocol is used to manage the storage of digital objects. Pairtree is a filesystem hierarchy.

MongoDB Adapted

Metadata is stored as JSON documents in the filesystem and copied into a

MongoDB instance for search and reporting

Apache Solir Adopted

Full-text is extracted wherever possible. This full-text is stored in a Soir instance



A workflow tool that assigns unique identifiers to digital objects, validates consignments, and moves records into the Digital State Archive.

The Migrate tool is a Java command-line application.

Key Relationships

Search

The Digital Archives team at State Records is responsible for Search, the main finding aid for the State Archives collection. Contents of the Digital State Archive are discoverable via Search.

Project Closure Phase

The Project Closure phase closes the project and identifies any required post-project activities (such as the disposal of source records).

Tools

Basecamp is a web-based project management tool. It is used to collaborate with project participants, plan and schedule actions, and share documentation.



This tool provides agencies with a human and muchine readable manifest of digital records successfully migrated into the Digital State Archive.

The Receipt tool is a Java command-line application

Key Relationships

This is a disposal authority that provides for the authorised disposal of State Records that have been used as the source records for successful migration projects. It is under this authority that public offices are permitted to destroy source records post-transfer to the Digital State Archive. This authority mandates a minimum six months retention period for quality assurance purposes.





Digital archives migration methodology

Phase 1 Project Planning Phase 2 Migration Planning

Phase 3 Migration

Phase 4 Project Closure

- Who does what
- When
- Outcomes

 Analyse and prepare the records for migration

- Carry out the migration
- Transfer of control

- Confirm migration success
- Deal with source records
- Access arrangements

Methodology flexible enough to cope with simple or complex; custody or non-custody; hybrid or all digital



Project planning

- What is the scope of this project?
- Who should be involved?
- What will it cost? What resources are necessary?
- How long will it take?
- What value will the agency realize?



Migration planning

- What are we going to do with this format?
- What metadata resides in this system? What metadata do we keep? How does it relate to the metadata in other series in the DSA?
- How will we maintain the relationships between interlinked record systems?
- What will researchers of the future want to know about this system?
- What queries will the responsible agency want to run?
- What was the system's interface / look and feel?
- What documentation is there of this system?



DROID, ExifTool, Tika, Xena etc.

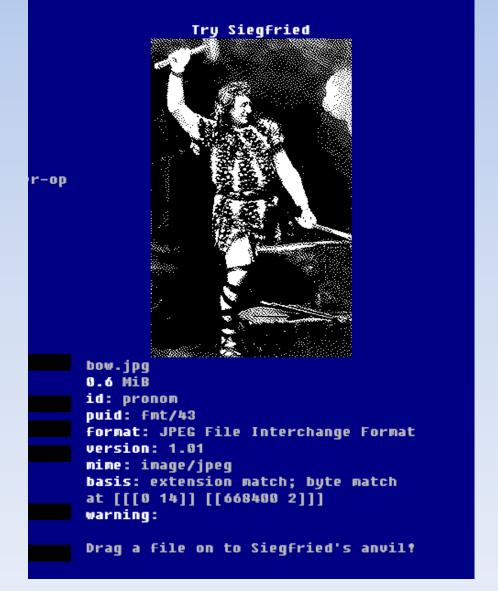


Preservation Pathways

Metadata Registry

File format identification





Digital Archives

Pathways

List all Pathways

Purposes

List all Purposes

Format

List all Formats

External Format Identifier

List all External Format Identifiers

Transformer

List all Transformers

Tagged Image File Format



Name:

Tagged Image File Format

Description:

The Tagged Image File Format (TIFF) is a raster image format originally developed by the Aldus Corporation, primarily for u scanning and desktop publishing. When Adobe Systems Incorporated purchased Aldus in 1994, they acquired the rights to the format and have maintained it since then. TIFF files comprise three sections: an Image File Header (IFH), an Image File Direct (IFD), and the image data. TIFF files can contain multiple images (multi-page TIFF), and each image has a separate IFD. The always appears at the beginning of the file, and is immediately followed by a pointer to the first IFD. The IFD contains metad which describes the associated image, stored as a series of tags. The IFD also contains a pointer to the actual image data. TII supports colour depths from 1 bit to 24 bit (e.g. monochrome to true colour), and a wide range of compression types (RLE, LCITT Group 3 and Group 4, and JPEG), as well as uncompressed data.

Generated:

true

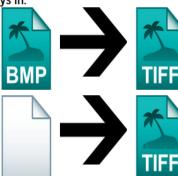
Extension:

tiff

infourl:

info:srnsw/formats/1010

Pathways In:





Home About Contact Visit The State Archives Collection Recordkeeping NSW public sector Government

 $\mathsf{Home} \to \mathsf{Digital} \; \mathsf{Archives} \to \mathsf{Pathways}$

| Digital Archives |
|---|
| Pathways |
| List all Pathways |
| Purposes |
| List all Purposes |
| Format |
| List all Formats |
| External Format Identifier |
| List all External Format Identifiers |
| Transformer |
| List all Transformers |

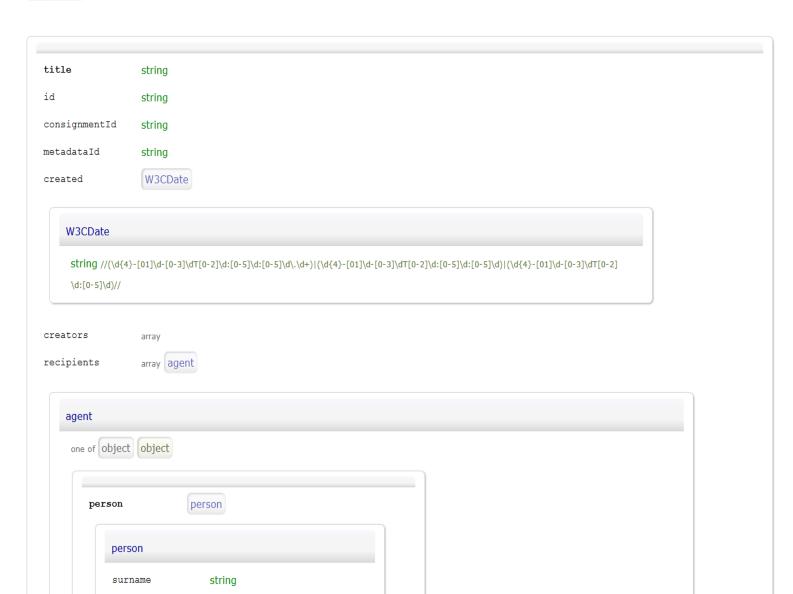
| Pathway | | Input Format | Transformer | Output Format |
|-----------------|------------|--|------------------|---|
| W DOC | PDF | Microsoft Word (Generic) | Optimus Prime | Acrobat PDF/X - Portable Document Format - Exchange 1:1999 |
| DOC - | DOC | Microsoft Word for Macintosh Document | Ironhide | Microsoft Word (Generic) |
| W - | DOC | Microsoft Word for MS-DOS Document | | Microsoft Word (Generic) |
| BMP | TIFF | OS/2 Bitmap | Steeljaw | Tagged Image File Format |
| | TIFF | Macintosh PICT Image | | Tagged Image File Format |
| List results pe | er page: 5 | <u>10</u> <u>15</u> 20 <u>25</u> Page 1 of 1 | | |

Digital Archives - Metadata registry

https://github.com/srnsw/metadata

Download Schema











How does an agency transfer digital archives?

- They contact us by usual methods or records at risk are identified
- We confirm whether the records are eligible (same rules as for paper)
- Once it looks like going ahead we log them into our project management tool and start the migration project
- Projects might take a few weeks or months, depending on the complexity



What about access?

- Records that are open to public access under an Access Direction to be available via our usual Search tools
- Data extraction will mean exciting possibilities for users of the archives
- Closed records to be available to controlling agency for responding to GIPA, business use etc.



The Opportunities





Welcome to OpenGov NSW

This is where you will find information published by NSW Government agencies, including Annual Reports and open access information released under the Government Information (Public Access) Act 2009 (GIPA Act). For government datasets, you should visit **Data NSW** or the **NSW Spatial Data Catalogue**. If you would like to browse archival records, please visit the **State Records NSW** website.

Attention: NSW Caretaker Period has commenced

The caretaker period for the NSW Election commenced on 6 March 2015.

Accordingly, no ministerial press releases or related information issued by the Government from this date will be available on this website. For copies of recently-issued ministerial press releases of information on the election policies of any political party as they relate to this department/agency or its portfolio area, please go to the website of the relevant political party.

Data

apps4nsw

OpenGov

Spatial FAQs

Qs Links

Information Asset Register

r

Order by:

Search datasets...

Download Summary Table

Relevance

Q

A / Datasets



Department of Educa... (57)

Roads and Maritime ... (24)

Office of State Rev... (23)

Transport for NSW (20)

Department of Plann... (19)

.....

Bureau of Transport... (17)

Office of Environme... (11)

Anti-Discrimination... (15)

Land and Property I... (10)

State Records Autho... (9)

Show More Organisations

▼ Groups

Infrastructure and ... (42)

Education and Training (34)

Business and Indust... (24)

Search datasets...

311 datasets found

BTS Data Visualisations

The following Bureau of Transport Statistics data visualisations are available: Travel Zone Explorer Journey to Work Explorer Local Government Area Profiler...

HTML

NSW and Sydney Transport Facts

The Transport Facts dashboard provides important top-level transport statistics at your fingertips. Categories include: Population Economy Labour Vehicles...

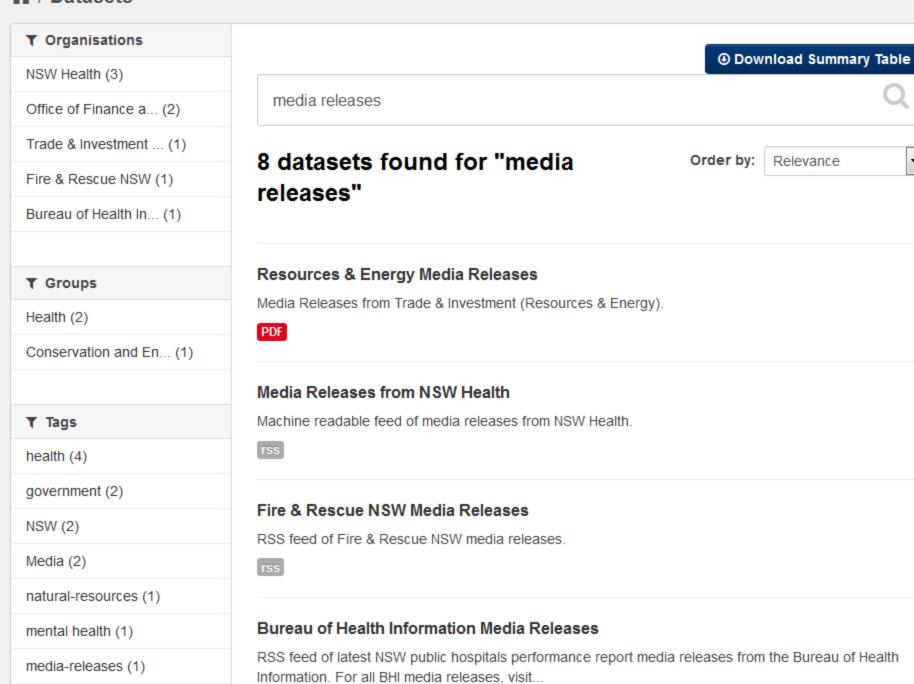
HTML

HTML

Landuse Planner

The Landuse Planner provides a detailed look at population, employment and workforce forecasts by area, and allows for the production of thematic maps.





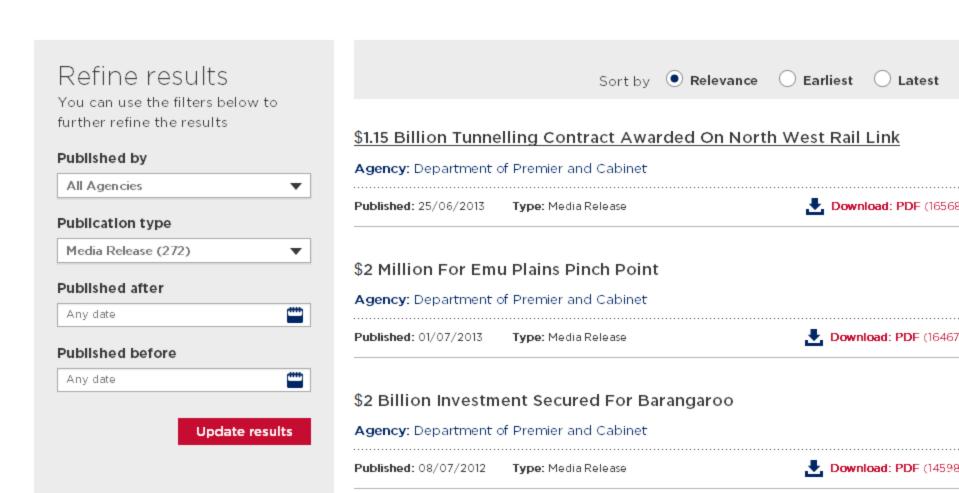
3525 publications



Latest

We found 272 matches for:

Publications published by any agency, of type Media Release, within any date range





Mary MacKillop Bridge Display

Home

Objects

Series

All Series

2010-10-11

20.282

Media releases from the office of Kristina Keneally, Premier of New South Wales

This series consists of media releases from the office of Kristina Kenneally during her time as Premier of New South Wales between April 2009 and March 2011.

The media releases are arranged in chronological order and were received electronically in .PDF format.

The media releases relate to matters in the Premier's portfolio and consist of policy announcements, announcements regarding event attended by the Premier, recent successes within the government as well as new projects and initiatives.

Each press release is 1-2 pages in length covering a single topic or issue and containing a media contact name and number at the end

| Title | Created | Series |
|-----------------------------------|------------|--------|
| NSW Unis Research And Development | 2010-07-13 | 20,282 |
| Rural Health | 2010-03-16 | 20,282 |
| South Coast Correctional Centre | 2010-11-12 | 20,282 |
| Royal Easter Show | 2010-04-01 | 20,282 |
| Barangaroo Transport | 2010-12-23 | 20,282 |
| LA Galaxy And Newcastle Jets | 2010-10-20 | 20,282 |
| N. M. Kell, B. J. B. J. | 0010 10 11 | |



State Records

Collection Search or Go »

Home About Contact Visit The State Archives Collection Recordkeeping NSW public sector Government Records Repository

You are here ::Home → Search

press releases

Collection search

Filter by year

1775 + (35)

Filter by series

Registered files (2)

Media releases from the office of Kristina Keneally, Premier of New South Wales (1)

Press releases from the office of Pam Allan, Minister for the Environment 1995-1999

(1)

State Coal Mines draft leases (1)

□ Video tape, audio
tape, film and other
media productions for
Department of Education
[VT series] (1)

Record series and items

Press releases [Department of Lands]

...These ministerial **press releases** concern such matters as: Crown land subdivisions; drought aid; the building of new schools; assistance for primary...

占 Press releases [Premier's Department]

...The series comprises signed copies of **press releases**, prepared for publication in various New South Wales newspapers, by Premiers of New South Wales...

Indexes to press releases [Department of Lands]

...These indexes give the subject matter and page number of departmental **press releases**. (They index the **press releases** located at 19/17675-76.) (19...

Newspaper clippings and press releases [Nurses Education Board]

...Newspaper clippings, 1975, **press releases**, 1976-78 (18/1429.3). 1 bundle. Note::

This description is extracted from Concise Guide...

Press releases from the office of Pam Allan, Minister for the Environment 1995-1999

Functions and activities

No results

Agencies and people

Community Relations and
Publications Section [NSW Planning and
Environment Commission]

Circular Quay Engineering
Committee (1938 - 1939) / Circular
Quay Supervisory Committee (1939 - 1964)

Media Unit [NSW Police]

Stockton Hospital for the Insane
(1910-1917) Stockton Mental Hospital /
Stockton Hospital (1917-1989)
Stockton Centre (1989-)

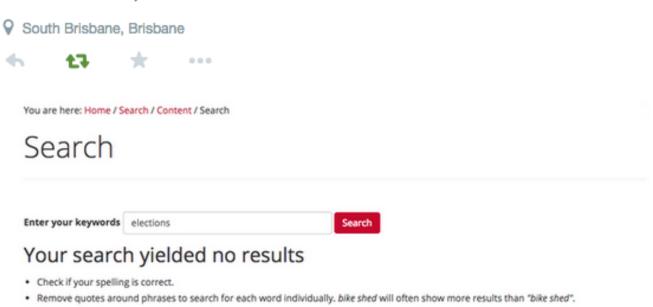
Rabbit Island Hospital for the
Insane (1910-1917) Rabbit Island
Mental Hospital (1917-1936) Peat and
Milson Islands Mental Hospital / Peat
and Milson Islands Hospital
(1936-1973) Peat Island Hospital
(1973-1989) Peat Island Centre







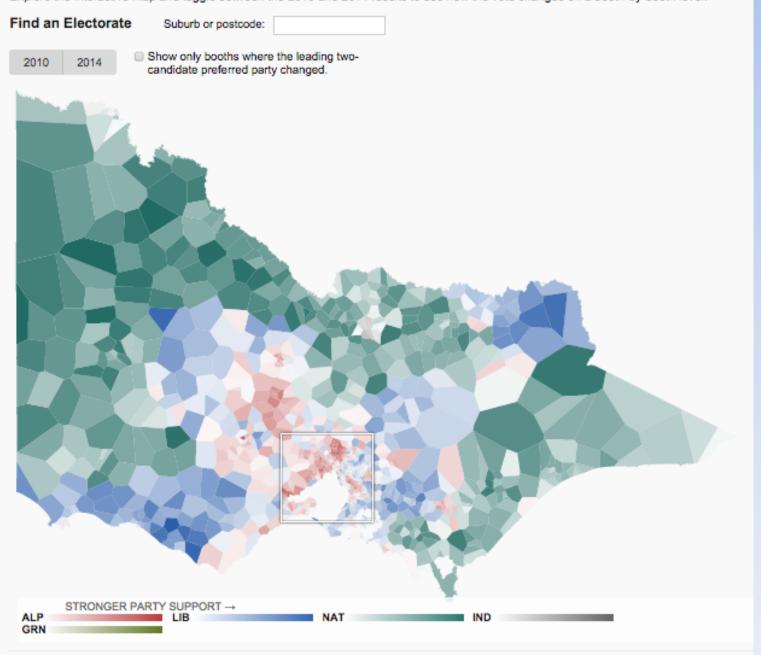
Hi @datansw. You do a great job, thank you. However, it would be nice to correct this:



Consider loosening your query with OR. bike OR shed will often show more results than bike shed.

The 2014 Victorian state election has been run and won. While there are still some recounts underway, we have enough data from the Victorian Electoral Commission to look at the count in more detail.

Explore the interactive map and toggle between the 2010 and 2014 results to see how the vote changed on a booth-by-booth level.



Links

http://www.records.nsw.gov.au/digitalarchives

http://futureproof.records.nsw.gov.au/

http://www.opengov.nsw.gov.au

http://data.nsw.gov.au