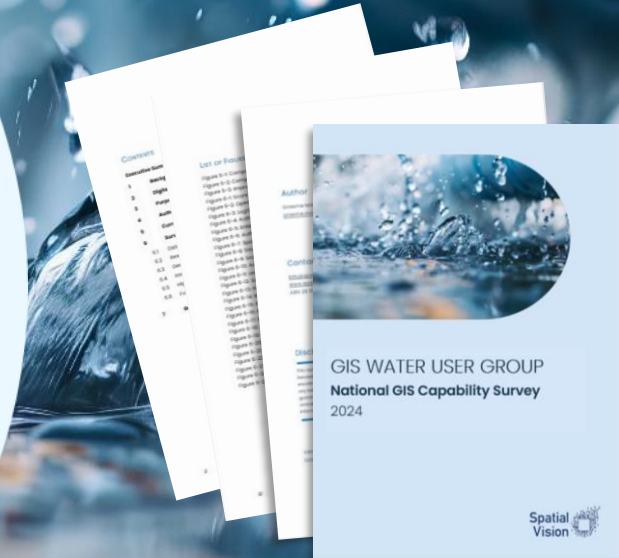


2024 National Capability Water Survey

GIS Water User Group
Meeting #56
13 Nov 2024



Agenda

GIS Water User Group Meeting #56

Graeme Martin
Andrew Langdon
and Rhiannan Muldana



9.30 – 9.40

- Welcome/Intros/Context

9.40–10.30

- **Survey Results and Roundtables (Part 1)**
 - Key takeaways
 - Data & Technology
 - Resources & Leadership

10.30–10.40 Break

10.40–11.40

- **Survey Results and Roundtables (Part 2)**
 - Demonstrated Value
 - Innovation
 - Geospatial Digital Transformation

11.40–11.50

- Climate Barometer

11.50–12.00

- SV Update
- What next/Closing remarks

Acknowledgement of Country

GIS Water User Group
Meeting #56

Graeme Martin
Andrew Langdon
and Rhiannan Mundana



Spatial Vision acknowledges the Traditional Owners of the Land(s) on which we meet today, and pay our respect to them, their cultures and their Elders, past, present and emerging.

We also acknowledge the Traditional Custodians of the various lands on which you all participate from today and any Aboriginal and Torres Strait Islander people participating in this meeting.

Context

Introductions

GIS Water User Group "GWUG"

History of surveys

**Spatial
Vision**



Context

Authority Types
Contributors

Spatial
Vision



sunwater

1. Bulk Utility/Service (6 submissions)

- managing water and/or delivering services to large areas or statewide



MI Murrumbidgee
Irrigation

2. Combined Urban/Rural (4 submissions)

- Delivering water for agriculture and townships <300,000 residents



wannonwater

3. Urban/Regional Services (5 submissions)

- Delivering drinking water to districts with <150,000 residents



MIDCOAST
council

4. Councils (4 submissions)

- Delivering local drinking water services



OzWater
WATER

5. Rural/Bulk Supply (3 submissions)

- Managing water supply for agriculture, irrigation, stock and domestic

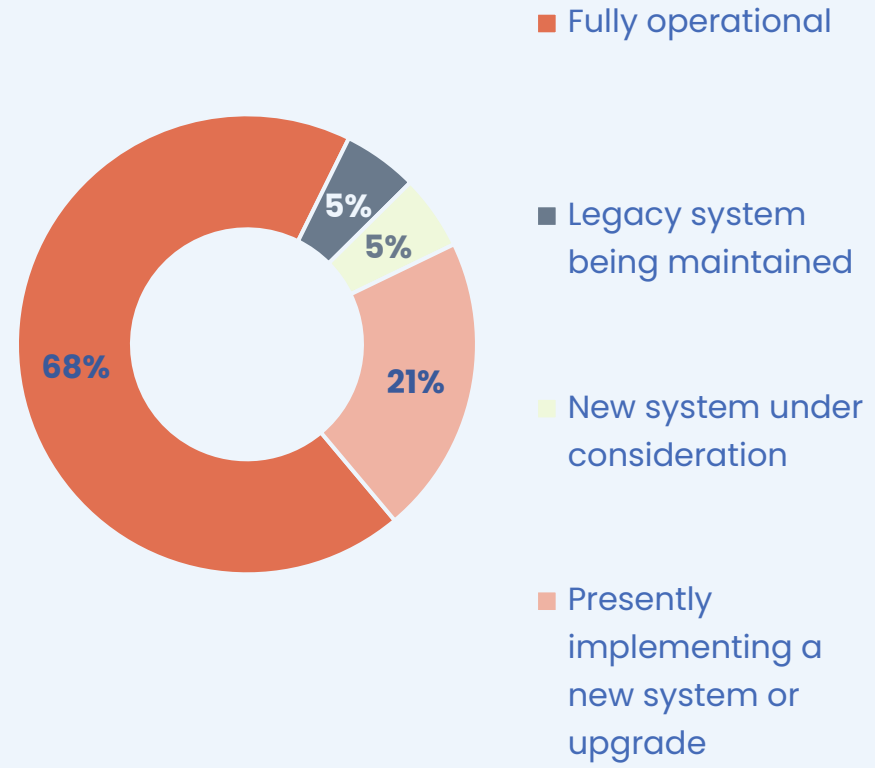
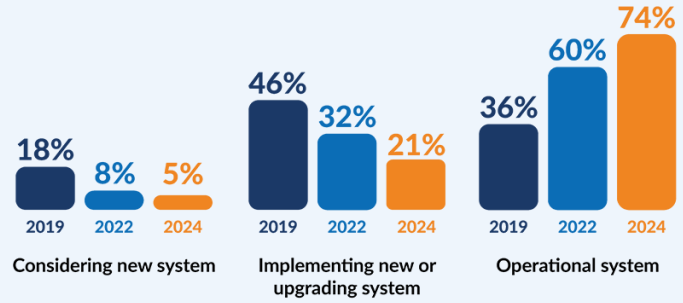


Data & Technology

#Enterprise GIS Status

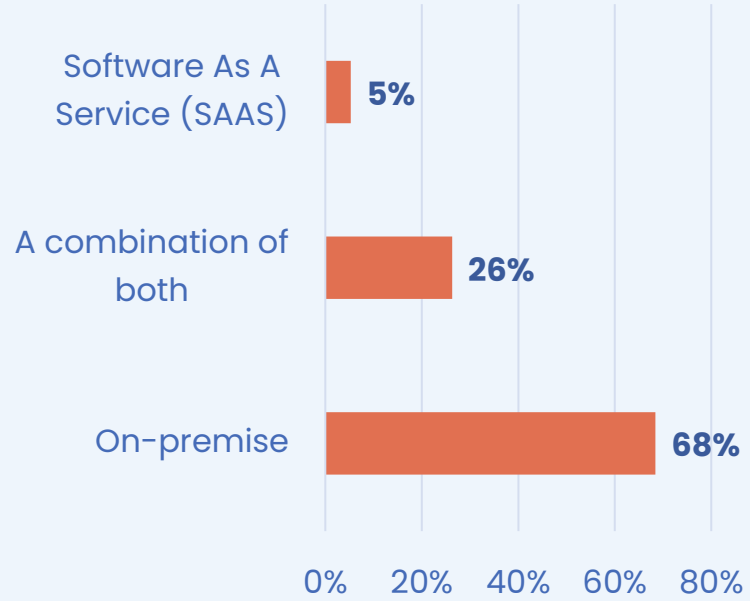
Lifecycle stage of enterprise GIS platform

About half of authorities have modernised their systems over the past few years.



Data & Technology

#Infrastructure Hosting



Data & Technology

#Infrastructure Hosting



Mentimeter

#Infrastructure Hosting: Why do we think most of us are still on prem? Even though many of us have spent time upgrading in recent years?

'thats how we always have done it'

Still developing data governance and cyber security policies.

Systems under review to define future state

Especially moving to cloud could cost a lot of money in undertaking the project, limitation of offerings, integration with other applications

Easier integration with other on prem systems

Cost \$

tbh, i still do not know what the actual benefit is (apart from that versions are managed etc)

Cost



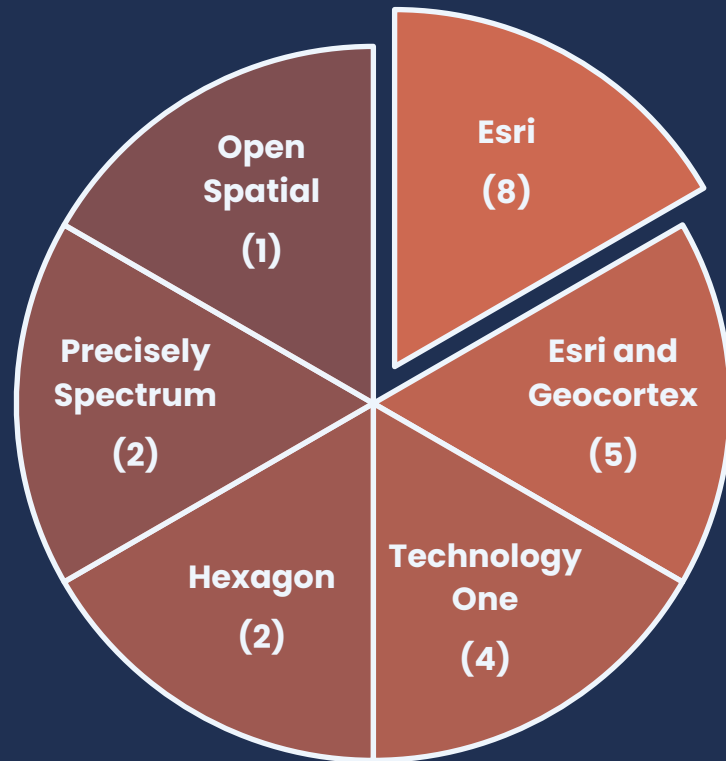
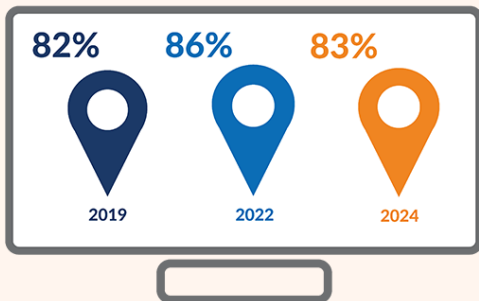
Data & Technology

#Corporate WebGIS



Corporate web-GIS implementation

Providing staff with a web-based GIS is a core application for the majority of authorities.



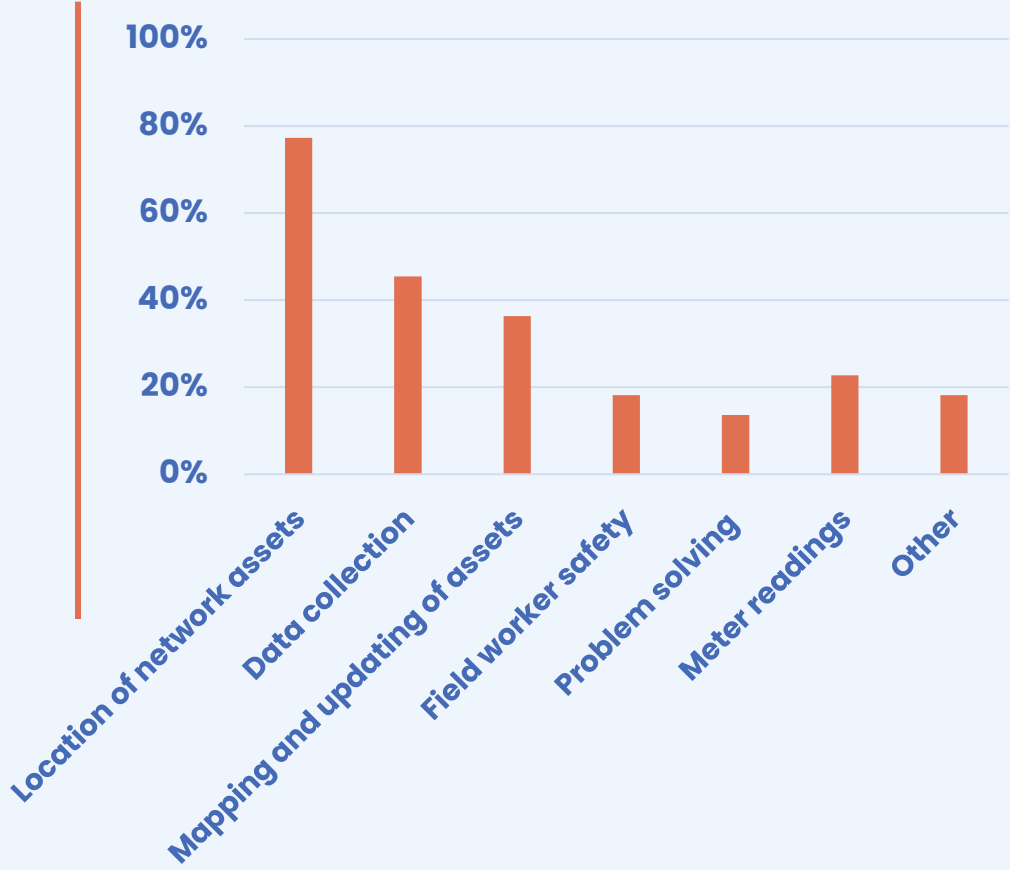
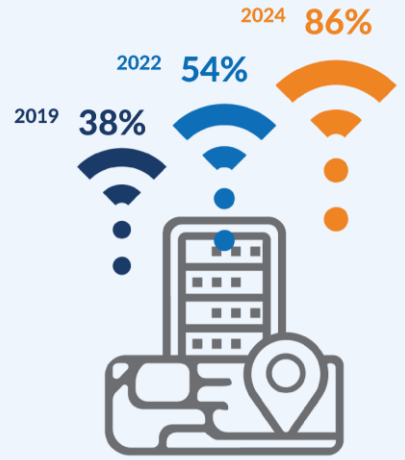


Data & Technology

#Field Mapping Use cases

Field access

Most authorities have now rolled out geo-field apps providing anytime, anywhere access to users.



Data & Technology

#Field Mapping Use cases



Mentimeter

#Field Mapping Use cases: What are we working on or see as new opportunities?

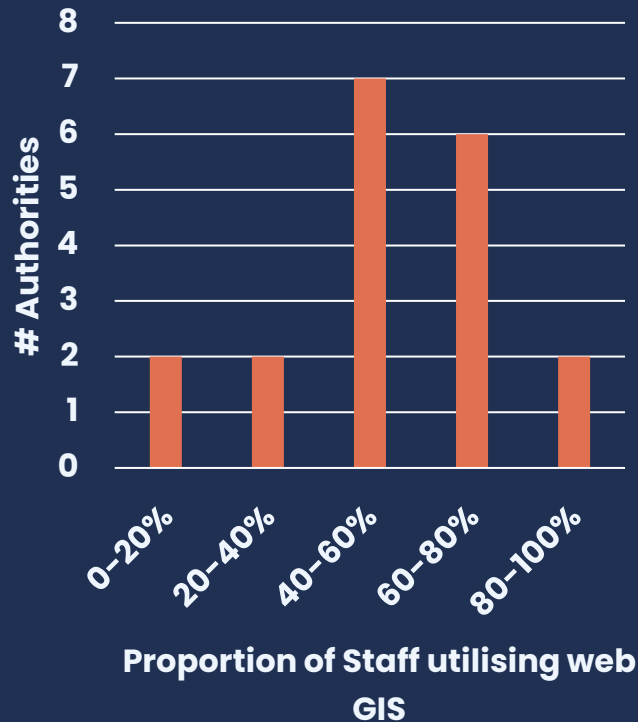
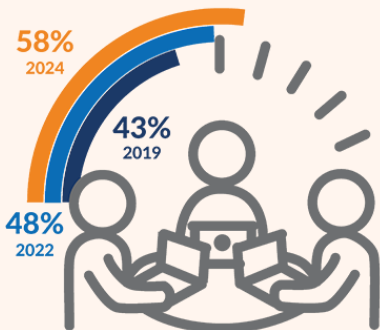
asset related inspections/workorders	Focus on asset inspection	snap send solve type from public	asset / maint collection in one system
Maximo Anywhere spatial capabilities are not up to my expectations	Maximo Anywhere doesnt have capabilities to lasoo assets and raise a work order. GMW is currently initiating a project to move to Maximo Mobile, with spatial capabilities supposedly improved	2	

Data & Technology

#WebGIS usage

% of staff who are regular users of GIS systems

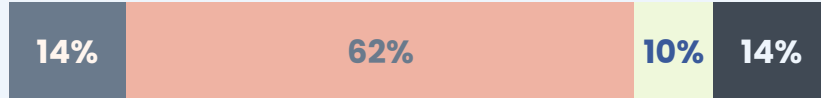
An increasing number of staff regularly rely on GIS to support their roles.





Data & Technology

#Status of Data



■ **Data is fit for purpose and meets requirements**

■ **Most Needs Met**

■ **Neutral**

■ **Some Needs Met**

Data & Technology

#Data Challenges

Lack of coordinated data collection approach

Lack of accuracy of legacy data

Currency of data

Out of data imagery

Lack of one source of truth for all asset data

Difficult to discover internal data

Difficult for external users to access data

Mismatch between asset register and assets recorded in GIS

Synchronisation between Asset Management System and the GIS

Spatial metadata missing

Transferring CAD drawings and as-constructed developer drawings to GIS

Lack of executive support for GIS investment

- ✓ Currency
- ✓ integration with assets
- ✓ Redundant or duplicate data



Resources & Leadership

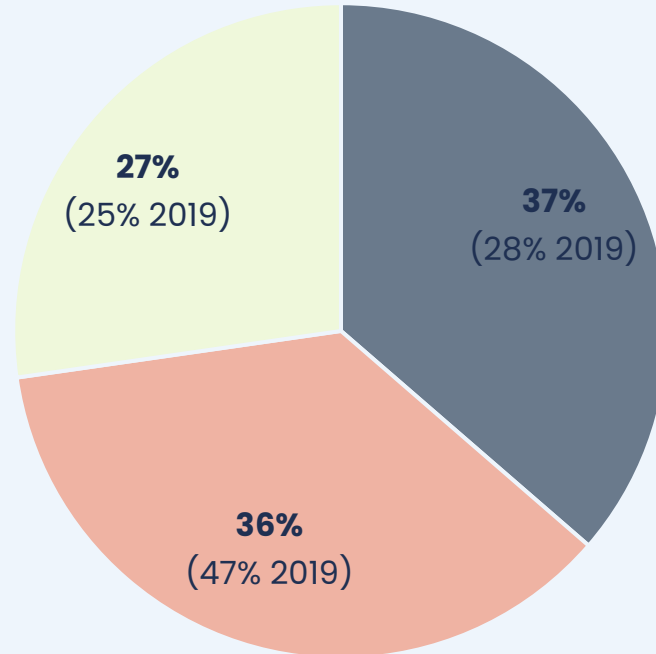
#Level of Exec Support

2019 High 28%

2024 High 37%

Medium to High
Leve Exec Support

■ High ■ Medium ■ Low



Executive leadership support is critical for GIS teams who are trying to support digital transformation across the business

Resources & Leadership

#Level of Exec Support



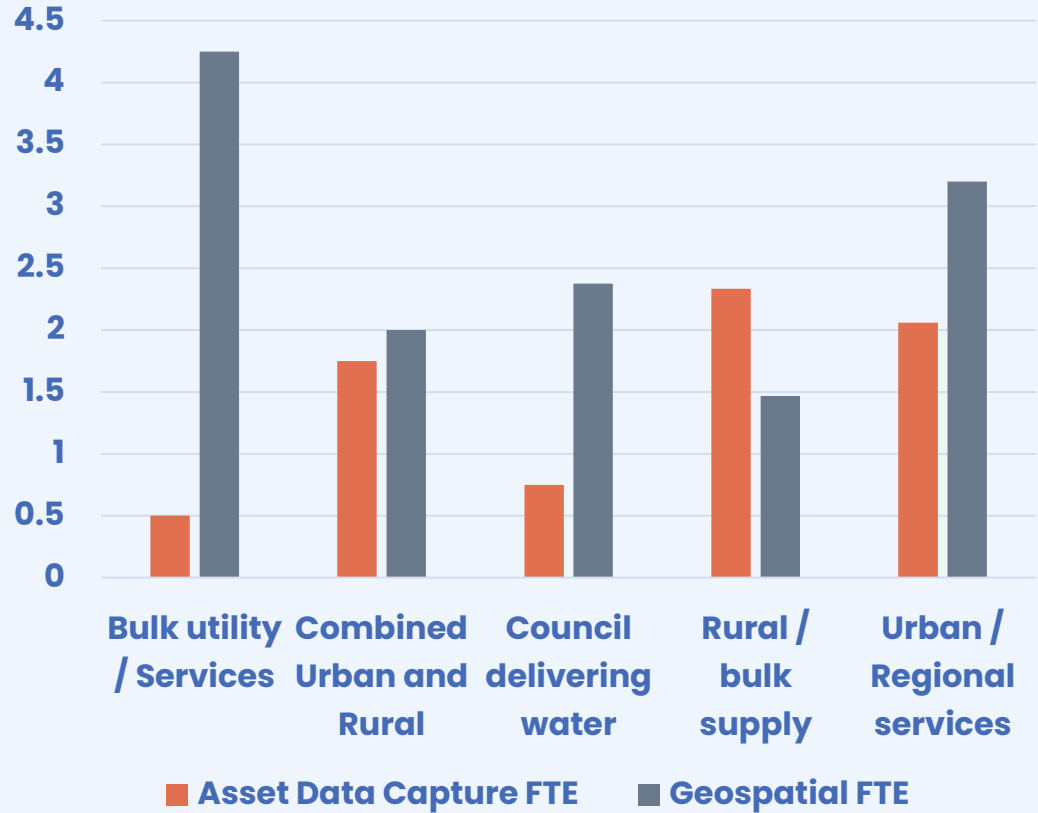
#Level of Exec Support: What are we doing right with our executives?

<p>It is more visible and exec must be seeing a good value in it</p>	<p>Change of execs can be a factor as well. Our MD is very data driven</p>	<p>Hoping that a shift away from IT GIS to Asset Management as GIS as a data system will help</p>	<p>Execs understand the importance of data to inform decision making</p>
<p>the point about different mediums is a factor, such as PowerBI. the need for spatial to complement the visuals is important</p>	<p>1</p>		



Resources & Leadership

#GIS FTEs



Break



10.30-10.40 Break

10.40-11.40

▪ **Survey Results and Roundtables (Part 2)**

- Demonstrated Value
- Innovation
- Geospatial Digital Transformation

11.40-11.50

- Climate Barometer

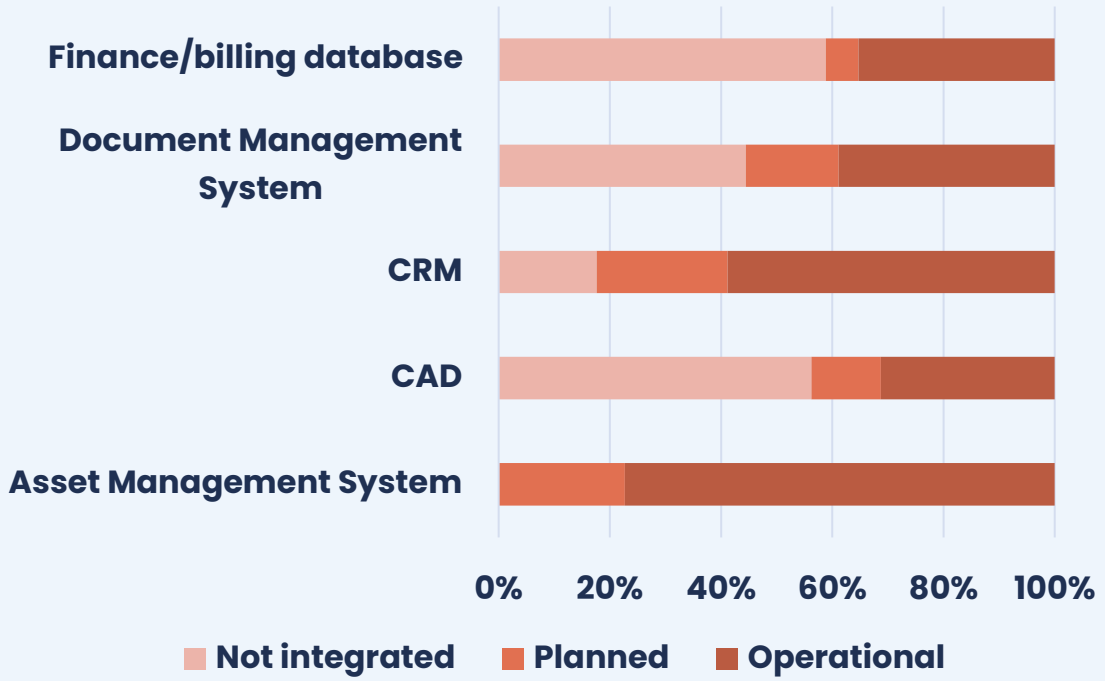
11.50-12.00

- SV Update
- What next/Closing remarks



Demonstrated Value

#Business System Integration



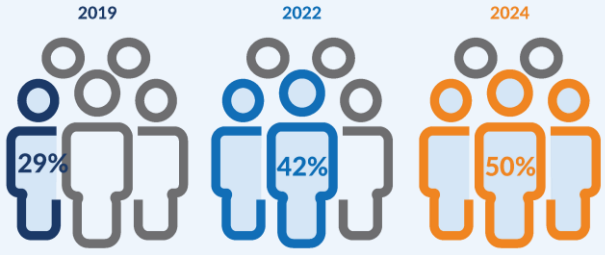


Demonstrated Value

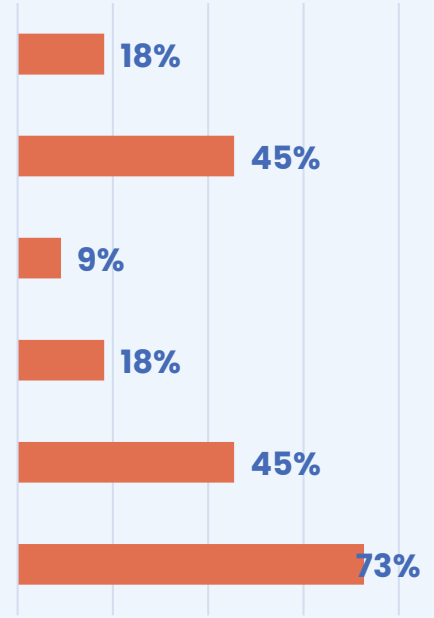
#Public Facing Use Cases

Public facing GIS application

Interactive service maps are becoming critical for customers and the community.



- Location of emergencies / incidents
- Extent of service area
- Work-order dispatch and updates
- Enable the public to report issues with...
- Display of outages
- Location of network assets





Demonstrated Value

#Public Facing Use Cases

#Public Facing Use Cases: Are we happy with level of GIS support for Outage transparency? ?

Yes

No, not spatially displayed

as a rural authority,
requirements/expectations are
a little different

our outage map can use tracing to
create a polygon. this was
implemented a couple of months
ago FME web app form to create
outage in AGOL

GMW mainly does this for
BGA alerts, floods and
winter dewatering

excellent information for
reference

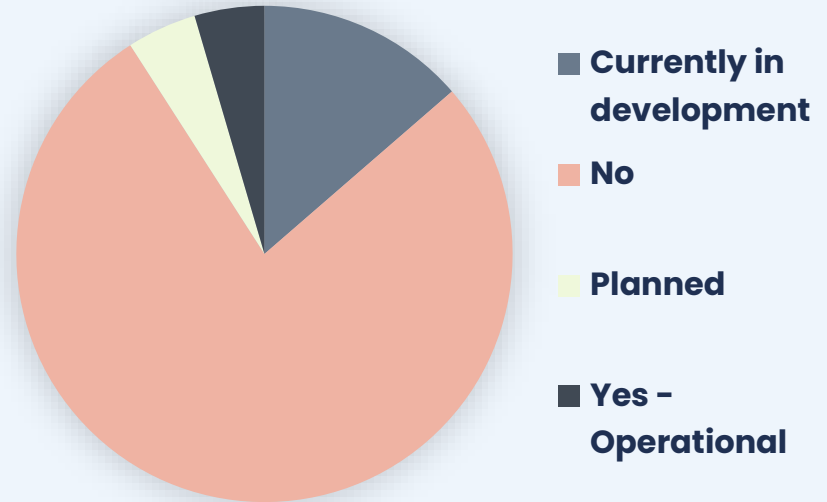
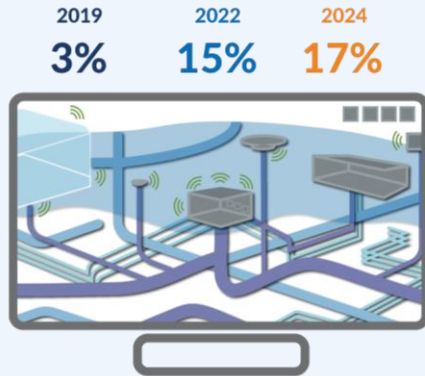


Demonstrated Value

#Digital Twins

Digital twin / 3D asset visualisations

An increasing number of authorities are developing or have implemented Digital Twins, mostly for asset and infrastructure planning.

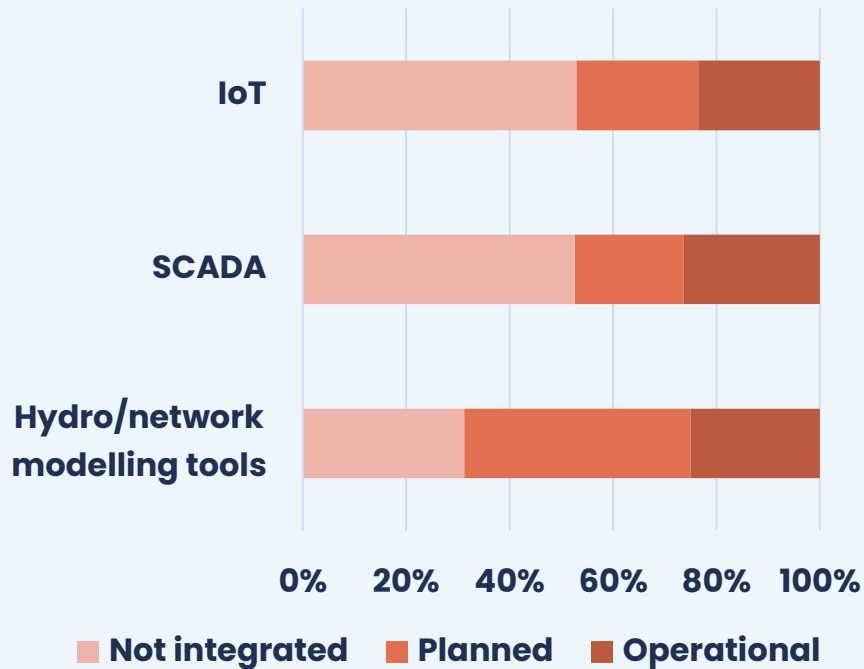




Innovation #IoT / Sensor Integration

Real-time monitoring of operations

More authorities are implementing live monitoring systems linked to geospatial views.



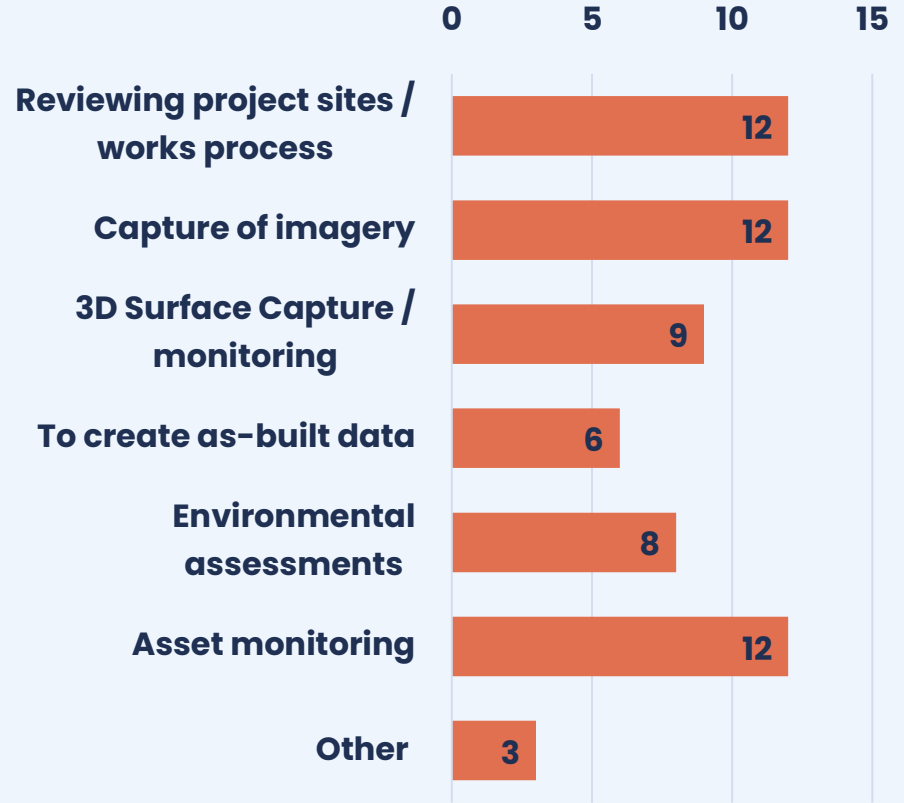
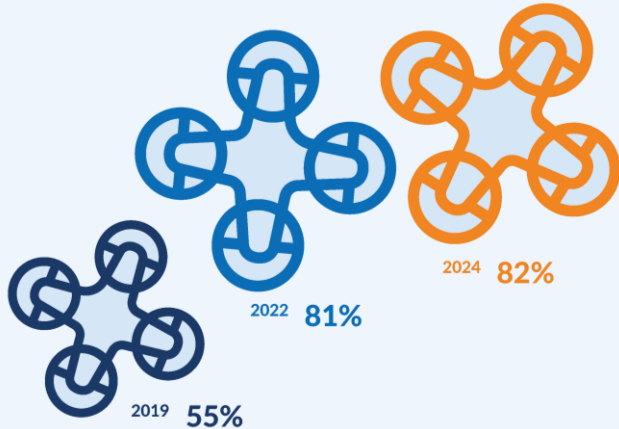


Innovation

#Drone Use Cases

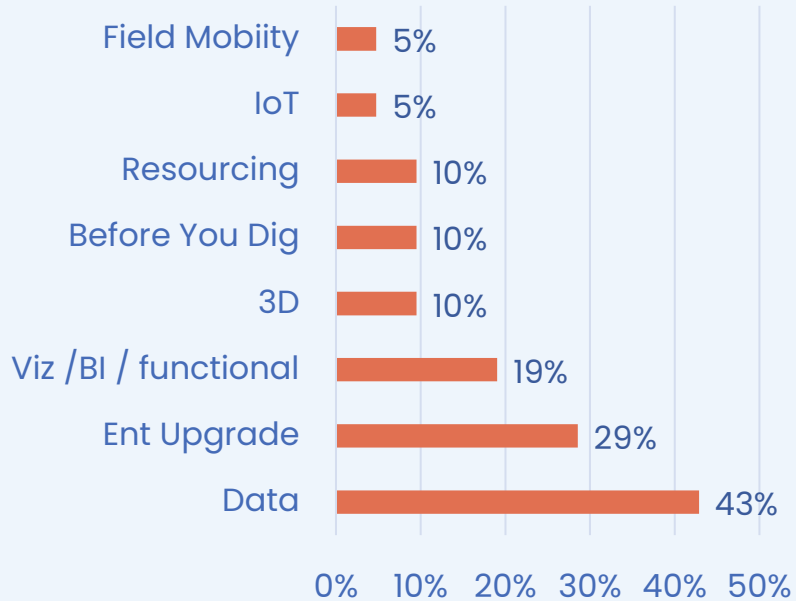
Use of Remotely Piloted Aircraft Systems (RPAS)

From reviewing project sites to asset monitoring, most authorities are utilising RPAS.

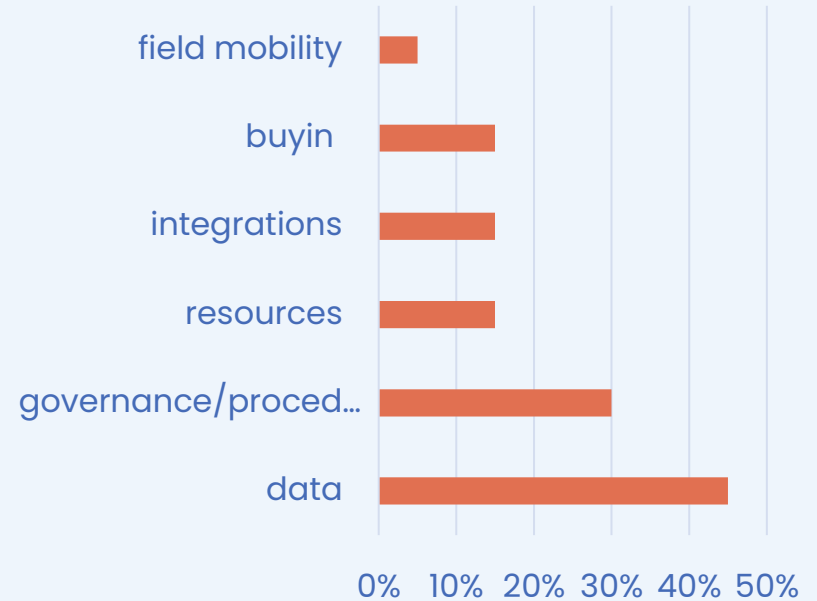




highlights/wins

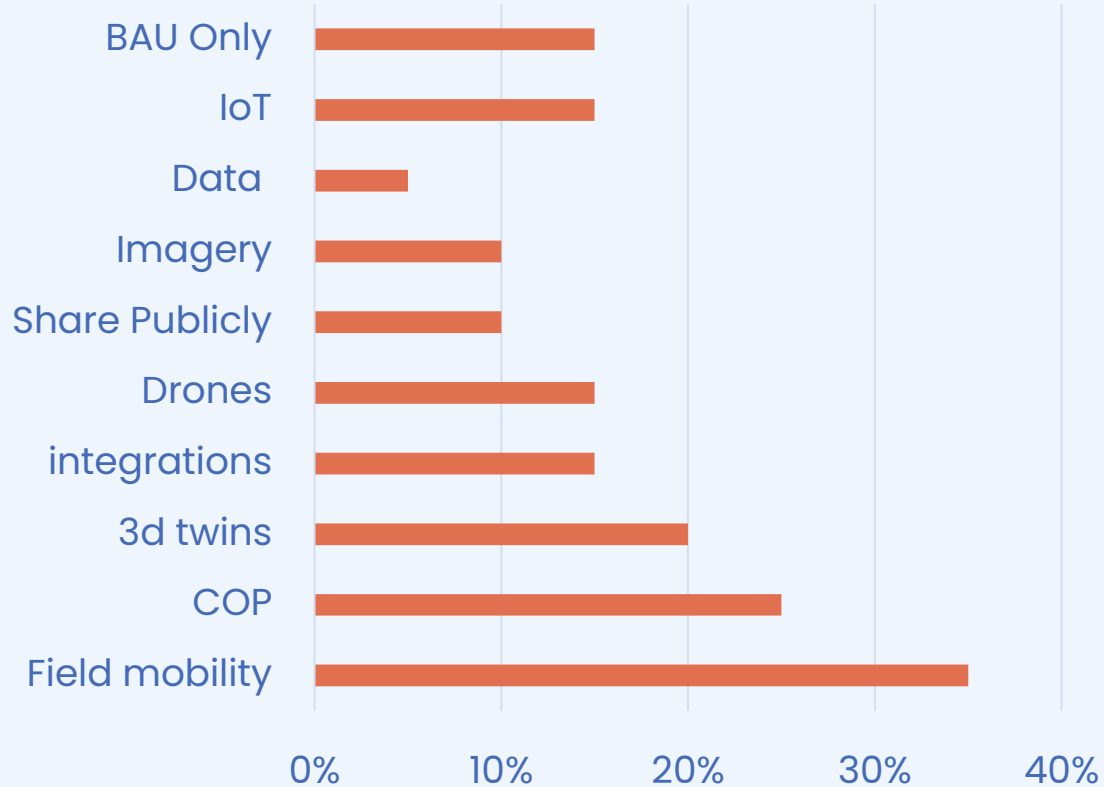


Current challenges





Opportunities





Geospatial Digital Transformation

Overall Survey Results

	Data & Technology	Resources & Leadership	Demonstrated Value	Innovation	Overall GDT
Bulk utility / Services - managing and/or delivering to large area or statewide	7.9	5.4	5.5	5.8	24.7
Combined Urban and Rural for agriculture and township services	7.5	4.6	3.1	3.4	18.6
Council delivering water	6.6	4.6	3	1.5	15.7
Rural / bulk supply for agriculture, stock & domestic	5	7	2.2	2.8	17
Urban / Regional services	6.6	5.4	5.8	4.7	22.4



Geospatial Digital Transformation

2024 Survey Results & Roundtable



How will use your Benchmark Report?

support defining GIS strategy

contribute to digital transformation program priorities

highlight opportunities that can benefit business drivers

Plan future projects
Recognise the trend
Track our progress
Show the value of the GIS to exec

appreciate and understand the effort that goes into producing this. definitely to feed into digital strategy development and other initiatives.

also to help us benchmark ourselves, which is always important. to communicate to others how we are performing, where we're on front, on par or behind

That there is no single way to approach Spatial solutions - each organisation is unique

Climate Barometer

Rhiannan Mundana



The screenshot displays the Spatial Vision website interface. At the top, the navigation bar includes the Spatial Vision logo, the Lapis logo, and menu items for 'About', 'Services', 'Industries', and 'Library'. A 'Get in touch' button and a search bar are also present. The main content area features a large image of a windmill in a field at sunset, overlaid with a white barometer graphic. The title 'Our Climate Action Barometer Survey' is prominently displayed. Below the image, there is a paragraph of introductory text and a section titled 'How prepared is your organisation?' which provides details about the survey's purpose and benefits. A small inset image shows a group of people in an office setting.

Spatial Vision Lapis

About Services Industries Library

Get in touch Search

Our Climate Action Barometer Survey

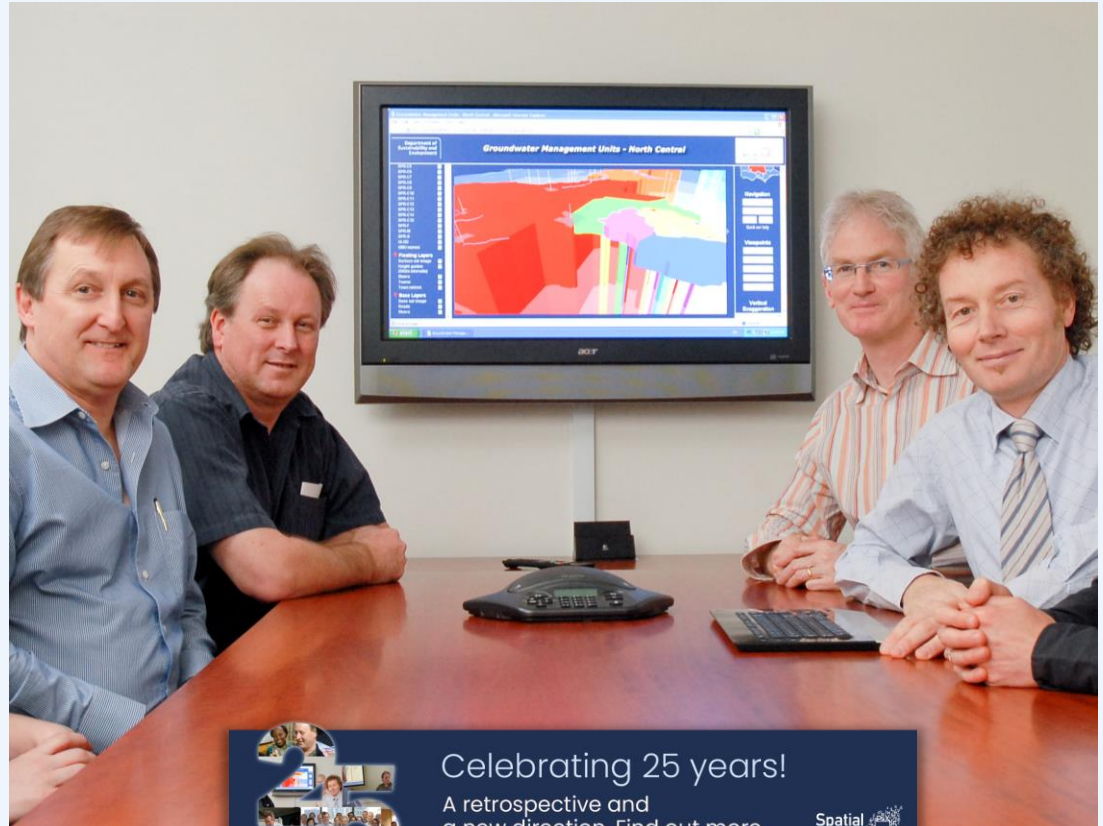
In today's rapidly evolving climate landscape, the need for action is undeniable. Organisations and governments are under growing pressure to develop adaptation and action plans to protect assets, operations, and communities from the increasing risks posed by climate change. However, we understand that amidst economic pressures and competing priorities, addressing climate risks can be a challenge.


We believe this survey and the resulting insight report will help you assess your current climate risk appetite, provide guidance on the necessary focus areas, and help you gain clarity and advocacy across your organisation.

How prepared is your organisation?

Spatial Vision's Climate Action Barometer is designed to help you find out. By completing our national survey, your organisation will not only contribute to a comprehensive report on the readiness of industries across Australia, but also gain valuable insights to benchmark your own climate planning, strategy, governance

What's news at Spatial Vision



 Celebrating 25 years!
A retrospective and a new direction. [Find out more...](#)

Spatial Vision 

What Next

Discuss Communications
Discuss Future Interaction Desires
Discuss...

**Spatial
Vision**



We would appreciate your feedback on today's GWUG meeting?

12 responses



A word cloud of feedback responses on a dark green background with a fern leaf pattern. The words are arranged in a roughly circular shape. The most prominent words are 'informative' and 'big thanks'. Other visible words include 'interesting', 'thanks', 'necessary', 'great work', 'insightful', 'engaging', 'helpful', 'very', and 'thanks great session'.

interesting
thanks
big thanks
necessary
informative
great work
insightful
engaging
helpful
very
thanks great session