GEOSPATIAL FRAMEWORKS

Maximising your spatial investment

Open Data: Achieving The Value Proposition

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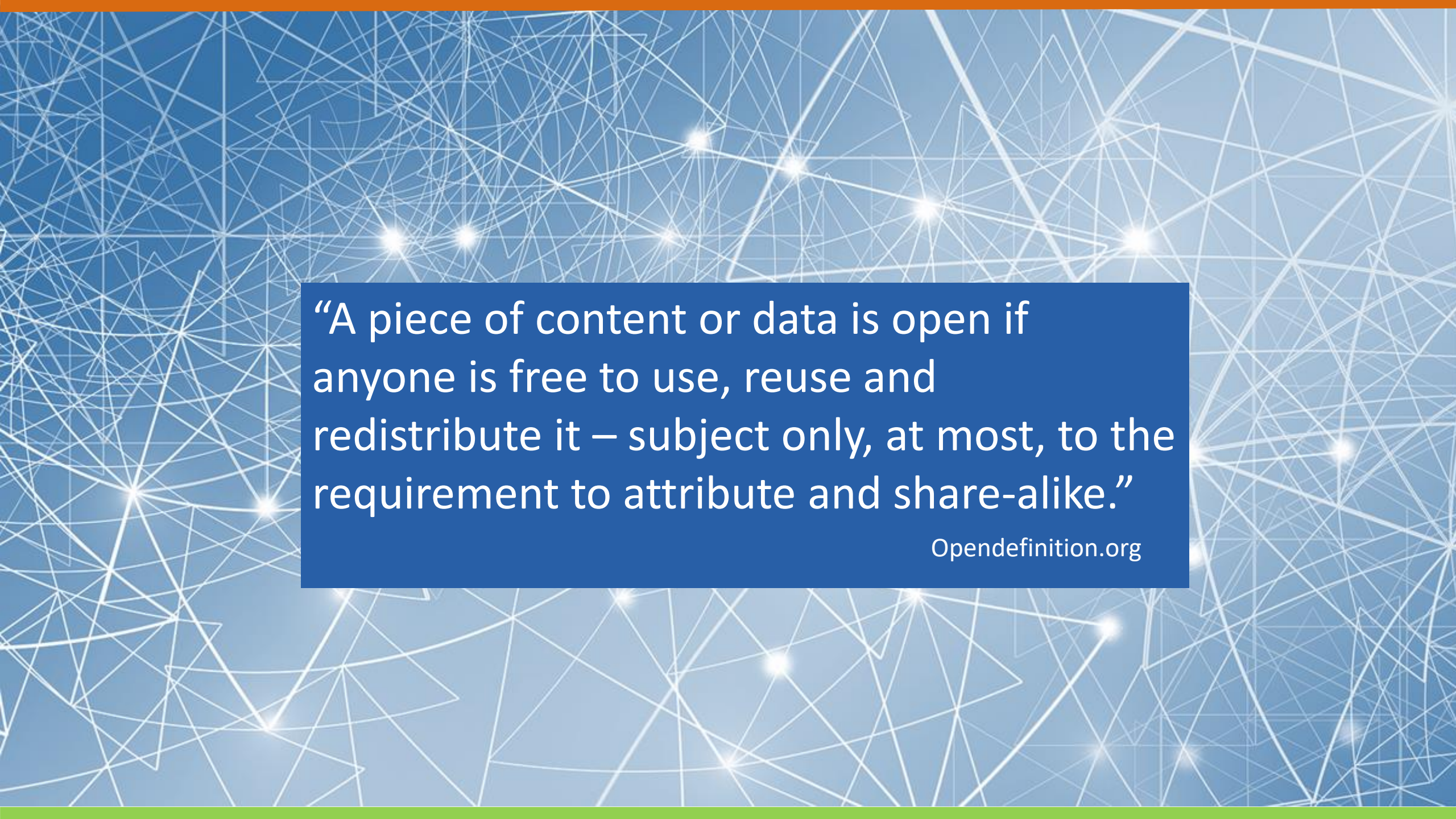
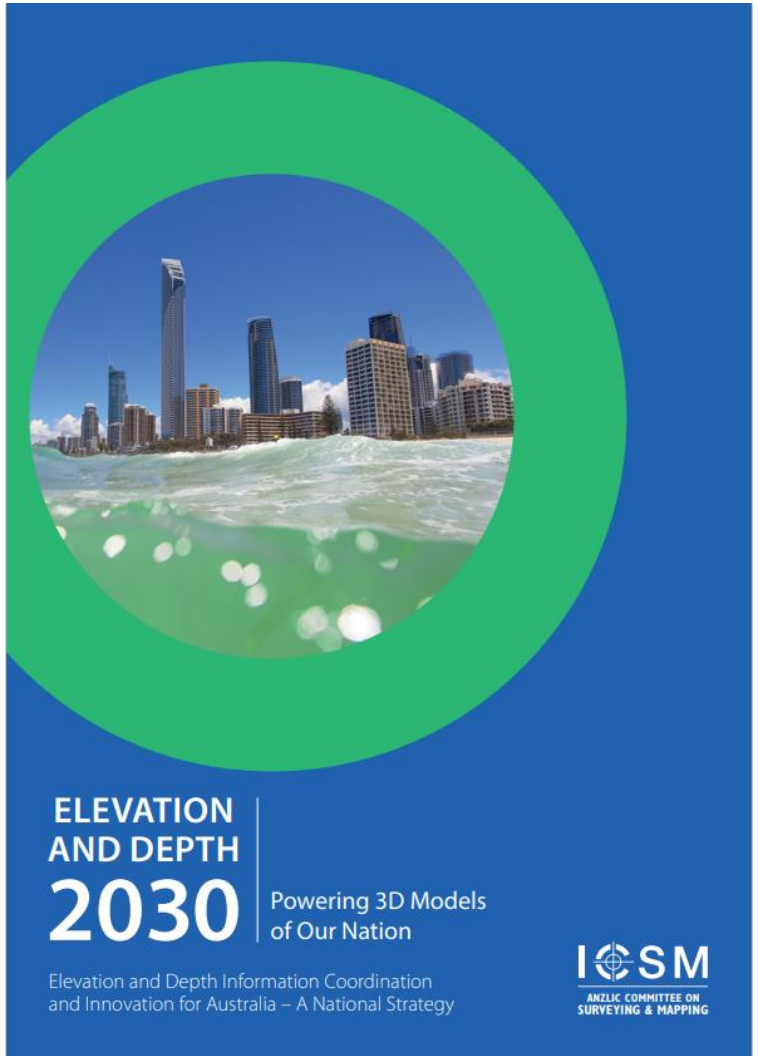

“A piece of content or data is open if anyone is free to use, reuse and redistribute it – subject only, at most, to the requirement to attribute and share-alike.”
Opendefinition.org

Strategic Focus

- Access to data is common goal of geospatial strategy
- Open Data a common objective
- Open by default, unless there is a valid reason no to do so

- ✓ Access to High Performance Data
- ✓ Unified Discovery and Distribution
- ✓ Advanced Integration and Visualisation
- ✓ Easily Queried and Used Widely
- ✓ Sustained Value through Collaboration



Elevation-and-Depth-2030-Consultation_Web.pdf (icsm.gov.au)

Strategic Actions

- Modernize the management of, and online access, to publicly available seabed data.
- Increase the rate of data acquisition to fill important gaps.
- Provide seabed mapping data essential for offshore renewable energy and tourism.
- Unlock archives of seabed data held by government and industry organisations.

The value of Australian seabed mapping data to the blue economy | Deloitte Australia | Deloitte Access Economics

Value of Open Data

Social – community safety, wellbeing, resilience to natural hazards and cultural significance

Economic – productivity improvement, cost reduction, growth in blue economy, revenue generation, job creation and territorial limits.

Environmental - preservation and regeneration of the marine environment, environmental management, monitoring and research, coastal management, and offshore renewable energy.

The Story is Important

Accurate Knowledge of port elevation, in conjunction with tide and vessel information has potential to increase export opportunities.

$300 million Value-add

The value of Australian seabed mapping data to the blue economy | Deloitte Australia | Deloitte Access Economics

Data Production – economic activity – contributed to $51 million in Australian Economy – employed 56,000 FTEs (producers/users of data (direct and indirect))

Source: Deloitte Access Economics – Value of Australian Seabed Mapping Data to the Blue Economy - figure for 2018-19 period (direct and indirect)

Bigger than transport sector and rental and hiring services

Yet 75% is still to be mapped

Research

Targeted research into habitats, understanding hazards, vulnerability, processes, and geomorphology of our coastal environments.

$120 Million Value-add

Search and Rescue

Safe navigation during rescue operations.

$250 Million Value-add

Defence

Improves the safety of the naval force during deep sea exploration and navel activities.

$5.5 Billion Value-add

Source: Deloitte Access Economics – Value of Australian Seabed Mapping Data to the Blue Economy - figure for 2018-19 period (direct and indirect) *Images: Pixabay*

Oil Exploration

Selection of areas of interest for exploration and the construction of oil and gas extraction infrastructure.

$740 Million Value-add

Aquaculture

Establishment of fishing locations and fish farms

$840 Million Value-add

Commercial Fishing

Minimize damage to seabed habitats and fishing equipment.

$1.5 Billion Value-add

Domestic Tourism

Vessel operators use data to minimize disturbance to the underwater ecosystem, identify seabed features, and ensure they can anchor safely.

$1.7 Billion Value-add

Transport

Safe navigation and anchorage of vessels - both freight and passenger water-based transportation.

$3.3 Billion Value-add

Oil and Gas Extraction

Assess environmental impacts and monitor risks associated with oil and gas extraction.

$48.4 Billion Value-add

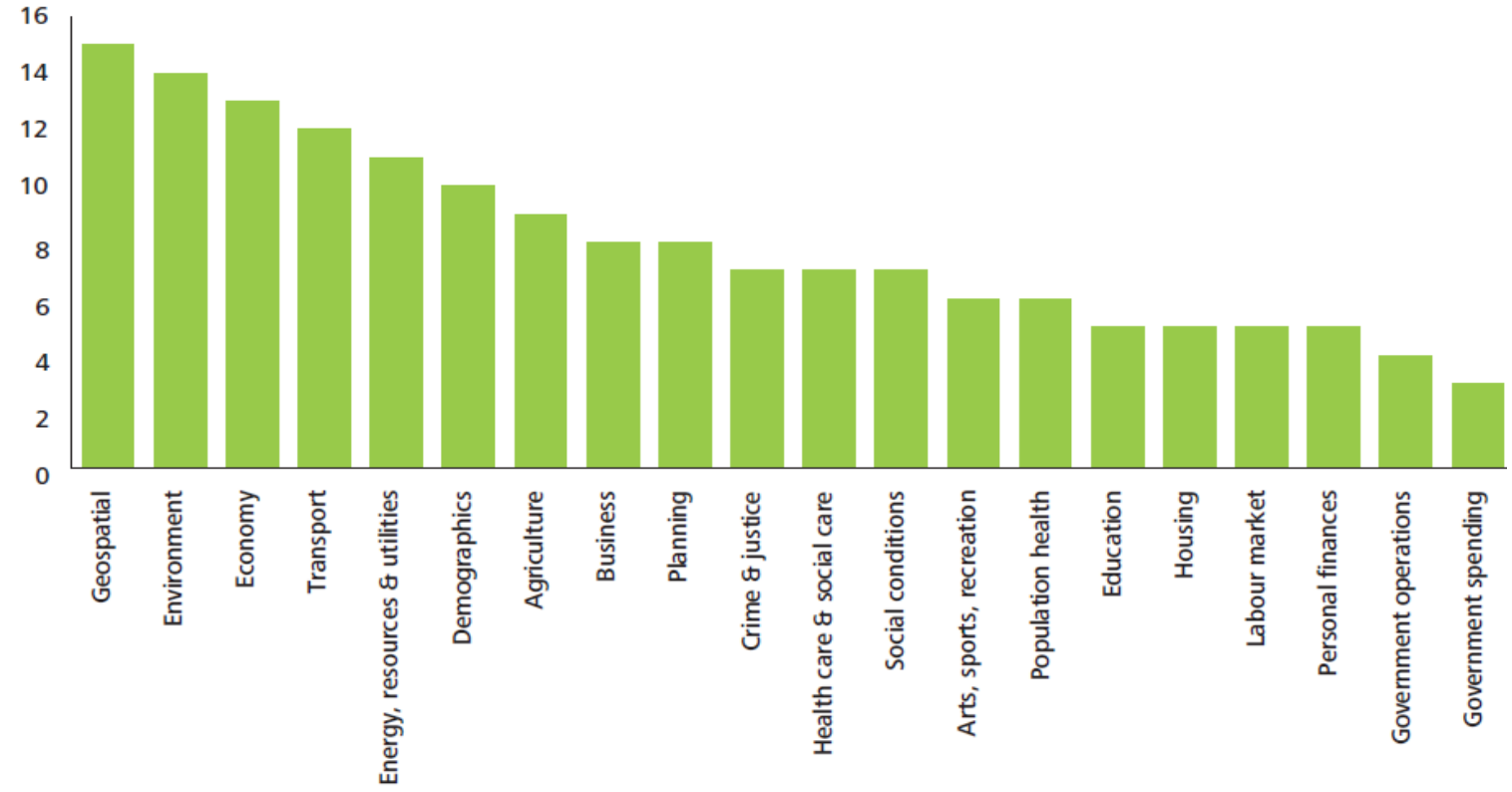
Images: Pixabay, Africa-active.com

Geospatial Data Underpins Everything

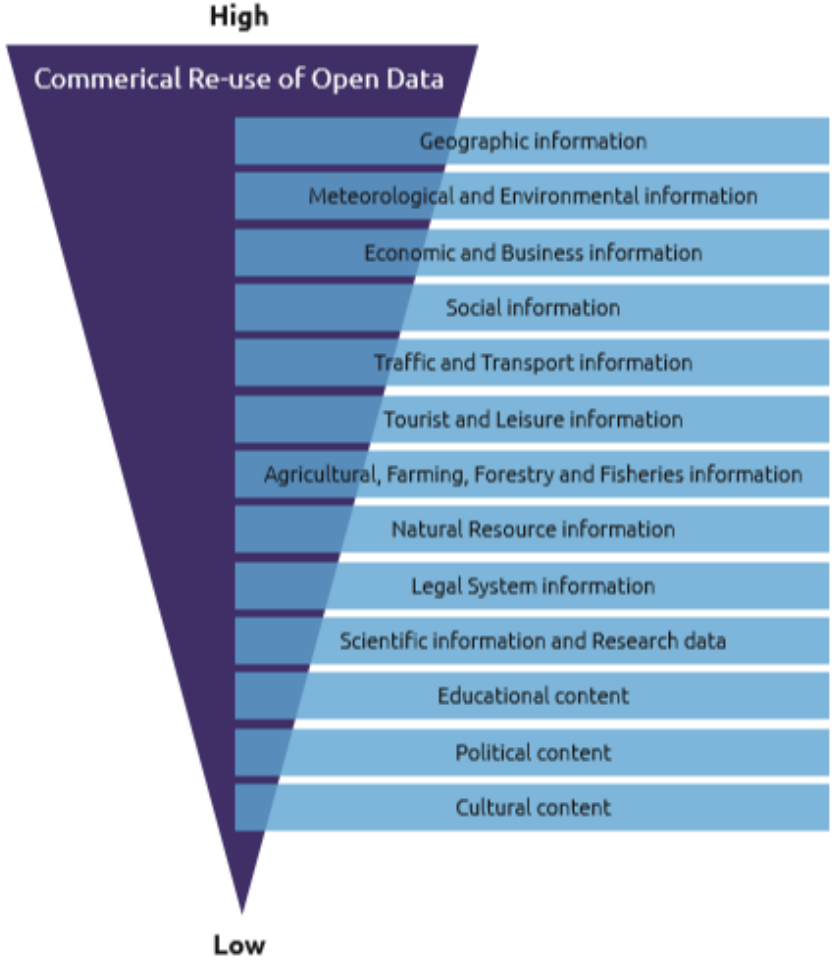
Almost

Figure 5. Which categories of open government data are most widely applicable?

Number of sectors to which the data is applicable

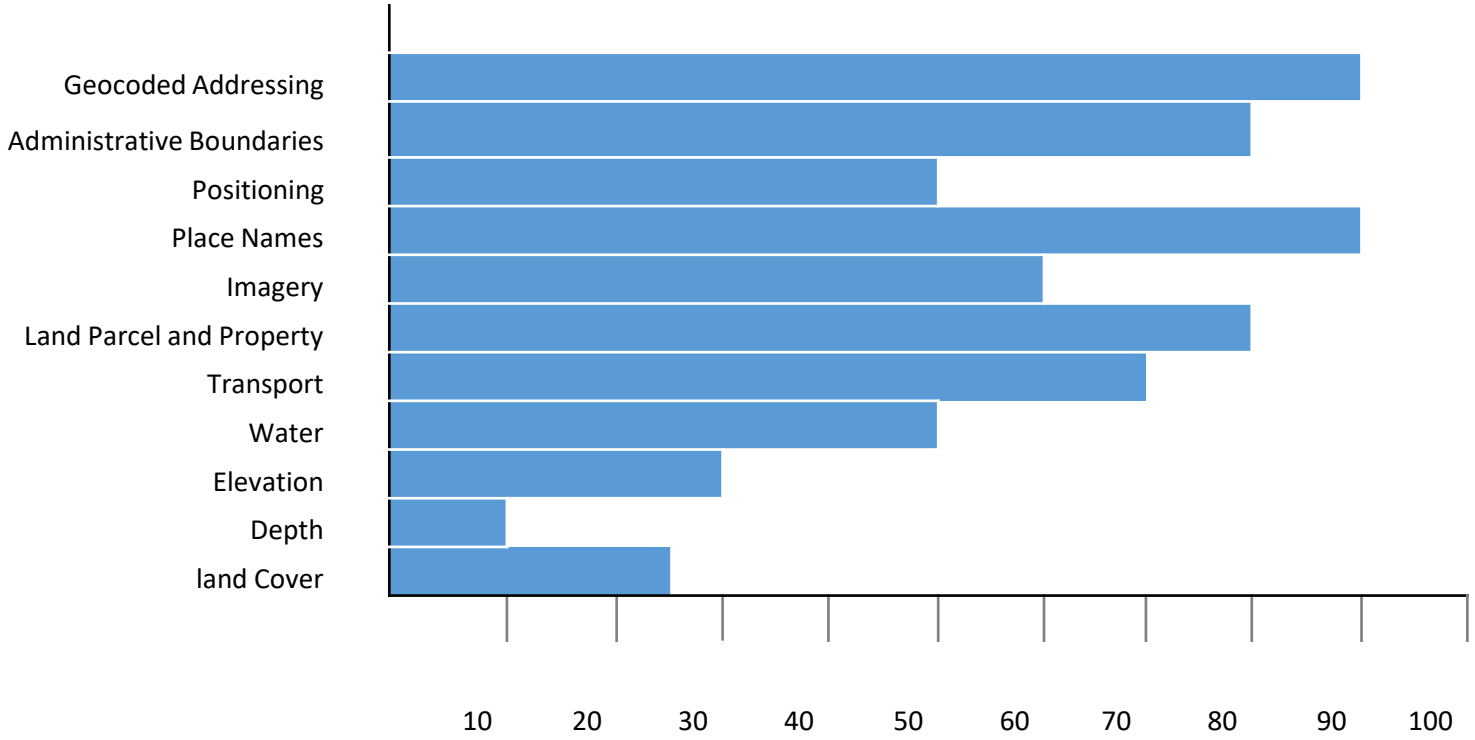


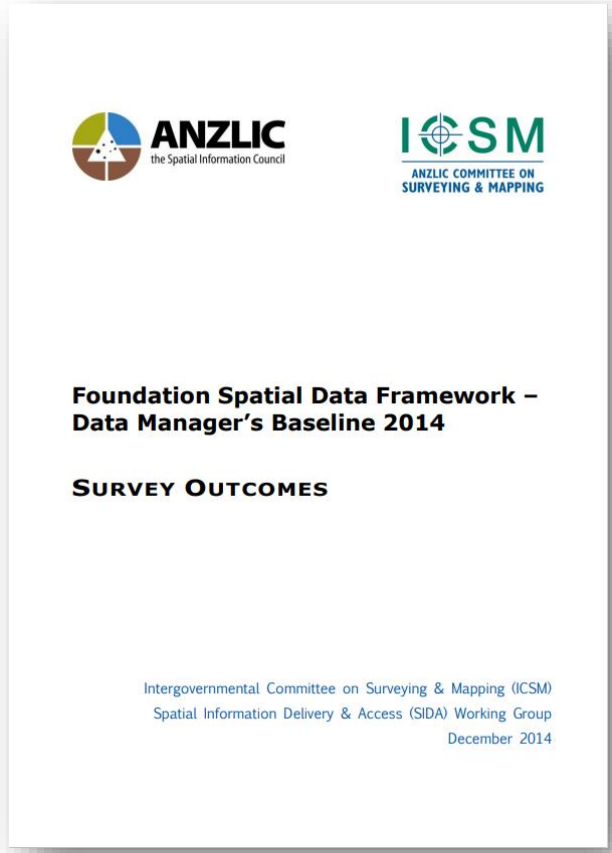
Source: Deloitte LLP/ODI analysis (2021)



European Commission (2017) Creating value through open data - Study on the impact of re-use of public data resources.

Accessibility a Recurring Problem





ICSM
ANZLIC COMMITTEE ON SURVEYING & MAPPING

Australian FSDF Baseline Survey - https://www.icsm.gov.au/sites/default/files/2017-07/SIDA-survey.pdf

Cost Savings – Reduced Duplication

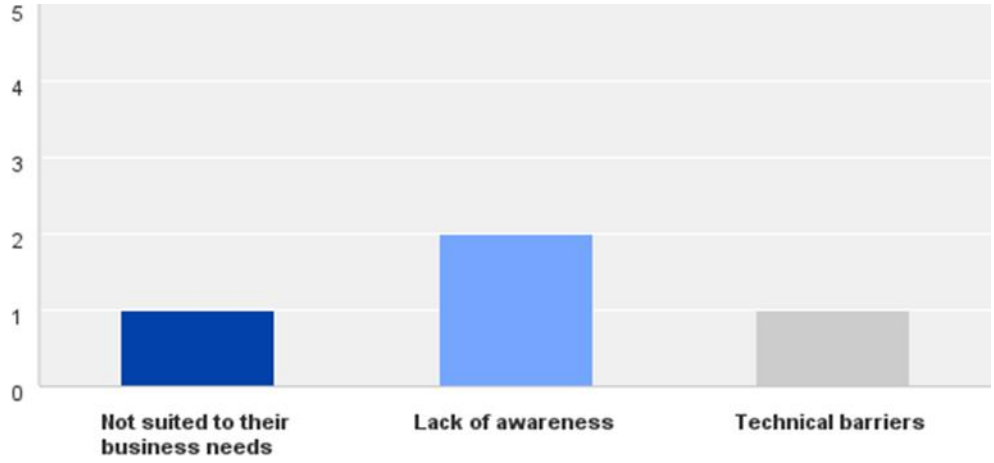
Q3: Duplication: Are there any other bathymetry datasets (similar to yours) collected and maintained by Government agencies in your jurisdiction (or nationally) that could be considered a duplication of effort?

	Yes	No	Don't know
Duplication	33.33%	16.67%	50.00%

Q4: Duplication: If Yes; please estimate how many?

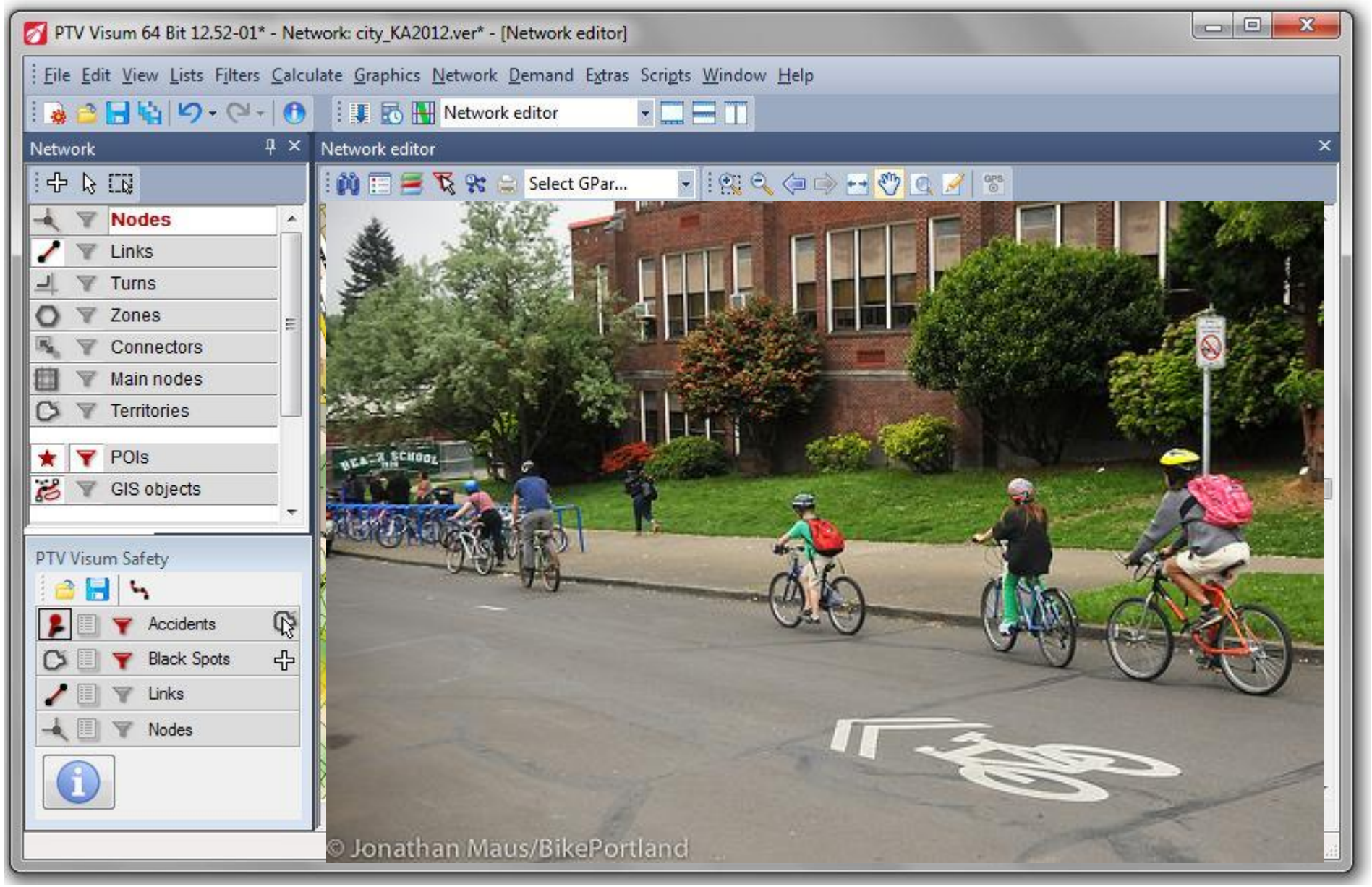
Answer Choices	Responses
1 - 2	0.00%
3 - 10	50.00%
10 - 20	0.00%
More than 20	0.00%
Don't know	50.00%
Total	

Q5: Duplication: If Yes; which statement/s best describe the reason why agencies do not use your bathymetry data?



Common Barriers

Leadership and Culture	*"The Importance of data as a public asset is not well understood".*
Loss of Reputation	*"Shortcomings in our data may reflect badly on our organisation".*
Misuse or Misinterpretation	*"Our data may be misused or interpreted incorrectly".*
Privacy	*"Someone will reengineer our data to get personal information".*
Knowledge and Skills Capacity	*"We don't know how to release data correctly".*
Governance	*"The authority to release or not to release data is specified under several Acts – how will we know which to apply".*
Resourcing	*"We don't have time to get data ready for public release".*
Data Readiness	*"Our data is not ready for public consumption".*
Technology and Security	*"Our Open Data Portal may be subject to hacking and put our internal IT systems at risk".*
Market Impact	*"Our free data will upset existing markets".*
Finance	*"If we don't sell our data we can't fund its maintenance".*
Liability Issues	*"We may be sued if sensitive data is released inadvertently".*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© Jonathan Maus/BikePortland

So how do we overcome the barriers

?

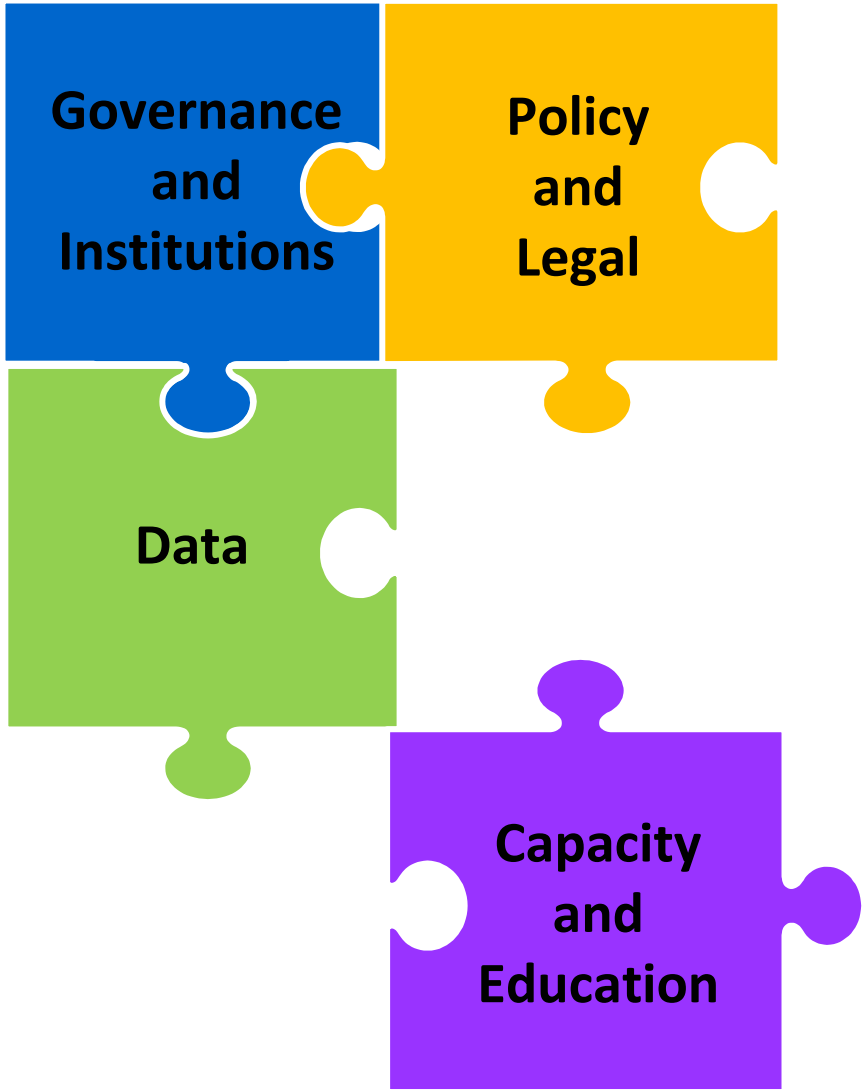
Open Data Policy

Open data policy encourages a position of data openness.

It will not overcome barriers alone!

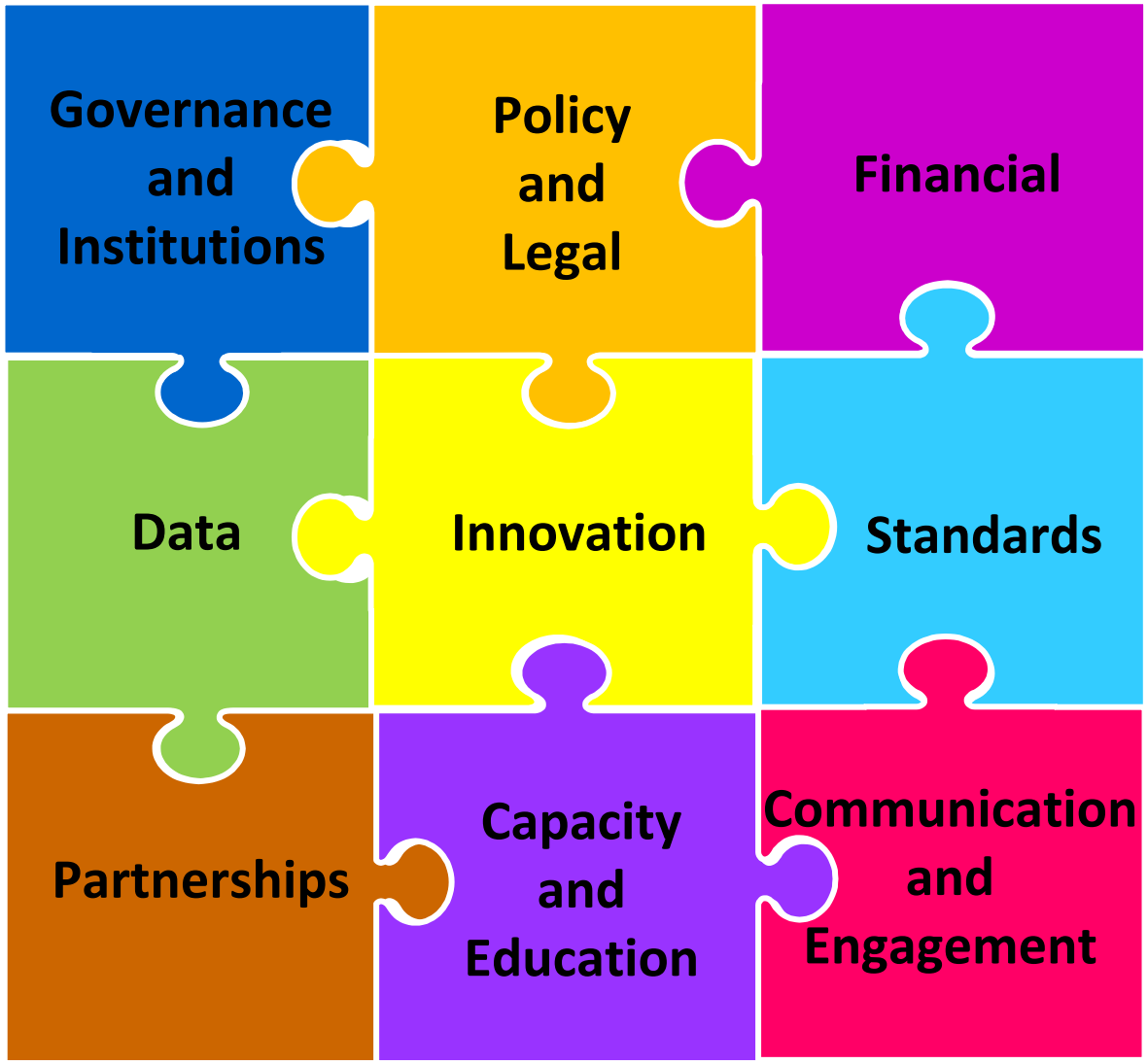
Overcoming Barriers with Actions

- Champions to lead the way – importance of the public asset
- Guidelines – Privacy, IP, Copyright, Licensing, Price, Access categories, data security
- Education around release processes, how to classifying information
- Open Data Plan, Data Improvement Road Map, data quality controls, quality statements, linked data



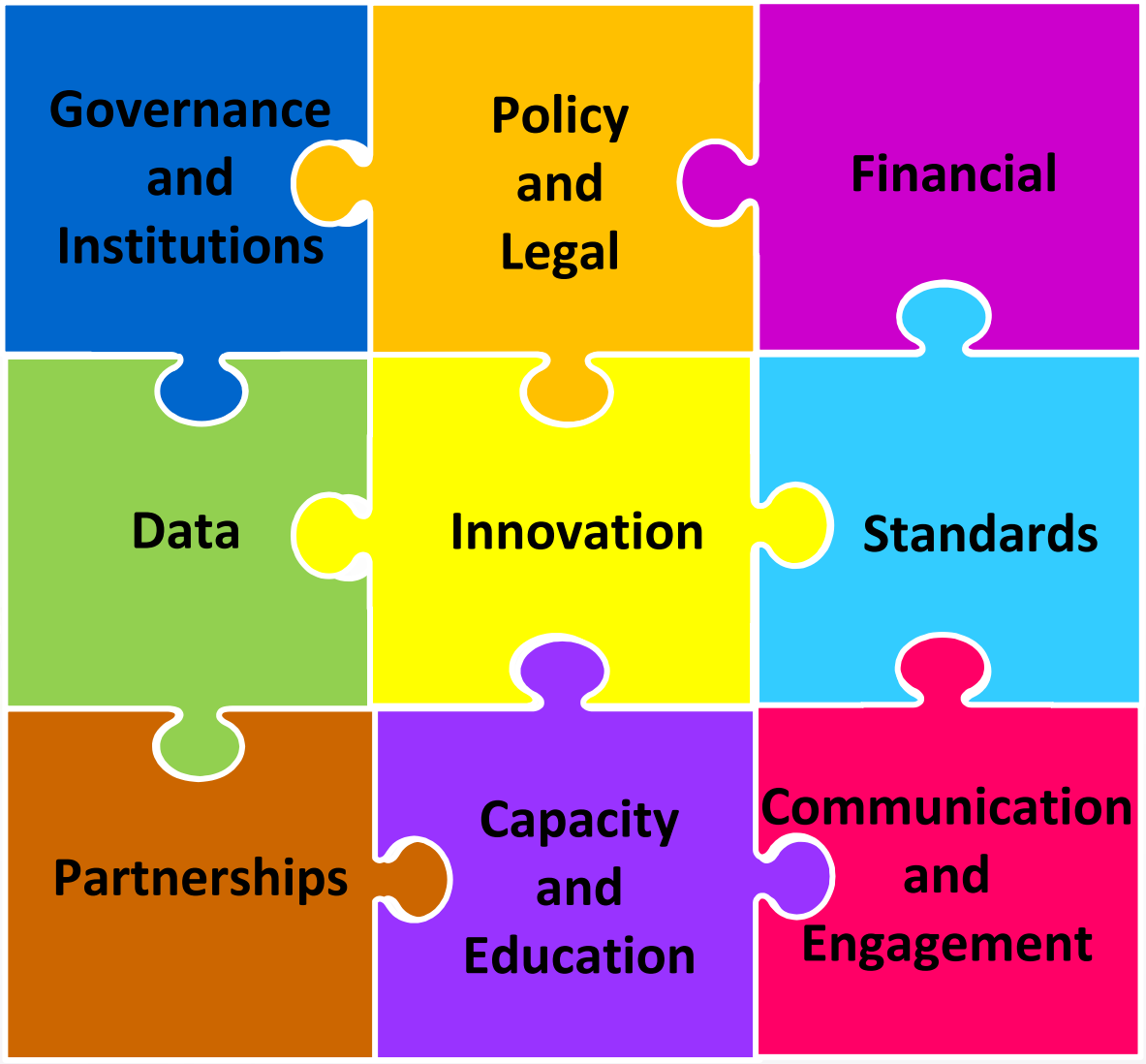
Overcoming Barriers with Actions

- Seamless model / interoperable data – standards
- Collaboration - acquisition partnerships
- Portal or system-of-systems to share data, findable machine readable metadata
- What's available, how it can be used and future 'Open Data Plans'
- Funding models / Market impact assessment



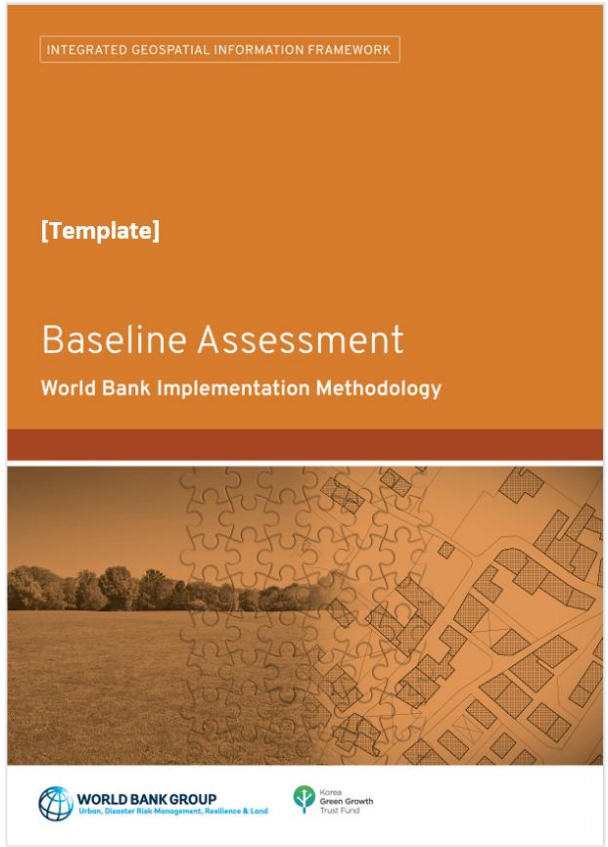
Achieving the Open Data ‘Value Proposition’ is multifaceted and requires action.

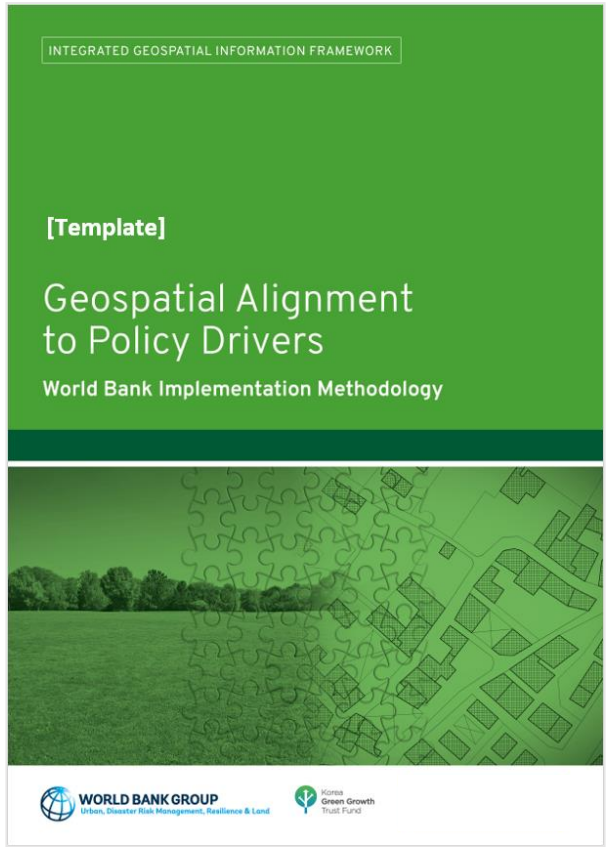
Actions = IGIF Action Plan

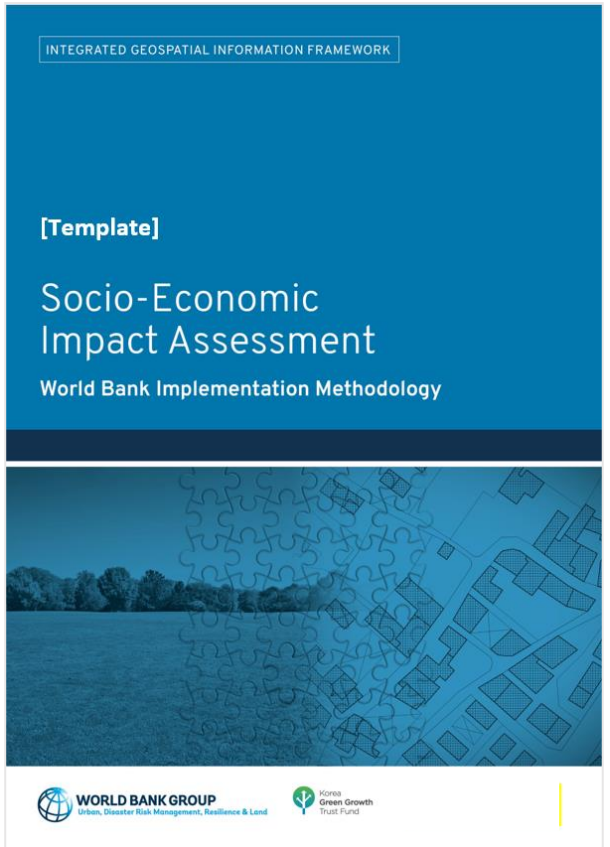


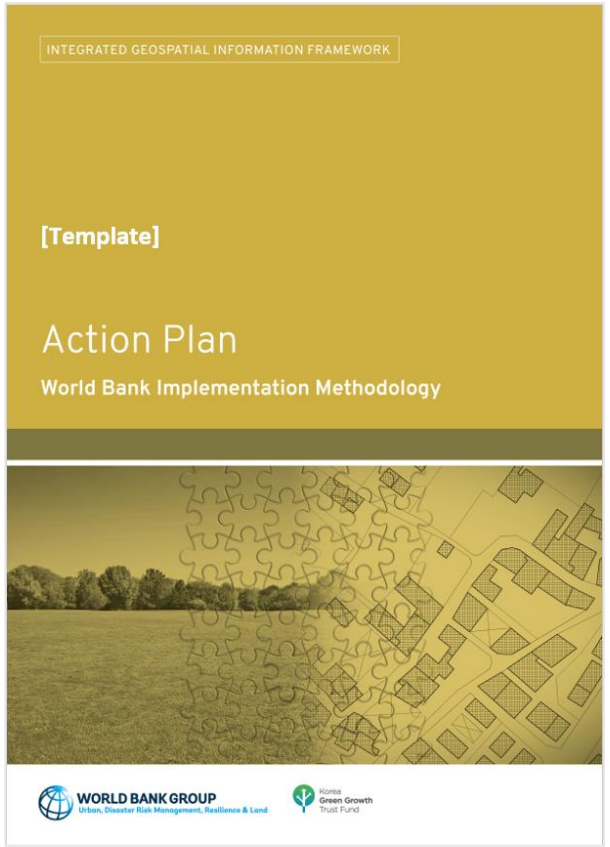
World Bank Templates

(World Bank Methodology)









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