Core spatial data services strategy 2018 – 2023

AT A GLANCE

Our role is to source, aggregate and maintain Victoria’s core spatial data, provide means to access it, and help government, industry and the community to generate value from it.

Guiding principles

These principles are designed to create optimal relationships between government policy objectives, DELWP’s core spatial data services capability, customer needs, and investment decisions. They are intended to ensure that balanced outcomes, rather than specific objectives of individual research projects, industries or customers, drive resource allocation decisions.

1. Core spatial data services are our highest priority in spatial
2. We will align our strategy with Victorian Government directions and priorities
3. Our strategy will be developed and implemented collaboratively across the whole of DELWP

GOALS

We keep improving our core business through innovation

1. We must efficiently source high quality and trustworthy data
2. We must effectively manage spatial information throughout its lifecycle
3. We will provide effortless access to our core spatial data services
4. We will foster strong partnerships with our suppliers and core customers
These principles are designed to create optimal relationships between government policy objectives, DELWP’s core spatial data services capability, customer needs, and investment decisions. They are intended to ensure that balanced outcomes, rather than specific objectives of individual research projects, industries or customers, drive resource allocation decisions.

1. Core spatial data services are our highest priority in spatial
2. We will align our strategy with Victorian Government directions and priorities
3. Our strategy will be developed and implemented collaboratively across the whole of DELWP
4. We will incorporate insights about the current and future needs of our customers in our planning processes
5. We must effectively manage spatial information throughout its lifecycle
6. We will target our investment in R&D and innovation
7. We will ensure our brand and value is recognised and understood by our customers and suppliers
8. We will help to connect the right knowledge and expertise to generate public value from spatial data
9. We will incorporate insights about the current and future needs of our customers in our planning processes
10. Wherever possible, we will make our data freely available for all to use
11. We will consider playing a role in the value chain where there is a market gap that is impeding public value creation
12. Existing capabilities will be augmented if new skills and approaches are needed to deliver our strategy
13. We will help to connect the right knowledge and expertise to generate public value from spatial data
14. We will target our investment in R&D and innovation
15. We will ensure our brand and value is recognised and understood by our customers and suppliers
16. We will help to connect the right knowledge and expertise to generate public value from spatial data
17. We will target our investment in R&D and innovation
18. We will contribute to the development of Victoria’s future workforce
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Core spatial data\(^1\) is a term used for the foundational geospatial information that underpins all other spatial information. Core spatial data depicts natural physical features on the earth’s surface, such as the height of mountains, and elements of the built environment, such as property boundaries, roads and addresses.

Authoritative datasets of core spatial data are mostly created and managed by governments, as they have broad value to communities and to public policy outcomes. These datasets often integrate the output of custodians who are responsible for a specific theme, such as property addresses, or for a geographic area.

As shown below, other organisations augment core spatial data with business specific data. Fauna breeding sites, population density and flood zone indicators are examples of spatial information that is not considered to be core or foundational: each set of data has a narrower purpose than, for example, the core spatial dataset that stores topographic contours across Victoria.

Core spatial data services are the delivery mechanisms that enable data to be accessed and used. Increasingly, core spatial data services come in the form of digital system to system interfaces such as Application Programming Interfaces (APIs).

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1 The terms geospatial data, spatial data and spatial data are often used interchangeably.
Several influences combined to confirm the need for a revised strategy. The Victorian Government announced the land entities reform agenda in October 2016 with the objective of achieving better ‘public value’ from the Victorian Government’s $114 billion land portfolio and the land and spatial information held by government.

When Land Use Victoria was formed, the Department of Environment, Land, Water and Planning (DELWP) wanted to ensure all associated decisions about core spatial data services were supported by a current and customer focussed strategy.

It was also clear that there had been substantial changes in the broader spatial data services industry in recent years. Transformations in consumer behaviour and technology capability both warranted a strategic response: if we are to remain an effective spatial data service provider, we must adapt to new data management methods and new consumer models.

Feedback from our customers and suppliers was a final, influential driver for revising our strategy. Requests to strengthen, and in some areas, expand, our services and service features, suggested that stakeholder expectations have been changing along with the other features of our supply chains.

2.1 Government policy and strategic directions have evolved

In shaping our strategy and investment decisions we are guided by the policy and strategic directions of government at both a state and a national level.

We work with interjurisdictional efforts by bodies such as Geoscience Australia, the Australia and New Zealand Land Information Council and its committees and Frontier-SI to achieve national standards and consistency and increase the availability of Australia-wide core spatial datasets. Within Victoria, spatial data has an increasing role in providing the supporting evidence for policy decisions and service delivery.

There are also broader state and national initiatives underway in the areas of public sector data reform and information management that are directly relevant to how core spatial data services are managed and delivered.
2.2 Our customers and suppliers have told us that they would like us to make some changes

Feedback from our current customer base highlighted some concerns about how well we are positioned to meet their developing needs. An analysis of the gaps between what our customers would like us to deliver, and our service offerings when we began our strategic review, highlighted that our business would be strengthened if we focus on:

- core spatial data services that provide the building blocks to catalyse innovation
- don’t compete with private sector offerings
- enabling access through modern digital channels
- working more closely with customers to support them and better understand their needs and requirements
- facilitating cross-sharing and collaboration across spatial and non-spatial sectors.

Other key stakeholders also asked us to consider some changes. Our success is dependent on the strength of our partnerships with data suppliers, such as local government, VicRoads, emergency response organisations and licensed surveyors. We must collaborate to ensure the systems and processes that supply Victoria’s core spatial data work as well as possible for all these organisations.

CASE STUDY 1

Emergency response and dispatch

In the event of a critical, life-threatening situation such as a fire or road crash, emergency response organisations need the most precise and reliable location information to respond quickly. Vicmap Address, one of the core spatial data products, is the authoritative, geocoded location information for Victorian homes and businesses used by emergency response dispatch. Used in combination with other core spatial data products such as Vicmap Transport and Vicmap Features of Interest, an incident can be quickly located and responded to.

Our current customers are our highest priority, but our strategy also considers future use cases

<table>
<thead>
<tr>
<th>Health</th>
<th>New energy</th>
<th>Construction and the built environment</th>
<th>Technology/software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visualisation of data is becoming increasingly important for health policy, allowing decision makers to overlay key health indicators and view patterns.</td>
<td>Imagery and elevation datasets help this industry to identify suitable sites for stations and to assess the performance of existing assets. Organisations will be able to use spatial data to visualize energy use to make better network planning decisions.</td>
<td>This industry increasingly uses 3D models for assets in the built environment. Spatial data such as planning, imagery and elevation underlies these visualisations. Accurate and precise spatial data is also critical to facilitate smart cities.</td>
<td>Spatial data is already being used in a wide variety of location-based applications, but technology industries are only just starting to explore the full potential of combining spatial data services with visualisation technology and the Internet of Things.</td>
</tr>
</tbody>
</table>

2. These priority sectors have been identified and align with the sectors identified in the Victorian Government future industries fund and Agenda 2026 Spatial Industry Transformation and Growth agenda.
2.3 We have a mandated role that we must continually review our ability to fulfil

Various acts, policies and royal commissions mandate that we must:

- support emergency response organisations through the provision of digital and hardcopy mapping and imagery products free of charge
- provide consistent and integrated land survey and spatial data services, and
- maintain a register of geographic names.

Positioning ourselves to ensure we fulfil these roles both now and in the future is a primary objective. The evidence of gaps between our service offering and customer needs suggested it would be timely to review whether there were also opportunities to strengthen our mandated products and services.

2.4 Consumers have new expectations

The need to invest in our understanding of the consumer market was reinforced by evidence of how fast it has been evolving.

The spatial or ‘location’ dimensions of information are now embedded in mainstream consumer products and services. Customers are demanding real time access to spatial data, and they do not expect technical barriers to prevent them from utilising the data they seek.

These consumer driven trends require providers of core spatial data services to explore how they can deliver them in more diverse and accessible ways.

CASE STUDY 2

Imagery to manage waterways

To support the protection and health of vital waterways and catchments across Victoria, Light Detection and Ranging (LiDAR) is being used to understand waterway conditions and assess management effectiveness. LiDAR is a form of optical remote sensing technology that accurately generates three-dimensional images of terrain and landscape features, including vegetation. This information is invaluable for waterways management as it provides precise data about river landscape including erosion, changes to channels and can assist in evaluating the impact of any environmental mitigation projects. The Coordinated Imagery Program, one of the core spatial data services, supports government agencies acquiring and accessing core spatial elevation and aerial photography spatial datasets.

Various acts, policies and royal commissions mandate our role
CASE STUDY 3

Positioning network automating

Victoria’s geospatial positioning network, GPSnet provides both core spatial data and core spatial data services delivered by DELWP. GPSnet is used by innovative technologies that are revolutionising project delivery in sectors such as construction, surveying and mining. One such technology, Tiny Surveyor utilises GPSnet coordinates to precisely, efficiently and safely mark points and lines on roads and pavements. Automation of the process allows for more efficient and productive use of time, reducing inconsistencies and errors that can have significant impacts on project delivery and site safety.

2.5 Rapid technology change is transforming how data is created, maintained and managed

The evolution of technology to create and manage spatial data has been as significant as the growth in service delivery expectations. Increasingly sophisticated data capture techniques mean that more data and more detail are available within supply chains. Complex spatial data is being utilised in more ways, as greater computing power means more data can be processed. Our products and services must keep pace with these technology developments, or the value that core spatial data can generate for Victoria will decline.

2.6 We need to evolve so that DELWP’s location services continue to put community at the centre

DELWP has committed to communities through the community charter - our blueprint to put the community at the centre of everything we do. Location is at the heart of many community-focused services that DELWP delivers, such as responding and recovering from emergencies, responding to climate change and population growth, sustaining the natural environment and productive and effective land management. Our core spatial data services need to continually adapt and evolve to enable DELWP’s important location based services to remain relevant and responsive to Victorian communities.

Technology developments are revolutionising the creation, maintenance and management of spatial data

1. CREATE
   - Aggregates base datasets to create statewide core spatial datasets
   - Internet of things
   - Crowd-sourcing
   - Passive data creation
   - Drones
   - 4D data

2. MANAGE
   - Maintains its core spatial datasets
   - Cloud storage
   - Changing skill requirements
   - Information security

3. SHARE
   - Provides services to deliver core spatial datasets to customers
   - Open data
   - Web services
   - Mobile access

4. INTEGRATE/DELIVER
   - Provides information systems and knowledge to support integration
   - Machine to machine
   - Real-time, location-based services

5. ANALYSE/ADVISE
   - Provides services to support business application of spatial
   - Artificial Intelligence and machine learning
   - Big data
   - Advanced analytics

6. CONSUME
   - End users consume data to make real-world decisions
   - Robotics and automation
   - Augmented reality
   - Place based decision-making
3 Developing the strategy

Before determining how to respond to the changes in our operating context, we undertook research to understand those changes more fully. Analysis was conducted to ensure our strategy development had a strong evidence base.

In particular, we gathered insights about:
- Customer preferences, including those related to our mandated role
- Our organisation and capabilities, and
- Emerging trends based on a market scan of best practice organisations.

The results of this analysis were synthesised with other inputs to establish a set of guiding principles that we could use to shape our strategy.

3.1 Gathering customer insights

Over 75 new and existing customers were engaged to identify their needs, wants and expectations.

The insights from this customer research highlighted a common set of priorities for DELWP’s core spatial data services.

3.2 Considering our organisation

Many teams within DELWP contribute to the management and delivery of core spatial data services. These teams have broad capability and their specialist expertise is one of our main strengths. However, given the degree of change in spatial data services over the last decade, it is not surprising that there are some skills we need to enhance so we can take full advantage of new technologies and tools.

What we heard

Focus on being the trusted and reliable source of core spatial data
Provide open access to the spatial building blocks which enable industry to innovate and create value-added products
Proactively facilitate collaboration and the sharing of data to help customers make holistic decisions
Be a well-recognised thought leader and clearly articulate our role to build deeper customer relationships
Create greater awareness and advocate the value of spatial data to secure required funding and increase usage
Maintain customer relevance and support new applications of spatial to create a future-focused offering
3.3 Researching emerging industry trends

We undertook a market scan to identify how organisations providing similar spatial information and services are responding to the technologies and trends shaping the industry.

This research showed us how leading practice public and private sector organisations are adopting innovative approaches to improve their products and services and increase their operational efficiency.

3.4 Establishing guiding principles

Using all the input gathered, a set of guiding principles was developed to inform our strategy. These were designed to create optimal relationships between government policy objectives, core spatial data services capability, customer preferences and investment decisions.

The seven principles will continue to be used to ensure that balanced outcomes, rather than specific objectives of individual research projects, industries or customers, drive resource allocation decisions.

Guiding principles for DELWP’s core spatial data services

1. Core spatial data services are our highest priority in spatial We have obligations, established in acts, policies and royal commissions, to provide core spatial data services to support critical Victorian Government functions. Our highest priority is to ensure that the supporting data is of sufficiently high quality and currency that customers can confidently use it to make decisions.

2. We will align our strategy with Victorian Government directions and priorities As Government priorities evolve, we will be agile and responsive. Our commitment to aligning with government direction extends beyond the land entities reform agenda. For example, we will invest in improvements to technology platforms that accord with the Victorian Government’s Information Technology Strategy 2016-2020.

3. Our strategy will be developed and implemented collaboratively across the whole of DELWP Our department has strong spatial information management capability in many parts of the organisation. We also have a unique profile of place based policy and operational responsibilities. Core spatial data services are therefore contributed to and used by staff beyond structural boundaries. We will leverage this organisational breadth to develop a whole of DELWP strategy. We will also put the community at the centre of what we do as part of delivering our promise in the DELWP community charter.

4. We will incorporate insights about the current and future needs of our customers in our planning processes The needs and preferences of existing customers, and customers who could be served in the future, are important inputs to our strategy and will influence our ongoing investment decisions.

5. Wherever possible, we will make our data freely available for all to use Our default position is that access to our data and services will be ‘open’ unless the revenue created from a commercial model is critical to the provision of the service.

6. We will consider playing a role in the value chain where there is a market gap that is impeding public value creation The scope of DELWP’s core spatial data services may change over time. We may extend our service offering where there is a clear public benefit and where there is a gap in private sector offerings that is impeding public value creation. The corollary of this principle is a need to consider discontinuing services if there are changes in the market.

7. Existing capabilities will be augmented if new skills and approaches are needed to deliver our strategy While the expertise of staff is one of our main strengths, we acknowledge that there may be areas where it will need to be enhanced to take full advantage of new technologies and tools. We also want to strengthen diversity and continuity in our workforce. Some of our earliest strategic initiatives will therefore aim to build internal capability that we will subsequently use to deliver externally facing improvements.
The strategic review\(^1\) confirmed that our primary role is as a trusted and accessible source of core spatial data services: this is where we can generate the greatest value for Victoria, and where we should allocate most of our resources.

It also highlighted that we need to become more effective engagement innovators, discovering new ways to grow government and private sector use of spatial data.

The strategy considers both roles, and each is explained in the context of our role in the spatial data services value chain (diagram page 9).

### 4.1 Spatial data services value chain

We source, aggregate and maintain Victoria’s core spatial data, provides means to access it, and help government, industry and the community to generate value from it.

Fulfilling this role gives us a unique position in the Victorian spatial data services value chain. We participate in many of the data supply chain components, and we are also a major contributor to the overarching standards and innovation capability that support the system.

Although we have a unique role in the core spatial data ecosystem, the diagram on page 9 shows that other organisations also participate in the components of Victoria’s spatial data services value chain. For example, we manage an administrative boundaries product at a state level for Victoria: this incorporates features from base-datasets supplied by local governments and the state electoral authority.

\(^1\) Deloitte, (2017) Core Spatial Data Services Strategic Review internal report
# DELWP's role in the spatial data services value chain

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<th>Value chain</th>
<th>Core spatial data</th>
<th>Business data</th>
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<td>DELWP aggregates base datasets to create statewide core spatial datasets</td>
<td>Organisations generate their own business specific data</td>
</tr>
<tr>
<td>2 MANAGE</td>
<td>DELWP maintains its core spatial datasets</td>
<td>Organisations maintain their business data</td>
</tr>
<tr>
<td>3 SHARE</td>
<td>DELWP provides services to deliver core spatial datasets to customers</td>
<td>Organisations access core spatial datasets</td>
</tr>
<tr>
<td>4 INTEGRATE/DelIVER</td>
<td>DELWP provides information systems and knowledge to support integration</td>
<td>Organisations integrate core spatial datasets with their business data</td>
</tr>
<tr>
<td>5 ANALYSE/ADVISE</td>
<td>DELWP provides services to support business application of spatial</td>
<td>Organisations spatially analyse events</td>
</tr>
<tr>
<td>6 CONSUME</td>
<td>End-users consume spatially-enabled information to make real world decisions</td>
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</table>
4.2 Our role

Our role is to source, aggregate and maintain Victoria’s core spatial data, provide means to access it, and help government, industry and the community to generate value from it.

Our two goals articulate our strategic direction – improving on what we do now by embracing smart and innovative ways to deliver our core business so we can focus our discretionary efforts on increasing the public value generated from spatial data.

4.3 Goal 1
We keep improving our core business through innovation

We are the trusted source of core spatial data services for Victoria. Our data is of a sufficiently high quality and currency that customers are able to confidently use it to make decisions.

We continue to source, aggregate and manage data more efficiently and seek innovative ways to do this. Customers can effortlessly access our services.

FOCUS AREAS THAT SUPPORT THIS GOAL

1. We must efficiently source high quality and trustworthy data

Diverse data sourcing processes have been established over time. There are opportunities to make these more efficient by modernising and integrating systems and introducing new, innovative capture methods such as voluntary data submissions and crowd sourcing. Importantly, any changes to our data sourcing operations must not erode the product quality standards that underpin our brand.

2. We must effectively manage spatial information throughout its lifecycle

The data that we source needs to be stored, managed and integrated into products efficiently and effectively. Failure to do this well creates unnecessary costs, and can introduce errors into our products and services. A range of improvements are planned that include increasing data standardisation and interoperability and leveraging cloud technologies – while strengthening our cyber and information security capability.

3. We will provide effortless access to our core spatial data services

We have a continuing commitment to increasing the discoverability and accessibility of our data services. The data that we provide is of little value if there are barriers to its use. The improvements planned for this focus area include enhancing our metadata to make it easier to find, and investing in APIs that allow customers to integrate our products seamlessly into their own more familiar systems.

4. We will foster strong partnerships with our suppliers and core customers

Many of our customers have said that they would like more opportunities to provide feedback and to influence the direction of our products and services. We are responding to this request by strengthening our partnering and engagement functions. We will also further digitise and improve customer and supplier support channels.

5. We will ensure our brand and value is recognised and understood by our customers and suppliers

Our customers have a varied understanding of the products and services we provide, and this can impede their ability to find and make use of the best solutions for their needs. We are improving how we communicate what we offer, how it can be accessed and how it can create value. Planned initiatives include web search engine optimisation, product campaigns, product showcases – and refreshing our brand to increase its impact.
4.4 Goal 2
We catalyse innovation and increase the value generated from spatial data

We help government, industry and the community to understand and benefit from the potential of spatial data. We extend our services beyond core spatial data where there is a clear public benefit, a gap in private sector offerings, and an affordable delivery path.

FOCUS AREAS THAT SUPPORT THIS GOAL

6 We will help to connect the right knowledge and expertise to generate public value from spatial data

The public value derived from core spatial data would multiply if supply chains were extended to new industries and uses. DELWP does not have the resources to drive these outcomes alone, but we can increase our reach and impact by collaborating and partnering with other organisations. For example, we are establishing a panel of solution providers that can support potential spatial data service users.

7 We will target our investment in R&D and innovation

Our research and development resources will be allocated based on strong criteria that direct targeted, strategic support to concepts, events and projects that support our core spatial data services as a priority. We will also direct our unique expertise and knowledge towards partnerships and collaborations that grow DELWP business application of spatial and the Victorian spatial data economy more broadly.

8 We will contribute to the development of Victoria’s future workforce

There is an urgent need for the Victorian government to help the economy prepare for transformations in technology use and employment structures. We will apply our expertise to assist with this goal, by increasing awareness of and fostering education in the science, technology, engineering and maths (STEM) disciplines underpinning spatial data services. We will also contribute actively to employment diversity across related sectors.
5 Delivering our strategy

To achieve our strategic goals, we must first build on what we are doing well, and prioritise efforts that drive improvements for our current customers and suppliers. We can then move to supporting new sectors and customers.

5.1 Collaborative governance

Delivery of the goals and innovations identified in this strategy will require a collective effort and solid foundation for governance. The proposed governance framework (page 13) connects stakeholders through cross-DELWP collaborations and partnerships, whilst minimising duplication of existing networks.

5.2 Prioritising our initiatives

A program of initiatives has been developed based on customer research, alignment with the principles of our strategy, and our review of technology trends. Implementation of these initiatives is set out in a supporting action plan.

We have sequenced initiatives for delivery over five years. Initially, we will focus on initiatives that require only current capabilities. We will also implement those that are central to achieving our vision, and lay the groundwork for future years.

In later years, we will implement initiatives that enhance our service delivery for new industries, uses and technologies, and we will leverage innovation and partnerships.

5.3 Reviewing implementation

Annual review of implementation will occur, with the first review of the action plan planned for early 2019. The status of initiatives will be considered, as well as evidence of whether they are achieving the expected outcomes. New initiatives that contribute to our strategic goals may be added as part of the annual review.

Three horizons for delivery

HORIZON 1
Build on our strong base
We will consolidate our base and grow our capabilities in horizon one. This will establish the groundwork for the following years. Initiatives in this period build on our existing work. They are high-priority and time-dependent.

Section 7 sets out the benefits and changes you can expect to see in the first horizon of delivery

HORIZON 2
Extend our reach
In this period, we will build on our foundation and extend our reach. Initiatives will focus on enhancing our service delivery to meet the needs of new industries, uses and technologies.

HORIZON 3
Harness innovation and collaboration
Our focus in the third horizon and onwards will be on future focused information systems, capabilities and data services. We will leverage our strengthened capabilities to support innovative applications and uses of core spatial data.
Governance and collaboration

PROJECT GOVERNANCE

Core spatial data services steering committee
- Senior executive oversight
- Implementation and benefits reporting line for strategy

Core spatial leadership network
- Executive/management oversight of core spatial service delivery
- Supports collaborative efforts between LUV/ISD

Core spatial experts network
- Subject matter experts/technical spatial practitioners
- Resolution of operational and project delivery issues

DELWP and VPS spatial networks
- Customers and spatial practitioners
- Research and development
- Community of practice

INFORMAL COLLABORATION AND NETWORKS

CROSS-SECTORAL COLLABORATION

National spatial governance

Collaborative spatial research
6 Realising the benefits

The successful implementation of the strategy is based on the delivery of benefits to our customers and suppliers. We will use an outcomes approach to measure our progress.

6.1 Benefits realisation

<table>
<thead>
<tr>
<th>Focus area</th>
<th>Outcome</th>
<th>Benefit</th>
<th>Benefit realised %</th>
</tr>
</thead>
<tbody>
<tr>
<td>We must source data that is both high quality and trustworthy</td>
<td>Data is high quality and current</td>
<td>Improved customer trust in our data to make business critical decisions</td>
<td>100%</td>
</tr>
<tr>
<td>We must effectively manage spatial information throughout its lifecycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We will provide effortless access to our core spatial data services</td>
<td>Better and easier discovery of core spatial data services</td>
<td>Improved customer experience</td>
<td></td>
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<tr>
<td>We will ensure our brand and value is recognised and understood by our customers and suppliers</td>
<td></td>
<td>Increased brand awareness and reputation</td>
<td></td>
</tr>
<tr>
<td>We will foster strong partnerships with our suppliers and core customers</td>
<td>Portfolio decisions are based on customer needs</td>
<td>Products and services are aligned to customer needs</td>
<td></td>
</tr>
<tr>
<td>We will help to connect the right knowledge and expertise to generate public value from spatial data</td>
<td>Supply chain is extended to new industries and uses</td>
<td>Improved public value generated from access to our knowledge and expertise</td>
<td></td>
</tr>
<tr>
<td>We must source data that is both high quality and trustworthy</td>
<td>Core spatial data services leverage R&amp;D, emerging technologies and approaches</td>
<td>Improved service delivery</td>
<td></td>
</tr>
<tr>
<td>We must effectively manage spatial information throughout its lifecycle</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>We will target our investment in R&amp;D and innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We will contribute to the development of Victoria’s future workforce</td>
<td>STEM disciplines underpinning core spatial data services are supported</td>
<td>Victoria has strong future workforce capability for core spatial data services</td>
<td></td>
</tr>
</tbody>
</table>

Ongoing monitoring and regular review of outcomes delivery will ensure that we will know if we are making an impact and achieving results. It will also facilitate continuous evaluation of implementation.
In the first horizon of delivery (i.e. first year), we will consolidate our base and grow our capabilities. This will establish the groundwork for horizons two and three. The following initiatives will commence straight away.

**Improvements to ensure our data is high quality and current**
- Implement critical improvements to the accuracy of the state’s digital representation of property boundaries by delivering the digital cadastre modernisation project. This will transform the way information is gathered, stored and accessed and deliver benefits across public and private sectors.
- Modernise decade-old systems that allow customers to notify us about errors in our data. This includes introducing crowdsourcing technology, providing new ways for citizens to contribute to government data.
- Implement the new national datum (GDA2020) which will align Australia’s national latitude and longitude coordinates with global satellite navigation systems, enabling smartphones and other positioning technologies to more accurately locate features marked on our maps.
- Establish an information asset register to support improved management of critical data assets.
- Apply the whole of Victorian government information management framework to DELWP’s core spatial data.

**Enhance the discoverability and use of our core spatial data services**
- Make our topographic maps accessible on mobile devices, unlocking new opportunities for their use in land management and emergency response.
- Implement cloud infrastructure that will enable customers to more easily access our data-heavy aerial imagery.

**Foster greater collaboration and connections between existing and emerging customers**
- Re-invigorate the DELWP spatial network to provide a forum for staff across the department to share information and promote the value of spatial data in supporting evidence-based outcomes.
- Leverage our networks and specialist expertise to support the establishment of shared government licenses for new and emerging spatial products such as daily satellite imagery and 3D datasets for buildings, surface cover and trees.

**Coordinate our investment in R&D to leverage maximum benefits to core spatial data services customers across DELWP**
- Refocus our commitment and participation in collaborative spatial R&D to ensure outcomes deliver value to our core spatial data services and specific business needs.

**Horizons 2 and 3**
In the second and third horizons, we will build on this strong foundation and extend our reach. Initiatives will focus on enhancing our service delivery to meet the needs of new industries, uses and technologies. A detailed action plan sets out specific initiatives, how we will measure and report benefits and collaborate on governance to ensure we are accountable for delivering benefits. A summary of our action plan is provided at Appendix A.
We keep improving our core business through innovation and increase the value generated from spatial data.

**GOALS**

**1.** We must efficiently source high quality and trustworthy data
- Review current data sources and investigate options to efficiently source core spatial data
- Modernise the digital cadastre and align to all relevant datasets
- Automate data supply with machine to machine data exchange
- Resolve inconsistencies that impact core spatial data products

**2.** We must effectively manage spatial information throughout its lifecycle
- Enhance product portfolio and lifecycle management
- Develop a data governance framework that aligns with the WoVG/DELWP Information Management Framework
- Represent Victoria’s interests in contributing to national metadata and data standardisation efforts
- Implement the cloud infrastructure project
- Increase product insights
- Develop and catalogue core spatial data services in DELWP Information Asset Register
- Review existing reports and research and implement improvements

**3.** We will provide effortless access to our core spatial data services
- Improve metadata search and discoverability of data
- Enhance mobile and digital offerings to improve accessibility
- Improve data discoverability
- Develop new web services /APIs
- Consider removal of fees for low cost products

**4.** We will foster strong partnerships with our suppliers and core customers
- Develop an ongoing program of customer and supplier engagement
- Establish agreed roles, responsibilities and service levels with core customers
- Secure voluntary data supply for products

**FOCUS AREA**

**Initiative**

**HORIZON 1**

**HORIZON 2**

**HORIZON 3**

**APPENDIX**

**ACTION PLAN**

NOTE: INITIATIVES REQUIRING NEW FUNDING WILL BE EVALUATED AND COSTED PRIOR TO COMMENCEMENT.
We catalyse innovation and increase the value generated from spatial data

5. We will ensure our brand and value is recognised and understood by our customers and suppliers
   - Refresh and raise the profile of the Vicmap brand
   - Enhance customer and supplier support channels

6. We will help to connect the right knowledge and expertise to generate public value from spatial data
   - Reinvigorate the DELWP Spatial Network
   - Develop and implement engagement opportunities that leverage existing efforts and target priority sectors
   - Engage in cross-sector collaboration efforts between spatial and non-spatial industries
   - Investigate options for customer-focused spatial solutions
   - Leverage spatial procurement coordination expertise

7. We will target our investment in R&D and innovation
   - Prioritise participation and involvement in research and development
   - Facilitate coordination on research and development

8. We will contribute to the development of Victoria’s future workforce
   - Champion and expand opportunities for graduation programs for STEM students
   - Support efforts in STEM education sector that are relevant to core spatial data services
Accessibility

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