

Moving Towards a Fully Operational 3D Digital Cadastre: Victoria, Australia

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Visualisation

Spatial
analysis

Validation

DCDB
Upgrade

ePLAN

Digital
Examination

LandXML



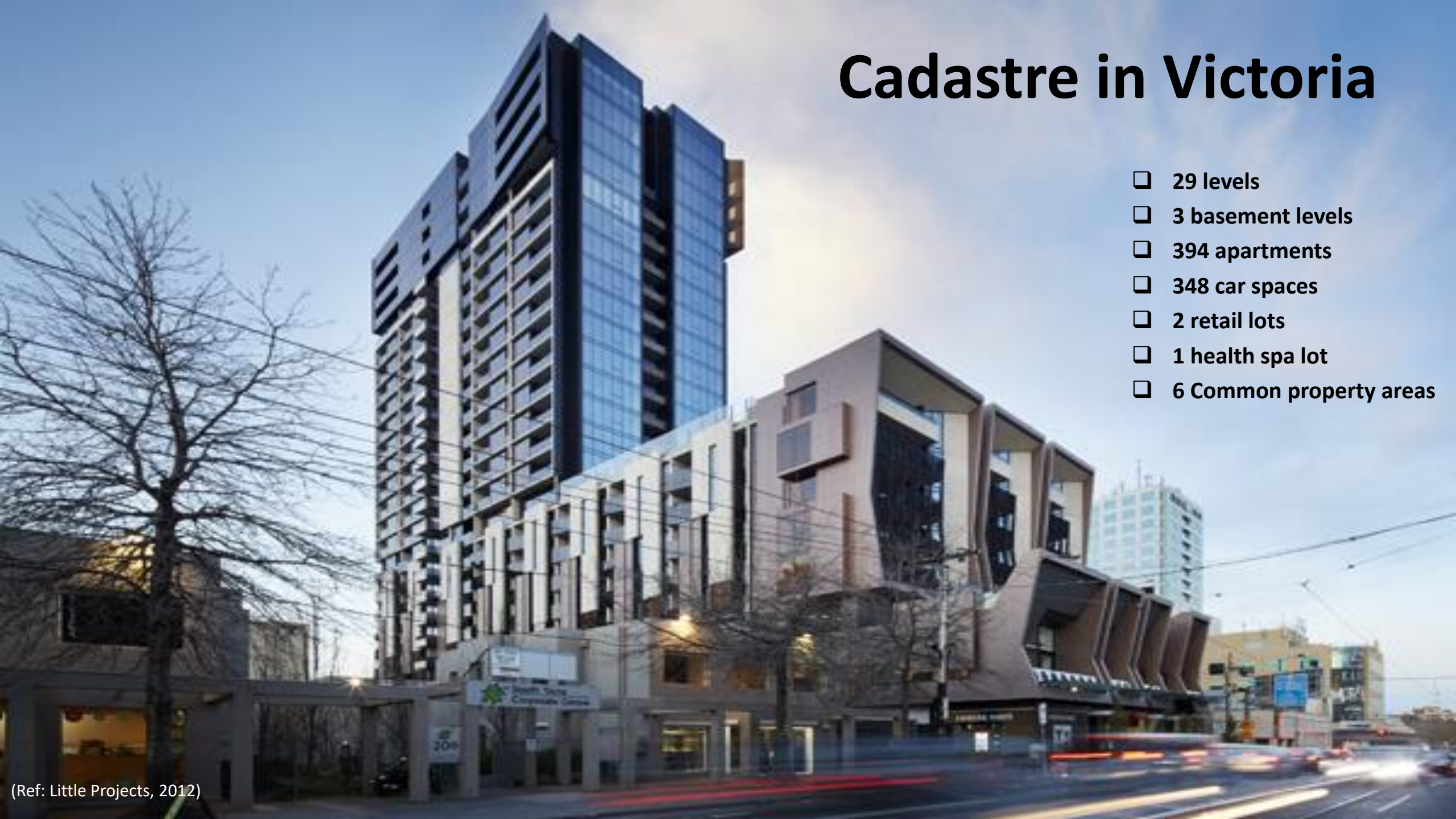


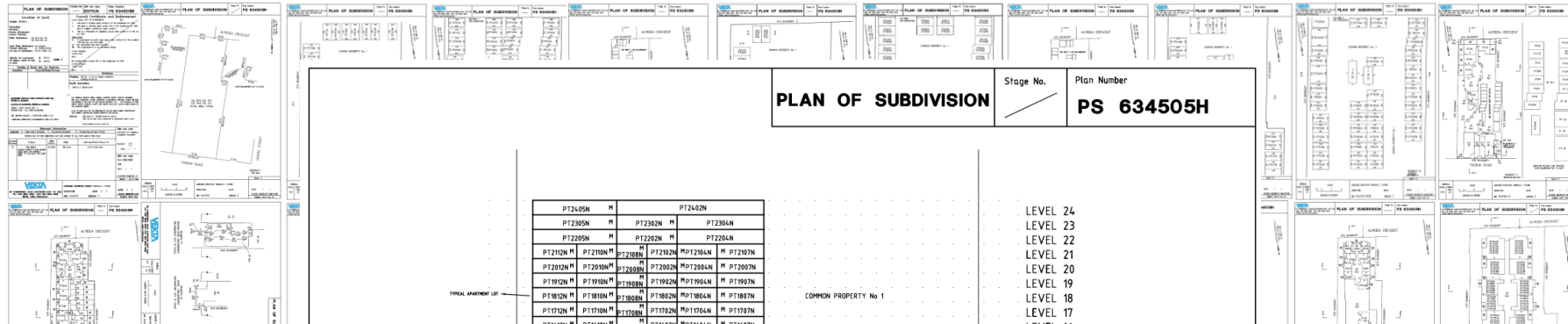


Limitations with the current Cadastre in Victoria

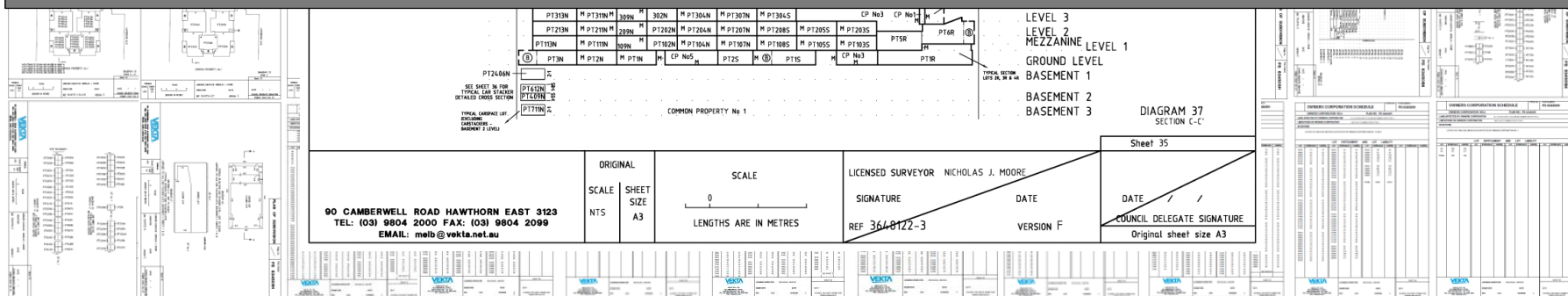
Cadastre in Victoria

- ☐ 29 levels
- ☐ 3 basement levels
- ☐ 394 apartments
- ☐ 348 car spaces
- ☐ 2 retail lots
- ☐ 1 health spa lot
- ☐ 6 Common property areas





56 Sheets to Represent Ownership Rights, Entitlements and Liabilities



(Ref: AAM Group, 2012)

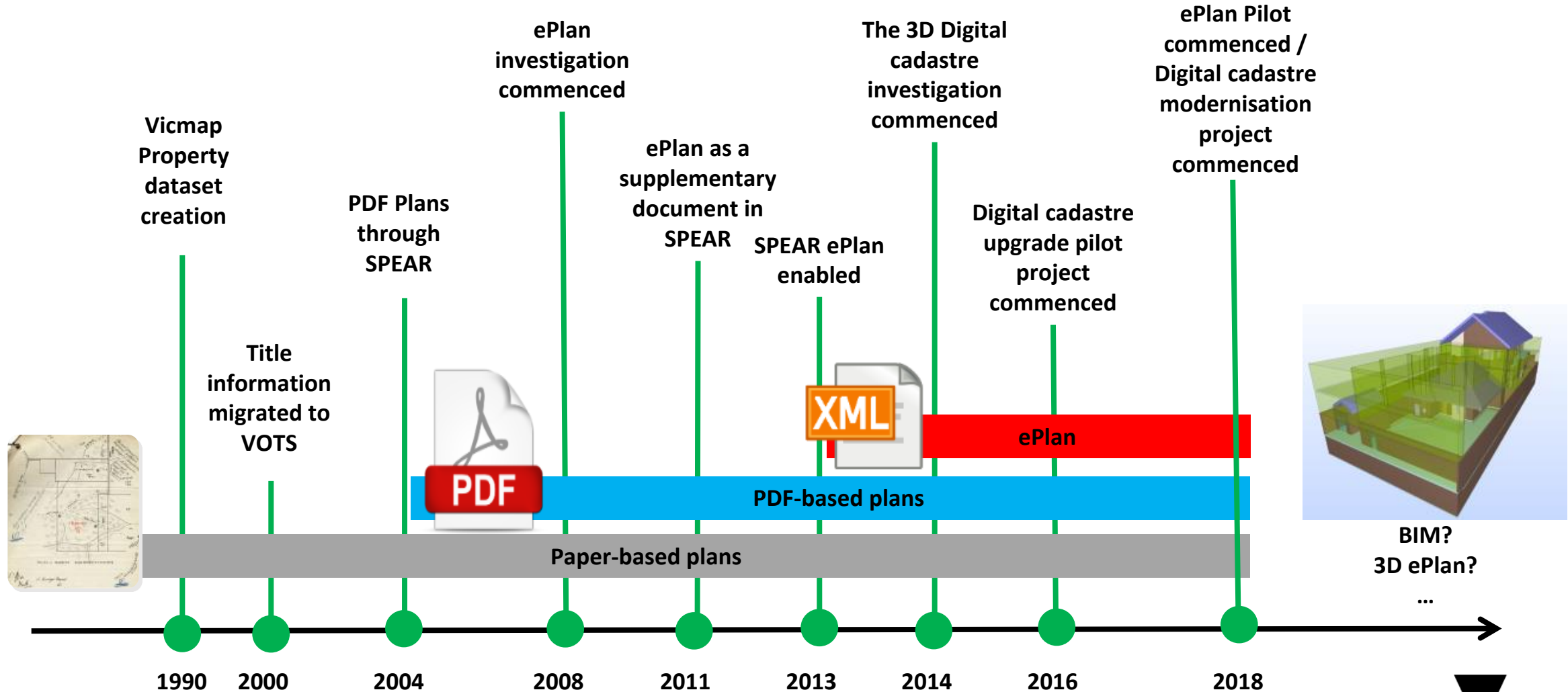
Current Limitations

- Plan preparation is complex and often results in requisitions
- Examination process requires careful examination and often requires technical expertise
- Information is not easily reusable (PDF)
- Queries, analyses and decision making are possible, but not efficient
- Difficult for the Public to understand their Rights, Restrictions and Responsibilities
- Plan interpretation between two parties can be different
- What are my ownership boundaries?
- What is the extent of the common property?



Where are we now?

Victorian Cadastral Transition (Paper → Digital)

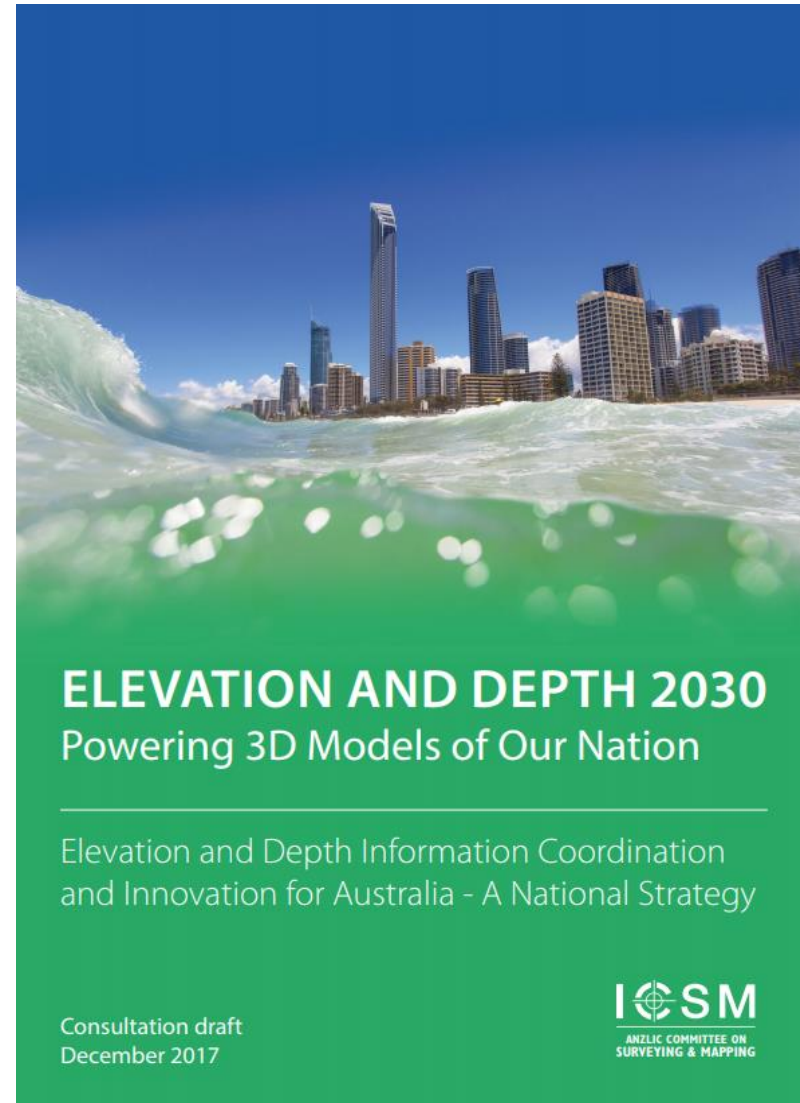
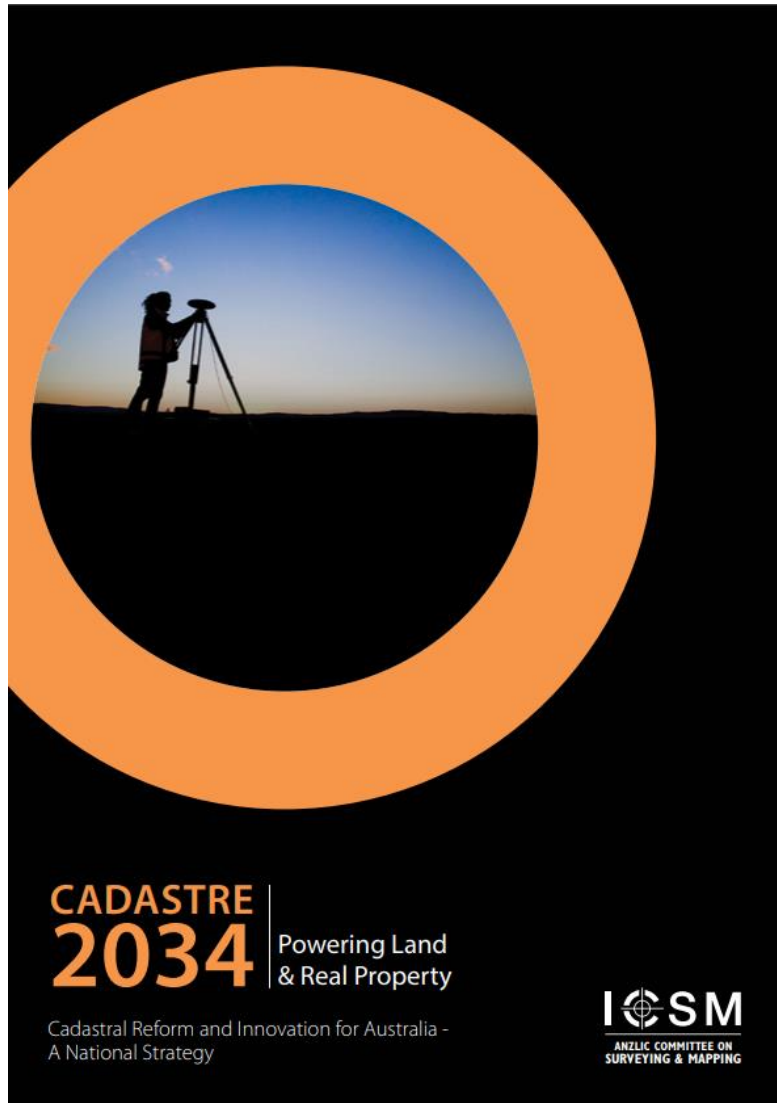


Research Activities

- 3D data visualisation
- 3D data validation
- 3D data modelling
- 3D data storage
- 2012-15: ARC Linkage project on 'Land and Property Information in 3D'
- 2016-19: ARC Linkage project on '3D Property Ownership Map Base for Smart Urban Land Administration'

Where do we want to be?

High Level Strategies





ePlan 2025 Road Map

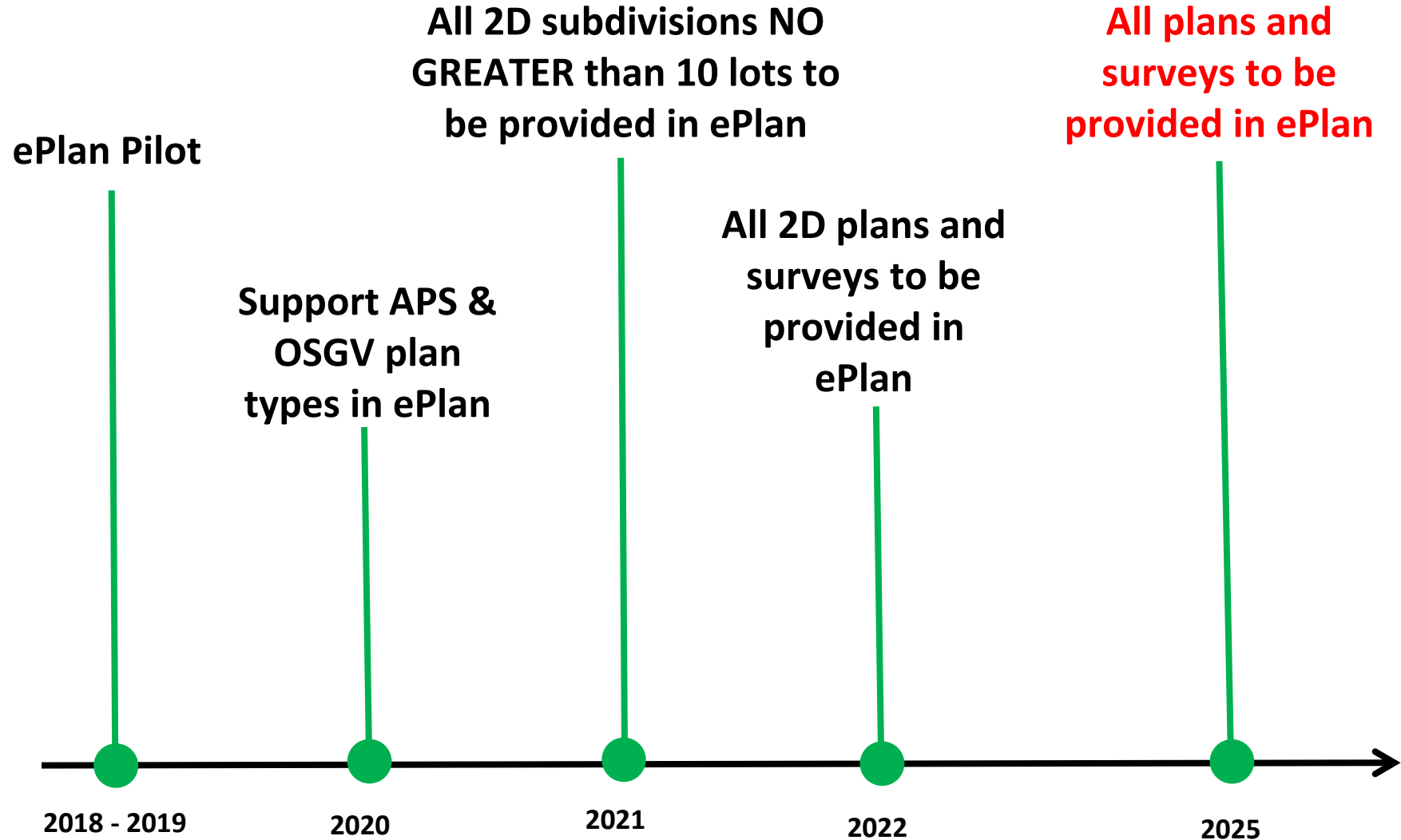
Short-term Vision:

- Provide the infrastructure and services to enable the submission and registration of ePlan for all 2D Victorian cadastral plans by 2020.

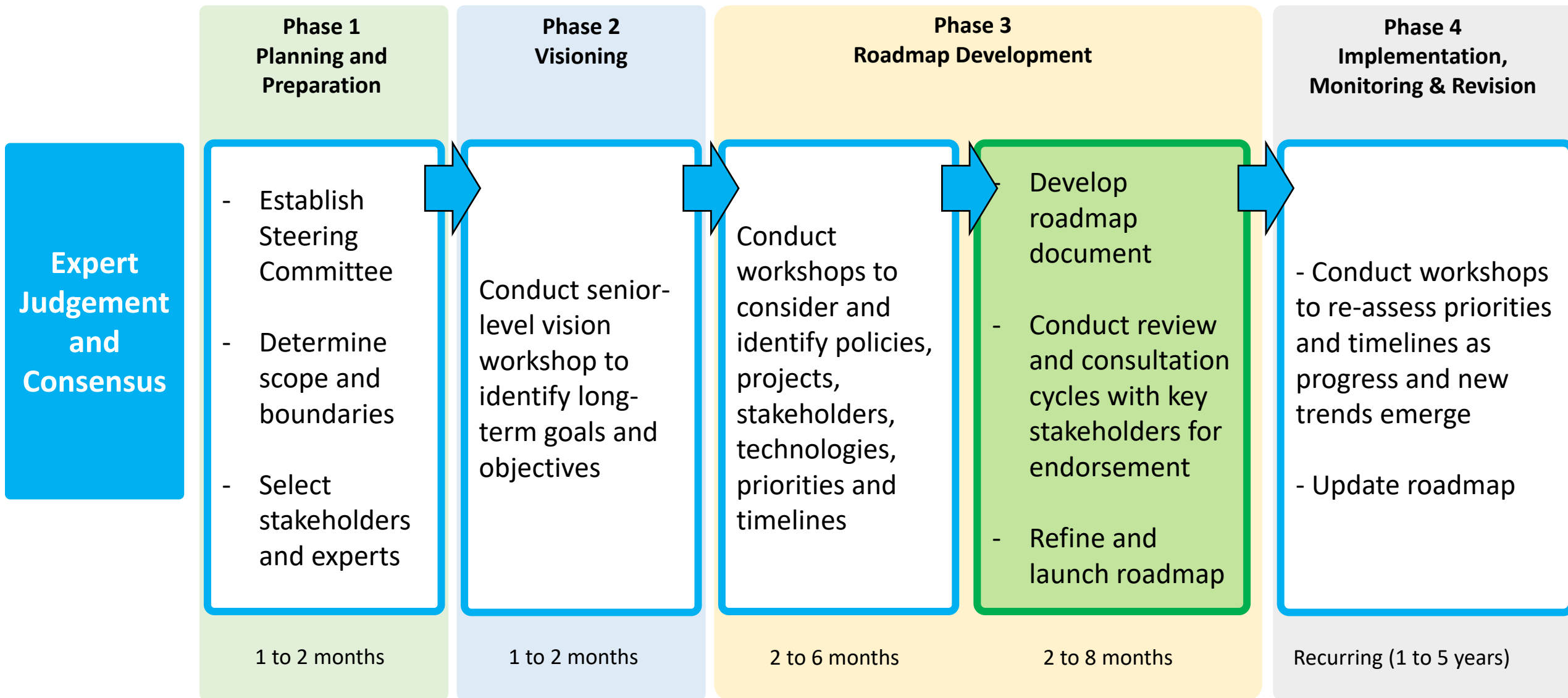
Long-term Vision:

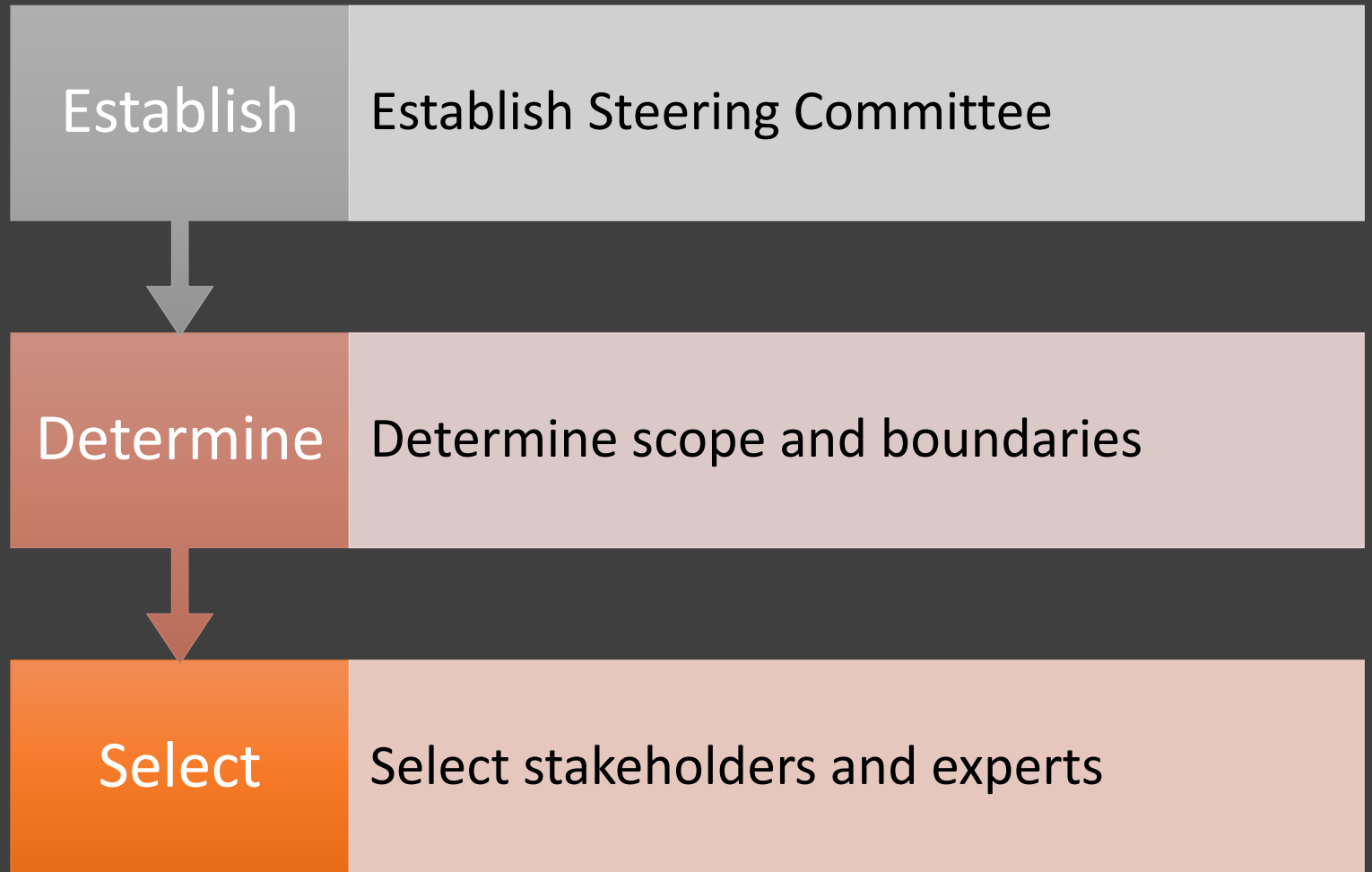
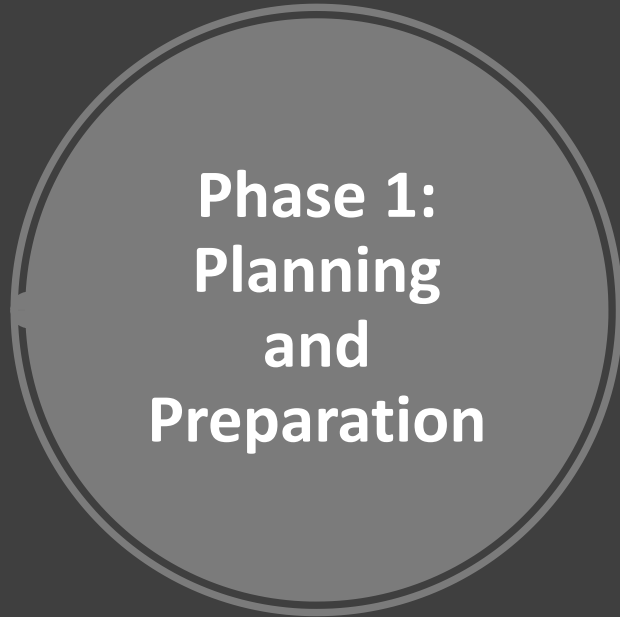
- Implement ePlan for all cadastral plans & surveys by 2025.

ePlan 2025 Road Map – Major Milestones



Roadmap Development Process





Phase 2: Visioning

- Conduct senior-level vision workshop to identify long-term goals and objectives

By 2025, implement a digital cadastre that:

- *accurately delineates Victorian property boundaries in 3D*
- *defines the legal rights, restrictions and responsibilities of all parcels and their associated physical objects*
- *delivery of cadastral data is to an industry accepted single modelling standard*
- *facilitates 3D visualisation, validation, storing, updating, interoperability and interrogation of cadastral data*
- *enables key stakeholders to make timely and efficient decisions*
- *supports integration with existing cadastral systems and databases.*

Phase 3: Roadmap Development

- Conduct workshops to identify relevant policies, projects, stakeholders, priorities and timelines
- Develop roadmap document
- Conduct review and consultation cycles with key stakeholders for endorsement
- Launch Roadmap



Phase 4: Implementation, Monitoring & Revision



- Conduct workshops to re-assess priorities and timelines as progress and new trends and technologies emerge
- Update roadmap

Future Work

- Continue development of the roadmap
- Consult with key stakeholders for review and endorsement
- Continue 3D digital cadastre investigation according to the roadmap



Environment,
Land, Water
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THANK YOU