Adopting AI for Planning in Victoria's Councils

A MOMENT OF READINESS, A MOMENT OF CAUTION

GREATER DANDENONG
City of Opportunity

MAVlab

MAV
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Acknowledgement of Country

The Municipal Association of Victoria acknowledges Traditional Owners of Country throughout Victoria and pays respect to their cultures and Elders past and present.


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Authors

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Executive Summary

This moment marks a significant inflection point in the development and application of Artificial Intelligence, as we see a technology rapidly moving from experimental innovation to practical integration within core government and business workflows. While private sector adoption continues to accelerate, public institutions face the dual challenge of embracing these tools to enhance efficiency and responsiveness, while also safeguarding public values, transparency, and accountability.

Governments seeking efficiency upgrades and service improvement are moving towards embedding AI into everyday processes. This early phase of adoption demands a cautious yet proactive approach that acknowledges the technology's experimental nature, rapidly evolving capabilities and the need for governance structures and evaluation methods that can evolve in parallel. By approaching AI as a collaborative, iterative practice, rather than a one-off technical upgrade, councils can build resilient systems that learn, adapt, and remain grounded in the principles of public service.

This report presents findings from a federally funded initiative exploring how artificial intelligence (AI) might support Victorian councils to meet housing targets through more efficient statutory planning processes. This work was funded by the Australian Government National Housing Support Program Stream 1. The work was developed by MAVlab, the innovation lab of the Municipal Association of Victoria (MAV), in collaboration with the City of Greater Dandenong (CODG). The research engaged with more than 250 planning, technology and procurement professionals representing 70% of Victorian councils. Technology vendors and a broad range of subject matter experts were also consulted for their expertise and insight to support the development of fit-for-purpose procurement guidance for local government in relation to the responsible adoption of AI in planning.

The resulting recommendations, use cases, and governance frameworks aim to help councils navigate this technological transition while preserving the core values and professional integrity of local government planning practice. **While the focus of this work is on the specific use case and processes of statutory planning, many of the learnings and recommendations included in this report have broad application to the adoption of AI and automation in local government in general.**

This program of work was conducted over several months at the beginning of 2025. During this same time, the Victorian State Government commenced significant planning reform. The research reveals a Victorian planning system at a critical juncture. Through extensive engagement with councils, industry experts, and technology vendors, a striking consensus emerges: artificial intelligence may offer genuine opportunities to address administrative burdens in planning while preserving professional judgment, if implemented with care for community values, place-based outcomes, and a robust commitment to preserving the essential role of human expertise in planning decisions.

The planning profession faces mounting pressure. Housing demands are increasing. Resources are constrained. The planning system itself wasn't designed for automation. Yet there is remarkable momentum for change, with 70% of Victorian councils participating in this research and one-third either currently using or actively planning to implement AI within a year.

For planners, the most immediate opportunity lies in automating routine tasks that consume valuable time. Tasks like document processing, application validation, and customer service queries can be supported through a spectrum of technologies. Simple document classification can be handled through rule-based automation, validation can be managed through structured data checks, and customer service can be supported through knowledge bases and carefully implemented language processing tools. Together, a coordinated implementation of these tools could relieve significant administration burden and allow planning professionals to focus on the more strategic work that requires their expertise and judgment, and in the long-term provides the most value to communities.

However, the research also identifies significant implementation challenges. Council capability varies widely, with many lacking the governance frameworks, technical infrastructure, or expertise needed for responsible AI adoption. System fragmentation across 79 councils creates barriers to scale that will be difficult to overcome and will require dedicated coordination and investment in collaborative approaches.

Rushing toward automated decision-making carries substantial risks. Bias can become embedded, sustainability goals might be compromised, and perhaps most importantly, community relationships and trust could erode.

The recommendations in this report offer practical pathways forward: robust governance frameworks, capability development programs, collaborative procurement models, strategic investment and tiered implementation approaches that begin with low-risk, high-value applications. By working together to share knowledge, resources, and infrastructure, councils can harness AI's potential while navigating its challenges responsibly.

As councils adopt AI, they must lead with their values: transparency in decision-making, cultural inclusivity, support for professional judgment, and thoughtful stewardship of place and community.

This report outlines ten practical and interlinked recommendations designed to support safe, ethical, and effective AI use in local government. The approach prioritises collaboration, capability-building, and governance, enabling councils to act with confidence while preserving professional judgment, community trust, and planning's core public value.

Summary of Recommendations

1 **Establish Ethical and Governance Frameworks:** Create co-designed, planning-specific ethics and governance tools to safeguard public interest, maintain human oversight, and ensure inclusive and transparent AI use. Includes fairness metrics, bias mitigation, and consultation protocols for diverse communities.

2 **Initiate an AI Capability Development Program:** Launch targeted training and literacy initiatives for planners, IT teams, procurement officers, and executives. Ensure AI supports, not undermines, career development and professional pathways, especially for early-career planners.

3 **Establish a Community of Practice for AI in Planning:** Form a sector-wide knowledge-sharing network to foster peer learning, mentoring, and collective problem-solving. This community will evolve sector guidance, document lessons, and build a shared knowledge base.

4 **Enable Collaborative Procurement and Vendor Management:** Develop shared procurement models and vendor engagement frameworks that leverage collective buying power and embed safeguards around transparency, explainability, and data use.

5 **Develop Shared Infrastructure and Standards:** Create common data formats, templates, and interoperability standards to reduce fragmentation, support vendor scalability, and enable system-wide AI readiness across councils.

6 **Prioritise Tiered Implementation Pathways:** Adopt a staged approach to AI use – from simple automation to advanced decision support matched to council capability. Provide implementation guides, case studies, and success metrics for each tier.

7 **Create a Rapid Response Support Team:** Establish a cross-disciplinary team available to assist councils with hands-on support at key implementation stages. Includes a volunteer network to mobilise internal sector expertise.

8 **Develop Integration Pathways for Existing Systems:** Ensure AI tools can integrate seamlessly with current planning software and workflows. Promote modular, API-first solutions that enhance, rather than replace, legacy systems.

9 **Advocate for Automation-Ready Planning Reform:** Work with State Government to clarify planning rules and enable appropriate automation without eroding discretionary judgment. Pilot machine-readable codes and identify reform opportunities based on implementation feedback.

10 **Implement Continuous Monitoring and Improvement:** Develop robust evaluation frameworks to track AI's impact on planning quality, community satisfaction, efficiency, and sustainability. Use feedback loops to continuously improve tools and processes.

These ten recommendations form a cohesive roadmap for councils to navigate AI adoption responsibly. They emphasise ethics, capability, shared infrastructure, and iterative learning - positioning councils to lead with integrity and innovation. By working together, Victorian councils can unlock the benefits of AI while upholding their roles as stewards of place, fairness, and public trust.

The moment to act on these recommendations is now.

With a balanced approach to innovation and responsibility, AI and automation can help transform a system under pressure into one that better serves Victorian communities, planners, and developers alike. Councils and the planning sector don't need persuasion to modernize, they need strategic guidance, common frameworks, strategic investment, reliable partners, and safe pathways to trial and scale what works.

This report provides a foundation for that journey forward. The MAV will now be working with partners to identify opportunities to lead, collaborate and support the funding and implementation of these recommendations. Join us.

About this Project

Vision Statement

Building collective capability and enabling planning excellence through responsible AI

We envision a Victorian planning ecosystem where AI technologies enhance - rather than replace - professional judgment. Where councils can harness AI to address administrative burdens while maintaining planning's essential public values, freeing planning teams and support staff to focus on strategic work that creates liveable, sustainable communities in keeping with the core values of place-based decision making. This approach is values-led to leverage the efficiency gains promised by these technologies, while maintaining the core values of the planning profession.

Through collaborative implementation, standardised approaches, and strong governance, all councils, regardless of size or resources, can confidently navigate AI adoption in planning through shared infrastructure, collaborative procurement, and collective intelligence. By working and learning together, rather than separately, councils can also engage vendors more effectively, build internal capability more efficiently, and implement technologies more responsibly. This coordinated approach supports the Commonwealth Housing Support Program's goal of accelerating housing supply by creating efficiencies that benefit councils, applicants, and communities alike.

Project Introduction

About the project

The Municipal Association of Victoria is the representative peak body for all 79 local governments in the state of Victoria. The MAV has established MAVlab to catalyse new ways of working at scale to support Victorian local governments in their responses to critical and increasingly complex social, environmental, economic, technological and leadership challenges.

The Commonwealth Housing Support Program is one of a range of a federal government initiatives to help achieve the National Housing Accord target of building 1.2 million new, well-located homes over 5 years.

The Housing Support Program is supporting the delivery of increased housing supply by funding projects that seek to deliver enabling infrastructure, provide amenities to support new housing development or improve building planning capability.

The first stream of funding (HSP 1) has been provided to State, Territory and Local governments for projects that will improve planning capability.

The MAV partnered with City of Greater Dandenong as recipients of stream 1 grant funding from the Commonwealth Housing Support Program to deliver a portfolio of four projects that include:

1. Advancing AI Innovation in Local Government (AAII)
2. Councillor Champions of Change - support increased housing development by strengthening social licence for greater density, change and growth and inclusionary housing
3. Exploring underutilised public land for housing
4. Expanding knowledge for adaptive reuse of existing buildings

This report refers specifically to Project 1. Advancing AI Innovation in Local Government (AAII) only.

Project Goals and Objectives

The AAII project aims to build an evidence base to inform guidance and recommendations for interventions into the use and procurement of AI and automated decision-making tools for use in statutory planning in councils. It aims to support Victorian councils in meeting housing targets by investigating opportunities for strengthening their statutory planning capacity through responsible integration of AI and automation technologies.

At its core, the project seeks to identify efficiencies in the planning process that empower planners to work more effectively - enhancing, rather than replacing, professional judgment. By collaborating with councils and leading experts in planning, AI, regulation, data and ethics the project aimed to generate a robust evidence base to guide the procurement of AI and automation tools tailored to the needs of statutory planning functions in councils. The work attempts to articulate the critical role of statutory planning in local government and ensure that emerging technologies are aligned with the profession's values, responsibilities, and public purpose.

A key outcome of this initiative is the establishment of a MAV managed procurement register for vendors of AI and automation tools appropriate for statutory planning. This register will provide Victorian councils with coordinated, sector-wide advice and assurance on critical procurement issues, including intellectual property, data governance, privacy, and cybersecurity. By creating clear procurement criteria and vendor guidelines, the project positions procurement as a powerful lever to shape practice - setting standards, aligning expectations, and influencing product development in ways that reflect public sector values.

The outputs of this project, including process mapping, technology assessments, stakeholder engagement, and vendor outreach, will not only support councils to make informed investment decisions but will also offer a framework that can be shared nationally with other jurisdictions. Ultimately, we hope that this work will lay the foundations for a more efficient, ethical, and future-ready planning system.

Project Process

Research Methods and Activities

At the time of undertaking this project, the significant changes are underway to reshape the Victorian planning system, and as a result, the role of planners in that system. The biggest changes will be felt by the approximately 1800 planners working in Victorian local government.

These forces of change are:

- A national and state-wide housing affordability crisis, with many Victorians unable to access affordable or well-located housing
- The urgent need to address climate change mitigation and adaptation in planning systems
- Significant strain on local and state infrastructure to support fast-growing communities, with the state government now leading a significant reform program of local infrastructure changes
- The state-government increasing its share of planning decision making at the local level, removing local government oversight of local planning decisions
- A review and rewrite of the almost 40-year-old Planning and Environment Act 1987
- “Codification” of development assessment standards across many elements of the planning system, thereby changing the role of the council planner in the system.

Many of these issues are outlined, in detail, in the following MAV submissions:

- Local Government Sector Submission - Reforming Victoria’s Planning System
- Submission to Legislative Council Select Committee Inquiry into Victorian Planning Provisions amendments VC257, VC267 and VC274
- Submission to Infrastructure Victoria’s draft 30-year Victorian infrastructure Strategy: 2025 - 2055

In addition to these planning system changes, many councils are grappling with additional challenges, including:

- rapid advancements in AI and automated decision making and the correspondingly volatile hype cycle of AI
- significant pressure to deliver more housing at an increased pace
- significant resourcing constraints in many councils.

These forces make for a highly complex and topical exploration with strong and varied opinions being voiced by the sector. As such, MAVLab has led an approach that prioritised engagement to ensure that this project followed a structured and participatory research process designed to develop fit-for-purpose procurement guidance for the responsible adoption of AI technologies in statutory planning in Victoria. The methodology was grounded in human-centred design, public sector innovation, and digital capability development. Central to this approach was sustained engagement with Victorian local councils, technology vendors, peak bodies, and subject matter experts across planning, procurement, and AI technologies and governance.

This report is intended as a public resource and should be accessible and insightful for people with a variety of technical expertise. As such, to access descriptions and definitions of technical terms and sector specific language please refer to the glossary in Appendix D.

Framing and Outputs

The research was shaped around key questions of enquiry, which interrogated themes such as:

- What procurement panel guidelines and requirements are needed to guide suppliers, where opportunities exist for AI in planning?
- What capabilities might councils require, and what constitutes value and risk from the perspective of those procuring and using technology in local government?
- A range of subject matter experts in planning, ethics, AI, governance and first nations technology were also engaged to provide contextual insight.

These questions were used to guide both the desk-based research and stakeholder engagement, and were synthesised to produce best practice procurement guidelines, assessment criteria to be applied to a panel of vendors, and a comprehensive inventory of planning-relevant AI use cases - and this report.

These procurement guidelines, AI use cases, and vendor assessment requirements are intended as living documents. They represent a first iteration—fit for current technologies and council maturity levels—but expected to evolve as capabilities grow, regulations shift, and new AI-enabled planning tools emerge.

This report serves to contextualise and support their use and provide additional context and guidance outside of the formal structures of the procurement documentation, grounding guidance in the sector's lived experience and the priorities surfaced through extensive engagement. Together, these resources provide a foundation for safe, consistent, and values-aligned AI adoption across the Victorian planning system.

At the end of this report, you can find the following appendices:

Appendix A: Council perspectives on AI in planning

What it is: A synthesis of insights gathered from 70% of Victorian councils via surveys, workshops, and interviews, highlighting local government readiness, priorities, concerns, and practical observations about AI in statutory planning.

What it's for: Use this appendix to understand the real-world conditions councils are working within—especially the diversity in digital maturity, preferred use cases, integration challenges, and appetite for collaborative approaches. It's foundational context for implementation planning and framing sector support initiatives.

Appendix B: External stakeholder perspectives on AI in planning

What it is: A curated set of insights from planning experts, academics, technologists, legal advisors, First Nations representatives, and policy leaders reflecting on AI's role, risks, and reform potential in planning.

What it's for: This appendix helps broaden the lens, offering system-level reflections and surfacing deeper questions about ethics, regulation, trust, and long-term reform. It's especially useful for strategy, policy, and governance work.

Appendix C: Vendor perspectives on AI in statutory planning

What it is: Feedback from 18 vendors—ranging from established providers to start-ups—on their AI capabilities, willingness to meet sector expectations, and challenges in working with fragmented council systems.

What it's for: Use this to understand how the supplier market is responding, where vendor readiness aligns (or misaligns) with council needs, and how procurement practices can drive better outcomes through co-design and transparency.

Appendix D: Use case library for AI in planning for councils Glossary of Terms

What it is: A list of identified cases studies where AI may (or may not) be appropriate.

What it's for: Inspiration for local government and technology vendors to consider developing a product/process roadmap for AI implementation and investment.

Appendix E: Glossary of Terms

What it is: A list of key terms and descriptions to support general literacy.

What it's for: Use this to understand key terms used throughout this document.

In addition to this report and its appendices, a range of other documents were produced as outputs of this work.

Additional Documentation to Support Procurement of AI Technologies by Councils

As part of the larger project scope of work, the following documents were produced to support the establishment of the panel of vendors, and as living documents for Victorian councils to reference in their procurement and adoption of AI technologies for planning. These documents will be made available to Councils as part of the MAV procurement process to establish appropriate procurement mechanisms.

i) MAV AI Procurement Guidelines for Statutory Planning AI Technologies

What it is: A set of procurement guidelines developed for councils to safely and responsibly acquire AI systems for planning. Covers governance, ethics, legal obligations, risk, data, and lifecycle management.

What it's for: This is a core reference document for procurement teams, legal advisors, and project leads. It provides the guardrails and best practice processes for selecting and managing AI planning tools in line with council and legislative obligations.

ii) MAV AI Vendor Requirements for Victorian Council Planning Systems

What it is: A comprehensive framework detailing the essential criteria, standards and commitments that prospective technology providers must satisfy to join the appointed panel. It encompasses proven AI expertise in statutory planning, transparent and ethical workflows, rigorous security and privacy safeguards, indigenous data sovereignty principles, system adaptability and integration capabilities, as well as ongoing support and collaboration practices.

What it's for: This set of requirements is to give councils and procurement teams a clear, consistent benchmark against which to assess and compare vendor proposals. It ensures that selected providers not only deliver technically capable solutions but also uphold human-centred design, legislative compliance and strong partnership values.

Project Process

Discovery: Mapping processes and surfacing needs

In the Discovery phase, the team mapped existing statutory planning processes and procurement pathways to understand how councils currently assess and engage technology solutions. This included:

- A high-level process map of statutory planning activities and decision points, informed by existing MAV and council research.
- A 90-minute roundtable session with the City of Greater Dandenong (CODG), the MAV, planners, procurement experts, administrators and AI implementers, to understand system-wide drivers, constraints, and the characteristics of an effective, future-facing procurement pack.
- Interviews with subject matter experts across academia, peak bodies, AI governance, risk specialists and first nations advisory to further explore pain points and assess council readiness for AI enablement.
- A targeted survey issued to council planning, IT and procurement teams to understand the current state of technology systems, procurement maturity, and awareness of AI tooling.

Together, these activities helped illuminate both opportunities and constraints in the current system, while providing critical direction for later co-design efforts.

The design phase centred on testing assumptions and shaping draft outputs through direct engagement with council teams and vendors.

Design: Co-developing resources and validating assumptions

Three cross-functional workshops were conducted with representatives from planning, IT, and procurement functions across several Victorian councils. These workshops were designed not only to gather feedback on draft materials but also to deepen the research team's understanding of how councils approach AI, assess risk, and navigate procurement challenges in practice. Through these workshops, 124 participants from 58 councils focused on:

- Validating key pain points and identifying practical opportunities for AI to support current planning processes.
- Reviewing and providing feedback on early drafts of the procurement guidelines and vendor panel requirements.
- Exploring the cross-jurisdictional challenges of adopting AI, including issues of capability, culture, and compliance.

In parallel, an open invitation was issued to AI vendors to contribute insights into the landscape of available tools. Vendors participated in a consultation workshop where they were presented with draft procurement guidance and panel criteria. Vendors were invited to respond via a facilitated group discussion and a follow-up survey. This session helped test the feasibility of proposed requirements and clarified how vendors currently approach explainability, risk management, and transparency in AI-enabled planning products.

This mix of stakeholder and market engagement ensured that outputs were grounded in the practical realities of both buyers and suppliers, avoiding the pitfalls of overly theoretical or one-sided frameworks.

Delivery: Consolidation, testing and final recommendations

The final phase of the project involved refining outputs, validating findings, and supporting alignment with MAV, COGD, and council stakeholders. This included:

- Targeted feedback sessions with councils to refine the recommendations for AI procurement and test the usability of the draft guidelines.
- Direct collaboration with MAV and COGD to ensure the procurement materials aligns with existing tools, meets compliance expectations, and is adaptable to different council contexts.
- Submission of the final outputs for formal review and handover, including supporting commentary and suggestions for ongoing implementation and governance.

Through each stage, the research was intentionally grounded in the lived experiences of councils and guided by the principle that effective procurement of AI technologies must not only be technically sound but also fit for purpose to meet council needs and market readiness.

Engagement: Prioritising sector engagement

Throughout the program of work, the team conducted the following engagements:

- AI Readiness Survey – 97 responses (72% of Victorian councils)
- 4 x Council Workshops – 124 attendees (70% of Victorian councils) (3 x design workshops, 1 x feedback workshop)
- 1 x Vendor workshop – 18 AI vendors and technology providers
- 56 councils (70% of Victorian councils)
- 21 Interviews with subject matter experts: planning, procurement, AI, Council IT, law, ethics, First Nations, regulation, planning tech, property development, VIC state government, etc

The list of subject matter experts and specialists interviewed for the project include:

Marjan Hajjari | *Executive Manager Strategic Growth and Advocacy, City of Greater Dandenong*

Will Stewart | *Manager Statutory Planning, City of Greater Dandenong*

Tavis Vallance | *Coordinator Partnerships & Innovation, Boroondara Council*

Peter Hodgson | *Innovation Specialist, Boroondara Council*

Lisa Sarago | *CEO, Land on Heart Digital Agency*

Robert Stopajnik | *Development Director Precincts, Development Victoria*

Nicholas Davis | *Co-director, Human Technology Institute, UTS*

Lauren Solomon | *Special Advisor Governance Practice, National AI Centre*

Simon Weller | *Principal Planning Data Capability, Department of Transport and Planning VIC*

Joe Hurley | *Professor, Sustainability and Urban Planning, RMIT*

Jack Vaughn | *Director of Policy, Urban Development Institute of Australia, Victoria*

James Mant | *Managing Editor, Planning News, Planning Institute of Australia*

Michelle Wang | *Committe Member, Planning Institute of Australia VIC Division*

Stephen Rowley | *Planning Expert, author: The Victorian Planning System: Practise, Problems and Prospects, Senior Associate, SGS Planning*

Professor Kate Henne | *Director, School of Regulation and Global Governance (RegNet) Australian National University*

Natasha Palich | *Executive Officer, Council Alliance for a Sustainable Built Environment*

Kristine Minghella | *Insurance Counsel, Municipal Association of Victoria*

Eliza McDonald | *Knowledge Bank Lead, City of Melbourne*

Andrew Lowcock | *Deputy Executive Director, Victoria, Property Council of Australia*

Claire Daniel | *PlanTech Project Officer, Planning Institute of Australia*

Context

Understanding AI technologies in the planning context

Throughout this report, we refer to AI technologies that could support planning processes. It's important to distinguish between automation and different AI approaches as they offer distinct capabilities and limitations.

Artificial Intelligence (AI) encompasses a broad range of technologies that enable machines to perform tasks that typically require human intelligence, such as learning from data, recognising patterns, making predictions, and adapting over time. The most common types of AI include **machine learning** (which uses statistical techniques to improve performance based on data), **natural language processing** (which enables computers to understand and generate human language), and **computer vision** (which allows systems to interpret visual information).

A particularly prominent subset of AI in this moment is **large language models** (LLMs), such as ChatGPT (Open AI), Copilot (Microsoft), Claude (Anthropic) and Gemini (Google), which have gained widespread attention due to their ability to generate human-like text, answer questions, summarise documents, and assist with writing and analysis. LLMs sit within the field of natural language processing and are distinguished by their capacity to generalise across a wide range of text-based tasks, making them highly versatile tools for knowledge work and customer service.

It is important to distinguish **AI** from **automation**. While automation refers to predefined, rule-based systems that perform repetitive tasks with minimal variation, AI (including LLMs) can respond to complexity, nuance, and uncertainty. Different technologies are suited to different workflows: automation excels at high-volume, standardised processes (e.g., document management or task routing), while AI is better suited to tasks involving judgment, interpretation, or decision-support (e.g., assessing planning applications or extracting insights from complex datasets). Recognising these distinctions is key to choosing the right tool for the job and designing systems that augment human capabilities rather than replace them. Throughout this project, the team has attempted to clearly distinguish between tasks and workflows that are appropriate for AI and those appropriate for automation.

Integrating automated processes and/or AI tools into government workflows offers significant benefits, particularly in the planning system where large volumes of data and complex decision-making are common. **Automation**, through rules-based systems, workflow engines, or robotic process automation (RPA), can handle repetitive, high-volume tasks such as application triaging, document routing, or notification generation with speed and consistency. This can reduce human error, enhance compliance, and allow staff to redirect their time toward more strategic or relational tasks. In parallel, **AI** has potential to streamline more complex administrative functions, reduce processing times, and free up staff capacity to focus on higher-value, human-centred work. It can enhance decision support by analysing patterns in data, flagging inconsistencies, or providing insights that might otherwise go unnoticed. Tools like chatbots and large language models (LLMs) have potential to improve customer service by delivering faster, more consistent responses to enquiries, and even assist in drafting correspondence or summarising application materials.

As demands on the planning system grow, particularly in the context of housing pressures, automation can ensure foundational tasks are performed reliably at scale, while AI can offer adaptability and deeper analysis. Together, they provide complementary capabilities that, if integrated thoughtfully, may help councils manage workloads more efficiently, improve responsiveness, and generate data-driven insights that inform policy development, service design, and community engagement in more evidence-based ways.

However, these benefits come with real risks. AI systems can reinforce historical biases embedded in data, leading to unfair or discriminatory outcomes—especially for vulnerable or marginalised communities. Complex models like LLMs can lack transparency, making it difficult to explain how decisions are reached, which can erode public trust. LLMs also have a known tendency to hallucinate, meaning they can generate text that is fluent and confident but factually incorrect, fabricated, or misleading. This occurs because LLMs predict the most likely sequence of words based on patterns in their training data, rather than verifying information against a source of truth. While useful for drafting and summarising, their outputs must be carefully reviewed - especially in high-stakes domains like planning or governance - where accuracy, accountability, and legal precision are critical. Reducing hallucination typically requires combining LLMs with verified data sources, human oversight, and well-defined boundaries for their use.

There is also the danger of diminishing professional judgment if AI tools are seen as replacements rather than supports for skilled practitioners. Privacy and data security concerns are heightened as AI systems increasingly rely on sensitive personal, spatial, and planning information. Finally, uneven digital capability across councils could lead to inconsistent implementation and outcomes, widening gaps between well-resourced and less-resourced areas. For these reasons, thoughtful integration, that is anchored in strong governance, inclusive design, and continuous evaluation, is essential to ensure AI can deliver value without undermining trust or equity.

Automation vs. AI

- Automation refers to rules-based systems that follow predefined logic to perform repetitive tasks. In planning, this might include automatic checking of applications against codified, machine-readable planning criteria. Automation requires clear, unambiguous rules and structured data inputs.
- Artificial Intelligence (AI) encompasses a broader range of technologies that attempt to mimic aspects of human intelligence, often dealing with ambiguity and unstructured data. In November 2023, the Organisation for Economic Co-operation and Development provided a definition of an AI system, “A machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations or decisions that can influence physical or virtual environments. Different AI systems vary in their levels of autonomy and adaptiveness after deployment.”

To effectively implement digital technologies, including AI, in planning, it’s important to understand that automation and AI exist along a continuum rather than as entirely separate categories.

Rule-based automation forms the foundation of many digital planning systems. These follow explicit, predefined rules to perform routine tasks, such as checking application completeness against requirements or calculating fees based on established formulas.

AI-enhanced automation represents the middle ground where traditional automation incorporates some AI capabilities. For example, a document routing system might use machine learning to classify incoming applications by type and then automatically direct them to the appropriate department using predefined rules. This hybrid approach combines the reliability of rule-based systems with AI’s ability to handle less structured inputs.

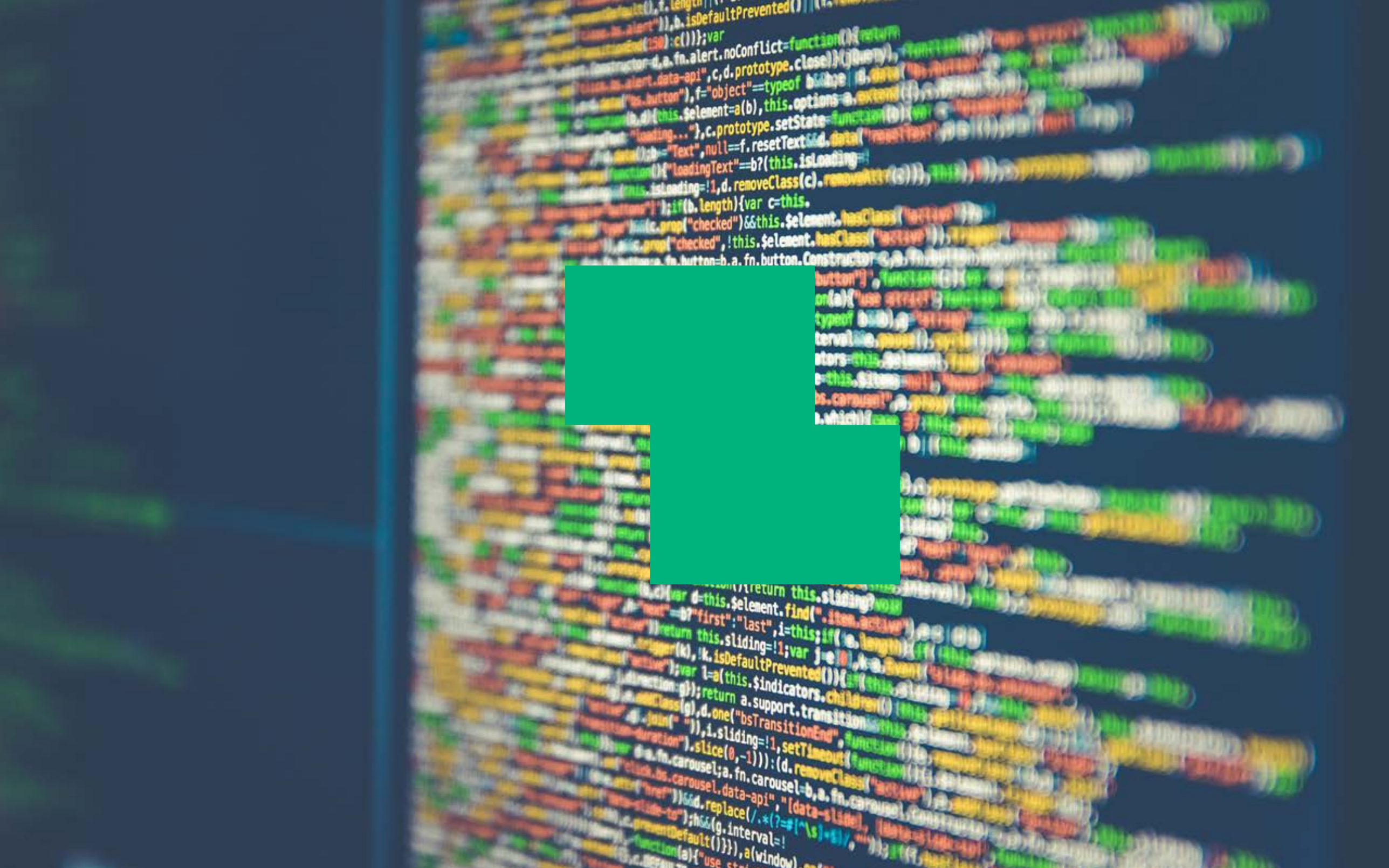
Machine Learning (ML) identifies patterns in data to make predictions or classifications. In planning, ML might categorise applications, predict processing times, or identify similar past cases. While ML is considered a form of AI, it often operates within automated workflows—the system might automatically flag applications that a predictive model identifies as high-risk for more detailed human review.

Advanced AI applications include natural language processing and large language models that can interpret and generate text that mimics human communication. These technologies might assist planners in summarising public submissions, drafting responses to inquiries, or interpreting planning scheme language.

The distinction between automation and AI in planning may be further blurred by how they’re implemented in practice, as planning software systems may use both approaches in tandem:

- Automated workflows may trigger AI analysis at specific points
- AI-generated insights may inform automated processes
- Both may operate under human supervision as part of a larger system

The Victorian planning system presents unique challenges for technology implementation. As noted by planning experts that were consulted as part of this project, the system “was never designed for automation”, with its complex overlays, discretionary elements, and context-sensitive judgments. By understanding this technology continuum, councils can make more informed decisions about which digital approaches best suit their specific planning needs, avoiding both under-utilisation of available tools and over-reliance on inappropriate technologies.



Findings

This section presents synthesised insights drawn from extensive engagement with three stakeholder groups: councils, external subject matter experts, and technology vendors. Each group brought unique perspectives to the question of how AI might transform planning processes in Victoria.

The council officers engaged in this process offered a practical view that is grounded in day-to-day operational challenges and the varying levels of digital maturity typically found across councils. Our engagement captured input from 58 councils (approximately 70% of Victorian councils), including planning staff, technology/ IT staff, procurement and legal, risk and compliance officers. Additionally, the perspectives from councils were sharpened by the deep engagement and contribution from the project's key council partner, the City of Greater Dandenong. Collectively, councils' feedback revealed both enthusiasm for AI's potential and pragmatic concerns about implementation.

External subject matter experts—including planners, legal experts, technologists, academics, First Nations advisors, and peak body representatives—provided critical insights on system design, governance, and long-term implications. Their perspectives often looked beyond immediate efficiency gains to consider how AI might uphold, or potentially undermine, the core public values of statutory planning practice.

Technology vendors, representing both established planning software providers and emerging AI specialists, contributed practical perspectives on implementation feasibility, integration pathways, and the current state of AI capabilities in planning contexts.

Rather than presenting these viewpoints separately, the following findings highlight where these perspectives align, diverge, or complement each other. By triangulating across these stakeholder groups, we can identify the most promising pathways forward - ones that address practical needs while preserving planning's essential purpose and values. The engagement and consultation insights from each stakeholder group is presented in the following sections of this report, and the appendices in greater detail.

"Many councils view AI not as an optional add-on but as an essential evolution of planning systems in response to mounting pressures."

Consensus on AI's role: augmentation, not replacement

Across the board, stakeholders share a powerful consensus that AI's primary purpose is to augment human expertise rather than replace it.

As one council officer stated, *"AI should not seek to replace human planning staff. There is a high degree of grey that is assessed in planning (particularly regional planning) where the bigger picture needs to be considered."* Councils, experts and vendors all emphasised that AI should handle repetitive administrative tasks, freeing planners to focus on strategic work requiring professional judgment. This alignment creates a solid foundation for responsible implementation.

Councils view augmentation primarily through a pragmatic lens of resource constraints and efficiency. Planning departments facing staff shortages see AI as an opportunity to maintain service levels despite increasing pressure to speed up processes, continue to make effective and principled planning decisions, within a context of growing complexity in applications, while experiencing staffing and resourcing shortages. Many councils view AI not as an optional add-on but as an essential evolution of planning systems in response to mounting pressures. As one council representative stated, *"AI adoption in statutory planning has great potential to streamline processes, improve decision-making, and enhance efficiency."*

However, there is clear and consistent concern that these tools must not erode the role of planners in making context-sensitive, discretionary decisions, even at the early stages of understanding and processing applications. As one council representative put it, *"(we have) concerns that the system could eventually become too dependent on AI, removing the more discretionary or subjective elements of decision making in planning."*

These insights point to a key risk of the slow creep of automation into areas that require relational knowledge, contextual sensitivity, and value judgments. There's a recognition that while some parts of the planning process may be relatively codifiable, the profession as a whole, is rooted in complex decision-making, balancing diverse public interests. This demands a structural commitment to keeping human expertise at the centre of planning systems, especially where community trust and interpretive nuance are involved.

Experts, particularly academics and planning professionals, emphasise the irreplaceable nature of human judgment, especially for discretionary decisions involving neighbourhood character, sustainability trade-offs, and community impacts. In addition, they note that councils - as the responsible planning authority - will ultimately be responsible for the planning decisions made. Therefore, human oversight by planners is crucial. Vendors position their solutions as assistive technologies while sometimes understating the complexity of planning decisions.

Importantly, this consensus points to the need for thoughtfully designed human-AI partnerships. Effective implementation will require clear delineation of which tasks are appropriate for automation versus human judgment. It also suggests a need for new workflows where AI can enhance a planners capabilities without removing their critical role in decision-making. As one council representative noted, *"I think it's a good tool to augment and draw on context, past cases, pick up things that maybe a planner didn't think of at the time... but not taking over that decision-making role."*

System readiness and integration: the foundational challenge

A fundamental tension exists around whether planning systems are ready for AI adoption. This manifests across multiple dimensions, from technical integration to process design and legislative frameworks.

External experts, particularly planning scholars, argue forcefully that Victoria's planning system isn't designed for automation. *"We're trying to automate without a machine-readable system—it's madness,"* noted one expert. They point to ambiguous planning controls, contradictory rules, and discretionary language that can't be meaningfully codified without significant reform.

Significant code changes are already underway for many dwelling types, for example see VC267 – Townhouse and LowRise Code. The Victorian State Government's new code has, in its view, simplified planning processes to speed up the approvals of new dwellings. Further codification projects are underway. Consultation on these reforms has been mostly undertaken without meaningful engagement with local government, industry, academia or the public. It is unclear if the government has considered how the new codification pathways, or any part of its planning reform program, has considered the emerging role, opportunities and causes for concern with AI and automated decision making. In addition, many councils have highlighted how the new code potentially conflicts with state and local planning policy, the new *Plan for Victoria*, and how it could undermine environmentally sustainable design targets. The codification work has, to date, only focussed on dwellings whereas other use and developments such as commercial and industry remain untouched. This has created more confusion and concern, rather than certainty.

The Municipal Association of Victoria (MAV) has for some time now flagged concerns on the centralisation of planning decision making within the Victorian government, and the conflicting narratives presented by the Victorian government. The MAV has sought to influence and be a constructive partner– see for example the two MAV discussion papers on shaping the Plan for Victoria (both for metropolitan and regional and rural Victoria. The MAV has recently completed a sector submission on the Victorian planning system and the current review and rewrite of the Planning and Environment Act 1987. This in-house work includes presenting a "Better Way" to implement planning reform that is inclusive of all stakeholders.

It is strongly recommended that current and future reform to the Victorian planning system is inclusive and undertaken in a fulsome way that meets the needs and expectations of planners, decision makers and the public. All with a lens to ensure changes to the code consider its machine readability now to allow for the potential application of AI and automation in the future, to avoid additional costly work or further codified barriers.

Councils, meanwhile, focus primarily on practical integration challenges with existing software systems. The survey revealed a fragmented planning software landscape spanning Technology One, Pathway, Greenlight, and various document management systems. Only 10% of survey respondents indicated their planning software currently has AI capabilities. Integration was consistently ranked among the top concerns, with councils stating they *"don't want standalone AI solutions that operate in isolation from their current workflows*."

Vendors express confidence in their integration capabilities while acknowledging data access challenges. Most report using open data formats and API-first design principles. However, they note that planning data is often inaccessible, inconsistent or difficult to interpret without deep domain knowledge. *"The council space regarding AI and planning is very specialised... We need them (councils) to experiment with us, share their knowledge, data and processes otherwise we will all be guessing,"* observed one vendor.

This reveals an essential sequencing challenge for the sector. Significant work may be needed to prepare planning systems, processes and data before meaningful automation can succeed. Councils may need to invest in process mapping and data standardisation before AI implementation. The question of what comes first—process reform or AI adoption—emerges as a critical consideration that will shape implementation pathways. Successful approaches will likely involve targeted automation of areas where planning processes are already well-structured, while laying groundwork for broader reform in more complex domains.

The maturity gap: capability and governance

The research revealed stark differences in council AI readiness, creating implementation challenges that any sector-wide approach must address. An AI Readiness survey MAV conducted for this project received responses from 70% of Victorian Councils.

Of those respondents, only 12% of councils reported that they have fully implemented or are implementing AI governance frameworks, while nearly one-third (31.3%) indicated that they have no framework at all. Just 7.6% have AI-specific data policies. This indicates a significant maturity gap between councils that are stepping up to embrace these new technologies with thoughtful considerations for appropriate governance, and those that are not. This maturity spectrum encompasses technical infrastructure, staff capability, governance frameworks and available resources. As workshop discussions highlighted, implementing new systems isn't just about the technology—it requires dedicated personnel. *"Most councils using Greenlight have had someone full time on the job keeping it running and explaining to people how to use it,"* noted one participant.

This survey revealed a striking correlation between AI literacy and adoption readiness. Among respondents who self-assessed with expert/high AI literacy, 72.8% were either using or planning to use AI, compared to just 22.3% of those with moderate literacy. This suggests knowledge is a key lever for increasing adoption, as technical understanding appears to reduce uncertainty and increase willingness to implement AI solutions.

Stakeholders disagree slightly on how to address this maturity gap. External experts recommend shared services, regional resources and capability building before implementation. Councils with less maturity note a preference for State leadership or with MAV-coordinated approaches, with one respondent stating, *"a state-led and coordinated delivery of AI tools for planning would add the most benefit and more consistent outcomes council to council."* Implicit in this view is the expectation for appropriate engagement and collaboration with councils to ensure that the spectrum of maturity can be bridged, and that the State will lead with investment into these tools and systems with councils as a full partner in implementation.

Less mature AI vendors expressed concerns about being disadvantaged in procurement processes, advocating for flexible, risk-based requirements that recognise where they are in their development journey. These vendors want evaluation criteria that focus on core capabilities and improvement roadmaps rather than expecting full compliance with all requirements immediately.

This tension points to the need for a tiered or graduated approach to AI adoption. Different implementation pathways should be available for councils at different maturity levels, with appropriate support mechanisms for each tier. Low-maturity councils might begin with shared services or regional partnerships, while higher-maturity councils could lead innovation and share learnings. As one workshop participant suggested, councils need a *"coaching team that can be tapped across the network—identifying who has skills and experience and can offer some advice as a mentor in a moment in time."*

Knowledge gaps and partnership models

A striking pattern across all stakeholder groups was the acknowledgment of significant knowledge gaps that hinder effective AI implementation.

Council representatives repeatedly expressed they *"don't know what they don't know"* about AI capabilities, creating a chicken-and-egg problem. *"Greenlight is a choose your own adventure—but you don't know what you don't know to ask for,"* noted one participant. Councils can't effectively procure solutions without understanding what's possible, but they can't understand what's possible without exposure to solutions.

External experts highlight the need for education and capability building within councils, recommending "lunch and learn" sessions, low-risk pilots and peer-led exploration to demystify AI. Vendors, meanwhile, seek better understanding of planning processes and access to domain expertise. They note that planning data and specialist knowledge aren't publicly available, making it difficult to build valuable solutions without council partnerships.

These shared knowledge gaps point to the potential value of more collaborative approaches to implementation. Councils seek case studies, mentorship networks and opportunities to learn from peers. *"It's hard to give feedback on these guidelines because we've never done this before—can we learn from others who have?"* asked one participant. Vendors express willingness to collaborate, understand local planning goals and co-design features that genuinely help council teams.

The traditional client-vendor relationship may prove insufficient for successful AI implementation in planning. More collaborative models—potentially involving tripartite arrangements between councils, vendors and domain experts—could address knowledge gaps more effectively. This might include shared risk pilots, co-design workshops and knowledge exchange forums that help bridge the divide between technical capabilities and planning expertise. Such partnership models would align with the finding that higher AI literacy correlates with greater adoption readiness, suggesting that knowledge-sharing can accelerate the path to implementation.

"Councils aren't just implementing software - they're custodians of community values, cultural knowledge, and public accountability."

Ethics, inclusion and values-based AI

Ethical considerations emerged as a critical priority across stakeholder groups, though with varying emphasis and understanding.

For councils, ethical AI use ranked as the third highest concern in the AI Readiness Survey, after data privacy (1) and regulatory compliance (2). External experts, particularly First Nations voices and planning academics, articulated a more nuanced view of ethics that extends beyond technical safeguards to encompass inclusion, cultural responsiveness and values alignment.

A powerful message from a First Nations leader consulted as part of this project was that AI systems risk reinforcing colonial dynamics if they aren't built with deliberate inclusion. *"The AI only works with whatever you put in. So if no Indigenous people are actually engaged in developing it, our culture and our ways of being, doing and knowing aren't even included,"* they explained. They emphasised that AI must not crowd out the relational, place-based and values-driven dimensions of planning. These messages have aligned with the MAV's calls for planning reform to be place-based, and relational to the unique contexts of places and communities.

Sustainability emerged as another dimension that stakeholders feared might be compromised in the rush for efficiency. Several interviewees expressed concern that planning systems, already under pressure, were seeing green space protections or sustainability ambitions quietly dropped. The risk is not just to the progress councils have made towards environmental goals through planning policies, it also points to a systemic challenge in eroding long-term goals for short-term gains. As one industry expert warned, *"Any time someone says they're going to make things more efficient, the red flag goes well and truly up."*

Vendors showed varying levels of ethical maturity in their approaches. Some can already provide fairness audits and documentation, while others rely on fairness benchmarks from their model providers. Only a small group of vendors demonstrate strong alignment with First Nations data protocols, either by working with Indigenous partners or embedding cultural heritage overlays into their tools. While most vendors expressed willingness to address ethical considerations, their approaches tended to be more technical and compliance-focused than values-based.

This points to the need for ethical frameworks that go beyond compliance and technical safeguards to actively centre public values in all their diversity. Successful implementation demands co-creation—embedding First Nations leadership from the outset, but also involving councils, communities, planners, and practitioners as stewards of AI systems and technology. Ethics in planning AI cannot be reduced to one lens alone. It must encompass cultural responsiveness, environmental sustainability, social inclusion, and equity of access and reflect the complex, place-based responsibilities councils uphold every day.

While the intent to adopt ethical AI is widespread, the ability to define and operationalise ethics remains a significant challenge. Councils are starting from very different levels of maturity, and there's no widely agreed-upon benchmark for what fairness or bias mitigation should look like in planning contexts. As several experts noted, ethical risk is often highly context-dependent—what is appropriate for a chatbot is not the same as what's needed for a decision-support tool that may influence development rights.

Councils are being asked to make ethical calls in the absence of consistent frameworks, data standards, or support. This introduces both operational risk and uncertainty, particularly for smaller

councils that may not have dedicated AI or ethics expertise. What's needed is an evolving, practical, flexible ethics approach that is developed in dialogue with multiple stakeholders' who can weigh in on and support the reality councils are facing with different levels of maturity, limited resources, and often no established benchmarks for fairness, bias mitigation or ethical oversight in planning contexts. Councils are being asked to uphold values that are difficult to define, and difficult to define appropriate measurements and metrics for evaluation. This creates uncertainty around how can fairness be audited when it's context-dependent? How can bias be mitigated when historical data may reflect exclusionary past decisions? And how can ethical rigour be maintained without stifling innovation, particularly from emerging vendors?

These tensions are not hypothetical, they were raised consistently across our engagement, and the project's guidelines respond directly to them. The MAV AI Procurement Guidelines for Statutory Planning AI Technologies, produced as part of this body of work, offer councils concrete governance requirements, from pre-deployment bias testing and continuous fairness audits, data sovereignty provisions and mandatory human oversight for all AI-assisted statutory planning decisions. Importantly, the guidelines are structured to support phased, risk-based implementation, - recognising that ethical capability cannot be built overnight, but must be grown alongside use.

As one vendor shared, *"We'll comply - we just need to know what that looks like in a local planning context."* That context matters. Councils aren't just implementing software - they're custodians of community values, cultural knowledge, and public accountability. Ethics in AI planning must reflect that. Building shared infrastructure, governance guidance, and open vendor-council dialogue is critical to reducing the ambiguity councils face—and ensuring these technologies support, not sideline, the social purpose of planning.

Trust and transparency vs. proprietary AI systems

> "People should be able to understand the rules that govern their communities—without a paywall."

A significant tension exists around transparency and proprietary systems in AI planning tools.

External experts warn against "black box" platforms that obscure decision-making and privatise planning rules. As one planning technology expert argued forcefully, *"people should be able to understand the rules that govern their communities—without a paywall."* They emphasise that planning decisions affect communities profoundly and should remain accountable to public scrutiny, regardless of the technology used to support them.

Councils similarly emphasise the critical need for explainability to maintain public trust and meet statutory obligations. This reflects the understanding that while AI might improve efficiency, it could inadvertently undermine community trust if decisions become more opaque or less explainable. For councils, maintaining this trust is non-negotiable—they remain accountable to their communities regardless of which technologies support decision-making.

Vendors claim they can provide transparency but face commercial and technical challenges in fully delivering this. Most report that they can clearly disclose where AI is used, how models work and what data flows into them. *"We provide transparency on all AI usage in our solution(s),"* stated one vendor. However, some acknowledge trade-offs between intellectual property protection and full transparency. Additionally, the "non-deterministic nature of AI" makes comprehensive explainability technically challenging, especially for complex or general-purpose models.

This tension spotlights the need for clear standards around explainability and transparency in procurement requirements. It raises deeper questions about the appropriate balance between commercial interests and public accountability in government AI systems. Future frameworks may need to distinguish between "process transparency" (how the system works) and "decision transparency" (why a specific recommendation was made), with higher standards for the latter in planning contexts if adopted. Successful implementations will likely require vendors and councils to collaboratively develop approaches that maintain the intelligibility of planning decisions for all stakeholders, including community members and applicants.

Councils, as responsible planning authorities are to be ultimately responsible for the planning decisions they make, despite the use of AI. This has the potential to lead to operational, reputational and liability risks.

Under the planning system an applicant can appeal a planning decision to Victorian Civil and Administrative Tribunal (VCAT). It is critical for community trust that councils are transparent in their use of AI in their planning decisions. However, it is unknown whether the use of AI may also lead to more decisions being challenged. This could result in additional resources and costs for councils. It could also result in a loss of efficiency if more planning decisions are challenged. This represents a potential operational and reputational risk for councils.

The use of AI in planning processes may also impact councils' risk of liability. Councils expressed particular concern about the potential for generative AI errors or "hallucinations" to create liability issues. As one workshop participant noted, these errors *"happen fairly often"* and while systems might *"recalibrate - 'I'm sorry I got that wrong,'"* the damage could already be done. This raises serious questions about council liability for decisions influenced by incorrect AI outputs, with council representatives directly asking about *"(insurance) claims for compensation"* that might arise. These concerns highlight the need for strong human oversight and verification processes for any AI-generated content used in planning decisions.

For example, there may be increases in risk if AI generates incorrect information that informs planning decisions or information provided to the public. **Where vendors exclude or limit their liability for incorrect information or decisions, this will create a liability risk for councils.**

Data governance and security

Data governance emerged as a critical consideration across all stakeholder groups, with particular emphasis on privacy, security and appropriate use of sensitive information.

Councils identified data privacy as their top concern, followed closely by security risks, reflecting their legal obligations and community expectations. These concerns are particularly acute given the sensitive nature of planning data, which often contains commercially sensitive information and personal information about property owners, development plans and community objections.

Victorian Councils are required to comply with the ten (10) Information Privacy Principles in the ***Privacy and Data Protection Act*** for: collection; use and disclosure; data quality; data security; openness; access and correction; unique identifiers; anonymity, transborder data flows; and sensitive information. *The Privacy and Data Protection Act* regulates the handling of personal and sensitive information by the public sector, including councils. A key aim of the legislation is to protect the privacy of individuals. Councils will have in place privacy policies to ensure compliance with this legislation.

Vendors reported strong data governance approaches, with most using encryption, limiting data movement and keeping council data under local control. *"We take data privacy, security, and responsible AI use extremely seriously—especially when working with council or user data in the public sector,"* stated one vendor. Most claim they don't use council data for training unless they have consent and safeguards in place. Several vendors explained they use retrieval-augmented generation (RAG) – a technique that allows AI systems to access and use specific and permitted council information without incorporating it into the vendors' underlying training datasets. This technique allows vendors to improve performance and tailor their solutions to councils without needing to retrain their models at all or 'absorb' council data in the process.

External experts emphasised the need for robust data management practices that balance security with usability. They highlighted record-keeping obligations as a particular challenge for AI implementation. One council representative noted, *"As part of Office of the Victorian Information Commissioner rules and regs, certain files have to be kept for X number of years depending on what type of file - some are 99 years."* These obligations raise complex questions, such as: How can councils ensure AI-processed information remains accessible for decades when AI technologies themselves may change dramatically? How will future systems be able to interpret or verify AI-influenced decisions made today? What happens if an AI vendor goes out of business or significantly changes their product during the required retention period for certain records? These questions become especially challenging as technology continues to evolve at a rapid pace.

This focus on data governance points to the need for clear frameworks that address the full lifecycle of data in AI planning systems—from collection and storage to use, processing, retention and disposal. Successful implementations will require strong data management protocols, clear ownership boundaries, and appropriate controls for different data sensitivity levels. However, a significant tension exists between data sovereignty requirements (which mandate that Australian data must be stored and processed within Australia) and the reality that most advanced AI systems are built and hosted on global infrastructure operated by international companies. This creates challenges for councils trying to balance the benefits of cutting-edge AI technologies with their obligations to maintain control over sensitive local data.

The fragmentation challenge

"For smaller councils with limited resources, collaborative approaches aren't just desirable—they're essential for meaningful AI adoption."

System fragmentation emerged as a significant barrier to AI adoption at scale.

External experts noted that 79 councils, each operating with slightly different processes and individual inefficiencies and implementation challenges, creates a formidable obstacle to AI adoption. This fragmentation spans documentation standards, terminology, software systems and interpretation practices. As one industry representative observed, when there are *"multiple platforms, different gateways to jump through, and less confidence in one municipal government's approach over another,"* it creates confusion where there should be clarity.

This fragmentation creates challenges for properties and developments that span or adjoin municipal boundaries. In these edge cases, applicants may need to navigate different planning schemes, documentation requirements, and approval processes for what is functionally a single development. AI systems built for individual councils would struggle with these cross-boundary applications, potentially providing incomplete or contradictory guidance. As development occurs in growth corridors that cross municipal lines, these boundary issues may become more common and problematic. Without standardised approaches, AI tools could amplify rather than resolve these traditional jurisdictional complexities.

Councils themselves express strong interest in collaborative approaches to overcome this fragmentation. *"How many software systems are out there/being used by councils - why can't we have just one system? Use our buying power of 79 councils and State,"* suggested one participant.

Many pointed to successful examples of collaborative procurement for other systems: *"We banded together as smaller councils to procure Greenlight (an online planning and building portal used by councils to manage and administer various planning permit related matters) and other systems). We would want to go down a similar path for AI taking a collaborative route."* For smaller councils with limited resources, collaborative approaches aren't just desirable—they're essential for meaningful AI adoption.

Vendors highlight challenges in accessing consistent data and planning processes across councils. They request better access to standardised planning information, sample datasets and clearer specifications to help them develop solutions that can scale effectively. *"The council space regarding AI and planning is very specialised and unique, there isn't much detailed planning data or specialist experience publicly available,"* noted one vendor. This fragmentation increases development costs and limits their ability to create solutions that work across multiple councils.

Stakeholders differ on the ideal solution to this fragmentation. Overall councils appreciate a standardised approach, with state leadership in the mix, balanced with local council engagement and local nuance: *"We want consistency in the boring bits, not in the bits that make a place unique."* This tension points to the need for thoughtful approaches that identify which elements of planning can be standardised (documentation formats, basic processes) while preserving local discretion where it matters most (environmentally sustainable design, strategic priorities). Shared data standards, documentation requirements and platforms emerge as essential infrastructure for creating an ecosystem where AI tools can scale effectively. The path forward is not demanding uniformity across councils but creating interoperable solutions and well-structured systems that still leave room for discretion where it matters. This balanced approach would benefit from State Government leadership and investment to establish common standards and infrastructure while preserving councils' ability to address local needs and context that makes planning effective.

Entry points: Customer-centric use cases at application lodgement

A clear pattern across stakeholder feedback was the prioritisation of customer service applications as entry points for AI adoption.

Councils ranked customer service as their top AI priority, followed by planning scheme interpretation and permit application assessment support. These customer-facing use cases address significant pain points in current planning processes. As one council explained, *"We would like to use AI for planning enquiries to streamline the process for customers and to reduce the burden on already stretched planning teams."*

External experts similarly identified *"improving application quality up-front"* as a promising opportunity. A significant cause of planning delays is incomplete or incorrect applications requiring multiple rounds of revision. AI tools that guide applicants through requirements, flag missing information and help ensure submissions are complete could reduce unnecessary back-and-forth. An industry representative noted that this would benefit both councils and developers: *"We'd welcome a tool that helps us get it right the first time."*

Vendors highlighted customer-facing tools among their offerings, with several already delivering solutions in this space. These include chatbots for planning enquiries, pre-application guidance tools and application validation systems. Vendors see these applications as lower-risk entry points that can demonstrate value while building organisational confidence in AI capabilities.

This alignment creates a natural starting point for AI implementation, where gains can be realised with relatively low risk compared to more complex applications. Customer service applications can improve accessibility and efficiency while building organisational confidence for more complex use cases. They address immediate pain points for both council staff and community members, potentially creating quick wins that justify further investment. As councils gain experience with these entry-point applications, they can develop the governance practices, technical infrastructure and staff capabilities needed for more sophisticated implementations in the future.

Some stakeholders and experts raised concerns about the role of outsourcing critical functions to AI in these initial customer service touchpoints. Traditionally these activities are undertaken by more junior planners starting out in the profession where this process of interacting with applicants and responding to a diversity of queries is used to home skills and expertise. Many planners cycle through this role again throughout their career to keep their skills sharp. Outsourcing this function to AI reduces opportunities for on-the-job training for junior planners and those skills will need to be developed in other ways.

This moment is also considered critical for relationship building between council and applicant and some stakeholders expressed concerns at the outsourcing of this relationship to external vendors via AI, questioning its long-term impact on the relationship between council and their constituents. When automating interactions, councils should evaluate not just efficiency gains but also the relationship value of human touchpoints. The most effective AI implementations will enhance council-constituent relationships rather than replace the direct connection between local government and community.

Critical to nurturing this relationship is the clarity for constituents to distinguish between council-owned processes and third-party vendor interactions. When applicants engage with AI tools, they should know whether they're interacting with council or an external system, as the council may ultimately remain responsible for planning functions regardless of who or what performs them.

If, for example, constituents leave the council environment to interact with a tool in a vendor managed environment, this may create a liability gap. If – as is often standard - the vendor accepts no responsibility for liability for the information provided, but the interaction has moved outside of council's direct control and oversight, this opens up the risk of liability for councils where they may be ultimately responsible for information provided to the public on their behalf, without a clear view of the information provided.

Councils should clearly mark third-party tools and platforms that direct constituents into non-council governed spaces. Before constituents enter third party tools and platforms it is recommended that councils require users to agree that they understand and acknowledge that they are receiving AI-provided information, including that they release the council from any liability arising in relation to information received from the third-party platform and tools. In addition, it is recommended that councils negotiate clear terms with vendors in regard to liability. In particular, it is recommended that councils avoid agreeing to a vendor significantly limiting or excluding its liability.

Regulation and governance approaches

Across stakeholder groups, there's emerging consensus around a responsive, proportional approach to AI governance rather than rigid compliance regimes.

This represents a more nuanced view than early AI regulation frameworks, which often took a one-size-fits-all approach. Councils seek clear guidelines but worry about implementation burden, particularly given their resource constraints and varying levels of maturity. *"From an org perspective - the proposed best practice procurement guidelines (drafted by MAV as part of this project) would require a lot of work to comply with - don't think our org is ready to do all of that - it's a big lift,"* noted one council representative.

External experts, particularly those with regulatory backgrounds, advocate for responsive regulation that builds trust over time and adapts to context. *"Good regulation isn't just about rules—it's about relationships,"* explained one governance specialist. This approach keeps humans—especially local governments—at the centre, supporting their judgment rather than replacing it with rigid compliance checklists. It recognises that regulation should evolve alongside the technology, incorporating lessons from real-world implementation.

Vendors request risk-based requirements that vary with use case sensitivity. *"Please do not overweight on requirements around security and discrimination where the particular solution's use case does not raise significant risks in those areas"* suggested one vendor. Many asked for flexibility based on how their tools would be used, noting that high compliance costs for low-risk applications could unnecessarily exclude innovative solutions, especially from smaller providers or startups.

This convergence suggests an opportunity to develop a tiered governance framework that applies different levels of oversight based on the risk profile of specific AI applications. Such an approach could reduce barriers to low-risk innovation while ensuring appropriate safeguards for higher risk uses. It would align with international best practices in AI governance, which increasingly recognise that contextual risk assessment is more effective than blanket rules. For planning applications specifically, this might mean lighter touch governance for customer service chatbots or document classification tools, with more rigorous requirements for systems that inform planning assessments or recommendations.

Stakeholder conversation raised the similarities of hierarchical and tiered, risk-based regulation to that of biosecurity management. Maintaining biosecurity requires dedicated hierarchical engagement at a national, state and local level, with a range of requirements and regulations based on risk. As a highly adaptive and dynamic challenge it also relies heavily on relationships for monitoring and compliance. There is much to be learned from this approach in AI regulation.

Summary of Key Findings

Victoria stands at a pivotal moment for AI in planning—one that demands more than generic excitement about technology.

The stark consensus across stakeholders isn't just that AI can help, but that getting it right from the start matters profoundly. This means rejecting the false choice between innovation and caution. Instead, councils must lead with clear values: transparency in decision-making, cultural inclusivity and sensitivity to place, support for professional judgment, and data handled with proper stewardship.

Successful adoption of AI for planning requires practical commitments—shared resources for smaller councils, standards that enable collaboration without erasing local context, and governance that's proportionate to risk. Most critically, it requires shifting from traditional client-vendor relationships to genuine partnerships where planning expertise and technological capability evolve together. By starting with customer-facing applications while laying groundwork for more complex use cases, councils can build momentum without sacrificing trust. The challenges are substantial, but so is the opportunity to transform a system under immense pressure into one that better serves Victorian communities, developers, and planners alike.

Spotlight on Expert Perspectives

Throughout our engagement with a diverse range of subject matter experts, several voices offered incisive observations that cut to the heart of the opportunities and challenges for AI in planning. These spotlight perspectives represent different vantage points across the planning ecosystem - from First Nations knowledge to legal expertise, from urban development to risk and regulatory policy.

We've selected these perspectives not only for their clarity and insight, but because they represent the multifaceted nature of planning itself - a discipline that must balance technical requirements with human relationships, legal frameworks with community needs, and efficiency with responsibility. These voices remind us that AI implementation in planning is not just a technical challenge but also touches on fundamental questions of how we make decisions about the futures of our place, space, and community.

Each spotlight offers a provocative insight followed by an invitation to deeper thinking - reflecting our belief that successful AI adoption requires not just technical solutions but thoughtful dialogue about the core purpose and values of planning in Victoria.

SPOTLIGHT: First Nations planning advisor

This perspective reminded us that planning is fundamentally relational. The promise of AI for efficiency, automation, prediction, can risk crowding out what is often unseen but essential: the act of listening, of showing up, of building trust.

They reminded us that planning takes place on Country, in communities, among histories and in futures that cannot be captured by code. "

"There are knowledge systems that don't run on data. They run on relationships. If we're not building AI in conversation with that, we're not building it for this place."

Invitation: What would it mean to design AI planning tools that honour place and Country, not just process?

"You can't automate listening."

"You can't delegate care."

SPOTLIGHT: Planning law scholar

This legal expert brought a sobering clarity: the Victorian Planning and Environment Act is structurally incompatible with meaningful automation. Its discretionary language, layered overlays, and conflicting rule types make it incredibly difficult to codify without significant risk.

They warned against attempts to retrofit AI into a system that isn't machine-readable or legally coherent—and called instead for a deeper reform effort that addresses the inputs before automating the outputs.

"Until the Act is rewritten to accommodate codification, any AI system we build is just putting a digital skin on a messy analogue heart."

Invitation: There is work to be done, in partnership with communities and stakeholders, can we rethink the legal architecture of planning for an AI era?

"We're trying to automate a system that was never designed for automation. It's madness."

SPOTLIGHT:
Leader in urban development

Speaking from the coalface of the development industry, this perspective cut through technical optimism with hard-edged realism. For proponents, investors, and communities alike, the planning system is not just slow—it's unpredictable. And unpredictability drives risk, cost, and disengagement.

They welcomed AI not as a magic fix, but to reduce friction, so long as it's implemented transparently, accountably, and in a way that doesn't deepen community mistrust.

"You need to show your working. If people don't trust the process, they won't trust the outcome."

Invitation: How do we build AI that improves, not erodes, the trust that's needed to make large investments at the heart of planning?

"Anything that adds uncertainty to the development process... just adds cost... And if they're not addressed early on, they inevitably add cost later on. Anything that erodes confidence... will cause a proponent to pause."

SPOTLIGHT:
Regulation policy researcher

While some global approaches to AI governance aim to lock down risk through compliance regimes (e.g., the EU AI Act), this expert offered a more adaptive model. Responsive regulation is relational: it builds trust over time, adapts to context, and keeps humans—especially local governments—at the centre.

They argued that public servants are not passive implementers, but active agents in shaping how AI is used. Regulation should support that judgment, not replace it.

"You can't really trust a black box process. What you're trusting is the institution and the people behind it."

Invitation: What would it take to design a governance model that learns and adapts as it goes—staying accountable to the communities it serves?

"We don't need hard regulation—we need responsive regulation."

SPOTLIGHT:
Sector advisor for legal and insurance

Drawing on extensive experience defending councils in professional indemnity claims, this insurance expert identified a crucial distinction in AI-related risk: Professional indemnity risks can arise when AI generates incorrect information leading to liability claims.

"If an AI system incorrectly represents that a development is permitted, and someone purchases property based on this, that's a potential duty of care breach. If permit errors require amendment or cancellation, councils may face 'wasted expenditure' compensation claims."

They emphasised that councils ultimately have responsibilities under the Planning and Environment Act.

"You can't just rely on AI and step away. There is still that absolute need for the expertise of planning professionals."

Invitation: How can councils update their risk frameworks to address both insurable professional indemnity risks and uninsurable operational risks from AI adoption?

"Council is ultimately the responsible authority and will be liable for planning decisions, even when using AI."

Recommendations

Drawing from extensive engagement with councils, external experts, and vendors, these recommendations provide a pathway for successfully integrating AI into Victoria's planning processes. Rather than presenting isolated suggestions, this section offers an interconnected roadmap that addresses the key challenges identified throughout our research while building on the collective wisdom of stakeholders across the planning ecosystem.

The recommendations are sequenced to reflect both priority and logical implementation flow. They begin with foundational governance and capability building (Recommendations 1 and 2), which create the essential bedrock for responsible AI adoption. Without robust ethical frameworks and baseline AI literacy across the sector, even well-intentioned efforts risk reinforcing existing problems or creating new ones. These initial recommendations respond directly to concerns about the potential erosion of planning values, professional judgment, and community trust.

The middle recommendations (3-7) focus on collaborative structures and shared infrastructure—the connective tissue that will enable councils to overcome fragmentation, pool resources, and learn from one another. These recommendations acknowledge that no single council can solve these challenges alone, and that collective approaches will yield better outcomes than 79 separate journeys.

The final recommendations (8-10) address specific implementation pathways, system integration, and ongoing evaluation—ensuring that AI adoption remains aligned with planning's core purposes over time. These recommendations recognise that successful implementation is not a one-time event but an iterative process requiring continuous reflection and adaptation.

Throughout these recommendations, immediate practical actions are balanced with longer-term strategic considerations. While some recommendations can be initiated quickly (such as establishing communities of practice), others represent multi-year commitments (like advocating for planning system reform). This varied timeframe reflects the reality that responsible AI adoption requires both immediate steps and sustained effort.

Importantly, these recommendations are designed to work together as an integrated approach. While councils may prioritise different elements based on their specific contexts and maturity levels, the full benefits will come from advancing across multiple fronts simultaneously - building capability while developing governance, exploring use cases while establishing evaluation frameworks, and collaborating with peers while advocating for system-level changes.

RECOMMENDATION 1.

Establish robust ethical and governance frameworks to guide all AI implementation in planning

Action

Create and implement a comprehensive ethics and governance program for AI in planning that maintains human oversight, safeguards community values, and ensures inclusive, transparent processes.

Why it matters

Ethical AI use was ranked as a top concern by councils and was echoed strongly by external experts—particularly around risks to sustainability, cultural responsiveness, fairness, and the erosion of planning's public purpose. However, ethics in AI is not a solved problem. Councils raised the challenge of acting ethically in practice without clear standards, benchmarks, or tools. What's considered fair or appropriate is often context-dependent, contested, and not easily reduced to checklists. The risk is that ethical responsibility becomes both urgent and paralysing: everyone knows it matters, but few feel confident navigating it.

Getting this right requires demands active effort, co-designed frameworks, and investment in defining and measuring what ethical AI looks like in the planning system—especially in a time of housing pressure and fast-moving technology.

What this involves

- Develop planning-specific ethical guidelines that define appropriate roles for AI in augmenting, not replacing, professional judgment, particularly for discretionary and place-based decisions
- Create a cross-sector working group (including councils, Traditional Owners, ethics and AI experts) to co-develop concrete fairness metrics, bias mitigation approaches, and transparency requirements for planning AI
- Identify and document specific ethical risks in planning data, including historical biases in approval patterns, coding inconsistencies, and potential impacts on vulnerable communities
- Provide tiered governance tools matched to council maturity, including:
- Model policies for council adoption
- Risk assessment templates covering both technical and community impact factors
- Human oversight documentation requirements for AI-augmented workflows
- Sample communication templates for explaining AI use to residents and applicants
- Embed principles of inclusivity through mandatory consultation protocols with First Nations groups, environmental sustainability advocates, accessibility experts, and representatives from culturally diverse communities, ensuring these perspectives shape systems from inception
- Establish structured evaluation mechanisms that track both operational efficiency and ethical outcomes over time, with clear feedback channels for community input and regular governance reviews.

How this builds capability

This recommendation creates the ethical infrastructure needed to support responsible innovation in planning, starting by meeting where councils are at, not where they're expected to be. By offering adaptable policies, tools and risk assessment templates, it will give councils immediate scaffolding to make AI adoption safer and more transparent.

Importantly, it helps councils shift from ethical aspiration to action, actively supporting them to define what fairness, trust, and public benefit look like in practice, rather than relying on abstract or imported frameworks. Co-developing shared benchmarks and fairness metrics reduces duplication, builds cross-sector clarity, and creates common language for evaluating systems and engaging with vendors.

It also reinforces councils' statutory authority and strengthens their role as stewards of place and public value. By building ethics into procurement, design and implementation councils can maintain trust with their communities, minimise liability, and set clear expectations with technology providers. This work won't happen overnight. This is why it is a crucial starting place to embed iterative governance, continuous learning, and strong partnerships, councils can build a robust, responsive ethical foundation for AI in planning.

RECOMMENDATION 2.

Initiate a comprehensive AI capability development program

Action

Launch a sector-wide AI literacy and skills development initiative targeting planners, IT staff, procurement officers, and executives to build baseline knowledge and expertise for effective AI adoption.

Why it matters

The research revealed stark differences in AI literacy and readiness across councils. Among survey respondents with high AI literacy, 72.8% were either using or planning to use AI, compared to just 22.3% of those with moderate literacy. This suggests knowledge is a key lever for increasing adoption. Additionally, there were legitimate concerns about AI's impact on the career pathways for planners, with workshop participants noting that *"Triaging application requests is important training and proving ground for young Planners - if we take this away from career trajectory how do they learn how to do this work well?"*

What this involves

- Conduct a sector-wide capability assessment to identify critical skill gaps
- Develop modular training programs targeting key roles: planners, IT staff, procurement officers, and executives
- Create AI literacy programs specifically designed for planning staff to demystify the technology
- Establish "AI champions" within councils who receive specialised training and act as internal knowledge hubs
- Partner with educational institutions and industry groups to integrate AI competencies into professional development pathways
- Work with educational institutions and industry groups to explore implications for professional indemnity insurance and career development
- Explicitly address career development concerns for early-career planners, ensuring AI complements rather than replaces formative training experiences.

How this builds capability

This recommendation directly addresses the "broader AI maturity and capability in councils" that needs to be supported. It creates a strategic approach to capability development that workshop participants called for. By addressing both technical skills and professional development pathways, this approach ensures AI augments rather than diminishes planning expertise. It acknowledges that automation may change how Planners learn their craft, requiring thoughtful redesign of career development to preserve essential professional judgment.

RECOMMENDATION 3.

Establish a community of practice for AI

Action

Form a structured, ongoing knowledge-sharing network connecting councils at different stages of AI maturity to facilitate peer learning, mentorship, and collective problem-solving.

Why it matters

Our research revealed a critical “knowledge gap” where councils often “don’t know what they don’t know” about AI capabilities, while vendors lack access to planning expertise. A living network of practitioners would transform static guidelines into dynamic, collective intelligence.

What this involves

- Create a formal planning AI community of practice that meets regularly (quarterly at minimum) with representatives from councils at various stages of their AI journey
- Establish an advisory panel with diverse expertise including First Nations perspectives, cybersecurity specialists, planning professionals, and IT experts
- Develop a digital knowledge repository of case studies, implementation toolkits, and lessons learned that evolves through practical experience
- Facilitate council-to-council mentoring that pairs AI-mature councils with those beginning their journey
- Produce living documentation that evolves based on implementation feedback, ensuring guidance remains relevant as technologies mature.

How this builds capability

This approach transforms isolated council experiments into sector-wide learning. Rather than each council navigating AI independently, the community of practice creates a multiplier effect where knowledge, resources and expertise are shared efficiently.

RECOMMENDATION 4.

Enable collaborative procurement and vendor management

Action

Develop shared procurement frameworks and vendor management approaches that leverage councils' collective buying power while allowing for local customisation.

Why it matters

Councils consistently expressed interest in collaborative approaches to vendor engagement. Many pointed to successful examples of collaborative procurement: *"We banded together as smaller councils to procure Greenlight and other systems - would want to go down a similar path for AI taking a collaborative route."* Workshop participants noted that collective purchasing power is about more than economics—*"if there's an error or issue, it's fixed for everyone!"*

What this involves

- Establish procurement panel arrangements for pre-vetted AI planning vendors meeting core requirements
- Create frameworks for multi-council procurement that distribute costs and risks while allowing for local customisation
- Develop standardised contract templates with appropriate safeguards for data use, explainability, and ongoing support
- Establish mechanisms for collective vendor performance monitoring and feedback
- Design vendor engagement models that support genuine partnership rather than traditional client-supplier relationships using principles from "responsive regulation"
- Create mechanisms for council planning experts to directly influence product development.

How this builds capability

This recommendation transforms procurement from a transactional activity into a strategic capability-building tool. By pooling resources and expertise, councils can engage vendors more effectively and influence product development more powerfully than any individual council could alone.

It addresses vendor concerns that "The council space regarding AI and planning is very specialised... We need them to experiment with us, share their knowledge, data and processes." By creating collaborative procurement models, councils can drive vendor accountability while sharing costs and reducing risks. This approach is particularly valuable for smaller councils that might otherwise struggle to attract vendor attention or negotiate favourable terms.

RECOMMENDATION 5.

Develop shared infrastructure and standards

Action

Create common data formats, documentation templates, and technical standards to overcome fragmentation and enable AI solutions to scale effectively across councils.

Why it matters

System fragmentation emerged as a critical barrier to AI adoption at scale. With 79 councils operating slightly different processes, vendors struggle to develop solutions that work across boundaries.

What this involves

- Develop standardised planning data formats and documentation templates for use across councils
- Create a centralised repository of planning scheme interpretations and relevant VCAT cases
- Invest in shared, secure environments for testing planning AI applications with realistic but sanitised data
- Establish interoperability standards for planning systems to ensure AI tools can connect with existing infrastructure
- Pay particular attention to geospatial data standards, recognising that “everything starts from a process and situating a property on a map - ties back to the council’s rate base”
- Work with the State Government to create common APIs for planning data access and referral authorities.

How this builds capability

This recommendation acknowledges the reality of council IT systems described by one participant as *“turtles all the way down”*. Rather than attempting wholesale replacement of systems (which is “unlikely to happen”), this approach creates pragmatic standards and shared infrastructure that work with existing systems. It enables councils to harness the value of AI or automation through standardisation and scale while respecting the complexities of their current environments. By collectively developing these standards, councils together can achieve what no single council could manage alone.

RECOMMENDATION 6.

Prioritise implementation of tiered use cases

Action

Adopt a staged approach to AI implementation that begins with well-defined, low-risk applications and progressively advances to more complex use cases as capability grows.

Why it matters

Our research identified significant variance in both technical complexity and ethical risk across different AI applications in planning. Councils overwhelmingly prioritised customer service applications (44.9% of respondents) as their top use case, while expressing greater caution about more complex decision support tools. As one expert noted, we should *"think of tools that fit into the workflow and reduce burden, not ones that attempt to reinvent it."*

What this involves

- Define and document a clear progression of use cases from low to high complexity:
    - Tier 1: Simple automation of administrative tasks, document management, and customer service
    - Tier 2: Application validation, referral management, and information extraction
    - Tier 3: Planning scheme interpretation and decision support tools
- Create implementation guides for each tier with appropriate governance requirements
- Develop evaluation framework and success metrics specific to each use case category
- Build demonstration projects for each tier to show concrete benefits and implementation approaches
- Establish clear qualification criteria and transition support for councils moving between tiers.

How this builds capability

This tiered approach allows councils to build confidence and expertise progressively. It acknowledges that, as one participant noted, there's *"appetite to identify the low hanging fruit for councils with a lower AI maturity to start there to enable further integration."* By starting with simpler use cases that deliver immediate value, councils can build the technical capabilities, governance structures, and organisational support needed for more complex applications. This approach also responds to the observation that *"there's currently no good examples to point to and say, 'well this is why we would go on this long process,'"* by creating proof points at each level of complexity.

RECOMMENDATION 7.

Create a rapid response implementation support team

Action

Establish a multi-disciplinary team of experts available to provide targeted, on-demand assistance to councils at critical implementation points.

Why it matters

Councils indicated that implementing AI requires more than guidelines—it demands active, hands-on support, especially at critical decision points. Several workshop participants suggested the need for *"a SWAT team, fellows, group of volunteers available on call to swarm for a potential issue or council need."* This is particularly important for smaller councils with limited in-house expertise.

What this involves

- Establish a multi-disciplinary response team with expertise in planning, procurement, technology, and governance
- Create a mechanism for councils to request targeted assistance at critical points (requirements definition, vendor selection, implementation planning)
- Develop a volunteer council network where experienced staff can temporarily support other councils on specific projects
- Offer "procurement partnership" services where MAV experts can join vendor negotiations and help councils navigate complex technical discussions
- Document interventions as case studies to build the sector's collective knowledge base.

How this builds capability

This recommendation directly addresses the sentiment that AI implementation is *"too big for one council to solve"* by creating a flexible support model that scales expertise across councils. It builds internal capability through hands-on assistance rather than outsourcing expertise to vendors. As workshop participants noted, councils need *"expertise INSIDE council, not vendor led, for councils to protect themselves and build a practice that fits needs and is agile and sustainable."* The response team model creates immediate support while building long-term capability through knowledge transfer and practical experience.

RECOMMENDATION 8.

Develop integration pathways for common enterprise systems

Action

Create technical specifications and integration approaches that allow AI tools to work effectively with existing council software systems.

Why it matters

Integration with existing systems emerged as a top priority for councils, with many emphatically stating they *"don't want standalone AI solutions that operate in isolation from their current workflows."* Our survey revealed a fragmented planning software landscape spanning Technology One, Pathway, Greenlight, and various document management systems. Only 10% of survey respondents indicated their planning software tools currently have AI capabilities.

What this involves

- Create integration guidelines for common council systems (Technology One, Pathway, TRIM, etc.)
- Develop technical specifications for AI tools to connect with existing enterprise software used in the planning process
- Establish data extraction and transformation approaches that work with legacy systems
- Promote modular, API-first solutions that can work alongside existing infrastructure
- Ensure geospatial data integration is prioritised in all planning AI implementations
- Design solutions that can detect double handling and streamline workflows across systems.

How this builds capability

This recommendation acknowledges the reality that *"no one has resources to get rid of things not fit for purpose"* while creating pragmatic pathways to enhance existing systems rather than replace them. It addresses the concern that *"adding complexity is not going to increase efficiency, it's going to make it worse"* by focusing on integration approaches that reduce rather than increase system complexity. By developing shared approaches to integration, councils can overcome the *"perception of it being a whole other thing to manage"* and instead position AI as an enhancement to existing systems.

RECOMMENDATION 9.

Advocate for effective automation pathways in planning system reform

Action

Partner with State Government to identify and improve planning rules that could be rewritten for greater clarity and automation readiness while preserving professional judgment.

Why it matters

Planning experts argued forcefully that Victoria's planning system isn't designed for automation. They highlighted how planning controls often combine incompatible rule types (e.g., performance-based vs. principle-based), making automation or AI interpretation difficult without introducing errors.

What this involves

- Partner with State Government to identify planning scheme elements that could be rewritten for greater clarity and automation readiness
- Pilot machine-readable planning rules for specific, well-defined application types
- Advocate for clearer distinction between different rule types (binary vs. discretionary) in planning schemes
- Develop proposals for planning reform that preserve professional judgment while enabling appropriate automation
- Create feedback mechanisms that use AI implementation experiences to inform future planning scheme amendments
- Identify opportunities to use AI implementation as a trigger to change the rules where current approaches are fundamentally flawed.

How this builds capability

This recommendation transforms a potential barrier—the planning system's automation readiness—into an opportunity for long-needed reform. Rather than forcing AI into a system not designed for it, this approach uses AI as a catalyst for improving planning rules in ways that benefit both human and machine interpretation. It acknowledges that *"the potential for automation in the system is being undermined by the foundational flaws in the code,"* while creating pragmatic pathways for improvement. By making some planning rules more consistent and machine-readable, particularly for low-risk applications, councils can enhance both AI adoption and human implementation.

RECOMMENDATION 10.

Implement continuous monitoring, evaluation and iterative improvement

Action

Establish measurement frameworks and feedback mechanisms that track AI's impacts on both operational efficiency and planning quality outcomes.

Why it matters

A fundamental question emerged about how to define and measure the value of AI in planning. While all stakeholders see potential benefits, their framing of value reveals important differences in perspective. As AI tools mature, developing holistic evaluation approaches will be essential to ensure technological advancements genuinely advance planning's core purposes and respects the evolution of council AI readiness and planning professionals' feedback and expertise.

What this involves

- Develop a common evaluation framework that measures both efficiency gains and planning quality outcomes
- Establish baseline metrics before implementation to enable meaningful impact assessment
- Create mechanisms for community feedback on AI-supported planning processes
- Implement regular auditing of AI systems for bias, accuracy, and alignment with councils' planning objectives
- Design feedback loops that inform ongoing development of both AI tools and planning processes
- Include measures related to sustainability, housing affordability, community satisfaction, and planning consistency.

How this builds capability

This recommendation ensures that AI implementation is guided by evidence and aligned with planning's broader objectives. It builds evaluation capacity that can distinguish between genuine innovation and technology for its own sake. By measuring outcomes that matter—not just processing speed but planning quality, community satisfaction, and environmental impacts—councils can ensure AI genuinely enhances planning processes and outcomes. This evaluation approach also creates accountability for vendors, ensuring their solutions deliver real value rather than just technical novelty.

Conclusion

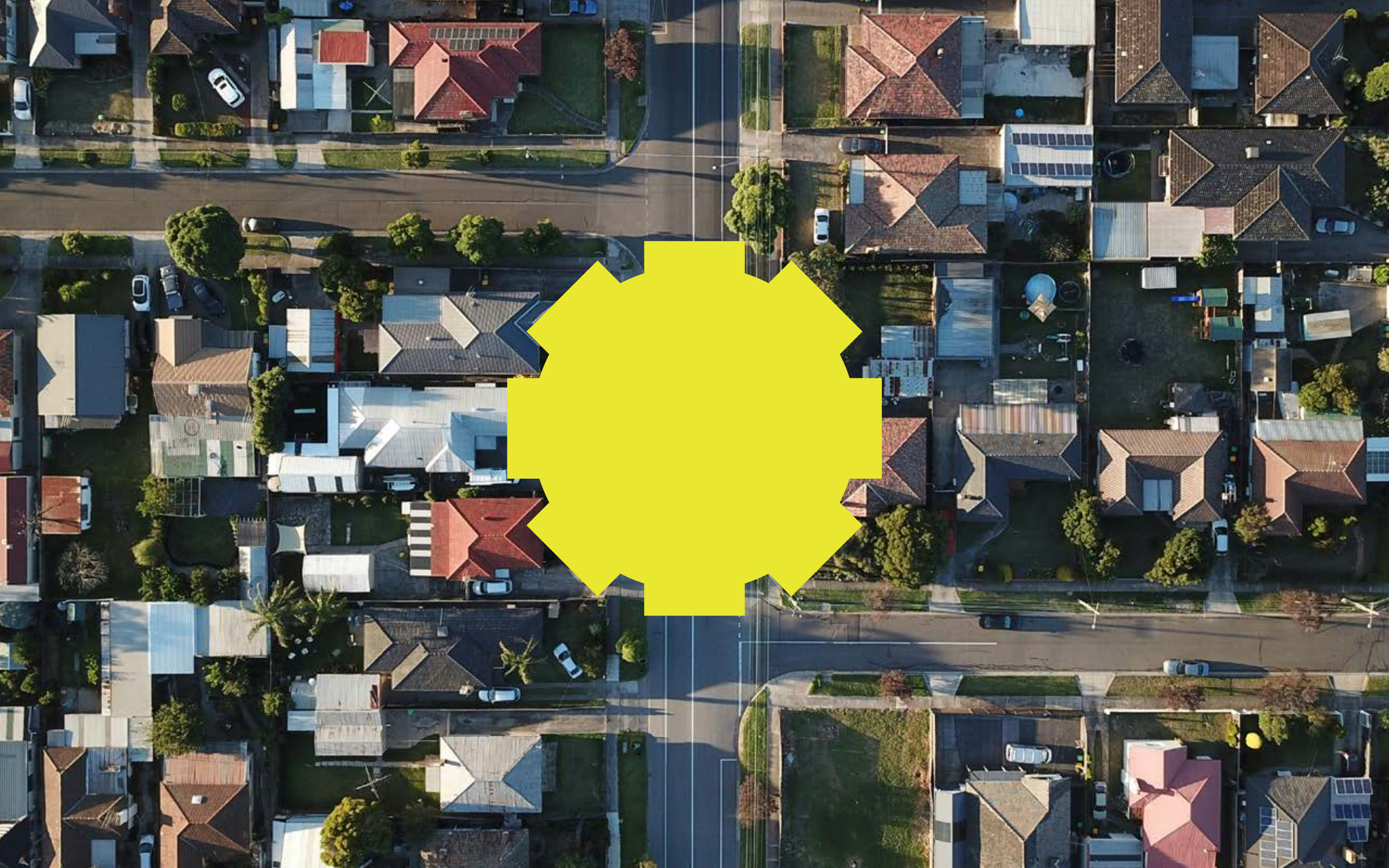
Victoria stands at a pivotal moment for AI in planning—one that demands more than generic excitement about technology. The stark consensus across stakeholders isn't just that AI can help, but that getting it right from the start matters profoundly. This means rejecting the false choice between innovation and caution. Instead, councils must lead with clear values: transparency in decision-making, cultural inclusivity and sensitivity to place, support for professional judgment, and data handled with proper stewardship.

Successful adoption of AI for planning requires practical commitments, including shared resources for smaller councils, standards that enable collaboration without erasing local context, and governance that's proportionate to risk. It also requires shifting from traditional client-vendor relationships to genuine partnerships where planning expertise and technological capability evolve together. By starting with customer-facing applications while laying groundwork for more complex use cases, councils can build momentum without sacrificing trust. The challenges are substantial, but so is the opportunity to transform a system under immense pressure into one that better serves Victorian communities, developers, and planners alike.

The recommendations outlined in this report provide a structured framework for action—beginning with ethical foundations and capability building, advancing through collaborative approaches and shared infrastructure, and culminating in practical implementation pathways and continuous improvement. This interconnected roadmap of actions responds directly to the concerns and opportunities identified through our extensive engagement with the planning ecosystem.

By working together and collaborating with shared knowledge, resources, and infrastructure, Victorian councils can navigate this technological transition in ways that strengthen rather than erode planning's public value. The path ahead will require investment, collaboration, and patience. Not all councils will move at the same pace, and implementation will inevitably involve learning and adjustment. But with clear governance frameworks, capability development, and collective approaches, the Victorian planning sector can demonstrate leadership in responsible AI adoption that balances efficiency with accountability to the communities it serves.

The moment to act is now, with both optimism for AI's potential and collective wisdom to navigate its challenges responsibly.



Appendices

Appendix A:
Council perspectives on AI in planning

Appendix B:
External stakeholder perspectives on AI in planning

Appendix C:
Vendor perspectives on AI in statutory planning

Appendix D:
Use case library for AI in planning for councils

Appendix E:
Glossary of Terms

Appendix A

Council perspectives on AI in planning

Executive summary

Through extensive engagement with Victorian councils through workshops, surveys, and direct consultation, this project revealed a nuanced picture of AI readiness and attitudes in planning, IT and procurement departments.

Collectively, councils show cautious optimism about AI's potential to improve planning processes but have significant practical concerns about implementation. Survey data from 56 unique councils (representing approximately 70% of Victorian councils), combined with in-depth workshop discussions, highlights six interconnected themes:

1. Varied digital maturity: Councils operate at vastly different stages of digital readiness, from those still transitioning from paper-based systems to those actively piloting AI solutions.

2. System integration priorities: Integration with existing systems is critically important - councils strongly prefer enhancing current tools rather than implementing standalone AI solutions.

3. Knowledge gaps: Many councils "don't know what they don't know" about AI capabilities, creating a chicken-and-egg problem in procurement and planning.

4. Risk management and compliance concerns: Councils feel caught between innovation pressures and public sector obligations around data privacy, record-keeping, and liability.

5. Preference for collaborative approaches: There's strong interest in shared procurement, knowledge-sharing, and coordinated implementation rather than 79 councils navigating AI independently.

6. Maintainability and adaptability requirements: Planning regulations change frequently, and AI is still in a state of rapid change - requiring AI systems that can adapt while providing sustainable, long-term support.

Current state of AI adoption in planning

The AI Readiness survey reveals AI adoption in planning is still in early stages, with only 7.9% of respondents indicating current use. However, there is significant momentum building:

- Nearly 25% of councils are planning implementation within the next year
- In total, about one-third of respondents (32.6%) are either using or actively planning to use AI in planning
- Six councils reported current AI use: Alpine Shire, Boroondara City, Melbourne City, Mornington Peninsula Shire, Southern Grampians Shire, and Yarra Ranges Shire.

The adoption trajectory suggests the number of councils using AI in planning could nearly triple in the coming year if these plans materialise, signalling an important transition period in the sector.

Digital maturity and council readiness

Organisational readiness gaps

Councils across Victoria exhibit significant variation in their AI readiness, creating a maturity landscape where one-size-fits-all approaches are unlikely to succeed:

- Governance immaturity: Only 12% of councils have fully implemented or are implementing AI governance frameworks, while nearly one-third (31.3%) have no framework at all
- Limited AI-specific data policies: Just 7.6% of councils surveyed have AI-specific data retention and management policies
- Moderate AI literacy: Most survey respondents report beginner (40.8%) or moderate (41.8%) AI literacy levels, with only 12.2% claiming expert knowledge
- Resource constraints: Only 18.1% of councils have dedicated AI technology budgets, and among these, 69.2% have allocated less than $100,000.

Workshop discussions revealed this maturity gap creates significant implementation challenges. As one participant explained: “Most councils using Greenlight have had someone full time on the job keeping it running and explaining to people how to use it.” This represents a substantial ongoing commitment that many councils struggle to justify against competing priorities.

Knowledge as an adoption accelerator

The survey revealed a striking correlation between AI literacy and adoption readiness:

- Among respondents with Expert/High AI literacy, 72.8% are either using or planning to use AI, compared to just 22.3% of those with Moderate/Medium literacy and 35.1% of those with Beginner/Low literacy
- Only 9.1% of Expert/High literacy respondents have no plans for AI, compared to 55.6% of Moderate/Medium and 43.2% of Beginner/Low literacy respondents.

This suggests that improving AI literacy across council staff could be a key lever for increasing AI adoption, as technical knowledge appears to reduce uncertainty and increase willingness to implement AI solutions.

Priority use cases and opportunities

Customer-centric focus

The strong prioritisation of customer service applications (identified by 44.9% of respondents as a top priority) indicates councils see significant value in using AI to improve the front-end of planning processes. This aligns with broader digital transformation goals to enhance citizen experience:

"We would like to use AI for planning enquiries to streamline the process for customers and to reduce the burden on already stretched planning teams."

"We are delivering preliminary information about planning controls and likely works triggers using AI."

Efficiency-driven applications

The top use cases identified in both the survey and workshops suggest councils are primarily targeting AI to address efficiency challenges in high-volume, administrative and repetitive tasks:

1. **Customer service:** 44 mentions (44.9% of respondents)
2. **Planning scheme interpretation:** 35 mentions (35.7%)
3. **Permit application assessment:** 34 mentions (34.7%)
4. **Document management:** 31 mentions (31.6%)
5. **Data analytics:** 28 mentions (28.6%)

Workshops highlighted specific pain points where AI could add immediate value:

- Application completeness verification: High volume of incomplete applications causing delays
- Document analysis: Time-consuming manual document review and classification
- Objection analysis: Processing volumes of objections (reportedly taking up to a full day per 5 objections)
- Report writing assistance: "Writing a report is one of the biggest parts" of planners' work.

The preference for AI to handle routine tasks while preserving human judgment for complex decisions was consistent across feedback channels:

"By leveraging AI, we aim to reduce processing time for inquiries, improve accessibility to planning information, and enhance self-service options for the community. Additionally, this initiative supports our planning team by automating information gathering, helping assess applications faster, and ensuring consistency in responses."

System integration and practical implementation challenges

Integration requirements

Councils emphatically do not want standalone AI solutions that operate in isolation from their current workflows. As one participant succinctly stated: "I'm envisaging it being part of our existing systems not as a separate thing."

The survey revealed a relatively fragmented planning software landscape that creates integration challenges:

- **Technology One / Tech One:** 13 mentions
- **Pathway / Pathways:** 13 mentions
- **Greenlight / E-Vis:** 9 mentions
- **Other systems** including TRIM/Content Manager, Salesforce, Microsoft Office, and various Civica products

This diversity has important implications for AI integration:

1. Any AI solution will need to be flexible in how it integrates with existing software
2. The document-centric nature of current planning processes (evidenced by the prominence of TRIM/Content Manager) suggests document processing as a key area for AI implementation
3. Most councils use a combination of enterprise systems alongside specialised Planning tools, indicating AI solutions may need to work across multiple platforms

Knowledge gaps and support needs

Limited current AI capabilities

Only 10.1% of survey respondents indicated their planning software has or will soon have AI capabilities, with 37.7% explicitly stating no AI capabilities exist. This gap means many councils will need to either upgrade existing systems, implement new solutions, or create integrations between current software and new AI tools.

Tiered/staged implementation preference

Councils strongly preferred incremental adoption, suggesting to **"Test on smaller application cases and scale if successful."** This reflects a risk-aware, proof-of-concept mindset rather than wholesale AI adoption or automation for the planning process.

Several participants pointed to SPEAR (the state's subdivision application system) as a successful model: *"SPEAR works so well for subdivisions. Would be great to have something similar for general planning apps."* This reference suggests an appetite for standardised statewide solutions that could overcome individual integration challenges – while retaining local individualisation where appropriate.

The most consistent sentiment expressed in workshops was captured in the phrase *"you don't know what you don't know,"* reflecting a fundamental challenge—councils lack awareness of what AI solutions exist and what capabilities might be relevant to their planning processes:

"We're unaware of the AI that's available - taking off the lid of where AI is and isn't."

This knowledge gap makes it difficult for councils to properly scope requirements or evaluate vendors. One participant noted: *"Greenlight is a choose your own adventure—but you don't know what you don't know to ask for."* This creates significant risk that councils will miss opportunities or implement suboptimal solutions simply because they weren't aware of alternatives.

Learning from peers

Many councils expressed a strong desire to learn from peers who have already implemented AI solutions:

"It's hard to give feedback on this because we've never done this before—can we learn from others who have?"

"Is there a jurisdiction or country already using/doing this using AI tech in planning? It might help if we can learn from/adopt a proven model?"

This suggests an appetite for case studies and practical examples to learn from and share as well as the development of guidelines.

Expertise network

The limited availability of expertise emerged as a significant constraint. Multiple councils suggested establishing a *"coaching team that can be tapped across the network—identifying who has skills and experience and can offer some advice as a mentor in a moment in time."* This points to the value of shared expertise across councils rather than each council developing capabilities independently.

Vendor accountability

Many councils expressed scepticism about vendor promises and wanted more concrete demonstrations before committing, such as vendors to be able to *"demonstrate their capabilities in the specific application in an in-principal test - like processing a DA (Development Application)"*, and *"tech doesn't over promise and councils don't over promise"*.

Maintainability and adaptability requirements

Councils are concerned about how AI systems will adapt to the dynamic nature of planning regulations and processes. There's significant anxiety about long-term vendor support, system responsiveness to legislative changes, and mechanisms for error correction.

Planning regulation changes

The changing nature of planning regulations emerged as a primary concern:

"How do we keep these AI up to date with regulation changes? This happens quite a bit in planning."

"How does it accommodate overnight changes - how do we ensure that there is responsiveness in the tools when the Planning system changes - is procurement the right lever for this?"

Vendor stability and support

Experiences with existing vendors have left many councils wary about promises of long-term support:

"We raise issues with the developers - they want us to go to the newer version and won't support the old one, even if the new one doesn't suit us better."

Vendor stability also emerged as a significant concern:

"Dealing with IT vendors - there's often a bit of churn in them. They can get purchased and bought out by another company quickly. The whole philosophy of the company can change."

Enthusiasm and optimism for AI-enhanced planning

Despite the challenges and concerns identified, Victorian councils demonstrate significant enthusiasm and optimism about AI's potential to transform planning processes. The feedback reveals a sector that recognises both the necessity and opportunity of technological advancement.

Genuine enthusiasm for innovation

Many councils are actively seeking ways to incorporate AI into their operations, driven by a desire to improve services and outcomes:

- Nearly one-third of survey respondents (32.6%) are either already using or planning to use AI in planning within the next year
- Six councils are already pioneering AI solutions, serving as early adopters whose experiences can guide others
- Workshop participants frequently expressed eagerness to learn more and begin implementation once practical pathways are identified

One council member enthusiastically shared: *"We are actively developing a Planning Application AI Assistant to streamline the customer experience and improve efficiency in assessing planning applications. This project involves AI training, reasoning, and testing to enable the assistant to interpret complex planning requirements and provide preliminary guidance to customers."*

Recognition of AI's transformative potential

Councils clearly recognise AI's potential to address longstanding pain points in planning processes:

"By leveraging AI, we aim to reduce processing time for inquiries, improve accessibility to planning information, and enhance self-service options for the community. Additionally, this initiative supports our planning team by automating information gathering, helping assess applications faster, and ensuring consistency in responses."

This demonstrates understanding that AI isn't merely an incremental improvement but a potentially transformative technology that could fundamentally enhance how Planning services are delivered in the long run.

Practical investment and implementation

Beyond merely expressing interest, councils are taking concrete steps toward adoption:

- *"We have a small group of staff participating in discovery and training for Microsoft CoPilot to determine where efficiencies could be gained."*
- *"We are delivering preliminary information about planning controls and likely works triggers using AI."*
- *"This project aligns with our broader strategy of embedding AI-driven solutions to improve service delivery, reduce bureaucracy, and enhance both customer and staff experiences."*

The survey reveals that among councils planning to implement AI in the next 6-12 months, 28.6% have already allocated budget resources, demonstrating real commitment beyond mere interest.

Driving forces behind adoption

Several key motivations are driving councils' interest in AI:

1. **Addressing resource constraints:** Councils see AI as a way to meet growing service demands despite limited resources: *"Our CEO has expressed interest in investigating AI potential for our planning team (to save resources/time)."*

2. **Enhancing consistency:** The ability to provide more consistent planning advice and interpretations may be particularly valued by regional councils: *"We lost half our planning team - we need these AI based programs to help keep consistency through ups and downs with employing people."*

3. **Improving accessibility:** Councils emphasise AI's potential to make planning information more accessible to the public: *"I'd like to see a consistent approach across the State, such as a State portal where any Victorian can find out whether they need a planning permit, and why."*

4. **Supporting professional staff:** Rather than replacing Planners, councils see AI as enhancing their capabilities: *"This initiative supports our planning team by automating information gathering, helping assess applications faster."*

View of AI as a necessary evolution

Many councils view AI not as an optional add-on but as an essential evolution of Planning systems in response to growing pressures and uptake:

"AI adoption in statutory planning has great potential to streamline processes, improve decision-making, and enhance efficiency."

This reflects recognition that the status quo is increasingly unsustainable given resource constraints, staff shortages, and growing community expectations for faster, more accessible planning services.

The survey reveals this isn't just aspirational thinking—councils with greater AI literacy are significantly more likely to be implementing or planning AI adoption, suggesting that as knowledge spreads, so too will implementation.

Collaborative spirit and shared progress

Perhaps most encouraging is the collaborative spirit evident across council feedback:

"There is an opportunity to coordinate and centralise the use of certain AI functions as opposed to the usual practice of all councils doing their own thing."

This willingness to learn from each other, share resources, and advance together demonstrates a sector that is not resistant to change but looking for practical, supported pathways to innovation.

In summary, while councils are certainly mindful of challenges and risks, their overall stance toward AI in planning is one of practical optimism. They see AI not as a threat but as a valuable tool to enhance planning processes, support professional staff, and better serve their communities. Their concerns are not about whether to adopt AI, but how to do so effectively, responsibly, and in a way that delivers genuine value.

Council priorities for moving forward with AI

Based on council feedback, several key recommendations emerge for supporting successful AI adoption in planning:

1

Support a tiered adoption approach: Develop flexible implementation pathways that acknowledge councils' varying levels of digital maturity while enabling all councils to begin their AI journey. This should include "quick win" opportunities for immediate value alongside longer-term transformation possibilities.

2

Establish innovation showcases and learning networks: Create structured opportunities for councils to learn from early adopters and share experiences. As one survey respondent requested: "Is there a jurisdiction or country already using/doing this using AI tech in Planning? It might help if we can learn from/ adopt a proven model?" These showcases should highlight both technical implementation and change management approaches.

3

Create an AI mentorship network or community of practice: Formalise the sharing of expertise across councils by establishing a network of AI-knowledgeable staff who can provide guidance to peers, as well as a commitment to valuing different forms of knowledge and expertise. This responds to the call for a "coaching team that can be tapped across the network—identifying who has skills and experience and can offer some advice as a mentor in a moment in time."

4

Develop practical implementation tools: Moving beyond guidelines to include ready-to-use resources such as model governance frameworks, change management templates, and AI literacy training resources. Workshop participants specifically requested: "Approval flows and processes - instead of just guidelines."

5

Enable collaborative trial-and-scale approaches: Establish mechanisms for councils to collaboratively trial, evaluate, and scale AI solutions, distributing both risk and investment across willing participants. This aligns with workshop feedback: "We banded together as smaller councils to procure Greenlight and other systems - would want to go down a similar path for AI taking a collaborative route."

6

Prioritise customer-centric use cases: Given the strong interest in customer service applications (44.9% of survey respondents identified this as a priority), focus initial implementation support on customer-facing use cases especially in the first stages of Pre-Application and Application lodgement that can deliver visible improvements to community experience while building organisational confidence in AI.

7 Develop responsible AI governance frameworks with an emphasis on human-centred planning values: Provide clear guidance on balancing innovation with responsibility by developing governance frameworks that address ethical use, privacy protection, and appropriate human oversight without stifling innovation. These should be practical, scalable frameworks suitable for councils at different maturity levels. These governance frameworks should also prioritise mechanisms to stay engaged and responsive to the needs of community, including a commitment to transparency and accountability to public perception, understanding, and trust in AI. Governance should explicitly recognise and preserve the essential human dimensions of planning, including place-making, community engagement, and contextual judgment that planners bring to decisions to ensure planning decisions remain grounded in local knowledge and human values.

8 Foster vendor engagement and standards: Engage technology vendors in developing shared standards, integration approaches, and pricing models suitable for councils of varying sizes. This responds to workshop feedback about the need for vendors to "work with a group of councils, similar councils that use the same systems."

9 Create data feedback loops: Develop mechanisms for AI systems to aggregate and analyse planning data across councils, creating valuable feedback that can inform better planning controls and more targeted interventions. This aligns with survey findings where data analytics was identified as a high-priority use case (28.6% of respondents). As one workshop participant noted about current challenges: "We don't have the resources to research it" while another explained that AI could help with "identifying patterns, trends, and insights from planning data that might not be readily apparent through manual analysis." Shared data analysis capabilities would enable even smaller councils to benefit from data-driven insights.

10 Explore State-level enabling infrastructure: Investigate opportunities for State Government to provide common infrastructure, data standards, or shared services that would enable all councils to leverage AI capabilities, similar to successful models like SPEAR for subdivisions. This aligns with strong workshop sentiment for "a State-led and coordinated delivery of AI tools for planning."

11 Implement frameworks for measurement and evaluation: Develop coherent evaluation frameworks and robust measurement methods to track the impact and efficiency gains of AI implementation. This includes establishing baseline measurements before implementation, defining success indicators that capture both operational improvements and planning outcomes, creating feedback loops for continuous refinement, and sharing evaluation results across councils.

The council feedback highlights that while there is definite interest and momentum toward AI adoption in planning, success will depend on addressing these practical challenges through coordinated, thoughtful approaches that respect both the variation in council readiness and the unique requirements of planning processes.

Appendix B

External stakeholder perspectives on AI in planning

Executive summary

Over the course of this research, we spoke with a diverse group of voices from across the planning ecosystem external to the Councils including planners, legal experts, technologists, academics, and peak body representatives. Each expert brought distinct knowledge and perspectives. But what emerged was not a clash of views. It was something rarer: a broad and striking consensus.

Across interviews, participants pointed to many of the same structural issues:

- Planning legislation and controls that are unfit for automation.
- A planning system under pressure to do more, faster, - with limited resources and inconsistent support.
- Councils at different maturities in AI adoption, some are ready to lead; many are still laying the groundwork in data, systems, and skills.
- A general scepticism around the AI hype, urging councils to take a discerning view of what technology can and cannot do today.

But across the board, there was a sense of forward momentum - and a belief that, with the right support, councils can meet the moment.

Importantly, there was little ideological resistance to AI itself. What people expressed was a desire to engage with these technologies responsibly. To use automation to relieve pressure, not to sideline expertise. To support planners, not replace them. And, to ground new systems in strong governance, an appreciation for the nuanced strategic role planners play, relationship building with vendors to enhance trust, and shared learning between councils, and between councils and the broader eco-system.

These interviews capture experts illustrating that the planning system in a moment of readiness for AI adoption. A sector that sees the same problems, is broadly aligned on the opportunities, and is asking for practical ways to move forward together.

Key findings: Non-council stakeholder perspectives on AI in planning

Through conversations with a diverse cohort of voices—from academics and industry leaders to policy experts and technologists—a nuanced yet surprisingly cohesive picture has emerged. These stakeholders, spanning different roles in the planning ecosystem, have converged on themes, tensions and critical insights that illuminate both the promise and the pitfalls of introducing AI into planning processes.

The system isn't ready for all out automation, it's simply not designed for it

The planning system is not universally "unready" for automation—but rather, it is not yet designed to support automation meaningfully or safely. Many interviewees noted that Victoria's planning controls are ambiguous, contradictory, or combine incompatible rule types (e.g., performance-based vs. principle-based), making automation difficult without introducing errors or inconsistencies.

As one expert bluntly put it, *"We're trying to automate without a machine-readable system—it's madness."* Others pointed out that successful automation is not about replacing judgment but identifying the clearest, most binary tasks—particularly those found on the 'left side' of the planning bell curve (e.g., standard residential applications)—and ensuring rules for those tasks are consistently structured and codified. This nuance, supporting targeted automation rather than global automation and understanding where this is possible within planning processes is crucial.

Human expertise isn't a backup, it's essential

Across nearly every interview, there was striking consensus: AI's most appropriate role is to augment human expertise, not replace it. The value for AI is clear—let automation handle the repetitive administrative tasks that consume planners' time, freeing them to focus on the strategic, interpretive work that requires human judgment.

Several noted that AI tools cannot yet assess neighbourhood character, balance trade-offs, or build community trust. One First Nations advisor put it plainly: *"AI will never replace the relationship layer. You can't automate listening."*

The future of AI in Planning is not about replacing humans but reducing administrative burden and amplifying opportunities for planners to exercise judgment. This requires investment in new skills—technical literacy, data awareness, critical thinking—and recognition that planners are not just end users, but essential co-designers of these systems.

Council capability is uneven, and vendor pressure is high

Nearly every interview referenced the maturity gap across councils. While some councils are experimenting with AI or improving their data practices, many lack internal technical capability, procurement confidence, or policy clarity.

Interviewees raised concerns about "vendor spin," with multiple councils reporting being approached by companies promising off-the-shelf AI tools with little transparency. They shared positive encouragement for shared procurement panels, cross-council collaboration, and stronger guidance from MAV and the State to support more informed adoption.

This is not a reason to delay, but a reason to support: councils need the capacity to ask good questions, evaluate risks, and sequence their investments carefully. As one interviewee put it, *"Everyone wants to be on the leading edge, not the bleeding edge."*

System fragmentation is barrier to current and future AI adoption

The fragmentation of planning systems—with 79 councils operating with slightly different processes—creates a formidable obstacle to AI adoption at scale. This variation in platforms, documentation standards, and interpretation erodes confidence for developers and complicates any attempt to build consistent, trustworthy AI tools. As one industry representative noted, when there are *"multiple platforms, different gateways to jump through, and less confidence in one municipal government's approach over another,"* it creates "competitive tension where there shouldn't be."

Without mechanisms to share learning across pilots, develop common platforms, or co-invest in vendor maturity, the system will remain fragmented. Several participants spoke to the value of sharing what works: *"There's so much activity—but we need a map."* Better visibility of how exactly AI is being used in councils won't just support learning—it will build confidence, reduce risk, and help councils move forward together.

Core values and priorities

First Nations knowledge and relationship-based approaches must be centred

A powerful message from First Nations voices in the interviews was that AI systems risk reinforcing colonial dynamics if they aren't built with deliberate inclusion. *"The AI only works with whatever you put in. So if no Indigenous people are actually engaged in developing it, our culture and our ways of being, doing and knowing aren't even included."*

First Nations experts highlighted that AI must not crowd out the relational, place-based and values-driven dimensions of planning. One expert observed that systems grounded in "data" often ignore systems grounded in "relationship"—and that the knowledge embedded in Country cannot be reduced to code.

This calls for more than token consultation—it demands co-creation, with Indigenous leadership embedded from the start and ongoing engagement with local traditional owners.

Sustainability must be protected, not compromised

Sustainability was discussed not in terms of AI's energy demands, but in relation to the risk that environmental goals might be deprioritised or reversed in the rush for development. Several interviewees expressed concern that planning systems, already under pressure, were seeing green space protections or sustainability ambitions quietly dropped. The risk is not just to the progress councils have made towards environmental goals through planning policies, it also points to a systemic challenge in eroding long-term goals for short-term gains.

Multiple experts highlighted AI's potential to strengthen environmental sustainability assessments in ways that human processing alone cannot achieve. Tools that can model passive solar gain, urban heat islands, tree canopy impacts, and cumulative environmental effects could help Planners make more informed decisions about how developments affect the broader ecosystem. This represents an opportunity to expand planning's impact, not just streamline its processes.

Community legitimacy relies on trust, not tech

AI will not restore community trust in planning, but it can undermine it if used poorly. Community members already feel disconnected from complex, jargon-heavy processes. If AI makes decisions feel more opaque or less explainable, that disconnection may grow.

Transparency and accountability were strong themes, particularly in relation to human oversight. Councils must understand what a system is doing and be able to interrogate its outputs. But many participants also emphasised external transparency: the need to explain to applicants, community members and objectors how and why decisions are made—especially if AI tools are involved.

As one planning leader put it: *"You need to show your working. If people don't trust the process, they won't trust the outcome."* Participants noted that councils must retain strong communication practices, actively disclose the use of AI tools, and provide meaningful opportunities for community input. Trust is relational, cumulative, and must be earned over time.

Key tensions

Planning is under pressure. AI could help—or make it worse

There was strong agreement that statutory planning systems in Victoria are under immense strain. Participants described a system facing mounting demands to deliver housing and infrastructure faster, with fewer resources, inconsistent support, and high community expectations. In this context, many saw a legitimate role for AI if it can reduce administrative load, speed up low-risk approvals, or support better document analysis.

However, participants also warned that premature or poorly scoped use of AI could exacerbate delays, generate confusion, or reinforce broken processes. *"If we automate the wrong things, we'll just get bad outcomes faster."* The opportunity is real—but only with strong guidelines, increasingly shared standards, and strong oversight by Planners themselves.

Efficiency must serve public good, not just processing speed

A recurring tension emerged between the push for faster processing and the imperative to maintain quality outcomes. While AI promises to streamline workflows, there's legitimate concern that in the rush toward efficiency, important values—like sustainability, public space quality, and community voice—could be sidelined. As one academic warned, "Any time someone says they're going to make things more efficient, the red flag goes well and truly up." This doesn't mean rejecting efficiency, but rather ensuring it serves public good, not just processing speed.

Standardisation and local nuance must be balanced

The tension between consistency and local nuance came up repeatedly. Many interviewees called for standardised planning data, rule structures, and terminology—particularly to support automation, simplify applications, or avoid "border disputes" between councils.

At the same time, others warned against erasing the contextual and discretionary aspects of planning. Codification is powerful, but only when it respects the complexity of place and the diversity of communities, *"We want consistency in the boring bits, not in the bits that make a place unique."*

The path forward is not demanding uniformity across councils, it's interoperable solutions and well-structured systems that still leave room for discretion where it matters.

Transparency versus proprietary systems

As AI tools proliferate, there's growing concern about proprietary "black box" systems that obscure how decisions are made. Multiple stakeholders warned against platforms that wall off knowledge or lock councils into opaque systems. A planning technology expert argued forcefully that *"people should be able to understand the rules that govern their communities—without a paywall."* This tension between vendor proprietary interests and public transparency needs active management.

Alleviating the administrative burden

The clearest immediate opportunity is to use AI to reduce the administrative load that currently consumes planning resources.

Promising opportunities

Document checking, application validation, summarisation, and basic compliance verification are all ripe for augmentation through AI tools. This could free Planners to focus on what matters most: strategic thinking, community engagement, and complex decision-making.

Improving application quality up-front

A significant cause of planning delays is incomplete or incorrect applications that require multiple rounds of revisions. AI tools that guide applicants through requirements, flag missing information, and help ensure submissions are complete from the start could dramatically reduce unnecessary back-and-forth. Applicant and industry representatives noted this would benefit both councils and developers: *"We'd welcome a tool that helps us get it right the first time."*

Some interviewees also reflected on opportunities for AI to reduce bottlenecks at referral authority stages, assist with documentation reviews, and reduce delays at VCAT for simpler cases. These are promising areas but need careful design before adoption.

Creating shareable data and useful feedback loops

Many stakeholders noted that current planning systems capture rich data but rarely use it to improve policy or practice. AI systems could help aggregate and analyse this information, creating an evidence base that can inform better planning controls and more targeted interventions. As one expert observed, *"These systems have never been set up to collect data that feeds back into making better planning policy."* AI could help close this loop, turning fragmented information into insights and evidence for future AI tools and strategic improvements in the planning system.

Recommended Actions

Start with process clarity

Before implementing AI tools, councils should map and understand their current processes. As one innovation leader noted, *"Sometimes the people in charge of the process don't even know why it's done that way."* Without this clarity, AI will simply replicate confusion rather than reduce it. Councils should invest in process mapping, documentation, and simplification as a precursor to automation.

Build internal capability and confidence

Following the example of leading councils, organisations should focus on building staff capability through hands-on experience with AI tools. Low-risk pilots, "lunch and learn" sessions, and peer-led exploration can demystify AI and build the confidence needed for broader adoption. Framing AI as a new literacy, something to be learned through practice, with appropriate guardrails but without unnecessary fear, or hype.

Collaborate on standards and infrastructure

Individual councils cannot solve system fragmentation alone. Collaborative approaches to data standards, documentation requirements, and shared platforms are essential for creating an ecosystem where AI tools can scale effectively. Councils should work together, and with the State Government, to harmonise these standards, potentially through shared procurement or joint development of core infrastructure.

Develop governance frameworks with community input

Governance shouldn't be an afterthought. Councils should develop frameworks that articulate values, establish oversight mechanisms, and build in transparency from the start. Importantly, these frameworks should be co-created with communities, especially those most likely to be affected by automated decisions. Responsive regulation—focused on relationships, feedback, and adaptation offers a promising model for managing vendor relationships as well as trust and accountability to communities and stakeholders.

Trial modular improvements, not end-to-end solutions

Rather than attempting to automate entire planning processes, councils should focus on specific, well-defined interventions within current workflows. Triaging incoming applications, flagging incomplete submissions, or automating routine document checks are lower risk starting points that can deliver clear benefits while building confidence. As one governance expert advised, *"Think of tools that fit into the workflow and reduce burden, not ones that attempt to reinvent it."*

Push for planning system reform alongside AI tool adoption

Councils should advocate for clearer, more consistent planning rules that distinguish between different planning rule types and clarify where automation is appropriate. This means engaging strongly with the State government on planning scheme reform, supporting efforts to make rules more machine-readable, and providing feedback on where current controls create unnecessary ambiguity or confusion. This should not seek to codify all detail, where thoughtful professional experience and expertise is best applied to interpreting planning rules in the context of place-based outcomes in line with the expectations of a community.

Manage liability and preserve relationships with applicants and other planning stakeholders

Councils must clearly distinguish between council-owned processes and third-party vendor interactions. When applicants engage with AI tools, they should know whether they're interacting with council or an external system, as the council may ultimately remain responsible for planning functions regardless of who or what performs them. Councils should clearly mark third-party tools and platforms and require users to understand and acknowledge that AI-provided information is not formal planning advice.

Importantly, councils should recognise that relationships with constituents represent a valuable asset built on trust and direct engagement. When automating interactions, councils should evaluate not just efficiency gains but also the relationship value of human touchpoints. The most effective AI implementations will enhance council-constituent relationships rather than replace the direct connection between local government and community.

Summary of external stakeholder perspectives

AI offers genuine opportunities to address longstanding pain points and elevate the planning profession's strategic role in making liveable spaces in Victoria in a time of increasing pressure for housing. But realising this potential requires more than new tools—it demands system reform, capability building, and collaborative governance.

The sector isn't starting from zero. From initiatives like the Knowledge Bank at the City of Melbourne to councils' innovation efforts aimed at safely adopting generative AI or proactively working with planning technology vendors to share requirements, pockets of leadership are already emerging. The challenge now is to connect these islands of innovation into a coherent, coordinated approach that allows all councils—regardless of size or resources—to benefit.

Councils don't need to be persuaded to modernise. They need guidance, common frameworks, reliable partners, and safe pathways to trial and scale what works. They need help navigating complexity while retaining control of the outcomes that matter most: good planning, community trust, and liveable places.

Appendix C

Vendor perspectives on AI in statutory planning

Introduction

To test the draft vendor requirements and gain insight into the readiness and perspectives of the AI technology market, the Municipal Association of Victoria (MAV) issued an open call to vendors who offer AI tools and services relevant to statutory planning. Vendors were invited to take part in a workshop and complete a detailed survey..

The survey included questions about vendors' product offerings, AI capabilities, integration readiness, alignment with legal and ethical frameworks, and ability to meet the proposed vendor panel requirements. In total, 18 vendors responded, representing a diverse mix of AI consultancies, and tech platforms, government software providers, and planning technology specialists. This section summarises what we learned from their contributions.

Summary of insights

Vendors showed strong interest in supporting councils and working collaboratively to improve planning processes. Most are already working with government or local councils and see statutory planning as a key area where AI can support better decisions and more efficient workflows.

The market is still maturing, and vendors vary in their readiness to meet all requirements. Some already meet high standards for transparency, security, explainability and fairness, while others are earlier in their journey. Despite this, nearly all vendors expressed a willingness to align with council expectations, provided there is clear guidance and opportunities to adapt their solutions through co-design with councils, especially council planning teams.

There is strong overall support for the MAV vendor panel requirements, but vendors encouraged flexibility in how compliance is assessed. Many asked for requirements to be applied in a risk-based or proportional way, depending on the sensitivity and complexity of each use case. Vendors also called for shared infrastructure, access to sample datasets, and improved data flows between councils and the tech sector to support development, testing and compliance.

The following findings present key themes from the survey and workshop.

Key findings

The vendor workshop and survey data offered a valuable glimpse into the mindset of technology providers looking to support AI adoption in statutory planning. While vendors brought diverse products and capabilities to the table, there was a surprising degree of shared perspective around what's working, what's challenging, and where things could go next. These insights will help councils understand where the market is up to, and where stronger alignment and collaboration could accelerate better outcomes.

Vendors are already active in planning and government tech – and they're ready to work with councils

The 18 vendors who participated in consultation represent a cross-section of the current market. This included AI consultancies, tech platforms, government software providers, and design-led planning specialists. Most are based in Australia and already have some experience working with councils or government clients. Some offer generative AI or large-scale platforms, while others are leaner, modular tools focused on specific planning problems. What they all share is a strong interest in working more closely with councils. As one vendor put it, *"We're building this with local government in mind – but we need access to planning knowledge and feedback to make it useful."* Some vendors felt strongly that their credibility and experience in related technology solutions can be put to use in supporting councils to innovate using AI, even if they don't have previous experience in this specific domain, *"Planning & State specific – we don't have the specific previous history of delivery as a company (though our people do) – so hope that we aren't excluded for this reason – as excluding those on the leading-edge of this innovative space would seriously prohibit Councils' ability to benefit from AI."* The following findings present key themes from the survey and workshop.

AI capabilities are evolving fast, but vendors say they can be transparent

Most vendors reported using a mix of AI approaches, including generative AI, natural language processing, traditional rule-based automation, and machine learning on structured data. Transparency was a strong theme across the board, with many vendors stating they can clearly disclose where AI is used, how models work, and what data flows into them. Some even provide documentation, secure API usage, or let councils control their own AI configurations. *""Yes – we provide transparency on all AI usage in our solution(s)."* Yet, vendors are practical about the challenges, *"The non-deterministic nature of AI has shown that trying to ascertain a deterministic answer (such as a specific value) can be hard to define... this can make the solution complex."*

Most vendors are aware of legal and security obligations – but a few need help to get there

When it comes to legal and regulatory compliance, most vendors say they're either fully prepared or on the way. Privacy obligations are the most mature, with several vendors already working toward SOC2 or Essential 8 certification. Planning-specific legislation and anti-discrimination laws were more varied, with some vendors calling for clearer templates or onboarding support to ensure compliance. Vendors are aware that consumer and AI-related laws are changing fast, and several said they welcome the structure that council frameworks can provide. One vendor summarised the feeling well: *"We'll comply – we just need to know what that looks like in a local planning context."*

Solutions are adaptable by design, and many changes come at little to no cost

Most vendors have designed their systems to be highly configurable. That means planning rules, overlays and local variables can be updated quickly, often without retraining the model. Several vendors allow councils to update rules directly, while others offer low-friction support or scoped services for bigger changes. *"The ability to update source documents is built in,"* one vendor explained, *"That keeps costs low, and the turnaround fast."* Most updates are included in subscription costs, though some charge for major regulatory shifts. *"This would need to be handled on a case-by-case basis – and is very often, though not exclusively, a resource intensive exercise."*

Security is taken seriously though levels of maturity vary

Security practices vary across the market, but most vendors demonstrate a strong commitment to getting it right. *"We take data privacy, security, and responsible AI use extremely seriously—especially when working with council or user data in the public sector."* A handful already meet frameworks like ISO/IEC 42001 or NIST AI RMF. Many others are actively working toward formal certification or already align with parts of those standards. Several vendors acknowledged that formal certification is expensive, especially for smaller firms, but still expressed a clear intent to meet those expectations over time.

Data governance is strong and training data use is tightly controlled

There is a strong culture of data governance among vendors. Most use encryption and limit data movement across environments. Council data is generally kept under local control, and most vendors don't use it for training unless they have consent and safeguards in place. Several vendors use retrieval-augmented generation (RAG) to improve performance without retraining at all. One vendor provided a detailed response, *"We won't use any private data for training purposes. For when the tweaks are necessary for instance for training and adding labelling, we provide a secure UI whereby the input can be entered by authorised people and their input is gone through measures such as vectorisation, perturbation, de-identification, and so forth."*

Vendors leveraging generative AI models note that strict requirements around data residency and sovereignty might need to adjust to the contextual use cases, *"Greater flexibility around data residency requirements specific to AI and machine learning components would make compliance more practical—particularly where local infrastructure is not yet available. A risk-based or tiered approach—where only sensitive or personal data must remain onshore, while anonymised or non-identifiable data can be processed offshore—would preserve council data protection needs while enabling advanced capabilities."*

Ethical maturity is growing even where formal assessment tools are still developing

Some vendors can already provide fairness audits and documentation, while others rely on fairness benchmarks from their model providers. A few don't yet run formal audits – often due to capability or data access limitations – but still show strong awareness of the risks. Vendors consistently acknowledged that fairness in planning AI is context-specific, and not well covered by general frameworks. *"We need data from councils to make the fairness tests more relevant."* Several suggested that co-design, transparency and explainable outputs are more important than technical metrics alone. One vendor asked for nuance in assessment, *"Please do not overweight on requirements around security and discrimination where the particular solution's use case does not raise significant risks in those areas."*

Integration with council systems is highly achievable

Most vendors report a high degree of integration readiness. Many already use open data formats (JSON, XML), support modular or API-first design, and have experience integrating with CRMs, GIS, or other council systems. *"Our platform is designed with modularity, interoperability, and API-first principles to ensure seamless integration with a wide variety of council systems—including legacy platforms and diverse technology stacks."* A large majority also said they align with Victorian Government Data Standards. *"We already use widely recognised standards (e.g., JSON, XML, open APIs) and actively comply with relevant Victorian Government Data Standards for planning use cases we support."* While a few vendors are still in development, they show clear intent to be compatible and often request clearer specs or sample data from councils to help them get there. *"Additionally, providing access to sample datasets, historic planning outcomes, and real-world examples across varied LGAs would significantly support testing, validation, and alignment with council expectations during implementation."*

Some vendors are already supporting First Nations priorities – others are ready to learn

A small group of vendors demonstrate strong alignment with First Nations data protocols, either by working with Indigenous partners or embedding cultural heritage overlays into their tools. *"We are deeply committed to respecting and integrating Traditional Ecological Knowledge (TEK) and Aboriginal Cultural Heritage into digital governance solutions. As an Indigenous Systems Integrator, we recognise the significance of cultural heritage data and its role in sustainable land management, planning, and community engagement."*

Others are open to doing so, with configurable systems and a willingness to partner with Traditional Owner groups or use the Victorian Aboriginal Heritage Register. *"It is intended that our product will pick up all relevant cultural knowledge including the Aboriginal heritage register."* However, this support is usually reactive – vendors typically wait for council direction rather than build it in upfront. A few vendors showed limited awareness of cultural governance needs, signalling a clear opportunity for councils to lead with expectation-setting.

Vendors see the requirements as fair – but want them to be risk-based and flexible

Vendors expressed general support for the panel requirements, saying they reflect best practice and are necessary to build trust. At the same time, they raised some clear tensions. Data sovereignty was seen as the most difficult requirement – especially where AI models are hosted on global infrastructure. *"The most challenging requirement is meeting strict data sovereignty and residency expectations, particularly in relation to AI and LLMs, which currently require some data to be processed or transferred outside Australia. While I can build can store and manage core datasets locally, advanced AI capabilities may still rely on offshore infrastructure. We're actively exploring sovereign AI and in-region hosting solutions to address this evolving need in partnership with government stakeholders."*

Some vendors asked for more flexibility based on use case risk, especially for startups or lightweight tools. Others flagged that high compliance costs or fixed standards may unintentionally exclude innovative players. Many vendors asked for clearer onboarding guidance and better access to open datasets so they can build and test their solutions locally: *"Please don't lock us out, work with us to make this possible."* There was recognition that the requirements may evolve over time as the technology and regulatory environment matures, *"Embracing the rapid rate of development in this area – and keep these requirements more as guidelines, not exclusionary criteria."*

Vendors want councils to be partners, not just clients

Across the board, vendors showed a willingness to collaborate. They want to understand local planning goals, test ideas, and co-design features that genuinely help council teams. Several vendors noted that current planning data is hard to access, and that clear examples of how decisions are made would help them build smarter, fairer systems. There's strong appetite for iterative partnerships, shared infrastructure, and collective investment in responsible AI. *"The council space regarding AI and planning is very specialised and unique, there isn't much detailed planning data or specialist experience publicly available to test and build something valuable for councils... We need them to experiment with us, share their knowledge, data and processes otherwise we will all be guessing."*

Integrating what we heard from vendors

Based on these findings, we raise the following approaches for consideration to improve alignment between councils and vendors, and to ensure the vendor panel is effective, inclusive and as ready as possible for councils to work with:

1 Maintain the current requirements but introduce flexible pathways to compliance. Vendors should be able to demonstrate current capability, plans for alignment, or innovative alternatives that meet the intent of each requirement.

2 Assess risk in context. At the time of issuing and assessing vendors for projects, councils should apply a risk-based approach to assessing compliance. Not all AI tools pose the same risks in different contexts.

3 Recognise transparency and contextual intelligence. Vendors who show deep understanding of planning issues, fairness, explainability, and First Nations data governance — even if formal tools are still in progress — should be viewed positively.

4 Support capability uplift through shared resources. Councils and MAV can play a valuable role by providing sample data, policy overlays, and other onboarding materials to help vendors develop and test their tools. Where compliance is costly, explore collective investment. Shared infrastructure, pooled procurement, or co-funded compliance pathways (e.g. SOC2 certification) may help smaller vendors meet high standards.

5 Encourage co-design and shared learning. Councils should be supported to engage vendors early, test features iteratively, and work in partnership to embed AI responsibly. Procurement processes should reward openness, improvement and collaboration.

By adopting these approaches, councils can support responsible AI adoption in planning while ensuring that the vendor panel remains open to innovation, grounded in risk, and aligned with public value.

Appendix D

Use case library for AI in planning for councils

Introduction

This document outlines a range of potential AI use cases identified through research and consultation with councils, planners, and technology experts involved in statutory planning. We are sharing these use cases to give vendors additional context about the specific opportunities where AI may deliver meaningful value, and to provide insight into the real challenges councils face in implementing such technologies.

Our goal is to help vendors align their solutions to the planning process by showing where AI can support improvements in efficiency, accuracy, transparency, and service delivery. These examples span the entire planning lifecycle—from early application guidance and lodgement, to assessment, communication, decision-making and post-permit monitoring.

Some use cases focus on high-volume, repeatable tasks suited to automation, while others explore how AI can augment professional judgment and improve consistency or decision quality. Across all of them, we emphasise the importance of human oversight, adaptability to local planning rules, respect for privacy and data governance, and transparency in outputs.

These use cases are not exhaustive or prescriptive but are designed to spark ideas and demonstrate the breadth of potential AI applications in statutory planning. They also highlight the many considerations and nuances councils must navigate, and are intended to support constructive, informed conversations between vendors and councils about implementation. Different councils have different development contexts and therefore different planning resourcing needs.

What follows is a detailed set of use cases and enablers, grouped by stage of the planning process, with opportunities, challenges addressed, and key considerations included for each. Please note that although AI may be able to automate several planning processes, human and professional planning expertise for the analysis, review, and oversight of any AI augmented workflows and documents is strongly recommended.

Planning Phase:
Pre-Application Support and Application Lodgement

USE CASE: Application completeness verification

Opportunities:

- AI can validate uploaded documents to ensure they meet requirements
- AI can check if applications are complete before submission
- Can assess if mandatory documents are provided and correctly titled
- Reduce duplicate submissions of the same document

Challenges addressed:

- High volume of incomplete applications causing delays
- Applications sitting in limbo requiring manual follow-up
- 20% of workload currently in pre-app and community asking what they can/can't do
- Manual time spent on checks for correctness, accuracy, omissions

Considerations:

- Need clear "completeness" requirements for AI to measure against
- Balance automation with human oversight for complex cases
- Ensure system provides clear feedback to applicants
- Privacy considerations for document handling
- Are the nuances of every planning application type appropriate for AI?
- New regulations and council specific planning considerations will need to be configurable.

USE CASE: Fee assessment and payment management

Opportunities:

- AI can identify correct fee types based on application classification
- Can guide applicants to pay the correct amount upfront
- Verify fees are correct before submission/ paid after submission
- Flag potential fee issues for review

Challenges addressed:

- Wrong fees being paid, requiring administrative follow-up
- Financial chasing and refund processing
- Complicated fee structures difficult for applicants to navigate
- Fees not always charged for early stages of application lodgement processes, leading to the process not being taken seriously by applicants and resulting in spurious documentation and potential wasted review efforts by council staff

Considerations:

- Need to handle complex fee structures and variations
- Keep fee information updated in the AI system
- Ensure transparency in fee calculation
- Integrations with payment processing software

USE CASE: Pre-application guidance for applicants

Opportunities:

- AI chatbots/smarter form validation to guide applicants through the application process
- Interactive systems (e.g. tree logic) to help determine if permits are needed
- Proactive guidance on application requirements based on property details
- Automated pre-qualification assessment where appropriate - still need human oversight and review

Challenges addressed:

- Applicants not understanding planning jargon, especially if first-time applicants
- First-time applicants (e.g., “mums and dads”) struggling with complex processes
- Pre-application meetings consuming significant planner time
- Planners’ time spent answering basic questions

Considerations:

- Ensure language is accessible to non-professionals
- Balance automation with opportunities for human assistance
- Manage expectations about what AI can definitively answer
- Multi-lingual/translation support may be required

USE CASE: Customer service enhancement

Opportunities:

- Automated communications on status updates and progress tracking of applications
- Self-service inquiry tools for applicants
- Support for 24/7 basic query handling
- Multi-lingual customer service support

Challenges addressed:

- Lack of transparency in the application process
- Applicants needing reassurance about where they are in the process
- Limited accessibility of planning services outside business hours
- Customer service accessibility and support

Considerations:

- Maintain empathetic customer service balance
- Ensure AI communications are clear and helpful
- Provide escalation paths to human support
- Multi-lingual translations may require significant training/testing to understand the nuances of planning vocabulary beyond regular natural language processing (NLP) capabilities

USE CASE: Data accuracy verification

Opportunities:

- AI can verify property information against official records
- Cross-check submitted information with existing databases (e.g. CRMs)
- Flag potential inaccuracies or discrepancies in applications
- Validate technical specifications against requirements

Challenges addressed:

- Inaccurate applications requiring correction
- Manual verification taking significant time
- Issues with data accuracy between systems
- Rechecking the same information multiple times

Considerations:

- Reliable data sources for verification (e.g. if it’s a cat picture instead of an expected document that’s easy, but there will be harder to check data)
- Clear feedback mechanisms for identified issues
- Balance automation with expertise for complex verifications
- Privacy implications at the outset of linking an application to an account or profile in a different system.

USE CASE: Application classification and assigning/delegation

Opportunities:

- AI can classify (certain types of) application types automatically
- Identify mandatory referrals (internal + external)
- Detect if applications require special consideration (heritage, overlays)
- Directed/assigned to appropriate planning specialists

Challenges addressed:

- Applications going to wrong departments/ teams for referrals
- Duplicate handling across teams
- Manual routing creating bottlenecks
- Overlapping systems across different parts of teams

Considerations:

- Need accurate training data on various application types
- Regular updates to classification rules as regulations change
- Allow for human override in complex or unusual cases

USE CASE: Technical complexity assessment

Opportunities:

- AI to determine application complexity and estimate assessment timeframes
- Categorise applications by technical difficulty and expertise required
- Identify applications needing specialist input early in the process
- Estimate cost of development for fee calculation purposes
- Flag complex subdivision conditions that require careful assessment
- Recognise unusual application types that might need special handling

Challenges addressed:

- Difficulty estimating workload and timeframes
- AI-augmented systems missing the nuance in applications needing early Planner input and interpretation
- Limited planning resources being allocated inefficiently
- Complex applications being under-resourced
- Technical details missed in initial assessments
- Variations in expertise between planners handling applications

Considerations:

- Avoiding bias against certain application types
- Ensuring consistency in assessment of complexity categorisation
- Maintaining appropriate staff development in managing Applications from the outset despite automation
- Balancing workload distribution while maintaining service quality

USE CASE: Document analysis and management

Opportunities:

- AI can extract key information from uploaded documents to pre-populate downstream checks, forms and reports
- Classify and organise documents automatically
- Identify missing information in technical documents
- Match documents to required checklist items

Challenges addressed:

- Manual document review consuming staff time
- Documents being submitted with incorrect titles or formats
- Difficulty handling large volume of application documents
- Multiple systems requiring manual data entry of the same information

Considerations:

- Document reading capabilities need to handle various formats
- Privacy and security for sensitive information
- Need clear document standards and naming conventions
- Integration with downstream planning software

USE CASE: Inferring information from historical context and data

Opportunities:

- AI can analyse past approvals to inform current applications
- Provide information on what has happened previously on property
- Match applications against historical records of similar applications
- Create transparency about previous decisions

Challenges addressed:

- Inconsistency between different planners' decisions
- Lack of context for applicants about local planning history
- Need to manually research previous property developments
- Difficulty explaining subjective planning decisions

Considerations:

- Ensure fair use of historical data without perpetuating biases, or planning decisions and applications that refer to out-dated regulations, or policy
- Balance consistency with case-by-case assessment
- Data quality of historical records needs verification
- Sometimes Planners would rightly come up with a different perspective - how do we know most historical decisions are "right", and understand the heuristics of this if needed?

USE CASE: System integration and inter-council data sharing

Opportunities:

- AI can facilitate integration between different council systems
- Match application names between systems automatically (Symphony 3 mentioned)
- Extract data from forms for cross-system/ cross-function use in council
- Automate data transfer between planning systems including enterprise systems

Challenges addressed:

- Duplication of systems across departments
- Manual re-entry of information between systems
- Integration issues between ERP systems
- Multiple applications lodged from one lodgement

Considerations:

- Data governance requirements for sharing information
- System compatibility challenges
- Need for standardised data formats
- Needs considerable data governance expertise to implement, will be different for different councils because all have their own systems.

Planning Phase: Initial Assessment

USE CASE: AI- augmented Planning Scheme Assessment

Opportunities:

- AI can analyse applications against relevant planning scheme provisions automatically
- Identify inconsistencies between proposals and planning requirements
- Generate baseline assessments for Planners to review, highlighting key considerations
- Create consistent interpretations of planning schemes across different applications
- Cross-check planning controls and identify relevant overlays that apply to a property

Challenges addressed:

- Pain point of inconsistency in planning scheme interpretation
- Variations in assessment quality between different planners
- Time-consuming manual reviews of planning controls
- Less commonly used planning controls being missed
- Triple handling of information when recording objections

Considerations:

- Need to identify which types of applications and provisions are low-complexity or low-risk enough to be managed by this, or “fit for automation or fit and clear enough to be encoded by “if this than that” type rules
- Need for human oversight to validate AI assessments
- Maintaining the Planner’s professional role while augmenting their capabilities
- Risk of over-reliance on AI without understanding its limitations
- Balance between standardisation and recognising unique case aspects
- Must account for frequently changing planning controls

USE CASE: Enhanced geospatial analysis

Opportunities:

- Create 3D visualisation of proposed developments in their actual context
- Automatically check shadow impacts against neighbouring properties
- Develop 3D maps of all developments and sites
- Scan and analyse site information, vegetation, and adjacent properties
- Compare applications with aerial imagery to verify accuracy of submissions
- Validate building envelope compliance through automated measurements

Challenges addressed:

- Manual site visits being time-intensive
- Difficulty in visualising impacts on adjacent properties
- Shadow analysis problems not being caught until late in the process
- Inaccurate site information in applications
- Height and view sharing issues requiring extensive manual checking
- Planning permits requiring high-quality geospatial data for effectiveness

Considerations:

- Integration with existing GIS systems
- Data quality, availability and currency of geospatial information
- Cost of 3D modelling capabilities
- Privacy concerns regarding detailed property information
- Appropriate level of detail needed for different application types.

USE CASE:
Referral management

Opportunities:

- AI to identify all mandatory internal and external referrals automatically or suggest these to action
- Accelerate referral processes by pre-filling responses for standard cases using application document data
- Monitor referral timeframes and automatically prompt for responses
- Connect with other authorities' systems for faster information exchange
- Auto-generate standardised referral requests with relevant application details

Challenges addressed:

- Speed issues in accessing referrals
- Missed permit triggers and obscure permit requirements
- Delays waiting for external authorities to respond
- Double or even triple handling of information across council departments

Considerations:

- Integration needs across different council systems, including customer record management (CRMs), email platforms
- Maintaining appropriate human oversight for complex referrals
- Protecting private information when sharing with external agencies
- Balancing automation with professional judgment and human oversight

USE CASE: Applicant communication automation

Opportunities:

- Generate tailored communications based on application progress
- Automate notifications when referral responses are received
- Create reminders for applicants to respond to information requests
- Develop timeframe-sensitive communication workflows
- Automatically update applicants on assessment progress

Challenges addressed:

- Frustration for applicants regarding timeframes to respond
- Request for Information (ROI) processes being manual and time-consuming
- Duplication across IT systems causing communication gaps
- Tracking new lodgements requiring manual intervention
- Need for reminder systems for application expiry dates
- Administrative burden of basic communication tasks

Considerations:

- Maintaining appropriate tone and clarity in automated communications
- Ensuring automated systems don't replace necessary or helpful direct communication
- Tracking communication history across multiple channels or council systems
- Integration between email systems and planning databases.

USE CASE: Templated report drafting and generation

Opportunities:

- AI can begin drafting assessment reports as applications progress according to standardised Council templates
- Populate property details, planning controls, and referral responses automatically
- Generate standard conditions for common application types
- Identify relevant VCAT cases like the current application if appropriate
- Include a space for summarised objections and categorise by common themes

Challenges addressed:

- Time-consuming report writing
- Inconsistent application of conditions

- Copying and pasting errors in conditions
- Summarising objections being labour-intensive with large numbers
- Difficulty in maintaining consistent quality of assessment reports
- Need for providing summary briefings to councillors

Considerations:

- Maintaining planner oversight and accountability
- Ensuring reports reflect proper assessment rather than just template content
- Keeping templates current with planning scheme changes
- Quality control mechanisms for AI-generated content
- All final decision-making to humans rather than AI.

USE CASE: Adjacent property and environmental context analysis

Opportunities:

- AI to analyse and report on adjoining land uses and developments
- Identify ongoing applications on nearby properties
- Assess cumulative impacts of multiple developments in an area
- Analyse vegetation/green space and other significant landscape elements
- Scan property information to identify heritage considerations
- Review site history and previous applications

Challenges addressed:

- Urban planning challenges in understanding adjacent properties
- Context of vegetation and landscape being missed
- Time spent researching surrounding properties
- Difficulty in assessing cumulative development impacts
- Understanding complex subdivision conditions
- Cultural heritage plans needing to be included in assessment

Considerations:

- Privacy and data protection considerations
- Integration with various data sources including spatial and aerial or other image data
- Accuracy of historical information and potential bias in applying historical patterns to new assessments
- Need for human judgment in assessing subjective impacts

Planning Phase: Notification Period

USE CASE: Notification distribution automation

Opportunities:

- AI [or digital automation workflows] can automate the generation and distribution of notification letters
- Identify properties within required notification radius automatically
- Generate maps of adjoining properties to be notified
- Extract relevant application data to include in notifications, and make information appropriate to send by removing private or sensitive details
- Provide alternative delivery methods beyond traditional mail where this is appropriate

Challenges addressed:

- Heavy administrative burden of notice preparation
- Ensuring all relevant properties receive notifications
- Time-consuming process of generating notification lists
- Inconsistency in notification content across applications

Considerations:

- Ensure notifications meet legal requirements
- Maintain records of all notifications for compliance
- Balance automation with personalisation needs
- Consider privacy requirements for address data
- Ensure integration with existing council systems

USE CASE: Objection Analysis and Summarisation

Opportunities:

- AI can analyse and categorise objections by themes and issues
- Generate summaries of large volumes of objections
- Identify common concerns across multiple submissions
- Compile standardised reports for planners and councillors
- Extract relevant planning considerations from objections

Challenges addressed:

- Large volume of objections becoming overwhelming
- Time spent processing submissions (reportedly up to a full day per 5 objections)
- Triple handling of information when recording objections
- Need for consistent summarisation across different applications
- Administrative burden of managing objections

Considerations:

- Maintain appropriate human oversight
- Ensure all objections are properly acknowledged
- Keep records of the original submissions alongside summaries, and assign human review to ensure original submissions are correctly summarised and represented
- Verify contact details are correctly captured

USE CASE: Notification exemption determination

Opportunities:

- AI can help identify which applications are exempt from notification
- Determine aspects of applications or proposals that might be exempt
- Flag applications with unusual exemption requirements for human assessment
- Support consistency in notification rules

Challenges addressed:

- Complexity around determining what to advertise/notify
- Inconsistent application of exemption rules, where there are clear rules that should be adopted as standard

Considerations:

- Maintain human judgment for edge cases or applications that might not be easily recognised for exemptions.
- For example, AI tools that support notification exemption decisions must account for significant variation in how new Clauses 52 and 55 are interpreted across councils. While some applications may appear to meet objective criteria, discretionary assessments or minor variations often require human judgment that AI may not reliably replicate. Many exemptions depend on complex, conditional logic—such as overlays, zone schedules, or local policies—which can be difficult to codify consistently. As a result, AI should be used cautiously in this space, with strong human oversight and clear pathways for planner review in edge cases.

- Ensure AI recommendations include rationale
- Keep exemption rules updated in the system
- Regular auditing of exemption decisions

USE CASE: AI-augmented councillor and decision-maker briefing

Opportunities:

- AI can generate customised briefings for councillors highlighting key issues
- Summarise VCAT practice notes relevant to applications
- Pull together or identify related cases for context

Challenges addressed:

- Laborious process of creating council briefings
- Need for consistent information presentation
- Difficulty in highlighting most relevant issues
- Time spent by planners preparing council materials
- Communication challenges between planners and councillors

Considerations:

- Maintain human interpretation, analysis and judgement in the creation and editing of council briefings
- Ensure reports remain accurate and balanced and understandable for councillors
- Maintain appropriate level of detail to provide for decision-making
- Include relevant planning policy context
- Support rather than replace professional judgment

Planning Phase:
Technical Assessment and Notification

USE CASE: Objection and referral synthesis for report

Opportunities:

- AI can synthesise objections and referral comments into standardised formats in the report template
- Identify planning considerations from various objections to include in report
- Compile and organise referral responses for inclusion in reports

Challenges addressed:

- “Writing a report is one of the biggest parts” of planners’ work
- “Grunt work” of synthesising objections and referral comments
- Time spent on repetitive writing tasks
- Ensuring all valid concerns are properly addressed

Considerations:

- Maintain accuracy in representing community concerns
- Ensure all substantive issues are captured
- Preserve context and nuance where important
- Support rather than replace Planner analysis
- Making sure Planners still must “hold the pen” when working on the report, even if AI is creating the first draft of some of it

USE CASE: Report quality and consistency enhancement

Opportunities:

- AI can check reports for completeness and accuracy
- Simplify planning language to improve accessibility, while preserving planning-specific terms and meaning to ensure correct planning terminology is used consistently
- Flag potential issues or inconsistencies in draft reports
- Potential for reports to be shared across councils for more consistency, improvements in the field

Challenges addressed:

- “Planning lingo” is not clear sometimes
- Inconsistent quality across different planners’ reports
- Technical accuracy issues in document preparation
- Need for standardised approaches to similar applications
- Ensuring comprehensive assessment of all relevant factors

Considerations:

- Balance simplification with technical accuracy and ensure appropriate technical language is preserved
- Maintain human judgment for edge cases or complex applications
- Support rather than replace editorial and senior planners’ review
- Preserve the planner’s voice and professional judgment

USE CASE: Automated redaction and privacy protection

Opportunities:

- AI can automatically redact, or identify and suggest redactions of personal information from reports and notifications
- Ensure compliance with OVIC rules and privacy regulations
- Identify and protect sensitive information in objections and submissions
- Maintain appropriate privacy levels for different contexts (online vs. in-person)
- Support councils in meeting data governance requirements

Challenges addressed:

- Time spent on redacting personal information
- Privacy compliance concerns with information handling
- Different privacy requirements for different contexts
- Risk of inadvertently publishing sensitive information can be potentially mitigated

Considerations:

- Ensure compliance with privacy legislation, with legal expertise to set this up
- Maintain clear governance and audibility of information handling
- Establish appropriate verification mechanisms so humans can always check redactions are appropriately managed

Planning Phase:
Final Decision Making and Permits

- Balance public interest with individual privacy, if information is available in-person or on-site but not online, what does this mean?
- The reliability of complete and appropriate privacy-preserving redaction for different document types (e.g., applications, objections, and supporting materials in an application) may be hard to guarantee
- Implement robust privacy protections for sensitive information, including disposal and deletion of online and database records where needed
- Incorporate appropriate verification steps for critical communications

USE CASE: ND and Permit document population

Opportunities:

- AI can automate the transfer of conditions from reports to notices of decision (ND) and permits
- Eliminate manual duplication of information between different documents
- Ensure consistency between conditions in various documents
- Automate population of similar information across different forms
- Fix formatting issues in permits and conditions automatically
- If decisions go to VCAT, potential for information to be populated across VCAT forms Councils need to provide information to.

Challenges addressed:

- Redundant data entry across multiple document types causing inefficiency
- Inconsistent formatting between notices of decision and final permits
- Manual copy-paste errors when transferring conditions between documents
- Time wasted on reformatting standard conditions for different document types
- Difficulty maintaining document version consistency throughout the process

Considerations:

- Ensure timing of document generation aligns with process requirements, so final NDs and permits are generated or completed only when the whole process is finalised and ready for information transfer
- Maintain proper version control between drafts and final documents
- Include appropriate verification steps for critical permit conditions
- Address formatting inconsistencies across document types
- Establish clear rules for condition transfer between documents
- Ensure human oversight and review of all documentation before finalisation and sending out

USE CASE: Decision consistency support

Opportunities:

- AI can collate previous decisions on similar applications into a library of decisions to draw on as training material for Planners or future AI models
- Infer principles behind similar decisions to support consistency
- Provide decision support based on historical patterns
- Flag potential inconsistencies with previous similar decisions
- Suggest appropriate conditions based on similar approved applications

Challenges addressed:

- Inconsistent decision-making between different planners handling similar applications
- Limited capacity for planners to research historical precedents thoroughly
- Difficulty maintaining institutional knowledge when staff changes occur
- Inability to efficiently access and analyse previous similar decisions
- Time constraints preventing comprehensive review of relevant precedents

Considerations:

- Maintain appropriate role for professional judgment and recognition of complex applications and edge cases
- Ensure historical decisions align with current policy
- Provide context for why previous decisions were made, especially if similar applications resulted in different decisions
- Support and augment the knowledge base for Planners rather than replace Planner critical judgement and decision-making

USE CASE: Post-decision monitoring and management

Opportunities:

- AI can track post-decision lodgements and amendments
- Identify changes on plans post-decision
- Measure progress on permit conditions (e.g., trees being planted)
- Monitor compliance to permits through aerial scanning and compare as-built development with approved applications

Challenges addressed:

- Difficulty tracking compliance with permit conditions systematically
- Limited resources for physical inspections of all developments
- Inconsistent monitoring of condition implementation across projects
- Manual processes for comparing as-built development with approvals
- Inefficient management of post-approval documentation and amendments

Considerations:

- Establish clear parameters for compliance assessment
- Maintain appropriate verification of AI-detected issues
- Ensure privacy and property rights are respected in monitoring
- Develop appropriate escalation processes for non-compliance
- Balance automation with appropriate professional oversight

Inappropriate use cases of AI to support council planning processes

As well as capturing the desirable use cases for AI and automation to support councils in the planning process, the following use cases have been identified as no-go zones, or inappropriate use cases for AI.

INAPPROPRIATE USE CASE: Complex policy interpretation of application assessment and referrals

Why it's inappropriate:

- Concerns about "missing referrals has serious consequences"
- Complexity of planning schemes can require interpretation, currently there is inconsistency around interpretation of the planning scheme and AI won't be able to "fix" this.
- Planning schemes contain provisions requiring a professional judgment to balance social, environmental and economic concerns on place-based policy goals
- Inconsistent interpretation approaches across different councils
- Historical planning controls often require contextual understanding
- Grey areas in planning provisions don't lend themselves to algorithmic interpretation
- Need for professional interpretation of planning intent beyond literal wording

Why humans need to do this:

- Deep understanding of planning legislation intent, beyond the literal wording
- Ability to interpret and navigate complex policy
- Professional responsibility for interpretation
- Contextual understanding of how policies interact
- Experience with previous interpretations and outcomes

INAPPROPRIATE USE CASE: Final decision-making on objection validity

Why it's inappropriate:

- Council reps emphasise "HUMAN ANALYSIS AND OVERSIGHT" for objection analysis
- Legal ramifications require human judgment
- Staff express concerns about being replaced, especially those with attention to detail
- Council representatives note the "risk that it takes away the thinking from the planners"
- Complex legal understanding required for determining objection validity
- Concerns about "objections legal ground" requiring human judgment
- Concerns that councils may misuse LLMs and generative AI chatbots by asking chatbots for advice around planning issues, and may face legal issues because of inaccurate, unclear, incorrect gen-AI outputs.
- Risk of AI misinterpreting legal implications without proper context
- Need for due diligence that cannot be automated
- Reputational damage risks noted if legal interpretations are incorrect

Why humans need to do this:

- Legal expertise and interpretation of planning schemes
- Understanding nuanced community concerns
- Ability to weigh objections against policy frameworks
- Professional responsibility for legal determinations
- Understanding of case law and precedents
- Assess potential appeal risks
- Discretionary judgment based on experience
- Accountability for decisions that affect communities
- Building trust with community stakeholders
- Explaining reasoning behind decisions
- Managing community expectations and concerns
- Navigating political sensitivities in planning decisions

INAPPROPRIATE USE CASE: Substitution for consultation meetings and mediation

Why it's inappropriate:

- Council reps note "chat/consult meetings with objectors/applicants following advertising often guides a decision or a condition on a permit"
- Human relationship-building is critical for mediation
- Complex negotiation between competing interests requires human touch
- Understanding emotional and non-verbal cues in meetings
- Need for professional judgment in finding compromise solutions

Why humans need to do this:

- Interpersonal skills to manage conflicts
- Ability to negotiate and find middle ground
- Professional judgment in weighing competing concerns
- Building trust with community members
- Understanding local context beyond written submissions

INAPPROPRIATE USE CASE: Final quality assurance for reports

Why it's inappropriate:

- Council reps emphasise maintaining "human touch" for review
- Senior/Lead review role mentioned as requiring professional judgment
- Council planning teams need to have verification of AI outputs to maintain professional responsibility for report quality

Why humans need to do this:

- Quality assurance from experienced practitioners
- Ensuring consistency with council policy and direction
- Mentoring and development of planning staff
- Accountability for final recommendations

INAPPROPRIATE USE CASE: Final planning determinations and discretionary judgments

Why it's inappropriate:

- Ultimately, place-making, planning, development and local context evaluation require human judgment
- Professional assessment involves complex value judgments beyond data analysis
- Risk of deskilling Planners through over-automation of core functions
- Need for human accountability in discretionary decision-making
- Planning decisions involve balancing competing community interests

Why humans are needed:

- Professional judgment in balancing competing objectives
- Understanding local context and community needs
- Applying tacit and experiential knowledge that isn't codified or documented or available in AI modelling
- Accountability for planning decisions to community
- Ability to weigh qualitative factors not easily quantified
- Professional responsibility for planning outcomes

Appendix E

Glossary of Terms

Term	Plain language description
AI (Artificial Intelligence)	The development of computer systems that can perform tasks typically requiring human intelligence, such as learning, reasoning, and problem-solving.
Automation	The use of computer systems to perform routine, repetitive tasks according to predefined rules without human intervention each time.
Bias	A pattern in how an AI system behaves, often based on the data it was trained on. Bias isn't always negative, but it needs to be carefully managed, so outcomes are fair and accurate
Capability maturity	How ready or experienced a council is in adopting new technologies like AI—including things like staff skills, policies, and systems.
Codification	Turning planning rules into a more structured, clear, and consistent format. This can help make parts of the system easier to automate or digitise.
Customer service applications	AI tools that help with routine interactions between councils and the public—like answering planning enquiries or checking if an application is complete.
Data governance	The rules and processes that ensure data is handled safely, legally, and responsibly—especially important when it includes personal or sensitive information.
Discretionary decision-making	Decisions in planning that require judgment, because the rules aren't black and white. These are often the complex, context-sensitive parts of planning.
Generative AI	A kind of AI that creates new content, such as summaries, responses, or advice, based on what it has learned from past data it has been trained to use.
Greenlight	A digital platform used by some councils to manage planning and building permit applications online.
Large Language Models (LLMs)	Advanced AI systems trained on vast amounts of text data that can generate human-like text responses.
MAV (Municipal Association of Victoria)	The peak body representing local governments in Victoria.
Office of the Victorian Information Commissioner (OVIC)	The agency responsible for overseeing privacy, data protection, and freedom of information in Victoria—referenced in the report in relation to data governance and record-keeping.
Pathway	A planning and permit management software system used by some Victorian councils to handle applications and workflows.
Planning controls	Rules that define what can be built or developed in an area and under what conditions.
Planning scheme interpretation	Reading and applying the rules in a planning scheme to understand what is or isn't allowed on a specific site.
Technology One	A widely used enterprise software platform by local councils in Victoria, including modules for planning and financial management.
Use case	A specific, practical example of how AI can be used to solve a real planning-related problem.
Victorian Civil and Administrative Tribunal (VCAT)	A tribunal where planning decisions made by councils can be appealed by applicants or community members.

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