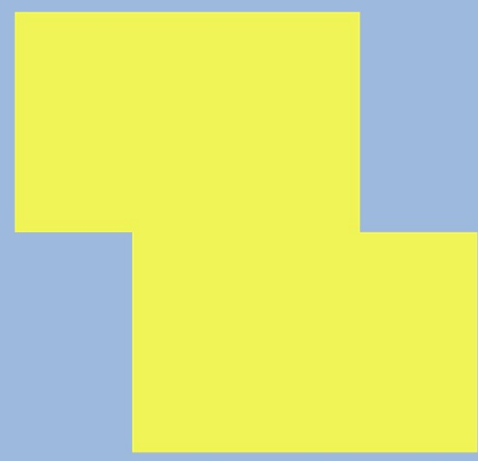
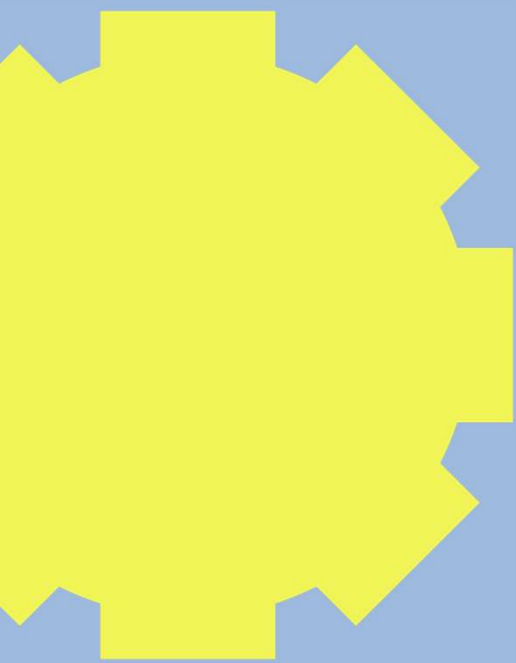
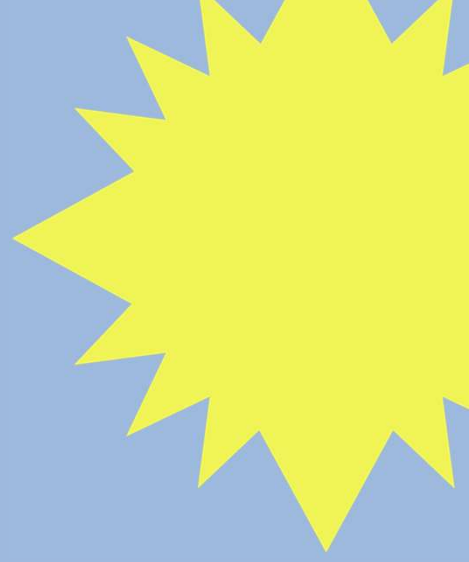


Use case library for AI in planning for councils

October 2025



Contents

1	INTRODUCTION	2
2	PLANNING PHASE: PRE-APPLICATION SUPPORT AND APPLICATION LODGEMENT	3
2.1	USE CASE: APPLICATION COMPLETENESS VERIFICATION	3
2.2	USE CASE: FEE ASSESSMENT AND PAYMENT MANAGEMENT	3
2.3	USE CASE: PRE-APPLICATION GUIDANCE FOR APPLICANTS	4
2.4	USE CASE: CUSTOMER SERVICE ENHANCEMENT	4
2.5	USE CASE: DATA ACCURACY VERIFICATION	5
2.6	USE CASE: APPLICATION CLASSIFICATION AND ASSIGNING/DELEGATION	5
2.7	USE CASE: TECHNICAL COMPLEXITY ASSESSMENT	6
2.8	USE CASE: DOCUMENT ANALYSIS AND MANAGEMENT	6
2.9	USE CASE: INFERRING INFORMATION FROM HISTORICAL CONTEXT AND DATA	7
2.10	USE CASE: SYSTEM INTEGRATION AND INTER-COUNCIL DATA SHARING	7
3	PLANNING PHASE: INITIAL ASSESSMENT	8
3.1	USE CASE: AI- AUGMENTED PLANNING SCHEME ASSESSMENT	8
3.2	USE CASE: ENHANCED GEOSPATIAL ANALYSIS	8
3.3	USE CASE: REFERRAL MANAGEMENT	9
3.4	USE CASE: APPLICANT COMMUNICATION AUTOMATION	9
3.5	USE CASE: REFERRAL MANAGEMENT	10
3.6	USE CASE: TEMPLATED REPORT DRAFTING AND GENERATION	10
3.7	USE CASE: ADJACENT PROPERTY AND ENVIRONMENTAL CONTEXT ANALYSIS	11
4	PLANNING PHASE: NOTIFICATION PERIOD	12
4.1	USE CASE: NOTIFICATION DISTRIBUTION AUTOMATION	12
4.2	USE CASE: OBJECTION ANALYSIS AND SUMMARISATION	12
4.3	USE CASE: NOTIFICATION EXEMPTION DETERMINATION	13
4.4	USE CASE: AI-AUGMENTED COUNCILLOR AND DECISION-MAKER BRIEFINGS:	13
5	PLANNING PHASE: TECHNICAL ASSESSMENT AND NOTIFICATION	14
5.1	USE CASE: OBJECTION AND REFERRAL SYNTHESIS FOR REPORT	14
5.2	USE CASE: REPORT QUALITY AND CONSISTENCY ENHANCEMENT	14
5.3	USE CASE: AUTOMATED REDACTION AND PRIVACY PROTECTION	15
6	PLANNING PHASE: FINAL DECISION MAKING AND PERMITS	16
6.1	USE CASE: ND AND PERMIT DOCUMENT POPULATION	16
6.2	USE CASE: DECISION CONSISTENCY SUPPORT	16
6.3	USE CASE: POST-DECISION MONITORING AND MANAGEMENT	17
7	INAPPROPRIATE USE CASES OF AI TO SUPPORT COUNCIL PLANNING PROCESSES	18
7.1	INAPPROPRIATE USE CASE: COMPLEX POLICY INTERPRETATION OF APPLICATION ASSESSMENT AND REFERRALS 18	
7.2	INAPPROPRIATE USE CASE: FINAL DECISION-MAKING ON OBJECTION VALIDITY	18
7.3	INAPPROPRIATE USE CASE: SUBSTITUTION FOR CONSULTATION MEETINGS AND MEDIATION:	19
7.4	INAPPROPRIATE USE CASE: FINAL QUALITY ASSURANCE FOR REPORTS	19
7.5	INAPPROPRIATE USE CASE: FINAL PLANNING DETERMINATIONS AND DISCRETIONARY JUDGMENTS	20

1 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.

2 Planning Phase: Pre-Application Support and Application Lodgement

2.1 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

2.2 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

2.3 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

2.4 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

2.5 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

2.6 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

2.7 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

2.8 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

2.9 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?

2.10 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

3 Planning Phase: Initial Assessment

3.1 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

3.2 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

3.3 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

3.4 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

3.5 USE CASE: Referral management

Opportunities:

- AI to identify all mandatory internal and external referrals automatically or suggest these to planners 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 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

3.6 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

3.7 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

4 Planning Phase: Notification Period

4.1 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

4.2 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

4.3 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

4.4 USE CASE: AI-augmented councillor and decision-maker briefings:

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 councillor

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

5 Planning Phase: Technical Assessment and Notification

5.1 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

5.2 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

5.3 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
- 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

6 Planning Phase: Final Decision Making and Permits

6.1 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

6.2 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

6.3 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

7 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.

7.1 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

7.2 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

7.3 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

7.4 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

7.5 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