**COuncil PLANNING   
DIGITAL Survey**

****2021

**Executive Summary for Councils**

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# Background and methodology

## Introduction

Thank you to all Victorian Councils for participating in the 2021 Digital Planning Survey for The Department of Environment, Water, Land and Planning (DELWP).

We are pleased to present you with this overview of the findings to assist with your own benchmarking and digital planning activities.

A number of Councils indicated that they would be happy to be identified in the data. However, we have kept the data within this report deidentified to maintain the anonymity of those who didn’t want to be identified. Those Councils who indicated that they were happy to be identified will be sent identified data separately.

## Background

DELWP identified the need to develop an understanding of the current IT landscape, digital maturity, opportunities, and barriers to delivering or enhancing online planning services within the 79 Victorian councils. This information will be used to inform short, medium and long-term opportunities to enhancing the online planning services, thereby improving the customer experience and reduce delays for the Victorian Planning community. The insights will also inform the establishment of a $4 million grants program to uplift the digital services and capability in Victorian councils over the next four years.

The aims of this research project were to:

* Understand the range of different experiences of Victorian council planning departments;
* Identify opportunities to streamline and digitise land use planning approvals and reduce delays; and
* Inform the reform agenda for the Planning Reform Program (planning rules, decision pathways, approval processes).

## Methodology

All Victorian councils participated in this council digital audit, conducted in July – September 2021. As such, the data reported herein shows a snapshot in time as at quarter three in the 2021 calendar year. The process to achieve 100% participation was:

For ease of analysis and understanding differences in capability and need, councils have been grouped into metropolitan, interface and rural (see appendix 2).

## Coverage

Given the coverage is 100% of the population of all councils, there is no need to consider error margins or confidence intervals in the data analysis; the results show the true situation for the entire population.

For ease of analysis and understanding differences in capability and need, councils have been grouped into metropolitan, interface and rural (see appendix 2).

Most interface Councils have more than 40 full time equivalent staff in their planning department, whilst two thirds of rural councils have less than 10.

Figure 1. Number of full-time equivalent staff in planning departments, by council location

Almost all councils (91%) indicated that they have more statutory planners than strategic planners. When a council has both, there are on average 2.7 times as many statutory planners than strategic planners.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Number of Councils with staff | Average number of staff | | | |
|  | **Total** | **Metro** | **Interface** | **Rural** |
| Strategic planners | 60 | 4.08 | 6.13 | 7.6 | 1.96 |
| Statutory planners | 77 | 11.29 | 19.34 | 22.16 | 4.27 |
| Urban Design | 23 | 1 | 1.63 | 2.3 | 0.04 |
| Heritage Planner | 18 | 0.3 | 0.46 | 0.36 | 0.17 |
| Economic Planner | 5 | 0.1 | 0.15 | 0.33 | 0.01 |
| Transport Planner | 12 | 0.46 | 1.04 | 0.57 | 0.01 |
| Social Planner | 14 | 0.49 | 0.57 | 1.43 | 0.19 |
| Enforcement Officer | 50 | 2.08 | 3.09 | 4.56 | 0.7 |
| Admin / executive assistants | 71 | 3.92 | 6.1 | 5.84 | 2.09 |
| Student | 27 | 0.48 | 0.92 | 0.46 | 0.16 |
| *Base* |  | *79* | *24* | *10* | *45* |

Table 1 average number of staff in different roles, by council type

# Summary of findings

## Technology and Landscape

Whilst almost all councils (96%) have some form of online services for the community, there were higher levels of adoption of online planning permit applications (through an online form, rather than a downloadable PDF) among metro councils. Less than half of rural councils have online planning application forms. Furthermore, most metro councils have some form of integration into council systems for their initial planning application forms, whilst few rural councils have implemented this. Amongst rural councils, most (68%) receive initial planning applications as a PDF form over email.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Metro | Interface | Rural |
| Apply for planning permit online (online form) | 96% | 70% | 42% |
| Initial planning application through online forms integrated into Council systems | 75% | 56% | 13% |
| Initial planning application through emailed PDFs | 13% | 22% | 68% |

The most commonly provided online planning services are downloadable permit application forms, pre-application information and submission of objections.

Figure 2. Proportion of councils providing online planning services to residents

|  |  |  |  |
| --- | --- | --- | --- |
|  | Metro | Interface | Rural |
| Downloadable permit application forms | 75% | 80% | 89% |
| General enquiries | 88% | 70% | 53% |
| Pre-application information | 83% | 80% | 49% |
| Submit objections | 92% | 80% | 44% |
| Apply for planning permit | 96% | 70% | 42% |
| Fee payments | 96% | 70% | 38% |
| VicSmart | 92% | 70% | 36% |
| Requests for extensions of time | 71% | 80% | 27% |
| Secondary consent plans | 71% | 70% | 24% |
| Amend applications (section 72) | 67% | 60% | 24% |
| Account & track progress | 46% | 60% | 29% |
| Request for further information | 50% | 50% | 27% |
| Apply for building permit | 50% | 20% | 31% |
| Certificate of compliance | 13% | 60% | 13% |
| Apply for Heritage permit | 38% | 0% | 11% |
| Contribution payments | 42% | 0% | 9% |
| Other | 33% | 20% | 18% |
| None | 0% | 0% | 7% |
| *Base* | *24* | *10* | *45* |

Table 2. Proportion of councils providing online services to residents by council type

The top 5 planning software used by Victorian councils are:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | |  |  |  |  |
| **Infor Pathway** | | **Technology One** | **Civica Authority** | **E-vis Greenlight** | **Open office** |
| **Number of Councils** this software is used by… | | | | | |
| **23** | | **15** | **12** | **10** | **8** |
| More often metro | | More often interface and rural | Evenly split across regions | More often rural and smaller councils | Often used in conjunction with Tech One |
| Average number of **different planning functions** software is used for… | | | | | |
| **8.2** | **7.1** | | **5.3** | **5.3** | **5.1** |
| Average **satisfaction** rating… (out of 10, where 10 is extremely satisfied) | | | | | |
| **5.14** | **5.42** | | **2.22** | **6.67** | **5.67** |

|  |  |  |
| --- | --- | --- |
|  | 73% | of councils say their planning software links to other software at council. This is more common amongst interface councils and councils with larger planning teams. Linkages are commonly for document management, sourcing ratepayer information and GIS / mapping. |
|  | 38% | of councils say their planning software **links to external** parties; mostly DELWP and referral agencies. This is less common amongst rural councils. Usually this links using web services, batch jobs, and manual file imports and exports. Few are using an API (13% more common for interface councils, 30%). |
|  | 19% | of councils say they frequently use the **Amendment Tracking System** (ATS, weekly or more often). Smaller rural councils sometimes engage consultants to do this. Councils suggested there are opportunities to improve the ATS user interface, authoring system, keystone integration and imports/exports (Word format). |

Initial public notification almost always occurs on site, through direct mail and on the council website. Receiving feedback and providing updates predominantly occurs over email and phone calls. Less than half of council planning departments use online engagement platforms for receiving feedback, with the main ones being The Hive and Engagement HQ / Bang the Table.

## Data and Reporting

|  |  |  |
| --- | --- | --- |
|  | 72% | are still using paper format for planning permit applications, although all but one use electronic as well. 28% have transitioned to electronic only (more common in rural areas and for smaller councils). |
|  | 76% | of councils **share planning data with other teams and/or external organisations**. This is more common amongst interface councils. The most common data sharing is application data, with internal teams, through file sharing or email. Spatial data is also sometimes shared with state government and other councils, mostly over email. |
|  | 48% | of councils **integrate data from external sources**. This is less common for rural and smaller councils. Most data integration is GIS / spatial, planning amendment data, planning schemes and overlays, and subdivision data. |
|  | 20% | of councils have a **dedicated data integrity officer**. This is more common amongst larger councils. The most common method for data quality management is to actively follow-up contact errors.  Figure 3. Data quality management |
|  | 10% | of councils include a **statement about data sharing of planning permit data with DELWP in their privacy policy**. |
|  | 74% | of councils said they are **interested in 3D modelling service, if it is free**. Rural councils less often see this as useful. |
|  | 66% | **of councils** say it is **essential for PPARS to allow them to see individual planning application data**, and 58% say it is essential to be able to update it. 72% rate the PPARS data as useful (rating of 7-10 / 10 where 10 is extremely useful). |

The main tools used for performance monitoring are PPARS and Excel (each used by 30+ councils), and 12 councils said they use PowerBI.

The priorities for permit reporting improvements are trends over time and the ability to export summary data.

Figure 4. Proportion of councils who ranked these potential improvements to planning permit reporting as most important

Most councils have in-house project management, data management and website design skills, however only half have system development and testing or data visualisation skills.

Figure 5. Internal digital skills

## Digital Capability

Overall, it is generally perceived that digital capabilities in councils are good, particularly in terms of thinking about digital capabilities when recruiting, and tailoring planning application forms and tools to user needs. Although rural councils more often see room for improvement. Areas with greater opportunity for improvement are in providing staff with opportunities for developing digital capability, agile delivery practices, and embedding digital capability into strategy.

|  |  |  |
| --- | --- | --- |
|  | 53% | of councils have a dedicated team member to manage publicly available online planning resources. This is more common amongst interface councils and less common amongst rural councils. When this is managed by an external team it is usually engagement or IT. |
|  | 44% | of councils have a **central project office** **for managing digital projects**. More than half do this in their individual business units (60%), and 23% do both (central office and business units). More rural councils are falling behind in terms of implementing digital strategies within their organisations. |

The main opportunities for digitisation lie with:

* Mail-outs, public notices and advertising;
* Application lodgements; and
* Fee payments and refunds.

Plans and projects currently being undertaken by councils to improve digital capabilities or planning processes include:

* Working on end to end process (or investigating) improvement, including simplifying workflows, digital modernisation, online form integration and planning portal (46 councils);
* Permit application lodgements (15 councils); and
* Online tracking for planning applications/web tracking and updates for customers (7 councils).

Improving online materials and data standardisation is currently being, or soon to be, undertaken by most councils. 3D building information models are clearly on the horizon as a major digital capability upskill in the near future.

Figure 6. Current progress in enhancing digital capability

## Strategic Direction

|  |  |  |
| --- | --- | --- |
|  | 43% | of councils have a digital strategy or roadmap. This is far more common amongst metro councils (79%) than rural (22%). |
|  | **51%** | of councils are planning to **make improvements to their systems** in the future. 44% admit their systems could be more advanced but are not planning any upgrades (mostly due to not having the resources to do so). Only 4% feel their systems are already advanced. |
|  | **33%** | of councils feel their organisation is a **leader or better than average** in terms of their use of digital tools and planning. More rural councils feel they are falling behind. |
|  | **19%** | of councils have conducted/are conducting a **software review in 2021**, and 15% have recently reviewed their software (2020). 18% are planning a review in 2022. |

The most important selection criteria when assessing planning software are integration with other council systems and user interface.

Figure 7. Software selection criteria, mean importance rating out of 5 (5 is extremely important)

# Gaps and opportunites summary

The following gaps and opportunities information was provided to DELWP to assist with their planning.

## Technology and Landscape

|  |  |
| --- | --- |
| Online services | 1. Help rural councils transition to online forms for processing initial planning permit applications (in line with customer preferences). |
| Software vendors | 1. Key challenges with planning software revolve around development / functionality not being in line with planning needs and newer technologies (particularly for Infor Pathway and Authority), and poor customer service response times (particularly for Authority). 2. Technology One is sometimes seen as costly, and the requirement for updates to be done externally can reduce satisfaction with the software. 3. For Pathway, the complicated user interface and level of expertise required can be a barrier. 4. Extensive sharing of planning software occurs across council, particularly with building, rates, local laws and customer service. 5. On the whole, rural councils are not as happy with their technological solutions for end to end planning, however those who are using Greenlight are generally happier with their vendor. 6. Pathway, Greenlight and Content Manager seem to be the more popular options amongst those who have recently reviewed their planning software. |
| Linkages | 1. Rural councils more often have stand-alone software to manage their planning permits, and less commonly link to external parties, suggesting that they could use additional assistance in understanding opportunities for, and implementing, cross-organisation and external data linkages. 2. Uptake of API technology for linkages is relatively low at this point in time, with most using manual processes. Where the process is automated, this is usually using web services or batch jobs. |
| Engagement channels | 1. Less than half of councils are using website engagement platforms to receive feedback from the community on planning matters. When they do, the main software used is usually separate to the planning management software. |
| Amendment tracking system | 1. Often councils don’t use the Amendment Tracking System (ATS) on a frequent basis, so the level of complication inherent in the system can be a challenge (as people have to remember how to do things). 2. There would also appear to be a lot of opportunities to reduce the burden of this system through integration with Word (uploads and exports), and usability enhancements to Keystone. |

## Data and Reporting

|  |  |
| --- | --- |
| Data storage | 1. All but one council is already using electronic means of storing planning applications, therefore there is little need to help councils transition to electronic. 2. Most are also still using paper application storage as well as electronic, so there is widespread multiple record-keeping occurring. 3. There are a number of councils who are still undertaking high risk data storage activities such as storing hard copies off-site or storing electronic information off-site (and potentially in a location that is outside of Victoria, therefore not conforming to Victorian Privacy Information Principles). |
| Quality control | 1. There is a clear opportunity for many councils to manage data quality through form validation. |
| Data sharing and integration | 1. Few councils have adopted API methods for file sharing, therefore upskilling may be required for councils to use this method. 2. Data import and export is still commonly implemented manually. 3. Integration of data form external sources doesn’t occur amongst smaller planning teams, however as team sizes increase, so does the likelihood that they will integrate external data. |
| Performance monitoring and reporting | 1. PPARS is an important system for councils to assist in performance monitoring. 2. The most useful components for digital planning software when considering performance monitoring and reporting are being able to see trends over time and exporting of summaries into commonly used software (such as Excel or Word). |
| Privacy | 1. Few councils include a section relating to sharing planning data with DELWP, suggesting there is an opportunity to provide councils with default text to add to their policies. |
| PPARS | 1. It will be necessary to continue providing the opportunity for councils to update individual planning application data (PPARS) after submitting to DELWP. 2. It will be necessary to continue providing the opportunity for councils to generate PPARS reports to assist with performance monitoring. |
| 3D Modelling | 1. There is widespread interest in a 3D modelling service provided by DELWP, however few would be willing to pay for it. |

## Digital Capability

|  |  |
| --- | --- |
| Data management | 1. Digital management primarily happens in-house, with most councils having some capabilities within their planning teams. 2. Rural councils may need more support, with fewer having in-house digital capabilities. 3. Interface councils are leading the way with in-house digital capabilities. 4. Management of digital projects is likely to be quite siloed, although many will be working to an overarching policy or strategy. |
| Digital skills | 1. Rural councils will need more support with certain skillsets due to a lack of in-house digital capability, especially in the areas of data visualisation and reporting, 3D model creation, and systems / software development. 2. Around half of councils should be able to manage system development in-house, although a lot will need external support for this. 3. Smaller councils will need additional support to help them embed digital capabilities into strategy and upskill their workforces. |
| Digitisation opportunities | 1. The main upcoming opportunities for councils to enhance their digital capabilities are in 3D building information models, improving online materials, and guidance and standardising planning application data. |

## Strategic Direction

|  |  |
| --- | --- |
| Digital strategy | 1. Rural councils will need more support to help them improve their digital strategy. |
| Software review | 1. Over a third of councils will be reviewing their software in the next two years, therefore the landscape may evolve quickly. |

# Appendices

## Glossary

|  |  |
| --- | --- |
| ATS | Amendment Tracking System |
| CRM | Client Relationship Management |
| DELWP | Department of Environment, Land, Water and Planning |
| FTE | Full time equivalent |
| GIS | Geographic Information Systems |
| LGA | Local Government Authority |
| PPARS | Planning Permit Activity Reporting System |
| SPEAR | Surveying and Planning through Electronic Applications and Referrals |

## Region groupings

|  |  |  |  |
| --- | --- | --- | --- |
| Metropolitan | Interface | Rural | |
| Banyule | Cardinia | Alpine | Mildura |
| Bayside | Casey | Ararat | Moira |
| Boroondara | Hume | Ballarat | Moorabool |
| Brimbank | Melton | Bass Coast | Mount Alexander |
| Darebin | Mitchell | Baw | Moyne |
| Frankston | Mornington Peninsula | Benalla | Murrindindi |
| Glen Eira | Nillumbik | Buloke | Northern Grampians |
| Greater Dandenong | Whittlesea | Campaspe | Pyrenees |
| Greater Geelong | Wyndham | Central Goldfields | Queenscliffe |
| Hobsons Bay | Yarra Ranges | Colac-Otway | South Gippsland |
| Kingston |  | Corangamite | Southern Grampians |
| Knox |  | East Gippsland | Strathbogie |
| Latrobe |  | Gannawarra | Surfcoast |
| Manningham |  | Glenelg | Swan Hill |
| Maribyrnong |  | Golden Plains | Towong |
| Maroondah |  | Greater Bendigo | Wangaratta |
| Melbourne |  | Greater Shepparton | Warrnambool |
| Monash |  | Hepburn | Wellington |
| Moonee Valley |  | Hindmarsh | West Wimmera |
| Moreland |  | Horsham | Wodonga |
| Port Phillip |  | Indigo | Yarriambiack |
| Stonnington |  | Loddon |  |
| Whitehorse |  | Macedon Ranges |  |
| Yarra |  | Mansfield |  |

## Software used by planning function

The most common software used for the various planning functions within Victorian councils are in the following table. The far right column shows additional information about the software, including notable regional variations.

It should be noted that given this question prompted for people to write in the software used, it may be that actual usage is higher than that stated (as some may not have thought to mention a piece of software that they actually use).

|  |  |  |  |
| --- | --- | --- | --- |
| Manage online forms (n=61) | Infor Pathway | 25% | Metro 50%, Rural 10% |
| Open Forms | 13% |  |
| Technology One | 11% |  |
| Greenlight (E-vis) | 8% | Rural 13%, Metro 5% |
| Civica Authority | 7% | Interface 22% |
| Manage customer log-in (n=58) | None / N/A | 28% | Rural 44% |
| Infor Pathway | 26% | Metro 48%, others 11% |
| Technology One | 14% | Interface 50% |
| Greenlight (E-vis) | 10% | Rural 20% |
| Civica Authority | 7% |  |
| Manage planning permits (n=77) | Infor Pathway | 28% | Metro 54% |
| Technology One | 19% | Interface 60% |
| Greenlight (E-vis) | 16% | Rural 26% |
| Civica Authority | 14% |  |
| Open Office | 12% |  |
| SPEAR | 8% |  |
| Manage building permits (n=74) | Infor Pathway | 28% | Metro 54% |
| Technology One | 22% | Interface 63% |
| Greenlight (E-vis) | 19% | Rural 31% |
| Civica Authority | 12% |  |
| Open Office | 9% |  |
| Manage heritage permits (n=54) | None/NA | 35% | Interface 83% |
| Infor Pathway | 19% | Metro 41% |
| Greenlight (E-vis) | 13% | Rural 23% |
| Technology One | 11% |  |
| Open Office | 9% |  |
| Manage customers (CRM) (n=73) | Infor Pathway | 29% | Metro 50% |
| Technology One | 14% | Interface 30% |
| Civica Authority | 11% |  |
| CRM | 11% |  |
| Open Office | 10% |  |

Table 3. Main software used by planning functions

|  |  |  |  |
| --- | --- | --- | --- |
| Manage general inquiries (n=71) | Infor Pathway | 28% | Metro 46% |
| Technology One | 21% | Interface 44% |
| CRM | 11% |  |
| Civica Authority | 8% |  |
| Open Office | 8% |  |
| Merit | 8% |  |
| Manage infrastructure contributions (n=54) | Infor Pathway | 26% |  |
| Technology One | 20% | Interface 44% |
| None/NA | 20% | Rural 32% |
| Civica Authority | 15% |  |
| Collect payments (n=68) | Infor Pathway | 28% | Metro 54% |
| Technology One | 21% |  |
| Civica Authority | 15% |  |
| Open Office | 6% |  |
| Display/review development activity and building models (n=48) | Other | 33% | Intramaps, Weave, GIS |
| None/NA | 19% |  |
| Technology One | 8% |  |
| Infor Pathway | 8% |  |
| Prepare reports (dashboards, charts, etc.) (n=71) | Infor Pathway | 27% | Metro 42% |
| Microsoft office (incl. Excel) | 24% | Rural 32% |
| PowerBI | 24% |  |
| Technology One | 15% | Interface 40% |
| Civica Authority | 11% |  |
| Open Office | 10% |  |
| Greenlight (E-vis) | 8% |  |
| Project management (n=48) | Other | 38% | MS Project, Excel, Office. |
| Microsoft office (incl. Excel) | 23% |  |
| None/NA | 21% |  |
| Technology One | 6% |  |
| Manage documents (Document management system) (n=75) | Content manager (Kapish) | 29% |  |
| Other | 27% | MagiQ, Objective, MicroFocus |
| Technology One | 21% |  |
| TRIM | 20% |  |
| Sharepoint | 8% |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Enable front end and back end systems to talk to each other (middleware) (n=43) | Other | 40% | Dell Boomi, API, Direct integration |
| None/NA | 19% |  |
| Infor Pathway | 14% |  |
| Content manager (Kapish) | 12% |  |
| Technology One | 7% |  |
| Automated mail handling (sending bulk updates etc.) (n=51) | Bing | 33% | Metro 50% |
| None/NA | 22% | Rural 38% |
| Other | 20% |  |
| Infor Pathway | 12% |  |
| Microsoft office (incl. Excel) | 8% |  |

## Software linkages

|  |  |
| --- | --- |
| Software | What it is used for |
| Authority | Finance, customer requests |
| CI Anywhere | Record system |
| Confirm | Asset management |
| Content Manager | Document management and recordkeeping |
| ECM | Records management |
| Exponaire | GIS and mapping, rates database |
| GIS | Mapping software and property information |
| HP TRIM | Document management and storage |
| Intramaps | GIS and mapping |
| Magiq | Records management and finance |
| Merit | CRM |
| Objective | Document management |
| Open office | Application management, finances, local laws |
| PowerBI | Reporting |
| Ponzi | GIS and mapping |
| Property.gov.au | Property information and landowner details |
| Sharepoint | Document management |
| Spectrum | GIS and mapping |
| Technology One | Invoicing, name and address register, records management, finance |
| TRIM | Document management |
| Weave | GIS and mapping |

Table 4. Software that planning software connects to