



Geospatial Analyst - Technical Lead

Directorate	Department
City Liveability	Research & Geospatial Analytics
Position No	Enterprise Agreement Classification
ACR04B	Band 7
Reports To:	Direct Reports
Coordinator Research & Geospatial Analytics	Nil

What we trust you to deliver

The Geospatial Analyst - Technical Lead has primary responsibility to manage existing and new configurations and integrations of Council’s GIS, with internal Council databases and external data portals as part of a data warehouse, to ensure data is disseminated across Council and the Knox community in alignment with IT and data governance protocols. The role involves managing external consultants and contractors when required, plus providing technical training and support in relation to geospatial technologies.

The Geospatial Analyst - Technical Lead works closely with Council’s Research and Geospatial Analytics team and Information Technology team to undertake research, configuration, maintenance and testing of existing and new systems and software, plus undertakes data integration, extraction, transformation, validation and analysis, for evidence-based decision making.

The role will be the main point of contact for the technical components of the *IntraMaps Review and Replacement Project*, coordinating and developing user access requirements, new automated processes, system upgrades, integrations, configuration and testing, in relation to new infrastructure and software. There will be direct management of consultants and increased collaboration with IT specialists.

As a member of the Research and Geospatial Analytics service, this role leads multidisciplinary teams in the initiation and delivery of projects and programs that inform an evidence-based approach to policy development, priority setting and decision making by the organisation and the wider community. This position will work collaboratively across Council and with forward-thinking innovators in other organisations focused on public policy, city strategy and governance.

What you will need to thrive

- Understanding land tenure, plus a willingness to learn the organisation’s core databases and business processes.
- Strong experience in the development, configuration, administration and integration of data sets in a data warehouse, to populate systems such as IntraMaps, QGIS, POZI and MBS Premium.
- Experience with data integrations, compilations and transformations, using tools and technologies such as OGR, ETL, WMS, API, Google Earth, FME and SQL Server.
- Experience with database management, including data manipulation, extraction and validation, by creating tables, views, stored procedures and jobs, using SQL Server Management Studio.
- Proven ability to monitor, maintain and troubleshoot systems, through the automation and scripting of updates, logs, backups, and scheduled tasks.
- Proven ability to research, implement and utilise data and technologies, such as AI, 3D mapping, satellite imagery, LIDAR, IoT and associated software such as TerraExplorer, Digital Twin, and Vic3D.
- Demonstrated ability to undertake data modelling, spatial analysis and data visualisation, using tools such as QGIS, SQL Server, PowerBI, Python, Daxx, IntraMaps and MapBuilder, and to present these insights effectively to a range of audiences.

- Strong ability to communicate technical issues and engage and collaborate effectively with a wide range of people, to determine needs, explain complex concepts, and provide sound recommendations to Council and other stakeholders.
- Excellent project management skills with experience managing complex projects on time and within budget, including design and scoping, project evaluation, and management of contractors and consultants.
- Highly developed skills in the implementation and upgrade of software, plus coordination of business processes and test plans.
- Experience in providing end user and technical training in geospatial technologies.

What success looks like

1. Promote and maintain professional, efficient and responsive customer service to all internal and external customers, ensuring high standards of service in line with industry best practice.
2. Provide or coordinate timely support and specialist advice regarding requests in areas of responsibility logged through the Help Desk, ensuring timelines established under the Service Level Agreement are met. This could include system configuration and issue resolution, data sourcing and manipulation, data analysis and interpretation, plus data visualisation and reporting.
3. Administrate and configure Council's internal and external enterprise GIS (IntraMaps, QGIS, MapBuilder) plus Data Warehouse, to accommodate the self-service of data for decision making.
4. Monitor GIS system's health (using IntraMaps, QGIS, FME and SQL server scripts and logs) plus troubleshoot, problem solve and rectify data and technical issues, to maintain system continuity and performance. This may be achieved in collaboration with IT and/or relevant vendor.
5. Create and maintain technical documentation in relation to geospatial systems, processes (e.g. data transfer data using the M1 process, MBS Premium and POZI Connect) and integration (e.g. Pathway, Confirm and HP Content Manager).
6. Monitor, measure and report on the quality of geospatial data, in addition to undertaking regular audits (e.g. PIQA, Good Practice Framework Survey) to maintain or improve data quality and integrity.
7. Establish repeatable reconciliation and accountability checking processes of core spatial data (e.g. point of truth, update frequency, match rates, geometry integrity, etc.), plus monitor the performance of the integration between GIS and the Property & Rates system and the Asset Management system.
8. Create and document ETLs (e.g. SQL Server, FME, etc.) to configure and manipulate data, to create views, tables and files, that add value to organisational processes and teams.
9. Coordinate software installs, upgrades, fixes, testing and integrations, plus database and system security and access, related to BI and spatial technologies.
10. Recommend and source new spatial and BI tools (software and add-ins), plus monitor new trends, ideas and changes related to analytics, data management, Open Data, Smart Cities, IoT analytics, machine learning, APIs, WMS, GPS, Google Earth and AI. Implement continuous improvement actions where applicable to foster innovation and improve service delivery.
11. Develop or coordinate 3D visualisation to inform and engage the community in significant decisions such as Precinct Structure Plans, Capital Works Plans or major planning development applications (e.g. Vic3D, Digital Twin, TerraExplorer)
12. Establish and facilitate corporate training for spatial systems and related technologies.
13. Scope, manage and deliver strategic Council projects on time and on budget, consistent with Council policy and corporate values, while maintaining communication of project deliverables and issues, with both the Coordinator Research & Geospatial Analytics and the relevant project manager.
14. Lead and contribute to multi-disciplinary project teams and working groups across all Council directorates to deliver strategic projects and support the delivery of ongoing Council services.
15. Manage the scoping, procurement, delivery, and evaluation of consultant projects in accordance with Council contract management policies and procedures.
16. Prepare Council maps, reports, dashboards, business cases, and other internal documents that present options, responses, and recommendations to inform decision-making by senior staff and Council.
17. Develop networks, partnerships, and consultative mechanisms with other councils, service providers, and Government agencies to support the development and advocacy of strategic projects and other Council priorities.
18. Contribute to business planning and budget processes of the Research & Geospatial Analytics and City Futures teams.
19. Actively participate in Council's approach to performance, development and review, through the ROADmap process. Your ROADmap is the opportunity to bring your whole self to work through celebrating your talents and strengths and supporting your performance and development.
20. This role may also be required to carry out other such duties as are within the limits of the employee's skills competence and training.

The expertise you bring (including qualifications and experience)

- Tertiary qualification in geospatial sciences, information technology, computer science, engineering, geography or related discipline, or less formal qualifications with extensive experience.
- Experience in database management (SQL Server Management Studio), programming (Python, Javascript), GIS (IntraMaps, QGIS, MapBuilder), business intelligence (PowerBI), data manipulation and transformation (FME), property management (Pathway, POZI, MBS Premium), asset management (Confirm) and electronic document management systems (HP Content Manager) and IT service management (Cherwell) are highly regarded.
- Experience and comprehensive understanding of systems integration architecture and the application of relevant policies and procedures.

Key competencies

Tech Savy	Drives vision and purpose	Communicates Effectively	Collaborates
Manages Complexity	Builds networks	Action orientated	Optimises work processes

OHS, Risk Management, Equal Opportunity, Child Safe Standards and Charter of Human Rights

- Adhere to Council’s Health and Safety, equal opportunity and risk management policies, plans and procedures as well as act in accordance with the Charter of Human Rights.
- Demonstrate and promote workplace behaviours that do not discriminate, bully or harass.
- Cooperate with any reasonable, lawful instruction to comply with relevant legal requirements.
- Adhere to policies and procedures to prevent injuries to people and damage to assets and property including reporting of these matters.
- Take reasonable care for your safety and the safety of others who may be affected by your actions or omissions.
- Promote positive mental health and wellbeing within your team and work towards the prevention of mental injuries and illness in the workplace.
- Ensure a childsafe environment and contribute to a culture of child safety by fulfilling the requirements and responsibilities outlined in legislation, including the Child Safe Standards, Reportable Conduct Scheme and Council’s Child Safe Policy and Procedures.

Our Customer Promises

Our customer promises are our commitments to our customers.

- We care: we listen and take the time to understand you and what you need.
- We’re helpful: we’re easy to deal with, professional and focused on clear, practical outcomes.
- We’re fair: we work to meet your needs, while balancing our community obligations
- We’re knowledgeable: we’ll let you know what we can do to help and help you anticipate what else you might need.
- We’re accountable: we’ll guide you through the next steps, always follow through and work with our colleagues to keep you informed of our progress.

Who you will work with:

Internal:	External:
<ul style="list-style-type: none"> • Manager City Futures • Coordinator Research & Geospatial Analytics • Manager Information Technology • Information Technology Department Coordinators • Corporate Records Team • Council System Owners / Key Users • All Council Staff 	<ul style="list-style-type: none"> • Software vendors • Government and Statutory authorities • Contractors and consultants • Officers at other councils and agencies (knowledge sharing and resource coordination) • Relevant professional organisations, user groups, and special interest groups

Accountability and extent of authority

- Responsible for business system support and development of Councils core GIS business systems (IntraMaps, QGIS, TerraExplorer, FME, MapBuilder, POZI Connect, MBSPremium) and other core applications as required.

- Working with IT and key business users to identify solutions to meet the organisation's business needs and to contribute to the planning, development and implementation of Council's integrated core business systems model.
- Establishment of productive relationships between Research & Geospatial Analytics, Information Technology, and other Council stakeholder teams.
- System performance and data integrity monitoring and reporting.
- Managing software release upgrades, loading and testing processes.
- specialist advice or regulate clients - freedom to act subject to professional and regulatory review; actions/advice may have a significant effect on clients or groups.
- Coordinate and implement recommendations and enhancements to GIS and other core business systems as required.
- Management and maintenance of core business systems, data integrity, confidentiality and security in accordance with Council policy.
- Have an input into policy development.

Judgement & Decision Making

- Make decisions on the day-to-day operations of assigned corporate applications according to policies, processes, standards and regulations.
- This role involves problem solving which may require creativity and innovation to satisfy business requirements.
- A strong emphasis on the ability to use initiative and successfully prioritise tasks to achieve the required outcomes.
- Sign off on business system fixes or upgrade testing, including implementation plans.
- Problem solving in nature, may involve identification and analysis of an unspecified range of options.
- Guidance is not always available within the organisation.

Specialist Skills and Knowledge

- High level of understanding, planning and monitoring of the use of technology as it relates to information management, mobile computing platforms and integrated systems.
- Well-developed business analyst and investigative skills.
- Demonstrated experience in understanding business requirements and develop and/or enhance systems to optimise their potential usage.
- Extensive knowledge and experience with the use of web-based technologies.
- Demonstrated experience and understanding of business process mapping in a computerised environment.
- High level of proficiency and experience in designing and administrating relational database systems.
- Highly developed skills in the implementation and coordination of business system updates, process management and test plans.
- Proficiency in the application of a theoretical or scientific discipline - in search of solutions to new problems/opportunities.
- Analytical and investigative skills in policy formulation.
- Understanding of organisational values, and the legal and political context.
- Specialist skills in facilitating technical training for core business systems within a corporate environment.
- Demonstrated experience in geospatial editing and analysis.

Management skills

- Communicate effectively with customers including appropriate handling of difficult customers.
- Ability to manage stakeholders, plus create and maintain relationships in order to achieve project outcomes.
- Manage projects end to end accurately plan, prepare formal documentation, record events and provide detailed reports.
- Ability to improve the effectiveness and efficiency of existing processes and to find better ways of doing things.
- Ability to understand and apply standards, practices, policies and procedures relating to the use of computerised information systems within the business environment.
- Management skills to achieve objectives despite conflicting pressures.
- Able to implement personnel policies and practices including awards, EEO and OH&S policies, recruitment and selection procedures and techniques, position descriptions and staff development schemes.
- Expected to contribute to long term staffing strategies

Interpersonal Skills

- Proficient in written and verbal communication, producing internal and external report writing and correspondence.
- Ability to interpret and understand user requirements and needs.

- Communicate openly in a clear and informative manner appropriate to the audience and situation.
- Ability to initiate and lead meetings with key stakeholders in relation to Council’s core business systems.
- Ability to gain cooperation and assistance from clients, other employees and members of the public in the administration of broadly defined activities.
- Ability to liaise with counterparts in other organisations to discuss and resolve specialist problems.
- Ability to motivate and develop employees.

Inherent Requirements

The inherent requirements of the role are provided in the job advertisement as well as on Council’s [Prepare to Recruit](#) page.

Within reason, and subject to Council's obligations under legislation, it is expected that a person conducting this type of work will have the capacity to perform the genuine, reasonable and inherent tasks of the role.

Conditions of Employment

Conditions of employment are in accordance with the **Knox City Council Enterprise Agreement** and the Knox City Council Code of Conduct. Applicants will require the following:

Satisfactory Police Check	ID Verification Check	Current Victorian Drivers Licence
Reference Check	AU Entitlement to Work	

About Knox

Making a difference to others and our community is at the heart of everything we do at Knox. Future Ready Knox connects our vision, aligns our purpose with values, strategy and people experience. We all have an important role to play, in working together we will achieve all we aim for and more.



Our Values

Our values are the foundations to our success and culture at Knox. They represent what we stand for, inspire us to bring our whole selves to work and create a shared understanding to align the way we work with our vision and purpose.



Make a difference daily



Inspire and facilitate success



Think big act bold

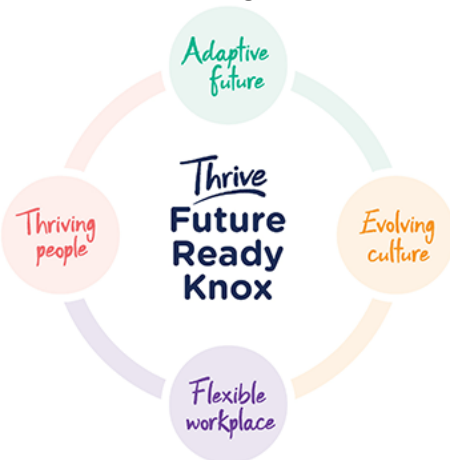


Do what is right (not what is easy)

THRIVE: Our Future Ready Knox Strategy

The world we live in is changing, placing ever more focus on people and what it means to be human.

It is time we reimagine the future of work and adapt how we lead our changing business, so we evolve and remain purposeful for our residents, our community and our City. We all have capacity to adapt and evolve. It is through harnessing our changing skillsets and mindsets, and working and learning together that we will bring out the best in each other and create a future we can all feel good about.



Adaptive future

We will pursue the future with a clear strategy of excellence and service. We will never stop learning and growing. We will be a resilient, adaptable and sustainable workplace comprised of thriving people working together to fulfil our core purpose: empowering our diverse community to thrive and prosper.

Evolving culture

We strive to be an agile organisation built on a foundation of psychological safety and trust in our leaders, our teams and ourselves. We will be defined by our love of learning, innovation and growth. We will be led by wholehearted humans who bring out the best in our people and drive collective ownership of our vision, strategy and values. This will ensure we respond, adapt and thrive in a rapidly changing world.

Flexible workplace

We will thrive in our inclusive and connected workplace, defined by flexible practices and spaces, and enabled by new technologies and business intelligence. These will support our people to explore and adopt new ways of thinking, learning and working that ultimately deliver greater value to our community.

Thriving people

We will be defined by our resilient, diverse and capable people and will support them to keep growing and leveraging their passions, talents and skills. We will improve the ways we engage and communicate, embrace productive conflict and hold each other accountable for our commitments. We will harness our collective potential to make a difference and create a future we can all feel good about.

Please refer to our website www.knox.vic.gov.au for more information about Knox City Council.