Position Description

Position title:	Senior GIS Engineer
Entity:	Austroads
Group:	Data & Technology
Job Type:	Full – time (1.0 FTE)
Location:	Austroads Melbourne Offices
Reports to:	Head of Data and Analytics
Responsible GM:	Chief Data & Technology Officer
Direct reports:	N/A
Date reviewed:	14 March 2024

Organisational Context

Austroads is the association of Australian and New Zealand transport agencies.

We provide authoritative, practical and impartial advice, information, tools and services to help our members to deliver safe, efficient and reliable mobility to their customers.

We also deliver value to a range of other key stakeholders across government, industry and communities, where there is a demonstrated societal benefit to do so.

Austroads comprises several business activities, including the core Austroads work program, the National Exchange of Vehicle and Driver Information System (NEVDIS), and Transport Certification Australia (TCA).

Our teams are located across Australia and New Zealand. We work in an integrated and collaborative way, along with external consultancies and other partners, to ensure our products and services are delivered successfully and maximise value.

Austroads promotes a culture of professionalism, innovation, and integrity, with a commitment to accountability, quality, and excellence in the delivery of all of our programs and services.

We recognise the unique skills and abilities of each individual, who come from a wide range of disciplines and backgrounds. We support our people through ongoing development and learning opportunities and create a supportive team environment for all our staff. We strive to be an employer of choice.

Austroads takes inclusion and diversity seriously. We embrace difference and diversity of identity, experience and thought, and actively strive for inclusive behaviours across our company and our work.

The Role

Team Purpose

The Data and Technology team focuses on harnessing the power of data and technology to support our member organisations to deliver an improved outcomes for roads and transport users.

Our mission is to enable data-driven decision-making, enhance operational efficiency, and create value for our stakeholders. We do this through the proactive development and implementation of contemporary D&T standards and systems.

Here are some key points that encapsulate our purpose:

1. Data Stewardship: We treat data as a valuable corporate asset. Our team aims to deliver its completeness, quality, security, and accessibility, allowing us to derive meaningful insights and drive informed actions.
2. Technology Enablement: We leverage state-of-the-art technologies; and we use the best systems for the task. Our goal is to empower our organization with scalable, reliable, and agile solutions.
3. Cross-Functional Collaboration: We collaborate closely with business units, ensuring alignment between data/technology strategies and organizational goals. By bridging the gap between technology and business, we drive holistic transformation.
4. Innovation Hub: Our group serves as an innovation hub, constantly exploring emerging trends and experimenting with novel solutions. We foster a culture of curiosity, experimentation, and continuous learning.

Remember, our Data and Technology team is not just about bits and bytes; it's about unlocking the full potential of data/technology to propel our organization forward.

Position Purpose

The Senior GIS (Geospatial Information System) Engineer has the responsibility and accountability to deliver geospatial services and administration within the Data and Analytics team. Working in a small team, the Senior GIS Engineer will implement and maintain GIS capabilities and develop spatio-temporal insights for Austroads/TCA, its members and other government agencies.

The required works will be undertaken in a project driven environment with a strong focus on adherence to quality systems.

Major Responsibilities/ Accountabilities

The role is responsible for:

- Technical leadership for the implementation, development and maintenance of telematics and spatio-temporal insights capability.
- Providing hands-on geospatial system administration services where required.
- Representing the team as a trusted service provider, working closely with internal and external customers to understand, document and solve their geospatial needs.
- Assisting in the publication of technical reports and papers.
- Managing multiple competing priorities in a changing environment.
- Liaising and providing technical assistance for internal staff, members and other stakeholders as required.
- Applying professional and technical expertise to mentor staff, resolve technical issues, and to prepare and edit reports, submissions, papers and correspondence as directed.
- Developing and maintaining documentation of processes and procedures to support the introduction of new initiatives.

- Exercising diligence when making decisions, adhering to the requirements outlined in the Delegations of Authority.
- Maintaining and adhering to Quality Systems processes and procedures.

Key stakeholder interfaces

Internal

- Application Delivery team
- Data and analytics Team
- Service Delivery Team
- Strategic Engagement and Performance Team

External

- Australian Government departments and agencies
- Road Managers and regulators

The Person

Qualifications, knowledge, and experience

The Senior GIS Engineer will possess:

Mandatory:

- A tertiary qualification in Geospatial engineering or Information Technology.
- A minimum of 5 years' GIS engineering, development or administration experience.
- Demonstrated experience in implementing and maintaining ESRI ArcGIS Enterprise in cloud-based environments.
- Demonstrated experience in spatio-temporal scripting/development using ArcGIS Pro and FME.
- Excellent written and oral communication skills.

Desirable:

- Experience using, Java and Python scripting, MS SQL Server, Databricks, Power BI.
- Experience applying project and service management (e.g., ITIL) methods and practices.
- Knowledge of Heavy Vehicle transport planning principles and an understanding of the responsibilities of road authorities and transport operators.

Personal qualities

The incumbent will need to present a professional image and build a strong relationship across the enterprise. Specifically, the role requires:

- Demonstrated interest in the use of data to inform public policy.
- Demonstrated willingness to learn and take responsibility for one's own personal development.
- Demonstrated willingness to make decisions, take initiative and originate action.
- Ability to deal with ambiguity, successfully adapting to changing demands and conditions.
- Comfort working in an environment which is constantly evolving.
- Demonstrated ethical behaviour.

Capability Profile

Flexibility and Adaptability	Adjusts approach in line with changing priorities. Is open to acquiring and developing skills and knowledge, adapts to new ways of working or organise work to deliver results.	Foundation
Critical Thinking and Problem Solving	Objectively analyses and evaluates available data, points of view, needs of stakeholders and potential solutions before recommending relevant actions or decisions.	Intermediate
Project/ work delivery and management	Defines work activities required to deliver against outcomes intended, in line with agreed timeframes, resources, and ways of working. Understands and applies effective project planning, coordination and control methods.	Foundation
Digital and Technological Proficiency	Integrates digital and technological developments in the design and delivery of relevant policies, programs and services.	Intermediate
Data literacy	Utilises diverse data sources to improve the speed and quality of service delivery and decision-making processes	Intermediate
Knowledge management	Establishes mechanisms to record and share knowledge and experience to enable the retention and expansion of corporate knowledge.	Foundation
Communicating with Impact	Uses various communication media to convey information, ideas, and insights in ways that maximises understanding of key messages. Possesses good written and verbal communication skills.	Foundation
Working Collaboratively	Collaborates with others, demonstrating an understanding of their value to the organisation.	Foundation