

He kōrero mō te tūranga | Job Description

Tūranga Job Title:	Data Analyst
Tīma Team:	Analytics & Modelling
Rōpu Group:	System Governance & Performance
Mā wai e tiaki Reporting to:	Manager, Analytics and Modelling
Wāhi Mahi Location:	Wellington
Rahi o te Utu Salary band:	
Wā whakarite Date:	June 2021

Te Aronga o te Ratonga Tūmatanui / Public Service Purpose

Mahi tōpū ai ngā Kaimahi Tūmatanui e whai tikanga ai te noho a ngā tāngata o Aotearoa. Hei tā te Public Service Act ko te pūtake o ngā Kaimahi Kāwanatanga, ko te tautoko i te kāwanatanga whai ture me te kāwanatanga manapori; ko te āwhina i te Kāwanatanga o te wā nei me ō anamata ki te whakawhanake, ki te whakatinana hoki i ā rātou kaupapa here; ko te tuku i ngā ratonga tūmatanui e nui ana te kounga, e nahanaha ana anō hoki; ko te tautoko i te Kāwanatanga e tūroa ai te whai oranga o te marea; ko te huawaere i te whai wāhitanga o te kirirarau ki te ao tūmatanui me te whakatutuki i ngā mahi i runga i tā te ture i whakahau ai. E hiranga ana te wāhi ki a mātou ki te tautoko i te Karauna i ana hononga ki ngā iwi Māori i raro i te Tiriti o Waitangi. Ahakoa he nui ngā momo tūranga mahi, e tapatahi ana ngā kaimahi tūmatanui i roto i te whakaaro nui ki te hāpai i ngā hapori, ka mutu, e arahina ana ā mātou mahi e ngā mātāpono matua me ngā uara o ngā Kaimahi Tūmatanui.

The public service works collectively to make a meaningful difference for New Zealanders. The Public Service Act states that the purpose of the public service is to support constitutional and democratic government, enable both the current Government and successive governments to develop and implement their policies, deliver high quality and efficient public services, support the Government to pursue the long-term public interest, facilitate active citizenship and act in accordance with the law. We have an important role in supporting the Crown in its relationships with Māori under the Treaty of Waitangi and te Tiriti o Waitangi. Whilst there are many diverse roles, all public servants are unified by a spirit of service to the community and guided by the core principles and values of the public service in our work.

Ō mātau uaratanga | How we do things – our values

KEI ROTO MĀTAU | INVESTED - We are committed and responsible

HE MĀIA | BOLD - We are courageous, shaping our place in the world

MAHI NGĀTAHI | COLLABORATIVE - We are connected and journey with others

He whakamana i a Aotearoa kia momoho | Enabling New Zealanders to flourish – our purpose

Our purpose statement goes beyond describing what our organisation does. It succinctly and powerfully captures the value that we will deliver to New Zealanders.

- **Flourish:** A living organism flourishes when it grows or develops in a healthy or vigorous way, especially as the result of a particularly congenial environment. We think that's what transport should do for New Zealanders.
- **New Zealanders:** New Zealanders are central to what we do. This includes New Zealand Inc, the business sector, and our international connections, but at the heart of all of it people.
- **Enabling:** We are here to help create the transport ecosystem that will enable society and businesses to flourish, and grow.

Data Analyst – Analytics & Modelling

The Ministry of Transport is the Government's system lead on transport. Our purpose is to enable New Zealanders to flourish, reflecting transport's role in shaping our society, economy and environment. The System Performance & Governance Group is responsible for supporting, influencing and advising on the performance of the Ministry and the wider transport sector.

The Analytics & Modelling Team is responsible for providing data handling, modelling and analytics capability to inform strategy, policy and development for the Ministry and the wider transport sector.

The purpose of the Data Analyst is to analyse and interpret data and translate this into evidence-based insights and analysis used to inform policy and decision-making by the Ministry and wider transport sector. Providing support to other members of the team as required. The Data Analyst will contribute to the teams' expert analytics and modelling capability, insights and development of transport evidence to inform the Ministry's strategy and policy.

Hei aha kei tō raurau | What you will do to contribute - key responsibilities

This role is responsible for:

- Collecting, collating, processing and interpreting data
- Developing repeatable analytical tools (e.g. using R or Python)
- Analysing results
- Visualising key results and insights
- Communicating insights and results to relevant policy teams and Ministry staff
- Working alongside teams within the Ministry to establish analytical needs
- Defining data collection, management and analysis processes
- Understanding the policy context and tailoring analysis and data (requirements) appropriately to ensure effective analytical support to MOT policy teams.
- Developing data sources, stakeholder relationships and data mining (e.g. website scraping)
- Coding complex routines that can be used repeatedly for example: there are a number of analytical/data processes that we continue to manually update on a regular basis that could be automated.
- Understanding change and futures “thinking” e.g. scenarios and effective forecasting
- Direct support to products:
 - Crash Statistics
 - Annual Fleet Report
 - Household Travel Survey Analysis
 - Fright Information Gathering System Reporting
- This will largely entail:
 - Collation and cleaning of base data to be input to analysis
 - Development of analytical tools and techniques
 - Analysis of historic trends
 - Forecasting of future trends
 - Publication of visualisations via website

The outcomes of the publication of these products are largely two fold: firstly to fulfil the Ministry's stewardship and Transport system leadership role in producing insight in to the performance of the transport system. Secondly to add value to and improve the policy generation cycle through development of more complex analyses and develop insights which can help to develop the evidence base.

The duties and responsibilities in this document are not exhaustive. The incumbent may be required to perform other work which is consistent with the nature of the role

Tō oranga i te wāhi mahi nei | Your health, safety and wellbeing

As a leader, promotes health, safety and wellbeing with the team. Ensures staff are informed of and trained in safe practices and procedures in their specific areas of work.

At the Ministry we expect all employees to:

- Work safely and take responsibility for keeping self and colleagues free from harm
- Report incidents and hazards promptly
- Know what to do in the event of an emergency
- Ensure personal health and safety standards are adhered to when at work or offsite when working

Kia mahi koe ki a wai | Who you will work with to get the job done

Internal	Manager – Analytics & Modelling
	Deputy Chief Executive – Regulatory and Data
	Ministry policy teams (e.g. Mobility & Safety, Rail & Freight, Urban Development & Environment, Investment, etc.) to support development of policy and regulatory projects.
	Other Analysts, Senior and Principal within the A&M team; members of the DSE&E team
External	Ministries and Agencies we source data from - e.g. NZTA, Ministry of Health, Port Authorities, etc.
	Agencies we share data with – e.g. NZ Police, Auckland Transport, NZTA, etc.
	Parliamentary staff

Ngā kaimahi māu e tiaki | Direct Reports

- Nil

Ōu pūkenga | What you will bring specifically

Experience:

- Experience using analytics and modelling tools and technologies, such as SAS, R, excel, python and Tableau
- Understanding of predictive analytics and simulation
- Previous experience of handling large data-sets and producing bespoke analyses to inform strategy projects.

Knowledge & Skills:

- Ability to analyse and interpret complex data and make sound conclusions based on the findings
- A good understanding of statistics
- Good understanding of data management and analytics, principles and practices
- Understanding of Government statistics e.g. Integrated Data Infrastructure
- The ability to translate analytical results and findings into a compelling narrative

- Good communication and interpersonal skills - able to communicate complex ideas to a variety of audiences (written and verbal).
- Good attention to detail and able to work independently

Other requirements:

- A tertiary qualification in a relevant field (e.g. mathematics, physical sciences, data science, computer science)

Ka tāea te aha | Capabilities

We use the Leadership Success Profile (LSP) to help guide our people, including those not in management positions, towards the skills and capabilities needed for success within the Ministry and across the public sector.

Honest and courageous

Deliver the hard messages, and makes difficult decisions in a timely manner to advance the longer-term best interests of customers and New Zealand.

Curious

Show curiosity, flexibility, and openness in analysing and integrating ideas, information, and differing perspectives; to make fit-for-purpose decisions.

Self-aware and agile

Leverage self-awareness to improve skills and adapt approach; to strengthen personal capability over time and optimise effectiveness with different situations and people.

Resilience

Show composure, grit, and a sense of perspective when the going gets tough; to help others maintain optimism and focus.

He kōrero mō te tūranga | Job Description

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Wāhi Mahi Location:	Wellington
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Senior Data Analyst – Analytics & Modelling

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The Senior Data Analyst is part of the System Performance & Governance Group. This Group provides quality, timely and effective policy and evidence-based analysis for the Ministry and the transport sector. The group is also responsible for the Ministry's Governance of the Crown Entities and overall stakeholder engagement and communications strategy. It also leads advice on some key commercial policy projects.

This role is part of the Analytics & Modelling Team. The Analytics & Modelling Team is responsible for providing data handling, modelling and analytics capability to inform strategy, policy and development for the Ministry and the wider transport sector.

The Senior Data Analyst –Analytics & Modelling has the responsibility for supporting the overall capability of the team to delivery on their key objectives.

Hei aha kei tō raurau | What you will do to contribute - key responsibilities

This role is responsible for:

- Assisting in the implementation of a modelling and analytics strategy across the transport sector
- Undertaking complex policy issues, leading development of innovative, practical and robust modelling and analysis, and providing authoritative advice often in areas that are complex and sensitive.
- Engaging with key stakeholders as required
- Taking the lead and project managing modelling and analytical work
- Enhancing the overall capability of the team through guiding and mentoring both advisers and graduates in their day to day work
- Establishing and developing productive relationships with other transport sector agencies and the wider government sector

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Kia mahi koe ki a wai | Who you will work with to get the job done

Internal	Domain Strategy, Economics & Evaluation team
	Senior Leadership team
	Policy teams
	Managers and staff across the Ministry
External	Minister and Associate Minister
	Transport Sector Entities
	Other government agencies, crown entities and other organisations

Ngā kaimahi māu e tiaki | Direct Reports

- Nil

Ōu pūkenga | What you will bring specifically

Experience:

Essential:

- Experience in policy analysis in the public or private sector and a sound understanding of evaluation or modelling of complex problems
- Excellent organisational skills
- Excellent written and verbal communication skills
- Able to work autonomously and meet deadlines
- Effective communicator

Desirable:

- Knowledge of the transport sector would be an advantage
- Experience of bespoke modelling tools (Powersim, Simul8 etc.)
- Knowledge of the public sector policy and processes would be an advantage

Other requirements:

- A tertiary qualification in a relevant field

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