

# JOB ROLE STATEMENT

## OPERATIONAL MODELLING AND VISUALISATION CO-ORDINATOR LEVEL 6

**DIRECTORATE** NETWORK OPERATIONS  
**BRANCH** TRAFFIC AND ROAD NETWORK PERFORMANCE **POSITION NO** P0062868 / P0062974  
P0063179 / P0063180

### KEY RESPONSIBILITIES

Co-ordinate operational traffic modelling and visualisation activities for either the North or South area of the Metropolitan road network in order to optimise network operations performance.

### KEY DELIVERIES

#### Traffic Modelling

- Co-ordinate traffic operational modelling and optimisation simulations to enable impact analysis for network areas, routes and intersections, intersection, microscopic and mesoscopic modelling.
- Utilise operational (tactical) modelling, visualisation and on-route assignment specialist capability to enable better operational decision making by giving a more realistic indication of outcomes within either the North or South area of the network.
- Perform specialist modelling and intersection analysis to predict the impact of large and complex changes across the North or South road network (such as accidents, road closures and road detours).
- Quantify and assess complex Main Roads' traffic systems operations efficiency through modelling utilising real-time data to deliver dependable solutions for the management and optimisation of the road network in either the North or South area.
- Provide specialist advice for reconciliation between strategic models (such as ROM24) managed by Planning and Technical Services teams and operational models managed by Network Operations.
- Develop complex models for either the North or South areas that simulate real-life traffic conditions for testing "scenarios" in order to determine impacts of proposal, for base vs future year modelling, anticipated changes in network operation.
- Review the outcomes of key operational modelling work conducted with the Operational Modelling and Visualisation Manager to ensure the correct operational decisions are taken, providing a balanced, impartial quantitative viewpoint of schemes.

#### Leadership and Management

- Supervise a small team to perform modelling capabilities within either the North or South area of the network using a suite of modelling and visualisation tools which include but are not limited to: LINSIG, TRANSYT, SIDRA, AIMSUN, VISSIM and 3D studio Max.
- Co-ordinate the participation in Main Roads on modelling and analysis forums and working parties.
- Manage human, financial, technological, physical and other resources within agreed allocations to meet agreed outcomes.
- Manage employee behaviour, performance and development.

#### Stakeholder Relationships

- Build and enhance collaborative working relationships with the Manager Network Performance, Network Area Performance Managers, Route Managers, Operations Analysis and Benefits Realisation Manager, SCATS and SVD Technical team, Operational Modelling and Visualisation team and Planning and Technical Services Directorate's Strategic/Micro-modelling team.
- Collaborate with other operational branches to gain considerable understanding of factors affecting traffic performance and the causes of traffic congestion.
- Communicate outcomes of modelling exercises using a series of modelling tools (such as fly through visualisation projections) that enable simple and concise communication of changes to multiple stakeholder groups.

### SAFETY, HEALTH AND WELLBEING (SHW)

Responsible for active participation and performance to SHW standards as detailed by the Main Roads' Safety, Health and Wellbeing (SHW) Management System - refer to "SHW Roles and Responsibilities Procedure" on 'iRoads' intranet.

### LOCATION

Main Roads is a regionalised organisation with key delivery centres operating from the Kimberley to the Great Southern regions, including the metropolitan area. The incumbent of this position may be required to undertake a role in a region for a period of time.

### DYNAMIC RESOURCING

The incumbent of the position may be required to perform any other role within the incumbent's level of skill, competence and responsibility as directed by the Managing Director of Main Roads to meet the organisation's objectives and the incumbent's development.

### REPORTING RELATIONSHIPS

This position reports to:

(A) TITLE AND LEVEL	POSITION NO
OPERATIONAL MODELLING AND VISUALISATION MANAGER	LEVEL 7 P0062855

# OPERATIONAL MODELLING AND VISUALISATION CO-ORDINATOR LEVEL 6

**POSITIONS UNDER DIRECT SUPERVISION**

List the position numbers, titles and levels of positions directly supervised

TITLE and LEVEL  
TBA

POSITION No

**ALL POSITIONS UNDER CONTROL**

State number of positions only

CATEGORY

NUMBER

Salaried,

TBA

TOTAL

TBA

**SELECTION CRITERIA**

**ESSENTIAL:**


- Substantial skill, knowledge and experience in:
  - transport planning, including traffic/transport modelling and monitoring
  - operational traffic/transport analysis including monitoring, modelling, visualisation and/or operational research
  - use of operational modelling for network optimisation, notably in the areas of signal control, priority junctions and roundabout design
  - delivering technical presentations and information to groups and individuals
  - building and enhancing stakeholder relationships
  - managing financial, technological, physical and other resources within agreed allocations to meet agreed outcomes
  - managing employee behaviour, performance and development
- Knowledge of:
  - and understanding of standard traffic/transport modelling and visualisation tools including, but not limited to; LINSIG, TRANSYT, SIDRA, AIMSUN, VISSIM, ARCADY, PICADY and 3D studio Max
  - policies and practices on Occupational Safety and Health, and on EEO, diversity and equity
- Possession of a current Western Australian 'C' Class (car) motor vehicle drivers licence or an approved equivalent.

**DESIRABLE:**

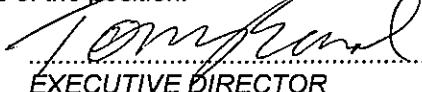
- A Degree in Engineering or Transport Planning.

**CERTIFICATION**


1. The details contained in this Job Role-Statement have been reviewed and conform to Main Roads guidelines.

SIGNATURE  MEADI LANGEROUDI DATE 14-9-2016  
BRANCH/SECTION HEAD

2. The details contained in this document are an accurate statement of the duties, responsibilities and other requirements of the position.

SIGNATURE  DATE 14.09.16  
EXECUTIVE DIRECTOR

3. The details contained in this document have been reviewed and conform to Main Roads guidelines.

SIGNATURE  DATE 15/9/16  
MANAGER HR BUSINESS