

Masoud has a Master of Science degree disciplined in Traffic Engineering and Transport Planning and a Bachelor of Engineering majoring in Civil Engineering.

Masoud has more than eight years of industry experience with extensive engagement in the private and public sector projects. Masoud specialised in transport modelling, data analysis and road safety studies.

Masoud is a specialist of various transport software platforms as well as programming languages, allowing him to provide targeted and specialist advice on transport engineering, and data analysis. These include SIDRA and Aimsun and data analysing packages such as NumPy, and Pandas.

KEY SKILLS

- Operational & planning modelling
- Transport modelling platforms – SIDRA, Aimsun & Vissim
- Data analysis – Excel, Power BI, Tableau, Python
- Transport Assessments and technical documentation
- Transport Design – car park design and compliance

KEY PROJECTS & EXPERIENCE

Moorebank Intermodal Precinct | Logos Property

Since the year 2022, Masoud has been leading the traffic modelling services for the Moorebank Intermodal Precinct (MIP) which completed by Ason Group, which stands as Australia's largest freight infrastructure project. His role has encompassed a wide array of traffic and transport services. One such pivotal contribution was in support of a modification to the approved State Significant Development Stage 2 consent for Moorebank Precinct East (MPE). Additionally, Masoud has been instrumental in assessing the construction phasing for the crucial adjacent intersection of Moorebank Avenue and Anzac Road, evaluating its performance across various construction stages.

Burrows Road Traffic Modelling Assessment | Goodman Group

Masoud led the traffic modelling assessment for a TMAP supporting the State Significant Development Application (SSDA) for an industrial warehouse development at 1-3 Burrows Road, St Peters. An Aimsun microsimulation model was developed, calibrated, and validated. SIDRA modelling analysis was also conducted to assess the redevelopment's impact on the surrounding road network.

Yennora Distribution Centre | Stockland Corporation

Masoud took the lead in evaluating traffic impacts for a State Significant Development Application (SSDA) involving the redevelopment of the Yennora Distribution Centre, which has been operational since 2002. A TMAP was developed referencing the latest design and planning standards. Jan led the SIDRA modelling to assess the impact of the redevelopment on traffic conditions at 16 intersections.

Golf Courses Trip Generation and Parking Demand Study | TfNSW

Masoud served as the Traffic Engineer and Data Analyst responsible for the Golf Courses Trip Generation and Parking Demand Study. TfNSW aimed to update trip generation and parking rates for golf courses across NSW, based on the Roads and Maritime Guide to Traffic Generation Developments – 2002.

Meadowbank Precinct Traffic and Transport Study | TfNSW

Masoud acted as a Traffic Modeller and Traffic Engineer, investigating the potential for a Kiss and Drop (KnD) facility near the railway line and adjacent to a pedestrian underpass that links to the Meadowbank Education and Employment Precinct. In collaboration with the City of Ryde and TfNSW, he assessed various traffic and transport options to determine which were worth pursuing for more detailed investigations.

Data Analytics and Visualisation | Tehran ICT Organization

Masoud was responsible for gathering, pre-processing, and integrating various transport data sources collected by Tehran Municipality ICT Organization (TMICTO). This data, which includes public transit AVL, mobile phone GPS, public transport e-tickets, and on-road traffic counters, was then converted into actionable information using Python packages for data analysis and visualisation.

Pedestrian Modelling and Simulation in Tehran | City of Tehran Council

Masoud handled pedestrian modelling and simulation in Tehran. He analysed pedestrian movements recorded in various walking facilities like walkways, stairways, crosswalks, and signalised intersections. The analysed data, extracted from video footage, was then utilised in the Social Force Model to simulate pedestrian behaviour in Tehran.

Road Transport Network Modelling of Iran | Ministry of Roads and Urban Development, Iran

Masoud assessed the existing condition of the east-west Shahrn-Damavand corridor in northern Tehran. He explored potential traffic management solutions using traffic simulation modelling, connecting the Sadr-Niyayesh tunnel and Sadr multi-level bridge.