Established in 1995, RoadNet is a specialised traffic engineering consultancy offering engineering advice and civil designs to Local and State Governments, Construction Contractors and Developers. We provide a diverse range of Civil and Traffic Engineering solutions, with a high focus on temporary traffic management and road safety audits on highway construction projects.

We pride ourselves on client relationships and repeat business, producing a high quality ‘value for money’ product in a timely manner.

RoadNet’s design team is highly experienced in highway design and has extensive experience on major highway upgrade projects. RoadNet has been heavily involved in the upgrade of the Pacific Highway during the company’s 21 years in business. RoadNet’s designs are prepared using MX Roads, 12d, and AutoCAD design software.

Many of RoadNet’s staff have previous experience working directly for TMR and/or RMS allowing our staff to provide accurate advice that meets TMR and/or RMS standards.

RoadNet’s key capabilities include:

- Civil Design
- Traffic Management Plans
- Traffic Staging Plans
- Traffic Control Plans
- Traffic Engineering
- Traffic Modelling / Analysis
- Road Safety Audits
- Dilapidation Surveys
- Traffic Signal Design
- Road Pavement Design
- Project Management / Contract Administration
- Skill Hire
- Traffic Reports
- Haulage Route Assessments
RoadNet has extensive experience in the planning and design of Traffic Staging Plans (TSP), Traffic Control Plans (TCP), Traffic Guidance Schemes (TGS) and Temporary Road Alignment Designs for major and minor road construction projects.

We use MX Road and/or 12D to design temporary road alignments and use AutoCAD to prepare detailed scaled drawings.

We maintain close contact with the construction traffic manager to provide technical advice on the best way to manage traffic taking account of proposed construction staging, site constraints and the contract specifications. RoadNet’s aim is to provide a service that results in improved staging, reduced level of risk and cost savings.

Associated services include the preparation of Traffic Management Plans (TMP) and road safety audits at design and implementation stages.

Personnel are formally qualified to select, modify, design and audit designs in both NSW and QLD. (RMS Prepare Workzone Traffic Management Plan, TMR Traffic Management Design, CPEng certification and RPEQ certification).

RoadNet is accredited with TMR for Traffic Management Registration Scheme (#0030).

PROJECT EXPERIENCE

**Pacific Highway Upgrade – Kundabung to Kempsey**
Client – McConnell Dowell OHL Joint Venture

**Pacific Highway Upgrade – Kempsey Bypass**
Client – Leighton Contractors Pty Ltd
Scope – Skill Hire (Senior Civil Engineer as Traffic Manager)

**Pacific Highway Upgrade – Warrell Creek to Nambucca Heads**
Client – Pacifico – Acciona Ferrovial Joint Venture
Scope – Traffic Staging, Traffic Control Plans and Temp Design

**Pacific Highway Upgrade – Sapphire Beach to Woolgoolga**
Client – Leighton Fulton Hogan Joint Venture
Scope – Traffic Staging, Traffic Control Plans and Temp Design

**Pacific Highway Upgrade – Woolgoolga to Halfway Creek**
Client – OHL York Civil Joint Venture
Scope – Traffic Staging, Traffic Control Plans and Temp Design

**Pacific Highway Upgrade – Devil’s Pulpit**
Client – John Holland Group Pty Ltd
Scope – Temporary Designs and Traffic Control Plans

**Pacific Highway Upgrade – Pimilico to Teven**
Client – Leightons Contractors Pty Ltd
Scope – Temporary Designs and Traffic Control Plans

**Pacific Motorway Upgrade – Nerang to Worongary**
Client – Fulton Hogan Pty Ltd
Scope – Temporary Designs and Traffic Guidance Schemes

**Ipswich Motorway Upgrade – Ipswich Logan Interchange**
Client – Leighton Contractors Pty Ltd
Scope – Temporary Designs and Traffic Guidance Schemes

**Warrego Highway – Blacksoil Interchange**
Client – Fulton Hogan Pty Ltd
Scope – Traffic Staging, Traffic Control Plans and Temp Designs
RoadNet specialises in Road Safety Audits. We currently have 8 full-time Road Safety Auditors accredited with both NSW RMS and QLD TMR and a network of accredited Road Safety Auditor sub-consultants.

RoadNet is regularly engaged to conduct road safety audits (including pre-opening, post-opening and design audits) on major road construction projects. We have undertaken road safety audits on a high number of projects throughout the upgrade of the Pacific Highway.

Our auditors are qualified to audit Traffic Control Plans and Traffic Guidance Schemes for roadwork sites:
- DESIGN/AUDIT Traffic Control Plans (NSW RMS - Orange Card).
- TRAFFIC MANAGEMENT (QLD TMR – MUTCD Level 4 Card).

RoadNet has also carried out many Route Safety Studies and Road Safety Audits that focus on improving road safety and reducing the number and severity of crashes. Recent examples include QLD TMR National Highway Route Strategy Planning (Cunningham Highway, Gore Highway, New England Highway) and NSW RMS Recreational Motorcycle Routes (Bruxner Highway, Summerland Way, Lions Road, Kyogle Road)

PROJECT EXPERIENCE

Pacific Highway Upgrade – Herons Creek to Stills Road
Client – BMD Constructions Pty Ltd
Scope – Pre & Post-opening Road Safety Audits, Design Audits

Pacific Highway Upgrade – Oxley Highway to Kundabung
Client – Lend Lease Engineering Pty Ltd
Scope – Pre & Post-opening Road Safety Audits, Design Audits

Pacific Highway Upgrade – Kundabung to Kempsey
Client – McConnell Dowell OHL Joint Venture
Scope – Pre & Post-opening Road Safety Audits, Design Audits

Pacific Highway Upgrade – Kempsey Bypass
Client – Leighton Contractors Pty Ltd
Scope – Pre & Post-opening Road Safety Audits

Pacific Highway Upgrade – Frederickton to Eungai
Client – Thiess Pty Ltd
Scope – Pre & Post-opening Road Safety Audits, Design Audits

Pacific Highway Upgrade – Nambucca Heads to Urunga
Client – Lend Lease Engineering Pty Ltd
Scope – Pre & Post-opening Road Safety Audits, Design Audits

Pacific Highway Upgrade – Sapphire Beach to Woolgoolga
Client – Leighton Fulton Hogan Joint Venture
Scope – Pre & Post-opening Road Safety Audits, Design Audits

Pacific Highway Upgrade – Devil’s Pulpit
Client – John Holland Group Pty Ltd
Scope – Pre & Post-opening Road Safety Audits

Pacific Highway Upgrade – Pimilico to Teven
Client – Leightons Contractors Pty Ltd
Scope – Pre & Post-opening Road Safety Audits

Pacific Highway Upgrade – Tintenbar to Ewingsdale
Client – Baulderstone Pty Ltd
Scope – Pre & Post-opening Road Safety Audits
CIVIL DESIGN
RoadNet has extensive experience in preparing concept and detailed designs for a range of major and minor road upgrade projects.

RoadNet’s previous design experience includes;
- Rural Roads
- Urban Roads
- Intersections
- Roundabouts
- Bus Stops
- Cycleways
- Car parks
- Stormwater
- Traffic Signals
- Street Lighting
- Pavement
- Construction Access
- Signs

RoadNet’s designers are trained and experienced in the application of design software including;
- 12D Model
- MX Roads
- 12D Drainage
- DRAINS
- AutoCAD
- Autoturn
- TraSiCAD

As specialist traffic engineering consultants we are able to integrate a complete intersection design service with traffic modelling, civil design, traffic signal design and road lighting design.

RoadNet has experience in Queensland and New South Wales providing designs that adhere to the requirements of TMR and RMS.

PROJECT EXPERIENCE
New England Hwy, Guyra Tomato Farm Development
Client – Costa Group Pty Ltd
Scope – Concept and Detailed Design for temporary construction access and permanent access on the New England Highway. The design included CHR, AUL, BAL, drainage, WAD, pavement, 3D modelling. RoadNet also prepared the TIA for the development.

Ewingsdale Road, Byron Bay (Roundabout)
Client – NSW Government
Scope – Detail Design for rural roundabout for access to new sports centre including drainage, pavement and lighting designs.

Pacific Highway & Hurley Drive Intersection, Coffs Harbour
Client – Roads and Maritime Services
Scope – Preliminary and Detailed Design for intersection upgrade to traffic signals and extension of right turn lane from the Pacific Hwy including drainage, pavement, traffic signal, lighting designs.

Oxley Highway, Timbertown Pavement Rehabilitation
Client – Roads and Maritime Services
Scope – Detailed Design of rehabilitation of the road pavement for section of the Oxley Highway adjacent to Timbertown in Wauchope.

Queen Street & Government Drive Intersection, Redlands
Client – Redland City Council
Scope – Preliminary and Detailed Design for intersection upgrade including kerb & channel, pavement widening, drainage, lighting.

Panorama Drive, Boundary Rd to Wellington St, Thornlands
Client – Redland City Council
Scope – Concept, Preliminary and Detailed Designs of a four lane divided road including drainage, pavement, lighting design.

Pacific Hwy & Boundary Road, Macksville
Client – Arben Management Pty Ltd
Scope – Detailed Design of intersection upgrade for Woolworths development including drainage, pavement, traffic signals design.
REPORTS
RoadNet has undertaken a wide range of Traffic Impact Assessments and Traffic Studies, including:
- Rezoning
- Town centres
- Shopping Centres
- Quarries
- Schools
- Industrial
- Subdivisions
- Residential Towers
- Hotels / Taverns
- Retirement Villages
- Medical Facilities
- Road Network Analysis (Macro and Micro)

Our staff have specialist experience with completing similar assessments for major construction projects:
- Traffic Management Plan (TMP)
- Road User Management Plan (RUMP)
- Haulage Route Assessment

RoadNet has provided expert traffic and transport planning support for major projects on NSW Mid North Coast:
- Area 14 – Lake Cathie (Port Macquarie, NSW)
- Area 15 – West Haven (Port Macquarie, NSW)
- Brimbin New Community (Taree, NSW)

INTERSECTION MODELLING
RoadNet uses SIDRA INTERSECTION to undertake intersection modelling and analysis. SIDRA is extensively used throughout the consulting world and is widely accepted by road authorities throughout NSW and QLD. SIDRA is also used for modelling traffic signal timing optimisation.

MICRO-SIMULATION MODELLING
RoadNet uses in-house expertise and consultant capabilities for AIMSUN and PARAMICS modelling. Micro-simulations are a useful tool to dynamically illustrate the effects on a road network.

MACRO STRATEGIC MODELLING
RoadNet provides area wide modelling at a strategic level using EMME and TRANSCAD, with both in-house experience and our associates.
PACIFIC HIGHWAY UPGRADE

(Refer to following page for details of RoadNet's involvement in Pacific Highway Upgrade Projects listed below.)

* RoadNet is presently involved on these projects.
## PACIFIC HIGHWAY UPGRADE - ROADNET'S INVOLVEMENT TO DATE

* RoadNet is presently involved on these projects

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