

PREQUALIFICATION SCHEME

TRAFFIC MANAGEMENT SERVICES (Consultants)

- ◆ Eligibility Criteria
- ◆ Categories and levels

Procurement Operations
60 Denmark Street
KEW Vic 3101

www.vicroads.vic.gov.au



Department
of Transport

TRAFFIC MANAGEMENT SERVICES GROUP

Category	Levels	Abbrev	Page No
Data Acquisition, Processing & Analysis	Market Research	DMR	3
	Behavioural Surveys	DBS	3
	Survey Design	DSD	3
Traffic/Transport Planning & Strategies	Road Network	PRN	4
	Road Safety	PRS	4
	Regulation & Legislation	PRL	4
	Access Management	PAM	4
Traffic Design & Operations – Arterial Roads & Motorways	Traffic Signal Design	TOS	5
	Freeways	TOF	5
	Arterial Roads	TAR	6
	Traffic Facilities	TTF	6
	Public Transport Facilities	TPF	6
	Simulation Modelling	TSM	6
	Communications Architecture	TCA	6
	Monitoring & Control Systems	TMC	6
	Traffic Signing & Delineation Design	TSD	7
	Freeway/Arterial Lighting Design	TLD	7
Freight and Freight Vehicle Operations	Vehicle Assessments	FVA	8
	Investigation & Reporting	FIR	8
	Research	FVR	8
Road Safety Audits	Road Safety Audit	RSAUDIT	9

Group: TRAFFIC MANAGEMENT SERVICES GROUP

Category: DATA ACQUISITION, PROCESSING & ANALYSIS

This category of prequalification incorporates services associated with traffic data acquisition for the purposes of carrying out market research, survey design and statistical analysis, and human factors/behavioral surveys.

All prequalified consultants in this category may be required to participate in regular reviews of performance.

Standard Eligibility Criteria for each Level

To be eligible a Company must:

- Have personnel experienced in the area of competency described for the pre-qualification level below;
- Have previous relevant experience (at least 2 years) and satisfactory performance in the area of competency described in the pre-qualification level and as otherwise specified;
- Have a Quality and OH&S management system that is either
 - (a) operational for contracts up to \$50,000, or
 - (b) approved as meeting VicRoads requirements for contracts up to \$100,000, or
 - (c) third party certified to AS/NZS ISO 9001 (QMS), AS4801 or AS/NZS ISO 45001 (OH&S) for all contracts;
- Provide evidence that the company has either a:
 - Victorian WorkCover insurance certificate or
 - proof of self-insurance which covers all personnel engaged in the delivery of services;
- Be an incorporated company.

Note: For VicRoads contracts for these works, a company will be required to maintain the following minimum levels of insurance:

- ◆ Public Liability \$10 million
- ◆ Professional Indemnity \$2 million

Levels: Market Research (DMR)

Area of Competency

This level of pre-qualification requires competency in carrying out market research on aspects relating to traffic management proposals, implemented treatments and/or devices.

Behavioural Surveys (DBS)

Area of Competency

This level of pre-qualification requires competency in carrying out behavioural surveys by various means (eg. telephone, face-to-face interviews or mail-outs) to determine human factors associated with traffic movements and demands.

Survey Design (DSD)

Area of Competency

This level of pre-qualification requires competency in the collection of traffic data, processing and analysis, including but not as separate competencies:

- Turning movements
- Portable machine counts
- Travel time surveys
- Observational surveys (eg. parking, manual counts, vehicle occupancy & O-D)
- Surveys by ITS techniques
- Road safety data
- Speed Surveys

Group:	TRAFFIC MANAGEMENT SERVICES GROUP
Category:	<p>TRAFFIC / TRANSPORT PLANNING & STRATEGIES</p> <p>This category of pre-qualification incorporates services associated with road network, road safety and ITS related planning and strategies, regulation and legislation issues, access management, and land use development impact studies. All pre-qualified consultants in this category may be required to participate in regular reviews of performance.</p> <p><u>Standard Eligibility Criteria for each level</u> <i>To be eligible a Company must:</i></p> <ul style="list-style-type: none"> • Have personnel experienced in the area of competency described for the pre-qualification level below; • Have previous relevant experience (at least 2 years) and satisfactory performance in the area of competency described in the pre-qualification level and as otherwise specified; • Have a quality and OH&S management system that is either <ul style="list-style-type: none"> (a) operational for contracts up to \$50,000, or (b) approved as meeting VicRoads requirements for contracts up to \$100,000, or (c) third party certified to AS/NZS ISO 9001 (QMS), AS4801 or AS/NZS ISO 45001 (OH&S) for all contracts; • Provide evidence that the company has either a: <ul style="list-style-type: none"> Victorian WorkCover insurance certificate or proof of self-insurance which covers all personnel engaged in the delivery of services; • Be an incorporated company. <p>Note: For VicRoads contracts for these works, a company will be required to maintain the following minimum levels of insurance:</p> <ul style="list-style-type: none"> ◆ Public Liability \$10 million ◆ Professional Indemnity \$2 million
Levels:	<p>Road Network (PRN)</p> <p>Area of Competency This level of pre-qualification requires competency in road network planning and strategies.</p> <hr/> <p>Road Safety (PRS)</p> <p>Area of Competency This level of pre-qualification requires competency in road traffic/transport planning and strategies with an emphasis on road safety considerations.</p> <hr/> <p>Regulation & Legislation (PRL)</p> <p>Area of Competency This level of pre-qualification requires competency in regulation and legislation aspects related to traffic / transport planning and strategies.</p> <hr/> <p>Access Management (PAM)</p> <p>Area of Competency This level of pre-qualification requires competency in access management / traffic impact assessment of land-use development / transport planning and strategies.</p>

Group: TRAFFIC MANAGEMENT SERVICES GROUP

**Category: TRAFFIC DESIGN & OPERATIONS –
ARTERIAL ROADS & MOTORWAYS**

This category of prequalification incorporates services associated with the design of traffic signals (arterial roads and motorways) the functional design of modal facilities, traffic modelling, street lighting design etc.

All prequalified consultants in this category will be required to participate in regular reviews of performance in relation to the performance assessment criteria for Traffic Management Services.

Standard Eligibility Criteria for each Level

To be eligible a Company must:

- Have personnel experienced in the Area of Competency described for the prequalification level;
- Have previous relevant experience (at least 2 years) and satisfactory performance in the Area of Competency described in the prequalification level and as otherwise specified;
- Have a quality and OH&S management system that is either
 - (a) operational for contracts up to \$50,000, or
 - (b) approved as meeting VicRoads requirements for contracts up to \$100,000, or
 - (c) third party certified to AS/NZS ISO 9001 (QMS) and AS4801 or AS/NZS ISO 45001 (OH&S) for all contracts;
- Provide evidence that the company has either a:
 - Victorian WorkCover insurance certificate or
 - proof of self-insurance which covers all personnel engaged in the delivery of services;
- Be an incorporated company

Note: For VicRoads contracts for these works, a company will be required to maintain the following minimum levels of insurance:

- ◆ Public Liability \$10 million
- ◆ Professional Indemnity \$2 million

Levels: Traffic Signal Design (TOS)

Area of Competency

This level of prequalification requires competency in the design (including traffic signal plans, etc) of complex traffic signals on arterial roads and motorways, and

must demonstrate:

- At least two qualified traffic engineers (one designing and one checking), each with at least three years experience
- Designed and checked at least 5 traffic signal plans in the last 12 months
- A comprehensive knowledge of VicRoads Traffic Engineering Manual (particularly Volume 1 and 2); VicRoads Motorway Design Guide; VicRoads ITS Specifications & Standard Drawings; DoT Traffic Signal Plan Checklist; AS1742.14; Austroads Guide to Road Safety; Austroads Guide to Traffic Management (particularly Parts 9 and 10) and the Austroads Guide to Road Design
- (Preferably) undertaking the 2 day DoT Traffic Signal Design & Operations Course, facilitated by ARRB

Freeways (TOF)

Area of Competency

This level of pre-qualification requires competency in the analysis, planning, and design of urban freeway operations and performance.

Group:	TRAFFIC MANAGEMENT SERVICES GROUP
Category:	TRAFFIC DESIGN & OPERATIONS – ARTERIAL ROADS & MOTORWAYS (Continued)
Levels:	<p>Arterial Roads (TAR)</p> <p>Area of Competency This level of pre-qualification requires competency in the analysis, planning, and design of arterial road (rural and urban) operations and performance.</p> <hr/> <p>Traffic Facilities (TTF)</p> <p>Area of Competency This level of pre-qualification requires competency in the analysis, planning, and functional design of roads and intersections, parking, pedestrian and bicycle facilities.</p> <hr/> <p>Public Transport Facilities (TPF)</p> <p>Area of Competency This level of pre-qualification requires competency in the analysis, planning, and functional design in relation to the operations of on-street public transport facilities, ie. trams, buses and taxis.</p> <hr/> <p>Simulation Modelling (TSM)</p> <p>Area of Competency This level of pre-qualification requires competency in carrying out traffic simulation of intersections, small and large networks using recently developed modelling tools, such as VISSIM.</p> <hr/> <p>Communications Architecture (TCA)</p> <p>Area of Competency This level of pre-qualification requires competency in the design and costing of communications architecture (land-line, mobile and radio communication networks for the transmission of digital and analogue data and video), planning of ITS applications for traffic and transport, including pedestrians, and to assist public transport and freight operations and must demonstrate:</p> <ul style="list-style-type: none"> • Extensive experience in the design of communications networks for data and video systems and in the use and operation of intelligent transport systems. • General knowledge of communications regulations. <hr/> <p>Monitoring & Control Systems (TMC)</p> <p>Area of Competency This level of pre-qualification requires competency in the development, design and costing of traffic monitoring and control systems, such as the VicRoads Freeway Data System and must demonstrate:</p> <ul style="list-style-type: none"> • Extensive experience with the development of both manual and automatic control systems software. • Experience in the integration of control systems. • Experience with interfacing between field equipment and remote control systems.

Group:	TRAFFIC MANAGEMENT SERVICES GROUP
Category:	TRAFFIC DESIGN & OPERATIONS – ARTERIAL ROADS & MOTORWAYS (Continued)
Levels:	<p>Traffic Signing & Delineation Design (TSD)</p> <p>Area of Competency This level of pre-qualification requires competency in the design of signs, signing and delineation schemes to suit rural and urban road environments and must demonstrate:</p> <ul style="list-style-type: none"> ▪ The standard eligibility criteria as above and ▪ Extensive experience with the design of various sign types and signing/delineation schemes in accordance with VicRoads Traffic Engineering Manual, Volume 2 – Signs and Markings, December 2001. <p>Freeway/Arterial Lighting Design (TLD)</p> <p>Area of Competency This level of pre-qualification requires competency in the design of freeway and arterial road lighting schemes as well as the associated electrical wiring design and must demonstrate:</p> <ul style="list-style-type: none"> • The standard eligibility criteria as above and personnel with: • Experience in the design of not less than three separate lengths of freeway lighting (stand-alone type schemes) as well as three interchange designs. • Experience in the design of not less than three separate lengths of arterial road lighting (stand-alone type schemes on declared roads) as well as three intersection designs. • A thorough knowledge of VicRoads TCG 006 Guidelines for Street Lighting Design and Installation. • Relevant qualifications and experience in not less than five electrical wiring designs to VESI standard and not less than three designs to AS/NZS 3000.

Group: TRAFFIC MANAGEMENT SERVICES GROUP

Category: FREIGHT & FREIGHT VEHICLE OPERATIONS

This category of pre-qualification incorporates services associated with vehicle assessments, investigation and reporting of freight operations, and research of intermodal and overseas operations.

All pre-qualified consultants in this category will be required to participate in regular reviews of performance in relation to the performance assessment criteria for Traffic Management Services.

Standard Eligibility Criteria for each Level

To be eligible a Company must:

- Have personnel experienced in the area of competency described for the pre-qualification level below;
- Have previous relevant experience (at least 2 years) and satisfactory performance in the area of competency described in the pre-qualification level and as otherwise specified;
- Have a quality and OH&S management system that is either
 - (a) operational for contracts up to \$50,000, or
 - (b) approved as meeting VicRoads requirements for contracts up to \$100,000, or
 - (c) third party certified to AS/NZS ISO 9001 and AS4801 or AS/NZS ISO 45001 (OH&S) for all contracts;
- Provide evidence that the company has either a:
 - Victorian WorkCover Certificate or
 - proof of self-insurance which covers all personnel engaged in the delivery of services;
- Be an incorporated company

Note: For VicRoads contracts for these works, a company will be required to maintain the following minimum levels of insurance:

- ◆ Public Liability \$10 million.
- ◆ Professional Indemnity \$2 million

Levels: Vehicle Assessments (FVA)

Area of Competency

This level of pre-qualification requires competency in the assessment of various vehicle configurations and their dynamic characteristics, including mass distribution, swept paths and safety.

Investigation & Reporting (FIR)

Area of Competency

This level of pre-qualification requires competency in the investigation and reporting of various freight operations throughout Victoria and may involve interstate operations.

Research (FVR)

Area of Competency

This level of pre-qualification requires competency in the research of intermodal operations involving road, rail and sea transport.

Group:	TRAFFIC MANAGEMENT SERVICES GROUP
Category:	<p>ROAD SAFETY AUDITS</p> <p>This category of pre-qualification is required for a Company to undertake Road Safety Audits as specified in VicRoads contracts. The road safety audit process provides at nominated stages of the design / work, for an independent assessment to be made by a team specifically skilled in the areas of accident prevention and road safety engineering.</p> <p>This pre-qualification is awarded to companies, but is conditional on a nominated representative of the Company (a Senior Road Safety Auditor**), being directly involved in the assessment and issue of the audit report. Applications for pre-qualification must nominate one or more employees who are Senior Road Safety Auditors.**</p> <p>All pre-qualified companies in this category may be required to participate in regular reviews of performance.</p> <p>Standard Eligibility Criteria To be eligible a Company must:</p> <ul style="list-style-type: none"> • Have personnel experienced in the area of competency described for the pre-qualification level below; • Have previous relevant experience (at least 2 years) and satisfactory performance in the area of competency described in the pre-qualification level and as otherwise specified; • Have a quality and OH&S management system that is either <ul style="list-style-type: none"> (a) operational for contracts up to \$50,000, or (b) approved as meeting VicRoads requirements for contracts up to \$100,000, or (c) third party certified to AS/NZS ISO 9001 (QMS) and AS4801 or AS/NZS ISO 45001 (OH&S) for all contracts; • Provide evidence that the company has a Victorian WorkCover insurance Certor proof of self-insurance which covers all personnel engaged in the delivery of services; • Be an incorporated company <p>Note: For VicRoads contracts for Road Safety Audits, a company will be required to maintain the following minimum levels of insurance:</p> <ul style="list-style-type: none"> ◆ Public Liability \$10 million ◆ Professional Indemnity \$2 million
Levels:	<p>Road Safety Audit (RSAUDIT)</p> <p>Area of Competency</p> <ul style="list-style-type: none"> • This level of pre-qualification requires competency in conducting various road safety audits, possession of adequate road safety engineering experience for the stage of audit and ability to act as a Senior Road Safety Auditor. **
	<p>** For accreditation with VicRoads as a Senior Road Safety Auditor, the individual must have:</p> <ul style="list-style-type: none"> • Successfully completed a recognised road safety audit training course, of at least two days duration, • At least five years experience in road design, road construction techniques, traffic engineering and road user behaviour, • Undertaken at least five formal road safety audits, including at least three at design stages, and • Kept their professional experience current by undertaking at least one audit per year. <p>Applications for accreditation should be undertaken on the VicRoads Road Safety Auditor Management System website: www.vrsa.com.au</p>