

**TRANSPORT REFORM - CAN YOU ACCESS THE  
INFORMATION YOU NEED?**

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**ABSTRACT**

Information is essential for both planning transport reform and monitoring the effectiveness of reforms. Information resources are scattered through out Australia and New Zealand, and valuable time is spent identifying sources or duplicating research and/or data collection. There are library and information networks such as TRANSLIB (transport librarians) in Australia and New Zealand that can help locate relevant information and minimise costs. Transport librarians from some organisations are contributing information on publications to the ROAD database compiled by ARRB Transport Research, enabling the resources of those organisations to be shared. ARRB Transport Research also maintains databases on current road research projects and an inventory of data sets. It participates in international information networks and is the Australasian Node of the World Interchange Network (a PIARC initiative) as well as the Australian contributor to the International Road Research Documentation (RRD) database provided by the OECD. Both of these networks are the result of researchers and information specialists working together. Access to sources of information in Australia and New Zealand could be improved by further co-operation and co-ordination involving the owners of the information and using skills of the information specialists. The collection of data and access to other sources are essential elements of the information strategy of the New Zealand Ministry of Transport.

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The logo for ATRF 96, featuring the letters 'A', 'T', and 'R' in a stylized, overlapping arrangement, with the text 'ATRF 96' overlaid on the 'R'.

## Introduction

Information is an essential ingredient in transport reform. It is required in various forms in the transport planning and research processes, and for monitoring the effectiveness of reforms. The value of information and research has been discussed frequently over recent years, and it is generally agreed that it is extremely difficult, if not impossible, to quantify. The need for reliable data in the transport planning process has also been identified (TRB, 1992). Efficiencies and economies can be made by utilising past research results and data sets. However, this can only be done if relevant sources can be identified and accessed.

This paper provides an update for transport professionals on information resources available to them in Australia and New Zealand, with particular reference to the access, availability and adequacy of these resources. A case study of an information research strategy developed by the New Zealand Ministry of Transport explores how they developed a strategy to answer the questions discussed below.

Information resources are scattered throughout Australia and New Zealand but there is no easy way of locating them. Nor is there any guarantee that information required for future planning and research will be available. Access to information for transport planning beyond 2000 will be more certain and efficient if some consideration is given now to those needs. Information professionals are supporting the planning and research processes by providing access to a range of sources world-wide, as well as managing local information sources. They have the skills to organise, manage and provide access to a wide range of data and information, and are broadening their traditional focus to encompass more value added service. They have the potential to make a much greater contribution to the collection, organisation and dissemination of transport related information.

If Australia and New Zealand are to have safe and efficient transport systems, based on the best available information, the following questions need to be addressed:

- \* what information will be required, and how is this to be determined?
- \* what is available now, and where is it?
- \* what are the gaps?
- \* what steps need to be taken to ensure the required information will be available and readily accessible?
- \* how, and by whom, can these steps be taken?

With the existing networks and close working relationships which exist in Australia and New Zealand, it is conceivable that cooperative efforts by transport and information professionals could provide access to the information required without the need to establish a dedicated centre.

## **Update on some information networks in Australia and New Zealand**

The Australian transport libraries network, the role of TRANSLIB, (transport librarians group) and ARRB Transport Research (ARRB TR) are outlined in a previous paper (Tickner, 1994). Since 1994, access to transport information has been expanded by activities of ARRB TR, TRANSLIB and the Internet.

### ***ARRB Transport Research Ltd (ARRB TR)***

ARRB TR continues to provide a range of national interest services under contract to its Members

#### ***1. The ROAD database***

With the cooperation of other organisations, the ROAD database has expanded its coverage of the holdings of other libraries and now includes the following:

- \* Electronic component of the Main Roads Western Australia library catalogue
- \* Tasmania Department of Transport library catalogue
- \* The former LASORS database (road safety)
- \* Road safety collections of
  - Royal Automobile Club of Victoria (RACV)
  - NHMRC Road Accident Research Unit
  - National Roads & Motorists' Association (NRMA)
  - NZ Land Transport Safety Authority

The road safety components of the Roads and Traffic Authority of New South Wales and of Vicroads will be added when a suitable electronic format is available, as will the library catalogue of the Northern Territory Department of Transport and Works. Most state road authorities continue to contribute records of their own publications as well as other Australian publications which they hold

ROAD now includes over 100,000 bibliographic records, many with more than one location, providing access not previously available to thousands of publications. ROAD continues to be available on INFORMIT's *Engineering and Applied Science* CD-ROM, now with greatly improved software, and marketed world-wide by Silver Platter. ROAD is also available on the National Library of Australia's OZLINE system (soon to become WORLD 1).

#### ***2. International Road Research Documentation (IRRD)***

As the Australian centre, ARRB TR continues to provide information on Australian research publications to IRRD. By arrangement with Transit New Zealand, records of its research reports are also sent by ARRB TR. IRRD operates under the Road Transport Research Programme of O.E.C.D. The *Transport CD-ROM*, produced by Silver Platter, provides access to world-wide literature in all transport modes, and as well as IRRD, includes TRIS (Transportation Research Information Service) from the

United States and TRANSDOC. (transport economics), provided by the European Council of Ministers of Transport (ECMT).

**3. ROADRES (Research Projects database) and AUSTDAT  
(Inventory of data sets)**

ROADRES contains contact and summary details of over 2,000 road-related research projects, including those provided by Transit New Zealand. It is updated twice each year, and is available on the *Engineering and Applied Science* CD-ROM as well as on OZLINE as the ROAR file. Information from AUSTDAT is available from ARRB TR. It is anticipated that both will be accessible via ARRB TR's home page when it is finalised.

**4. World Interchange Network**

INTERCHANGE is a global road transport knowledge exchange network initiated by PIARC (World Road Association). It is designed to put people with problems in touch with people with solutions. It operates through a network of nodes in over 35 countries, and ARRB TR is the Australasian node. The referral service is available to anyone seeking to obtain knowledge from experts in other countries. There is no fee for locating a contact, but parties involved may wish to negotiate fees if the information is not freely available. Being located in Information Services at ARRB TR the node has the advantages of access to a library of world-wide research literature, a network of contacts and on-line access to databases world-wide, in-house experts and others throughout the country via local and AUSTRROADS information files. Participation in international meetings on technology transfer has further enhanced the contacts and networks of the node.

Full-text proceedings and technical publications from the World Road Association are now available on a new CD-ROM product called CD-ROUTE. First issued in September 1995, CD-ROUTE will be updated biannually. It includes proceedings of the 1991 and 1995 meetings of the World Road Congress (in both French and English), the IRRD Thesaurus and the OECD publications list. CD-ROUTE uses Adobe Acrobat to support both Macintosh and PC systems.

***Rail, Sea and Air***

Access to rail, air and sea transport information remains largely uncoordinated in Australia. Airservices Australia has the only aviation oriented specialist library of world-wide scope in Australia. The library holds an extensive collection of technical reports, standards and regulatory publications produced by institutions involved in research and regulation governing the aviation industry world-wide. The library of the federal Department of Transport and Regional Development services its Policy Division, the International Air Services Commission, and the Bureau of Air Safety Investigation, covering pilot fatigue, human performance, stress, etc.

The Australian Maritime College, as the national centre for maritime education, training and research, maintains a learning resource centre. It covers maritime law and commerce, maritime engineering and electronics, navigation and seamanship, oceanography, fisheries technology, state of the art communications, ship building and offshore engineering. Over the past years, many of the port authorities have closed their libraries.

Rail information is not well covered. New South Wales and Western Australia have the only two specialist rail libraries, while material in other states is incorporated in other transport collections. The Department of Main Roads in Queensland supports the rail sector of Queensland Transport, as well as the road, marine and (to a lesser extent), aviation sectors.

ARRB TR has expanded its research capability to other transport modes, and this move will gradually be reflected in the information resources available through the organisation.

### **New Zealand**

New Zealand's transport collections have undergone considerable change over the last decade. This can be attributed partly to the significant changes in the state sector with the sale of ex-government departments or their division into several separate agencies. As a result, the libraries that had been available to both staff and the public have limited their access. In other instances the collections became smaller and more focused as the clientele changed, or, in some cases, libraries were closed altogether.

#### *Where are the transport collections now?*

The major collections continue to be held at the universities, especially the Universities of Auckland and Canterbury engineering libraries. These libraries provide the backbone for transport information but it should be recognised that their collections are not entirely focused towards the needs of the transport client.

Other collections can be divided into several groups all with a different focus but each meeting the needs of some part of the transport clientele:

- \* Health libraries attached to Regional Health Authorities, Crown Health Enterprises and the medical schools collect information on accident prevention, statistics, alcohol and drug abuse and its effects on drivers
- \* Museum libraries such as the Hobson Wharf Maritime Museum Library are considering creating a maritime research computer network linking other maritime collections that cover library, archival and physical holdings on shipping, naval architecture and yachting

- \* Regional Council libraries, namely Auckland and Wellington, have collections that focus on transportation planning.
- \* Private companies generally support the transport information needs of their own staff, with collections emphasising the engineering aspects of transportation.
- \* Ex-government departments that are now State Owned Enterprises, Crown Research Institutes or private companies, e.g. Works Consultancy Services Limited, Industrial Research and Trans Rail, generally have the largest and most extensive transport collections due to past government investment over many years. Access is generally available only to staff or on a user charges basis.
- \* Government agencies such as the Land Transport Safety Authority (which has a significant collection available to the public), Accident Compensation Corporation and Tourism.

Access to these collections is generally limited to a specific group - frequently the staff of the parent organisation. Usually the public can borrow from the collections of private companies, State Owned Enterprises etc. only through either the New Zealand interloan scheme or by paying for access e.g. subscription to the library services. In some situations the librarians use their discretion in sharing the collections, although there are few formal resource sharing arrangements except between the Crown Research Institutes.

There are major challenges affecting the delivery of information services to those in the transportation field. Many organisations that had previously had a librarian maintaining their collection and ensuring their own publications were managed are now floundering. They may lack awareness of the need to ensure their own publications are sent to legal deposit ensuring that the publications are then available world wide. Exchange agreements with other agencies worldwide, which provide libraries with valuable transport information have lapsed so that publications that were previously obtained this way now have to be paid for, or are no longer obtained. It may be that organisations should reconsider the value of the corporate librarian to ensure their publications are distributed, their reference information is obtained efficiently and cost-effectively, and links with other information resources are maintained.

#### *TRANSLIB*

The aim of the transport librarians group is to make best use of the transport information resources in Australia and New Zealand. It meets each year, alternately with the Australasian Transport Research Forum (ATRF) and the Special Libraries Conference. This year, an invitation was extended to transport professionals, with the aim of improving communication between the information users and the information providers.

Transport Librarians met in August in 1995 in conjunction with the Asia Pacific Specials, Health and Law Librarians Conference in Sydney. The meeting was attended

by 25 librarians responsible for transport collections in Australia and New Zealand. The group agreed to seek a home and sponsor for a home page. The University of Technology, Sydney has agreed to develop the site which will be maintained by ARRB TR. The group also agreed to investigate the feasibility of undertaking a Conspectus of transport libraries.

ARRB TR has updated the *Directory of Libraries with Transport Collections* providing details of almost 50 libraries in Australia and New Zealand. The *TRANSLIB Union List of Periodicals* is now available on the Engineering and Applied Science CD-ROM, providing a location for 2600 periodical titles in 19 libraries.

### ***Transport information and the INTERNET***

The bright light in the access to transport information is the development of the Internet, especially the World Wide Web. There are numerous transport sites, many of them still under construction. The interaction of the "Information Highway" or "Global Information Infrastructure" with transportation, both by making transportation more efficient, and by providing remote access to services has been described elsewhere (McGurrin & Patel, 1995). The authors describe how some local city authorities, academics, and business are providing transportation and travel-related information services, and discuss the interest and stake the transportation community holds, and the role it should play, in the development of the Infobahn.

Guensler and Bernstein (1996) describe the basic tools available on the Internet, summarise a variety of available transportation-related resources, general Internet capabilities (e-mail, mailing lists, dial-up bulletin board system, TELNET and FTP and World Wide Web), and provide a table of various information sources for each Internet service.

In Australia, in May 1996, there were over 30 World Wide Web transport related sites, ranging from those under construction with little more than a home page, to more developed sites providing details of memberships of committees, ferry timetables and current research. A list of Australian sites is provided in Appendix 1. In New Zealand, there were 15 sites, in similar stages of development (Appendix 2)

While some services simply offer descriptions and contact information for off-line resources, a growing number provide direct access to viewable and/or down loadable data sets. The more sophisticated sites support data extraction utilities that facilitate the retrieval of subsets of large data sets or the manipulation of raw data into graphical or map image output (Morris, 1996)

While there is little in the way of full-text of transport research publications available on the Internet, access to indexes and library catalogues, particularly in the United States, is extensive. The Princeton Transportation Resources page at (<http://dragon.princeton.edu/~dnh/>) provides an exhaustive list of transportation resources on the web

## New Zealand Ministry of Transport Information Research Strategy

The following is an outline of a case study by the New Zealand Ministry of Transport analysing the development of a Transport Information Strategy, which aims to ensure access, availability and adequacy of relevant information.

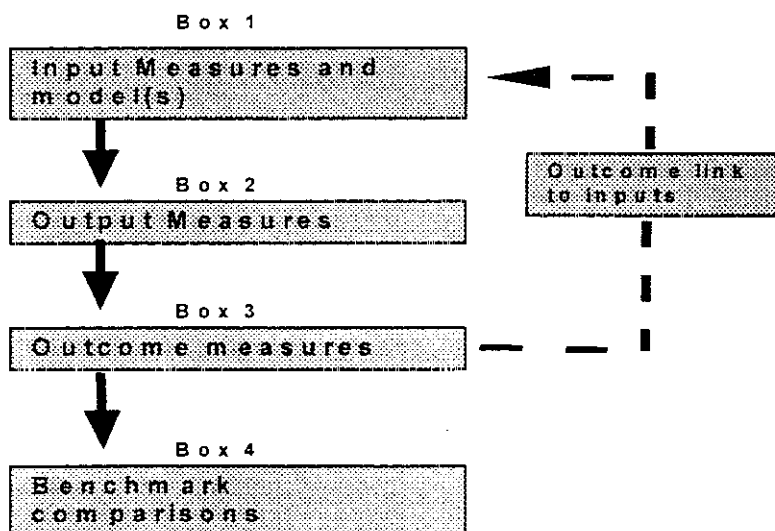
In the last decade, successive New Zealand Governments, as a result of transport reform have redeveloped transport policy into a comprehensive multimodal approach, with the overall goal of developing a safe, sustainable transport system at reasonable cost.<sup>1</sup>

The New Zealand Ministry of Transport Information Research Strategy (MOTIRS) arose from the need to provide an accurate picture of transport activity, to indicate whether the Ministry of Transport is achieving its goal of "safe sustainable transport at reasonable cost". The MOTIRS was designed to give us the tools and information necessary for this.

### *The information framework*

To accurately provide a picture of transport activity, the way in which such information was to be obtained was developed in an information framework. This framework can be classified into four distinct, but interrelated stages (Figure.1). These stages together form a conceptual model that has been developed out of the current structure of public sector management and policy development as set out, explicitly or implicitly, in the Public Finance Act 1989 and the State Sector Act 1988.

**Figure 1: The Information Framework**



<sup>1</sup> "safety" means giving reasonable freedom from personal risk, while "sustainable" applies to the economic, environmental and social structures within which the transport sector operates. "At reasonable cost" is defined in legislation as being a situation where the benefits to New Zealand exceed the costs to New Zealand of any given intervention or action.



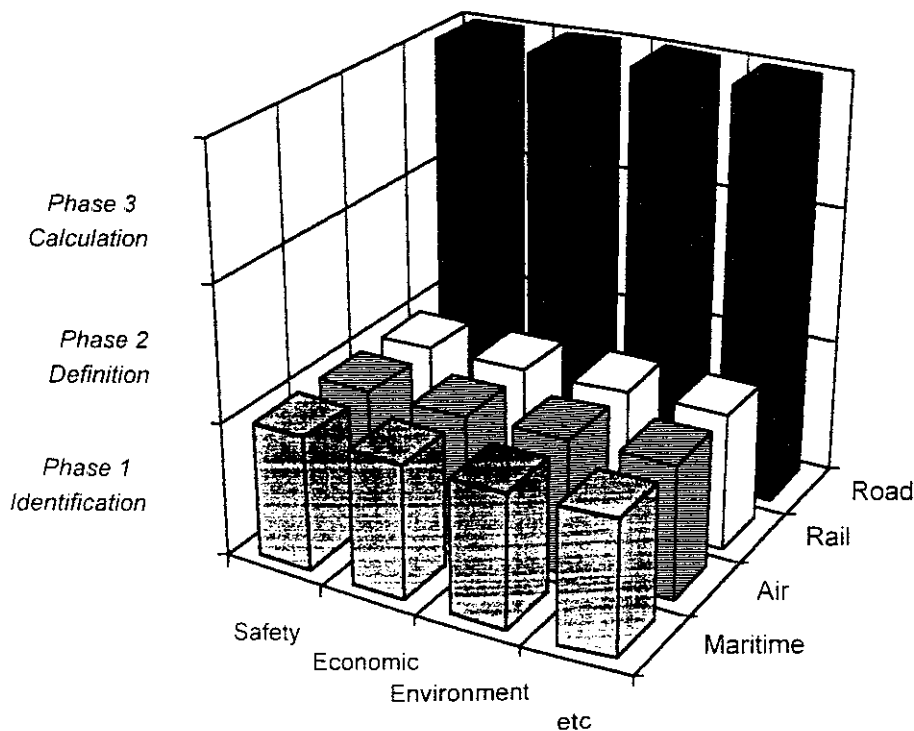
Box one is a comprehensive description of the policies in operation, their subsequent measurement and the combination of policy and cost inputs for evaluation and sensitivity;

Box two records levels of activity in the sector of interest. These are raw performance measures e.g. cost, safety, production;

Box three outlines performance measures in relation to an activity; and

Box four develops comparable international or other relevant statistics.

**Figure 2: Phases in the Development of Transport Measures**



Using the information framework, an internal draft information strategy was developed, which used a second model (Figure 2) to define the phases by which the framework could be undertaken. The first two phases of the second model, identification and definition, were tendered out for contracting. A project team comprising of Works Consultancy Services and Business and Economic Research Limited were contracted for the completion of Phase one and two.

The indicators - (of Road, Rail, Air and Maritime) will be used to measure the effects of transport in the areas identified above - on safety, the environment, economic activity,

different groups within society and the sector's overall performance. Phase two focuses on developing indicators for road only.

***Phase 1 Identification of ideal measure: January - March 1996***

The reports which are described below were developed by the Project Team through an extensive review of New Zealand and international literature related to the impacts and measures of the transport sector. Extensive discussion was undertaken with policy staff from the Ministry in each of the Policy Units (Safety, Environment and Commercial), to ensure the rationale for each indicator was understood (and where necessary modified), and aligned with the Ministry's policy directions. There was also considerable analysis and internal debate within the Project Team and, where necessary, further modification.

Two draft reports were produced, and after consultation within the Ministry and the Project Team, a final report "Development and Implementation of an Information Strategy Phase 1: Foundations" was produced. This included a chapter on a review of appropriate national and international databases to access. An independent review of this report was completed.

***Phase 2 Definition of available measures: April - June 1996***

Because of the size of the overall project it was decided to concentrate during Phase two and subsequently Phase three on completing road transport indicators only. The process of defining available measures took the ideal measures identified in Phase one, and advised appropriate procedures to calculate the measure. If the ideal information was not available, we identified either a surrogate measure based on available information, or an appropriate research program. We prioritised the ideal measures, to enable the best use of resources, on the basis of the usefulness and cost of measures.

Requests for information were made to transport agencies and organisations, either in writing, or in person. This enabled us to identify both the appropriate contact person, and any other available data sources.

Two draft reports were produced for internal review. At the time of publication, Phase two of the working model is in the throes of completion. A final report for Phase two has yet to be developed.

***Phase 3 Calculation of measures: July 1996 onwards***

Phase three will involve calculation of the available measures, using the data sources identified in Phase two. The end of this phase, will enable us to identify the most appropriate means to publish the data for road transport.

### **Case Study conclusion**

The MOTIRS with the development of an information framework and working model has endeavoured to ensure access, availability and adequacy of relevant information can be obtained in New Zealand. It is only on the completion of the three phases of the MOIIRS that quantitative data and qualitative statements can be made on the adequacy, availability and accessibility of New Zealand's information since the transport reforms. The goal of the Ministry of Transport is to ensure that these results place us in a situation where we are continually recognised as the primary agency for all matters related to policy information, advise and action-fulfilling our long term strategic goal of "safe sustainable transport at reasonable cost"

### **Conclusion**

Some current cooperative projects providing access to information in Australia and New Zealand have been described, but there is no coordinated strategy or plan to ensure access to information required for future transport reform. To access the broader range of data and information, an appropriate strategy needs to be devised. New technologies can facilitate information sharing not previously achievable, but it requires the cooperative and coordinated efforts of both transport and information professionals. The MOTIRS developed by the New Zealand Ministry of Transport to address its transport information needs beyond 2000 is highly dependent on external sources. However, both internal and external sources require ongoing support and proper management to provide appropriate and efficient delivery of data and information for the transport reform process.

### *References*

Guensler, R and Bernstein, D. (1996). "Transportation resources on the Internet" *ITE Journal*, 66(4) pp.42-48

McGurrin, M.F. and Patel, V. (1995). "A road trip down the Infobahn: Transportation resources on the Internet" In: VERTIS (ed.) "*Steps forward*" *Proc. Second World Congress on Intelligent Transport Systems '95 Yokohama* Vol.4. pp 1672-77. (VERTIS: Tokyo, Japan)

Morris, S. (1996). "Surfing the Net: Transportation publications on the Web" *Transportation Division Bulletin* 12 (2) p.13, 17.

Tickner, J. (1994). "The transport information partnership" *Australasian Transport Research Forum*, 19th, Lorne, Victoria, 1994. pp 447-63. (University of Melbourne, Transport Research Centre: Parkville, Victoria)

Transportation Research Board (1992). *Data for Decisions. Requirements for National Transportation Policy Making* Special Report 234. (TRB:Washington, DC).

**TRANSPORT RELATED WORLD WIDE WEB SITES IN AUSTRALIA  
as at May 29, 1996**

ACT City Services - Transport Facilities and Services	<a href="http://actg.canberra.edu.au/actg/dus/csg/org9/org9.htm">http://actg.canberra.edu.au/actg/dus/csg/org9/org9.htm</a>
AITPM	<a href="http://www.sinta.uts.edu.au/aitpm/">http://www.sinta.uts.edu.au/aitpm/</a>
Ansett Australia	<a href="http://www.ansett.com.au/">http://www.ansett.com.au/</a>
Australia Department of Transport and Regional Development	<a href="http://www.dot.gov.au">http://www.dot.gov.au</a>
Australian Automobile Association	<a href="http://cibc.anutech.com.au/new/101/">http://cibc.anutech.com.au/new/101/</a>
Bureau of Transport and Communications Economics	<a href="http://www.dot.gov.au/programs/btce/homepage.htm">http://www.dot.gov.au/programs/btce/homepage.htm</a>
Central Queensland University Centre for Railway Engineering	<a href="http://www.cqu.edu.au/research/re/home.html">http://www.cqu.edu.au/research/re/home.html</a>
ITS at University of Technology, Sydney	<a href="http://www.ee.uts.edu.au/eo/its/its.html">http://www.ee.uts.edu.au/eo/its/its.html</a>
ITS Australia	<a href="http://www.itsa.uts.edu.au">http://www.itsa.uts.edu.au</a>
Metrobus (WA)	<a href="http://www.metrobus.wa.gov.au/">http://www.metrobus.wa.gov.au/</a>
Monash Transport group	<a href="http://civil-www.eng.monash.edu.au/mtg/home.html">http://civil-www.eng.monash.edu.au/mtg/home.html</a>
NRMA	<a href="http://www.nrma.com.au">http://www.nrma.com.au</a>
PaveNET	<a href="http://www.mincad.com.au/engineering/pavenet/">http://www.mincad.com.au/engineering/pavenet/</a>
Public Transport Corporation (Victoria)	<a href="http://yoyo.cc.monash.edu.au/~benna/melb.html">http://yoyo.cc.monash.edu.au/~benna/melb.html</a>
Public Transport Users Association (Victoria)	<a href="http://yarra.vicnet.net.au/~ptua/firstpt.htm">http://yarra.vicnet.net.au/~ptua/firstpt.htm</a>
Queensland Transport	<a href="http://www.squirrel.com.au/qdot/overview.html">http://www.squirrel.com.au/qdot/overview.html</a>
Queensland University of Technology Physical Infrastructure Centre	<a href="http://www.qut.edu.au/bee/civil/pic/pic.html">http://www.qut.edu.au/bee/civil/pic/pic.html</a>
RailPage Australia	<a href="http://www.com.au/railpage/">http://www.com.au/railpage/</a>
Road Accident Research Unit (SA)	<a href="http://www.raru.Adelaide.edu.au">http://www.raru.Adelaide.edu.au</a>
Roads and Traffic Authority (NSW)	<a href="http://www.rta.nsw.gov.au/">http://www.rta.nsw.gov.au/</a>
Royal Automobile Club of WA	<a href="http://www.rac.com.au/rac">http://www.rac.com.au/rac</a>
SINTA	<a href="http://www.sinta.uts.edu.au/">http://www.sinta.uts.edu.au/</a>
South Australia Department of Transport	<a href="http://dino.slsa.sa.gov/sagov/agencies/dt.htm">http://dino.slsa.sa.gov/sagov/agencies/dt.htm</a>
South Australia Police Traffic Safety	<a href="http://www.saschools.edu.au/police/police.html">http://www.saschools.edu.au/police/police.html</a>
State Rail NSW	<a href="http://www.webpages.com.au/state-rail/staterail.htm">http://www.webpages.com.au/state-rail/staterail.htm</a>

Sydney Harbour Ferries	<a href="http://www.sinta.uts.edu.au/ferries/">http://www.sinta.uts.edu.au/ferries/</a>
University of Melbourne Transport Energy Group	<a href="http://sungear.mame.mu.oz.au/~jeremyl/">http://sungear.mame.mu.oz.au/~jeremyl/</a>
University of South Australia Transportation Systems Centre	<a href="http://www.unisa.edu.au/tsc/index.html">http://www.unisa.edu.au/tsc/index.html</a>
VicRoads	<a href="http://www.vicnet.net.au/vicnet/vicgov/vicrds/vicroad.htm">http://www.vicnet.net.au/vicnet/vicgov/vicrds/vicroad.htm</a>
Victoria Police Speed Camera Program	<a href="http://www.vicnet.net.au/vicnet/traffic/traffic.html">http://www.vicnet.net.au/vicnet/traffic/traffic.html</a>
Victoria Road Safety Strategy 1995-2000	<a href="http://www.vicnet.net.au/vicnet/vicgov/safety/safety.htm">http://www.vicnet.net.au/vicnet/vicgov/safety/safety.htm</a>
Westrail	<a href="http://www.westrail.wa.gov.au">http://www.westrail.wa.gov.au</a>

**TRANSPORT RELATED WORLD WIDE WEB SITES IN NEW ZEALAND  
as at May 29, 1996**

New Zealand Road Transport Association (NZRTA)	<a href="http://mars.auck.irl.cri.nz/rta_publ.htm">http://mars.auck.irl.cri.nz/rta_publ.htm</a>
Air New Zealand	<a href="http://airnz.com/">http://airnz.com/</a>
Airways Website Index	<a href="http://www.airways.co.nz/">http://www.airways.co.nz/</a>
Auckland International Airport Information Finder	<a href="http://www.url.co.nz/airport/welcome.htm">http://www.url.co.nz/airport/welcome.htm</a>
BMW Owners Register of New Zealand	<a href="http://iconz.co.nz/bmw/bmw.html">http://iconz.co.nz/bmw/bmw.html</a>
Christchurch International Airport Ltd	<a href="http://icair.iac.org.nz/iac/iac_cial.html">http://icair.iac.org.nz/iac/iac_cial.html</a>
The Civil Aviation Authority of New Zealand	<a href="http://www.caa.govt.nz/">http://www.caa.govt.nz/</a>
Kiwi Travel International Airlines	<a href="http://www.kiwiair.co.nz/">http://www.kiwiair.co.nz/</a>
Ministry of Transport	<a href="http://www.govt.nz/ps/min/transport/">http://www.govt.nz/ps/min/transport/</a>
Mount Cook Airlines	<a href="http://www.clearfield.co.nz/mount_cook/mc_home.htm">http://www.clearfield.co.nz/mount_cook/mc_home.htm</a>
Automobile Association	<a href="http://www.aa.org.nz/">http://www.aa.org.nz/</a>
MOTAT (Museum of Transport and Technology)	<a href="http://hmu4.hmu.auckland.ac.nz:8001/motat/index.html">http://hmu4.hmu.auckland.ac.nz:8001/motat/index.html</a>
New Zealand Transport	<a href="http://www.comsec.co.uk/newzeal/newz.htm#transport">http://www.comsec.co.uk/newzeal/newz.htm#transport</a>
Ports Of Auckland Limited	<a href="http://www.globalregister.co.nz/ports/port-tmp.htm">http://www.globalregister.co.nz/ports/port-tmp.htm</a>
TruckNET in New Zealand	<a href="http://mars.auck.irl.cri.nz/">http://mars.auck.irl.cri.nz/</a>