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Abstract (200 words):

This paper describes the preparation of the Redlands Integrated Local Transport Plan (ILTP). The ILTP sets up strategic directions for the development of the future transport system capable of implementation at the local level. It identifies practical initiatives to integrate local transport and land use planning. The preparation of the ILTP included extensive consultation with the community, key stakeholders and state agencies and undertaken in parallel with the preparation of the Redlands Planning Scheme. The partnering of transport planning, land use planning and the local government planning expertise resulted in a realistic, integrated and innovative ILTP. The study considered coordinating travel modes with greater support for public transport, walking and cycling through better designed land uses. The study established a number of strategies and associated actions to be implemented over a short to medium term period. The transport plans delivered as part of the ILTP include road hierarchy, public transport, freight and cycling and walking. The ILTP has been developed to ensure the Shire's growth is matched by an efficient, effective and environmentally sustainable transport system. The ILTP supports the bigger picture integrated land use and transport plans in South East Queensland that provide the over-arching focus for local governments.

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Introduction

This paper describes the study undertaken by the author to prepare the Redland ILTP (2016) for the Redland Shire Council. The ILTP sets up strategic directions for the development of the future transport system capable of implementation at the local level. It identifies practical initiatives and seeks to integrate local transport and land use planning. The preparation of the ILTP included extensive consultation with the community, key stakeholders and state agencies. The ILTP won the 2003 Planning Institute of Australia (Queensland Division) for excellence in planning for the innovative methodology adopted in preparing the ILTP; the relationship with the “Community Plan – Vision 2005 and Beyond” and the integration with the preparation of the Redlands Planning Scheme. The partnering of transport planning, land use planning and the local government planning expertise resulted in a realistic, integrated and innovative transport plan. The PIAQ award and citation are included in Appendix A. The study considered coordinating travel modes with greater support for public transport, walking and cycling through better designed land uses. The study established a number of strategies and associated actions to be implemented over a short to medium term period. The transport plans delivered as part of the ILTP include road hierarchy, public transport, freight and cycling and walking. The ILTP has been developed to ensure the Shire’s growth is matched by an efficient, effective and environmentally sustainable transport system.

ILTP Inception

A local transport plan is best prepared by the local community which is most familiar with the existing situation and opportunities to plan a better future. Within Redland Shire, the community and the Council ventured on a strategic planning exercise defining their community’s vision and goals for the shire.

Local Community Plan

In the early 1990s Council embarked on a process to establish a future plan for the shire which was known as the Local Community Plan – “Vision for 2005 and Beyond”. It was a long-term social, environmental and economic plan for Redland’s sustainable future. The community plan set the following goals in respect of the transport system. They were:

- develop a safe, convenient and integrated public transport system to attract more people to use sustainable modes of travel;
- expand walkways and bikeways and their integration with public transport, places of recreation and urban centres;
- promote land use and transport systems, which provide more compact and better designed communities that make it easier to walk, cycle and use public transport;
- develop a well-defined, hierarchically-structured, safe and efficient road network system to cater for a moderate increase in the number of vehicular trips;
- introduce Travel Demand Management (TDM) measures in order to reduce the number of trips, especially by private cars;
- ensure the efficient movement of goods and services;
- develop a transport system to provide for the travel needs of all users, including physically impaired people;
- develop implementation plans; and
- ensure funding and finance.

It contained a vision of where the community wanted the shire to be in 2005 and beyond.

Vision for Transport Systems

The vision 2005 process undertaken by the Council in 1995 identified, amongst other matters, the definition of the transport systems that the community would like to have in the Shire. The community's vision was to develop an efficient and effective transport system, which was ecologically sustainable and enabled residents and visitors to travel safely and conveniently. The Redland Shire's Integrated Local Transport Plan (ILTP), together with the Redland's Planning Scheme, is a key delivery mechanism of Redland Shire's Community Plan. The ILTP sets the strategic direction to develop the Shire's transport system.

Regional Plan Relationship

Redland Shire Council, together with other local governments in the region, supports the Regional Framework for Growth Management (RFGM) and the Integrated Regional Transport Plan (IRTP) for South-East Queensland. The IRTP released in May 1997, contains policies and actions that aim to provide a high quality, sustainable transport system for the region. Council's ILTP for the shire had to take into consideration, and be consistent with, the Shire's Community Plan and the goals of the IRTP. The ILTP translates the policies and actions set out in the IRTP and Transport 2007 into more detailed plans, able to be implemented at a local government level, taking into account the needs of the Redland community.

ILTP Development

In developing the ILTP one needs to be cognisant of technical, statutory and political requirements, however it is critical that the community's goals are somehow inherent in the development process. The community goals were included in the development of the ILTP. The ILTP considered:

- Neighbouring local governments' transport plans (Brisbane, Logan and Gold Coast);
- State agencies transport positions (Department of Main Roads, Queensland Transport and Queensland Rail); and
- Public transport operator's positions.

Process

The ILTP was developed in parallel with the Planning Scheme and the process was later recognised by Queensland Transport and the Australian Institute of Planning (Queensland Division) as an effective model for other ILTPs as shown in the Award included in Appendix A. For the ILTP and the Redland Planning Scheme studies, significant levels of consultation and technical analysis were undertaken. These consultation findings provided the forums for progressing the four stages of the ILTP study program which included:

- Inception;
- Where are we? (existing situation);
- Background studies (addressing each community goal); and

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- Determining the strategic framework (ILTP).

Objectives: The main objective of the project was to develop an ILTP for the Shire consistent with Council's and the community's vision for the Shire, as well as the Integrated Regional Transport Plan and the Regional Framework for Growth Management in South-East Queensland. The ILTP draws modelling and travel forecasting information from the Redland Shire Transport Study. The study, which was a joint Council, Queensland Transport and Department of Main Road initiative, was complete in 2000. This study provided background modelling required for the ILTP process. It is proposed that travel demand analysis be carried out in the future as a part of the ILTP implementation and monitoring process to evaluate if implementing the ILTP has changed people's travel behaviour in the Redlands.

Consultation: The ILTP was prepared in conjunction with the Redland Planning Scheme Study and through a parallel consultation program with a number of stakeholders in the community. Those consulted included:

- Councillors;
- Council staff;
- State Government agencies;
- Neighbouring local governments;
- Transport providers and user groups;
- Community and members; and
- Key stakeholder groups.

The communications and consultation strategy was extensive and involved a variety of mechanisms.

Some of the key transport issues identified through consultation include:

- Inter-agency communication improvements are required to improve transport service provision and coordination;
- Better designed communities are needed to reduce the need for motorised travel and to promote an urban form conducive to public transport usage and walking and cycling movement;
- Transport and land use integration;
- Coordination of alternative travel modes; and
- The need to support public transport, walking and cycling.

Issues raised by the consultation process were considered during the preparation of Transport Issues and Position Papers as part of the Redland Planning Scheme Study.

The ILTP also incorporated the transport outcomes of the Community Plan and the Southern Moreton Bay Islands Study. The ILTP development process is illustrated in Figure 1.

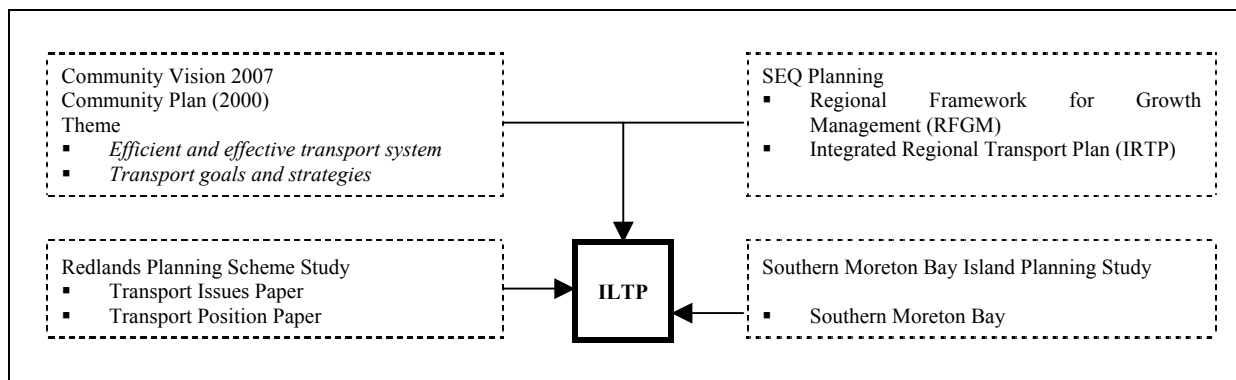


Figure 1: ILTP Development Process

Existing Transport Picture

The two main points clear about the present transport use included:

- a high reliance on cars for travel in the Shire; and
- a declining patronage for public transport.

The existing transport picture in the Shire is painted as follows:

- modal integration mechanisms (e.g. ticketing and timetabling) do not complement the existing modes of travel (e.g. ferry, bus and train);
- public transport hierarchy structure and financing mechanisms are deficient;
- walking and cycling and their integration with public transport is not as much utilised for short internal trips;
- lack of self contained area, urban consolidation around transport nodes and low existing residential densities do not contribute to effective use of walking, cycling and public transport modes;
- road network offers a high reliance for total trips today; and
- industrial and extractive areas in the line generate heavy truck movements.

Travel Patterns

Analysis and available transport data provided information on travel patterns as illustrated in Figures 2, 3, 4 and 5 below. Figure 2 illustrates actual “journey to work” data from census and Figures 3 to 5 are model outputs.

Transport Policies

The ILTP process involved undertaking a brief audit of the current planning scheme to identify improvements needed to current approaches in addressing transport improvements. Some of the issues identified as requiring improvements in policy approach included:

- integrated land use pattern and movement system;
- maximise existing railway line usage;
- line haul bus priority system;
- coordinated system of walking and cycling network and facilities; and
- urban form which supports public transport walking and cycling.

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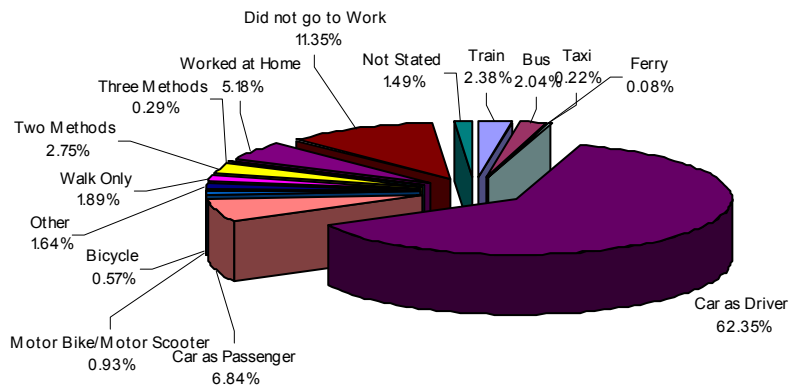


Figure 2: Mode of Travel to Work
(Source: ABS 1996 Census)

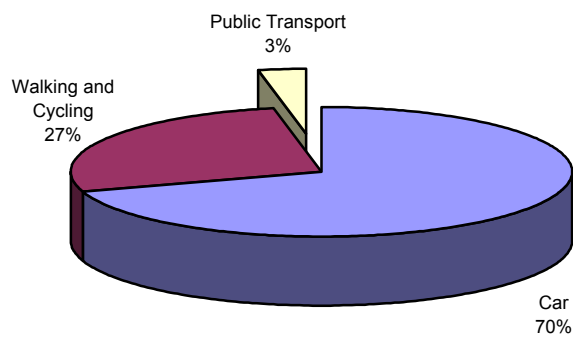


Figure 3 Modal Share in Intra-Shire Trips
(Source: Shire Transportation Study Trip Matrices, 2000)

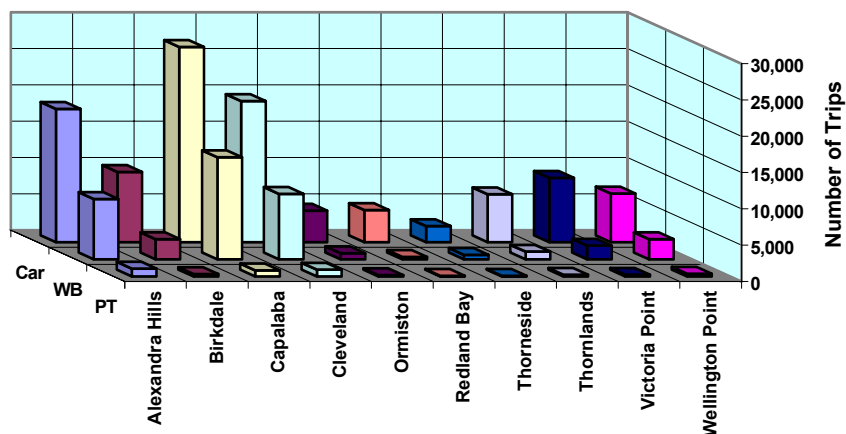


Figure 4 Distribution of Intra-Shire Trips
(Source: Shire Transportation Study Trip Matrices, 2000)

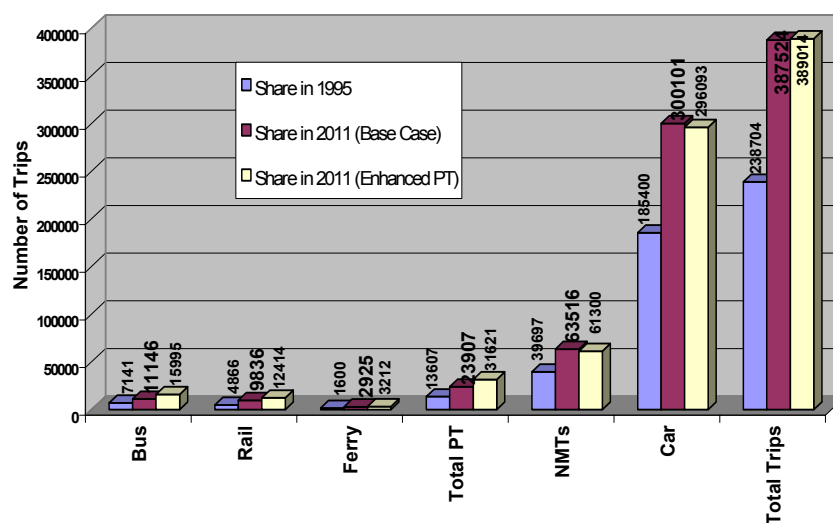


Figure 5 Modal Split Travel Pattern in the Shire
(Source: Shire Transportation Study Trip Matrices, 2000)

Transport Challenges

The transport challenge for the future is to offer the community better choices and opportunities to travel, and to date the Shire has been fortunate that it has not experienced the range of travel problems associated with many urban areas. The future will see an increase in

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the demand for transport presenting a challenge to the Shire to find ways of meeting this increasing demand while satisfying the community's desire for environmental quality, economic development and social equality. The following facts and issues illustrate the scale of this challenge to lessen car travel and increase non-car travel:

- average household size of 3.07 to changing to more people living alone, in two-person households or as sole parent families;
- higher than average proportion (14%) of people aged 60 years or older and increasing;
- a relatively high percentage (26%) of young population in the 0 – 14 year age group who, on reaching adulthood, would become more mobile;
- increased female participation in the workforce and more women with drivers' licences;
- changing work hours due to flexible working hours and an increase in the number of hours; and
- "journey to work" trips originating in Redlands have destinations that are widely scattered outside the Shire.

Demography

Approximately 60% of employed people who live within the Shire work outside the Shire, illustrating Redlands as a Shire reliant on other centres (Brisbane City Council and neighbouring local government areas of Logan, Pine Rivers and Ipswich) for employment of its residents. Accordingly, a major challenge facing the Shire is how to provide increased employment opportunities as the population increases. Redland Shire has experienced sustained periods of significant population growth and is expected to experience the same growth from 118,000 in 2001 to 164,000 by 2016. The population will age significantly over the same period, when 38.5% of the Shire's population will be aged 50 years and over.

Mode Share Targets: As with the IRTP, the ILTP promotes:

- integrated transport planning;
- reduces dependency on private motor vehicles;
- increased vehicle occupancy; and
- encourages walking and cycling.

The implementation of the ILTP is driven by the necessity to achieve targets. The targets also enable assessment of the consequences and costs of achieving the aim of altering traffic growth and mode share. The targets adopted for the IRTP and the ILTP are shown in Figure 5 below.

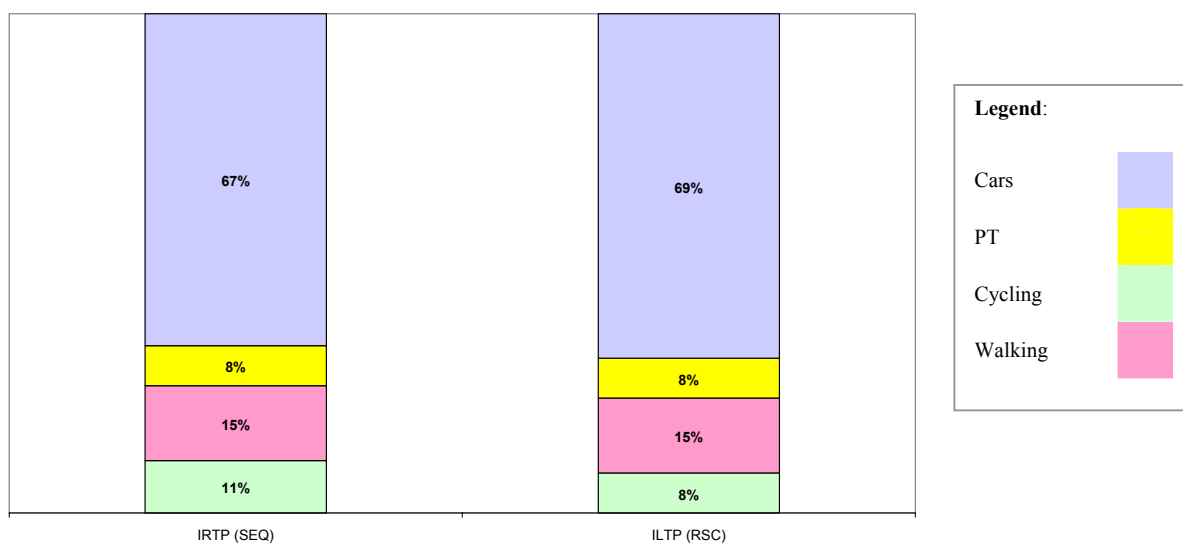


Figure 6: Mode of Travel Targets for 2011

Source: IRTTP for SEQ, 1997 and Redlands ILTP, 2002

Existing Land Use Planning Issues

Transport policies alone are unlikely to achieve the objectives of an ILTP, and as has been increasingly recognised, generally land use planning and transportation in Redland Shire are also inextricably linked. The relationships between land use and transport networks have an influence on:

- distance people need to travel;
- proportion of trips that can be made with a particular mode; and
- cost effectiveness of, and level of service provided by public transport.

Sprawling lower density communities and segregated land uses in the Shire make it difficult for conventional public transport to function effectively, and do not encourage cycling and walking to facilitate a reduction in travel demand.

The ILTP identified the Planning Scheme as an important mechanism in the achievement of integrated land use and transport, and it is appropriate to use the Planning Scheme under the Integrated Planning Act and development conditions to better support travel by public transport, walking and cycling in the Shire.

Improving the design of new and existing communities can increase opportunities for walking, cycling and travelling by public transport. The ILTP identifies strategies and actions that are steps in the right direction for better land use and transport integration. These mainly related to establishing self-contained land use and movement systems and ensuring urban form that supports public transport, walking and cycling.

Public Transport

Redland Shire is serviced by four modes of public transport, viz, bus, taxi, rail and ferries. These services require convenient and flexible co-ordination to make the public transport system a realistic and attractive alternative to the car. The public transport network is illustrated in Figure B2 and it needs to be refined as improvements are progressively implemented.

One of the main issues to be addressed by an ILTP is how to provide more attractive and alternative forms of travel than by car. Redland Shire Council's LTP considers public transport as one of its main components. The ILTP reviewed criteria that are available for strategic transport planning and recommended those that need to be considered in Redland Shire to make public transport travel as the preferred mode of travel some of these include:

- ideally 90% of potential passengers should live within 400 metres of their nearest bus stop for peak period services or within 800 metres of rail services. The figures could be 800 m for bus and 1 km for rail within Redland Shire;
- lower density land uses that attract public transport users capable of walking further, are located at the edge of convenient walking areas. Thus, TAFE colleges and high schools should be located about 400 metres from bus interchanges and up to 800 metres from rail stations. The figures could be 800 m for bus and 1 km for rail within the Shire as it is realised that this seems to be typical for Redland Shire; and
- in general terms, cycles are ideally suited to journeys of under 5 km and walking is suited to trips under 2 km.

The reality is that Redlands Shire in preparing the ILTP with a focus on public transport, has little control over the public transport. Council has to take a "pro-active" and "partnership" role in the provision of public transport although the provision of public transport services is mainly Queensland Transport's responsibility. Queensland Transport has in place service contracts with public transport operators. However, Council needs to play a role in advocating community's expectations and assisting in education and publicity strategies.

Walking and Cycling

The climate and natural environment in the Shire is generally suited for visitors and residents to walk and cycle, and introduction of any measures to continue encouragement of walking and cycling will lessen the use of private car for short trips. The strategic pathway and bikeway network plan is illustrated in Figure B3.

Footpaths and shared paths have been provided progressively and a reasonable network of cycle facilities currently exists. Existence of walking groups and cycle groups (e.g. RedBUG and RedBAC), together with appointment of Council's Cycling and Pedestrian Coordinator are positive indications of growth and increases in the use of non-motorised modes. The existence of these groups is also an indication that the Shire community is aware of the distinct advantages of cycling and walking over the car.

Facility improvements (type and number) and existing initiatives involving development of the detailed Shire walking and cycling strategy will assist in promoting and encouraging the increased use of non-motorised transport. As well, overall facilities must cater for people with disabilities.

The Redlands Cycling and Walking Strategy is an integral component of the ILTP. The strategy is being developed through consultation with the public and other local interest groups. The strategy provides actions to encourage and facilitate increased cycling and pedestrian activity and enables Council to develop a policy position in relation to walking and cycling in the Shire.

Criteria used to develop the walk and cycle networks included coherence, directness, safety, abstract access and comfort.

Travel Demand Management

Travel Demand Management (TDM) can be a cost-effective way to deliver transport outcomes and better match demand with supply, and it also provides environmental benefits. It aims to modify travel behaviour using incentives (soft measures) and restrictions (hard measures).

A detailed analysis of people's travel choices and their options carried out in Western Australia (James, 2000) demonstrated that about 40% of trips have no realistic alternative other than a car and 15% are constrained to walking, cycling or public transport. About 35% of trips, for which walking, cycling and public transport could have been realistically chosen, were made by car. A total 10% of trips were made by walking, cycling and public transport despite the availability of a car. "TravelSmart" projects have been implemented in Brisbane as well, with positive results for TDM.

The major potential for short-term, cost-effective mode choice changes lies in applying behaviour change strategies that have demonstrated success in changing perceptions and motivating actual changes in mode choice. The Redland ILTP emphasises soft measures for travel demand management. Hard measures will be explored in the later stage when soft measures will not work out. This approach is consistent with the current Queensland Transport policy on travel demand management.

To date, there are very limited examples of travel demand measures being trialled or implemented in the Shire. However, both Shire residents and Council have voiced support for soft TDM measures to modify travel behaviour. There are no programs currently in place in the Council that are directed towards voluntary travel behaviour change. Interest has, however, been emerging within Council on travel behaviour change programs, such as, TravelSmart Suburbs. TravelSmart School and TravelSmart Work are other smaller scale programs, which focus specifically on school trips and work trips.

Implementing TDM projects could bring about significant changes in the way people in the Redlands would like to travel, thereby reducing or at least pushing back the need for new road infrastructure to accommodate more single occupant car trips.

Road Network

A high quality road network is needed to link people, goods and services internally and externally, to and from the Shire. A strategic road network hierarchy, including State-

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controlled roads, higher order Council-controlled roads like arterials, sub-arterials and trunk collectors, and future transport, green space and trail corridors, is shown in Figure B4. The proposed hierarchy is derived from the Manual of Uniform Control Devices, published by the Department of Main Roads, for the functional classification of urban roads.

Key issues highlighted from the ILPT investigations into the existing road network include:

- transport, green space and trail corridors for future protected use is not clearly defined;
- geographical location of Redland Shire places much of the transport activity load on three major roads. The peak hour capacity and level of services of these roads needs to be managed with preference for public transport and High Occupancy Vehicle (HOV) lanes; and
- road cross-sections do not always cater for cyclists, breakdowns or emergency parking.

To develop the strategic road network hierarchy, the current network was evaluated using the best practice of urban road hierarchy and intersection control planning. The road network hierarchy also considered the likely reduction of vehicular trips as a result of various measures in public transport, walking / cycling and travel demand management plans.

The stricter enforcement and removal of functional deficiencies in the road hierarchy does not eliminate the need for new road works in the system. However, it pushes the need to construct roads further back – as identified in modelling work undertaken for Redland Shire Transport Study (1999).

Detailed Environmental Impact Studies would be planned after determining the role and function of Council's preserved corridors. A clearer picture would be possible after the state policy review and TDM measures – such as a shift in travel demand to modes other than single driver cars – are implemented and evaluated.

Road network strategies – including a strategy on the use of designated future transport corridors – would be reviewed from 2011 – 2016 and consideration be given to network developments in adjoining councils. The Redland ILTP has not suggested any new major links in its road network for the entire life of the plan.

Developing a strategic road network hierarchy has taken into account the findings and recommendations of the Shire Transportation Study, Council's position on the study's recommendations, and Department of Main Roads' Draft Statement of Intent for State-controlled roads (which prescribes the vision for future function).

Freight

Redland Shire's freight is primarily moved by road. Freight movements within the Shire consist largely of extractive material and dredging material haulage and the transporting of commercial, rural and industrial products. There is no formal recognition of the freight network currently, and the freight task is affected by current road peak congestion and, in some locations, capacity restrictions and safety issues.

The major State-controlled roads and Council arterials accommodate the majority of freight movements. The effective movement of freight in the Shire is a contributing factor to economic development in the Shire. The freight network is illustrated in Figure B5. Freight

movement relating to local delivery and pickup (e.g. farms and major supermarkets) occur daily by mixing commercial vehicle movements (commercial vans to articulated heavy vehicles) with other passenger movements.

Issues relating to heavy vehicle movement in the Shire are associated with industrial and commercial areas and extractive industry. Heavy truck movements are currently perceived to be impacting on the amenity and the environment. These movements are likely to increase as the industrial, commercial and extractive industries expand (assuming if outside existing approvals). As well, there are issues of disposal of dredge spoil from ferry terminal at Victoria Point and Toondah Harbour. Managing truck movements to a preferred network with the use of arterials and sub-arterials would ensure the transport system effectively provides for freight movement with the environmental impact of the movement minimised.

Social Aspects of Transport

Queensland Rail's Easy Access Program designed to modify and improve passenger access to rail services and Citytrain stations and Queensland Transport's Accessible Bus Program, aimed at improving the quality of life for people with reduced mobility, are examples of the whole-of-Government commitment to improving access to the transport network for people with a disability.

Within the Shire, community-based transport services also play an invaluable role in meeting the travel needs of people with disabilities. These services are typically provided by institutions such as retirement villages, under a variety of funding arrangements, and are usually dedicated or exclusively available to well-defined groups. There are approximately twelve such services in the Shire. The Council has also instigated the Special Transport Access Redland (STAR) service which provides access to health facilities using private vehicles and volunteer drivers. This service is seen as the precursor to a more diverse community-based bus service when funding becomes available.

The use of active transport has been shown to have a significant impact on individual health and well-being. Results of a recent Danish study (Anderson, 2002) revealed that study participants who did not cycle to work had a 39% higher mortality rate than those who did, irrespective of other leisure time physical activity. The huge health benefits, which are external to the transport systems and are associated with active and sustainable modes of transport would certainly attract more funding support. The Redlands ILTP gives greater consideration to these modes, taking into account the external, unquantifiable health benefits that higher usage of these modes would bring to the Redland community.

Having transport choices is important for the community. Transport-disadvantaged people, either economically or physically and with no access to private vehicles rely on public transport for access to essential services.

Issues such as accessibility and affordability of transport, personal safety and security, community amenity and the impacts of new developments all need greater consideration in transport planning. The role of public transport in providing equitable access to transport for all members of the community is important, as is catering for people with mobility difficulties.

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The ILTP addresses the need to provide a fair and equitable transport system to ensure all members of the community have access to transport services to fulfil basic needs. This is undertaken currently by supporting state initiatives such as QR's Easy Access and QT's Accessible Bus programs and local initiative such as STAR. The ILTP identifies social aspects of transport in the future can best be addressed with continued involvement of the community and state agencies.

Transport and Environment

The ILTP initiatives contribute towards the protection of the environment and natural resources unique to the Shire. Strategies and systems associated with transport infrastructure and operations that minimise environmental impacts of noise and air pollution have been released at a national and state level. The ILTP recommends that these need to be referenced in future transport planning for the Shire.

Currently, around 70% of air pollution in SEQ is caused by motor vehicles and greenhouse gas emissions with the transport sector in Queensland accounting for 17% of the State's total greenhouse emissions. Other environmental impacts identified in SEQ include traffic noise, urban sprawl and changes in land use patterns.

Redland Shire has sought to protect its natural resources (fauna and flora) and ensure a liveable community by restricting transport infrastructure impacts and encouraging a shift in travel by use. This has included programs which aim to increase the use of public transport, walking and cycle modes, especially in areas of nature conservation significance. Within the Shire, some environmental areas of specific concern are as follows:

- transport corridors interfere with movement patterns of wildlife;
- road transport results in koala deaths and injuries;
- parts of future road corridors are intact natural bushland or regrowth and represent areas of high potential for cultural heritage and stand to be disturbed by future road proposals (however, options are available if need for extent of area changes and mode of transport use changes for pursuing discrete sections of corridor only);
- noise impacts from arterial road and rail corridors;
- air quality in urban centres with signals (idle traffic) and high traffic volumes; and
- transport corridors destroying visual amenity of areas.

Transport systems and services contribute to lessening environmental quality both through noise, air and water pollution and depleting natural resources like koalas, and natural reserves at Points). The total number of koalas hit by cars from 1997-2000 for Redland Shire was about 800, with an average of 200 koalas hit each year.

The Environmental Protection Agency (EPA) advises the results of radio-tracking over 200 koalas in the last five years suggest that koala movement throughout Redland Shire are being impeded by roads and the associated traffic. The Agency suggests that any future road development plans incorporate the need for monitoring and catering for koala movements and appropriate funding be allocated to address this need.

ILTP Implementation

The ILTP provides an implementation program, mechanism for funding ILTP actions and indicative cost estimates, and a monitoring program using performance indicators.

Implementation Program

The implementation program assigns priorities short term to 2005, medium term from 2004 – 2011 and long term 2012 – 2016, as well as, the agency or agencies responsible for implementation and start timing where applicable. The detailed actions of the ILTP provide the Council and all transport agencies and operators with a strategic framework for providing an integrated transport system. The actions to be implemented require on-going consultation and agreement between stakeholders.

Consolidated List of Actions: A consolidated list of actions is assembled which assigns lead agencies, supporting agencies, priority and timing. The actions, even though prepared with the participation of all stakeholders, may not all be supported by the agencies because they do not match their policies. Notwithstanding, there is an exception that all stakeholders are committed to implementing the actions Council has requested as a list of short term high priority actions to be implemented by lead agencies.

Funding ILTP Actions: As for the IRTP, the ILTP actions, improved transport infrastructure and services cannot be funded from existing revenue sources. The developed implementation program has unfunded elements and both the Council and State agencies have identified on-going shortfall of funds, needed to improve transport infrastructure and services in the Shire. An ILTP provides a preliminary estimate of costs that needs to be detailed, especially for short term priority actions. A number of ILTP actions should be achievable using the existing resources and also through partnerships with State agencies. Planned identification of additional revenue is a task that requires the necessary support from partners.

Institutional Arrangements: During the ILTP, TransLink emerged as the responsible agency for organising and controlling public transport at State level. Within the Shire a two-tier institutional framework was established for implementing the Redlands ILTP.

The group included:

- Redland Transport Implementation Group; - higher level steering body for implementing ILTP (consultation and agreement with stakeholders); and
- Redland Transport Working Group – lower level working body responsible for technical analysis and for marketing information.

Examples from the “Consolidated List of Actions” and a list of short term high priority actions are shown in Table 1.

Table 1: Consolidated List of ILTP Actions

Action No	Action Description	Lead Agency	Support Agency	Priority	Timing
High Priority Actions (HPA): These actions form part of the consolidated list of actions.					
HPA1	Define and set up the Redland Transport Implementation and Working Group to assist in implementing ITLP actions.	RSC	QT DMR and other agencies	Short-term	2002
Strategy 5.1.2: Establish institutional arrangements to monitor and proactively improve public transport services and facilities.					
A5.11	Define and set up a local level institutional framework to advocate for and incorporate local government input in defining public transport routes. The framework would also plan, coordinate, monitor and evaluate the system – such as the operator’s performance and the system’s performance – assist in commuter planning and implement TransLink’s initiatives within Redland Shire. This group could be referred to as the Redland Transport Implementation Group (RTIG). The RTIG would be supported by the officer-level Redland Transport Working Group (RTWG).	RSC	QT DMR DLGP EPA BSO FSO and other RTIG member agencies	Short-term	2002
A5.14	As an initial gesture of commitment to provide alternative forms of transport to Shire residents, Council should employ under contract an officer (eg. A TDM coordinator) who would promote walking, cycling and public transport and provide input to public transport planning. The role would include coordinating and following up with Queensland Transport, operators, and adjoining local government agencies. This position would provide input for the development of public transport policy for RSC and oversee the performance of public transport services but not day-to-day operating issues.	RSC	-	Short-term	2003

In addition, a transportation planner, who would also manage the implementation of the RSCP & ILTP, future integrated transport model, co-ordination and other transport related tasks, was to be appointed.

Monitoring and Review: Regular monitoring of ILTP actions is required to monitor the plan as a dynamic document and Council agreed on review every three years. An important attribute of a successful ILTP is the ability to monitor and evaluate its performance so corrective action can be taken should implementation activities begin to fail. The ILTP incorporates performance indicators (PI) to help evaluate progress towards an improved transport system. The RTIG would undertake further work on benchmarking and defining targets for indicators. Examples of PI identified by the ILTP included:

- public transport usage to increase faster than population growth;
- rate of traffic growth calculated by averaging the traffic counts for key roads in the Shire with indicative target should annually be less than rate of population growth; and
- travel times for vehicles along major arterials reducing by less than 1% per year.

Projects Implemented

Council is actively pursuing its implementation phase rather ensured that the community sees realistic, practical solutions. One of the first and most important projects has been the development and implementation of institutional arrangements. Further, a transportation planner has been appointed to co-ordinate the tasks for implementing the ILTP. Also established and entrenched in the implementation of actions are the Redland – Transport and Implementation Working Groups. Short term priority projects being implemented and monitored to date are discussed below.

TravelSmart Pilot Projects: The Shire residents and council having expressed support for travel behaviour change program, are pleased to now see that Council and QT were successful in seeking Federal Government (Australian Greenhouse Office) funding to implement four pilot projects. These included two “TravelSmart Suburbs”, one “TravelSmart School” and one “TravelSmart Work” projects. TravelSmart is the brand for a program (using the Individualised Marketing (IndiMark®) technique) promoting voluntary travel behaviour change, i.e. encourages people to reduce the number as well as the length of car trips and meet their travel needs by using sustainable modes of travel (e.g. walking, cycling, public transport, ridesharing carpooling) and by making shorter trips. The TravelSmart projects as identified in the ILTP have been explored collaboratively with Queensland Transport and are being piloted currently. It is envisaged that the pilot projects could bring about significant changes in the way people in the Redlands Shire would like to travel. Thereby reducing or at least pushing back the need for new road infrastructure to accommodate more single occupant car trips.

Public Transport Network Plan: A number of actions in the ILTP relate to partnership with Queensland Transport’s newest agency, TransLink. A major project undertaken between June 2003 to June 2004, has been the Redlands Public Transport Network Plan (PTNP). The Redland PTNP has reviewed the existing situation regarding public transport services and infrastructure through a consultative process and has established a short to medium term PTNP. The PTNP assessed patronage and travel time as well as route structure and established a revised service plan to be implemented over the short term in line with new contract arrangements via TransLink.

Bus Lane and HOV Implementation Study: Council recently commenced a Bus Lane and HOV Implementation Feasibility study in conjunction with state agencies (DMR, QT, TransLink). The study identified the timing and need for Bus and HOV Lane on two line haul east-west arterials. The study will involve limited consultation.

Parking Demand and Supply Study: Council has completed a parking and demand for the centres of Capalaba and Cleveland. The study investigated mechanisms to manage and rationalise parking.

Conclusion

Redland Shire's ILTP, also known as Redlands Transport Plan 2016, has been part of a community's vision to develop an efficient and effective transport system, which is ecologically sustainable and enables residents and visitors to travel safely and conveniently.

The ILTP incorporates:

- a viable and co-ordinated public transport system;
- a hierarchically structured road network system;
- a choice of effective and environmentally sustainable transport, including road, rail and water-based modes;
- pedestrian and cycling connections through an extensive walkway and cycleway network;
- ease of movement within and between communities, activity centres, employment areas and public transport modes; and
- good quality urban design, which supports sustainable transport modes.

The ILTP encourages walking, cycling and the use of public transport over the use of private cars and adopts the following targets for Redland Shire:

<i>Mode</i>	<i>ILTP Targets</i>		
	<i>1995</i>	<i>2005</i>	<i>2011</i>
Walking	10%	13%	15%
Cycling	6%	7%	8%
Public Transport	6%	7%	8%
Vehicle Occupancy	1.3	1.35	1.4

The ILTP also encourages adoption of strategies and actions to:

- ensure land use planning to support provision and use of public transport, walking and cycling;
- coordinate different modes of transport (e.g. ferry, bus, rail) to improve public transport reliability and improve commuters' experiences;
- increase the use of car-pooling and ride-sharing;
- maximise use of existing transport corridors (rail, road, water based) through modal shift, technological improvements (e.g. signal co-ordination) and institutional arrangements to delay any upgrading or construction of new works;
- minimise the transport impacts on environment (e.g. wildlife and natural areas); and
- address social aspects of transport such as accessibility, affordability and equity.

The strategies and actions are applicable to improvements to existing and future developments via local government approval processes (eg. Council policies and guidelines) and supported at state level through policies, guidelines and legislation.

Unless a significant shift in land use and transport planning is undertaken by implementing the above strategies, it is unlikely that the Shire will achieve significant advances in creating an efficient, effective and sustainable transport system. The Redland ILTP through the strategies and actions aims to achieve this shift.

The ILTP has established Shire network maps (included in Appendix B) for road hierarchy, public transport, walking, cycling and freight. Strategies and actions have been developed for:

- Land use and transport integration;
- Public transport;
- Walking and cycling;
- Travel demand management;
- Road network;
- Freight;
- Social aspects of transport; and
- Transport impacts on environment.

The ILTP provides an implementation program, mechanisms for funding ILTP actions and indicative cost estimates, and a monitoring program using performance indicators.

The implementation program assigns priorities (short term to 2005, medium term – 2006-2011, and long term – 2012-2016), agency(s) responsible for implementation and/or start timing where applicable.

Many of the actions in the ILTP require low levels of funding and/or use of existing Council resources to implement. For actions which require higher funding levels, based on the priority assigned, more detailed costing will be required. Funding will be the responsibility of all levels of government as well as developers. The introduction of the Transport Infrastructure Changes Plan will assist in allocation of funding responsibilities.

Monitoring of the ILTP with the use of some or all of the performance indicators (e.g. public transport patronage, traffic growth, travel time, etc) will enable establishing whether the objectives of the ILTP are being met and result in re-allocation of funding in the right areas. Implementation and monitoring will be best achieved through a Redland Transport Implementation Group (RTWG) which has been in place for over a year now.

Lessons and Recommendations

The author believes that the following recommendations should be considered in developing Integrated Local Transport Plans.

ILTP Inception: Involving the community, agencies and other key stakeholders through a programmed and managed consultation process in the inception phase provides the necessary ownership and interest for ongoing timely input as the project progresses. The community best understands and experiences the existing transport system and are in the best position to

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express their vision / desires for improvements for a future transport system that they can look forward to. Early involvement from agencies can also secure partnerships (e.g. necessary funding and steering the progress of the project) that can be critical for a successful ILTP.

ILTP Development Process: Development of an ILTP should take into consideration the inception phase goals and vision of the community, the relationship to regional and neighbouring planning and the latest practices / skills available. As seen in the RSC ILTP, the innovative methodology adopted, involved determining the relationship between the “Community Plan – Vision 2005 and Beyond” and integration with the preparation of the Redland Planning Scheme. The partnering of transport planning, land use and local government planning expertise resulted in a realistic, integrated and innovative transport plan.

The parallel consultation program for the Planning Scheme and ILTP assisted in clearer understanding by the community, agencies, councillors and council staff, of the necessary integration objectives of the two projects. Additionally, it provided savings in the resources and project budgets overall.

ILTP Implementation: The strategies and actions as much as practicable must be quantitatively or qualitatively substantiated for them to be recognised as realistic in the eyes of the community, which would live with the future transport plan. Deterrents and obstacles to inclusion of innovation and technology associated with actions should be eliminated to ensure knowledge about all available travel options have been considered.

The components of an implementation program requires careful consideration including:

- identifying mechanisms for funding actions;
- assigning priorities, lead responsibilities and partnerships;
- establishing performance indicators to ensure the objectives of the ILTP are met and assist in re-allocation of available funds;
- establishing joint implementation groups to oversee the timely implementation of actions; and
- advising the community of results of short term high priority actions that have been implemented.

Appendix A



Figure A1: PIAQ Certificate of Merit

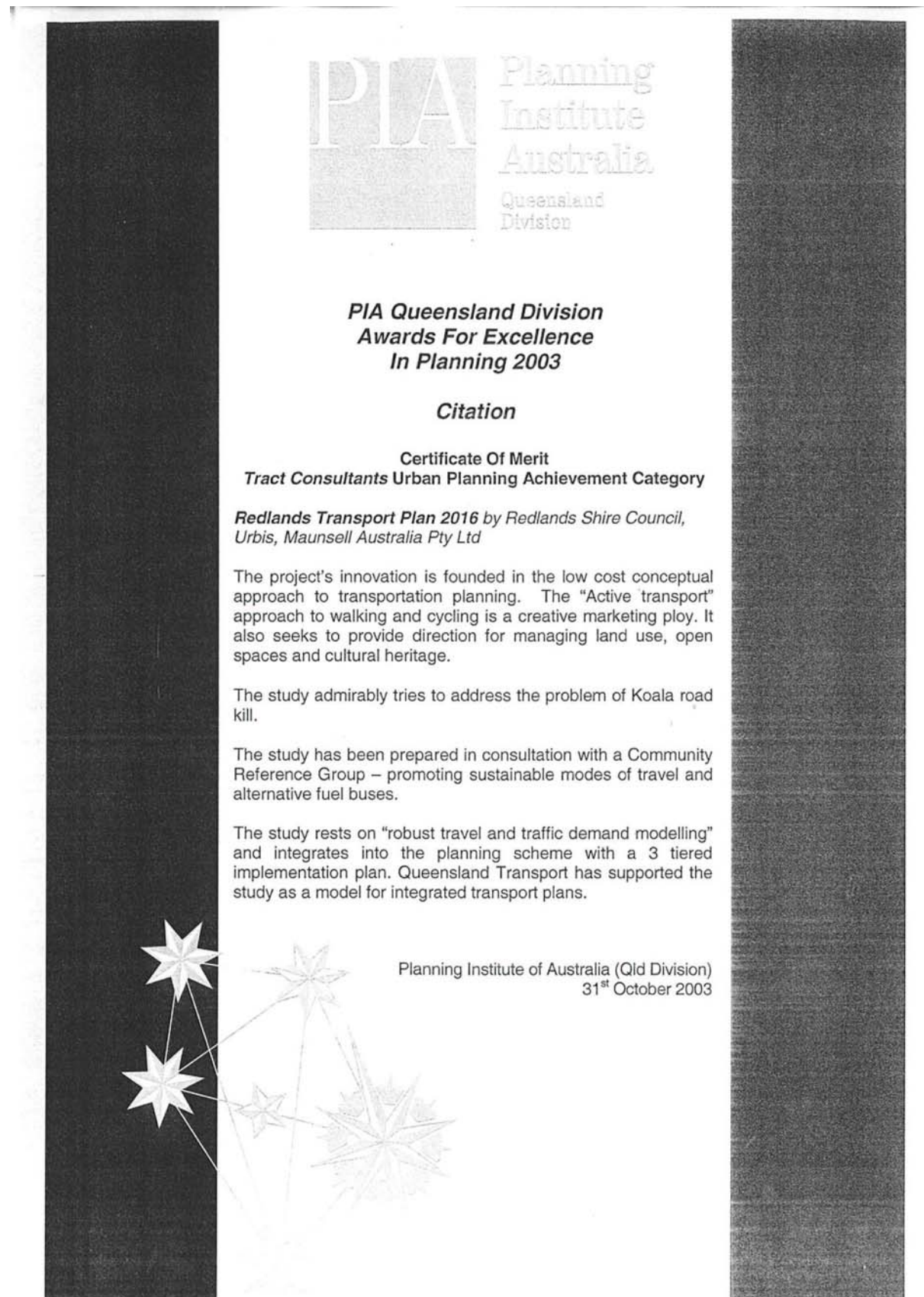


Figure A2: PIAQ Award for Excellence in Planning 2003

Appendix B

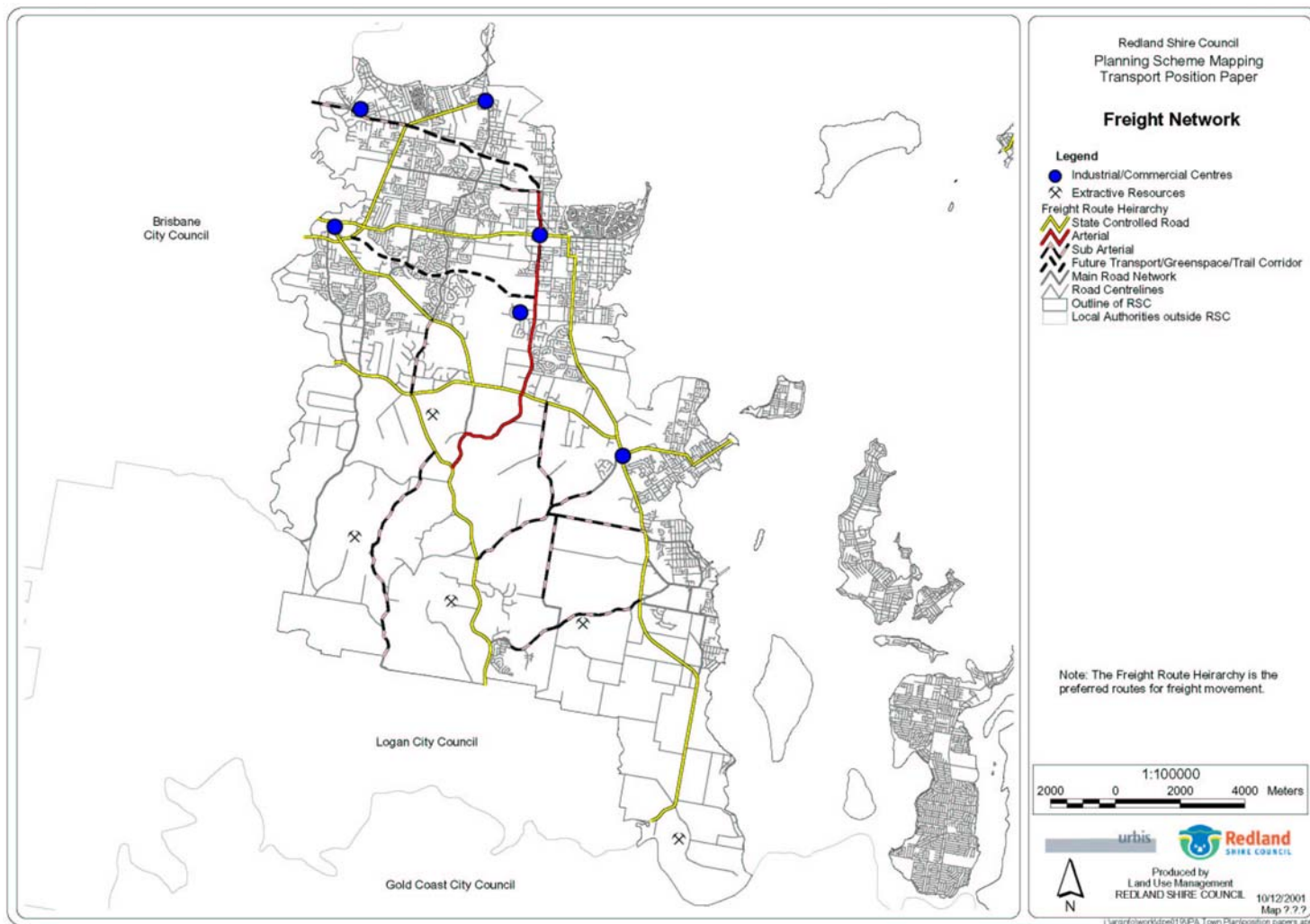


Figure B1: Freight Network

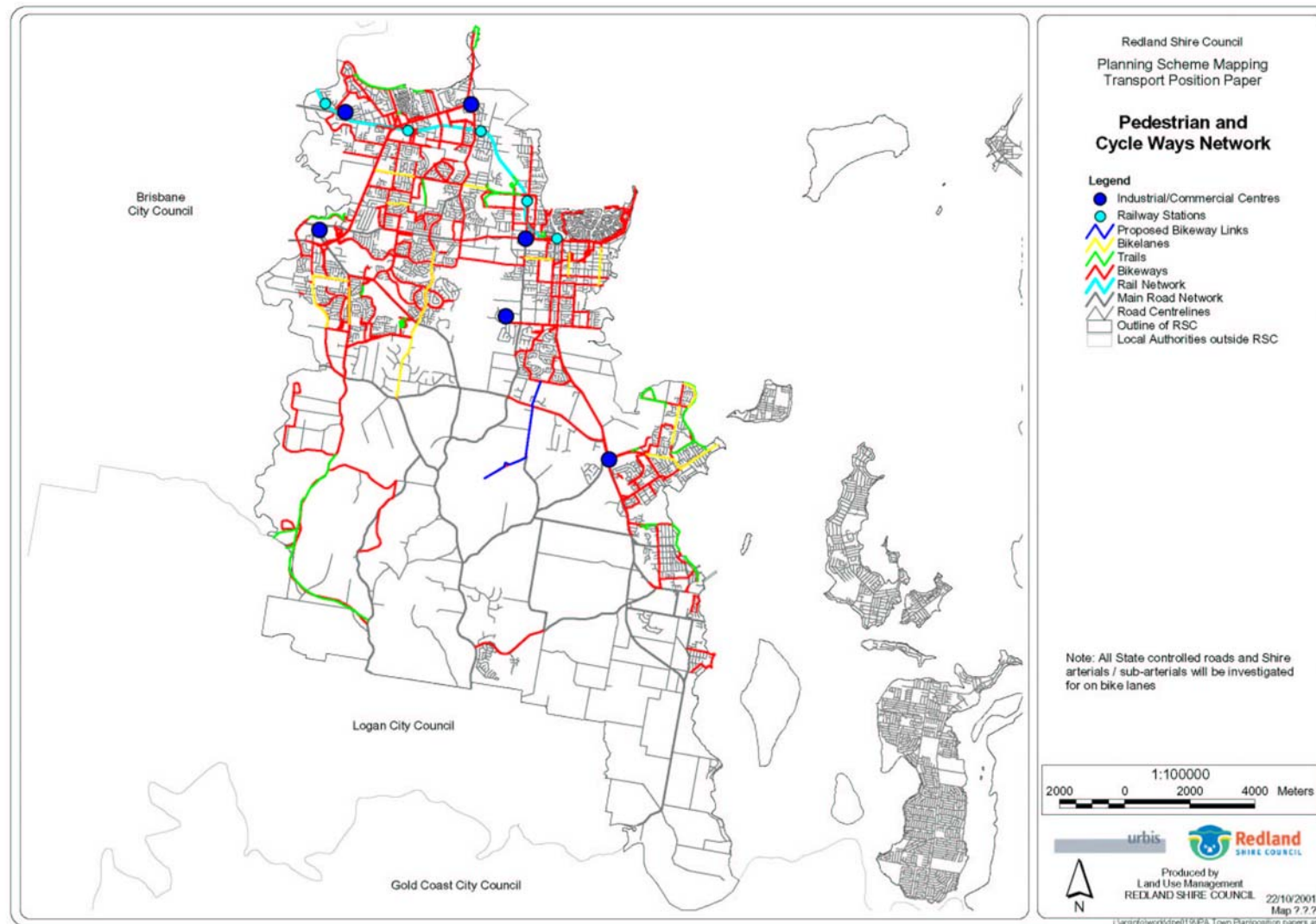


Figure B2: Pedestrian and Cycle Ways Network

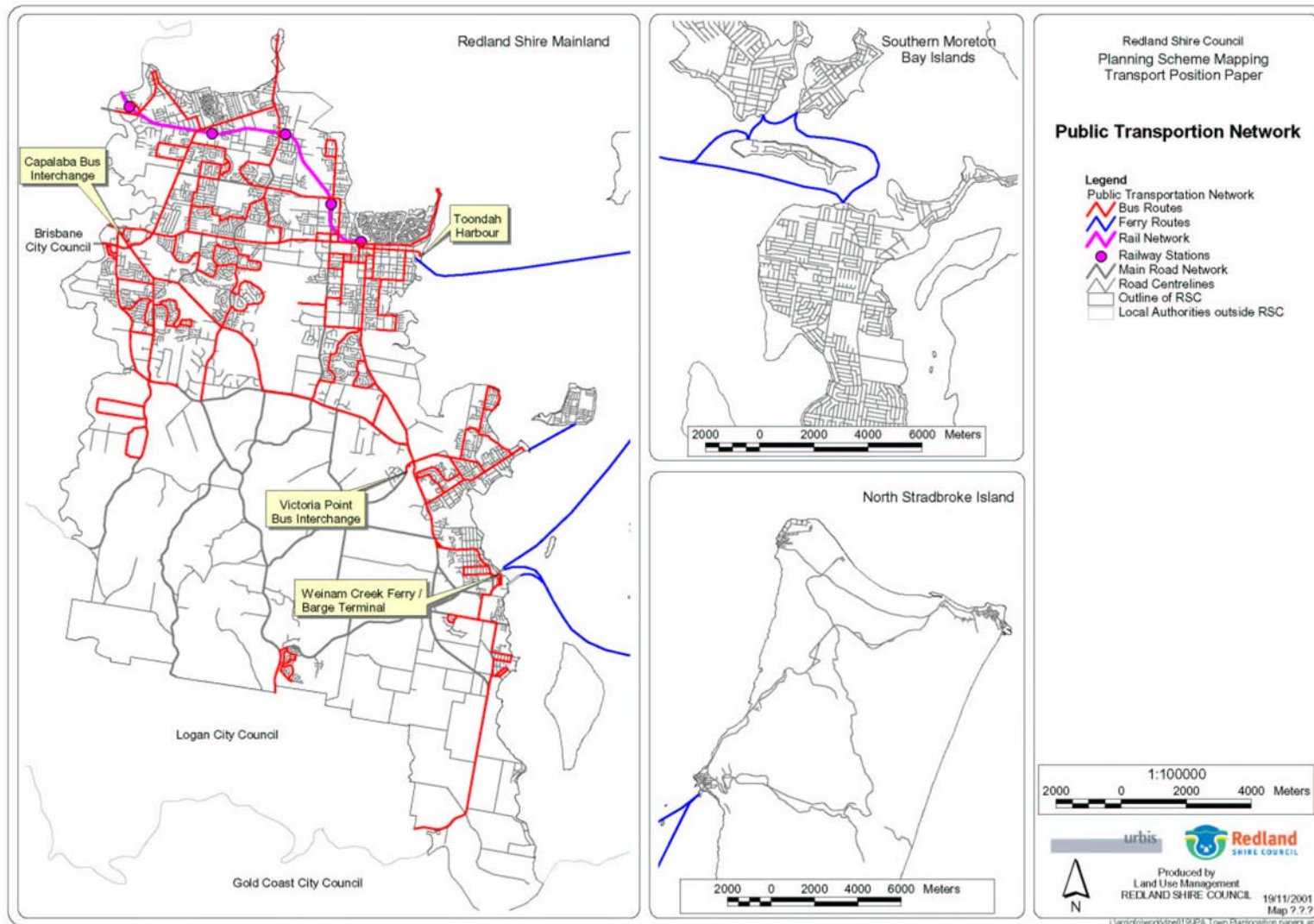


Figure B3: Public Transportation Network

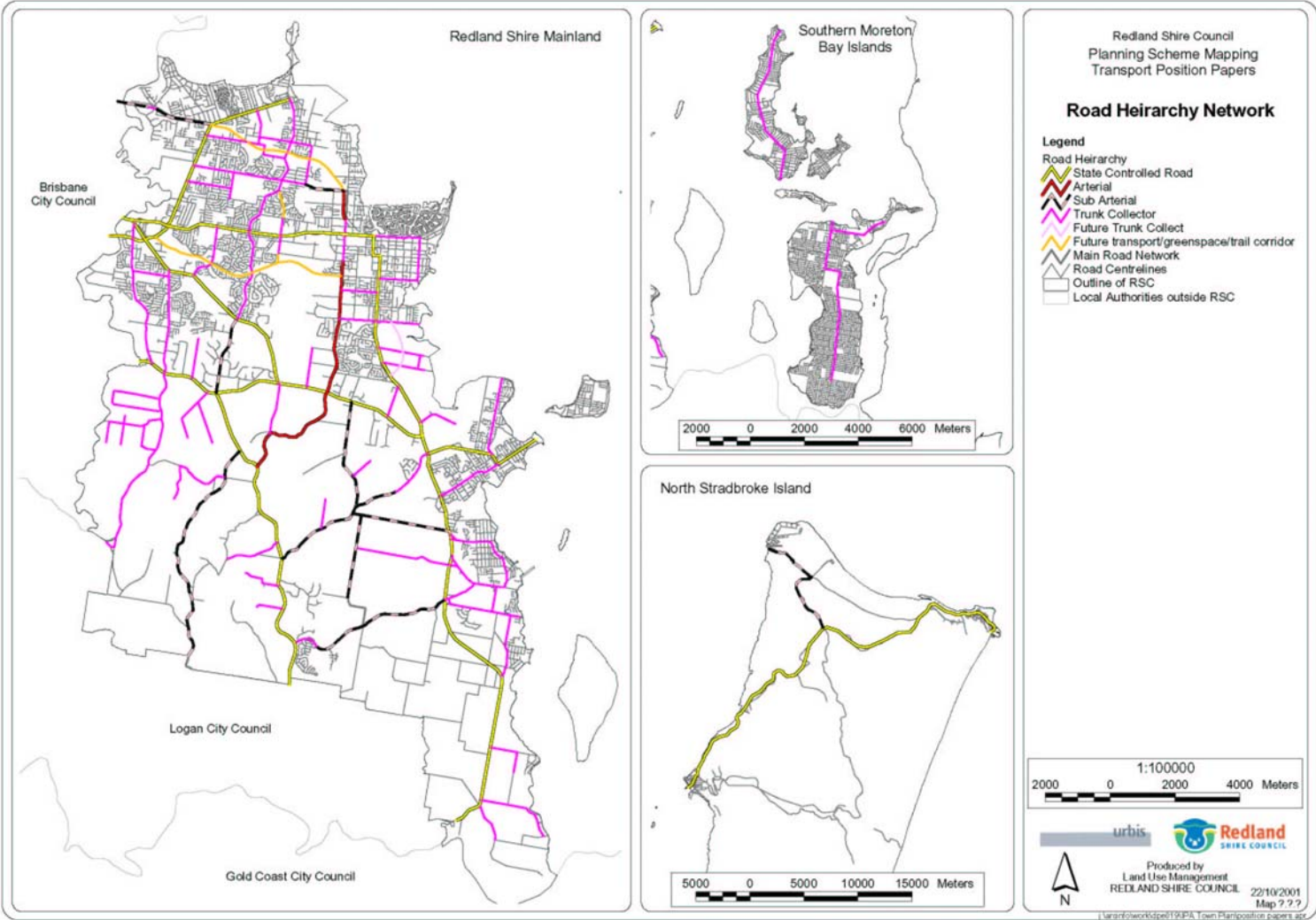


Figure B4: Road Hierarchy Network

References

Department of Local Government and Planning (199?) *Regional Framework for Growth Management* Queensland

Queensland transport (199?) *South East Queensland Integrated Regional Transport Plan* Queensland

Queensland Transport (199?) *Vision 2007* Queensland

Redland Shire Council (1995) *The Community Plan - Vision 2005 & Beyond*

TransLink (June 2003) *Public Transport Network Plan for South East Queensland* Queensland Transport

Brisbane City Council (2003) *Transport Plan for Brisbane 2002-2016* Brisbane

Gold Coast City Council (1998) *Gold Coast City Transport Plan 1999 – 2030* Gold Coast

Department of Local Government and Planning (2003) *SEQ 2021 Issues & Options for Transport – Discussion Paper* Queensland Government

TransLink (May 2004) *Public Transport Network for Redlands 2016* Redlands, Brisbane