ABSTRACT

The paper briefly outlines the background to, and content of the new strategic directions adopted by the Auckland Region and the Auckland City Council. The new directions place more emphasis on public transport and other alternatives to roading construction, and on achieving higher land use densities. The paper puts them in the context of recent statutory reform particularly that relating to public transport deregulation, regional land transport strategies, and national land transport funding. The benefits and limitations of the transport law reform are highlighted using recent studies as examples. Key issues must be resolved quickly if the major regions' land transport strategies are to be effective. Required statutory amendments are discussed, as is the Ministry of Transport's Land Transport Pricing Study. Funding issues are a major source of frustration. The paper argues strongly for the devolution of key funding decisions to empower the Auckland Region and other regions to implement their land transport strategies as a package of projects and measures. Means of enabling this to occur are proposed.

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1. INTRODUCTION

The 1960’s, 70’s and early 80’s saw extensive motorway (freeway) construction in Auckland. This facilitated urban and economic development by providing good accessibility. Motorway construction also encouraged low density sprawl and high car ownership. The recent high economic and population growth has been accompanied by sharp increases in congestion both on central motorways and on city roads. This has heightened concerns that traffic is threatening the quality of life: that Auckland’s environment and future sustainability are increasingly threatened. Many people demand that “something must be done”, but few translate that into personal action. Public transport has a poor image and is often not seen as a realistic travel option, but attempts to increase roading capacity are often strongly opposed.

The response of local government in Auckland has been to develop a new strategic direction away from simply building more roads to cater for ever increasing demands for vehicle travel. The transport system is seen as a means of moving people and goods. Land use and transport planning and development are integrated. Substantial improvements to public transport are proposed as these are vital if public transport is to be sufficiently attractive and convenient to be capable of persuading people out of their cars. High occupancy vehicles, walking and cycling are to be encouraged. Demand management has a role as part of a package of measures.

The new direction will require changes to community attitudes to the car and to the value placed on mobility. It is made much more difficult by statutory, administrative and funding obstacles.

This paper outlines the strategic directions being taken by the Auckland Region and the Auckland City Council. These are set in the context of the transport law reform of recent years. Proposed major projects and current studies are discussed. Means of overcoming the obstacles, some of which are urgently needed if real progress is to be made, are put forward. The Land Transport Pricing Study is discussed briefly. In response to the formation of Transfund, a new transport funding system is proposed which would give Auckland and other regions the ability to achieve their desired long term outcomes.

2. STATISTICS & TRENDS

In 1995 the Auckland Region had a population of 1.03 million representing 29% of New Zealand’s population. The total full time equivalent (fte) employment was 412,900. Between 1994 and 1995 the population grew by 2.5% and total employment by 4.6%.

The Auckland Region produces about one third of New Zealand’s GDP of $85 Billion (March 1995 year). It has been estimated that direct annual travel costs (largely vehicle operating costs and road maintenance and operating costs) represent 9% of the region's GDP.
Between 1963 and 1992 vehicle ownership in the region increased from 0.23 to a high 0.54 vehicles/person. Over the same period the population increased at an average compound rate of 1.1% p.a. whereas vehicle trips increased at an average of 2.6% p.a.

Between 1981 and 1991 the average length of the trip to work increased from 10.8 km to 12.6 km. The proportion of commuters using public transport (bus and rail) was 14.0% in 1981 and 1986 but fell sharply to 7.0% in 1991. Over the same period the proportion of commuters driving a car to work increased from 55.3% to 70.9%.

It has been estimated that the cost of "unacceptable" congestion (travel speeds less than 46 km/h) on Auckland's motorways is $60M/year based on 1994 traffic counts. Available data suggests that motorway congestion increased tenfold from 1989 to 1994.

Auckland City (including the gulf islands) has a population of 336,500 (1995), which is almost one third of the region's population. Auckland City, however, is the location of 220,500 jobs or around half of the region's employment. The main employment areas are the Auckland Central Area/CBD with 53,800 fte jobs, and the Industrial Edge (Mt Wellington, Penrose, Te Papapa, Onehunga) with 42,800 fte jobs (1995).

The Auckland Central Area forms the hub of the public transport system. In 1986 24,400 people or 41% of those travelling to work in the Central Area in the weekday morning peak period used public transport (largely bus). This number remained relatively steady up to 1988. It then fell sharply to 1991 and continued to fall to 13,600 in early 1994. At that point the modal split had dropped to 28%. Over the next year public transport patronage increased to 16,000 (which is close to the 1991 figure) and the modal split rose to 29%.

The sharp drop in public transport patronage in the late 1980's and early 1990's resulted from a combination of factors. These include the contraction in the economy with an accompanying loss of jobs, the increase in fares and reduction in services accompanying public transport deregulation, and the sharp reduction in the costs of car ownership and operation relating to the deregulation of the economy. The recent increases accompany a sharp lift in the economy from 1993 and high immigration into the region.

The effect of economic and population growth on traffic flows is illustrated by comparing the increase in daily traffic flows into the Auckland Isthmus (Auckland City) between 1991 and 1995. Over the two year period from 1991 and 1993 total daily traffic flow entering and leaving Auckland City increased by only 1.9%. Between 1993 and 1995 the growth increased to 10.6%.

Public concerns over traffic congestion, noise, pollution and safety have been heightened by the possibility of a 40% increase in the region's population over the next 20 years.
3. TRANSPORT LAW REFORM 1989 - 1995

3.1 Regional & National Land Transport Strategies

The Transit New Zealand Act 1989 required each regional council to establish a regional land transport committee whose prime task is to prepare a Regional Land Transport Strategy (RLTS). This requirement changes to the Land Transport Act 1993 from 1 July 1996. Among other things each RLTS is to identify the region’s future transport needs; the best means of responding to such needs taking environmental effects into account; and the appropriate role for each transport mode. It must not be inconsistent with any National Land Transport Strategy. All relevant central government agencies and departments and local government must ensure their actions are not inconsistent with the RLTS.

The RLTS can be thought of as having two primary roles: The first is to provide a framework for investment over the next 3 - 5 years. The second is to set the longer term strategic direction. This provides the opportunity for integrating land use and transport strategies and policies.

The Auckland RLTS (refer Section 5.2) is proving to be an effective means of developing an Auckland regional position on complex transport issues some of which have significant strategic implications. Factors behind this success include the willingness of the local authorities in the region to work together, and the composition of the Regional Land Transport Committee. Each local authority, Transit/Transfund, commercial road users, private road users, NZ Police, Land Transport Safety Authority and pedestrians and cyclists are represented on the Regional Land Transport Committee.

The 1995 transport law reforms require the development of a National Land Transport Strategy after 1 July 1996. This is to include land transport goals, corresponding policy objectives, and performance targets. The NLTS is to be in effect for 10 years at a time. The transport agencies must ensure their actions are not inconsistent with the NLTS. The Minister of Transport’s commitment to prepare a national strategy, and to do so in full consultation is very welcome.

3.2 Land Transport Funding

The full costs of maintaining, operating and developing the nation’s state highway network plus a share of the costs of “local roads” - roads administered by the local authorities - come from the National Land Transport Fund (NLTF). Traffic enforcement and road safety administration costs are also met by the Fund. All road user charges on truck use, receipts from the petroleum tax (currently 9.4 cents/litre), and annual vehicle registration fees go into the NLTF. Road users also contribute to general taxation through a fuel tax which is currently 30.8 cents/litre. The remaining expenditure on local roads is met from property rates.

Expenditure from the NLTF is currently administered by Transit New Zealand (TNZ), a central government agency which also operates the state highway system.
Pursuant to the Transit New Zealand Amendment Act 1995, from 1 July 1996 the Land Transport Fund is renamed the National Roads Account and is administered by a new central government agency called Transfund. Transit New Zealand becomes solely responsible for state highways. Transfund is separate from Transit NZ, but two of Transfund’s five Board Members must be Transit NZ Board Members, and Transit NZ staff are to service Transfund.

While Transit NZ’s principal objective refers to achieving “a safe and efficient land transport system that maximises national economic and social benefits”, Transfund’s is simply “to allocate resources to achieve a safe and efficient roading system”.

### 3.3 Public Transport Deregulation

The 1989 transport law reform legislation introduced a strong element of competition into the provision of public passenger transport services, and reduced public sector control over the form of such services. The Transport Services Licensing Act divided public transport services into commercial and contracted services. The former are unsubsidised and are determined by the operators. The latter are awarded following a competitive tendering process. Regional Councils (in special cases territorial local authorities) were required to specify the services to be contracted out. To ensure a separation between service specifiers and service providers, Regional Councils were no longer permitted to have a direct or indirect interest in a passenger transport operation.

### 4. COMMENTS ON DEREGULATION

The 1989 transport law reforms succeeded in reducing public transport subsidy requirements. Operators were forced to become more efficient. Wages were reduced and restrictive practices removed, particularly in operations previously in the public sector.

Central government public transport subsidies were significantly reduced during the reform period forcing an increase in fares and contributing to a reduction in service quality. The reforms occurred at a time when other government policies were reducing the real cost of car ownership and use.

The deregulated environment has now been in effect for a number of years and a review is appropriate. The operators claim that the existing system stifles initiative and inhibits their ability to identify and react to market signals. They would like to gain more flexibility and certainty through an increase in the proportion of commercial services (probably around 15% in the Auckland region currently). This could occur through central government (or regional government) refunding operators directly for the cost of fare concessions for the young and retirees. The operators would also like to see service specifications which are less prescriptive, plus a change to output-based funding. The latter could take the form of a contracted passenger kilometre rate. They argue that such changes would encourage and enable operators to increase their market share.
From the public policy perspective the challenge, I suggest, is to retain the efficiency advantages gained while ensuring longer term strategic land use and transport objectives can be met. The latter requires the ability to provide an integrated system where the various services and modes are coordinated and have common timetables and integrated ticketing.

WAIPTS Study

Some of the problems and conflicts inherent in the existing legislation are illustrated by the difficulties in implementing the Waitakere & Auckland Isthmus Passenger Transport Strategy (WAIPTS). The WAIPTS study was initiated by the Auckland City Council and undertaken jointly by the Auckland City, Waitakere City and Auckland Regional Councils plus Transit New Zealand. The primary objective was to design a public transport system for the two cities better meeting the needs of existing and potential users within current funding constraints. The study was undertaken by consultants at a cost of $300,000 over a 2 year period from 1993 to 1995. It involved extensive surveys and detailed computer analysis supplemented by good knowledge of the existing system. There was a strong emphasis on consultation throughout. The recommended strategy included better cross city routes, a simplification of the current complex route system, higher frequencies in some areas, and more use of the rail system. The current system in Waitakere City and the eastern suburbs of Auckland City is to be converted to a line haul feeder system focusing on appropriate local centres. Such a concept is consistent with the development of mixed use, medium density, public transport oriented development along the existing rail corridors being strongly promoted by Waitakere City Council.

New service contracts for the two cities are to commence in January 1997. The Auckland Regional Council’s stated intention is that these are to form a stage in the introduction of the proposed line haul feeder system. Full introduction is to follow the introduction of integrated ticketing and completion of the proposed rail extension to Britomart in the Auckland Central Area.

The bus operators, however, have shown little enthusiasm for the proposed line haul feeder system, and have yet to fully accept an integrated ticketing system. They have registered a relatively large number of commercial services based very largely on the status quo. The Regional Council’s reaction has been that it feels it has little choice but to accept this situation and to design contract services to “fill the gaps” in service provision. The overall service network offered in January 1997 is, therefore, likely to be very similar to that available today.

This appears to leave the local authorities in the position of being unable to ensure that the public transport system will support strategic land use policies, particularly the introduction of higher density development at selected rail stations. It bodes ill for future major investment in passenger rail requiring an integrated, complimentary public transport system to be fully effective.
Statutory Changes Required

If reasonable progress is to be made in implementing key public transport infrastructure improvements then one representative regional body should be given the power to designate land and to own infrastructure where appropriate. Depending on the circumstances this could possibly include interchange facilities, tracks, and light rail vehicles. This body would not be a service provider. It could be the Regional Council or a new Passenger Transport Authority.

If strategic regional objectives are to be achieved, it is essential that the public authorities are able to determine the form of the public transport system and are able to ensure that the various components are integrated with one another. This will require amendments to the Transport Services Licensing Act. The ability of operators to register commercial services should be removed. At the very least the Regional Council should be given the power to turn down a commercial registration if it does not conform with the RLTS (of which the Regional Passenger Transport Plan forms part). This would in turn require that commercial registrations be limited to a time period of three or at most five years. The RLTS would provide the guidelines by which the regional council could determine where competition and contestability must be subservient to strategic regional objectives.

This interference in the commercial market carries with it the implication that the Regional Council must accept at least some of the financial risks associated with its decisions in order to maintain a market attractive to private operators. This might be achieved through the use of gross price contracts rather than the net price contracts generally employed in Auckland. It is important to retain a contestable tendering system for passenger transport contracts as a way of retaining the balance between planning control and a market based system.

5. STRATEGIC DIRECTION

5.1 Land Use Development

Land use development comes under the Resource Management Act (RMA) 1991 whose purpose is “to promote the sustainable management of natural and physical resources.” The Regional Policy Statement (RPS) is prepared by the Regional Council under the RMA.

To enable future growth to occur while protecting the surrounding environment, the Proposed RPS seeks the containment of future urban growth within a defined urban limit, plus “selective intensification” of land use within that limit. Future development is to be concentrated in areas where services such as water supply, sewage disposal and transport can be provided efficiently and in an environmentally friendly manner. On the Auckland Isthmus longer term growth is to be concentrated at nodes and along corridors that can be served effectively by public transport. Regional policies also seek to encourage a better balance between jobs and the workforce to reduce, for example, the
future growth in commuter travel from the North Shore into Auckland City across the Harbour Bridge. The RPS policy objectives are generally supported by the territorial local authorities, although there is currently some disagreement on the definition of the urban limits and the levels of future intensification in some areas.

Selective intensification differs from the infill housing policies of recent years. Infill housing has developed a bad name due to the damaging effects on some neighbourhoods. From the transportation perspective it adds to the pressures on the existing road network and does little for public transport. The challenge is to achieve a land use form more friendly to public transport, walking and cycling and to do so in an attractive manner.

The rail corridors represent a very underutilised asset which have the potential to carry far more passengers in a congestion free environment. Many rail stations are little used and are isolated from the surrounding areas. The relatively recent upgrading of rolling stock combined with improved frequencies have produced a large rise in patronage, albeit from a low base. We need to build on this. Planned rail improvements including a future light rail system are described elsewhere in this paper. Park and ride plus feeder buses will assist in attracting more to rail. However, appropriate land use changes must occur along the rail corridors if the planned major investment in light rail is to meet its objectives.

Public ownership of land at existing stations is relatively low. At some stations opportunities for higher density development exist or can be created. Along much of the rail corridors, however, the preferred approach is to encourage attractive medium density, mixed use, public transport friendly development around or close to stations. A recent study has concluded that public sector intervention will be necessary to reduce investment risks if nodal mixed use medium density development of a sufficient scale is to be achieved along the existing rail corridors.

Cities such as Portland and San Diego have successfully adopted the “new urbanism” approach to achieving mixed use medium density development. New urbanism, also known as neo-traditional town planning and transit-oriented development, seeks to create communities that are higher density and more self contained; where land uses are mixed rather than segregated; where land use and street patterns encourage people to walk or cycle; and where public transport is within a relatively easy walking distance. It seeks to do this in a manner which is attractive to residents, makes good returns for developers, and accommodates relatively high car ownership. New urbanism is now being looked at seriously by the Waitakere City and Auckland City Councils.

The centre of the Auckland Isthmus is served by north-south arterials, namely Sandringham Road, Dominion Road, Mt Eden Road and Manukau Road, all of which have relatively well patronised bus services and strip commercial development. A major strategic study of the area with a strong emphasis on consultation entitled the Central Isthmus Corridor Study is currently being undertaken by the Auckland City Council. Phase 1 has identified that the community wish to see future road development in the corridor limited and more emphasis on public transport. Phase 2 is looking at
means of achieving this. In addition to future transport options. Phase 2 will seek to produce a land use development concept that reduces dependence on the car and is acceptable residents and businesses in the area. The outcome of this study could have a strong influence on other parts of the city served by major bus routes.

5.2 Regional Land Transport Strategy

The September 1995 Auckland Regional Land Transport Strategy (RLTS) sets out a new direction for the development and management of the region's transport system. This new direction recognises that short-term, reactive planning and investment decisions will not achieve a more sustainable future; that the potential environmental, social and economic costs of attempting to meet the ever increasing demands for travel by car are too high. The Auckland RLTS recognises the link between land use form and the transport system; the importance of attitudes and perceptions; and the need to provide a good alternative to travel by car, particularly in the congested peak periods. This last point is very relevant. For many, public transport is simply not perceived to be a realistic or acceptable option.

The major challenges are to provide realistic alternatives while recognising economic constraints, and the need to change public attitudes to these alternatives and to the car itself. These challenges are great in a region typified by low density sprawl, and where buses are seen as second-class forms of transport typically used by those with no choice. They are made more difficult by funding, statutory and administrative systems which currently favour the road-based status quo.

The Auckland RLTS is structured in the form of an overall goal followed by 6 objectives relating to the achievement of the goal. Targets for measuring the achievement of each objective are included where practicable. There then follow 7 strategies or courses of action to achieve the objectives. A series of policies are set out under each strategy. "Methods" or actions are attached to each policy. The agency or agencies responsible for implementing each method are identified.

The Auckland RLTS contains a number of major roading projects as well as major public transport improvements. Major roading projects either underway or currently being planned include the upgrading and realignment of State Highway 1 from Greville Road to Puhoi, the building of Whangaparaoa Road, the construction of the South Eastern Arterial, the construction of the South Western Motorway from Roscommon Road to Massey Road and its extension west of Hillsborough Road, the construction of the Airport Eastern Access, the East Tamaki Arterial, and the improvement of access to the Port of Auckland along Stanley Street.

Strong emphasis is placed on alternatives to the single-occupant private car. A series of measures are proposed including improvements to bus service design; better integration between services and modes; bus priority measures; improvements to suburban rail (higher frequencies; station upgrading; bus/rail integration; park-and-ride facilities, and a new terminal at Britomart; Central Auckland); encouragement of new ferry services; improved public passenger transport marketing; better passenger information; and
improved facilities for cyclists and pedestrians. Two major higher capacity public transport infrastructure projects are proposed, namely the Northern Priority Lane and Light Rail in the western and southern rail corridors. These are discussed in Section 5.4.

The main weakness of the 1995 RLTS is that it does not set clear priorities for the implementation of key projects. Part of the explanation for this lies in a funding system which centralises project programming and seeks to maximise national economic benefit through the application of cost benefit analysis (refer Section 6.4).

Further work on the development of performance targets is also required and must be given a high priority. It is vital that strong emphasis be given to the achievement or non-achievement of targets and that the community as a whole be involved as much as possible.

5.3 Auckland City 2020 Transport Strategy

The Auckland City Council has been undertaking a series of major transport studies in recent years, most of which have a strong emphasis on public consultation. Roading studies include the completion of the planning of the South Eastern Arterial Construction started in late 1995. Traffic management plans have been developed and adopted for Otahuhu and Newmarket. A draft Central Area Transport Plan has been prepared. The Central Isthmus Corridor Study currently underway is effectively involving the community in strategic transport decision making. Difficult land use development issues in the corridor are also being addressed as part of this study. Public transport studies include the WAIPTS study discussed elsewhere. The Great North Road Bus Priority Study has been initiated and a public discussion document released.

In addition the Council has and continues to work with Transit New Zealand on the planning of the improvement of the access to the port along the Grafton Gully: the upgrading of the motorway system south of the Harbour Bridge (linked with planned Northern Priority Lane): and the extension of the South Western Expressway to and beyond Dominion Road.

The Auckland City Council is currently reviewing its 2020 Outstanding City Strategy adopted in late 1993. The updated strategy has been influenced by the findings of a large marketing survey. The updated transport component is consistent with the RLTS, but has some interesting differences. The key transport strategies are:

- Population growth is to be concentrated in corridors of frequent and fast public transport.
- During the planning period Auckland City will reach the situation where further increases in people movement at peak times are accommodated primarily by public transport.
- Road network improvements are to compliment public transport improvements and are to be more specifically focused on goods movement.

- Vehicular travel growth is to be managed to limit further environmental impacts of the transport system.

- Attractive mixed use development which is friendly to public transport, walking and cycling is to be encouraged at appropriate locations and corridors.

The concept of road network improvements which compliment public transport improvements and are more specifically focused on goods movement; the increasing reliance over time on public transport to move people in the peak periods; and the acceptance of some form of management of growth in vehicular travel are features of the key transport strategies.

These changes represent a significant shift from past directions and will not be achievable instantly. A major difficulty the city faces is that it has no direct ability to ensure that the required public transport improvements will indeed occur. In the shorter term this may result in a more conservative approach to decision making than might otherwise be the case. In the longer term there is the real risk that continuing delays to significant improvements to public transport will force a change in policy towards roading provision, if only to retain the city’s competitive economic position.

### 5.4 Northern Priority Lane & Light Rail Implementation

**Northern Priority Lane**

The Auckland RLTS includes the opening of the Northern Priority Lane by the year 2000. The proposed Northern Priority Lane is to run along the eastern side of the Northwestern Motorway between Constellation Drive and the Auckland Harbour Bridge. The scheme was originally proposed in 1987 by the Comprehensive Transportation Study Review and at that time was a bus lane only. The Auckland Regional Council undertook a major investigation into the feasibility and appropriate design of such a facility. That study determined the optimum design (which includes two way, tidal flow and one way flow sections), plus the location and design of the interchanges (at Smales Farm and Constellation Drive). As the proposal runs alongside an existing state highway and the Regional Council is prohibited by statute from owning or designating infrastructure, Transit New Zealand took over the preparation of the Assessment of Environmental Effects (AEE) in 1992. Transit NZ subsequently decided that the facility should accommodate high occupancy vehicles in order to improve its economic justification. This required a major design review. The AEE is expected to be completed this year.

Frustrations at the apparent lack of action by public authorities are adding to pressures to build a Second Harbour Crossing. Delays to weekday morning peak period southbound traffic on the Northern Motorway are substantial with queues extending over several kilometres. The extension of the Northern Motorway north of Greville...
Road programmed to commence in the 96/97 year for completion three years later will add to these pressures. In recognition of the high environmental cost of a Second Harbour Crossing and a capital cost including approach roads estimated at around $1 Billion, the RLTS states that no new crossing of the Waitemata Harbour will be constructed prior to 2011. It is vital that an early start on the staged implementation of the Priority Lane be made both to give a strong message to commuters and to demonstrate that some decisive steps are finally being taken.

**Light Rail**

“Light Rail” refers to a modern steel track electric rail system collecting power from overhead wires and capable of safe running on street or in a separate right of way. Light Rail was first adopted in 1988 by the former Auckland Regional Authority following a major investigation into the future use of the existing rail corridors for public transport purposes.

Light Rail has received strong political support from the mayors of Waitakere, Manukau and Auckland Cities. This support relates to their conviction that motorists will be attracted to Light Rail and that the long term congestion and land use benefits will justify the high costs. It of course assumes the provision of feeder buses to rail: integrated ticketing; improved marketing and information; attractive, safe stations; and park and ride facilities.

Method 46.2 of the RLTS refers to the urgent need for a Light Rail system in the existing southern and western rail corridors linked by a new on-street section along Queen Street in the Auckland Central Area. The stated target is for Light Rail to be operating by 2000. The RLTS, however, states that there are a number of issues to be resolved prior to implementation. These include funding, appropriate timing, ownership and legal issues: a financial appraisal, and agreement being reached on longer term land use development along the rail corridors.

Studies recently undertaken by the Regional Council to implement the RLTS Light Rail policies have highlighted major difficulties faced over and above those relating to funding. Firstly, Tranz Rail, a private company whose prime focus is on goods movement, has sole ownership of the existing rail tracks. Secondly, the Regional Council is prevented by legislation from designating land or owning infrastructure. Finally, the public authorities cannot ensure that bus operators will not compete with rail along the rail corridors. This substantially increases the investment risk.

Perhaps the most critical decision to be made is whether to improve the existing suburban rail system by stages as patronage increases, or whether to implement Light Rail as quickly as possible. The former could mean retaining diesel multiple unit operation for several years while stations are upgraded and park-and-ride is introduced. It is the lower risk, lower (short term) cost approach. The latter would be more marketable: more likely to attract existing car drivers; and should, over time, have a greater effect on land use development. Provided there is adequate accountability, the decision is appropriately a political one which should be made here in Auckland.
6. TRANSPORT FUNDING

6.1 Current System

Transit New Zealand prioritises funding of "major maintenance" and new construction works nationally on a project basis. Benefit: cost ratios and first year rates of return calculated in a consistent manner are used by TNZ to prioritise projects. The limited funds available have meant that in recent years individual projects have had to have a B:C ratio of 5:0 or more to qualify. The National Land Transport Programme for 1995/96 totals $675.8M. Of this $43M is available for starting new construction projects, and $109M for construction projects already underway. $28.62M is allocated to passenger transport of which $0.25M is for new infrastructure.

In recent years TNZ's public passenger subsidy has been restricted by central government instruction to a maximum of only $29.5M nationally. In 1994/95 the total public passenger transport subsidy in the Auckland region was $47M. Of this $26M came from property rates, $13M from TNZ, and $7.5M from the regional petrol tax of 0.95 cents/litre (ending 30 June 1996). Comparable Australian urban areas such as Perth and Adelaide spent three to four times that amount on public transport. The higher quality of public transport in these cities is quickly evident.

6.2 Transfund

From 1 July 1996 Transit New Zealand is replaced by Transfund. Section 3D of the Transit New Zealand Amendment Act 1995 states that Transfund will be able "to fund outputs that consider or develop efficient alternatives to the provision or maintenance of roading." These alternatives can relate to the movement of freight or passengers by road, rail or sea. They must, however, be funded through a separate financial output. According to the Ministry of Transport capital funding is not permitted for such alternatives to roading investment.

Transfund has yet to determine its financial assistance policies and these are awaited with great interest. The interpretation and implementation of Section 3D could prove critical. In addition, it is vital that Transfund develops policies that enable key strategic decisions to be made at the regional level where appropriate. A funding system that would allow this to occur is outlined in Section 6.4 below.

6.3 Land Transport Pricing Study

The Ministry of Transport's Land Transport Pricing Study is a major pioneering project aimed at providing answers to some very difficult questions. Among other things it is looking at the appropriate level of annual expenditure on the nation's road network, and the prices various categories of road users should be paying for their use of the road including the external environmental costs arising from that use. Catalysts for the study included increasing pressures for a substantial increase in expenditure on the road system: a desire to ensure that competing modes such as goods movement by rail, road
or coastal shipping each pay their true costs thus creating a level playing field; and pressures on the government to cost and charge for the environmental externalities of transport use.

The Ministry of Transport has released four reports as discussion documents namely “The Cost Of Roading Infrastructure”, July 1995, “Roading As An Economic Good”, December 1995, “Environmental Externalities”, March 1996, and “Safety Externalities”. May 1996. All represent valuable inputs to policy development, but do not reach firm conclusions Future policy options are to be developed at a later date. In addition Transit New Zealand has produced a discussion document entitled “National Traffic Database” dated April 1996

Some interesting concepts are put forward including a capital charge or rate of return applied to state highways and, possibly, local roads A capital charge paid to a local authority as road controlling authority would provide a road user derived source of funds which could supplement property rates.

For the first time an attempt has been made to put dollar values on the external environmental costs imposed by road users. The potentially high costs of vehicle emissions identified in the Environmental Externalities report must surely speed up the introduction of emission control regulations in New Zealand. At present there is no incentive to use catalytic convertors; to ensure vehicles are tuned to minimise emissions; or to use less polluting fuels.

It is important that decisions following the Land Transport Pricing Study are not bogged down in theoretical or political arguments. As quickly as practicable Central Government should determine an appropriate interim increase in the size of the National Roads Account. The principle that road users should pay for environmental externalities should be established through the introduction of a tax on petrol and diesel. The initial tax could be relatively low to reflect uncertainties over the correct level. The appropriate figures can be resolved later.

The National Traffic Database document provides some very interesting information. For the first time an objective study has confirmed that road users in the Auckland Region pay far more into the National Land Transport Fund (from the 9.4 cents/litre petrol tax and road user charges) than is returned to the region from the NLTF through Transit New Zealand. Thus, hopefully, future debate will concentrate not on whether there is a transfer of funding from Auckland Region to other parts of the country, but on how great the transfer (if any) should be. The large majority of the “surplus” in income from the Auckland Region arises in Auckland City. This emphasises the case for a major increase in transport funding for Auckland City in particular.

6.4 An Appropriate Transport Funding System For Auckland

The current centralised, project based, cost benefit analysis driven funding system is not an appropriate means of prioritising key strategic transport investment projects in the
Auckland region, nor should it be the sole determinant of the (non-ratepayer sourced) roading and public transport funding available.

This paper proposes that an appropriate funding system would consist of:

- bulk funding of an agreed regional transport strategy enabling the region to give priority funding to pre-determined key elements of that strategy to achieve desired outcomes
- a National Roads Account of sufficient size to provide an adequate level of funding
- a reduction in the share of funding from property rates
- taxpayer funding of at least some of the social costs of public passenger transport
- any transfer payments between regions to be transparent and road user sourced.

**Bulk Funding**

Key investment decisions must be made within the context of a long term strategy if Auckland is to remain an attractive place to live and work, and if we are to have sustainable future development. The Auckland Regional Land Transport Strategy (RLTS) gives greater prominence to major investment in public transport as an alternative to roading construction. These investments generally have a lower B:C ratio than the roading alternatives as their benefits tend to be longer term and difficult to quantify in monetary terms. A national ranking system relying on project B:C ratios would typically give public transport projects a lower priority, thus potentially delaying them in favour of roading projects. In addition a region choosing a public transport oriented future may well find its share of national funding falling as roading projects elsewhere are given preferential funding.

What is required is a type of bulk funding system that would permit the Auckland Region, or any other region, to implement key strategic projects identified as being essential to the achievement of desired strategic outcomes.

In the proposed system, the Regional Land Transport Committee would prioritise annual expenditure based on a rolling programme. Cost benefit analysis would continue to be used to assist in determining the appropriate regional strategy, and would have the dominant role in prioritising projects. Only projects critical to the achievement of regional land use and transport strategies and identified as such in the RLTS could be advanced above others with a higher B:C ratio/First Year Rate Of Return. The strategy or package of projects being funded would need to ensure adequate investment in maintaining and operating the existing road system as at present.

The amount of funding received by the region would be determined in advance. Initially at least it could be based on the level of funding received in recent years through Transit NZ. The region’s share of any future increase in road user derived
funding would be determined by economic growth or, possibly, travel growth rather than by the geographic make up of an approved national programme of local authority projects. Such a proposal would not be inconsistent with the network funding concept put forward for discussion by the Ministry of Transport in 1994.

**Size of Road Transport Fund**

Whatever the funding mechanism, it is vital that the total amount spent on the transport system is adequate. The Road Pricing Study should lead to firm decisions on the appropriate national level of expenditure and hence on the size of the National Roads Account. A significant increase in the National Roads Account should greatly assist in reducing current pressures, particularly if Transfund’s financial assistance policies ensure that the additional funding goes to where it is most needed.

**Role of Property Rates**

This paper does not argue that rates should be eliminated in favour of user charges. Rates could be seen as a form of network access charge, or alternatively as a recognition of the public good component of roads. The role of property rates in funding local (non-state highway) roading and public transport needs, however, to be reduced. Under the present system an average of 50% of approved local roading costs and around 60% of public transport subsidies are met from rates. Most local authorities meet some roading expenditure entirely from rates. This need to match Transfund financial assistance could be a major barrier to increased investment, particularly high cost investments. Provision of an additional source of local/regional funding from road users would provide much needed flexibility. Alternatives to funding from rates include the following:

- A regional petrol tax is an efficient means of raising revenue. One cent per litre would raise around $8M in the Auckland region. Preliminary estimates indicate that the proposed light rail system on the western and southern rail lines could be funded through a three cents/litre petrol tax. While a regional petrol tax may be politically unacceptable to central government, it should not be discounted as a viable option.

- The Road Pricing Study has raised the possibility of a capital charge on roads. A capital charge on the local road network could be an appropriate means of raising revenue (provided, of course, such revenue is returned to the local authorities as the road controlling authorities).

**Public Passenger Transport Social Costs**

Central government has often stated that road users should not pay for the "social costs" of urban public transport. Central government does, however, accept that taxpayers should fund rural school buses through the Education Vote. It is possible that the legislation under which Transfund will operate may not permit it to fund such costs. If so, Transfund would need to carefully consider whether the costs of maintaining very low volume public rural roads are not also "social costs".
In my view there is a clear case for taxpayer funding of the social benefit elements of urban public transport. An appropriate means of achieving this would be for the consolidated fund to meet the costs of concessionary fares, i.e., reduced fares for schoolchildren and superannuants. This would not meet all social costs, but any other split such as by time of day or day of the week is fraught with difficulties.

Transfer Payments Between Regions

Transit NZ’s financial assistance policy for local roads varies the funding rate for each local authority according to its “ability to pay.” “Ability to pay” is used as a mechanism for ensuring that some of the costs of maintaining the less used portions of the nation’s road network are met from other more populous parts of the country. It does so, however, not by a direct transfer of road user derived funds, but through differential local authority financial assistance rates intended to reflect the relative “wealth” of each local authority. There is a fairly general acceptance that some transfer is reasonable. However, the amount of such transfer should be rationally based and the transfer payments should be seen to come from road users rather than ratepayers.

7. CONCLUSIONS

7.1 The Auckland region contains 29% of New Zealand’s population and produces an estimated one third of the country’s GDP. It’s population growth appears likely to remain higher than much of the rest of the country. The region’s population may increase by 40% over the next 20 years. Auckland’s economy increasingly has its own dynamic. Our transport problems and challenges are substantially greater and more complex than those faced by other regions. The potential environmental, social and economic costs of continuing reliance on roading to meet future travel demands needs are large. Major investment decisions are being made which will have a long term effect on the region. These decisions go beyond transport into areas such as drainage and waste water treatment costs. Implementing some key projects is, however, proving very difficult and time consuming resulting in increasing frustration at an apparent lack of action.

7.2 The transport reforms of recent years have produced some real benefits. The required preparation of a Regional Land Transport Strategy (RLTS) and the creation of the Regional Land Transport Committee have enabled the region to develop a common position on complex issues and have provided an effective transport forum. The public passenger transport deregulation has forced efficiency gains and has reduced the public sector costs of service provision. The creation of Transfund opens the door for major changes in the funding of alternatives to roading investment.

7.3 The 1995 Auckland RLTS sets out a package of measures aimed at achieving defined objectives. The RLTS supports land use policies aimed at increasing densities and reducing further sprawl. It sets out a new direction placing far more emphasis on alternatives to the single occupant private car. While several large roading projects are
contained in the RLTS. It also includes major investment in upgrading the rail system and other initiatives for improving public transport. Both the need to provide effective alternatives to the single occupant car and the need to change public attitudes to the car are emphasised. The need for demand management is accepted.

7.4 If the Auckland region is to be able to implement its adopted strategies, however, the current statutory, administrative and funding frameworks must be amended as a matter of urgency. There appears to be a reluctance on the part of central government and its agencies to relinquish central decision-making relying on the uniform application of national rules. This sits uneasily with the bulk funding of schools and hospitals which delegates decision-making to the local/regional level.

7.5 The Regional Council's inability to designate land has added to the difficulties and delays in implementing major public transport projects. A regional body must be given the ability to designate land and own public transport infrastructure. This could be the Regional Council or a new Passenger Transport Authority. This body would not be a service provider.

7.6 The Transport Services Licensing Act should be amended to provide the region with the power to ensure that the public passenger transport system elements are fully integrated and the system is designed to meet strategic regional objectives. Market forces should be able to continue to ensure efficient use of public funds, but within a strategic framework set by the region.

7.7 New Zealand's land transport system has been underfunded for many years. The Ministry of Transport's Land Transport Pricing Study should be used to assist in determining the appropriate size of the National Roads Account, the appropriate charges to be paid by road users, and the appropriate means of funding local roads and public transport. Such decisions should be given a high priority for early resolution, and the tendency to become bogged down in theoretical studies should be strongly resisted.

7.8 Transfund should implement a type of bulk funding system that would permit the Auckland Region, or any other region, to implement key strategic projects identified as being essential to the achievement of desired strategic outcomes. A system can be devised which does not "threaten" other regions, but permits key regional decisions to be made by the regions themselves. Only in this manner can the consultation process, wider strategic land use objectives and political trade-offs represented in the RLTS be recognised. There also needs to be a source of regional funding other than rates such as a capital charge or regional petrol tax. Without such a funding system, roading projects will continue to be funded ahead of public transport projects and eventually any strategy relying on major public transport investment will become redundant. Section 6.4 of this paper suggests a funding system that would be appropriate for Auckland and other regions wishing to implement long-term strategies, and which would continue to make substantial use of cost benefit analysis.

7.9 The National Land Transport Strategy (NLTS) may be an appropriate vehicle for dealing with some of the issues raised in this paper. The NLTS should set out the policy
and strategic framework to guide regional strategies as well as establishing national targets and priorities for transport. It should set the means of determining the size of the National Roads Account and the incidence of charges on road users including environmental externalities. The social costs of transport including roading should be defined and means of funding these specified. Regional Councils should be empowered to implement their land transport strategies.

7.10 Effective community involvement is essential if the community are to “own” the problem and to support the actions taken. It can also help change public attitudes and perceptions. Councils are responding to the need for, and indeed demand for more effective consultation in different ways. The Auckland City Council, for example, is making major efforts to involve the community in strategic decision making through direct consultation on strategic options (Central Isthmus Corridor Study) and through a major marketing survey (2020 Strategy Update).

7.11 A major effort is required to gradually change attitudes towards the private car, recognising that, in the end, this is the best way of making major progress. In addition the public bodies need to be more realistic and avoid selling schemes as “solutions”. No one scheme will “solve congestion”. A package of measures plus the will and capability to implement the package is required.

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