Session 1a

GOVERNMENT REFORM

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THE FUTURE OF TRANSPORT POLICY IN NEW ZEALAND
Philip McDermott & Roger Toleman

DO GOVERNMENTS UNDERSTAND THE ECONOMIC ROLE OF THE ROAD SYSTEM? DISENTANGLING OBJECTIVES AND CONSTRAINTS
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Session 1a Paper 1

THE FUTURE OF TRANSPORT POLICY IN NEW ZEALAND

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ABSTRACT

The transport sector was central to the economic reforms pursued in New Zealand in the 1980's. Market liberalisation exposed New Zealand business to fierce international competition It was critical to the success of this strategy that transport as an "intermediate" sector was made both competitive and responsive This called for restructuring, removal of government from the "business of transport", and reregulation, the latter shifting the emphasis of intervention from quantitative controls on market behaviour to qualitative standards. These processes are summarised in this paper The latest phase of reform, the pursuit of inter-sector comparability through the establishment of a unifying framework for pricing different modes of land transport is also described. This is intended to pursue the Government's strategic objective of "a safe sustainable transport system at reasonable cost"

Other areas of intervention are based on the generic statutes for ensuring suitability for conducting a transport business maintaining a competitive environment enforcing safety standards and for the setting of and compliance with environmental standards.

The paper looks to the setting of transport policy in the future Rapid growth in demand and increasing standards of performance and specification for the international carriage of freight and people will call for the continuing refinement of regulatory procedures and judicious surveillance of standards Demands on domestic transport systems will become intense, placing pressure on maintaining a framework which leads to efficient resource decisions while allowing the private sector the opportunity to devise solutions to problems of volume congestion and rising service expectations

The greatest challenge for central transport policy agencies will be maintaining an effective interface between domestic including regional and international sector interests trans-national government agencies and global transport systems.

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The Future of Transport Policy in New Zealand

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1.0 Introduction

New Zealand has come through a period of radical reform in transport. This has substantially reduced government involvement in the sector and removed barriers to competition. Measures include privatisation of state-owned transport operations, simplification of statutes, corporatisation of infrastructure assets, deregulation of aviation and shipping, labour market reform, and reform of land transport. Not all relevant reforms have arisen in the transport sector. For example, the Employment Contracts Act, 1991 contributed to operational flexibility. Similarly, reduction of import restrictions and tariffs for manufactured goods has reduced costs in the transport supply sector.

Government has moved progressively from ownership and control, arbitration and prescription, to a much more permissive form of regulation. The aim has been to allow the transport market to operate within very broadly defined parameters to rationalise the consumption of resources - and therefore costs - across modes.

Deregulation does not mean that there is no role for government. But the nature of policy intervention has changed. The Ministry of Transport, for example, now oversees the sector and community structures established to set and maintain standards for health and safety, environmental protection, and social provision, rather than doing those tasks itself. Consequently, government can focus on long-term strategic issues.

This paper reviews the reform process and its outcomes, identifies outstanding policy matters, and discusses the strategic issues facing sector.

2.0 Reform Process and Outcomes

2.1 The 1980s

The transformation of the transport sector cannot be understood independently of the public sector reforms which took place in the 1980s. These were fuelled by the belief that, even in a long-standing democracy, power can become too centralized, a burden on the economy, and remote from the people. In 1984 the New Zealand conservative party - National - was voted out of power and a more liberal Labour Party voted in. The incoming government sought an end to Keynesian economic management in the interests of a more competitive economy, a theme which preoccupies central policy still. This

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marked the beginning of the end of a century's commitment to central government involvement in "nation building" and economic management.

The approach to the transport sector has traditionally been bi-partisan. Thus, the opening up of competition between road and rail commenced under the National Government in the late 1970s and was completed under Labour in 1986. Nevertheless, the 1984 change in government accelerated the process, with transport reform caught up in a wider sweep of state sector reforms and economic liberalisation. The new government withdrew support (by way of tariffs, import quotas, direct subsidies and subsidised capital) from agriculture and manufacturing. The finance sector was deregulated. The labour market was deregulated. The government dismantled the Arbitration Court and subsequently introduced the Employment Contracts Act 1991 which abolished compulsory unionism and introduced workplace-based bargaining and individual employment contracts.

The State Sector Act (1988) redefined relationships in government, transforming the operations of the public sector. Ministers today contract with heads of departments to purchase the *outputs* necessary to achieve political objectives, or *outcomes*. Department heads employ the resources, including the people, necessary to produce the outputs. Ministers focus on policy objectives; departments on means of achieving them. In theory, ministerial focus on policy should be sharper, political interference minimal, and executive accountability for the execution of policy unequivocal.

Major organs of state-led development, the Ministry of Works and Development, the Ministry of Energy, the New Zealand Forest Service, and the Department of Lands and Survey, were disestablished within the first term of the Labour Government. Commercial activities were corporatised (as State Owned Enterprises) and have been progressively privatised. State assets were sold off, including the Shipping Corporation and Air New Zealand in 1989. Responsibilities for policy development were separated from responsibilities for service delivery and policy departments reduced in size and scope.

The Ministry of Transport lost a number of traditional functions. Environmental activities associated with its maritime responsibilities were transferred to the Department of Conservation and regional councils. Traffic safety enforcement was transferred to the Police. The Transit New Zealand Act 1989 and Transport Services Licencing Act 1989 "assigned important planning and regulatory functions in respect of roading, passenger transport, and safety" to regional and local councils (Martin, 1991, 277).

2.2 The 1991 Review [2]

The reform implemented in the first term of the Labour Government, despite its internal logic, was driven by an urgent desire to correct the perceived imbalance between the public and private sectors and to restore economic competitiveness. The measures adopted for transport left unanswered long-term questions about the role of government.

[2] This section is based on Toleman (1996) *Refocusing The Role Of Government In Transport The New Zealand Experience*, Paper to the World Transport Research Conference

These were addressed through a comprehensive review of transport policy and administration between 1988 and 1991, which identified a number of principles as a basis for longer-term reform:

- Government would maintain its interest in the management of the transport system through a strategic approach, rather than by involvement in operational matters;

- Public policy would be implemented through the minimum number of administrative units, maximising use of structures already in place for non-transport matters;

- Policy management would be conducted within a multimodal framework;

- Any organisation created to manage any part of the sector would be accountable for defined responsibilities, free from conflicts of interest;

- Public management of the transport sector was to be cost effective, with the costs of intervention borne by the relevant interest group, wherever practicable.

The outcome of the review was a medium term management strategy, outlined below.

2.3 Commercialising Transport Operations

One imperative for reform was the view that bureaucratic structures were inappropriate for direct management of transport in a rapidly changing environment. Slow decision-making, conflicting goals, and concerns over fiscal responsibility and public accountability, among other things, called for reconsideration of government's involvement in transport.

Consequently, government transport operations were transformed to operate according to commercial norms. The constraints associated with government control were reduced. Once commercial operations were running satisfactorily, they became candidates for privatisation. At the same time as government was withdrawing from operational activities, it effectively passed the commercial regulation of transport, including policing restrictive practices and pricing, to the Ministry of Commerce.

The transport-related activities of the Ministry of Works and Development, New Zealand Railways and 40% of Ministry of Transport activities were corporatised. Commercialisation of individual enterprises allowed management to focus on running transport operations in a clear framework of accountability. The companies created have generally achieved their initial targets for operating profits, while maintaining or improving service. The process of commercialisation in central (and local) government is now approaching completion in the aviation, maritime and rail transport sectors.

Figure 1: Transport Organisation Development

Organisation in 1980	Organisation(s) in 1995	Transport function(s)	Status
Ministry of Works	Works Civil Construction Ltd	Road construction	State Owned Enterprise
	Works Consultancy Services Ltd	Roading design & management	State Owned Enterprise
	Transit New Zealand	State Highways management and local road funding	Crown Entity
Government Railways Dept	NZ Rail Ltd	Railways & ferries operation	Private sector company
	Dept of Survey & Lands Information	Owner of railways land	Government department
	Inter-City Coachlines	Long distance coach services	Private sector company
	StageCoach	Urban bus services	Private sector company
Ministry of Transport	Civil Aviation Authority	Aviation safety regulation Aviation security services	Crown Entity
	Airways Corporation of NZ	Air traffic control services	State Owned Enterprise
	Aviation Services Ltd	Aviation personnel testing	Private sector company
	Maritime Safety Authority	Maritime safety regulation	Crown Entity
	Marine and Industrial Ltd	Maritime safety inspection	Private sector company
	Land Transport Safety Authority	Road & rail safety regulation	Crown Entity
	Vehicle Testing NZ Ltd	Vehicle safety inspection	State Owned Enterprise
	NZ Police	Road safety enforcement	Government department
	Master Drive Ltd	Road safety education	Private sector company
	Meteorological Service of NZ Ltd	Weather forecasting	State Owned Enterprise
	Transport Accident Investigation Commission	Accident investigation	Crown Entity
	Ministry of Transport	Transport policy & monitoring	Government department

2.5 The Case of the Ports

The success stories of corporatisation are demonstrated by port reform. The Port Companies Act 1988 separated Harbour Board commercial from non-commercial operations. Thirteen Harbour Boards were transferred to council-owned port companies by the Local Government Amendment Act. Elected officials were replaced by appointed boards charged with operating ports as commercial entities. Financing of operations and investment was to be through normal commercial practice and instruments.

Port reform was not accepted unequivocally. Users felt that their past custom had funded assets which they would now pay for through charges set outside political control. Local interests felt corporatisation would prejudice the responsiveness of ports to the wider needs of business, especially agribusiness, in their hinterlands. The need to obtain a commercial return on assets and to pay tax on profits raised the spectre of increased charges, regardless of possible efficiency gains.

Corporatisation was just one of a number of reforms aimed at reducing the public role in port operations. For example, the abolition of the Waterfront Industry Commission (Waterfront Industry Reform Act 1989) saw the way opened for direct employment, reduced staffing and the introduction of multiple shifts. Such reforms, spurred on by inter-port competition, in fact saw handling charges fall and service levels rise dramatically. For example, the Ports of Auckland reported in 1993 that over the first four years of the new regime costs were reduced by 43%. This was accompanied by a reduction in turn-round time for container ships from 38 to 15 hours, and a four-fold reduction in non-container ship turn-round time (from over 80 to just over 20 hours) while staff fell by two thirds. Similarly, the Port of Napier in 1994 reported a four-fold gain in ship turnaround time and a doubling of vessels handled.

Today, a number of local bodies have begun to sell off (minority) shares in their port companies, by way of public float. Several ports are listed, with 45% of shares in the Port of Tauranga publicly owned, for example, and 28% of the Northland Port Company. South Port (Invercargill) with its large aluminium trade has been partially privatised and shares in Lyttelton Port are being offered to the public in 1996. Continued privatisation depends on the extent to which local authorities wish to liquidate commercial assets and direct the proceeds towards core public sector responsibilities, or the extent to which they seek to hold them for strategic or financial reasons.

The effects do not stop there. In the spirit of deregulation and greater competition, ports and airports are becoming increasingly differentiated. Thus, Auckland is strengthening its dominance as the national port of entry for imports. Although the value of imports nationally was 4% lower in 1994 than in 1985 (in 1994 dollars), the value of imports through the Ports of Auckland was 25% higher. Over the same period imports increased by over 44% through Auckland International Airport. Today, over 70% of merchandise imports by value enter the country through Auckland.

In contrast, export growth has become less centralised. Between 1985 and 1994 export volumes grew by 7.5%, with this growth occurring primarily in the secondary ports, such as Tauranga, Napier and Nelson (driven in large part by forestry trade). Container trade, however, is becoming more centralised. Nevertheless, the emergence of specialist export ports outside the main population centres is a feature of the sector.

Since reform, then, the pattern of ports and port business has changed radically:

- Ports are operating in a commercially responsive manner, exploiting technology and changed employment conditions to achieve higher loading rates and lower unit costs;
- Pressures for substantial expansion of port infrastructure to deal with primary sector exports - especially forestry products - have been dampened by productivity gains;
- There is growing specialisation among ports, with some gaining at the expense of others. Imports are becoming centralised, based on Auckland, but conventional exports are becoming less centralised;
- Auckland and Lyttelton are emerging as hub ports, seeing a return to transhipment activity as a result of coastal shipping deregulation.
- A number of ports, especially in the South Island, have contracted, although coastal shipping may maintain basic levels of activity and service among them.

The ports example demonstrates how specialisation and flexibility increase as operators and investors gain experience of working independently of the constraining hand of government. Greater flexibility and falling costs, in turn, gives the proponents of privatisation the evidence they seek to push further into areas traditionally considered the domain of central or local government.

2.5 Outstanding Business: the Land Transport Sector

While there are now no publicly owned road freight operations, and most bus companies have been privatised, management of roading operations remains in the hands of non-commercial agencies. Transit New Zealand, created in 1989 to remove management of the State Highway network from political influence, has made substantial management gains and fiscal savings. Policy development is now focused on ways of maximising the benefits accruing from an asset with a $25 billion replacement value.

Transfund New Zealand was established by the Transit New Zealand Amendment Act 1995 as a crown agency with the principal objective to:

> "allocate resources to achieve a safe and efficient roading system" (Section 3B)

It is responsible for funding land transport, dispersing road user charges, vehicle registration, and fuel tax among the bodies responsible for the development and operation of the nation's roads, in particular:

- Transit New Zealand, with responsibility for the State Highway network;
- Regional councils, with responsibility for funding public transport ;
- Local authorities, with responsibility for the local road network.

Under the new arrangement funding will be dispersed among modes on the basis of efficiency. Thus, the funding of the state highway system is separated from responsibility for its operations, which remains in the hands of Transit NZ. Of equal importance, it is to be considered alongside funding of outputs from:

> "one or more of the following, namely, passenger services, rail transport, and maritime transport *[defined to include]* the carriage of freight and the carriage of passengers" (Section 3D(b)).

It is anticipated that this will see a change in emphasis away from catering for the private motor vehicle transport through incremental extension of the highway system to the consideration of mode and sector alternatives for achieving particular transport goals. Regional councils will be required to determine and set regional transport priorities through the preparation of Regional Land Transport Strategies, which will become the basis for funding applications. Regional strategies will need to be consistent with or cognisant of priorities in any National Land Transport Strategy, and it is in this area that central attention is most likely to be focused in the short term.

Currently, the emphasis of strategic studies at the national level is clearly on the establishment of a "level playing field" through identification of the full costs of transport on any mode. The recently completed Land Transport Pricing Study (Ministry of Transport, 1995,1996) provides a basis for further rationalisation of road transport funding by providing an accounting framework for balancing highway investment and operations, on the one hand, and revenue generation, on the other. Social and environmental externalities have been assessed, providing a basis for separating public and private costs and benefits and improving the efficiency of network planning, development, and funding.

These initiatives will enable funding to be distributed among agencies responsible for all aspects of land transport development, maintenance and operations on the basis of resource efficiency. Higher order funding decisions are removed from single purpose agencies. The economic accounting framework developed will eliminate hidden subsidies and further facilitate inter-modal comparison by users, contributing to the resource efficiency of the sector as a whole.

3.0 Reweighting the Light Hand of Government

One of the ironies of deregulation intended to increase competitiveness and enhance flexibility is that it is often accompanied by a concomitant push to regulate behaviour. Individual autonomy does not necessarily extend to matters of safety or environment, both areas subject to market failure. In a specialised and technological environment the consumer may be unable to reasonably assess danger and personal risk. The onus on the operator to maintain socially acceptable and economically sensible safety standards needs to be enforced by regulation, particularly if entry to a particular area of enterprise is relaxed. Equally, a shift from regulating what investors and operators in a sector can do, and how they do it, calls for a more explicit focus on the environmental impacts of what they do. As long as markets fail to price the full effects of commercial activities on physical systems, regulation will be needed to protect natural resources.

3.1 Safety Issues

The of the "safety audit" was introduced in 1988 (Ministry of Transport, 1988). This takes a lifetime view of safety, focusing on entry and exit procedures to a sector and on the accountabilities of operators for safe practices. The public interest moves from spot checks on particular components of the system, or on prescribing how they should operate, to the ensuring by means of audit the effectiveness of safety management systems. The parallel with quality management (under ISO9000 and 9001, for example) and environmental management (under ISO14000) is obvious. In keeping with quality practice, attaining the appropriate standards is seen to benefit the operator, who therefore carries the costs of auditing and compliance.

To manage the transition to safety audit across the transport sector, and to reveal the costs of public involvement, three new modal agencies have been created. The Civil Aviation Authority, Land Transport Safety Authority and Maritime Safety Authority are accountable to the Minister of Transport through a formal Performance Agreement. Each is overseen by an appointed Board and responsible for safety rules, licensing, monitoring and enforcement for the relevant sector group. Stand-alone agencies working in partnership with the relevant sector groups are preferable to a multipurpose government department because of the technical nature of transport safety. While Performance Agreements may involve some public funding for particular purposes, the bulk of operating costs are recovered from charges on the relevant part of the industry.

The agencies must demonstrate that any Safety Rules proposed meet the test of safety "at reasonable cost", defined in the legislation as a situation in which the costs of any interventions are exceeded by the benefits. This should ensure that a sector group subject to particular regulations and services can ensure that the Rules are appropriate and that the agencies developing and enforcing them are giving value for money. While the new approach will take some time to implement, having to justify interventions will reduce the mass of technical legislation currently in force.

New Zealand law does not treat safety as a property right capable of being defended in court, opting instead for an accident compensation approach. It is important, therefore, that safety authorities are able to identify the costs of safety measures. The involvement of the appropriate sector group in standard setting and the move to user pays for safety services ensures informed scrutiny of intervention costs. (In the non commercial private operator sector - involving the recreational use of motor vehicles, light planes or boats - the question of appropriate levels of safety intervention is still under consideration).

The development of safety outcome measures is necessary for agency accountability. It will also facilitate intermodal safety comparisons, complementing the development of structures through which their commercial efficiency can be compared. Ultimately, purchasers of transport services will compare modes in both commercial and safety terms, leading to decisions which will collectively enhance deployment of transport resources across the sector.

3.2 Environmental Issues

As with any other resource user, transport operations are now subject to the consent procedures of New Zealand's Resource Management Act (1991), administered by local and regional (or unitary) councils. The Act is intended to promote the sustainable management of resources by setting the environmental standards for economic and social activity to comply with, through the preparation of district and regional plans. While less prescriptive than the Town and Country Planning Act which it replaces, the Resource Management Act makes significant demands on organisations insofar as they are required to comply with the environmental expectations and standards of local communities. By setting such standards and imposing the costs of compliance on the parties who would breach them, the Act in theory will enable environmental externalities to be internalised.

The reform of the environmental legislation in New Zealand requires the sector to come to grips with the environmental impacts of the transport system and its expansion more directly than has been the case in the past, when compliance with procedures and rules were less subject to local interpretation, more prescriptive, and bore little relationship to the environmental costs imposed. Difficulties arise in the new regime, however, because many of the environmental impacts of transport are associated with mobile plant and cannot be dealt with effectively under the Resource Management Act. These must be addressed on a national fleet basis.

The principles of inter-modal comparison and economic efficiency call for an understanding of the externalities associated with different modes of transport activity. Recent estimates for four categories of pollutant associated with road transport suggest the economic costs of environmental damage are substantial, although subject to a wide range of uncertainty (Table 2). Nevertheless, a major policy challenge for the future is to incorporate these sorts of costs, ideally estimated across modes, into the decision-making of transport investors and users.

Table 2: Annual Environmental Costs of Road Costs ($ Million)

Pollutant Category	Range	Best Estimate
Noise	230 to 2,650	290
Local Air Quality	None Estimated	700
Greenhouse Gases	25 50 580	290
Water Quality	35 to 170	100

Source: Ministry of Transport, 1996, 88

Any attempt to reflect true resource costs, including environmental costs, in transport decisions raises a range of questions. Mechanisms for pricing environmental impacts should be related directly to the cost of avoidance, mitigation or recovery measures. This the spectre of a return to central regulation, and technocratically adjudicated and bureaucratically administered solutions. Market-based alternatives, the creation, for example, of a market in rights to pollute, while theoretically attractive are problematic, and may themselves require new regulatory structures without reducing uncertainty.

A number of indirect costs to the environment arising from transport development have not yet been broached, yet may be significant. These include the impact on and consequences of urban sprawl arising from the extension of motorways beyond the city fringe, for example; the consequences of community severance as a result of motorway or bypass construction; and the impacts of new roads, road upgrading, or increased traffic densities on health, landscape, and rural or residential amenity values. Environmental impact assessments of new roading projects, with their focus on the measurable impacts in the immediate vicinity of a designation, largely omit these more difficult-to-measure, wide-ranging and long-term consequences. Clearly, dealing with the externalities associated with road transport remains an important area for policy analysis and development both at the regional level (under the Resource Management Act) and nationally.

Whatever policies are eventually developed, a number of implementation preferences can be identified as the consequence of the principles set out in the 1991 review (Section 2.2 above). In particular, solutions should be part of a multimodal approach that recognises the commercial structures of the transport industry and has clear accountabilities.

3.3 Social Issues

Commercialising previously public operations inevitably raises social concerns. Some of these relate to safety and environmental issues, discussed above, with failures almost inevitably laid at the door of the restructuring or privatising process. The same judgements can be made regarding the provision of transport services for equity or welfare ends. If an operator, who must make a profit to survive, withdraws a non-commercial transport service, questions of transport disadvantage may arise.

The experience of commercialisation to date suggests that more of the transport network is commercially viable than might have been expected. Increased public intervention for social policy purposes has not been necessary. All freight services, for example, operate in a fully commercial environment. While operators might choose to cross-subsidise services, such decisions may be commercially sensible on the grounds of marginal costing. This appears to be the case, for example, with long haul rail passenger services and international air freight services.

The principal social concerns remain focused on urban passenger services in the main cities, and particularly meeting the needs of the transport disadvantaged. The benefits of affordable public transport services do not accrue just to the transport disadvantaged, with any reduction in vehicle use benefiting other road users and enhanced accessibility benefiting the commercial community. In recognition of the inter-sectoral and land use related issues, responsibility for planning and service definition for public passenger transport lies with elected regional councils (unitary councils where these exist). Regional Councils are also responsible for strategic resource management and for funding local transport strategies. Currently, 60% of the funding for public transport services is raised locally, through property or petrol taxes, while the remaining 40% comes from central government. The total value of central and regional government funding for public transport is just over $100 million.

Regional councils are prohibited from owning any transport assets. Service tenders are awarded on a competitive basis, and currently fund bus, taxibus, taxi, rail and ferry services, as appropriate. As a result of these arrangements, subsidies to public transport are transparent, service needs are defined in consultation with local interests, and competitive supply should enhance operational efficiency.

4.0 WHERE TO FROM HERE?

4.1 Progress to Date

One of the interesting outcomes of the reform process has been the increased ability of suppliers to compete across modes, and for users - particularly shippers - to undertake genuine intermodal comparison, at least between the aviation, rail and maritime sectors. This is increasingly sustaining the emergence of new forms of transport provider, offering seamless, integrated service across modes.

Deregulation of the transport sector is already an administrative and financial success. Government exposure to risk through ownership is being eliminated, user benefits are apparent in better service, wider choice, and falling or stable charges. The role of central rules and intervention has been minimised, allowing government to focus on strategic policy issues. The task of the Ministry of Transport today is to ensure that the management systems and structures exist to deliver on the long term strategic target of a "safe sustainable transport system at reasonable cost." The Ministry no longer has any vested interests in particular solutions or approaches, and has no direct service delivery or management functions.

The structural changes underpinning this reform and refocusing have been dramatic. In 1987 the Ministry employed over 5,000 people. Around one quarter of those positions have since disappeared. Approximately 3,700 were transferred to other departments or privatised. The drive for productivity in the sector may have seen further attrition of the original figure. Today, the Ministry of Transport employs less than 60 people to meet its policy commitments.

4.2 The Outstanding Issues

The outstanding issues from the recent period of reform relate to the extension of the principle of comparative treatment to roading infrastructure, and to a multimodal approach to the costs of safety and environmental impacts. These are fundamental issues, but they are ones that the new structure is now capable of addressing in a manner that will not be inherently prejudiced by bureaucratic rigidity. In both instances, the responsibilities lie across sectoral boundaries. Thus, the issues of safety entail facilitating conformity with the Occupational Safety and Health Act through the operation of transport safety authorities already set in place, and ensuring that international safety agreements to which New Zealand is a party are reflected in domestic law.

The question of environmental protection is more problematic. The key statute is the Resource Management Act. The Act sets out its purpose and a process for pursuing it, but is flexible with respect to outcomes sought and methods through which councils might pursue them. The identification of environmental costs associated with the road transport network is a first step which may need to be supplemented by work across the other modes. While no particular mechanism may be called for to oversee this task, the experience of other sectors (such as farming, tourism and forestry) is that the complexities of the Act call for a sector to address issues of appropriate standards and codes of practice to assist with compliance by their members. Again, the issue may be one of integration, in this case through consultation with sector interests and continuing collaboration with regional and district councils. This will be achieved, in part, through sector participation in the preparation of Regional Land Transport Plan.

Issues of social equity and access for the transport disadvantaged are best pursued at the same level, and through much the same mechanism, the Regional Land Transport Plans. In the case of both environmental externalities and social need, this provides an appropriate forum for developing standards and means of compliance which can then be implemented by local authority in conjunction with the appropriate local authority, informed by the National Land Transport Strategy.

Beyond consultation and an analytical contribution, central influence will be exercised in these areas of local policy through the way in which Transfund New Zealand allocates its funds, how it assesses benefits and how it prioritises between modes and among areas. It may well be this agency which most requires the extension of the inter-modal information framework initiated through the Land Transport Pricing Study.

Beyond extending this information framework, the Ministry of Transport maintains a responsibility for monitoring developments in the sector and, to this end is preparing a Transport Information Strategy. This will include, amongst other things, the technical developments which enable the Ministry to refine the decision-making, planning and policy framework for transport, for example, or to facilitate the move to more targeted charging regimes within sectors.

4.3 Beyond 2000: the Strategic Issues

Rapid Growth

If the balance of this century is taken up with completing the development of an inter-modal information and policy framework, what lies beyond that? Many of the signs, today, point to the twin issues of transport diversity and integration, driven by market and technology developments which reach across the entire sector.

Recent reforms highlight the role of transport as an intermediate supplier of services in the modern economy. The future of transport, then, cannot be separated from the structural changes occurring in the wider economy. The pursuit of international competitiveness requires the transport sector to support the demands of modern production - for high speed, high specification, and highly responsive goods transport services - and of modern consumption - for efficient private transport and quality public transport. In both production and consumption, rates of growth in demand for transport services are likely to continue to increase ahead of growth in output.

As more of the economy is committed to international trade, and as the average value of traded goods increases, so the demands placed on both internal and external transport are multiplied. At the same time, international competitiveness exerts almost continuous pressure on internal transport prices and on the price of international carriage, demanding continuous gains in productivity. Similarly, as greater shares of household consumption, in New Zealand and overseas, are committed to intangibles, and especially to services involving travel, so the expansion of the "for hire" areas of passenger transport will expand rapidly. This includes the rental car, coach, and airline sectors, as well as tourist operators of pleasure aircraft and boats.

International Integration

Alongside rapid growth, there will be growing diversity in demand for transport services. Changes in the nature of production, based on international melding of manufacturing systems, higher specifications for materials, components, and assemblies, reliance on just-in-time delivery systems, the drive to competition based on quality, and the imperative to locate production at internationally low cost centres, are forcing the "reconstruction" of transport and distribution activities. The line between producers and transporters will, in many instances become blurred, especially as their interests in terms of capturing value in an international marketplace become indistinguishable.

Differentiation of demand will lead to further integration in transport services, rather than fragmentation. Organisations in the freight sector will no longer be distinguished by nationality or by the location of ownership so much as by their international network affiliations. National boundaries will have diminishing relevance for the definition of services. Modal specialisation will give way to product affiliation or service-type specialisation. This may or may not involve the separation of ownership of transport plant from the marketing and organisation of capacity, as service alliances become increasingly common. The emergence of specialist carriers in the ground, maritime and airfreight sectors, with advanced handling, storage and environmental control systems, will be accompanied by the development of highly specialist forwarders to cater for the needs of particular subsectors.

Similarly, while the prospect is for continuing strong growth in demand for international travel, notions of mass tourism are already outmoded. International travel demand will be increasingly discriminatory and differentiated. For example, the move to differentiated leisure travel will be reflected in land transport, where high service rail passenger transport is once more in vogue, and in marine transport, with the renaissance of the cruise business.

Despite the emergence of high capacity, relatively low cost (seat kilometre basis) aircraft, customers for air services are becoming more knowledgeable, sophisticated, and explicit in their demands for rapid, long-distance travel, whether it is for no-frills, low cost services, or for high levels of catering and care. The major airlines are reflecting this in their ability to reconfigure capacity, and the greater diversity of routes they offer. Hubs may become more important as a basis for offering greater flexibility of destinations in response to booming demand for international travel.

The increasing density of airways and the proliferation of international-capable airports means that a huge range of tourism product demands can be catered for by powerful, flexible, international information systems. The changing nature of demand for travel services will support a growing host of businesses capable of customising travel products with a level of detail, flexibility, and responsiveness previously unheard of in the tourist wholesale and retail sectors.

Domestic Diversity

Against this background of integration within an international transport system the question arises as to the future of domestic transport. Clearly, through tourism and trade, major components of the domestic transport sector will be integrated into international markets and regulatory systems. Beyond that, the themes of diversity and integration will still prevail. The urban transport problem will not be resolved simply through investment of public funds in traditional mass transit systems. Instead, the emergence of highly specialised labour markets, differentiated residential suburbs, and changing patterns of consumption will break down the traditional urban problem of catering for peak commuting demand on clearly defined routes.

Cross-commuting, extended peaks, weekend recreation congestion and the emergence of intensive local traffic generators are all manifestations of these tendencies. They are occurrences which call for a more flexible, demand responsive public transport system, at the same time as they endorse the convenience of the private automobile. Opportunities are created, however, for achieving flexible for-hire transport systems, falling between traditional taxis and fixed-route, timetable bus services, while existing transport infrastructure becomes utilised more intensively with substantial benefits in the off-peak period.

Diversity will be reflected in new patterns of land use, reflected in a greater variety of transport needs. Urban consolidation, for example, raises questions of the impacts on urban and residential amenity of intensification of suburban traffic, at the same time as it generates transport benefits from short trip lengths associated with the return of inner-city living. While the compact city will become more viable, and generate its own particular traffic problems, so we can expect social diversity to create greater demands for ex-urban living. This demand will be manifest through pressure in sensitive physical environments, in coastal areas, for example, in and around bush, or simply in those areas close to urban boundaries which are valued by city dwellers for their rural qualities Increased traffic, including long-distance commuting, will be contentious in such areas, and place pressure on under-developed rural roads.

Inter-regional transport demand will grow and diversify. The emergence of specialist ports (especially for forestry), for example, and of specialist centres of production and consumption (including tourism destinations) will see increasing demand for heavy traffic haulage competing with continuing pressure from private vehicles. Conflict will be manifest in debates about who pays for road wear, rural congestion, and safety incidents.

The Regulatory Implications

An era of high growth, high volume, diverse and often specialised transport demand and supply will still call for policy attention. However, the agencies of policy and, indeed, the structures within which they operate, will be responsive, flexible, and generally light handed. Nevertheless, a number of areas can be anticipated to require policy monitoring:

- Protection of the environment;
- Maintenance of safety standards;
- Policy and enforcement structures;
- Compliance costs;
- Conditions of entry;
- Licensing and other consent procedures;
- Facilitation of transport, including quarantine, customs, security, and related inspections and documentation.

Despite these areas of public interest, there is little, if any, prospect of a return to a centralised, hands-on regulatory approach, where non-profitable segments of the sector might be sustained by public ownership, or by imprecisely targeted and inefficient subsidy. Where active intervention is called for, to protect the public interest from the environmental and social consequences of expanding domestic transport systems for example, this is likely to be developed at the local or regional level in consultation with industry and community interests. It will be facilitated by the existence of an information framework which allows even-handed inter-modal comparison, and by an institutional framework in which the public sector has no vested operational or ownership interest. In this environment, central government is most likely to maintain an overseeing and advisory rather than an active role.

Where intervention is called for to protect the public interest in a safe domestic transport system, specialist authorities working closely with transport sector interests will be favoured. These agencies will be accountable to government for the efficacy of their actions, but will draw on specialist international expertise and build industry linkages to ensure that rules are appropriate to the safety objectives with which they are charged.

While the concentration of technology and capital will support the emergence of global carriers in freight and passenger transport, greater ease of entry and exit from a regulatory point of view and the fragmentation of demand will offset this by encouraging a steady flow of small specialist operators to enter the industry. In this environment central regulatory agencies will be faced with two challenges: acting to limit potential abuse of market powers by international conglomerates , on the one hand, and enforcing internationally-derived safety standards among small, possibly under-capitalised, low-cost operators, on the other. While the latter task will be operationalised through safety authorities, questions of international standards and compliance will call for a central role of vigilance, advocacy and negotiation.

Indeed, the tasks of a central transport policy agency will be complicated by the fact that regulation is increasingly subject to international mediation. Acceptable safety standards, for example, are more and more determined by international forums, associations and conferences. Trade regulations are subject to international scrutiny and agreement, as are rules on customs, quarantine and phytosanitary controls. The issue of international co-ordination will be progressed by creation of a single Australasian aviation market, and, beyond, that possible harmonisation of airways throughout the Asia-Pacific Region.

It is in this area, of forming an effective interface between international industry, trans-national government and global transport, at the same time as its direct role in the domestic economy has greatly diminished, that central policy agencies in transport will face their greatest challenges in the 21st century.

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