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Paper title: Transfund's allocation process for land transport in New Zealand

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Abstract (200 words):

The New Zealand Government sees transport policy as fundamental to fulfilling its broader social, economic and environmental goals. In recent years, this has led to profound changes in the policy and funding framework for New Zealand's land transport. Those changes have covered the legislative framework and transport strategy as well as the funding allocation processes. As the government agency responsible for allocating funds to land transport, Transfund New Zealand has been at the forefront of the changes. A key development has been the shift of focus from economic efficiency of individual projects to a broader approach in which economic assessment is supported by wider qualitative and quantitative environmental, health and safety assessments. Where New Zealand was previously positioned well towards the 'mechanistic' end of the funding allocation spectrum, it has now moved into closer alignment with the international trend towards using a strategic, multi-criteria approach. The paper has four parts:

1. The impact of the new legislative framework on Transfund's functions, roles, policies and processes
2. The funding allocation process for 2004/05 and beyond
3. How the funding process compares with international practice
4. The contribution of monitoring in achieving land transport policy objectives.

Introduction

The New Zealand Government sees transport policy as fundamental to fulfilling its broader social, economic and environmental goals. In recent years, this has led to profound changes in the policy and funding framework for New Zealand's land transport. Those changes have covered the legislative framework and transport strategy as well as the funding allocation processes. As the government agency responsible for allocating funds to land transport, Transfund New Zealand has been at the forefront of the changes.

This paper provides an overview of the policy context and funding regime for land transport in New Zealand. The paper is structured into four parts covering the changes in terms of the following perspectives:

- Part 1. The impact of the new legislative framework on Transfund's functions, roles, policies and processes
- Part 2. The funding allocation process for 2004/05 and beyond
- Part 3. How the funding process compares with international practice
- Part 4. The contribution of monitoring in achieving land transport policy objectives.

Part 1: Impact of new legislative framework

The New Zealand Transport Strategy was formally released by the New Zealand Government in late 2002 with the overall vision:

“By 2010 New Zealand will have an affordable, integrated, safe, responsive and sustainable land transport system.”

The strategy set out the government objectives for transport as:

assisting economic development

assisting safety and personal security

improving access and mobility

protecting and promoting public health

ensuring environmental sustainability.

To fulfil the vision in the New Zealand Transport Strategy and to turn it from a concept to a reality, a new legal framework was required. As a result the Land Transport Management Act 2003 (the Act) came into force in November of 2003 which gives legislative effect to the New Zealand Transport Strategy.

The overall purpose of the Act is to:

“contribute to the aim of achieving an integrated, safe, responsive and sustainable land transport system.”

To do this the Act:

- provides for an integrated approach to land transport funding and management
- improves social and environmental responsibility in land transport funding, planning and management
- changes the statutory objectives of Transfund and Transit New Zealand (State highway operator) to broaden the focus of each entity
- improves long-term planning and investment in land transport
- ensures that funding is allocated in an efficient and effective manner
- improves the flexibility of land transport funding, including provisions enabling new roads to be built on a tolled or concession agreement basis
- requires regional land transport strategies to be reviewed to bring them into line with the new objectives.

Two important innovations in the Act are:

- the roles of all transport agencies are focussed on an integrated, sustainable approach that takes into account wide-ranging economic, social and environmental policy objectives
- new sources of funding of land transport are to be developed in addition to the National Land Transport Fund (Crown revenue from fuel excise duty and road user charges) and local council rates.

Transfund's role

The new Act designates Transfund as the agency through which funding from the National Land Transport Fund will flow to maintain, manage and improve land transport services and infrastructure.

The Act changes Transfund's statutory objective from one that required Transfund:

“to allocate resources to achieve a safe and efficient roading system”

to one that requires Transfund:

“to allocate resources in a way that contributes to an integrated, safe, responsive and sustainable land transport system.”

Transfund's role has therefore been widened from an organisation that funds a safe and efficient roading system to one that has a broader responsibility for ensuring land transport (including rail, barging and coastal shipping) plays its full part in developing New Zealand economically, socially and environmentally. The new Act puts a responsibility on Transfund to work collaboratively with local government to develop integrated land transport systems in a strategic manner.

4 Transfund's allocation process for land transport in New Zealand

Implications for funding

The key implications for future funding of land transport under the new Act are:

- a more strategic approach with less emphasis on maximising efficiency of individual investment decisions through reliance on the benefit-cost ratio
- a broader range of options to be considered
- more emphasis on integrating all modes of transport – motorised and non-motorised – and making better use of existing infrastructure
- the need to address both the supply side (eg. creating more capacity) and the demand side (eg reducing the need for more capacity)
- a requirement to respond to the needs of communities affected by transport investment decisions.

The previous approach concentrated largely on maintaining and improving the road network. This served New Zealand well in a number of respects. For example, the fact that the state highway system is as well developed and maintained as it is, particularly in the South Island, owes much to this approach. Where it proved less effective was in resolving the emerging and increasingly complex transport issues facing New Zealand's major urban centres and areas of high growth, and in realising the potential of the rail system.

Part 2: Transfund's allocation process

Each year, Transfund prepares a National Land Transport Programme and subsequently approves the funding of land transport activities within it. The National Land Transport Programme is developed from proposals submitted by "approved organisations". The approved organisations are:

Transit New Zealand – the government agency responsible for controlling State highways

Regional councils – the local government councils responsible for preparing regional land transport strategies, and for planning and subsidising passenger rail services, bus services and harbour ferry services

Territorial local authorities – the local government councils responsible for controlling local roads.

In December 2003 Transfund published the first version of a new allocation process to:

- assist approved organisations to formulate activities that meet the new Act's requirements when they prepare proposals for inclusion in the National Land Transport Programme
- assess, prioritise, programme and approve activities for funding in the National Land Transport Programme over a 10 year period
- monitor the outcomes from the National Land Transport Programme with the aim of improving it in future years.

The new allocation process is a six-stage process to ensure that funds are allocated to an appropriate mix of activities across modes, irrespective of the sources of funding provided by central and local government and other parties – see Figure 1.

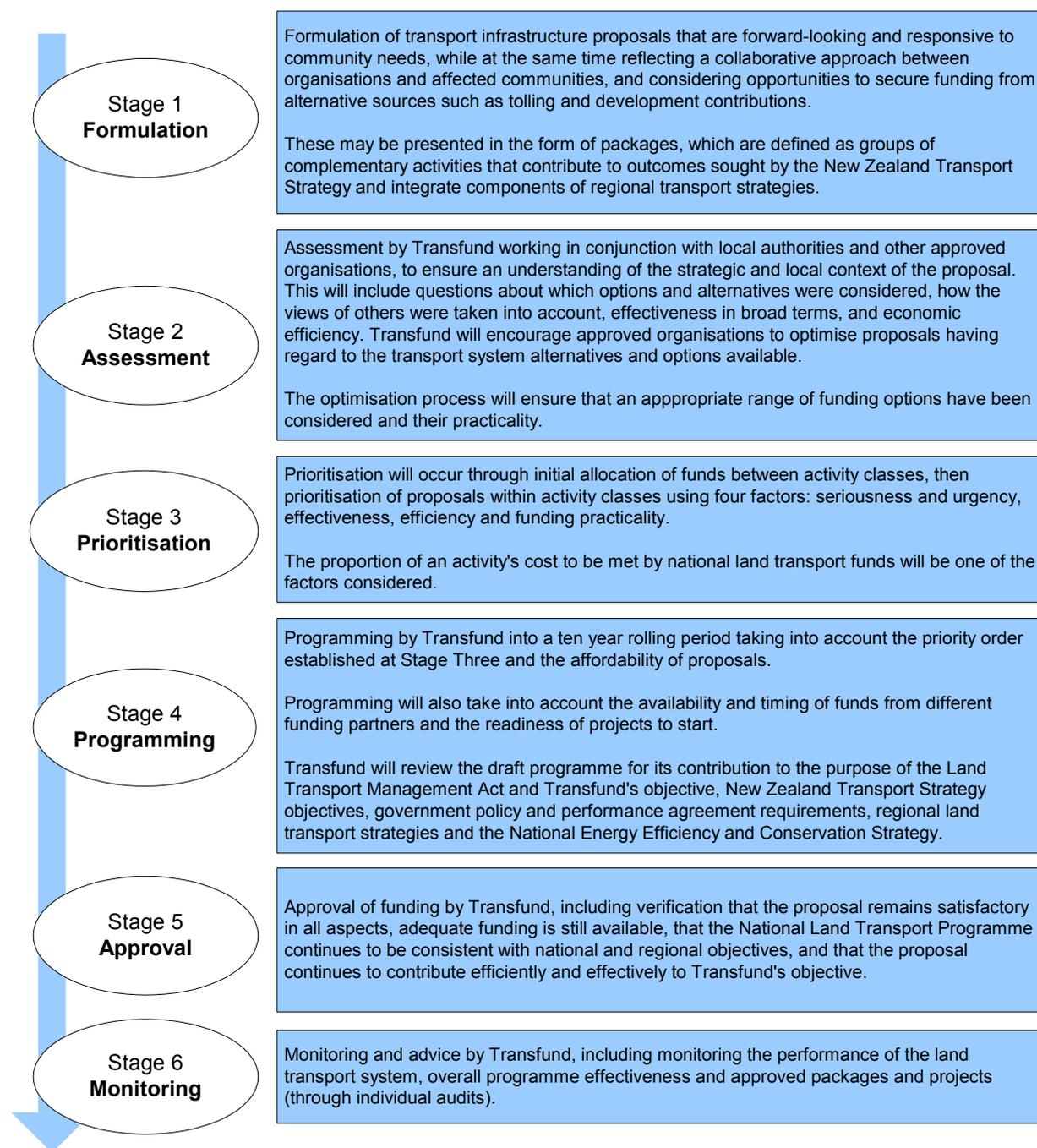


Figure 1 Transfund's allocation process used to develop the 2004/05 National Land Transport Programme

6 Transfund's allocation process for land transport in New Zealand

Key changes

Several aspects of the new allocation process merit emphasis:

A strategic approach: The new process is pro-active in encouraging approved organisations to develop proposals for funding that are related to the “big picture” of regional land transport strategies, and the wider transport system and policy outcomes set by the new act. Strategy studies are encouraged and funded. This contrasts with the previous approach, which tended to be driven from the “bottom up”. The projects submitted were not necessarily the most urgent in terms of meeting strategic transport needs, nor did they necessarily form part of coherent investment strategy for the transport networks or corridors concerned.

Prioritisation: Another key difference between the old and new allocation processes is the way Transfund now prioritises funding bids from approved organisations. The old process relied heavily on the benefit cost ratio (BCR), which was applied in a very mechanistic way. Under the new process, Transfund still takes the BCR into account in assessing projects, but other factors are also weighed. These include the importance of the proposal to meeting the strategic policy objectives, and the availability of realistic alternatives.

Collaboration: The new allocation process provides the basis for collaboration between all the relevant organisations in the transport sector to deliver a National Land Transport Programme that meets the objectives of the new Act. Rather than sitting in judgement at the end of the process Transfund will now be proactively involved, at an early stage, in working with and supporting those who are developing proposals.

Packages: The new process puts emphasis on packages of inter-related and complementary activities, rather than treating all projects as distinct stand-alone activities. Packages may involve different authorities, different types of activities and different time periods. One of the benefits of using the package approach is that, where appropriate, it enables a critical mass to be achieved – linking the regional land transport strategies and national road and rail network strategies with the funding of specific activities.

Transparency: As a publicly accountable agency, a key objective for Transfund is to ensure the allocation process remains as transparent as possible. The previous system, in relying on the formulaic use of the BCR, was intrinsically more transparent than new one, which introduces judgement into the decision-making process. To mitigate this problem, Transfund's approach is to state its reasons when it departs from the BCR priority order. This places a discipline on Transfund to justify why it is apparently allocating resources sub-optimally from an economic efficiency perspective. Such justifications recognise the limitations of the BCR methodology, including its failure to capture all the relevant benefits and costs in the formula, and its averaging of values of time for different parts of the transport system.

Long-term programming: The new process incorporates a ten-year financial forecast as part of the National Land Transport Programme. The aim is to provide greater certainty about the availability of funding for the various activities in the programme in future years. This in turn should assist organisations to think strategically, to plan ahead with greater confidence, and to integrate their plans with those of other organisations.

New funding streams

In the past there were two dominant types of funding: the National Land Transport Fund; and local council rates. These funding streams were combined through Transfund's system of financial assistance rates.

There have been important recent developments in relation to the both the scale and the distribution of Crown funds. In December 2003 the government announced additional funds for land transport over a ten-year period:

- a 5 cent per litre increase in fuel excise duty and an equivalent increase in road user charges for light vehicles, to be distributed regionally on the basis of population for 10 years from April 2005

- a Crown contribution over 10 years for transport funding for Auckland beginning in April 2005, comprising \$50 million per annum in the 2004/05 and 2005/06 and up to \$100 million for the following eight years.

These regionally distributed funds are to be allocated through the National Land Transport Programme by Transfund in accordance with the requirements of the new Act. Overall, Crown funding for improvements to the land transport system is being doubled, an increase of more than \$5 billion over 10 years.

The Land Transport Management Act also contains powers to enable new roads to be funded through tolls. Road controlling authorities will be able to apply to the government to establish road-tolling schemes for the purpose of setting and enforcing tolls on new roads. A number of schemes are currently under consideration and, if approved by the government, it is likely that the net income from tolling will be used to generate a capital sum towards the cost of the roads in question.

Meanwhile the Local Government Act 2002 has strengthened the powers of local councils to secure contributions from developers and other parties towards the cost of transport infrastructure, which will generate benefits to them. These powers are not new but there is a new emphasis on encouraging local government to explore the opportunities for attracting supplementary funding at the formulation stage in developing proposals.

Regionally distributed funds, in conjunction with tolling and other supplementary funding, mean that a considerably wider range of funding streams is now available:

- Crown funding – nationally distributed funds

- Crown funding – regionally distributed funds

- Local council funding – rates; charges and levies; local council borrowing

- Supplementary funding – capital sums borrowed against tolling revenue streams, private sector concession agreement finance, developer contributions.

Transfund plans to publish the second version of the allocation process in September 2004. This will take into account the experience gained by Transfund and approved organisations in using the first version of the allocation process, and the need to co-ordinate the more complex funding streams.

Linking of funding with the development of proposals

Funding needs to be taken into account throughout all the stages of the allocation process. In the future consideration of funding options will be integral to the formulation, assessment, prioritisation and programming of projects, as illustrated in Figure 2.

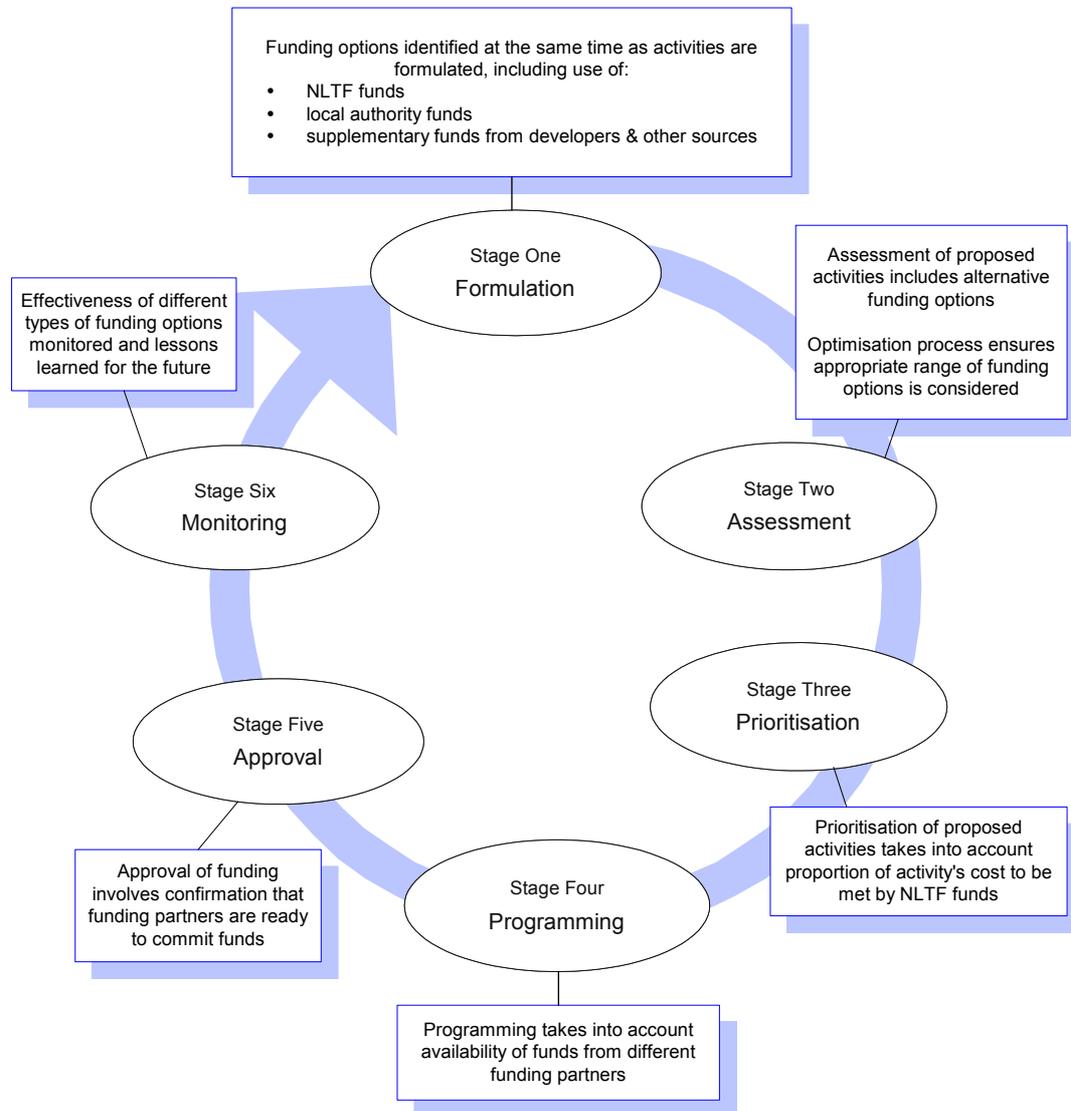


Figure 2 Integrating funding options into Transfund's allocation process

Network and demand management

As well as improving supply ie enhancing the land transport infrastructure, achieving New Zealand's transport goals will require network and demand management. Managing demand is about making better use of existing network capacity and encouraging people to meet their transport needs in different ways and at different times – rather than always seeing the solution in increased capacity.

This is not a new concept. Existing forms of demand management include subsidising public transport and enforcing parking restrictions.

A successful example of effective network management is North Shores City's (Auckland) Onewa Road. Onewa Road is a notorious bottleneck for people approaching the motorway to cross the harbour bridge into Auckland City. The high occupancy vehicle transit lane, which has operated during the morning peak since 1982, was not enforced. This resulted in motorists ignoring the transit lane and forcing public transport users to endure the same delays as general traffic.

In 2002 the council undertook a campaign of education and enforcement to limit the usage of the transit lane to high-occupancy vehicles and buses. The result of this network management was very successful, producing the following benefits:

- car pooling rose from 9% of all vehicles in 1982 to 26% of all vehicles in 2003

- travel time in the transit lane was cut by 80%

- bus services kept to timetable with an increase in patronage of 25%

- approximately 600 vehicles a day have been removed from Onewa Road

- vehicles travelling in the general traffic lane also experienced quicker travel times because of the reduction in the total number of single occupancy vehicles.

Wellington's Westpac Stadium is another example of how integrated solutions can generate outstanding results. The stadium is directly linked to Wellington Railway station platforms allowing a high proportion of stadium crowds to travel by rail from throughout the region. Car parking is available, but during events a very high charge applies. Business and Economic Research Limited projected the Stadium would generate at least an additional \$20 million per year for Wellington City from inbound tourists – much of it new economic activity not diverted from other cities in New Zealand. Because of the location of the stadium and the integration with existing public transport facilities this increase in economic activity has been achieved without the need to add an extra lane on the motorway or to construct massive car parks.

New innovative network and demand management schemes will be needed if New Zealand is to achieve a sustainable transport system, especially in urban areas. For example, the use of road pricing to manage demand is a key area for investigation. In this connection, government recently announced that a feasibility study of road pricing in Auckland is to be undertaken.

Road pricing to manage demand is a highly complex issue from economic, technical and political points of view, and it is unlikely that it will happen quickly. Nevertheless, in the longer term this area has significant potential as part of the mix of interventions to produce sustainable solutions. In the meantime, there is considerable scope to make progress through enhanced traffic management schemes and other non-pricing travel demand measures.

Part 3: Comparison of funding process with international practice

Transfund commissioned an independent peer review of the allocation process from TRL Ltd (TRL), a respected United Kingdom based research organisation. Based on their experience in assessing funding regimes TRL (Chris Fry and Paul Tomlinson) looked at international

10 Transfund's allocation process for land transport in New Zealand

approaches that were relevant to the New Zealand land transport sector context. From this they were able to peer review the allocation process in terms of international best practice.

TRL's overall assessment was:

"TRL considers that Transfund's allocation process provides a sound framework for transport funding decisions.... In many areas the allocation process compares very favorably with current international practice. Through careful implementation, the allocation process should effectively direct and support Transfund's work during 2004. Beyond this, the approach should also provide a good basis for further improvements to the process and its associated methods.... Transfund is now correctly focusing on changes in the medium term as well as supporting the immediate needs of the 2004/05 National Land Transport Programme process. "

The following section comments on international best practice criteria were made by TRL:

Alignment to the government policy context for transport: the allocation process has been designed explicitly to give effect to the Land Transport Management Act. Without this mechanism it would not be operationally possible to ensure delivery of the purpose of the Act.

Supporting relevant wider government policy objectives: transport is not an end in itself and this is clearly signalled in the broad outcomes of the New Zealand Transport Strategy. For this reason, in developing the allocation process, government strategies in areas such as the environment, social inclusion and energy planning and conservation have been taken account of. The allocation process allows for a balancing of government strategies.

Forging an effective link to the regional planning tier: regional land transport strategies and programmes are a critical aspect of the new planning and funding regime. The new Act sets them the same purpose and broad outcomes as Transfund's objective under the Act. There is therefore close alignment between regional land transport strategies and programmes, and the National Land Transport Programme

Ensuring that guidance to stakeholders is clear and fit for purpose: provision of comprehensive and clear guidance to regional and local councils is a priority. This has been achieved through a variety of mechanisms including consultation documentation and workshops to provide guidance and 'best practice' on how to prepare regional land transport strategies.

Achieving an efficient process overall: in designing the allocation process the aim has been to simplify the process wherever possible in order to avoid unnecessary compliance costs. As far as possible, the documentation will be available 'on-line' to streamline activities and eliminate duplication of processing. Transport authorities will be able to track the progress of their proposals and see the reasoning behind decisions. The use of 'packages' combining a number of specific projects rather than treating all projects individually will eliminate multiple handling of documentation. Similarly, in developing evaluation and monitoring requirements, the intention is to ensure that the benefits justify the costs.

Monitoring and feedback: stage 6 of the allocation process is a monitoring phase. This will provide important post-decision monitoring and ensure an evidence base for proposals coming forward. Monitoring will be at various levels ranging from the efficiency of

individual projects up to the wider outcomes of the land transport system as whole. Feedback from regional and local councils will enable the monitoring regime to be refined and enhanced.

Training and support: as has been the case with previous policy and funding changes implemented by Transfund, training and support for users of the allocation process is critical to successful adoption. Such support takes the form of briefing workshops for transport authorities throughout New Zealand. In addition, Transfund will assist transport authorities in the handling of their proposal from development and assessment through to implementation.

Part 4. The role of monitoring

Monitoring is both the end and the beginning of the funding allocation process. In the Transfund's allocation process monitoring is shown as stage 6, but that final step of the process is also the start of the process. Feedback from monitoring helps to inform which new proposals should be put forward.

Transfund envisages monitoring of the new funding regime applying at three levels:

the performance of the land transport system as whole in delivering the desired 'outcomes'

the 'outputs' of the land transport system, including trends in 'conditions' in different parts of the system

the efficiency and effectiveness of individual projects and other activities.

As part of monitoring it is important for Transfund to differentiate between outcomes and outputs, as illustrated in Figure 3.

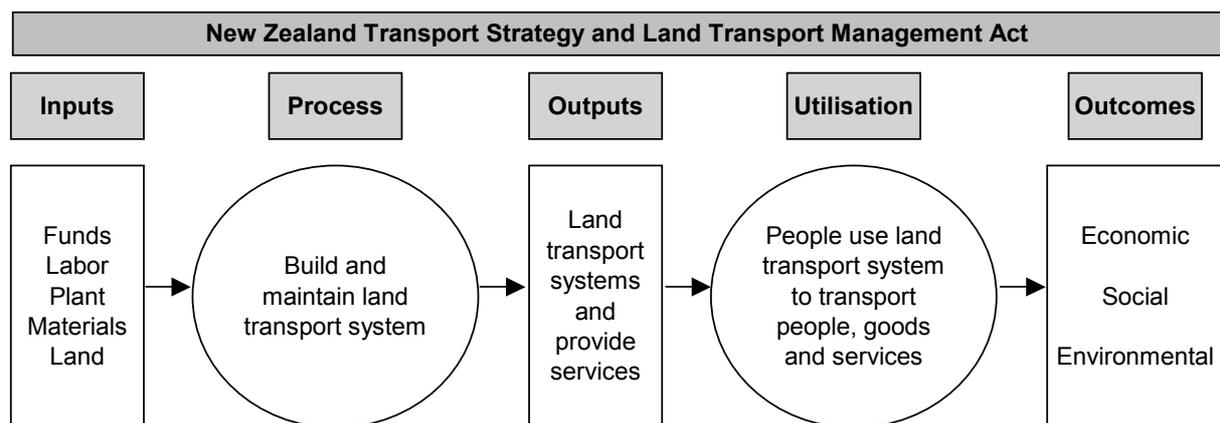


Figure 3: Process model for New Zealand land transport system

Outcome measures

At the highest level there is a need to monitor how the land transport system as a whole is performing in terms of delivering desired policy outcomes. Under its legislation Transfund is

12 Transfund's allocation process for land transport in New Zealand

required to allocate funds in a way that contributes to an integrated, safe, responsive and sustainable land transport system.

Some outcome measures are already in place. For example an outcome measure for 'safety' is the number of casualties on New Zealand roads each year, which is monitored by the Crash Analysis System. In this example, to lower the number of casualties on New Zealand roads requires the co-ordination of outputs from multiple organisations such as the police (enforcement), road controlling authorities (engineering), and other agencies (vehicle standards, driver education and social marketing).

In other areas, such as 'sustainability', Transfund is currently developing a range of high-level outcome measures that can be used to report on how the transport sector is contributing to the purpose and other requirements of the Land Transport Management Act. Consultation on these will be carried out in the latter half of 2004.

Output measures

Output measures are needed to identify how individual parts of the land transport system are performing and contributing to the overall performance of the land transport system. Continuing with the previous example of 'safety', output measures that would contribute to the overall outcome of a lower road toll would be the kilometres of medium barriers, or the smoothness of the road surface on the state highway network. These outputs can be measured by the relevant road controlling authorities.

The absence of having such a broad system-wide approach has been apparent in relation to New Zealand's railway infrastructure. Until this year, a private sector company managed railway infrastructure, and government did not monitor its overall condition closely. A priority for the new state agency New Zealand Railways Corporation, which will take over responsibility for New Zealand's railway infrastructure from July 2004, will be improving the monitoring of the condition of the rail network using both outcome and output measure.

Measures of efficiency and effectiveness of activities

Monitoring is also needed to measure the efficiency and effectiveness of projects and other activities. This will help to improve the future programme to ensure that it delivers value for money and the best possible progress towards New Zealand's transport goals.

There is already extensive monitoring at this level with transport authorities reporting against a wide range of performance measures. Refinements continue to be made and, in relation to roading projects, it is likely that Transfund will issue standard measures to be monitored (along with guidance notes) as part of the instructions associated with the funding process. This will provide a "no surprises" way of signalling that monitoring will be required. Guidance notes will emphasise the importance of integrating the monitoring of a single project or package with other monitoring for the network as a whole.

Keeping compliance costs under control

There is a risk of treating monitoring as a ‘merit good’ that is, something that is so inherently valuable that more will always be better. One of the pitfalls in designing a monitoring regime is burdening the land transport sector with onerous requirements that provide little real value and end up discrediting the whole monitoring concept. Transfund will be aiming to strike the right balance between obtaining a full and comprehensive picture and overkill.

Conclusion

New Zealand is emerging from a period of profound change in terms of land transport policy. The fundamental elements are now in position: the strategy; the new legislation; a collaborative allocation process; and expanded funding streams.

New Zealand has changed from a land transport planning and funding system that put its main emphasis on the efficiency of individual interventions, through the formula driven benefit-cost ratio process, to one that incorporates more comprehensive and strategic criteria. From where New Zealand was previously positioned, well towards the ‘mechanistic’ end of the funding spectrum, it has now moved into closer alignment with the international trend towards using a broader multi-criteria approach to land transport planning.

The change to the policy environment for the land transport sector is large and this is reflected in the mixture of incremental improvements and groundbreaking elements within the new funding allocation process. It is highly unlikely that the process will be optimised at the outset. Throughout implementation of the allocation process Transfund aims to generate a robust monitoring system to capture valuable learning experiences.

Like all previous funding models, the current allocation process is not immutable. It will be modified in the light of experience and feedback from the sector. There are issues about the transparency of the process, and the compliance costs it imposes. However, while the process will evolve to deal with these issues, there are reasonable grounds for believing that the fundamentals are right.

The level of government investment available for land transport has increased by more than \$5 billion over the next 10 years. This effectively doubles the investment available for new initiatives and means there is a real opportunity over the coming years to make progress on improving New Zealand’s land transport system. It also presents a huge challenge. The land transport sector has been unable to spend at existing funding levels. At the end of the 2003/04 financial year Transfund had a surplus of \$230 million. Although this funding had been allocated, it had not been spent because of the lead times in getting the construction of some major roading projects underway.

So the sector must gear up to ensure the opportunity created by the higher resource levels now available is seized. Transfund will be playing its role by developing the ten-year programme, and encouraging organisations to accelerate their programmes.

With effective collaboration in the transport sector, the new funding allocation process – in conjunction with the significant increase in funding – should enable New Zealand to make good progress towards its national land transport goals over the next decade.

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