

# **REPORT ON CASE STUDY IN PUBLIC TRANSPORT POLICY**

**Public Health Advisory Committee  
Health impact assessment project  
December 2003**



## 1. BACKGROUND

The Public Health Advisory Committee (PHAC) has developed a Guide to Health Impact Assessment to assist policymakers in assessing potential health impacts of policies outside the health sector.<sup>1</sup>

The PHAC chose a policy-based case study to trial the guide. This practical trial of the guide and its tools set out to test:

- who should use the guide
- what processes work best
- clarity of the concepts and language
- usability of the checklists and tables
- level of guidance needed in the text
- whether the tools could be used in a tightly time-constrained environment
- whether there were any difficulties with using the tools.

The guide contains two appraisal tools, one of which is chosen according to the policy in question. This case study trialled the Health Appraisal Tool.

The project has used *Te Whare Tapa Wha* as the definition of health.<sup>2</sup> This model assumes a broad view of health as a state of physical, mental, social and spiritual wellbeing.

## 2. POLICY SELECTION

The first steps were to select an appropriate policy proposal to assess using the health impact assessment tool, and to gain the support of the government agency developing the policy (in this case Transfund New Zealand).

The PHAC selected transport as the example sector for the first case study because the significant public health issues associated with transport were perceived to be under-recognised in New Zealand. While the road toll from motor vehicle crashes has decreased in recent years, it is still of concern, and the adverse health effects arising from vehicle emissions in some urban areas has recently come to the public's attention. A report on the health effects of vehicle emissions in New Zealand concluded that air pollution from vehicle emissions is a significant, but under-recognised, cause of adverse health effects such as illness and premature death.<sup>3</sup>

Public policy-making varies from using open and consultative processes to being more inward looking and technocratic. The type of process depends on a range of factors including the political sensitivity and urgency of the proposed policy. The

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<sup>1</sup> Draft health impact assessment tools were developed by an advisory group to the Public Health Advisory Committee, comprised of experts in impact assessment.

<sup>2</sup> Model of health developed by Mason Durie.

<sup>3</sup> Fisher et al. 2002. *Health Effects due to Motor Vehicle Air Pollution in New Zealand*. Wellington: Ministry of Transport. Available from: [http://www.mot.govt.nz/downloads/niwa\\_report.pdf](http://www.mot.govt.nz/downloads/niwa_report.pdf)

'culture' of the agency in respect of the willingness of the staff to engage with officials from other government and non-government agencies also impacts on the nature of the policy-making process.

It proved to be a challenge to identify a suitable transport policy area that was sufficiently early in its development and, in addition, subject to a process that would provide an opportunity for the PHAC to comment on potential health effects. Transport agencies at the time had limited statutory requirements for wide consultation and did not have a culture of wide stakeholder involvement in public policy development.<sup>4</sup> Staff in transport agencies questioned the relevance of health impact assessment to transport, and did not initially welcome 'outside interference'.

The PHAC project team was initially offered 'project-level' options (for example, a proposal to build a new road in a provincial town with air pollution concerns), rather than those at policy level. Potential policy-level options that were considered included a policy to introduce vehicle emissions testing and initial work on congestion pricing. However, both of these options were too early in their development to be used for the project, and did not suit the timeframe.

Eventually a public transport funding policy was chosen as the focus for the health impact assessment trial, in consultation with the key governmental transport agencies and the Minister of Transport's Office. The case study focused on a review of the central government financial assistance payments for public transport, conducted by Transfund, the government agency that funds transport. Transfund allocates public transport funding to regional councils who then pay operators a subsidy to deliver public transport services.

### **Description of policy change**

Transfund's proposed policy change for passenger transport funding sought to reorganise the funding of public transport (buses and harbour ferries), extending the funding basis from a primary focus on increasing patronage to include other service enhancements.

The previous policy for funding passenger transport is known as the 'Patronage Funding Scheme'. Transfund pays regional councils on the basis of the number of passengers carried on all services in the region, for both contracted and commercial services. Patronage funding applies to increases in patronage above a base level agreed with the regional council. On top of funding for the base level of patronage, each additional passenger attracts a payment.

Prior to revision of the scheme, Transfund contributed 100% of increases in patronage.

The original scheme had a strong emphasis on encouraging the growth of passenger transport patronage, the revised scheme (the policy used to trial the health impact assessment tools) aimed to meet a range of objectives.

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<sup>4</sup> The Land Transport Management Bill 2002 (currently before Parliament), if enacted will introduce detailed new consultation requirements for government transport agencies.

The proposed scheme would:

- continue to encourage the growth of passenger transport patronage
- provide funding to sustain and improve services on an ongoing basis
- replace the present scheme with one designed for long term financial sustainability
- be consistent with the objectives of the New Zealand Transport Strategy.

A core component of the policy proposal was to give councils sustainable forward funding with an effective extension from one to three years of their planning and management horizon. The policy required increased monitoring by Transfund with the opportunity to adjust 'discretionary' allocation for service improvements, such as low floor buses to increase accessibility, or low emissions buses to reduce air pollution.

The policy development process involved technical analysis of the existing assistance scheme, funding formula adjustments ('the proposed policy'), public release of the proposed policy with a call for submissions within ten weeks, and confirmation of the policy (possibly adjusted following submissions) four weeks later.

### **3. CASE STUDY PROCESS**

A proposal to Transfund to trial the health impact assessment tool 'within' the agency (with a health representative as part of Transfund's review team) was not accepted. However, a parallel independent approach was agreed, where the case study was led by the PHAC, but there was regular informal collaboration with Transfund staff. The PHAC then made a formal contribution to the policy development process in the form of a written submission prior to the policy being finalised. Ideally, health impact assessment would be initiated by the policy agency.

While some limited background information was available early on, the project team received details of the policy proposal at the same stage as the agencies and organisations receiving the funding directly (regional councils) or indirectly (public transport operators).

The PHAC produced two background papers that summarised the impacts of transport on health. These papers were given to Transfund and were used as evidence to help with the case study.

The case study was undertaken over a five-month period. However, it took an additional three months prior to this to negotiate with Transfund and agree on a way forward. This negotiation would not be required when a policy agency initiates health impact assessment.

The process of testing the health impact assessment tool involved three separate trials:

- 1) an initial 'in-house' trial
- 2) a trialling session undertaken with the project team and two transport officials

- 3) a workshop involving 25 people from several sectors, including health, transport and environment.

### **Initial trial**

The in-house project team comprised two public health analysts and an impact assessment specialist. This trialling took two sessions – one full day and one half-day. Using a draft text of the health impact assessment guide, the project team applied the screening and scoping processes, and used the Health Appraisal tool.

This initial work led to minor changes to the guide and prompted debates on the potential impacts of the policy proposal. For example, there was debate on a proposal to extend the peak travelling hours (which attract a higher subsidy). It was believed that this would provide an incentive for regional councils to establish more peak bus services possibly at the expense of 'off-peak' services. The project team felt that adoption of this proposal might, in fact, create impacts in terms of health inequalities. Health inequalities could widen as off-peak bus services tend to be used by the unemployed, families with young children, older people and others outside of standard employment hours. This could impact on health through reduced community participation, increased social isolation or reduced access to health and social services. However, in later discussions transport policymakers argued that increased peak hour services would be more likely to lead to an increase in off-peak services, as it would be expensive to leave buses idle during the day.

Another lesson was the importance of agreeing on assumptions that were made throughout the process, especially with regard to potential policy outcomes. The outcomes of the policy will depend on the decisions made by regional councils, transport operators and the public as potential users of bus services. It was noted that assumptions should be explicitly recorded as part of the health impact assessment process.

### **Trialling session with transport officials**

The second stage of the trial involved a one-day session, held with the project team and two transport officials (from Transfund and the Ministry of Transport). During this session, it emerged that it was not possible to predict exactly the potential outcomes of the policy. This arose as follows. The proposed policy comprised a set of management strategies to allocate and maintain a cap on financial assistance by central government for regional councils to distribute or use. The regional councils expend some and pass on most as subsidy to public transport service providers. Accordingly, the outcome of the policy depends on the responses of different regional councils, public transport operators and the public.

This apparent brick wall for the health impact assessment trial – that the policy outcomes were unknown or at least uncertain – challenged the project team to produce a mechanism to use the tools effectively. It was decided to develop a set of scenarios with definite outcomes. It was clear that these needed to be concise and mutually exclusive to allow conclusions to be drawn. Approaching health impact assessment in this way facilitated the identification of desirable and undesirable public health outcomes from different passenger transport funding decisions. This information could then be fed back into the policy development process and guide

policy-makers on specific adjustments to encourage the positive outcomes and discourage the negative ones.

Another lesson drawn from the experience was that people in areas outside of health or social policy are likely to have a limited understanding of public health concepts such as health determinants and health outcomes. Consequently, information on public health concepts needed to be clearly presented in the guidance material.

### **Workshop**

In order to gain wide input to the application of health impact assessment to public transport funding policy within the short time available, the project team organised a one-day workshop. A group of 25 professionals attended, from the areas of public health, transport planning and funding, transport operation, environmental policy and impact assessment.<sup>5</sup> Māori perspectives on transport were included.

The workshop included presentations on health impact assessment, public health concepts and public transport, followed by a mix of small group work and plenary sessions to apply the health impact assessment tool to the public transport funding policy. Findings from the workshop suggested that the health impact assessment guide in its final form would be a useful addition to policy processes in New Zealand. A particular refinement suggested was that the guide needed to include more direction to summarise and prioritise health impacts during each stage. It was also noted that, although evidence for the links between the policy change and health is required, it can be limited or, at times, non-existent because of problems in data collection and the complexity of causal pathways that link transport policies and public health.

The use of *Te Whare Tapa Wha* enabled the identification of a range of potential impacts. For instance, the community and family dimension of the model prompted participants in the workshop to discuss potential impacts on low socio-economic or rural communities, and to consider effects on overall social cohesion within communities. However, *taha wairua*, the spiritual dimension of health in the model, presented some challenges to workshop participants. Several people from transport agencies questioned the relevance of including this dimension for transport issues. However, others considered that it was useful and provided a new dimension to the discussion. There was a tendency for participants to interpret 'spiritual' in the sense of formal religion, whereas the model's definition is wider than this view.

A key output of the day was a set of recommendations<sup>6</sup> to mitigate potentially negative effects and enhance positive effects on health of the policy change. For example, the group felt that the policy change had the potential to improve air quality over the longer term, but only if the bus fleet and fuel quality are upgraded.<sup>7</sup> It was also recommended that there be monitoring and action to ensure that adequate off-peak bus services continue to be provided. Transfund could potentially implement some of the suggestions from the workshop, while others were broader and would require action from other government agencies. Participants from both central and regional government expressed interest in applying the tools in their policy

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<sup>5</sup> The list of participating organizations is attached as Appendix 1

<sup>6</sup> The set of recommendations are attached as Appendix 2

<sup>7</sup> New Zealand has a lower quality of diesel fuel compared with some other countries.

development work. The opportunity for dialogue between transport and health was highlighted as especially useful.

#### **4. REFLECTIONS ON THE CASE STUDY**

General observations on the workshop process by the project team included the following.

- The workshop approach was used for convenience in this case, whereas an iterative process would be more effective in a real policy-making context.
- Scenarios were useful in clarifying issues and in making the process work, although it took considerable time to agree on assumptions.
- Humour was important in getting through challenges in applying the tools and in staying focused throughout a process that was, at times, arduous.

The use of the case study as the principal method for testing the policy tools revealed some issues that the team had not anticipated. The project team used informal collaboration to involve Transfund. There were weekly phone calls and email contact, and regular meetings during the case study period. However, at times it was difficult to get access to information. The Board that oversees Transfund chose not to use health impact assessment as a formal part of its policy process. This gave the health impact assessment process less legitimacy for the agency's staff and made the task of ensuring effective communication between the two groups more challenging. At times Transfund appeared protective in a process that involved exposure of its policy development process to external agencies. The project team's response was to reinforce that the primary objective of the case study was to trial the draft health impact assessment guide rather than critiquing the policy. In a real policy situation the health impact assessment would be initiated and managed by the policy agency, so this should be less of a problem.

Other barriers to the relationship between the project team and transport officials for the health impact assessment process included:

- conflicts between a narrow transport focus and a broader approach that considers other impacts such as health and the environment
- a traditional 'silo mentality' versus a cross-sectoral approach
- tensions between different types of government agencies, for instance, the Ministry of Transport is a central government department and Transfund is a stand-alone government agency with an independent (although government-appointed) Board.

Some of these barriers could be overcome by securing commitment from key officials at the outset and setting up a mechanism for early sharing of information between officials. It is especially important to have support at a senior or governance level. The experience in this case study suggests there is a need to work closely with the sector concerned in order to ensure that they understand the aims of the work and the potential contribution of health impact assessment.

## 5. KEY OUTCOMES AND LESSONS

The case study provided a useful opportunity for dialogue between officials and stakeholders across several sectors on the links between transport and health. The application of the case study to the health impact assessment guide highlighted potential health impacts that transport officials had little awareness of, as well as possible unintended consequences. The case study also, in turn, educated health officials so that the PHAC was able to make a submission to the transport agency's review of public transport funding. The submission made seven recommendations, mostly to enhance potential positive impacts on health arising from the new policy. Recommendations included the establishment of criteria for funding targeted service improvements, capital projects and initiatives, and that these criteria include public health benefits; and to ring-fence an agreed portion of the total annual funding budget for targeted service improvements, capital projects and initiatives that provide a public health benefit.

Key lessons that can be drawn from this experience include the following:

- It is important for parties to be clear about potential policy outcomes and to agree on assumptions made about the policy and potential outcomes. These understandings should be recorded clearly as part of the work.
- Health impact assessment is most easily applied to specific, focused policy changes.
- It is important for a range of stakeholders and agencies to be involved in order to obtain a wide variety of responses to get the best outcome.
- The nature of relationships across agencies that are established in such a process needs to be negotiated clearly and then nurtured to achieve productive outcomes for all parties. Early consultation with decision-makers, including at senior level, is essential to gain the benefits of their knowledge and experience.
- There needs to be 'buy-in' to the requirement for clear communication by all parties during the process of policy development.
- Public health concepts should be defined clearly so that people outside health have an understanding of them (eg, determinants of health, health outcomes).

On a final note, the decision to undertake the transport case study proved to be timely, as a new national strategy for transport is now in place (*New Zealand Transport Strategy*, Ministry of Transport, December 2002) and has, as one of its five key objectives, the promotion and protection of public health. The project team had the opportunity to contribute to the development of this strategy and helped to shape the public health objective. The health impact assessment process has the potential to be a practical tool that helps transport policy-makers to implement the public health objective.

## APPENDIX 1

| <b>Organisations involved in HIA workshop on transport and health<br/>30 April 2003</b> |                                     |
|-----------------------------------------------------------------------------------------|-------------------------------------|
| Transfund New Zealand                                                                   | Bus and Coach Association           |
| Transit New Zealand                                                                     | Auckland Regional Council           |
| Ministry of Transport                                                                   | Environment Canterbury              |
| Ministry for the Environment                                                            | Greater Wellington Regional Council |
| Ministry of Health                                                                      | Public Health Association           |
| Te Puni Kōkiri                                                                          | Auckland Regional Public Health     |
| Land Transport Safety Authority                                                         | Environmental Advisors/Consultants  |
| Historic Places Trust                                                                   | Public Health Advisory Committee    |

## **APPENDIX 2**

### **RECOMMENDATIONS**

**The Public Health Advisory Committee makes the following recommendations to Transfund:**

1. To establish criteria in conjunction with the Regional Councils for funding targeted service improvements, capital projects and initiatives, and that these criteria include public health benefits.
2. To ring fence an agreed portion of the total annual funding budget for targeted service improvements, capital projects and initiatives that provide a public health benefit.
3. To encourage Regional Councils to consider public health issues, and specifically to undertake HIAs of proposed projects and regional passenger transport plans.
4. To adopt a peak period for higher subsidy purposes that better reflects regional differences in lengths of congested periods.
5. To put in place monitoring and management strategies to ensure that any additional funding that would go to Auckland in the event that the peak period were extended does not disadvantage services with a public health benefit elsewhere in Auckland or elsewhere in the country.
6. To ensure the monitoring programme includes both national and regional performance indicators to help ensure maximum possible delivery of public health benefit through the passenger transport funding policy.
7. To initiate research and monitoring on passenger transport use and users commensurate with the government's investment in this area, to better guide that investment. In particular, there is need for research on whether increased patronage on buses is moving people away from cars, or displacing walking trips.