

Paper for New Zealand Walking Conference 2008

Submitted by: Transit New Zealand (will be the New Zealand Transport Agency from August 2008)
Title: State highways and pedestrians
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This paper outlines the progress being made by Transit New Zealand (now the New Zealand Transport Agency) to accommodate pedestrians on the state highway network. Several New Zealand case studies - of different size, approach and geographical location - will be presented to demonstrate how catering for walking is an integral part of state highway planning and improvement projects.

The state highway network, because it is characterised by high volumes of vehicular traffic travelling at high speed, often does not present itself as an obvious, or desirable, environment in which to walk. The challenge – for both transport specialists and local communities - is to work within, and overcome, current constraints to develop sustainable solutions that accommodate both vehicular and pedestrian users – a ‘win-win’ solution for planners and public alike.

Although this paper focuses on walking, the studies presented also include references to cycling, because the two modes have much in common with regard to their actual and potential inclusion in the state highway network.

The Challenges

State highways are a national asset and an essential part of New Zealand’s transport network because they link our communities, facilitate economic development, move freight and contribute to the well-being of New Zealanders. State highways are only one part of the transport network, however, and one of the fundamental challenges is the need to integrate planning with all transport modes (walking, cycling, public transport) and transport networks (local roads, rail, sea ports). The New Zealand Transport Agency’s stewardship of the state highway network involves planning, building and managing state highways in ways that support the government’s objectives to:

- assist economic development;
- assist safety and personal security;
- improve access and mobility;
- protect and promote public health; and
- ensure environmental sustainability.

(New Zealand Transport Strategy and Updated New Zealand Transport Strategy)

The nature and extent of these objectives pose challenges in the state highway context. There is potential conflict between maintaining individuals’ and communities’ quality of life and freedoms, and protecting the environment and growing the economy. Balancing these different agendas can be problematic, and when issues such as land-use and urban growth patterns are also introduced, the complexity becomes even more acute. Persuading people to alter their travel behaviour in order to reduce greenhouse gas emissions and congestion is one way forward. Exogenous shocks like the recent rapid increase in international oil prices have also played an unplanned, but potentially quite significant, part in encouraging individuals to modify their travel behaviour.

The Solutions

The solutions, however, need to be multi-faceted and multi-modal, and cannot rely on individual factors such as fuel prices, technology advancements or behaviour-change marketing, to deliver on the above objectives. The New Zealand transport sector is rapidly changing its perceptions of what a modern transport system is, and needs. It now recognises and promotes, as part of multi-modal solutions, enhanced pedestrian and cycle access as focussed and successful alternatives to private car transport, especially in urban areas. It also recognises that getting more people walking and cycling contributes significantly to public health and environmental sustainability objectives.

Accordingly the updated New Zealand Transport Strategy sets targets to increase the number of people choosing to walk and to cycle. The relevant target is to increase walking and cycling and other ‘active modes’ to 30% of total trips in urban areas by 2040 (currently 17%). In support of these targets The New Zealand Transport Agency has started outlining its priorities for the first year of operation. These short-term priorities are:

- **Modal Shift** – Getting freight and people shifting to a wider range of transport modes;
- **Safer travel** – Ensuring journeys for work and pleasure are safer;
- **Streamlined funding process** – Making applications for funding easier and success more predictable;
- **Value for money** – Developing our approach for achieving value for money; and
- **Partnerships** – Building our capacity to deliver with regional partners.

All these priorities show a significant focus on all active and shared modes. To support these five priorities there are several actions that are identified including:

- Encouraging mode shift and sustainable travel choices through a programme of promotion campaigns, travel planning, integrated traffic managements and travel demand projects; and
- Supporting the switch to active modes through regional walking and cycling strategies, ensuring cycling and walking are integral parts of all transport networks, improving funding processes to reduce existing hurdles, and challenging traditional design assumptions that restrict active modes.

At a simplistic level we – as transport specialists - need to ensure that for walking:

- we do not discourage individuals choosing to travel on foot by making it impractical, inconvenient or unsafe;
- we encourage further uptake by improving the travelling environment for these modes; and
- we promote and market the benefits of walking as a mode.

Obviously there are critical factors to consider, many of which are challenging in their own right:

Safety	<p>High-speed and low-speed – A high differential of speeds in the state highway environment is generally classed as a serious safety concern.</p> <p>Safety for all users – ‘While many pedestrians are fit and healthy, have satisfactory eyesight and hearing, pay attention and are not physically hindered, this is not the case for all pedestrians’¹.</p>
Funding	<p>Affordability – Plans and proposals must take account of the finite resources available to transportation.</p> <p>Economic benefits – The true economic, environmental and social benefits and costs of transport solutions are difficult to assess and can be difficult to align with policy.</p> <p>Funding priorities – Proposals must compete and be prioritised against other transportation improvements</p> <p>The economic and political climate – The ever changing economic and political climate can influence the resources available and priorities set for transportation.</p>
Design	<p>Designing for all users – Different types of pedestrians can have very different needs.</p> <p>Maintenance requirements – Once a project is complete responsibility for the on-going liability of maintenance is critical.</p> <p>State highway characteristics – The state highway continually changes, depending on the environment in which it is sited, the levels and type of traffic using it and changing land use patterns surrounding it.</p> <p>Retrofitting solutions – The existing state highway network was often not designed for a mix of users and retrofitting solutions can be complex and expensive.</p> <p>Lack of data – There is a lack of data on the numbers of people walking and cycling, which makes planning and evaluation difficult.</p>

Policy direction

To shift from a private vehicle-dominant transport paradigm to a ‘multi-modal’ one takes time, but the New Zealand Transport Agency is committed to achieving this, and the government has confirmed its commitment in the specific strategy for walking and cycling: *Getting There on foot, by cycle*. In a similar vein, the New Zealand Transport Agency has walking policies and practices embedded in its toolkit, which includes:

- the Planning Policy Manual (contains State Highway Walking and Cycling Policy);
- the Travel Demand Management Manual;
- the National State Highway Strategy; and
- the Pedestrian Planning and Design Guide.

The State Highway Policy on Walking and Cycling confirms “*Transit is committed to providing and maintaining appropriate, safe and cost-effective walking and cycling facilities and traffic information and management techniques aimed at cyclists and pedestrians on state highways, especially where specific safety concerns exist and/or where state highways form part of the most appropriate route for these modes of travel.*”²

These documents emphasise that all planning and state highway initiatives must consider the needs of pedestrians during development, design, implementation and maintenance phases. While policy is key in establishing the commitment and setting the direction, it is equally important to ensure that policy becomes practice. In the context of state highways “policy-to-practice” is achieved by:

- working with others - especially local authorities – to ensure an integrated, network focus;
- working with local authorities to achieve land use patterns that support active modes of transport;
- achieving alignment among local walking strategies, Regional Land Transport Strategies and Transit’s State Highway Forecast;
- maintaining an active network of walking champions throughout the country (this role is bracketed with that of cycling champion);
- annual funding for specific walking and cycling projects on state highways (\$3 million in 2007/08; budgeted to be \$5 million in 2008/09); and
- spending some \$30 million on walking and cycling improvement projects as part of other capital and maintenance activities (approximately 2% total annual expenditure).

Making it happen

In addition to policies and ongoing practical implementation, other elements are still essential if we are to progress toward a multi-modal transport network, including:

- well-developed, affordable pedestrian strategies (state highway strategies, local authority strategies and Regional Land Transport Strategies);
- effective regional co-ordination to achieve strategies;
- greater recognition of the role of land use and development patterns influencing travel choice;
- positive support and motivation from key stakeholders (including council staff, elected representatives and community leaders);
- community support and involvement; and
- local passion.

These factors, combined with relevant policy direction, can be incorporated into the following workstreams at regional and local levels:

i) Engaging in and/or producing network-wide walking strategies

Walking strategies (or, more commonly, combined walking and cycling strategies) have been developed fairly extensively by territorial authorities. At the regional level it is very important for these strategies to be integrated so a connected active transport network is progressed. The Auckland regional case study (Case Study 1) shows one methodology for achieving this. The Atawhai case study (Case Study 4) demonstrates how individual local authority strategies can be sufficient for developing walking and cycling projects on state highways when there is no regional state highway walking and cycling strategy.

ii) Providing improvements for pedestrians on and across state highways

¹ Land Transport New Zealand – Pedestrian planning and design guidelines

² Transit New Zealand’s Planning Policy Manual for integrated planning and development of state highways, Version 1, effective from 01 August 2007, page 29

There is no single process for initiating improvements for pedestrians. Ideally, strategies will prioritise and schedule improvements so an integrated network is created in a rational and transparent manner. However, some authorities are still developing their strategies in which case improvements are implemented according to a more ad hoc or “as-needed” schedule. In these instances, requests for projects can come from the public or other stakeholders through various strategic plans or from the development of other roading projects. Each year Transit has published a State Highway Plan and Forecast, detailing planned state highway maintenance and capital improvements. In future, state highway activities will be included in Regional Land Transport Plans and will be consulted on regionally. The New Zealand Transport Agency will be publishing a three-year National Land Transport Programme in 2009.

iii) Influencing local growth and land-use planning

Consistent with Transit’s statutory objective, Transit has engaged in strategic land use planning and has taken a proactive role by working in partnership with local authorities, developers and other key stakeholders to help determine the location, form and timing of development. The aim is to minimise adverse effects of growth and development on the transport network and to ensure that the multi-modal transport requirements of growth are provided for. The New Zealand Transport Agency will continue this focus.

iv) Maintaining and managing pedestrian facilities

Transit proactively manages the performance of its major asset - the 10,894 km of state highway pavements and surfacings. The state highways are annually visually-rated using the RAMM rating system, and footpaths are included within this monitoring. As well as maintaining the usability of the asset, we take into account the needs of all road users when we are carrying out works on the network. The Code of Practice for Temporary Traffic Management (COPTTM) describes the safe and efficient management and operation of temporary traffic management on all roads in New Zealand. This includes guidance on how to manage the movement of pedestrians within road works. There are variations in the quality of temporary traffic management processes, and although there is growing awareness of road users other than motorists, there is still a long way to go.

Case Studies

Four case studies are presented in this section to demonstrate various approaches to providing for pedestrians.

Case Study	Funding Type	Description of Funding
1 Auckland State Highway Walking and Cycling Strategy	Strategy development	Funds for developing strategies in partnership with local and regional authorities
2 Mt Roskill Project (Auckland)	Major projects	Projects with budgets over \$4.4 million (anticipated to be \$4.9m in 08/09)
3 Otaki Roundabout (Wellington)	Block projects	Projects with budgets under \$4.4 million (anticipated to be \$4.9m in 08/09)
4 Atawhai Shared-Use Path (Nelson)	Walking and cycling projects	Projects that deliver specific walking and/or cycling facilities

When planning and designing facilities for pedestrians, some basic principles (drawn from international good practice) need to be considered. In the Mt Roskill, Otaki and Atawhai case studies these principles – explained below - provide a framework for subsequent assessment.

Convenience (giving pedestrians permeability and advantage not available to other modes will encourage modal shift)

- Networks should allow pedestrians to go where they need to;
- Routes and key destinations should be signed;
- New facilities should offer advantage in terms of directness/permeability and/or journey time with the minimum of detours; and
- There should be minimal delay at signalised crossings and intersections.

Safety (routes should not only be safe - they should feel safe)

- Road speeds should be appropriate to their surroundings, with controls in place where required;
- Crossing points should be provided with consideration of traffic safety and personal safety (underpass / overpass); and
- Footpaths should be maintained to avoid ‘trip hazards’ and ensure that undergrowth does not overgrow.

Accessibility (routes should provide a positive advantage over motorised traffic)

- The network should link key origins and destinations and connect naturally; and
- Routes should coincide with natural desire lines and be continuous without barriers or gaps.

Attractiveness (providing advantage over other modes helps to make non-motorised travel a more natural choice of transport for short trips)

- The environment should be made as attractive as possible – that is, well-maintained, well-lit and free from litter and graffiti; and
- Opportunities for enjoying the ‘travelling landscape’ should be created by providing innovative design, public art and opening up vistas.

Case Study 1

The Auckland State Highway Walking and Cycling Strategy

The Auckland State Highway Walking and Cycling Strategy was developed to provide an integrated and focused programme of improvements for walking and cycling on state highways in Auckland. Because it was essential that the development process was transparent and created good partnerships with local authorities, the strategy was developed in six clearly-defined steps that were implemented in two phases:

Phase 1

1) Project identification: all relevant strategic studies were reviewed to identify projects/studies located within proximity to or across the state highway network

2) **Project consultation:** consultation was undertaken with Auckland’s seven local authorities and the Auckland Regional Transport Authority. Specific and/or possible future projects, assessment methods and prioritisation of projects were discussed

Phase 2

3) **Project assessment:** the assessment criteria for the study were developed (a largely qualitative process) to ensure consistency between project prioritisation procedures and regional transport objectives. They included consideration of:

- support and connectivity to the passenger transport network;
- support and connectivity with regional growth centres;
- local authority walking and cycling strategies and the developing regional cycle network
- accessibility to schools;
- rate of reported cyclist and/or pedestrian crashes over a five year period; and
- consistency with council objectives.

4) **Project ranking:** projects were ranked against the assessment criteria

5) **Project urgency:** in addition to ranking the projects against the assessment criteria, each was defined as ‘urgent’, ‘investigate’ or ‘pending’: that is, projects that could be included within already-programmed state highway projects were classed as ‘urgent’

6) **Project prioritisation:** the final stage was to prioritise the projects using a matrix of ranking and project urgency.

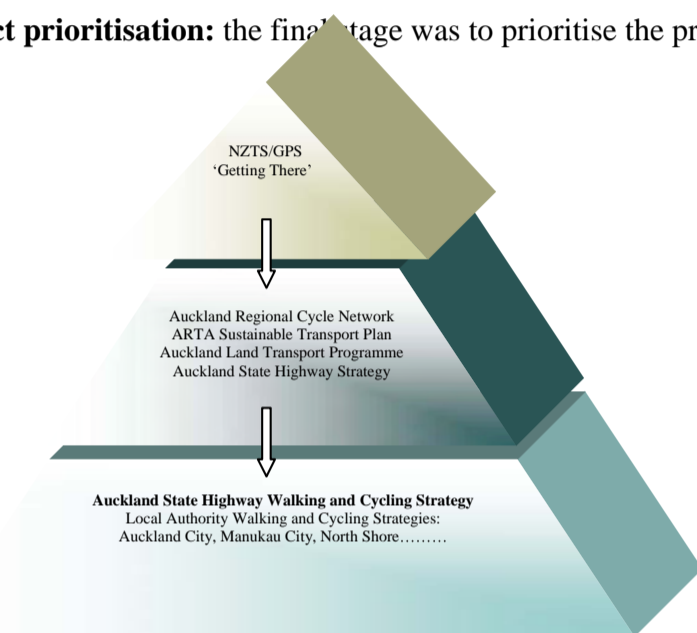


Figure 1. Framework for Auckland Walking and Cycling Strategy development

Phase one positioned the state highway strategy within the current framework of local authority walking and cycling strategies and plans (figure 1). Working in partnership with local authorities means alignment among authorities was ensured and the benefits of working in partnership were fully realised, resulting in:

- understanding: *stakeholders gaining an understanding of what is being done and why;*
- empowerment: *stakeholders buying into the process with a degree of acceptance of, and agreement on, projects that are underway;*
- opportunities: *stakeholders reflecting on the synergies and assessing opportunities within their own work/projects/strategies; and*
- consistency: *stakeholders are ensured of a consistent approach, ensuring silos of development and planning are not created.*

The second phase (steps 3 to 6 above) was equally critical in that each step was discussed with local authorities and documented. The clear structure and methodology reduced the potential for confusion and conflict arising from different stakeholder interests and priorities in the transport planning process.

The Auckland Walking and Cycling Strategy therefore provides a good example of how state highway planning can work with, and within, a region to create a strategy that supports a unified, prioritised programme of works based on a transparent decision-making process – smoothing the Auckland region’s progress towards fully realising its walking and cycling objectives. The approach taken provides a model for other regions in New Zealand and will be further developed by the New Zealand Transport Agency to ensure integrated and seamless networks for pedestrians and cyclists are created in urban areas.

Case Study 2

Mt Roskill Extension in Auckland

The SH20 Mt Roskill Extension is a key component of the Western Ring Route in Auckland (figure 2). When completed it will be a four-lane, four-kilometre extension to the current motorway and as such, it will not only be part of the regionally-strategic Western Ring Route but it will also provide considerable relief to local roads in the Mt Roskill and Avondale areas.



Figure 2. Western Ring Route – Mt Roskill is a link within this broader plan. (<http://www.transit.govt.nz/projects/wrr/>)

The primary purpose of the Mt Roskill extension is to carry high traffic volumes as part of the regional state highway network. However, the proposed route had the potential to separate schools, parks, shopping areas and other recreational facilities from their respective communities. The potential for conflict and disconnection was addressed through the planning process and liaison with Auckland City Council, by carrying out an origin and destination transport study. The study identified the need for two bridges over the new motorway dedicated to pedestrians and cyclists for the purpose of maintaining established links within the community. The project (see figure 3) provides for all modes of transport by:

- a dedicated cycle path running parallel to the state highway;
- two dedicated bus shoulder lanes; and
- provision for a rail line in the future, connecting to the Auckland Regional Transport Authority’s proposed rail link to Auckland International Airport.

The multi-modal elements of the project have been specifically designed to encourage individuals to use a variety of non-vehicular modes and will help mitigate against the possibility of induced demand.

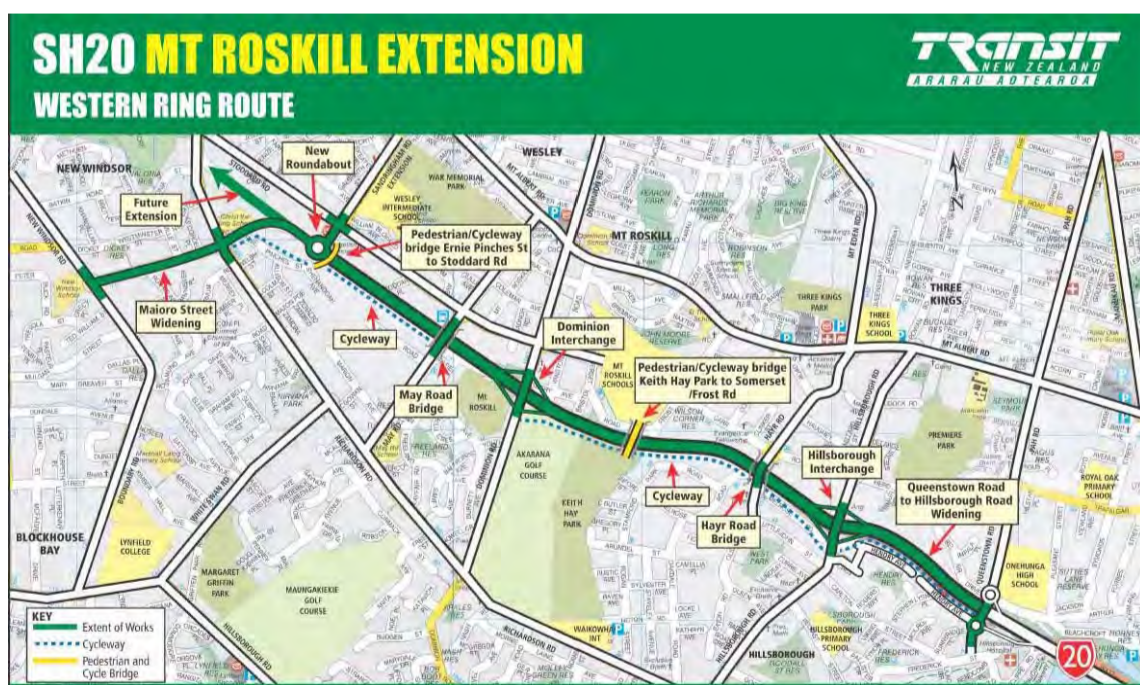


Figure 3. Summary plan of Mt Roskill Extension

The two bridges dedicated to non-vehicular use are the Keith Hay Bridge (figure 4) and the Ernie Pinches Bridge. The following table assesses them against the four best-practice design principles discussed above:

Convenience	▪ The bridges link existing key destinations (schools and recreational areas) on direct desire lines (i.e. no need for long detours).
Safety	<ul style="list-style-type: none"> ▪ Because they are dedicated non-vehicular facilities, there is reduced risk of accidents involving vehicles, although there do remain issues when the paths re-join the local road network. ▪ Good lighting, long sight distances and high usage (due to being on key desire lines) should ensure people feel safe using the facilities. ▪ Good width guidelines ensure sufficient space between users.
Accessibility	<ul style="list-style-type: none"> ▪ Key destinations are linked by the facilities, thus maintaining accessibility and reducing severance within the community. ▪ Gradual gradients have been provided to ensure the bridges are suitable for the majority of users.
Attractiveness	▪ The bridges themselves are relatively iconic (cable-stay design).

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| | <ul style="list-style-type: none"> ▪ Design features such as downlights within the railings enhance the environment for pedestrians and cyclists. ▪ There are issues with users' exposure to weather elements on the bridges as they are not covered and are relatively long. |
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The level of investment in the two bridges (over \$2 million) and the provision of facilities for non-vehicular modes demonstrate a clear commitment to a multi-modal solution for the Mt Roskill project. The project also highlights the future potential for major transport projects to successfully incorporate high-quality walking and cycling facilities.



Figure 4, Images of the Keith Hay Bridge, Mt Roskill Extension under construction

Case Study 3

Otaki Roundabout

Otaki is located on State Highway 1 approximately 70km north of Wellington and about the same distance south of Palmerston North. The town has recently attracted a number of factory outlet stores to its shopping area that stretches along State Highway 1. These outlets attract greater numbers of shoppers to the town, which benefit the local community and economy. However, increased retail activity has also created problems with state highway efficiency, causing delays and congestion. Transit's proposal was to redesign the roundabout just north of the Otaki shopping area to improve capacity and ease congestion.

During the consultation phase the local community requested that pedestrian facilities in the town also be improved. Accordingly Transit undertook an investigation of pedestrian provision and desire lines, and two locations for better crossing facilities and improvements to the existing zebra crossing were recommended – the latter included staggering the crossing. This resulted in at least two benefits: first, pedestrians acquired a central refuge to wait in, thus increasing their perception of safety; and second, traffic flows improved as vehicles did not have to wait for pedestrians to cross the entire road.

The pedestrian improvements were constructed at relatively low cost and did not affect the existing benefit-cost ratio for the project. However, if the pedestrian improvements had been undertaken separately from the roundabout work, it is doubtful that the benefits would have been sufficient to warrant the work under current funding parameters. This highlights an important issue for the New Zealand Transport Agency to work through, as existing evaluation and approval processes require closer alignment with government objectives.



Figure 5. Before and after image of Otaki crossing improvements. River boulder finish matches with other similar features in the community.

Commissioning the works within the wider project also provided contractual and other cost-saving benefits. However, there are risks in bundling different elements into projects. At a simple level when costs increase, what can be perceived as discretionary elements by some (such as walking improvements) may be reduced or removed to ensure project completion within budget. The funding and evaluation process alongside the method of delivery (in terms of block or major projects) is therefore a key element in successful project delivery. The importance of educating New Zealand Transport Agency staff and consultants about what is 'discretionary' within project scope, and reinforcing the importance of providing safe, multi-modal corridors will be a priority task for the new transport agency.

Convenience	<ul style="list-style-type: none"> ▪ The new pedestrian facilities improve the links across the state highway, mitigating against some of the severance that occurs ▪ The zebra crossing has been relocated away from the intersection to improve safety but not so far as to make it inconvenient to use.
Safety	<ul style="list-style-type: none"> ▪ The introduction of a median at the zebra crossing will improve people's perception of safety.

	<ul style="list-style-type: none"> ▪ Build-outs and median refuges at the other locations improve levels of safety at those locations. ▪ The more visible crossing facilities may assist in slowing vehicle speeds through the area.
Accessibility	<ul style="list-style-type: none"> ▪ Access across the state highway has been improved so that shops on either side are now easier to access.
Attractiveness	<ul style="list-style-type: none"> ▪ The pedestrian refuges have been finished with river boulders to match facilities found elsewhere in the town.

This case study highlights the benefits of consultation and community involvement. The project evolved from a specific desire to improve the ‘through-put’ of vehicles to incorporate improvements to the urban environment. While the growth of main-street shopping along a state highway is by no means ideal for either local communities or vehicular traffic, the reality of this scenario throughout New Zealand highlights the challenges and compromises that are necessary when catering for all state highway stakeholders in urban areas.

Case Study 4

Atawhai Shared-Use Path, Nelson (specific walking and cycling project)

This project demonstrates how walking projects can be progressed in their own right (in this instance with cycling) within the state highway programme. The shared-use path is predominantly off-road and generally three metres wide, running adjacent to State Highway 6 for four kilometres, linking to the Nelson CBD network in the south and ending at the northern end at a primary school.



Figure 6. Images of Atawhai Shared-Use Path

The project originated from the Nelson City Council Walking and Cycling Strategy and was developed through liaison meetings between Transit and the council. This example illustrates the value of a well-developed local strategy for leveraging funding for projects and it also illustrates what can be achieved with joint funding (the path was jointly-funded by Nelson City Council and Transit at a total project cost of nearly \$1million). The following table assesses the path in relation to best-practice features:

Convenience	<ul style="list-style-type: none"> ▪ The path provides the most direct off-road route for people commuting to and from the CBD and northern suburbs. ▪ There are some compromises, as the path gives way at intersections (due to the high-speed environment of vehicles leaving the state highway). ▪ One small section of the path is on-road utilising a parallel local road.
Safety	<ul style="list-style-type: none"> ▪ For much of the route the path is well-separated from the state highway. ▪ There are sections (due to geographical constraints) where the path runs immediately parallel to the state highway thereby increasing the risk and perceptions of safety. ▪ Conversely, when the path moves away from the state highway perceptions of personal safety may diminish due to lack of visibility in some places. ▪ Only some sections have suitable lighting. ▪ The path is predominantly three metres wide, which provides adequate space for shared-use. However, some short sections are less than three metres wide, and there is potential for user-conflict at busy times.
Accessibility	<ul style="list-style-type: none"> ▪ Accessibility has improved as the path provides the only off-road link from the northern suburbs into Nelson. ▪ The path links into the existing walking and cycling network in Nelson. ▪ The path directly connects with all side-streets along the state highway meaning people do not have to cross the highway to access the facility. ▪ Changes in gradient are minimal, ensuring it is suitable for the majority of users. ▪ The path links into a local school allowing more children to walk or cycle to school.
Attractiveness	<ul style="list-style-type: none"> ▪ The path runs through parks along its route creating an attractive environment for travelling by foot and cycle. ▪ Geographical constraints mean individuals walk directly adjacent to the 100km/h state highway for some sections, reducing its attractiveness.

The geographical and funding constraints have resulted in a path that is less-than-ideal in terms of best-practice design principles. The geographical characteristics are such that the state highway and path occupy a narrow strip of land between the sea and a steep slope, meaning there are sections where the space available for a state highway and shared-use path is less than desirable for maximum levels of service for both.

Unlimited funding would have provided for retaining structures to have been built to maintain the three-metre width, and lighting to have been provided along the full length to enhance personal security. However, the economic benefits attributed to future users of the path were not deemed sufficient to warrant funding at this level.

In the future a more holistic and inclusionary approach to planning and development, incorporating consideration of issues such as vehicular speed, intersection layouts and road-space allocation, could provide an enhanced solution for all users.

Despite the compromises, this Nelson facility has certainly improved the situation for pedestrians and cyclists. The project again demonstrates the merits of a partnership approach, progressing from jointly funding the physical infrastructure, to agreeing a joint promotion and education programme to support the project. The promotion and education element continues on from good practice already being undertaken by the council. For this project it will involve publicity for the path and education of local school children.

Conclusion

This paper has presented four case studies that demonstrate different approaches to addressing the needs of pedestrians in the state highway environment. All case studies reflect the government's commitment to providing a multi-modal transport network.

In the Auckland case, a joint strategic approach has been developed and applied as a continuation from a lead provided by local authorities.

In contrast, Nelson's Atawhai development shows how a good local strategy can be sufficient to develop a project.

The most important common element shared by these two case studies is that a coherent and 'joined-up' network has been planned and facilitated by good partnership work, with individual projects contributing to the overall outcome.

The Mt Roskill and Otaki case studies also demonstrate how Transit has successfully integrated walking elements into construction projects, again with a strong partnership approach.

All the projects remain "under construction" and so their success in encouraging more active modes of transport cannot be fully assessed yet. Nevertheless, in each case there are discernible improvements for walking in terms of convenience, safety, accessibility and attractiveness. Consistent with the challenges of catering for a wide range of users, there are elements of compromise within each case study.

The government's *Getting There* strategy has raised the profile of both walking and cycling, and this has been reflected in recent state highway policy direction. The New Zealand Transport Agency's ongoing agenda is to ensure that the best-practice design elements featured in the four case studies described in this paper become nation-wide practice to encourage more individuals to get out of their cars for short journeys. This is a learning process for us and we are committed to doing it in partnership with our stakeholders.