10. Land Transport

The land transport infrastructure of the Horowhenua District provides for the movement of people and goods throughout the District. These systems - road, rail, pedestrian and cycling networks, contribute to the social and economic functioning of the District by enabling travel between home, work, educational, recreational, cultural and business activities, as well as routes for visitors to or through the District.

The principal land transport infrastructure in the District is the road and rail networks. The local road network is provided by the Council, the State Highway network by the New Zealand Transport Agency (NZTA) and the rail network by New Zealand Railways Corporation (under the trading name Kiwirail). State Highway 1 is the main national and local arterial road running north-south passing through Foxton, Levin, Ohau and Manakau. State Highway 57 provides an important regional link to Palmerston North from Levin and passes through Shannon and Tokomaru. State Highway 56 provides an alternative link between Shannon and Palmerston North via Opiki. The North Island Main Trunk Railway Line provides rail freight and passenger services from and through the District - including commuter services between Palmerston North and District centres and Wellington.

The development of national rail and road links have been instrumental in the location and growth of Levin, Foxton, Shannon, and other District settlements. The network of local roads extends in a grid type pattern east and west from State Highways 1 and 57. Each of the settlements is relatively compact in form and predominantly flat which makes it possible for cyclists and pedestrians to make use of pathways and shared use of roads.

The safe and efficient functioning of the road and rail networks can be impacted on by new, or changes to, activities and development. For example, new activities often require new entrances to the road network and these entrances need to be carefully located and designed to avoid adverse effects on the safety and efficiency of that road. At a broader scale, there is a need to integrate transport infrastructure and land use patterns to achieve a safe and sustainable land transport infrastructure. Subdivision, use, and development of land, can have adverse impacts, including cumulative impacts, on the transport network, such as on the level of service, safety and congestion.

The land transport infrastructure can also generate adverse environmental effects, particularly from new or upgraded road and rail transport projects. For example, traffic noise, exhaust emissions, contamination of stormwater runoff, loss of visual amenity, privacy, and accessibility. These effects are increasingly compounded by the continued growth of traffic, particularly on routes which were not designed to handle present or predicted levels, or by the inappropriate use of local roads as arterial routes, or de facto bypasses.

Issue 10.1 Maintaining and Developing Land Transport Network

The sustainable management of the land transport network to meet the needs of the community.

ISSUE DISCUSSION

Factors influencing the sustainable management of the land transport network, and its ability to meet the community's needs, are:

10-1

The Maintenance of Existing Infrastructure

There is considerable investment in existing land transport infrastructure including roads, railway lines and facilities, pedestrian pathways and facilities, street lighting, vehicle parking facilities, and directional and safety signage. It is important to the well-being of the community that this infrastructure is maintained to a standard able to function effectively.

The Integration of New or Extended Infrastructure With Existing Networks

It is important that any additions or extensions to the existing infrastructure are designed and constructed in a way that is compatible with existing infrastructure and which ensures efficient use of transport resources. Extensions to the roading network, for example, which unnecessarily duplicate existing roads or which create intersections with difficult safety conditions will not be compatible with aims of effectiveness or safety or efficiency. It is important that additions and extensions to the infrastructure meet adequate and consistent standards of design, construction, and maintenance. For example, new or extended roads should be compatible with the District's long-term roading hierarchy and structure plans.

Providing for the Needs of Users Other than Vehicles

Development of the transport infrastructure should also recognise the diverse transportation needs of people in the community. The needs of pedestrians, people with disabilities, children and infants, and cyclists as well as motorised vehicles should be provided for within land transport networks and land developments.

Public Passenger Services and Facilities

Public passenger transport is not a significant feature of land transport in the District although rail and bus services operate on the main connecting routes. The townships are small in size and most people use private vehicles or cycles or walk. Private vehicles predominate in the rural areas.

Vehicle Parking

Provision for vehicle parking is important to the proper operation of the transport network. It is important to achieve a balance between providing specific parking areas clear of conflicts with vehicles on roads and making maximum use of roads with kerb-side parking. The provision of on-site carparking is to be optional and market driven.

Significant Changes and Future Transportation Needs

The ongoing subdivision, use and development in the District, together with expected increasing vehicle numbers and vehicle use, will add to the demands on local and arterial roads. As the transport infrastructure is critical to ensuring the Horowhenua continues to grow and develop, the capacity of the transport networks may need to be more fully utilised or enhanced so that the social and economic well-being of the community prospers. The transportation network should therefore continue to be developed to support the strategic and sustainable growth of the Horowhenua.

The transport infrastructure is also highly influential in the pattern and character of urban growth, as it often forms the framework for urban development. Thus transportation network and urban growth need to be managed in an integrated way.

Traffic Congestion - Oxford Street Levin

The issues of congestion of Oxford Street and the adverse effects of intensive use by heavy vehicles continue to present environmental problems for the Levin community. The Wellington Northern Corridor (Levin to Wellington Airport) is one of seven "roads of national significance" that the Government has identified as essential State Highways which require upgrading to reduce traffic congestion, improve safety and support economic growth in New Zealand. The NZTA has commenced preliminary work on improvements to the approximately 30km section of State Highway 1 from north Otaki to north of Levin as part of highway improvements to State Highway 1 (from Otaki to the north of Levin).

Agencies Involved

Responsibility for the provision and maintenance of land transport infrastructure is shared between a number of organisations including:

- The District Council (for local roads, pedestrian paths and cycleways).
- NZTA (for state highways).
- New Zealand Railways Corporation trading as Kiwirail (for railway lines).
- Individual land developers (in creating new public and private roads and transport facilities).

An appropriate mix of land transport infrastructure can only be achieved through the combined efforts of all agencies. This District Plan can contribute only a share of the policies and methods necessary to support land transport networks to meet the needs of the community.

Objectives & Policies

Objective 10.1.1 Maintaining and Developing Land Transport Network

Maintenance of land transport networks to efficiently and safely move people and goods through and within the District to meet the current and future needs of the District.

Policy 10.1.2

Identify and apply District Roading Hierarchy to ensure that the function of each road is recognised and protected in the management of subdivision and land use.

Policy 10.1.3

Ensure that all proposed new or extended roads are necessary to provide safe and convenient access for the community; and

Ensure that they provide the most efficient form of transport to serve community needs in terms of the alternative forms of transport and routes available and the relative environmental costs and benefits of those alternatives.

Policy 10.1.4

Encourage the development of pedestrian paths and cycleways, as well as convenient and accessible cycle parking, to support the opportunity to use non-vehicular transportation modes throughout the District.

Policy 10.1.5

Maintain and upgrade the existing roads in the District and provide for new roads and related facilities where these are important to meet the current and future needs of the District.

Policy 10.1.6

Require all new public and private roads to be designed and constructed to meet consistent minimum standards relating to safety and efficiency of vehicle movement and particularly in respect of:

- Road width and alignment which should be sufficient for two vehicle lanes except where traffic volumes are insufficient;
- The formation and surface sealing of all roads, access ways, and private ways to standards appropriate to the volume of vehicle traffic expected to be carried;
- Provision for necessary public utility facilities within roads; and
- Safe design and construction of roads, road access points, including alignment, gradient, vehicle parking, manoeuvring, and turning requirements.

Policy 10.1.7

Ensure that the design and construction of all land transport routes and facilities incorporate measures to enhance the personal safety, security, and convenience of users including vehicle users, public passenger transport services, pedestrians, cyclists, children, and people with disabilities.

Policy 10.1.8

Require all public roads, private roads, accessways, cycle ways, and pedestrian footpaths in urban areas to be provided with overhead lighting.

Policy 10.1.9

Require all new urban subdivisions and developments to incorporate infrastructure and facilities for non-motorised transport users and particularly:

- Pedestrian access routes connecting residential areas, schools, shopping centres, recreation reserves, and public transport collection points and terminals where appropriate;
- Provision for cycle traffic within road carriageways in such a way that lane width, design, and surface finish are adequate to safely accommodate both motorised vehicles and cycles;
- Separate bicycle tracks outside road carriageways;
- Pedestrian footpaths to be provided in urban areas adjacent to, but separated from, vehicle carriageways;

- Safe, all-weather surfaces and gradients for public pedestrian footpaths; and
- Pram and wheelchair crossings located at convenient positions in relation to intersections.

Policy 10.1.10

Require all proposed allotments to have access from a public road suitable for the safe and efficient carriage of vehicles, cyclists, and pedestrians.

Policy 10.1.11

Access across a rail corridor for subdivisional purposes is only permitted at an existing public level crossing and where sufficient safe sightlines are available or alternatively at a position where there are existing safety warning devices.

Policy 10.1.12

Ensure that the cost of new or upgraded roading, which is needed to provide access to new subdivision or development, is met by the subdivider or developer.

Policy 10.1.13

To ensure that State Highways are a safe and efficient network.

Explanation and Principal Reasons

Council has adopted a roading hierarchy which represents the intended status and function of roads and determines their design and speed characteristics. The three hierarchy classifications are:

- Arterial: State Highways and key District roads which form part of the network of important district arterial routes that predominantly carry through traffic and the major traffic movements within and between settlements
- Collector: Locally preferred routes forming a link between the arterial roads and residential, commercial, industrial, open space and rural areas. Although having a major through traffic function, they also serve adjacent properties and collect traffic from local roads and feed through to arterial routes; and
- Local: Roads with the main function of providing access to properties and connectivity within a local area.

All subdivision and development of land should be serviced by roads of appropriate design and speed characteristics as defined by the hierarchy.

It is important both for the safety and convenience of road users and for the efficiency of ongoing maintenance of roads that they be designed and constructed using consistent standards. Road surface and gradient are particularly important to road safety and significant differences in the standard of road surface may compromise road safety. Where higher volumes of traffic are expected on urban roads, road surfaces should be hard-surfaced for long-term wear and tear and ease of maintenance.

The design width of a road will depend on its status within the roading hierarchy but must be sufficient to accommodate the services and facilities usually expected within roads. Roads provide the servicing trenches for several essential public services. In some circumstances

facilities such as footpaths, cycle lanes, vehicle parking, and landscaped berms may be appropriate. It is important that the road's future function be fully understood at the time of its design and that it is sufficiently wide to accommodate that function.

Council is committed to minimising accidents at road intersections. The design of all future road intersections will therefore be required to incorporate safe sight distances and intersection detail appropriate to the local speed environment and environmental conditions.

Roads are public spaces heavily used by pedestrians and cyclists of all ages and abilities, as well as by vehicles. Roads have different safety characteristics at night compared to the daytime. It is important that roads be designed to maximise personal safety of all users. Street lighting is one way of designing for safety and crime prevention. Separation of road users with security fencing or barriers may, in some circumstances, be appropriate (e.g. where there are high vehicle speeds or steeply-sloped pedestrian footpaths intersecting with vehicle roads). The location and design of any such barriers should be chosen carefully to enhance crime prevention.

Roads should be designed and constructed to maximise opportunities for pedestrian and cycle access within communities. The policies are directed towards ensuring that the provision of pedestrian and cycle facilities incorporate basic safety and convenience elements.

Road marking and traffic signs are an important component of the transport infrastructure. The District Plan will enable provision for essential traffic safety and directional signs and road names. Access along local public roads is unrestricted and provides wide community benefit. That community-wide benefit is reflected in the funding of road maintenance from District Council rates. Where new roads are extended specifically to connect new subdivisions or developments to the existing road network, the capital cost of that construction should be met by the principal beneficiary of the access (i.e. the subdivider or developer).

Public roads will be designed and maintained to enable their use by public passenger transport services and Council will continue to upgrade/provide facilities where demand necessitates.

The development of a network of pedestrian paths and cycleways in the District would support the opportunity for residents and visitors to move between areas and around the district. The provision of cycle parking in convenient and accessible locations, such as near or at schools, retail areas, recreation reserves, public transport locations and other community facilities would support the cycling. An efficient approach in providing this land transport infrastructure is for Council to work in partnership with or support other agencies.

Methods for Issue 10.1 & Objective 10.1.1

District Plan

- The District Plan will adopt the current District roading hierarchy and use that to determine the status and function of all future roads.
- The District Plan will specify the standards to be applied to the design and construction of public roads and private roads and access ways; and for non-vehicle land transport including facilities for pedestrians, cyclists, and people with disabilities. Includes reference to compliance with relevant engineering and technical standards to ensure a suitable standard of infrastructure.

- The District Plan will provide for all existing public roads and parking areas as designated public works; and will recognise designated railway lines and rail facilities.
- The District Plan will permit essential road markings and signs as permitted activities.
- Where a subdivision of land creates a new road Council will require the subdivider to fund the cost of road construction. Where an existing road is extended or upgraded to serve a subdivision, Council will require the subdivider to pay the full cost or contribute to the cost of the extension or upgrading in accordance with the level of benefit the upgraded road provides for the subdivision compared with other road users.

Given the importance of land transport infrastructure to the community, District Plan rules and resource consents are considered to be the primary way to ensure transport infrastructure with consistent high standards to meet current and future community needs.

Long Term Plan and Regional Land Transport Programme

- Council will continue to fund capital works and maintenance of land transport infrastructure throughout the District in accordance with annual priorities.
- Council will continue, in association with other agencies through the Regional Land
 Transport Programme, or any plan or programme which supersedes it, to improve
 infrastructure and facilities for pedestrians and cyclists and public transport
 passengers and will continue to maintain and improve the safety and efficiency of the
 road network.

Other Methods

- Council will continue to investigate and develop a network of recreational walkways and cycleways in the District.
- Council will work with NZTA to investigate long term options for resolving the environmental problems caused by heavy traffic and heavy vehicle congestion in Oxford Street, Levin.

Issue 10.2 Managing Effects of Transport Infrastructure

The adverse effects on the environment and the community that can be caused by the construction, maintenance and operation of the transport infrastructure and transportation activities.

ISSUE DISCUSSION

The construction and maintenance of transport infrastructure can give rise to adverse effects on the environment. One example is road earthworks which scar the landscape or cause siltation of waterways. The choice of location of new transport infrastructure and road alignment is often limited by other engineering factors and the location of existing infrastructure. Adverse effects of transport infrastructure need to be balanced against overall benefits to the community of enhanced access, efficiency, or safety.

The use of transport infrastructure and transportation activities can give rise to localised adverse effects. Examples include noise of vehicles on roads or on private properties; dust on metal roads; vehicle exhaust emissions on local air quality; surface water run-off from

roads to road-side drains and private property; spills of wastes and other material from vehicles to the road and stormwater system such as effluent from stock trucks. Other adverse effects include the severance of communities and the safety risk associated with speeding or large volumes of traffic. Effects on the wider environment include the cumulative effect of increasing vehicle emissions on the atmosphere and ozone depletion. It is necessary to protect the safety and amenity values of local areas while providing for an effective roading network.

Objectives & Policies

Objective 10.2.1 Managing Effects of Transport Infrastructure

To provide for a land transport network that is safe, convenient and efficient, and which avoids, remedies or mitigates the adverse effects to maintain the health and safety of people and communities, and the amenity and character of the environment.

Policy 10.2.2

Require all extensions and upgrades to the land transport infrastructure, including roads, to avoid, remedy, or mitigate any adverse effects on the natural and physical resources, sensitive areas, and amenity and landscape values of the District.

Policy 10.2.3

Avoid adverse amenity impacts by ensuring that new roads are designed to, at least, minimum standards and visually complement the character of any surrounding area.

Policy 10.2.4

Adopt techniques to discourage high volume and heavy traffic use in areas where it would have adverse environmental effects on the local community.

Explanation and Principal Reasons

Construction and maintenance works for land transport infrastructure, including roads, can have adverse effects including disturbance to landforms, indigenous vegetation and habitats, contaminant discharges, noise and vibration, vehicle emissions, and dust, which can impact on water, soil and air quality. Land disturbance, earthworks and vegetation clearance for infrastructure development should avoid significant landform features, and cultural and heritage sites. In addition, effects from the use of land transport infrastructure, such as emissions, can be minimised by decreasing traffic volumes and travel times, and by designing roads to minimise runoff.

Environmentally sensitive construction and design techniques should be incorporated into new and upgrades to land transportation infrastructure where appropriate. The design and alignments of new or upgraded transport infrastructure shall be assessed in terms of the measures that can be taken to avoid, remedy or mitigate the adverse effects.

The road environment is an important, highly visible and extensive area of public open space within the District. The way that the roads and their immediate surrounds are developed (i.e. their alignment, layout and associated plantings) is significant in maintaining and improving the amenity of both residential and business areas.

Impacts of traffic passing through or visiting an area can, to a certain extent, be controlled by developing and encouraging the use of a roading hierarchy which directs higher volumes of traffic and heavy traffic movements on certain routes and discourages them on others (e.g. residential areas). The hierarchy can be reinforced by traffic management measures outside the District Plan which discourage the use of residential streets, other than by those vehicles that have no alternative. The development of safe, pleasant and convenient pedestrian and cycle links can assist in reducing vehicle usage and improve the amenity around a settlement.

Methods for Issue 10.2 & Objective 10.2.1

District Plan

 Proposed extensions and upgrades to transport infrastructure will be assessed in terms of the District Plan's policies and standards relating to protection of the qualities of natural and physical resources (including water quality, land disturbance, landscape quality, and protection of archaeological and historic sites). Transport activities will have to meet minimum environmental standards.

The District Plan will recognise existing designated roads. New and extended roads will be considered on their merits and be assessed in terms of the policies of the District Plan relating to environmental quality.

The District Plan will include minimum performance standards, principally relating to noise, for transportation activities on private land so as to maintain the amenity of local environments. The District Plan will adopt the District roading hierarchy and will accept a certain level of effects from transportation activities along national and arterial routes. It will be the non-District Plan initiatives of Council and other agencies which will encourage traffic to use appropriate routes within the hierarchy.

Other

 Council will work with New Zealand Police, NZTA and use road signage and other techniques to encourage heavy vehicles to utilise the arterial routes indicated in the roading hierarchy.

A number of organisations can influence the movement and behaviour of traffic. Coordination with key transportation agencies will assist to ensure issues with the operation of the transport infrastructure are promptly identified and resolved effectively.

Issue 10.3 Adverse Effects of Land Use Activities, Subdivision and Development on Land Transport Infrastructure

The adverse effects that inappropriate land use activities, subdivision and development can have on the safety and efficiency of land transport systems.

ISSUE DISCUSSION

Certain land use activities, subdivision and development, can have adverse effects on the safe and efficient operation of the land transport network. Examples include:

- Inappropriately sited vehicle crossings resulting in poor sight lines for on-coming traffic and potential intersection accidents.
- Road-side stalls with poor visibility and difficult entrances/exits.
- Buildings and trees shading roads and contributing to ice on roads and safety hazards.
- Activities generating high vehicle movements into and out of a site increasing the chance of intersection accidents.
- Night lighting and glare from buildings affecting visibility of roads for vehicle users.
- Vehicle loading and delivery arrangements which interfere with the free and safe use of footpaths by pedestrians.
- Advertising signs which are distracting to motorists.
- Activities which generate demand for vehicle parking but do not make provision for that parking and cause congestion on adjacent roads for other road users including cyclists.
- Accidental spills from vehicles onto roads creating slippery or hazardous road surface for other road users.
- Sensitive activities (e.g. residential and places of assembly) in close proximity to major land transport infrastructure (i.e. reverse sensitivity issues).
- Buildings, structures and signs which obstruct sightlines.

The maintenance of safe sight lines at rail level crossings is a particular issue that needs to be provided for.

Objectives & Policies

Objective 10.3.1 Adverse Effects of Land Use Activities, Subdivision and Development on Land Transport Infrastructure

Protection of the safety and efficiency of the land transport network from the adverse effects of land use activities, subdivision and development.

Policy 10.3.2

Avoid, remedy, or mitigate the adverse effects of increased traffic or changed traffic type, which could compromise the safe and efficient operation of any road, or the safe and convenient movement of pedestrians and cyclists on public roads.

Policy 10.3.3

Require vehicle crossing places and vehicle entrances from public roads to be located, constructed, and maintained to standards appropriate to the circumstances of traffic volume, pedestrian movement, and speed environment of each road.

Policy 10.3.4

Ensure that buildings and activities do not compromise the necessary clear sight lines for trains and road vehicles at level rail crossings, or of vehicles at road intersections.

Policy 10.3.5

Ensure that any on-site parking and manoeuvring space provide is safe and visually attractive.

Policy 10.3.6

Ensure that adequate and safe on-site loading and unloading provision be made.

Policy 10.3.7

Control the location, design, and extent of advertising signs located adjacent to roads.

Policy 10.3.8

Require all road-side advertising signs in moderate to high speed zones (70kph and above) to display clearly and boldly the nature of the goods or activities being advertised.

Policy 10.3.9

Ensure that advertising signs do not interfere with the safe and efficient use of roads and pedestrian ways.

Policy 10.3.10

Minimise the number of remote advertising signs in the rural and greenbelt rural residential environment to avoid an adverse effect on traffic safety.

Policy 10.3.11

Avoid, remedy, and mitigate any adverse effects generated by land use activities, subdivision and development adjoining the State Highways, District roads or the North Island Main Trunk Railway line where such adverse effects have the potential to reduce the safety and efficiency for road users (drivers, pedestrians and cyclists) and railway users. Adverse effects include glare, inappropriate lighting, smoke, or discharges onto the road or railway corridor.

Policy 10.3.12

Ensure that land use activities, subdivision and development adjoining State Highways, other arterial roads and the North Island Main Trunk Railway, avoid, remedy or mitigates any reverse sensitivity effects by protecting themselves from noise and vibration, particularly in bedrooms.

Explanation and Principal Reasons

The safe and efficient movement of vehicles between the road network and individual sites is important to maintain suitable levels of functionality and safety of the road and rail networks. Most of the effects can be avoided or mitigated through compliance with standards imposed through the District Plan, such as through access standards and sight line requirements. In addition, some land use activities generate significant traffic movements which can generate negative environmental impacts on adjoining land uses, as well as on the efficiency and safety of the roading network. Council seeks to ensure that the types and intensity of effects of activities are appropriate to the speed on, and function of, individual roads. This may

mean, in some situations and for reasons of public interest and transport safety and efficiency, that activities need to be modified or even prevented from operating.

The provision of adequate parking and loading areas is an integral part of the safe and efficient operation of the roading system, linked strongly to both moving traffic and land use activities. Demand for parking and loading is generated by most activities, with provision of sufficient parking and loading necessary to avoid overspill of parking onto the adjoining road and neighbouring properties. This situation creates a traffic hazard, visual detraction and an impact on the amenity values of the area. However, it is recognised in the main commercial area (particularly the pedestrian focused area) the provision of on-site parking and loading is not always possible or appropriate.

The provision of numerous car parking spaces can have adverse effects on the amenity values of the area. Parking areas can create dust or mud if unsealed, and they can detract from the visual quality of the area. Attention to sealing, landscaping and screening will be required to reduce these adverse impacts.

Some development in close proximity to the State Highways, other arterial roads and railway, may adversely affect the safe and efficient functioning of this major land transport infrastructure. Due to their historic location and development, landowners need to accept a certain level of effects emanating from this infrastructure. Measures to mitigate adverse effects, such as building setbacks from the infrastructure and insulation of buildings from road and rail noise by using barriers and acoustical treatment of buildings are encouraged for residential units and other sensitive activities in the vicinity of these major road and rail corridors.

Methods for Issue 10.3 & Objective 10.3.1

District Plan

- The District Plan will include rules controlling the location, size, and design of advertising signs visible from transport routes; and standards for the operation of certain activities intended to avoid, remedy, or mitigate adverse effects of activities including their effects on transport routes (such as glare, night lighting, setback distances for plantation forestry and shelterbelt planting).
- The District Plan will include controls on building location intended to maintain clear sight lines to key intersections and rail level crossings and maintain a minimum separation distances with major transport infrastructure to minimise reverse sensitivity issues.
- Where resource consent applications involve access onto the State Highway network or across a railway corridor, Council will forward copies of applications to NZTA and KiwiRail respectively as an affected party. Council will make reference to NZTA's "Planning Policy Manual" when considering applications for resource consent which have implications for the State Highway network.
- The District Plan will include performance standards controlling the location and design of farm loading ramps, to avoid the adverse effects of the use of these facilities in close proximity to the roading network.

The District Plan is considered to be the most appropriate and effective means of controlling the adverse effects of activities on essential transport infrastructure and activities. In the case of District roads, Council is able to assess the likely effects of activities. Council will, in the case of State Highways, recognise NZTA's role and interest in maintaining safety and efficiency of Highways and will ensure that NZTA is aware of proposed activities likely to

affect the Highway. The NZTA has powers under the Government Roading Powers Act 1989 to control the location and design of State Highway crossing places for designated Limited Access Roads. Remedies under this legislation should be used where appropriate to control adverse effects. Similar recognition applies to Kiwirail in relation to maintaining the safe and efficient operation of the North Island Main Trunk Railway Line.

Other Council Initiatives

• Council intends to continue to work with New Zealand Police, transport operators and NZTA to minimise the incidence of accidental spillages onto roads within the District.

ANTICIPATED ENVIRONMENTAL RESULTS

The environmental results for land transport which are anticipated to result from the combined implementation of the above policies and methods are as follows:

- 10(a) A land transport network which safely and efficiently moves people and goods through and within the District.
- 10(b) A land transport network which meets the needs of users other than motor vehicles, with increased use of alternative forms of transport, rather than private cars.
- 10(c) Few land transport hazards created by inappropriate land use activities.
- 10(d) A high standard of safety and amenity throughout the land transport network.
- 10(e) Minimal adverse effects on the environment from transportation infrastructure and activities.