

# TRANSPORTATION SERVICES

**Transportation has the highest expenditure of any of the Council's activities.**

## The Waikato District Transportation Network

*The transport network in the Waikato district is dominated by road transport as the district is predominately rural. There are significant stretches of State Highway passing through the district such that the highways form an integral part of the transportation network, connecting the regions and major cities. State Highway One almost bisects the district from north to south, hence the rapid development of the Auckland to Cambridge expressway is important. The "interim" State Highways: 39 and 1B, continue to grow with more and more traffic using them. Highways 26 and 23 provide important links between Hamilton City and Morrinsville and Raglan respectively.*

*The North Island Main Trunk railway line essentially follows State Highway One and provides opportunity for alternatives to road transport. The rail link to the ports of Tauranga and Auckland are important for bulk freight movement and will be utilised by major companies such as Genesis Energy in the next few years. The use of rail for commuters between Hamilton and Auckland has been tried in the past but continues to hold its potential.*

*The Waikato area has about 10 percent of the country's population, and approximately 20 percent of the nation's heavy vehicle movements occur in the region, highlighting the strategic position of the district. The greater Hamilton City area is expected to experience 97 percent of the region's population growth, and this impacts on the district through high residential growth in the wards bordering the city.*

### Core Services

Council supports and works with Environment Waikato to provide bus services between the major towns of the district and Hamilton City. The major bus routes run between Hamilton City and Raglan, Huntly and Ngaruawahia. Council will be actively exploring ways in which services can be expanded to assist those living in smaller villages within the district.

While there is little congestion on the roads between the towns and their destinations the motivation to use alternatives to road transport, such as public transport or walking and cycling is weak. However Council is actively encouraging these alternatives by building up and maintaining facilities for them. Connectivity between the various forms of transport is key to ensuring that the

transport network is fully integrated. Leisure, as opposed to commuter, walking and cycling is more prevalent in the district and this is noted and taken into consideration when designing facilities.

The Waikato district has one of the highest road crash records in New Zealand. Council's District Road Safety Co-ordinator works closely with Police, Transit New Zealand (TNZ), Land Transport New Zealand (Land Transport NZ) to develop education and enforcement initiatives to address this in conjunction with engineering works.

### Relationships

Council's relationships with the Police, Land Transport NZ, Transit New Zealand, Ontrack (formerly NZ Railways Corporation), Environment Waikato, and the neighbouring Territorial Authorities (Hamilton City Council, Waipa, Matamata-Piako, Otorohanga and Waitomo District Councils) form some of our more important strategic alliances.

## Significant Negative Effects on Community Well-being

Busy roads can affect communities' and people's lifestyle through visual and noise intrusion and by severing neighbourhoods. This is managed through good planning prior to constructing new roading infrastructure.

Any improvements to the roading network generally improve safety, particularly where the works include realignments and widening, but this can sometimes be countered by a lift in vehicle speeds. Road standards reflect the importance of the road and the level of traffic that use this infrastructure.

Sealed roads are more costly to maintain than an unsealed length of road.

Road construction can harm the environment particularly during earthworks. This is managed/mitigated through using industry best practice to control and address silt and runoff during the works.

Incorrect use of chemical weed spray can harm the environment. This is managed through using current industry best practice and appropriately qualified contractors. Members of the public who object to the use of chemical sprays can apply to Council to be included in the register of "no spray" zones.

### Rationale for this Group of Activities

Local Authorities exist principally to supply core services that meet the needs of their communities. Transportation services result from the creation, operation, maintenance, rehabilitation and replacement of transportation assets.

In line with the New Zealand Transport Strategy, the purpose of these transportation assets is to provide an affordable, integrated, safe, responsive and sustainable transport system. All transportation projects are considered in terms of how they assist economic development, assist safety and personal security, improve access and mobility, protect and promote public health and ensure environmental sustainability.

Council also has a number of statutory obligations in relation to transportation that it must meet as per the following legislation:

- Local Government Act 2002
- Land Transport Management Act 2003
- Resource Management Act 1991
- Traffic Regulations 1976
- Transit New Zealand Act 1989
- Local Government Rating Act 2002

This LTCCP includes Council’s land transport programme, in accordance with the Land Transport Management Act 2003.

Council is the regulatory provider for the administration of Rural Fire Activity under the Forest and Rural Fires Act 1977.

### Key Assets

Changes in demand are assessed through the use of the pavement management system and the modelling of pavement performance over time.

Field inspections, maintenance required and historical records identify any major concerns. As a result, additional work may be required or the timing of scheduled maintenance may need to be altered.

In growth areas, the development of structure plans considers and accommodates future demand. Over time, the predicted demand can be compared with actual demand.

The key community assets for the Transportation Group include:

#### Length of roads

Sealed Roads – rural	1,056 kms
Unsealed Roads – rural	475 kms
Sealed Roads – urban	128 kms
Unsealed Roads – urban	3 kms
<i>Total</i>	<i>1,662 kms</i>

#### Number of bridges and culverts

Bridge structures	137
Large culverts (>2.1m diameter)	279

#### Length of Footpaths

Concrete	103 kms
Sealed	4 kms
Metal	2 kms

**Length of Kerb and Channel** 196 kms

**Number of Streetlights** 2,322

Key Projects over the Next Three Years

Project	Projected Cost\$	Growth / demand	As a result of...		
			Service level change	Changes to legislation / standards	Maintenance / renewal of asset
36 km of area wide pavement treatment (sealed road renewals).	3,900,000 per annum	√			√
360 km of sealed roads are resurfaced.	2,800,000 per annum				√
Reconstruction of: - Piako Rd (2006/07) - Waverley Rd and - Riverview Terrace (2007/08)	800,000 600,000 200,000	√			√
24 km of seal extension	3,300,000 per annum	√	√		
Implementation of Structure Plans - 2006/07 - 2007/08 - 2008/09	4,600,000 1,700,000 2,000,000	√	√		√
Wright's Bridge replacement 2008/09	700,000				√

All projects post 2008/09 will be reviewed in detail for the LTCCP 2009-19, and any costs and timings are indicative only at this stage.



# Transportation Network Administration

## Overview of the Activity

This activity includes the administration of the transportation network, including Council's in-house contract administration and design unit. Council's Transportation Group is responsible for the asset management and operation of the Transportation Network. Under the Land Transport Management Act - 2003, Council is required to produce a Land Transport Programme that is consistent with the New Zealand Transport Strategy or the Regional Land Transport Strategy.

## Primary Contribution to Community Outcomes

This activity contributes to the Community Outcomes Accessible, Active, Green and Safe Waikato.

## Land Transport Programme

This activity assists Council in assessing the affordability and sustainability of its transportation activities, in line with the objectives of the Land Transport Management Act, and ensures that Council is responding to the basic needs of the transportation assets in order to maximise their service life.

## What We Plan To Do

Council aims to produce short and long-term programmes for maintenance and project works that maintain the service levels indicated in this document while also meeting its legal obligations, and maintaining consistency with the New Zealand Transport Strategy as well as the Land Transport Strategy.

## Where We Want To Go

### Regional Land Transport Strategy

The Regional Land Transport Committee is currently preparing the Waikato Regional Land Transport Strategy for adoption by Environment Waikato. The purpose of the Strategy is to guide the development and management of the land transport system in the Waikato Region over the next 10 years.

In particular, the strategy will guide investment decisions for maintenance and improvement of local roads and State Highways, passenger transport, walking and cycling infrastructure and alternatives to roading such as rail and barging to ensure an integrated, safe, responsive and sustainable land transport system into the future.

This is an important document for the Waikato Region as it will bring together a variety of available funding sources (national, regional and local) and will allocate that funding to specific projects and activities. To guide investment, a vision for land transport and set of desired land transport outcomes has been developed in consultation with the Regional Land Transport Committee (see table below). The vision for land transport in the region is:

*A safe, sustainable and integrated transport system that really works and enhances the environmental, economic, social and cultural well-being of the region.*

A preferred strategic direction for developing the regional land transport system has also been developed. This focuses on:

- ensuring investment is directed to significant regional roads to provide an efficient and sustainable transport network through the region;
- managing demand and encouraging alternative modes of transport; and
- ensuring that investment right across the transport network gives effect to the desired regional land transport outcomes developed for the Strategy.

### Regional Land Transport Strategy Desired Outcomes

Outcome Area	Outcome Statement
<b>Economic Development</b>	A transport system that promotes continued growth and economic development of the region and provides for the efficient, affordable movement of people and goods in and through the region
<b>Safety and Personal Security</b>	Substantial improvement of the safety and personal security within all modes of transport
<b>Access and Mobility</b>	A transport system that is inclusive, accessible and affordable
<b>Public Health</b>	A transport system that promotes and provides positive public health outcomes
<b>Environmental Sustainability</b>	A sustainable transport system that minimises adverse effects on the environment
<b>Integration</b>	Integrated land use and transport planning Integrated transport modes
<b>Responsiveness</b>	A transport system that is proactive to the needs of the community
<b>Energy Efficiency</b>	Improved energy efficiency
<b>Funding</b>	A transport system that is funded to fully implement local, regional and national strategies

## Where We Want To Go continued

### Land Transport Programme

Under the Land Transport Management Act, Council is required to produce a land transport programme that is consistent with the New Zealand Transport Strategy.

The Government’s vision for transport is that “By 2010 New Zealand will have an affordable, integrated, safe, responsive, and sustainable transport system.” The government’s objectives for transportation are:

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

These objectives are consistent with the Waikato District Community Outcomes.

The transportation activities, included in the LTCCP, make up Council’s Land Transport Programme in accordance with the Local Government Act 2002 and the Land Transport Act 2003.

### Adoption of the Regional Land Transport Strategy

Submissions to the draft Regional Land Transport Strategy were sought from interested stakeholders from the end of May to the end of June 2006. Submissions will be heard by a Hearings Committee before the final Strategy is formally adopted by Environment Waikato on 28 September 2006.

### What the Regional Land Transport Strategy will mean for Waikato District Council

The Regional Land Transport Strategy will rely on key transport stakeholders for its implementation and will contain a number of specific actions that Waikato District Council will be responsible for. In addition, any projects and activities proposed by Waikato District Council must be consistent with the Strategy to meet Land Transport New Zealand funding criteria

for funding subsidies. The Strategy will guide land transport investment within Waikato District.

Projects arising from the Regional Land Transport Strategy may need to be jointly funded by local, regional and national sources in order to achieve the desired vision and outcomes for the Waikato Region’s land transport system. The Waikato Joint Officials Group process should provide additional crown funding to the Waikato Region to address part of the funding gap, and this will require local funding inputs. The funding will not be available until 2007/2008 at the earliest. Therefore, the detail of policy and funding requirements under the Regional Land Transport Strategy will be incorporated into next year’s LTCCP planning process.

### Pavement Management System

Council has developed a pavement management system to assist with asset management through regular inspections and assessments of the transportation assets. The data is maintained in the Road Assessment and Maintenance Management (RAMM database). This data provides detail of transportation assets and is the basis for asset valuations.

The need for pavement replacement is assessed through computer modelling. Road inspections are undertaken to confirm the accuracy of the computer modelling. Modelling enables Council to explore different levels of service and associated funding requirements.

### Contracts and Design Business Unit

This Unit is an in-house consultancy service, which carries out the majority of our professional services including scoping, design and supervision of transportation projects, maintenance and works. External consultants are engaged for specialist activities and to supplement in-house resources as necessary.

## How will we know we are on track

Service Level	Checking Progress	Target 2006/7 to 2008/9	Target 2009/10 to 2015/16
The pavement management system is maintained and used to develop robust short and long-term programmes.	On a two-year cycle, the asset condition is assessed and modelling is used to establish a rolling three-year programme for pavement renewal and resurfacing, which is verified by field inspection.	Every two years	√
The Contracts and Design Business Unit completes the design and supervision of named projects and schedules the year’s works so that projects are constructed at suitable times of the year.	All projects are completed within agreed timeframes and budgets.	100%	√

# Corridor Maintenance

## Overview of the Activity

*The transport network includes not only the paved road and footpath surfaces, but also the land between the property boundaries that make up the road reserve, all of which is referred to as the transport corridor.*

*Corridor maintenance activities include: traffic services (signs and road marking), carriageway (street) and amenity lighting (including some under veranda lights), amenity works/corridor maintenance (mowing, weed spraying, street cleaning, kerb sweeping and catch pit cleaning, litter patrol and bin cleaning), removal of graffiti, and the maintenance of railway/road level crossing warning devices.*

*Corridor maintenance serves three purposes - it assists road safety by creating a consistent driving environment, improves the efficiency of traffic flow and drainage systems, and creates a tidy and consistent appearance throughout the communities and rural areas in the district. Our aim is to provide an appropriate level of service that achieves these goals for an affordable cost. In doing so Council recognises that it is cost effective to carry out maintenance routinely, especially for mowing, weed control, street sweeping and litter collection, rather than respond to problems as they arise.*

## Land Transport Programme

This activity assists economic development by maintaining good traffic flow, it assists safety and personal security through improving traffic safety and removing potential hazards, and it contributes to environmental sustainability.

## What We Plan To Do

Routine long term contracts, with between two and five year contract periods, are awarded for the corridor maintenance activities. These contracts specify the service levels required.

## Where We Want To Go

Council aims to review the service levels for corridor maintenance on a regular basis to ensure the service levels provided meet the reasonable expectations of the public and are affordable.

## Primary Contribution to Community Outcomes

This activity contributes to the Community Outcomes Green, Thriving and Safe Waikato.



### How will we know we are on track

Service Level	Checking Progress	Target 2006/7 to 2008/9	Target 2009/10 to 2015/16
The number of requests relating to corridor maintenance is monitored over time and the analysis of them is used as a basis for continuous improvement.	All complaints (as recorded in Council's customer request management system) are monitored and are responded to within 24 hours of receipt and any appropriate works are programmed and undertaken promptly.	100%	√
	The number and nature of requests are monitored over time and analysed to form a basis to target continuous improvement.	Reduction in number of complaints	√
All corridor maintenance is undertaken and completed to a high standard.	Contracts are regularly monitored for performance and any non-performance is addressed promptly by the contractor within the specifications of the contract documents.	100% compliance with contract conditions	√
	Audits undertaken by Land Transport NZ are favourable and any issues identified are addressed.	Favourable audit results	√
Lighting: All street and carriageway lighting is maintained with minimal outages.	All streetlight outages are referred for action within 24 hours of notification, and are addressed promptly.	100%	√
An annual increase in the community's perception of and satisfaction with the district's lighting.	Results of the Annual Satisfaction Survey are monitored and there is an increasing trend in the percentage of respondents rating the lighting in the district as satisfactory (57% in 2005).	58% increasing to 60% by 2008/09	61% increasing to 67% by 2015/16

# Road Safety

## Overview of the Activity

The aim of Council's road safety activities is to reduce the incidence and severity of crashes in the district. In line with the Government's Road Safety to 2010, Council's initiatives for safety address engineering, education, and enforcement issues.

Minor Safety Improvement works are engineering initiatives targeted at reducing actual crashes as recorded in the Land Transport NZ database (CAS) or the tangible threat of crashes. The Road Safety Co-ordinator works closely with both local and neighbouring communities to help them develop and implement educational and promotional initiatives. While the Police carry out enforcement, Council staff work closely with them to coordinate with other safety initiatives.

To ensure safety activities are correctly targeting the causes of crashes and that works are prioritised correctly, Council undertakes detailed reviews of crash statistics and their historical trending at five yearly intervals. Crash reduction studies are undertaken on black spots and black routes as identified through the Land Transport NZ database. Council completes safety audits on a sample of its capital projects to ensure that new works add to the safety improvement of the entire transportation network.

Council is implementing a safety management system to ensure that all decisions about maintenance and construction are made within the context of improving safety.

## Land Transport Programme

This activity contributes to the objectives of assisting safety and personal security and assisting in protecting and promoting public health.

## Primary Contribution to Community Outcomes

This activity helps to achieve the Community Outcomes Accessible, Educated and Safe Waikato.

## What We Plan To Do

The Road Safety Co-ordinator raises awareness of safety issues and assists the communities in developing and implementing their own initiatives to educate people about road safety.

Minor Safety Improvement works are rated and prioritised. Typical projects include visibility improvements, intersection improvements, installation of stock underpasses, and road realignments.

Projects are summarised into broad categories including intersection improvements, stock underpass installation, lighting improvements, works associated with other projects such as pavement renewals, and other general safety projects, such as localised widening and visibility improvements.

Project	2006/07\$	2007/08\$	2008/09\$
Intersection improvements	452,000	673,000	804,000
Works associated with other projects*	265,000		
Stock underpasses	136,000	132,000	136,000
Lighting improvements	56,000	63,000	70,000
Safety projects (other)	268,000	361,000	252,000
Safety education	69,000	71,000	72,000

\* Costs for works associated with other projects in future years are included in the intersection improvements budget.

Subsidy assistance towards the conversion of stock crossings to underpasses is part-funded in this activity, recognising its contribution to road safety.

## Where We Want To Go

Over a ten-year period Council would like to see a reduction in the number and severity of crashes in the district.



## How will we know we are on track

Service Level	Checking Progress	Target 2006/7 to 2008/9	Target 2009/10 to 2015/16
Implementation of annual Community Road Safety Programme (CRSP)	Quarterly CRSP report by Land Transport NZ demonstrates satisfactory Council performance.	Satisfactory response	√
Regular monitoring of LTNZ crash statistics to ensure work programmes are targeted and address identified safety problems appropriately.	Review of network crash history, undertaken at five-year intervals.	Five-yearly review	√
	Random safety audits completed on at least two roading projects annually, with any resultant issues addressed.	2 projects audited	√
An annual increase in the community's perception of and satisfaction with the safety of Waikato district roads.	Results of the Annual Satisfaction Survey are monitored and there is an increasing trend in the percentage of respondents rating the safety of roads as satisfactory (54% in 2005).	55% increasing to 57% by 2008/09	58% increasing to 64% by 2015/16
The Safety Management System is implemented.	Annual audits of the Safety Management System are completed and any issues raised are addressed as appropriate.	Annual Audit	√

# Bridges

## Overview of the Activity

Council is responsible for over 400 bridges and culverts throughout the district, which serve as an important and vital component of the road network. Timely and appropriate maintenance is carried out to maximise the serviceable life of these structures. Generally, bridges and culverts are replaced when it is no longer viable or safe to maintain them.

When undertaking maintenance on culverts particular attention is paid to fish passage. When new culverts are installed they are constructed so that the entire culvert is passable by the aquatic life likely to be living in the watercourse. Environment Waikato has provided guidance on key watercourses, which currently or potentially support aquatic life, and existing culverts along these waters are modified to assist in supporting and maintaining the fish stocks.

The district has a number of single lane bridges which will be upgraded and widened over time, particularly if they are impacting on safety, and as traffic volumes increase.

Where a structure is replaced the project can also involve road realignment to improve safety. Major capital improvement works also contribute to safety by upgrading the structure to current industry standards.

Council also aims to ensure that its bridge structures are at all times sound and therefore safe for the loads they are required to carry.

## Primary Contribution to Community Outcomes

This activity contributes to the Community Outcomes Accessible, Green and Safe Waikato.

## Land Transport Programme

This activity is vital to ensuring route reliability throughout the district and that sections of the transport network are not cut off. The activity assists economic development, access and mobility and environmental sustainability. Most projects involving the replacement of a structure or major capital improvement works assist with safety and personal security.

## Where We Want To Go

Over the next 10 years Council aims to maintain its bridge and culvert stock in a safe and serviceable condition. Through regular and timely maintenance, Council aims to extend the life of each structure as long as viably possible.

## What We Plan To Do

Council plans to continue to routinely inspect its bridge stock and complete repairs and maintenance in a timely fashion. Where a structure cannot be maintained in a safe manner or it is no longer viable to maintain, then the structure is replaced.

Bridge maintenance is determined through bridge inspections and the level of expenditure depends on the state of the asset over time.

Where possible, high cost works such as bridge replacement are scheduled in conjunction with other major roading projects to regulate the annual total roading expenditure.

Project	2006/07\$	2007/08\$	2008/09\$
Bridge inspections	40,000	5,000	42,000
District wide maintenance	175,000	668,000	430,000
Rutherford Road	200,000		
Waitetuna Valley Road	120,000		
Wrights Bridge replacement in Hakarimata Rd/Riverview Terrace			698,000
Culvert replacement:			
Tahuna Rd	154,000		
Taniwha Road			215,000
Uapoto Rd		123,000	

## How will we know we are on track

Service Level	Checking Progress	Target 2006/7 to 2008/9	Target 2009/10 to 2015/16
Full compliance with Transit NZ standards for bridge construction and maintenance.	Biannual bridge inspection reports identify less than \$100,000 value of routine bridge repair.	Less than \$100,000	√
Prompt completion of scheduled bridge maintenance programmes.	All routine bridge maintenance work completed within one year of being identified, subject to funding.	100%	√
	All detailed bridge maintenance work completed within three years of being identified.	100%	√

## Footpaths

### Overview of the Activity

*This activity improves the quality of our pedestrian infrastructure by repairing or replacing damaged footpaths and installing new ones where appropriate to ensure that walking destinations are linked. Much of the districts' walking network is included in the road reserve (i.e. is placed alongside the road) while other walkways run off-road or into our many parks and reserves. To encourage more walking it is important that these walkways are connected and readily accessible.*

*Where repairs and new installation of footpaths is adjacent to the road edge, the kerb and channel and associated drainage system is often repaired or installed in conjunction with the footpath works.*

### Primary Contribution to Community Outcomes

This activity contributes to the Community Outcomes Accessible, Active, Sustainable, Thriving and Safe Waikato.

### Land Transport Programme

This activity assists with improving access and mobility and protects and promotes public health by encouraging people to exercise more.

### What We Plan To Do

Council plans to maintain its existing footpath network as its first priority. An annual amount is assigned to the installation of new footpaths, and potential projects are prioritised in consultation with the local Community Board.

Project	2006/07\$	2007/08\$	2008/09\$
Footpath repairs	281,000	375,000	351,000
New footpaths	168,000	115,000	117,000

### Where We Want To Go

Over the next 10 years Council would like to see the further establishment and development of an attractive walking network throughout the district, which encourages more physical activity. The footpath network, which is mainly located in the urban areas, contributes to this overall goal.

### How will we know we are on track

Service Level	Checking Progress	Target 2006/7 to 2008/9	Target 2009/10 to 2015/16
Footpaths are maintained in a safe serviceable condition.	All complaints (as recorded in Council's customer request management system) relating to the safety and serviceability of footpaths are responded to within 48 hours of receipt and any appropriate repair works are programmed and undertaken promptly.	100%	√
An annual increase in the community's perception of, and satisfaction with the footpaths in the district.	Results of the Annual Satisfaction Survey are monitored and there is an increasing trend in the percentage of respondents rating the district's footpaths as satisfactory (44% in 2005).	45% increasing to 47% by 2008/09	48% increasing to 54% by 2015/16

# Transportation Network Development and Maintenance

## Overview of the Activity

This activity is made up of a number of sub-activities, including:

- Pavement Maintenance
- Drainage Maintenance
- Kerb and Channel
- Carriageway Resurfacing
- Pavement Renewal
- Unsealed Roads
- Structure Planning

### **Pavement and Drainage Maintenance, Kerb and Channel**

Regular maintenance of the roading network ensures that the asset is maintained in a safe and serviceable condition, while extending the life of the asset to protect the investment that Council has made in it.

Maintenance of the roading network includes addressing surface faults, which can present a hazard to the motorist, and ensuring that drainage is well maintained and keeps the pavement layers free of excess water. Maintenance of the road surface includes the repair of potholes and seal failures, as well as the regular grading of the unsealed roads. Drainage maintenance includes the clearing and renewing of side drains and the repair and replacement of drainage systems and installation of kerb and channel and small culverts.

The surface of the road and the associated drainage is maintained in such a way that any flooding of traffic lanes is kept to a minimum.

Important pavement and drainage maintenance activities include:

- Grading of unsealed roads
- Addition of metal to unsealed roads
- Repair of pavement faults including potholes and digouts
- Clearing of roadside shoulders and drains
- Repairs to, and replacement of, culverts less than two metres in diameter
- Emergency works – attending to storm damage, flooding, slips, and other hazards such as fallen trees.

### **Carriageway Resurfacing, Pavement Renewal**

Roads are a major component of Council's transportation system, and represent a significant investment. The sealed surface of a road waterproofs the underlying pavement and provides an all-weather skid resistant surface for vehicles.

Pavement renewals are timed so that a road is reconstructed when it is no longer viable to maintain (that is, the cost to reconstruct the road is cheaper, or has more benefit than continuing to maintain it) and is therefore at the end of its useful life. Pavements also require upgrading for other reasons, for example, when traffic patterns have changed, or when crashes are occurring due to a fault in the road.

When pavements are renewed the work can often extend into the adjoining verges, particularly in the rural areas. In these situations, level areas for walking can be provided where there is a demonstrated need for walking facilities or where walking can be encouraged. Improvement works associated with pavement renewal can include improvements to intersections, widening of the traffic lanes, increasing sight distance through earthworks where visibility is restricted, reviewing and modifying signage and road marking, traffic calming works to modify driver behaviour, and the provision of safe access for pedestrian and cycle traffic. Some of this work may be funded from different cost centres, including minor safety, but the works are completed as one project.

Work is programmed based on computer modelling. The work to date indicates that on average 120km of resurfacing and 12km of pavement renewal per annum is a responsible service level over the next 10 years. The model will be run again during the life of this LTCCP and the results assessed against this current strategy.

### **Unsealed Roads**

Unsealed roads are addressed through three categories of work:

- Seal extension – where the unsealed road is fully designed and upgraded to a safe sealed road standard.
- Unsealed upgrade – where the unsealed road is improved (often to a designed standard compatible with a future seal extension project) in terms of alignment, width, surface; but remains unsealed.
- Isolated improvements – where the existing road is upgraded to improve safety or to reduce future maintenance costs. This activity slowly lifts the overall standard of the unsealed network over time by carrying out earthworks to improve sight distance or increase width in localised areas, minor realignments, improvements to drainage, and the pavement or surfacing layers.

### **Structure Planning**

The greater Hamilton City area is expected to experience 97 percent of the region's population growth, and this impacts on the district through high residential growth in the wards bordering Hamilton City. Subdivisional development impacts on the transport network by generating more road users in all modes, while also potentially changing the nature of an area if the expectations of the community change.

For the transport infrastructure to be sustainable the network has to be upgraded to cope with the greater demand, and it must be constructed in a timely manner so that it is available as the demand comes on stream. In line with Council policy, developers must fund the bulk of the costs of upgrading the infrastructure to support the growth. To do this, Council has reviewed its Development Contributions Policy and will apply it under the Local Government Act 2002.

## Roading Design Assumptions

In addition to the corporate level assumptions outlined at the beginning of the LTCCP, (particularly in relation to inflation, increasing contractor rates, and Land Transport New Zealand subsidies) there are also additional roading-specific assumptions that apply to this group of activities.

A roading project is designed and built in accordance with current industry best practices as described in the Land Transport NZ standards and guidelines manual. The roading designer calculates the depth of metal required for a new pavement based on a specific engineering process.

The structural integrity of the existing road is assessed through available information or by field inspection and testing. History and growth projections are used to assess vehicle usage and therefore the expected life of the road.

## Primary Contribution to Community Outcomes

These maintenance and renewal works continually improve the safety of the roading network and, over time, should assist in reducing the incidence and severity of crashes, particularly those attributable to road factors.

This activity contributes to the Community Outcomes Accessible, Active, Green, Sustainable, Thriving and Safe Waikato.

## What We Plan To Do

For resurfacing and pavement renewal, target lengths are set annually based on the results of the modelling from the pavement management system.

Priority lists of projects for pavement renewal, seal extension, unsealed upgrades and isolated improvements are developed and managed. Throughout the year projects may be held up and need to be deferred in which case the next project on the priority list will come up to take its place. Recognising that the state of the network can change throughout the year, newly identified projects, which are not on the list, are tested within the prioritisation systems to see if they should be included in the list and if so, where they rank in terms of priority. If savings are made on projects it may be possible to bring forward a project that was programmed for a future year.

### Structure Plans

Council is finalising structure plans for infrastructure in Tamahere and in Lorenzen Bay at Raglan. The structure plans detail the infrastructure required to support the projected growth and the cost to construct it over time. Development levies to fund this local infrastructure are then applied to all developments within the specific area.

In developing the structure plans Council acknowledges that the wider community will use parts of the infrastructure, particularly the arterial or through roads, and walkways and therefore Council funds these elements of public good. Over the next three years, Council will develop further structure plans selected from the list below:

- Raglan/Te Uku
- Matangi/Eureka/Gordonton/Tauwhare/balance of Tamahere
- Kainui/Te Kowhai/Whatawhata/Horotiu
- Te Kauwhata
- Maramarua
- Waikato Western Hills

## Operating Maintenance

### Pavement and Drainage Maintenance and Kerb & Channel

	2006/07\$	2007/08\$	2008/09\$
Pavement and drainage maintenance	3,450,000	3,570,000	3,650,000
District wide kerb and channel	163,000	167,000	118,000
District wide capital major drainage	220,000	179,000	236,000

# Transportation Network Development and Maintenance continued

## What We Plan To Do continued

### Carriageway Resurfacing and Pavement Renewal

	2006/07\$	2007/08\$	2008/09\$
120km per annum reseal	2,765,000	2,835,000	2,900,000
12km per annum area wide treatment (AWT)	3,885,000	3,976,000	3,789,000
Road reconstruction	804,000	872,000	
Thin asphalt surfacing	102,000	105,000	107,000

### Area Wide Treatment (AWT)

Area wide treatment in 2006/07 to 2008/09 will be selected from the following:

Blackett Road	Lumsden Road	Tahuna Road
Bow Street North And South	Manukau Road	Tainui Road
Collie Road	Matahuru Road	Tauwhare Road
Glen Murray Road	Monument Road	Te Akau Road
Gordonton Road	Newell Road	Te Kowhai Road
Hautapu Road	Okaeria Road	Te Ohaki Road
Herschel Street	Orini Road	Waikokowai Road
Hetherington Road	Princess Street Rotary	Waingaro Road
Highway 22	Riverview Road	Webb Street
Holland Road	Rotowaro Road	Whitikahu Road
Horotiu Road	Rutherford Road	Woodland Road
Lee Martin Road		

### Reconstruction

Over the next three years, Council plans to undertake reconstruction on Piako Road in 2006/07 at a cost of \$804,000 and Riverview and Waverley Roads in 2007/08 at a cost of \$872,000.

## What We Plan To Do continued

### Unsealed Roads

	2006/07\$	2007/08\$	2008/09\$
Cost of seal extension	3,340,000	2,720,000	3,280,000
Length of seal extension	9.3 km	7.3 km	7.5 km
Unsealed upgrades	838,000	844,000	1,200,000
Isolated improvements on rural unsealed roads	538,000	481,000	552,000

The following is a list of roads scheduled for seal extension in 2006/07:

Bell Road	Horahora Road	Rayner Road
Carter Road	Maungatawhiri Road	Tregoweth Lane
Driver Road	Ohautira Road	Waitetuna Valley Road

Seal extension in 2007/08 and 2008/09 will be selected from the following:

Karakariki Road	Ohautira Road	Dixon Road
Mahuta Station Road	Valintine Road	Maungatawhiri Road
Waitetuna Valley Road	Nicholls Road	Williamson Road
Ruapuke Road	Pond Road	Te Hutawai Road
Tikotiko Road	Te Papatapu Road	

### Unsealed Upgrades

Unsealed upgrades in 2006/07 to 2008/09 will be selected from the following:

Kawhia Road	Ormsby Road	Te Papatapu Road
Mangiti Road	Ruakiwi Road	Waimai Valley Road
Matira Road		

### Structure Plans

	2006/07 \$	2007/08 \$	2008/09 \$
Structure Planning <i>Which includes Structure Plans for the following areas:</i>	4,615,000	1,658,000	2,018,000
- Raglan/Lorenzen Bay	3,146,000	353,000	360,000
- Tamahere	1,470,000	990,000	1,013,000
- Other growth areas		315,000	645,000

# Transportation Network Development and Maintenance continued

## Land Transport Programme

These activities assist economic development by ensuring the reliability of the roading network, which in turn supports commerce and social interaction.

The activities assist personal safety and personal security, improve access and mobility particularly to remote rural areas, and contribute to the protection and promotion of public health where walking tracks are provided.

Implementation of the structure plans in growth areas creates the opportunity to fully upgrade sections of the infrastructure, or construct completely new assets, providing Council with the opportunity to meet the vision of providing an affordable, integrated, safe, responsive and sustainable transport system. Hence this activity contributes to the objectives of assisting economic growth, assisting safety and personal security, improving access and mobility, promoting and protecting public health, and ensuring environmental sustainability.

## Where We Want To Go

Council continues to aim to manage its roading network in a manner that maximises Council's investment in its infrastructure while maintaining a safe and appropriate level of service to the public.

Council aims to have structure plans in place for all growth areas to ensure that the transportation network and other infrastructure can be funded and provided, such that growth throughout the district is sustainable.



## How will we know we are on track

Service Level	Checking Progress	Target 2006/7 to 2008/9	Target 2009/10 to 2015/16
An annual increase in the community's perception of and satisfaction with the Waikato district roads overall.	Results of the Annual Satisfaction Survey are monitored and there is an increasing trend in the percentage of respondents rating roads overall as satisfactory (63% in 2005).	64% increasing to 66% by 2008/09	67% increasing to 73% by 2015/16
Roading assets are maintained in a serviceable and safe state. The number of requests is monitored over time and the analysis of them is used as a basis for continuous improvement.	All complaints (as recorded in Council's customer request management system) are monitored and are responded to within 24 hours of receipt and any appropriate repair works are programmed and undertaken promptly.	100%	√
	The number and nature of requests is monitored over time and analysed to form a basis to target continuous improvement.	Declining trend in number of complaints	√
Sealed roads are scheduled for resurfacing in a timely manner (prior to a deterioration of waterproofing, and ability to provide skid resistance).	On average 120km of sealed roads are resurfaced each year; as supported by the pavement management system.	120 km average per year	√
Sealed roads are scheduled for pavement renewal in a timely manner (at the point where renewal has greater cost benefits than continued maintenance).	On average 12km of sealed roads are renewed each year; as supported by the pavement management system.	12 km average per year	√
Contracts for projects are completed in accordance with the specifications.	Contracts are regularly monitored for performance and any non-performance is addressed promptly by the contractor and particularly within the specifications of the contract documents.	100% compliance with contract conditions	√
Seal extension works constructed to current industry standards, and are completed to approved budgets and timeframes.	Safety audits are completed on a selection of projects and any issues identified are appropriately addressed.	Safety audits completed	√
	Seal extension projects are completed to agreed budgets and timeframes.	100%	√
Council will develop and implement Structure Plans in identified growth areas.	Structure plans are developed for: <ul style="list-style-type: none"> <li>- Raglan/Te Uku</li> <li>- Matangi/Eureka/Gordonton/</li> <li>- Tauwhare/balance of Tamahere</li> <li>- Kainui/Te Kowhai/Whatawhata/Horotiu</li> <li>- Te Kauwhata</li> <li>- Maramarua</li> <li>- Waikato Western Hills</li> </ul>	At least two structure plans are completed each year	√ or as agreed by Council

# Passenger Transport

## Overview of the Activity

Council contributes funding to bus services that operate within the district. The administration of these services is carried out by Environment Waikato. The government, through Land Transport New Zealand, provides a subsidy on the operation of approved services. School bus runs are not part of this activity.

Council aims to support and encourage services where the community signals a need for them, where they will be supported by patronage, and where they can be provided at reasonable cost.

The management of service levels for the actual bus service lies with Environment Waikato.

The services currently supported include:

- Hamilton to Huntly service
- Huntly internal service
- Meremere to Pukekohe service
- Raglan to Hamilton service

Council also maintains and provides bus stops and some bus shelters for these services.

## Primary Contribution to Community Outcomes

This activity contributes towards achieving the Community Outcome Accessible Waikato.

## Land Transport Programme

This activity contributes to the objectives of improving access and mobility particularly for those who do not own a car. Council is exploring additional rural services where they prove to be affordable.

By promoting passenger transport Council enhances the environment, providing an alternative to the car, and promotes public health as passengers generally walk to and from the bus stops.

## What We Plan To Do

**Council intends to maintain the four existing bus routes. Council will also investigate additional rural services.**

Project	2006/07\$	2007/08\$	2008/09\$
Huntly internal passenger transport	10,000	10,000	10,000
Huntly to Hamilton passenger transport	97,000	100,000	102,000
Meremere to Pukekohe passenger transport	2000	2000	2000
Raglan to Hamilton passenger transport	40,000	41,000	42,000
Investigation & implementation of new services	5,000	5,000	5,000
New bus shelters	10,000	10,000	11,000

## Where We Want To Go

Council supports the provision of public transport as a means to limit congestion, provide an alternative to cars, and provide transport options for those who may not have access to a private motor vehicle.

Over time Council would like to see an increase in the number of bus routes supported, and be able to show a rising trend in patronage numbers.

## How will we know we are on track

Service Level	Checking Progress	Target 2006/7 to 2008/9	Target 2009/10 to 2015/16
The Council supports all well-patronised passenger transport services as identified and managed by Environment Waikato (EW).	The WDC Passenger Transport funding agreement with EW is reviewed annually.	Annual Review	√
	Passenger numbers are monitored throughout the year.	Monitoring throughout the year	√

# Regulatory

## Overview of the Activity

The major regulatory activities in regards to transportation include:

- Issuing of resource consents (related to transport)
- Parking enforcement
- Bylaws enforcement
- Management of road openings
- Rural fire control administration
- Rural (RAPID) and urban numbering

### Issuing of resource consents

Council has statutory requirements on the District Plan and the Resource Management Act to process resource consents.

### Parking

Council has parking time restrictions in Huntly, Ngaruawahia and Raglan. An enforcement officer is on duty frequently but randomly in each of these towns to ensure that cars do not over-stay. A time limit on parking encourages short stays and increases the chances of other shoppers and visitors to the towns being able to find a park easily and conveniently.

### Bylaws Administration

Council has several bylaws related to transport activities including the Livestock Movement Bylaw that must be administered and enforced in accordance with the relevant legislation.

### Road Openings

Council has a requirement under the Local Government Act to manage people working on the road, particularly utility network operators working within the road reserve. The objectives of managing road openings are to ensure that people working in the road do so safely and do not present a hazard to the public or other road user, and that Council assets are reinstated properly on completion of any works.

### Rural Fire Control Administration

Council provides a fire control service outside the urban fire districts to enable a quick response to be made to rural fires. This is achieved through co-operation with the New Zealand Fire Service and the use of Council and contractor resources. A District Fire Plan is updated annually, which details the responsibilities, resources and procedures that are used to meet these objectives.

## Primary Contribution to Community Outcomes

This activity contributes to the Community Outcomes Accessible, Thriving and Safe Waikato.

## Land Transport Programme

These activities assist economic development by ensuring vested assets are of a robust standard and through maintaining good traffic flow particularly during road works. Safety and personal security are assisted through traffic management of works and by providing rural fire protection. Environmental sustainability is also assisted.

## What We Plan To Do

Council continues to manage regulatory activities in accordance with legislative requirements.

## Where We Want To Go

Council aims to manage regulatory activities in a positive manner educating and negotiating with stakeholders to comply with legislation rather than through rigid enforcement.

## How will we know we are on track

Service Level	Checking Progress	Target 2006/7 to 2008/9	Target 2009/10 to 2015/16
Roading-related resource consents are issued in accordance with legislative requirements.	Legislated processing times are met.	100%	√
Parking enforcement patrols are carried out as follows: <ul style="list-style-type: none"> <li>- Not less than 12 hours per month in Ngaruawahia and Huntly and,</li> <li>- Not less than eight hours per month in Raglan.</li> </ul>	Average patrolling hours are reported on a monthly basis, showing: <ul style="list-style-type: none"> <li>- Not less than 12 hours per month in Ngaruawahia and Huntly and,</li> <li>- Not less than eight hours per month in Raglan</li> </ul>	100%	√
Rural Fire - Council fulfils the requirements of the Waikato District Council Fire Plan – October 2005 to September 2007.	The Fire Plan obtains a favourable audit from the National Rural Fire Authority (NRFA) every five years. Any issues raised by the NRFA during the audit or at any time are addressed promptly.	Favourable audit result	√
Adequate response time to notification of rural fires.	Rural fires are responded to within one hour of notification by a Rural Fire Officer.	100%	√

## Estimated Expenses and Revenue Statement - Transportation Services

A forecast for the 10 years ending 30 June 2016

	2006/07 \$000's	2007/08 \$000's	2008/09 \$000's	2009/10 \$000's	2010/11 \$000's	2011/12 \$000's	2012/13 \$000's	2013/14 \$000's	2014/15 \$000's	2015/16 \$000's
<b>Activity Expenditure</b>										
Bridges	856	865	931	947	959	1,022	1,031	1,126	1,178	1,182
Corridor Maintenance	2,543	2,637	2,718	2,902	2,964	2,742	2,797	2,803	2,864	2,915
Footpaths	664	675	736	746	757	818	830	841	896	908
Passenger Transport	166	170	174	178	182	185	194	191	194	196
Regulatory	477	487	500	510	520	530	542	547	557	559
Road Safety	87	88	90	92	94	96	98	99	101	101
Transport Network Administration	2,877	2,937	2,994	2,983	3,176	3,315	3,404	3,476	3,614	3,861
Transport Network Development & Maintenance	7,808	8,672	9,561	10,161	10,477	11,643	12,389	13,175	14,620	15,429
	<b>15,478</b>	<b>16,531</b>	<b>17,704</b>	<b>18,519</b>	<b>19,129</b>	<b>20,351</b>	<b>21,285</b>	<b>22,258</b>	<b>24,024</b>	<b>25,151</b>
Less:										
Internal Interest	103	197	179	158	279	388	491	644	715	769
<b>Activity Expenditure</b>	<b>15,375</b>	<b>16,334</b>	<b>17,525</b>	<b>18,361</b>	<b>18,850</b>	<b>19,963</b>	<b>20,794</b>	<b>21,614</b>	<b>23,309</b>	<b>24,382</b>
<b>Activity Revenue</b>										
Fees/Other Income	283	298	294	731	445	1,646	1,730	1,224	1,304	1,402
Financial Contributions	3,690	3,726	3,759	3,792	3,821	3,850	3,874	3,898	3,918	3,940
Grants/Subsidies	9,684	9,841	9,914	11,014	12,071	12,348	13,928	12,886	13,208	12,704
	<b>13,657</b>	<b>13,865</b>	<b>13,967</b>	<b>15,537</b>	<b>16,337</b>	<b>17,844</b>	<b>19,532</b>	<b>18,008</b>	<b>18,430</b>	<b>18,046</b>
Less:										
Internal Interest	50	50	50	50	50	50	50	50	50	50
<b>Activity Revenue</b>	<b>13,607</b>	<b>13,815</b>	<b>13,917</b>	<b>15,487</b>	<b>16,287</b>	<b>17,794</b>	<b>19,482</b>	<b>17,958</b>	<b>18,380</b>	<b>17,996</b>
<b>Activity Surplus/ (Deficit)</b>	<b>(1,768)</b>	<b>(2,519)</b>	<b>(3,608)</b>	<b>(2,874)</b>	<b>(2,563)</b>	<b>(2,169)</b>	<b>(1,312)</b>	<b>(3,656)</b>	<b>(4,929)</b>	<b>(6,386)</b>
<b>Activity Surplus/ (Deficit) funded by</b>										
Council Reserves	(3,468)	86	111	138	167	219	244	270	297	327
General Rate	(6,544)	(10,783)	(11,867)	(12,620)	(13,041)	(14,106)	(14,827)	(15,618)	(17,244)	(18,299)
Income Applied to Capital Works	8,244	8,178	8,148	9,608	10,311	11,718	13,271	11,692	12,018	11,586
	<b>(1,768)</b>	<b>(2,519)</b>	<b>(3,608)</b>	<b>(2,874)</b>	<b>(2,563)</b>	<b>(2,169)</b>	<b>(1,312)</b>	<b>(3,656)</b>	<b>(4,929)</b>	<b>(6,386)</b>

## Estimated Capital Funding Requirements - Transportation Services

A forecast for the 10 years ending 30 June 2016

	2006/07 \$000's	2007/08 \$000's	2008/09 \$000's	2009/10 \$000's	2010/11 \$000's	2011/12 \$000's	2012/13 \$000's	2013/14 \$000's	2014/15 \$000's	2015/16 \$000's
<b>Capital Expenditure</b>										
Growth	4,836	1,837	2,254	2,338	2,382	2,405	2,443	2,479	2,511	2,544
Level of Service	5,441	5,038	5,635	8,226	8,013	9,861	13,617	11,051	12,450	12,318
Renewal	9,269	9,331	9,415	8,978	10,671	10,991	10,987	11,403	11,586	11,479
	<b>19,546</b>	<b>16,206</b>	<b>17,304</b>	<b>19,542</b>	<b>21,066</b>	<b>23,257</b>	<b>27,047</b>	<b>24,933</b>	<b>26,547</b>	<b>26,341</b>
<b>Loan Repayments (internal and external)</b>	<b>1,502</b>	<b>1,645</b>	<b>1,782</b>	<b>2,059</b>	<b>1,873</b>	<b>2,073</b>	<b>2,038</b>	<b>2,172</b>	<b>2,246</b>	<b>2,101</b>
<b>Total Capital Funding Requirements</b>	<b>21,048</b>	<b>17,851</b>	<b>19,086</b>	<b>21,601</b>	<b>22,939</b>	<b>25,330</b>	<b>29,085</b>	<b>27,105</b>	<b>28,793</b>	<b>28,442</b>
<b>Funded By</b>										
External Loans Raised	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
General Rate	6,076	2,299	2,620	3,136	3,189	3,217	3,789	3,513	3,301	2,570
Income Applied to Capital Works	8,244	8,178	8,148	9,608	10,311	11,718	13,271	11,692	12,018	11,586
Internal Loans Raised	0	0	0	0	0	0	880	0	0	0
Replacement Reserves	4,728	5,374	6,318	6,857	7,439	8,395	9,145	9,900	11,474	12,286
	<b>21,048</b>	<b>17,851</b>	<b>19,086</b>	<b>21,601</b>	<b>22,939</b>	<b>25,330</b>	<b>29,085</b>	<b>27,105</b>	<b>28,793</b>	<b>28,442</b>