

Infrastructural



infrastructural group

Overview of Group

This group is made up of the following activities of Council:

- City Services operations
- Stormwater and land drainage
- Transport
- Waste management
- Wastewater
- Water supplies

Infrastructural Group activities provide many of the traditional key services associated with councils, such as water, sewerage, roads and refuse collection. To provide these services, Council owns and manages many large and complex assets on behalf of the community.



Climate Change

Areas where Council needs to provide for the effects of climate change are Civil Defence and Emergency Management planning, utility infrastructure including Stormwater pipes, drains, detention ponds and treatment. All this planning has an additional cost which is difficult to quantify at this stage. Over time, as a better appreciation of the effects of climate change on the Rotorua district are understood, costs will be more reliably calculated.

Stormwater and Land Drainage

Stormwater is an area where there has been some lag in asset investment over recent years. It is a very technical area requiring sophisticated hydraulic modelling to ensure sustainable engineering solutions. Significant work has been done in recent years to model stormwater movements and a detailed plan is now being developed that will set out the amount and size of stormwater works needing to be built in various parts of Rotorua. Council will continue with its backlog and upgrade expenditure in stormwater infrastructure. This will, over time, reduce the risk of flooding from 1 in 100 year storm events.

The major strategic issue will be development of a local stormwater strategy in accordance with the recently completed Regional Stormwater Strategy. This document requires Council to prepare catchment-wide consent applications for key catchments. A continuation of the capital upgrade programme to address a backlog in the urban network is included in the Ten Year Plan. No significant changes to levels of service as proposed.

Transport

The Transport Activity Plan is in line with requirements of the Land Transport Management Act 2003 which requires the development of a 'balanced' land transport programme. This means getting the mix right in terms of infrastructure development, alternative modes of transport, access and safety. To achieve this, the Rotorua Transport Strategy has been prepared to demonstrate compliance with the Land Transport Management Act and various national and regional strategies.

The Transport Strategy also links the individual components which include:

- Rotorua Urban Transportation Study 2003
- Safety Management Systems
- Bike Rotorua
- Road/Rail Strategic Assessment
- Passenger Transport Infrastructure
- Travel Demand Management strategy

From these individual strategies a number of major projects have been allowed for in the Ten Year Plan.

Road Upgrades

- Victoria Street Arterial
- Lake Road 4-Laning
- Eastern Arterial
- Ngongotaha/Fairy Springs Road 4-Laning

One of the major projects that Council will be involved in is the Victoria Street arterial. When complete it will provide a new arterial route from Old Taupo Road through to Te Ngae Road, eliminating the need to use parts of Amohau Street (State Highway 35). Although outside the timeframe of this Ten Year Plan, it is proposed to transfer responsibility for Amohau Street to Rotorua District Council and Victoria Street to the state highway road network.

infrastructural group cont.

Passenger Transport

- New transportation centre

Travel Demand Management

- Travel Demand Management strategy implementation

Cycleways

- Ngongotaha to CBD

For the projects above, no significant changes in levels of service are anticipated. However, there will be backlog and/or excess capacity in some areas.

There will be ongoing focus on:

- ride quality
- economic development
- surface water discharge to the environment
- safety

Rail

Council advocates the continued public ownership of the rail corridor.

Transport (Road Safety and Sustainability)

Key strategic issues for the next ten years include:

- Delivery of Council's Road Safety Strategy. In particular education initiatives are key to achieving a lower crash rate on the district's roads. The crash trend is a reducing one and we will aim to continue this by delivering projects and interaction with the community in conjunction with engineering and enforcement works. Council is largely driven by the crown road safety targets which attract a 75% government subsidy.
- Delivery of Council's cycling improvements and alternative travel encouragement programmes. Given the uncertain future of oil and likely changes in travel modes, either by choice or necessity, alternative forms of transport will be needed. Council

intends to plan and implement an integrated cycle network over the coming ten years. This work will partially fulfil the districts, and region's Land Transport Management Act (LTMA) requirements which are essential for sustainable growth. Council is also presently focusing on 'inter modal' travel, travel demand management opportunities, and more co-ordination as part of regional initiatives.

- Ongoing external partnerships and collaborative initiatives including: Drivewise, Police, NZ Transport Agency, ACC, Toi Te Ora - Public Health Service, Environment Bay of Plenty and Environment Waikato.
- Responding to state sector review of transport and resultant changes of central government roles and agencies.
- Devolution of services to local government level and changes in funding criteria.
- Giving effect to the cycling policy review. This will present a significant change in emphasis for this mode of travel in the city. The policy outlines a number of key performance indicators and targets for the coming years.
- Undertake integrated marketing, in conjunction with Environment Bay of Plenty, to promote the benefits of using public transport.

The Drivewise Rotorua Trust represents community interest in road safety and sustainable transport. Its vision for transport safety and sustainability is "a vibrant, safe community with walking, cycling and road networks and public transport facilities that link our residential communities to shopping, parks, tourism and events venues".

The Bay of Plenty Regional Transport Committee is a governance body made up of representatives of the regional council, district and city councils, the New Zealand Transport Agency (NZTA), cultural interests, and people drawn from the wider community to represent the NZTA's five objectives, ie economic development, safety and personal security, public health, access and mobility, and environmental sustainability.

The Regional Transport Committee has prepared the Bay of Plenty Regional Land Transport Programme 2009/10 - 2011/12 for consultation and public submission. This document is important to the Rotorua District Council as it establishes regional priorities for many of the district's transport activities, including all state highway activities, local road improvements, walking and cycling and community road safety activities (as outlined in the Ten Year Plan). It also discusses regional funding for transportation projects to be allocated through the National Land Transport Fund.

Transport (State Highway Management)

The management and administration of the physical highway network within the district is undertaken by Council. This is a unique situation. Council works within the NZ Transport Agency management structure to deliver this output.

Council has delegated authority for operational management of the State Highway network. This includes capital and maintenance works. For this, Council is paid an administration fee but works are funded entirely from NZ Transport Agency budgets.

Presently the transport sector is being reshaped as a result of central government's Transport Sector Review. This activity area is involved indirectly through its involvement with the agency.

The district will need significant highway improvements within the ten year period. These include 4-laning projects and motorway construction. Council will be at the forefront of planning and delivery of these needs although this is dependent on national funding constraints and priorities.

The activity will likely expand and contract in terms of output and staffing in line with maintenance and project work over this period.

infrastructural group cont.

Key strategic issues for the next ten years include:

- Roles and functions of crown agencies (and this activity area) remain uncertain into the future. Additionally, funding streams and prioritisation, both regionally and nationally, are being heavily restructured and continue to evolve. The activity provides Council with an input and a view of the regional and national land transport function from both a highway and local road viewpoint, thereby covering the complete network. Current highway level of service and capital/safety project advances are governed nationally by the NZ Transport Agency. While Council can advocate for Rotorua, final decisions are made by that agency. Additionally, transport and planning initiatives and joint work streams are being undertaken with regional authorities and neighbouring territorial authorities in an effort to reduce uncertainties in project planning and cost. (It should be noted that Rotorua District falls within two regional council areas).
- A significant number of large highway projects (infrastructure) will exist into the future for the district. These include:
 - the eastern corridor
 - Ngongotaha Road 4-laning
 Additionally, a range of lesser improvements has been identified. Given that income for the activity is derived from works expenditure, this will vary during the course of the Ten Year Plan.
- All projects and associated investigations, designs and consent processes are included in the national highway planning regime. While Council will potentially deliver some or all of these, they will be funded externally and be at the discretion of the NZ Transport Agency. Therefore individual projects and timelines have not been included at this time.

Waste Minimisation

Council has a waste minimisation strategy that was reviewed in 2006. The strategy provides a number of goals and objectives that contribute towards reducing the amount of waste managed through the landfill. The strategy is focused around the waste hierarchy of reduction, reuse, recycle, recovery and residual. Some of the elements in the strategy include:

- **Continuing to operate the RDC landfill for the foreseeable future.**
This includes continuing to develop the Atiamuri Road site with additional cells over time, as required to meet the needs of Rotorua business and residential communities.
- **Establishing transfer stations for rural communities, (to the extent Council is able to secure resource consents).**
There are currently transfer stations at Tarawera and Rotoiti and these will be open for an additional day per week over the summer months. Council would also like to establish a transfer station at Rotoma but has not been able to identify a site that meets community acceptance and has for now left the matter in that community's hands.
- **Operating the In-town Recycling Centre.**
This centre is very well used by the community and has allowed the Rotorua District to reach levels of reduction, reuse and recycling that are comparable with other cities of similar size in New Zealand.



Future Options for Waste Minimisation

Over recent years there has been a number of submissions to draft annual plans, requesting a kerbside recycling collection service. There have also been calls from parts of the community for Rotorua, as New Zealand's tourism capital, to have a more obvious green image with a residential kerbside recycling collection service.

A waste minimisation subcommittee has explored a range of new waste minimisation options. As a result of feedback during the consultation phase on the draft Ten Year Plan the council has called for a detailed investigation and report into the best way to deliver recycling services for the future. This report will also consider options for a kerbside recycling collection service. The report will be completed in the early part of the 2009/10 year so that any decisions to amend existing waste policy and current practice can be implemented from the commencement of the 2010/11 year.

The key to waste minimisation is increasing the level of individual (both residential and commercial) responsibility for reducing waste. Those local authorities that have adopted a zero waste goal, focus strongly on individual responsibility to the extent that many parks and reserves now do not have litter bins as they place responsibility on those that bring waste into reserves, to take the waste out with them, dispose of it properly, and without the need for a local authority to provide bins.

This is one of the more important issues facing Council. It has the potential to substantially affect costs: upwards, if current trends continue of providing waste services at every available situation, or downward if there is greater individual responsibility for waste minimisation.

infrastructural group cont.

To ensure there is commitment to a higher level of service for residential recycling during the Ten Year Plan, a financial provision has been included in 2010/11. There are still many questions associated with a possible kerbside service, including:

Issues	Some Options
<ul style="list-style-type: none"> ■ Frequency of service 	<ul style="list-style-type: none"> ■ Weekly ■ 2 weekly ■ Monthly
<ul style="list-style-type: none"> ■ Collection container 	<ul style="list-style-type: none"> ■ 50 litre bin, 120 litre, 240 litre ■ Wheelie bins ■ Households supply own
<ul style="list-style-type: none"> ■ Contractor 	<ul style="list-style-type: none"> ■ Castlecorp (ie in-house) or tender out
<ul style="list-style-type: none"> ■ Sorting of material 	<ul style="list-style-type: none"> ■ Household sorting at the kerb ■ At time of collection ■ At recycling centre
<ul style="list-style-type: none"> ■ Pricing of service 	<ul style="list-style-type: none"> ■ Separate targeted rate ■ Include with current rubbish collection rate ■ General rate ■ Pay contractor directly
<ul style="list-style-type: none"> ■ Future of current In-town Centre 	<ul style="list-style-type: none"> ■ Continue on a reduced scale ■ Close and refer those without kerbside service to landfill recycling site
<ul style="list-style-type: none"> ■ Business 	<ul style="list-style-type: none"> ■ No service ■ Extend to commercial premises

It is also important to understand the various elements of the recycling chain as each element requires separate consideration. In summary they are:

- { Collection from kerbside
- Sorting material into recycling and reused streams
- Storage
- { Transport
- { Marketing and sales.

New waste minimisation legislation enacted in 2008 requires a much greater leadership role for local government, commencing with:

- (a) A waste assessment
- (b) A waste minimisation plan; and
- (c) Bylaw review

In the meantime any financial decisions taken should keep all the strategic options open.

In preparing the draft Ten Year Plan \$800,000 per annum has been included for eight years, totaling \$6.4 million, to provide a waste minimisation 'solution' that will meet community expectations and wider recycling objectives. There will be a corresponding targeted rate on all properties that receive the service. Considerably more analysis is need before commencing any service of this kind, including identifying levels of public support.

'Waste 2 Gold'

The Wastewater Treatment Plant (WWTP) is an efficient system for the treatment of sewage from the city's 58,000 residents and business premises. The outputs of the wastewater treatment plant include:

- Water containing levels of nutrients, including nitrogen and phosphorus, which is pumped to settling ponds in the Whakarewarewa Forest. It is then spray irrigated to parts of the forest on a rotational basis to strip remaining nutrients down to a lower level before the water enters Lake Rotorua from the ground waste system.
- Sludge, which is sediment that cannot be treated any further. Currently, sludge is de-watered and then transported to the landfill for disposal. This process will be prohibited from 2012 onwards under a National Environmental Standard.

infrastructural group cont.

In 2005, Scion was engaged to identify options for the further use of sludge. They identified five options for potential beneficial reuse, and further consideration was given to an incineration option. However, after a short list of qualified consortia were invited to submit proposals, it proved economically unsustainable.

Scion has now proposed a new solution that has very high levels of sustainability and is branded 'Waste 2 Gold'.

The underlying principle of the Waste 2 Gold programme is the conversion of 'waste carbon' into useable energy. Scion is developing technology platforms "to maximise recovery of embodied energy from low-value carbon substrates, generate added value co-products, and minimise the environmental footprints of waste carbon generators and energy users."

Because Scion and the council are both based in Rotorua, they can work together seamlessly. This provides an exciting opportunity to be real leaders in New Zealand, in waste management. The benefits of the Waste 2 Gold opportunity, which encompasses both biosolids and broader landfill opportunities, include:

1. Significant extension of landfill life.
2. Increase in gate revenue at the landfill.
3. Process likely to be a 'permitted activity' as both the WWTP and the landfill sites are already consented.
4. Generation of revenue from end-products (eg methane to combined heat and power).
5. Potential to mine the old landfill, increasing future landfill capacity.
6. Potential to gain greenhouse gas credits through voluntary reduction in organic waste entering the landfill.
7. Elimination of biosolids currently going to landfill.
8. Substantial reduction in greenhouse gas emissions.
9. RDC alignment with the Waste Minimisation Bill.

10. Reduction in costs associated with the waste levy being introduced in 2009.
11. Elimination of carbon supplementation costs at the WWTP through the production of biologically available carbon (eg acetic acid).
12. Elimination of potential health issues associated with pathogens through disposal of biosolids at the landfill.
13. Creation of value-added products.

This project is one that, if successful, will provide a sustainable long term solution for the disposal of the Wastewater Treatment Plant's sludge.

Landfill Gas Flaring Project

The Waste 2 Gold project will significantly decrease the costs of building and operating the landfill for Council and potentially provide a future income stream as the waste is "mined" to provide a biofuel feed stock. However, it will adversely affect the availability of landfill gas for the landfill gas to energy project that Council has been developing with a private company.

The landfill gas to energy project is the combustion of methane by means of a gas flare. The sole source of revenue is from the sale of carbon credits. The company has obtained emission reduction units (carbon credits) from the New Zealand Government and Council has been offered an opportunity to participate in or purchase the project as a whole.

Rotorua Lakes Water Quality

The most important environmental issue facing Rotorua District is that of lake water quality of the district's 14 Lakes. This requires a long term sustainable solution. Rotorua's lakes play an iconic role in the district's identity. Their restoration is critical for Rotorua, as a visitor destination, and as a place with quality recreational opportunities for our communities.

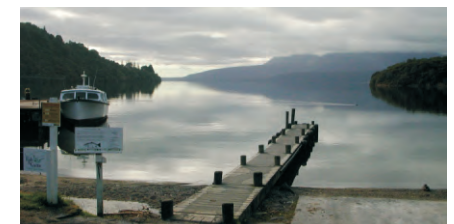
There has been significant scientific investment in understanding the cause of the decline of lake water quality of many Rotorua lakes, and into the potential solutions.

Environment Bay of Plenty, Rotorua District Council and Te Arawa Lakes Trust have worked collaboratively to develop an understanding of the scientific issues, to implement strategic initiatives for improving lake water quality, and to monitor the effectiveness of investment.

The Government, through the Ministry of the Environment, has also played a major role in assisting with funding. In 2008 the ministry announced a \$72 million contribution towards restoration strategies. Council is building sewerage schemes for lakeshore communities that currently rely on septic tanks, which adversely affect lake water quality by releasing nutrients into groundwater which ultimately reaches the lakes.

Plans have so far been concluded for the four priority lakes: Rotorua, Okareka, Rotoiti and Rotoehu.

Council has already completed lakeshore community sewerage schemes for Mourea, Marama Point and Okawa Bay/Duxton Hotel and these were commissioned in 2006. Water quality in the Okawa Bay area of Lake Rotoiti is now showing encouraging signs of improvement.



infrastructural group cont.

Wastewater

The Wastewater Activity Plan is in line with the requirements of the Resource Management Act, Local Government Act and Health Act.

The activity involves the collection, treatment and disposal of wastewater including related operation and maintenance activities.

Several major strategic documents have been prepared to address long term issues related to the activity. These include:

- Rotorua Basin Wastewater Strategic Plan
- Strategy for the Lakes of Rotorua District
- Lake Rotorua/Rotoiti Action Plan - complete
- Lake Okareka Catchment Management Action Plan
- Rotorua District Council Assessment of Water and Sanitary Services

The Rotorua Basin Wastewater Strategic Plan identifies around \$45 million of capital expenditure for upgrade work over a 50 year period. Of this, approximately \$21 million is included in this Ten Year Plan, and the remainder is for projects that will take place after 2018/19.

From the high level documents listed above, a number of major projects has been allowed for in the Ten Year Plan:

- \$12.5 million over 2008/2009 and 2009/2010 for Brunswick/Rotokawa sewage collection and transfer to the Wastewater Treatment Plant.
- \$9.7 million over 2008/2009 to 2010/2011 for the Lake Okareka Sewerage Scheme.
- \$14.7 million over 2008/2009 to 2011/2012 for the Okere/Otaramarae/Whangamarino Sewerage Scheme.
- \$11.9 million over 2008/2009 to 2012/2013 for the Gisborne Point/Hinehopu Sewerage Scheme.
- \$15.0 million over 2008/2009 to 2012/2013 for the Hamurana/Awahou Sewerage Scheme.
- \$13.8 million over 2012/2013 to 2014/2015 for the Lake Tarawera Sewerage Scheme.

- \$12.4 million over 2011/2012 to 2012/2013 for the Lake Rotoma Sewerage Scheme.
- \$6.0 million from 2014/2015 to 2016/17 for the Mamaku Sewerage Scheme.
- \$1.84 million from 2008/2009 to 2010/2011 for the sewerage of unserviced parts within the Urban Sewerage Area.
- \$6.60 million from 2008/2009 to 2011/2012 for the upgrade of the Wastewater Treatment Plant.
- \$5.30 million from 2010/2011 to 2016/2017 for the upgrade of the Land Treatment System.
- \$8.23 million from 2008/2009 to 2018/2019 for the upgrade of the Urban Sewer Reticulation Network.

NB. These costs are reported in 2009 dollars whereas in the accounts they include inflation.

Funding of these schemes includes subsidies from the Ministry for the Environment and from Environment Bay of Plenty.

These schemes will benefit both the health of the community and the environment through lakes water quality improvements.

Environment Bay of Plenty has signalled a commitment to subsidising some of the schemes. Final approval and the amount will be determined after the final application is approved. Where the financial commitment from Environment Bay of Plenty is known it is shown in the respective scheme information in the wastewater activity plan.

Improving water quality of lakes will require converting existing individual on-site wastewater treatment and disposal systems servicing lakeside communities, to water-borne wastewater collection treatment and disposal systems. Provision has been made for implementation of several lakeside communities sewerage schemes over the next ten years.

Council is obliged to comply with Environment Bay of Plenty regional rules and consent conditions for discharge of nutrients to water. Nutrients, such as phosphorous and nitrogen, are the single biggest contributor to a poor Trophic Level Index (TLI) rating, a key measure of water quality.



infrastructural group cont.

The adjacent table shows anticipated reductions in nutrients in the district's lakes as a result of Rotorua District Council's commitment to reticulated sewerage schemes replacing septic tanks:

	Nutrient loading from existing on-site sewage disposal (tonnes per year by scheme)		% Reduction of current loading from proposed schemes	
	Nitrogen	Phosphorus	Nitrogen	Phosphorus
Lake Rotorua Scheme				
Rotokawa/Brunswick	5.7	0.25	95%	100%
Hamurana/Awahou	5.7	0.25	95%	100%
Rural	0	0	0%	0%
Total tonnes/yr	11.4 tonnes/yr of nitrogen 0.5 tonnes/yr of phosphorus			
Lake Rotoiti Scheme				
Mourea/Okawa Bay	1.79	0.12	96.8%	100%
Okere Falls/Otaramarae	2.48	0.15	96.8%	100%
Gisborne Pt/Hinehopu	2.13	0.15	85%	100%
Rural	0	0	0%	0%
Total tonnes/yr	6.4 tonnes/yr of nitrogen 0.42 tonnes/yr phosphorus			
Lake Rotoma Scheme				
Rotoma	4.93	0.05	85%	100%
Rural	0	0	0%	0%
Total tonnes/yr	5.8 tonnes/yr of nitrogen 0.05 tonnes/yr of phosphorus			

	Nutrient loading from existing on-site sewage disposal (tonnes per year by scheme)		% Reduction of current loading from proposed schemes	
	Nitrogen	Phosphorus	Nitrogen	Phosphorus
Lake Okareka Scheme				
Okareka	2.4	0.02	100%	100%
Rural	0	0	0%	0%
Total tonnes/yr	2.4 tonnes/yr of nitrogen 0.02 tonnes/yr of phosphorus			
Lake Tarawera Scheme				
Tarawera	3.61	0.2	100%	100%
Rural	0	0	0%	0%
Total tonnes/yr	3.61 tonnes/yr of nitrogen 0.2 tonnes/yr of phosphorus			

Additional capacity required from future growth of service areas will be provided by planned upgrades of existing assets.

For more information on lakes water quality and Trophic Level Index (TLI) ratings refer to Environment Bay of Plenty's Long Term Council Community Plan and other resources.



infrastructural group cont.

Water Supplies

Over recent years, the government has increased the required standards for public water supplies, community operated private water supplies, and even individual supplies to households. These standards have increased the costs for Council in three ways. Firstly, as a result of more onerous monitoring programmes on all water supplies in our district; secondly, from the requirement to undertake a comprehensive risk assessment of all water supplies, and thirdly, because of increased capital costs of raising Council's community operated water supplies to the standard expected.

One million dollars has been invested in UV light treatment disinfection systems for each of the urban and rural water supplies. The financial effect of this is to increase operating costs and hence, the cost of water, requiring a targeted rate or water charges through metering.

Increasing development and difficulty in obtaining larger water allocations from existing sources has required a strategic plan for sustainable water sources and a servicing network to be prepared. This has identified significant capital works which have been included in the Ten Year Plan. These include investigation of new source development, large trunk delivery mains to developing areas and additional storage reservoirs.

Key strategic issues for the next ten years include:

- Requirement to service areas where development/growth is expected - \$4.4 million.
- Installation of backflow prevention devices - \$2.19 million from 2009 to 2011.
- Additional reservoir storage for the urban area - \$2.97 million in 2013
- Consideration of additional water metering.

Growth components of the above projects are to be funded by Development Contributions.

Potential Significant Negative Effects

Stormwater and Land Drainage

Negative environmental effects generated from this activity include stormwater reticulation impacting on the quality of the lakes. A detailed assessment of this has been completed. See "Rotorua City Urban Stormwater Quality and Prediction of Environmental Impacts" – NIWA. Ongoing monitoring programmes check contaminant loads and efficiency of management regimes.

Transport

Transport can impact negatively, for example air and water pollution, noise, glare and vibration. It is proposed that the land use components, noise, glare etc be handled by way of an environmental effects zone through the district plan. Off-site effects are mitigated by way of management methodologies.

Transport (State Highway Management)

The activity in itself creates no significant negative effects. However, work streams stemming from this activity can, and these are mitigated or avoided using consent, environmental enhancement and consultation processes.

Waste Management

Waste has a negative effect on the environment and management aims to reduce that waste. The balance between affordability and funding is key in that high costs lead to illegal dumping. This is an ongoing issue.

Wastewater

Wastewater has a negative effect on the environment and particularly on Rotorua lakes. The activity of collecting and treating wastewater reduces the negative effects.

Water Supplies

Abstraction of water resources from the natural environment may have a negative effect on the environment but is subject to resources consents and conditions.

These and a number of other negative effects identified, and associated mitigation options, are provided in the respective Activity Plan sections.

Asset Management Plans Information

The key assets used in this Activity Group are:

- Buildings
- Wastewater Treatment Plant
- Land
- Roading
- Stormwater drainage
- Landfill
- Street Signals, Signs, Lighting
- Bridges
- City Focus
- Footpaths
- Water works
- Wastewater Reticulation
- Footpaths (Engineering)
- Waste Management Rural Bin Sites

Further details are provided in each activity section.



infrastructural group cont.

Net Cost of Service

Net Cost of Service by Activity (\$000s)	Actual 2007/08	Annual Plan 2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
City Services Operations	1,287	1,558	1,463	1,474	1,493	1,515	1,558	1,593	1,605	1,619	1,622	1,664
Stormwater & Land Drainage	2,724	2,495	2,540	2,656	2,694	2,779	2,836	2,882	2,838	2,862	2,870	2,787
Transport	7,039	6,561	(1,147)	(3,980)	(815)	60	1,309	(11,919)	(4,541)	(1,720)	975	2,600
Waste Management	1,827	1,838	1,300	774	993	916	1,610	1,782	1,457	1,582	1,720	1,459
Wastewater	(121)	(3,973)	(8,134)	(11,318)	(13,905)	(14,966)	(13,903)	(5,417)	(5,908)	(7,703)	(6,839)	(6,536)
Water Supplies	(783)	(943)	(929)	(1,969)	(2,125)	(1,284)	(1,519)	(1,764)	(1,902)	(2,515)	(2,875)	(3,167)
Total Net Cost of Service	11,973	7,536	(4,907)	(12,363)	(11,665)	(10,980)	(8,109)	(12,843)	(6,451)	(5,875)	(2,527)	(1,193)



infrastructural group cont.

Infrastructural Assets

Asset Type	Cost/Valuation (\$000s)	Accumulated Depreciation (\$000s)	Book Value 1 July 2008 (\$000s)
Bridges	13,117	690	12,427
Buildings	7,640	603	7,037
City Focus	230	99	131
Computer Hardware	653	505	148
Computer Software	433	420	13
Database	424	258	166
Engineering	21	10	11
Footpaths	26,259	1,385	24,873
Furniture	157	139	19
Land	11,353	-	11,353
Landfill	6,305	3,071	3,234
Office Equipment	371	259	112
Parking	922	205	716
Parks and Reserves	58	6	52
Plant and Machinery	1,466	873	592
Roading	231,106	11,718	219,387
Stormwater drainage	60,144	3,088	57,056
Street Signal. Sign & Light	4,970	938	4,031
Vehicle	76	68	8
Waste Mgnt Rural bin Site	749	47	702
Wastewater Reticulation	114,513	7,751	106,762
Wastewater Treatment Plant	41,562	4,541	37,021
Water Works	76,550	4,228	72,322
	599,077	40,903	558,174