

6.0 LEVELS OF SERVICE

6.1 Introduction

A key objective of this Asset Management (AM) plan is to match the level of service provided by the asset with the expectations of customers. This requires a clear understanding of customers' needs, expectations and preferences. The levels of service defined in this section will be used:

- to inform customers of the proposed type and level of service to be offered
- to enable customers to assess suitability, affordability and equity of the services offered
- as a focus for the AM tactics proposed to deliver the required level of service
- to measure the effectiveness of this AM plan
- to identify the costs and benefits of the services offered

While a large amount of the Transportation assets have a high expected service life, this could be impacted by a number of issues. These include long term funding (not meeting or receiving NZTA subsidy for a project, a reduction in either NZTA subsidy and/or no increase in local share), local government amalgamation (assets being delivered through a regional regime) and possibly privatisation.

The target levels of service for transport current industry standards and are based on:

Community Outcomes: Provide guidelines for the scope of current and future services offered and manner of service delivery, and define general levels of service which the community wishes to receive.

Customer Expectations: Information gained from customers on expected quality and price of services.

Statutory Requirements: Legislation, regulations, environmental standards and Council By-laws that impact on the way assets are managed (i.e.: resource consents, building regulations, health and safety legislation). These requirements set the minimum level of service to be provided.

Strategic and Corporate Goals: Provide guidelines for the scope of current and future services offered and manner of service delivery, and define specific levels of service which the organisation wishes to achieve.

The significant service for Transportation is to allow for the safe and efficient movement of people and goods. The significant assets are considered to be bridges/structural assets (refer to risk section with listed bridges), main arterial roads and those roads which provide access to services such as water pump stations in times of emergencies.

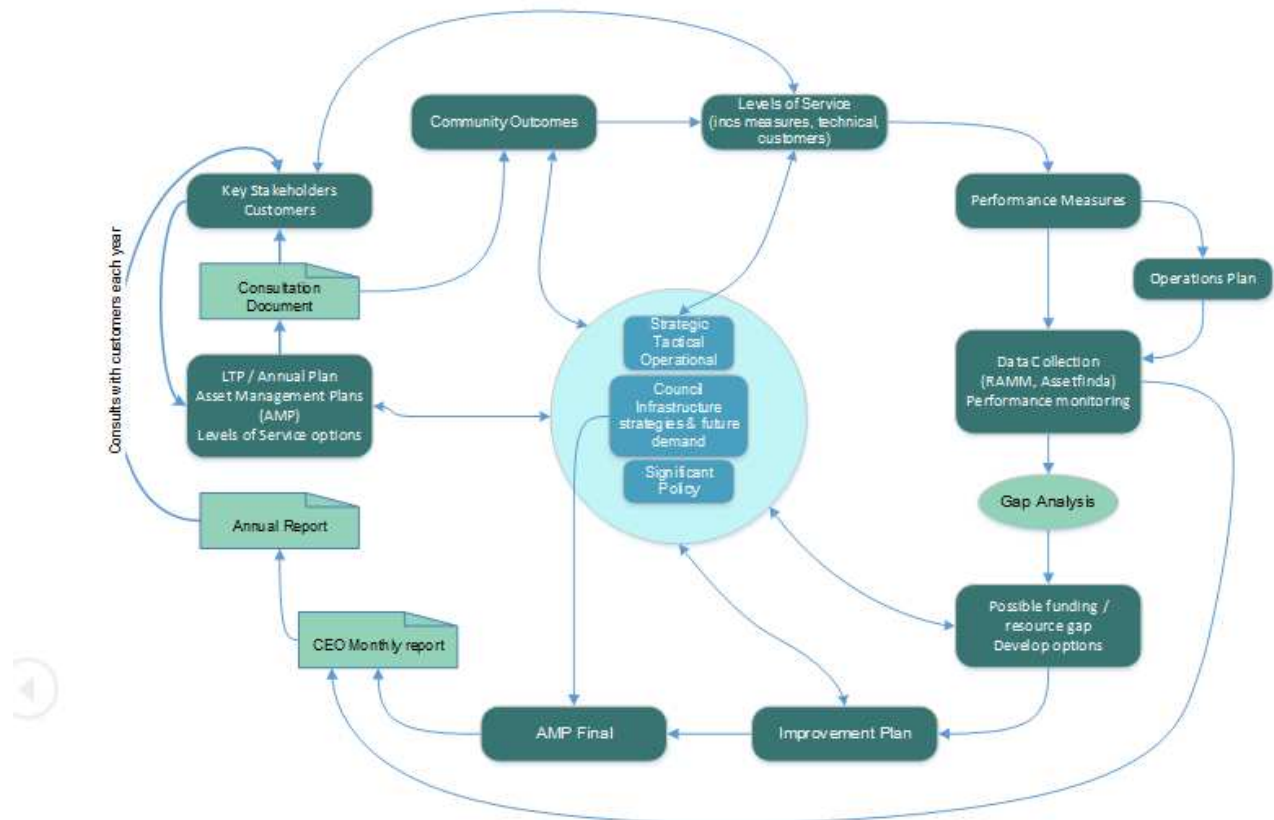


Figure 1 above shows the links with LTP, Levels of service and AMP documents.

6.2 Types of Levels of Service

6.2.1 OPERATIONAL

Current operational levels of service for transport are scheduled in Table 6.2. The levels of service stated are “how we maintain our existing assets” for our customers.

Operational levels of service fall into two categories:

Technical (asset/product related) measures, which relate to the outputs the customer receives in terms of:

- Quality
- Capacity
- Quantity
- Environmental impacts
- Availability
- Cost/ affordability
- Legislative requirements
- Comfort
- Maintainability
- Safety
- Reliability and performance

Service Quality (service process related) measures, which relate to how the customer receives the service in terms of:

- Tangibles (information sheets etc)
- Responsiveness
- Courtesy
- Empathy (understanding, individual attention)
- Assurance (knowledge, courtesy, trust, confidence)

6.2.2 TACTICAL

The levels of service stated within Table 6.1 are “why we build new assets”. These are thresholds which warrant the creation of a new asset in order to maintain an optimum level of service for the asset.

6.2.3 IMPLEMENTATION

The implementation levels of service stated within Table 6.3 are “the standard we build a road asset to”.

6.2.4 NATIONAL

Levels of service developed in Table 6.4 have been developed based on the One Network Road Classification customer service outcomes (CLOs). The ONRC supports a shift in the way we manage the road network at both national and regional levels. The most important concept behind the ONRC is that it places the customer at the centre of every investment decision.

The associated Customer Levels of Service for each functional category have been developed to reflect the following six fit for purpose outcomes.

Mobility

- 1) Reliability: the consistency of travel times that road users can expect.
- 2) Resilience: the availability and restoration of each road when there is a weather or emergency event, whether there is an alternative route available and the road user information provided.
- 3) Speed: indicates the optimal speed for each road. The optimal speed is the speed that is appropriate for road function (classification), design (including safety) and use. Optimal speeds support both safety and economic productivity.

Safety

How road users experience the safety of the road.

Amenity

The level of travel comfort experienced by the road user and the aesthetic aspects of the road environment.

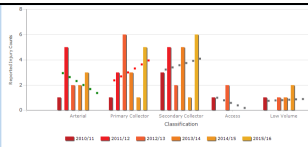
Accessibility

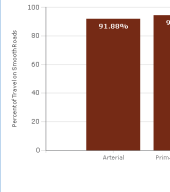
The ease with which people are able to reach key destinations and the transport networks available to them, including landuse access and network connectivity.

There are very few legislation requirements for Transportation asset, therefore the risk they aren't met is low/rare. Generally, resource consents are generally required where large earthworks are required. Reporting on NZTA technical criteria are reported to NZTA via the yearly achievement report, each July. Traffic Management plans are required for all events occurring on or within the road reserve and are approved by the relevant road controlling authority.

6.3 Levels of Service

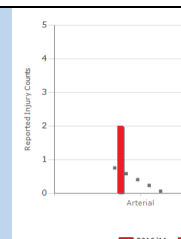
Below is a table to ONRC Customer Levels of Service (CLoS) with the highlighted rows being the ones we currently measure and/or report on. Note: These levels of service haven't been consulted with the wider community.

ONRC Customer Level of Service (CLoS)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current performance	Comment
Value of Money	OM1		Activity Management Plan and AMP Improvement Plan demonstrate a long term programme of customer level of service.	No	No	The road network is being maintained efficiently and effectively to deliver the CLoS Outcomes of the ONRC.	AMP and AMP Improvement Plan contains the technical output measures of the ONRC (where the means of measurement states this) and will continually improve the cost efficiency and effectiveness of service delivery as detailed in these measures.		
Safety	OM1	We provide a transport network for the safe movement of people and goods.*	Reducing number of serious and fatal injuries on network each financial year as part of a 5 year trend.	Yes	Yes	The road and roadside are becoming safer to drive on as shown in the five-year trend in serious and fatal injuries.	<u>Arterial to Access (Low Volume):</u> No. (with 5 year trend being established) by classification.		Currently measured using NZTA Crash Analysis System (CAS).
	OM2	We provide a transport network for the safe movement of people and goods.*	Collective Risk (Crash Density) – Annualised S+F per km by classification and Risk rating	Yes	No	The roads and roadsides are being maintained in a way that means I feel safe when driving them.	Report Risk rating and crashes per km by classification.		Roads are currently not rated for risk (KiwiRAP) so unable to report against the measure, consider once risk ratings have been established.
	OM3	We provide a transport network for the safe movement of people and goods.*	Personal Risk (Crash Rate) – Annualised S+F per veh.km travelled (See KiwiRAP and Risk Rating)	Yes	No	The roads and roadsides are being maintained in a way that means I feel safe when driving them.	Report Risk rating and crashes per 100 million vehicle km by classification.		Roads are currently not rated for risk (KiwiRAP) so unable to report against the measure, consider once risk ratings have been established.
Resilience	OM1		The number of journeys impacted by unplanned or emergency event(s).	No	No	The number of journey impacted by unplanned events is acceptable.	Number of incidents and the total number of journeys impacted per year by classification.		Not deemed to be required due to the level of classification.
	OM2		Journeys not made due to	No	No	An appropriate level of effort is put into risk	Number of Journeys not made per year by classification.		Not deemed to be required due to the level of

ONRC Customer Level of Service (CLOs)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current per						
			unplanned events or emergency event(s) where there is not viable alternative			mitigation on roads where there is no viable alternative access, if it were to be closed by an unplanned event.								
Amenity	OM1	Smooth travel exposure	Smooth Travel Exposure (STE) Index for sealed roads.	Yes	Yes	The smoothness of my journey is as I would expect when I take into account the importance of the road.	<p>% by road classification:</p> <p><u>Current for urban roads:</u> Vehicle kilometres travelled on sealed local roads with less than 500vpd with roughness ≤180 NAASRA</p> <p>Vehicle kilometres travelled on sealed local roads with 500 to 4,000vpd with roughness ≤150 NAASRA</p> <p>Vehicle kilometres travelled on sealed local roads with 4,000 to 10,000vpd with roughness ≤120 NAASRA</p> <p>Vehicle kilometres travelled on sealed local roads with greater than 10,000vpd with roughness ≤110 NAASRA</p> <p><u>Current for rural roads:</u> Vehicle kilometres travelled on sealed local roads with less than 1000vpd with roughness ≤150 NAASRA</p> <p>Vehicle kilometres travelled on sealed local roads with greater than 1000vpd with roughness ≤130 NAASRA</p>	 <table border="1"> <caption>Percentage of Private Exposure by Road Classification</caption> <thead> <tr> <th>Road Classification</th> <th>Percentage of Private Exposure</th> </tr> </thead> <tbody> <tr> <td>Arterial</td> <td>91.00%</td> </tr> <tr> <td>Primary</td> <td>91.00%</td> </tr> </tbody> </table>	Road Classification	Percentage of Private Exposure	Arterial	91.00%	Primary	91.00%
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								<table border="1"> <tr> <td>Classification</td> <td>Taupo District Council</td> </tr> <tr> <td>Arterial</td> <td>Taupo District Council</td> </tr> <tr> <td>Primary Collector</td> <td>Taupo District Council</td> </tr> <tr> <td>Secondary Collector</td> <td>Taupo District Council</td> </tr> <tr> <td>Access</td> <td>Taupo District Council</td> </tr> <tr> <td>Low Volume</td> <td>Taupo District Council</td> </tr> </table>	Classification	Taupo District Council	Arterial	Taupo District Council	Primary Collector	Taupo District Council	Secondary Collector	Taupo District Council	Access	Taupo District Council	Low Volume	Taupo District Council
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Travel Time Reliability	OM1		Predictability of travel time – measures the variability of journey travel time.	No	No	The travel time to reach my destination is predictable														
	OM2		Bus journeys – The variability in departure time to that scheduled.	No	No	The travel time to reach my destination is predictable.														
Accessibility	OM1		Access to Public Transport available	No	No	The bus services is what I would expect in an area like this.	Proportion of the population living within 500m of a bus stop and 1km from a rail or bus rapid transit station by classification.													
	OM2(a)		Truck Travel Exposure – Proportion of the network not traversable to Class 1	No	No	The trucks that need to use these roads can do so.	Report the network length inaccessible for each classification and heavy vehicle type.													
	OM2(b)		Truck Travel Exposure – Proportion of the network not traversable to 50 Max (and HPMVs)	No	No	The trucks that need to use these roads can do so.	Report the network length inaccessible for each classification and heavy vehicle type.													
	OM3		Roads operated to facilitate journeys (per 1800v/lane/km).	No	No	The road and corridor are sufficient for the number of vehicles and type using them.														
Safety	PM1		Permanent Hazards are	Yes	No	Reduce the likelihood of crashes occurring by	Monitor through sample network inspections													

ONRC Customer Level of Service (CLOs)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current per
							signs and out of context hazards. Max 3 faults per section (From Local Gov Maint. Guidelines). <u>Access (Low Volume):</u> Report no. of faults. Provisional service level is: Generic warning signs and out of context hazards. Max no. faults per section (From Local Gov Maint. Guidelines).	
Safety	PM2		COPTTM implanted at roadworks	No	No	Reduce the likelihood of crashes occurring by maintaining sight lines and identifying hazards	Report no. of audits undertaken and % of Audits 'Acceptable' from criteria (Acceptable as defined in COPTTM).	
	PM3		Sight Distances (vegetation)	?	No	Reduce the likelihood of crashes occurring by maintaining sight lines and identifying hazards	10% of quarterly sample. Always complies.	
	PM4		Street lighting – to provide and maintain lighting in a consistent and fit for purpose manner to support the facilitation of safe movement and personal security.	No	No	Reduce the likelihood of crashes occurring by maintaining sight lines and identifying hazards both day and night.		
	PM5		Reducing Trend of Serious & Fatal crash through loss of control, wet and night time crashes	No	No	Reduce the likelihood of crashes occurring by maintaining sight lines and identifying hazards.	No. as part of a 5 year trend by classification.	
	PM6		Reducing Trend of Serious and Fatal injuries at intersections.	Yes	Yes	Reduce the likelihood of crashes occurring by maintaining sight lines and identifying hazards.	No. as part of a 5 year trend by classification.	



ONRC Customer Level of Service (CLoS)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current per
							<p>10km <u>Primary collector:</u> Report no. of faults in a 5% quarterly sample provisional service level is: Urban - 3 deficient locations per 1km Rural - 4 deficient locations per 10km <u>Secondary collector:</u> Report no. of faults in a 5% quarterly sample provisional service level is: Urban - 3 deficient locations per 1km Rural - 6 deficient locations per 10km <u>Access:</u> Report no. of faults in a 5% quarterly sample provisional service level is: Urban - 3 deficient locations per 1km Rural - 8 deficient locations per 10km <u>Access (Low Volume):</u> Report no. of faults in a 5% quarterly sample provisional service level is: Urban - 4 deficient locations per 1km Rural - 10 deficient locations per 10km</p>	
	PM9		Percentage of customer service requests relating to roads and footpaths responded to in line with the timeframes set out in the RCA's	Yes	Yes	Reduce the likelihood of crashes occurring by providing a safe road.	Percentage requests meeting RCA set timelines in LTP as per DIA guidelines. Target 90% are responded to within 5 working days.	2016/2017

ONRC Customer Level of Service (CLoS)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current per
			deficiencies are identified and remedied appropriately and efficiently.			providing a safe road.		
Safety	PM13		Reducing Trend of Serious and Fatal injuries to vulnerable road users.			Reduce the likelihood of crashes occurring by providing a safe road.	No. as part of 5 year trend by classification.	
	PM14		All traffic restraining devices such as bridge side rails, guardrails are maintained in an effective operating condition.			Minimise the consequences of crashes when they do occur by providing forgiving roads and roadsides.	Report no. of faults in a 10% quarterly sample. Provisional service level is Always effective.	
	PM15		Roadside safety zones are maintained free from unauthorised obstructions and the development of new hazards.			Minimise the consequences of crashes when they do occur by providing forgiving roads and roadsides.	<u>Arterial:</u> 10% quarterly sample. Provisional level of services is No unauthorised roadside obstructions while maintaining the current standard of roadside safety zone. <u>Primary collector:</u> 5% annual sample Provisional level of service is: No unauthorised roadside obstructions most of the time while maintaining the current standard of roadside safety zone. <u>Secondary to Access (Low Volume):</u> 5% annual sample Provisional level of service is: Usually no unauthorised roadside obstructions while maintaining the current standard of roadside safety zone.	
	PM16		RCAs have strategies in	No	No	Minimise the consequences of crashes	<u>Arterial and Primary Collector:</u> RISA ,Urban KiwiRap, or Safety Risk	

ONRC Customer Level of Service (CLoS)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current per
			Plan in pace and actionable.			through robust routes and viable alternatives.	journeys. <u>Access to Access (Low Volume):</u> Plan is in place and operational, including implementing preventative actions, to mitigate against significant scale events that will interrupt customer journeys.	
Resilience	PM2		Number of events where journeys are lost or impacted due to loss or road function through proactive maintenance not taking place.	No	No	The possibility that my journey is impacted by an unplanned event is minimised by providing the customer confidence to make the journey through robust routes and viable alternatives.	<u>Arterial to Primary Collector:</u> No. <u>Secondary collector to Access (Low Volume).</u> Reporting not required.	
	PM3		A plan is in place that details that the alternative routes available for vulnerable routes are robust in case of route closure.			The possibility that my journey is impacted by an unplanned event is minimised by providing the customer confidence to make the journey through robust routes and viable alternatives.	<u>Arterial to Primary Collector:</u> Rural roads: Route nearly always available through either robust current route or viable alternative. Urban roads: N/A. <u>Secondary Collector to Access (Low Volume):</u> Reporting not required.	
	PM4		An Emergency Procedures and Response Plan is in place and actionable. (EPRP).			The impact of unplanned events on my journey is being minimised by being prepared to respond.	<u>Arterial to Secondary Collector:</u> Plan is in place and operational. The plan, reflective of breadth, scale, likelihood and consequence of event and lifeline considerations, details plans for prioritisation for restoration of passage and access depending on classification and route criticality. It includes for continuity of essential needs until access is restored. <u>Access to Access (Low Volume):</u> Plan is in place and operational. Plan reflects lower classification and is reflective of breadth, scale, likelihood and consequence of event and lifeline considerations. It details plans for continuity of	

ONRC Customer Level of Service (CLoS)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current per
	PM6		Public transport customers are informed within 15 minutes of a significant change in travel times, via appropriate on-route mediums.			The impact of unplanned events on my journey is being minimised by providing consistent and up to date information to customers informing public transport customers.	15 minutes	
Travel Time Reliability	PM1		A process is in place to coordinate planned activities and events minimising customer impact, taking into account road function and any changes in priority by mode that may occur.			Travel time to reach my destination is predictable and acceptable by managing the impact of activities on the network.	<u>Arterial:</u> Process minimises disruptions to customers through restricting planned activities that have more than a minor effect on required flow capacity to off peak and low flow periods. <u>Primary Collector to Secondary Collector:</u> Process minimises disruptions to customers through coordinating network access for planned activities. Activities restricting required capacity flows create only moderate delays to customer journeys. <u>Access to Access (Low Volume):</u> Process minimises disruptions to customer through coordinating network access for planned activities and maintaining access is not excessive for road users.	
	PM2		Delays due to planned activities shall not exceed x% of the typical travel time for key journeys.		No	Travel time to reach my destination is predictable and acceptable by managing the impact of activities on the network.	<u>Arterial:</u> Compliance with a maximum of 10 minute or 10% delay in travel time for key journeys. <u>Primary collector to Access (Low Volume):</u> Process can be a combination of restricting delays up to 1 hour and the customer shall be informed of those expected delays such that they can make an informed decision	

ONRC Customer Level of Service (CLOs)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current per
			mediums.					
	PM5		Where planned delays exceed 20mins, information is made available to customers at least x days before travel.		No	Travel time to reach my destination is predictable and acceptable by providing information regarding delays.	<u>Arterial:</u> 30 days <u>Secondary Collector to Access (Low Volume):</u> 10 days	
	PM6		RCA's shall have a network/corridor operating framework in place to ensure operation of the network focusses on moving people and goods.		No	Travel time to reach my destination is predictable and acceptable by maximising effective capacity.	<u>Arterial:</u> Comply, network operating framework demonstrates which road users typically have priority access to the network. <u>Secondary to Primary collector:</u> Comply, network operating framework demonstrates mixed use environments with mixed access priorities by mode, place and time. <u>Access to Access (Low Volume):</u> Reporting not required.	
Amenity	PM1		At least 95% of the sealed road network meets specified levels of ride comfort.			An appropriate level of comfortable ride by maintaining road roughness.	<u>Arterial:</u> Report % Provisional service level is: Urban<=130, Rural<=120 NAASRA <u>Primary Collector:</u> Report % Provisional service level is: Urban<=140, Rural<=120 NAASRA <u>Secondary Collector:</u> Report % Provisional service level is: Urban<=140, Rural<=130 NAASRA <u>Access:</u> Report % Provisional service level is: Urban<=150, Rural<=150 NAASRA <u>Access (Low Volume):</u> Report % Provisional service level is: Urban<=170, Rural<=180 NAASRA	

ONRC Customer Level of Service (CLoS)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current per
			provided, it should be compliant with MOTSAM, RTS2 and the Traffic Control Devices Manual			through the network by providing adequate traffic facilities for way finding.		
	PM3		Land Use Planning – organisations have a transition plan in place so that access requirements documented in the District Plan are implemented and take into account the ONRC customer levels of service for Accessibility.			Ease of access to and through the network by providing infrastructure that allows users to perform their role.	<u>All road classifications:</u> Plan is in place.	
Accessibility	PM4		Access to adjoining land for new customers should not be restrictive but balanced against minimising impact to existing users.			Ease of access to and through the network by providing infrastructure that allows users to perform their role.	<u>Arterial:</u> Provisional service level: Some land use access for road users both rural and urban areas. <u>Primary Collector:</u> Provisional service level: Land use access for road users generally permitted. <u>Secondary Collector:</u> Provisional service level: Land use access for road users generally permitted. <u>Access:</u> Provisional service level: Access to all adjacent properties for land owners. <u>Access (Low Volume):</u>	

ONRC Customer Level of Service (CLOs)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current per
			the network maintained in an economically sensible manner that allows for safe travel at a sensible and appropriate speed.			through the network by providing infrastructure that allows users to perform their role.	100% of network by length is accessible. <u>Primary to Secondary collector:</u> Report %. Provisional service level is 99% of network by length is accessible. <u>Access to Access (Low Volume)</u> Report %. Provisional service level is 95% of network by length is accessible.	
	PM8		RCA has a strategy in place to demonstrate it is managing active road users demands and ensuring new assets are consistent with the ONRC guidelines.			An accessible network, for everyone by providing accessibility to active road users.	<u>Arterial:</u> Some separation of road space in urban areas. Strategy in place. <u>Primary collector to Access (Low Volume)</u> Should expect mixed use environments with some variability in the road environment, including vehicle speed. Strategy in place.	
	PM9		RCA has a process that demonstrates it is managing Corridor Access Requests, ensuring all utility access to the network complies.			An accessible network, for everyone by providing accessibility to utilities.	Process to be referenced in RCA Asset Management Improvement Plan.	
Accessibility	PM10					An accessible network, for everyone by providing accessibility to the community.	Process to be referenced in RCA Asset Management Improvement Plan	
	PM11		RCA shall demonstrate it is expanding access to HMPV and 50 Max vehicles to meet the changing			An accessible network, for everyone by providing accessibility for freight and goods to move productively.	To be developed.	

ONRC Customer Level of Service (CLOs)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current per
								2016/2017 1.2 km 6,658 m2
	EM2		Chipseal resurfacing quantity (lane km and m2)	Yes	Yes	Assurance that the work we do is necessary is co-ordinated and is delivering value for money by doing work at the right time.	Report achieved quantities for previous year, planned quantities for current year and requested quantities for proposed year for each classification.	2014/2015 31.6 km 232,254 m2 2015/2016 24.6 km 194,609 m2 2016/2017 58.0 km 235,654 m2
	EM3		Asphalt resurfacing quantity (lane km and m2)	Yes	Yes	Assurance that the work we do is necessary is co-ordinated and is delivering value for money by doing work at the right time.	Report achieved quantities for previous year, planned quantities for current year and requested quantities for proposed year for each classification.	2014/2015 0.1 km 869 m2 2015/2016 0.2 km 962 m2 2016/2017 0 km 0 m2
	EM4		Unsealed road metalling quantity (km and m3)	Yes	Yes	Assurance that the work we do is necessary is co-ordinated and is delivering value for money by doing work at the right time.	<u>Secondary collector to Access (low volume):</u> Report quantity delivered for previous year, planned for current year and requested for proposed year for each classification.	2014/2015 56.0 km 2,148 m2 2015/2016 16.9 km 1,054 m2 2016/2017 32.9 km 1,637 m2
Value for Money	EM5		All significant (by cost) work categories	No	No	Assurance that the work we do is necessary is co-ordinated and is delivering value for money by doing work at the right time.		

ONRC Customer Level of Service (CLoS)	ONRC Outcome Measure	Link to TDC current level of service	Brief Description	Reporting required	Currently reported	Customer outcome measure	How we measure it	Current per
						continually seeking better ways for doing things by delivering the service at the best price.	year by classification. Lane km by classification and network vehicle km travelled calculated by Asset Register for each classification.	2016/2017 =
	EM9		Pavement resurfacing	Yes	Yes	Assurance that the service provided is at the best price and we are continually seeking better ways for doing things by delivering the service at the best price.	Report actual costs for previous year, planned costs for current year and requested costs for proposed year by classification. Lane km by classification and network vehicle km travelled calculated by Asset Register for each classification.	2014/2015 Chipseal = \$7 AC = \$98,715 2015/2016 Chipseal = \$7 AC = \$118,00 2016/2017 Chipseal = \$9
	EM10		Routine Pavement Maintenance (Sealed and Unsealed)	Yes	Yes	Assurance that the service provided is at the best price and we are continually seeking better ways for doing things by delivering the service at the best price.	Report actual costs for previous year, planned costs for current year and requested costs for proposed year by classification. Lane km by classification and network vehicle km travelled calculated by Asset Register for each classification.	2014/2015 Sealed = \$56 Unsealed = \$8 2015/2016 Sealed = \$88 Unsealed = \$8 2016/2017 Sealed = \$86 Unsealed = \$7
	EM11		Unsealed road metalling	Yes	Yes	Assurance that the service provided is at the best price and we are continually seeking better ways for doing things by delivering the service at the best price.	Report achieved costs for previous year, planned costs for current year and requested costs for proposed year by classification. Lane km reported by Asset Register (vkt N/A) for each classification.	2014/2015 = 2015/2016 = 2016/2017 =
Value for money	EM12		All significant (by cost) work categories	No	No	Assurance that the service provided is at the best price and we are continually seeking better ways for doing things by delivering the service at the best price.		
	EM13		\$/lane.km and \$/vkt travelled	No	No	Assurance that the service provided is at the		

Below are the Levels of service from the previous AMP which have been consulted on.

Note: An asterisk * identified the performance measure in the Long Term Plan.

Number	Links to Community Outcome	Level of Service	How we measure it (customer)	How we measure it (technical)	Current LoS Performance	How We Monitor Performance
T1	Economy	Sufficient capacity to meet the demand of today and of future growth	Justified complaints about the drop in level of service are programmed to be remedied in the LTP Sufficient capacity	Road widening is carried out as modelling indicates a drop in levels of service to either E or F.	No complaints in year 12/13. No levels of service E or F when last modelled in 2010.	Modelling updated on year basis. Customer service requests/feedback
T2	Economy	Sufficient capacity to meet the demand of today and of future growth	Strategic roads are planned and constructed to cater for the traffic growth indicated within structure plans.	Strategic roads are planned and constructed to cater for the traffic growth indicated within structure plans and growth models.	Post ETA enhancement projects are designed to cater for traffic and pedestrian growth.	Structure plans indicate strategic road links needed for the future. Traffic volumes.
T3	Economy Environment	A footpath network that meets the demands of today and of future growth.	Urban streets to have a footpath on one side.	Footpath matrix is used to prioritise annual footpath programme.	38km of urban streets have no footpath on either side (August 2008).	RAMM database records the lengths of footpaths constructed.
T4	Economy Environment	Suitable cycle routes to meet the demands of today and of future growth	Length of cycle paths/lanes increasing.	Length of cycle paths/lanes increasing.	Taupo District has approximately 37km of cycle paths and/or cycle lanes.	Asset valuation data (August 2008) records length of cycle paths/lanes.
T5	Economy	The road network is suitable for the safe movement of people and goods	The road network is safe.	Injury crashes in Taupo District are decreasing.	Injury crashes on the Taupo District network (including State Highways and private roads): In 2010 fatalities 1, serious 7, minor 40, non-injury 65, total crashes compared In 2009, fatalities 2, serious 21 minor 49 and non-injury 121.	CAS data from NZTA, crash history over last 5 year period.

Number	Links to Community Outcome	Level of Service	How we measure (customer)	How we measure it (technical)	Current LoS Performance	How We Monitor Performance
03	Economy	We provide a transport network for the safe movement of people and goods.*	The level of satisfaction with the roading network is met.	The level of satisfaction with the roading network is met.	Efficient road network Customer satisfaction was 89% in last survey.	Measured by independent Community survey.
04	Economy Environment	A quality footpath network appropriate for its level of usage.	Footpaths are maintained to reduce trip hazards.	Maintenance intervention when displacement greater than 10mm for Taupo CBD, Taupo urban areas Turangi and other urban areas.	Quality footpath network Maintenance intervention when displacement greater than 10mm for Taupo CBD, Taupo urban areas Turangi and other urban areas. The current level of service for footpaths is that 80% of footpaths in the district fall within the level of service standard for the condition of footpaths that is set out in the TLA's AMP.	Customers service requests/feedback. Footpath rating undertaken every two years to measure performance.
05	Economy	Sufficient parking capacity to meet the demands of today and of future growth.	Customers are able to find a park.	Short term actions from parking study implemented.	The parking study to identify demand is under review and the decision on the outcome of this has been deferred. The current provision is 2379 parking spaces in the Taupo CBD (on street and off street parks).	Not currently monitored.
06	Economy	We provide a transport network for the safe movement of people and goods.*	Reduction in crashes.	Crashes recorded from the NZTA CAS database, which identifies location and type of crashes (reported by Police).	Total crashes on the Taupo District network (including State Highways and private roads): In 2010 fatalities 1, serious 7, minor 40, non-injury 65, total crashes compared. In 2009, fatalities 2, serious 21 minor 49 and non-injury 121.	CAS data from NZTA, crash history over last 5 year period.

Number	Links to Community Outcome	Level of Service	How we measure it (customer)	How we measure it (technical)	Current LoS Performance	How We Monitor Performance
I1	Economy	Land transport network is suitable for the safe and efficient movement of people and goods.		Construct in accordance with Code of Practice and relevant standards.	Construct in accordance with Code of Practice and relevant stands.	New roads are inspected by Development Engineer prior to handover.

Table 6.3: Implementation of Levels of Service

Number	Links to Community Outcome	Level of Service	How we measure it (customer)	How we measure it (technical)	Current LoS Performance	How We Monitor Performance
N1	Economy	Smooth travel exposure – urban (≤70km/hr)	Smooth travel, no potholes.	Vehicle kilometres travelled on sealed local roads with less than 500vpd with roughness ≤180 NAASRA	Average roughness of all sealed roads = 70 NAASRA. 10% of sealed roads over 130 NAASRA	(Survey June 2010)
				Vehicle kilometres travelled on sealed local roads with 500 to 4,000vpd with roughness ≤150 NAASRA	Average roughness of all sealed roads = 70 NAASRA. 10% of sealed roads over 130 NAASRA	(Survey June 2010)
				Vehicle kilometres travelled on sealed local roads with 4,000 to 10,000vpd with roughness ≤120 NAASRA	Average roughness of all sealed roads = 70 NAASRA. 10% of sealed roads over 130 NAASRA	(Survey June 2010)
				Vehicle kilometres travelled on sealed local roads with greater than 10,000vpd with roughness ≤110 NAASRA	Average roughness of all sealed roads = 70 NAASRA. 10% of sealed roads over 130 NAASRA	(Survey June 2010)
N2	Economy	Smooth Travel Exposure - Rural (>70km/hr)		Vehicle kilometres travelled on sealed local roads with less than 1000vpd with roughness ≤150 NAASRA		
				Vehicle kilometres travelled on sealed local roads with greater than 1000vpd with roughness ≤130 NAASRA		
N3	Economy	Maintenance Expenditure		Percentage variation between planned and actual year's expenditure in the maintenance output class NB: "planned" is the	0%	

Number	Links to Community Outcome	Level of Service	How we measure it (customer)	How we measure it (technical)	Current LoS Performance	How We Monitor Performance
N6	Economy	Structural Maintenance Expenditure		Expenditure per lane kilometre for Structural Maintenance of the road network	\$1798/lane/km	
N7	Economy	Corridor Maintenance Expenditure		Expenditure per lane kilometre for Corridor Maintenance of the road network	\$1,205/km	
N8	Economy	Capital Projects Variation		Per Percentage and number variation between planned and actual capital projects completed during the year	-1%	
N9	Economy	Audit Recommendations		Percentage of New Zealand Transport Agency Audit recommendations, including RAMM	N/A	
N10	Economy	Standards Compliance Rate		Compliance rate with mandatory New Zealand Transport Agency standards (NZTA will measure through its audits)	100%	
N11	Economy	CPP Compliance Rate		Percentage of the RCA's contracts audited any New Zealand Transport Agency that comply with legislative Competitive Pricing Procedure requirements	100%	
N12	Economy	Walking and Cycling	Number of kilometres of cycle ways developed disaggregated into cycle ways and cycle lanes).	Percentage of projects commended in the current financial year that considered, as part of their design brief, the provision of walking and cycling features <i>Measure that TLA's activities are acknowledging one of the objectives of the New Zealand Transport</i>	Taupo District has approximately 37km of cycle paths and lanes (see cycle lifecycle section) <i>Measure of increase in facilities available to pedestrian and cyclists</i> 100%	

6.3.1 LINK TO PROJECT EXPENDITURE

The following table show the current levels of service for the asset and the links between the levels of service adopted and the current budget. Everything we do, we do in order to provide a level of service to the community.

Transport Budget		Link to LOS
Subsidised Programme		
<u>Activity Class 1</u>		
<u>Structural Maintenance</u>		
111	Sealed pavement maintenance	01, 02, 03, 06, 07, 08
	Special purpose roads	01, 02, 03, 06, 07,
112	Unsealed pavement maintenance	01, 02, 03, 06, 07
113	Routine drainage maintenance	01, 02, 03, 06, 07
114	Structures maintenance	01, 02, 03
<u>Corridor Maintenance & operations</u>		
121	Environmental maintenance	01, 02, 03, 04
	Special purpose roads	01, 02, 03, 04
122	Traffic Services maintenance	01, 02, 03, 06, 07
	Special purpose roads	01, 02, 03, 06, 07
	New road markings & signs	01, 02, 03, 06, 07
124	Cycle Path maintenance	01, 02, 03, 06, 07
<u>Network & asset management</u>		
151	Network & asset management	ALL
	Special purpose roads	ALL
<u>Activity Class 3</u>		
<u>Structural renewals</u>		
211	Unsealed road metalling	01, 02, 03, 06, 07
212	Sealed road resurfacing	01, 02, 03, 06, 07
213	Drainage renewals	01, 02, 03, 06, 07
214	Pavement rehabilitation	01, 02, 03, 06, 07
215	Structures component replacements	01, 02, 03, 06, 07
<u>Corridor renewals</u>		
222	Traffic services renewals	01, 02, 03, 06, 07
	Lighting (after undergrounding)	01, 02, 03, 06, 07
231	Associated improvements	01, 02, 03
	Major drainage	01, 02, 03
	New culverts	01, 02, 03
<u>Activity Class 5</u>		
<u>311 Road studies</u>		
	Crash reduction studies	06, 07
<u>323 New Road infrastructures</u>		
<u>324 Road Reconstruction</u>		
	Road Widening (Broadlands)	T1, T4, I1

Transport Budget	Link to LOS
Road Widening (Poihipi)	T1, T4, I1
Road Widening (Waipapa)	T1, T4, I1
Poihipi Rd Straightening	T1, T5, I1
Broadlands Rd curve easing (RP5.2-5.4)	T1, T5, I1
<u>341 Minor Safety Improvements</u>	
Minor improvements	ALL
Activity Class 8	
<u>412 System Use Studies</u>	
Taupo Walking and Cycling Strategy update	O4, T3, T4,
AMP Review/Study	ALL
<u>Community Projects</u>	
431 Community Programme	O6, O7, T5
<u>Walking and Cycling</u>	
451 Footpath Construction	T3, I1,
452 Cycle Strategy Implementation	T4
Activity Class 9	
511 Bus services	ALL
512 Total mobility services	O8
Unsubsidised Maintenance	
Maintenance Management - RAMM	O1, O2, O3, O6, O7
Street Cleaning 70 % + Misc.	O1, O2, O3, O6, O7
Footpath Maintenance	O4
Berm reinstatement	T3, I1
Street Lighting	O3, O6, O7
Festive Lights	
Kerb and Channel Repairs	O1, O2, O3
Verge Maintenance	O1, O2, O3
CBD Paver Maintenance & Reseal	O3, O4
Street Landscaping	O3, O4
Blister Islands	T5, O4
Off Street Park Maintenance & Reseals	O1, O5
Bus Shelters	O3, O8
Taupo Welcome Sign Maintenance/Replacement	O3
Land Purchase & Legal Costs	T1, T2, T5
Roadway Maintenance	O1, O2, O3
Residential assistance for undergrounding aerial services	T5
Professional services	ALL
Off street park reseals	O5
Reserve Road reseals	O1, O2, O3
Footpaths isolated damaged sections	O4
New Works	
Parking	
On Street Parking (25Pks)	T1, T5, I1

Transport Budget	Link to LOS
Miscellaneous Improvements	
CBD Streetscape Upgrade	T3, T5, I1
Post ETA enhancements	
<i>Tongariro St traffic calming</i>	T1, T2, T3, T4, I1
<i>Arrowsmith/Kiddle intersection</i>	T1, T2, T3, T4, T5, I1
<i>Mere/Taharepa/Lake Tce intersection</i>	T1, T2, T5, I1
<i>Wharewaka & Lake Side Tce's intersections</i>	T1, T2, T3, T5, I1
<i>SH5/Lake Tce intersection</i>	T1, T5, I1
<i>Miro/Tauhara intersection</i>	T1, T5, I1
<i>4-laning Spa Rd</i>	T1, T5, I1
<i>Lake Tce traffic calming & realignment</i>	T1, T3, T4, T5, I1
Tauhara/Spa Rd intersection	T1, T3, T4, T5, I1
Retaining Walls General	T5, I1
Retaining Walls Wylie Tce (Acacia Bay)	T5, I1
Huka Falls lookout	T5
New road marking and signs	T1, T5
Road Upgrading (realignment/widening)	
Poihipi Rd straightening	T1, T4, T5
Rural Road Berm Widening	T3, I1
Wharewaka realignment	T1, T5, I1
Broadlands Rd curve easing (23.3-23.5km)	T1, T5, I1
Poihipi Rd (E of SH32 realign)	T1, T5, I1
New Kerb and Channel	
Mangakino Streets - Upgrade Program (K&C + Pavement + Footpath)	T1, T3, T5, I1
Kerb and Channel Replacement End of Life	T1, T3, T5, I1
Seal Extension	T1, T2, I1

Table 1: Link between Level of Service and Budget

6.4 Consultation

6.4.1 RATEPAYERS AND RESIDENTS CONSULTATION

Consultation on community outcomes and resultant levels of service was completed in 2005 in conjunction with the 2006 Long Term Plan (LTCCP). Through the LTCCP consultation the following community outcomes were derived.

- Lakes, Rivers, Landscapes – places we are proud of
- Healthy people, healthy communities
- Safe and Secure
- Thriving and prosperous
- Vibrant and diverse

For this LTP round Council have identified a different set of outcomes which are listed below.

- Economy
- Environment
- Engagement

At present resident contact is generally on a one on one situation in the handling of customer complaints or in council and community board meetings. Regular advertised public forums are held to encourage and provide for ratepayer opinions and concerns to be heard. Submissions

and suggestions for desired project and improvement work for Council consideration and inclusion into the LTCCP are called for during consultation.

In addition Taupo District Council (TDC) has meetings with key stakeholders:

- As part of the planning process, TDC has consulted with New Zealand Transport Agency, Police, and Regional Council and where appropriate local community groups/advocacy groups.
- Contact has been established with the Heavy Haulage Association Inc., Road Transport Authority and AA over proposed major projects and issues.
- Bi-monthly meetings with New Zealand Transport Agency on State Highway and funding issues.

The last NRB Communitrak survey was completed in 2009 and included three very general questions about roads. Three yearly customer satisfaction surveys may measure satisfaction with the overall road service. While these surveys may give a broad understanding of current customer satisfaction they do not attempt to determine levels of service desired by customers or reasons behind various satisfaction levels. The results of the survey showed that 79% of Taupo District residents and non-resident ratepayers are satisfied with roads while 21% are not very satisfied. The main reasons for being not satisfied with roads are:

- Heavy congestion problems
- Need a bypass
- Uneven/potholes/rough
- Poor condition/lack of maintenance/need upgrading
- Poor quality roads/patching/stones left on roads.

Most of the comments were relating to State Highways rather than local roads.

A decision was made by SLG that levels of service consultation will not be undertaken for the 2018-2021 LTP.

6.4.2 CUSTOMER FEEDBACK

Asset Managers described the performance aspirations for specific Council activities that are primarily driven by customer needs and categorised the level of service desired for each of the services Council provided. The results of this work were collated and a self-completion survey was derived. Nineteen thousand of these surveys were sent and there were 752 responses in by July 2005.

Specific objectives of the survey were to;

- Understand the level of importance of given services;
- Identify levels of satisfaction with current levels of service;
- Determine the desire for changes to current levels of service;
- Determine willingness to pay for improved levels of service;
- Ascertain quantum/magnitude or speed of change desired.

The survey included separate questions for the road service as well as the proposed Taupō Town Second Bridge Crossing. Results include:

- 74% of respondents are happy with the current level of service for road in general. However almost one half of respondents (49%) desire a significant increase to the level of service for the second Taupo Bridge crossing.
- 21% of respondents desire a moderate increase to the level of service. Approximately 65% of those people which desire a level of service increase are willing to pay \$192-\$200 (with a current cost of \$191). Only approximately 35%

of those people wanting an increase in the level of service are willing to pay more than \$200. These results indicate that the community is happy with the status quo and they would not be willing to incur any significant increase in the cost of the service.

This consultation suggests that the public is generally happy with the current level of service therefore there have been no significant changes to level of service from previous.

6.5 Changes to Level of Service

The proposed changes to levels of service for this Transport Asset Management Plan are the ones based on the ONRC Customer Levels of Service outcomes.

Capital expenditure to improve the level of service includes;

- Footpaths
- Passenger transport
- Localised widening projects to improve safety of road users

Budgets were revised between draft and final AMP's to ensure a financially sustainable budget council wide. The level of service implication of these budget changes are shown in table 9-1 within the Financial Summary section.