

Our Infrastructure Assets

Council's assets are summarised below and are categorised by the themes as set out in Our Community Plan. This illustrates how these assets help meet the objectives and strategies as set out in the Community Plan and how they facilitate the delivery of services to the Community.

Our Society

- Streetscaping
- Community Halls
- Swimming Pools
- Cemetery
- Libraries
- Gallery & Museums
- Parks & Reserves
- Sporting Fields & Facilities
- Showgrounds
- Public Amenities
- Affordable Housing Assets

Our Infrastructure

- Roads
- Bridges & Culverts
- Footpaths & Cycleways
- Kerb & Gutter
- Stormwater
- Water Supply Network
- Sewerage Service Network

Our Economy

- Parking Facilities
- Airport & Aerodrome
- Saleyard
- Holiday/Caravan Parks
- Visitor Information Centres
- CBD Assets
- Development Property

Our Environment

- Waste Management
- Recycling
- Floodplain Assets
- Reserves & Wetlands
- Noxious Weed Assets
- Stormwater Network

Our Leadership

- Corporate Buildings
- Light Fleet
- Plant & Equipment
- Depots

In late 2014, CVC undertook a 'council-wide' service review primarily to address budgetary shortfalls. Once finalised, the service review will provide a framework of all Council services and will link the service provision to the assets. Reviewing the appropriateness of such service provision may lead to future asset rationalisation and/or efficiency savings by eliminating 'end of life' or under-used assets for example. This will contribute to the future sustainability of Council.

Asset Conditions

Condition assessments for assets are undertaken using the Institute of Public Works Engineering Australasia's (IPWEA) International Infrastructure Management Manual's recommended 5-point scale:

- Condition 1** Excellent Condition - no work required (normal maintenance)
- Condition 2** Good Condition - only minor maintenance work required
- Condition 3** Average Condition - maintenance work required
- Condition 4** Poor Condition – renewal/Replacement required
- Condition 5** Very Poor Condition - Urgent Renewal/Replacement required

The graph following demonstrates the majority of Councils assets are in good to moderate condition.

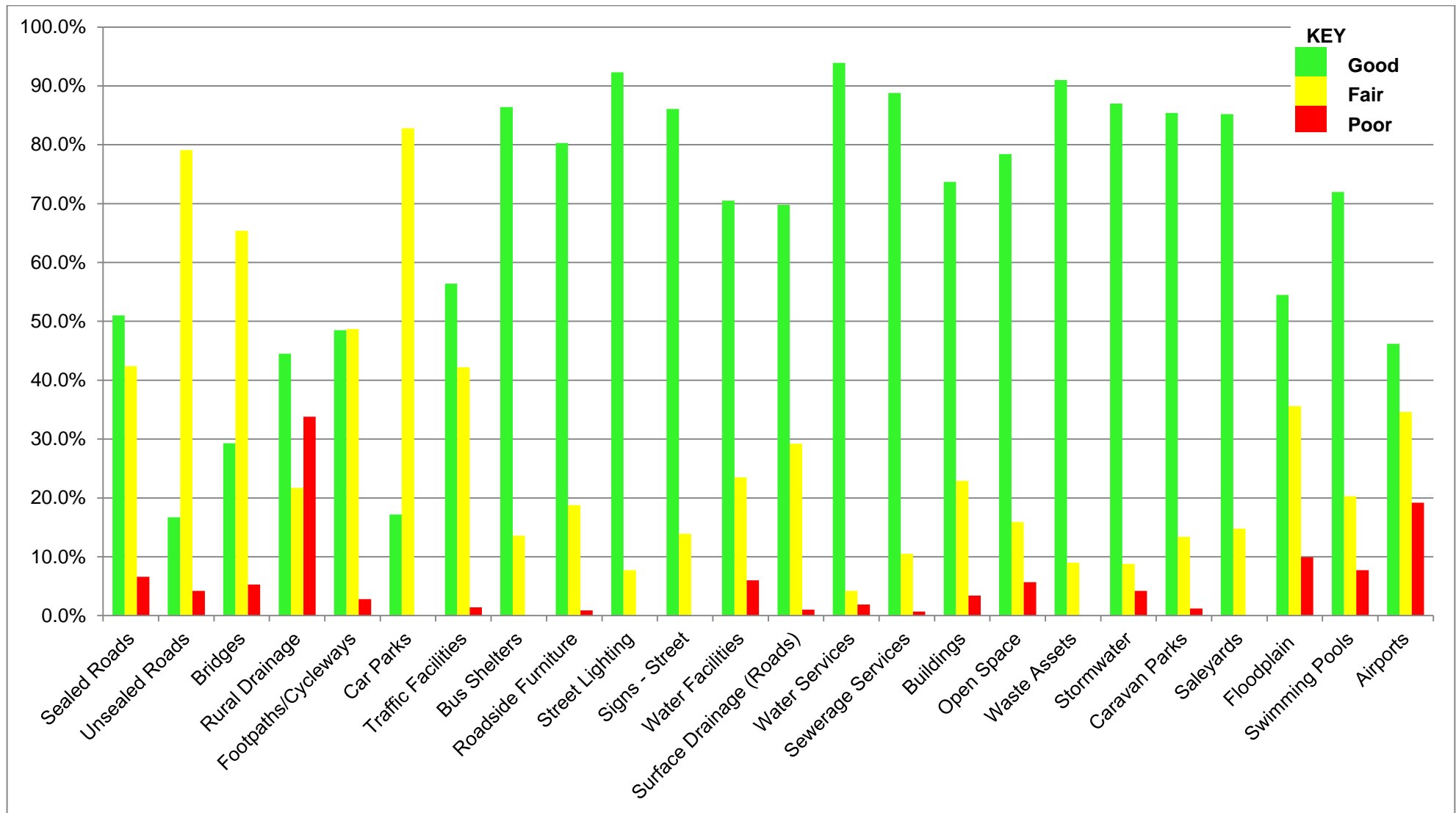


Figure 2: Asset Condition and % Asset Value

In order to define what condition ratings are acceptable, Council will take into consideration the following:

- Community views / acceptance
- Establishing asset standards necessary to provide and support desired levels of service now and into the future
- Determining appropriate and sustainable levels of maintenance and renewals/upgrades
- Risk hazard and risk reduction requirements

Management strategies for assets in 'poor' condition (rating 4 and 5) are detailed in each asset management plan summary. There are considerable costs associated with the renewal and/or upgrade of these assets in poor condition and the backlog of works required to do this and the increased annual maintenance cost of not renewing the assets is summarised below, as detailed in Special Schedule 7 of the Annual Financial Statements for 2014/15.

Asset Group	2014/15 Cost to Bring to Satisfactory	2014/15 Required Annual Maintenance	2014/15 Actual Maintenance	2014/15 Asset Maintenance Gap
Civil Services	\$56,892,810	\$15,051,000	\$10,168,902	\$4,882,098
Water Cycle	\$5,545,000	\$3,913,000	\$4,011,082	(\$98,082)
Open Space & Facilities	\$3,540,260	\$1,970,000	\$1,681,962	\$288,038
Total	\$65,978,070	\$20,934,000	\$15,861,946	\$5,072,054

Council currently maintains its assets at a condition rating between 1 and 3.

Asset Values

As at 30 June 2015 the estimated replacement value of Councils assets is over \$2 billion dollars and represented below by the major asset groups as a percentage of the total asset replacement value:

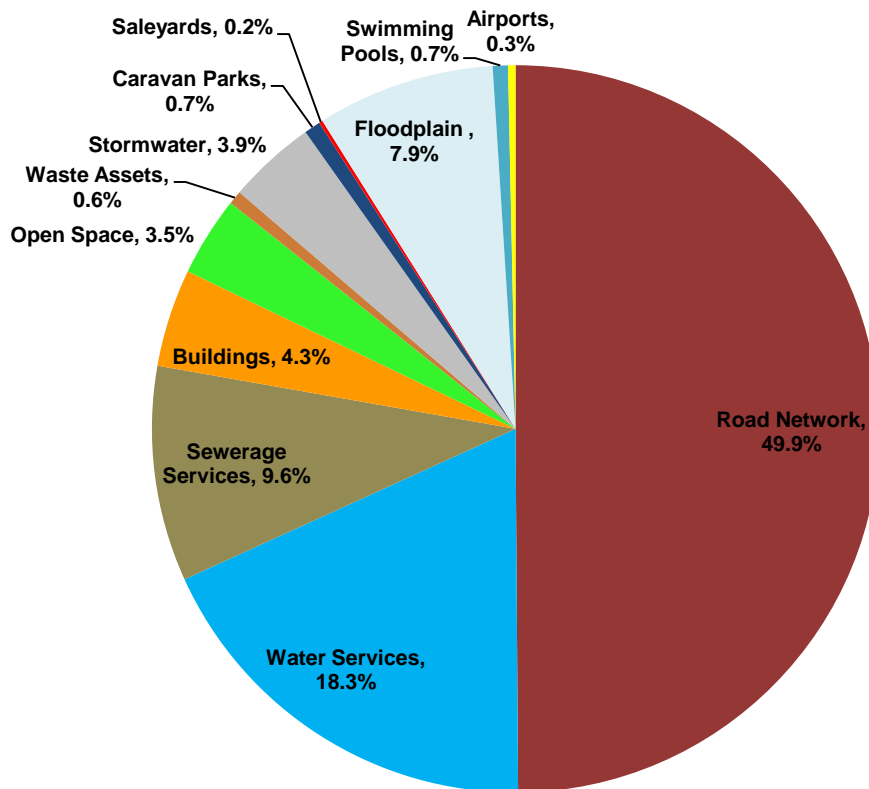


Figure 3: Asset Replacement Value

The state of major infrastructure assets as reported in the Clarence Valley General Purpose Financial Statements for the year ending 30 June 2015 is included below:

Special Schedule No. 7 - Report on Infrastructure Assets
as at 30 June 2015

\$'000										
Asset Class	Asset Category	Estimated cost to bring up to a satisfactory standard refer (1)	Required Annual Maintenance refer (2)	Actual Maintenance 2014/15 refer (3)	Written Down Value (WDV) refer (4)	Assets in Condition as a % of WDV				
						1	2	3	4	5
						refer (4) & (5)				
Buildings										
	Council Offices / Administration Centres	-	108	104	16,114	8%	48%	44%	0%	0%
	Council Works Depot	448	20	19	10,202	45%	33%	20%	2%	0%
	Council Public Halls	-	48	46	9,840	24%	58%	18%	0%	0%
	Libraries	-	34	32	9,816	82%	14%	4%	0%	0%
	Council Houses	8	5	4	2,523	42%	22%	36%	0%	0%
	Museums	-	7	7	2,697	4%	90%	6%	0%	0%
	Childcare / Community Health	-	42	41	9,520	19%	65%	16%	0%	0%
	Art Gallery	-	24	24	2,754	9%	83%	8%	0%	0%
	Amenities / Toilets	47	8	8	5,083	30%	45%	22%	1%	2%
	Sporting / Caravan Parks	52	340	329	43,959	47%	38%	14%	1%	0%
	Waste Facilities	-	25	24	9,034	72%	27%	1%	0%	0%
	Water & Sewer Buildings	-	14	13	5,026	68%	14%	16%	2%	0%
	RFS / SES	260	38	36	9,251	53%	32%	12%	3%	0%
Other	-	13	13	5,493	35%	44%	18%	1%	2%	
	sub total	815	726	700	141,312	41.4%	40.4%	17.2%	0.8%	0.1%
Other Structures										
	Other Structures	56	5	10	2,353	42%	42%	13%	3%	0%
	Airports	-	4	8	3,094	35%	14%	46%	5%	0%
	Saleyards	-	10	23	2,348	28%	62%	10%	0%	0%
	Cemeteries	11	1	1	1,196	39%	57%	4%	0%	0%
	Tips	-	1	2	2,820	36%	61%	3%	0%	0%
	sub total	67	21	44	11,811	35.6%	44.7%	17.7%	1.9%	0.0%

Special Schedule No. 7 - Report on Infrastructure Assets (continued)
as at 30 June 2015

\$'000											
Asset Class	Asset Category	Estimated cost to bring up to a satisfactory standard refer (1)	Required Annual Maintenance refer (2)	Actual Maintenance 2014/15 refer (3)	Written Down Value (WDV) refer (4)	Assets in Condition as a % of WDV					
						1	2	3	4	5	
						refer (4) & (5)					
Roads	Sealed Roads	23,883	6,183	4,139	413,710	44%	44%	11%	1%	0%	
	Unsealed Roads	821	4,314	3,540	54,351	6%	85%	9%	0%	0%	
	Bridges	1,135	838	457	102,484	9%	14%	75%	1%	1%	
	Footpaths & Cycleways	1,393	265	193	19,371	24%	28%	47%	1%	0%	
	Road Furniture	-	762	199	16,578	24%	71%	4%	1%	0%	
	Water Transport Facilities	1,746	95	81	4,051	41%	35%	19%	5%	0%	
	Carparks	-	50	25	2,294	55%	45%	0%	0%	0%	
	Bus Shelters	-	41	45	602	11%	78%	11%	0%	0%	
	sub total	28,978	12,548	8,679	613,441	33.6%	42.8%	22.5%	0.9%	0.2%	
Water Supply Network	Dams/Weirs	-	235	230	81,247	100%	0%	0%	0%	0%	
	Mains	1,450	1,650	1,734	277,699	39%	59%	2%	0%	0%	
	Reservoirs & Treatment	1,491	232	366	33,790	13%	53%	31%	3%	0%	
	Pumping Station/s	-	42	46	7,189	62%	18%	18%	2%	0%	
		sub total	2,941	2,159	2,376	399,925	49.6%	45.8%	4.3%	0.3%	0.0%
	Sewerage Network										
Mains		-	660	550	130,341	50%	42%	8%	0%	0%	
Pumping Station/s		2,375	623	435	41,211	53%	38%	8%	1%	0%	
Treatment		229	471	650	80,752	76%	14%	10%	0%	0%	
		sub total	2,604	1,754	1,635	252,304	58.8%	32.4%	8.6%	0.2%	0.0%

Special Schedule No. 7 - Report on Infrastructure Assets (continued)
as at 30 June 2015

\$'000										
Asset Class	Asset Category	Estimated cost to bring up to a satisfactory standard refer (1)	Required Annual Maintenance refer (2)	Actual Maintenance 2014/15 refer (3)	Written Down Value (WDV) refer (4)	Assets in Condition as a % of WDV				
						1	2	3	4	5
						refer (4) & (5)				
Stormwater Drainage	All Stormwater & Drainage	24,016	1,768	675	144,740	10%	67%	21%	2%	0%
	sub total	24,016	1,768	675	144,740	10.0%	67.0%	21.0%	2.0%	0.0%
Open Space/ Recreational	Swimming Pools	304	206	158	6,033	28%	29%	42%	1%	0%
	Caravan Parks	50	205	157	4,166	59%	36%	5%	0%	0%
	Parks	1,212	409	314	8,216	53%	40%	6%	1%	0%
	Reserves	523	194	149	5,242	53%	33%	13%	1%	0%
	Sports Facilities	569	208	159	11,168	50%	36%	11%	3%	0%
	Other	-	1	1	2,769	68%	27%	5%	0%	0%
	sub total	2,658	1,223	938	37,594	49.9%	34.7%	14.1%	1.4%	0.0%
Other Infrastructure Assets	Floodplain	3,899	735	815	149,110	3%	61%	22%	14%	0%
	sub total	3,899	735	815	149,110	3.0%	61.0%	22.0%	14.0%	0.0%

Special Schedule No. 7 - Report on Infrastructure Assets (continued)
as at 30 June 2015

\$'000										
Asset Class	Asset Category	Estimated cost to bring up to a satisfactory standard refer (1)	Required Annual Maintenance refer (2)	Actual Maintenance 2014/15 refer (3)	Written Down Value (WDV) refer (4)	Assets in Condition as a % of WDV				
						1	2	3	4	5
						refer (4) & (5)				
	TOTAL - ALL ASSETS	65,978	20,934	15,862	1,750,237	37.3%	45.2%	15.5%	1.9%	0.1%

Notes:

- (1). Satisfactory is defined as "satisfying expectations or needs, leaving no room for complaint, causing satisfaction, adequate".
The estimated cost to bring assets to a satisfactory standard is the amount of money that is required to be spent on an asset to ensure that it is in a satisfactory standard.
This estimated cost should not include any planned enhancements (ie.to heighten, intensify or improve the facilities).
- (2). Required Annual Maintenance is "what should be spent to maintain assets in a satisfactory standard".
- (3). Actual Maintenance is what has been spent in the current year to maintain the assets.
Actual Maintenance may be higher or lower than the required annual maintenance due to the timing of when the maintenance actually occurs.
- (4). Written Down Value is in accordance with Note 9 of Council's General Purpose Financial Statements
- (5). Infrastructure Asset Condition Assessment "Key"

1	Excellent	No work required (normal maintenance)
2	Good	Only minor maintenance work required
3	Average	Maintenance work required
4	Poor	Renewal required
5	Very Poor	Urgent renewal/upgrading required

Financial strategies to reduce the infrastructure renewal backlog and annual maintenance gap

Council has investigated the option to increase loan borrowings rather than applying for a Special Rate Variation (SRV) to the Independent Pricing and Regulatory Tribunal (IPART) to address the significant infrastructure backlog and annual maintenance gap. However, NSW Treasury Corporation (T-Corp) has expressed, as part of the Local Infrastructure Renewal Scheme Financial Assessment and Benchmarking Report (October 2012), concern over Council's liquidity and ability to service debt over the long term. Consultants Ernst & Young have confirmed that view in a review of Council's current debt portfolio in early 2015 in which they advised that the sustainable debt target for Council is \$110M (as at 30 June 2015 Councils' debt portfolio was \$135.855M).

Council adopted the Delivery Program and Operational Plan on 23 June 2015, and in doing so Council had instructed the General Manager to start public consultation on a proposal to increase Council's rate revenue via a SRV of 8% a year (including the rate peg limit) for five years, starting 2016/17, in accordance with Section 508A of the Local Government Act 1993. From 21 August 2015 through to 25 September 2015 Council undertook public consultation on the proposed SRV by implementing the Community Engagement Strategy for its 'Financial Sustainability – the Road Ahead' process, which included applying for an 8% SRV and reviewing Council's discretionary services. Methods of community engagement included shopping centre displays at Grafton and Yamba, a Main Street display at Maclean, community meetings in Grafton and Maclean, and community surveys.

The outcome of the community survey was presented by IRIS Consulting at the 20 October 2015 Ordinary Council meeting (Item 05.011/15). The survey results demonstrated that when asked about the importance of a list of specific types of infrastructure, residents ranked sealed and unsealed roads as being the most important. Interestingly, Council's 2014-15 Annual Financial Statements 'Special Schedule 7 - Report on Infrastructure Assets' indicates that Council as at 30 June 2015 has a road and road-related infrastructure (including bridges, culverts and drains) backlog of \$49.855M and that the annual maintenance gap for these assets is \$4.292M, the largest amounts for asset classes listed in Special Schedule 7. If Council does not address the roads and road related infrastructure backlog and increase our annual maintenance on these assets it is expected our community will experience a steady decline in the condition of its roads and road related infrastructure over time, leading to reduced levels of service to the community, reduced public safety, higher risks of infrastructure failure and higher maintenance costs.

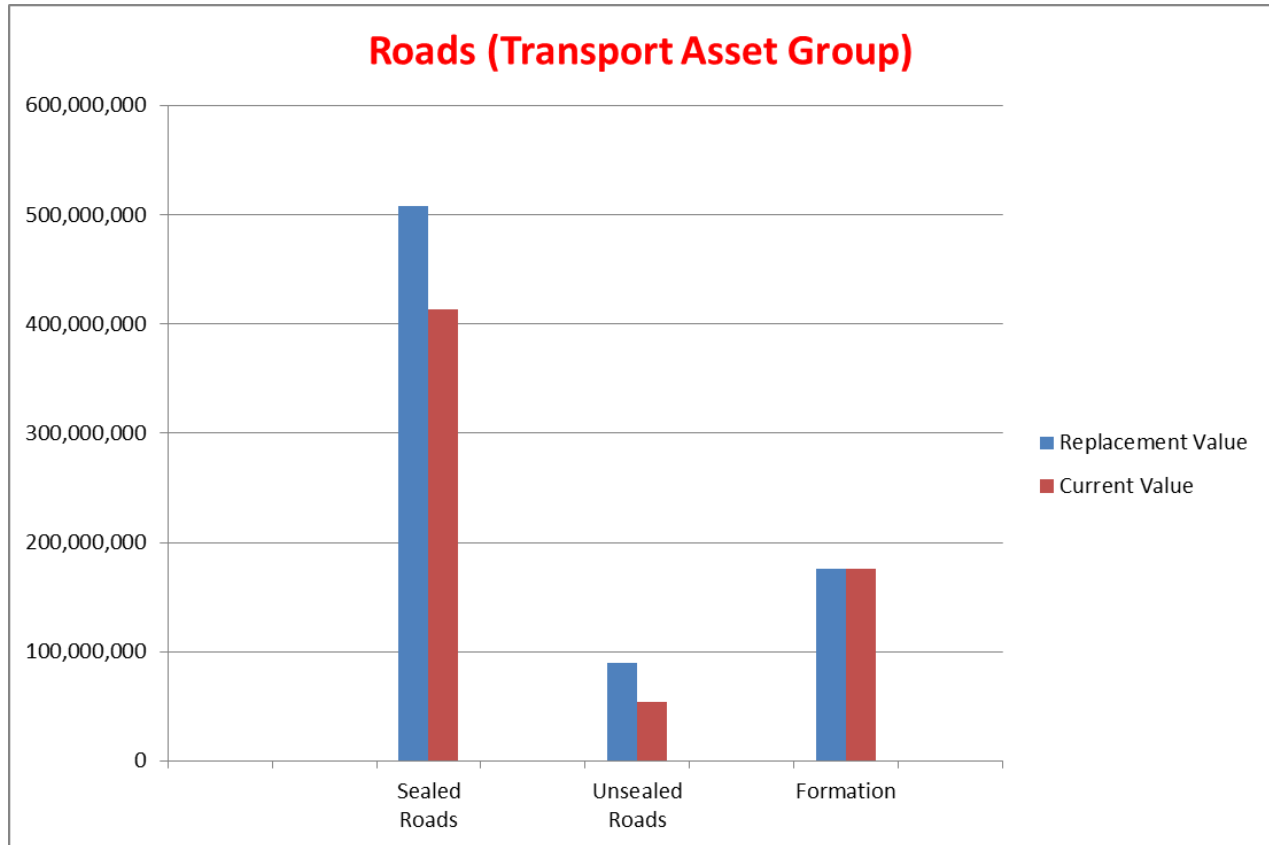
At the 24 November 2015 Extraordinary Council meeting (Item 12.060/15), Council resolved to apply for a Section 508(A) SRV of 6.5% p.a. (including the rate peg limit) for 5 years commencing 1 July 2016, which is a cumulative increase in general rates of 37% by year 5 of the SRV. That cumulative increase is also permanently built into the general rate after the 5 year SRV period has ceased. The additional income generated above the rate peg over the 5 years totals \$19,548,037. These additional funds will be specifically used to repair Council roads and road-related infrastructure. Council has notified IPART of its intent to make an SRV application along those lines.

The table below is a summary of where the additional income above the rate peg over the 5 years of \$19,548,037 will be spent.

Amount ¹	Notes	16/17	17/18	18/19	19/20	20/21
Road Pavements and Surfacing inc surface maintenance, heavy patching and reseals	Currently ~26,000m ² area requiring treatment Reseals ~\$3.50/m ²	\$738,969	\$1,679,492	\$2,345,968	\$3,100,981	\$3,907,627
Shoulder Repair and Grading includes edge break repair and gravel resheet of shoulder	~3,600 linear Km of road edge	\$350,000	\$450,000	\$850,000	\$1,350,000	\$1,850,000
Drainage Maintenance includes open and piped drainage	6941 culverts 6140 pits	\$100,000	\$200,000	\$300,000	\$415,000	\$500,000
Kerb & Channel Maintenance repair and replacement of K&C	currently ~77000m of K&C at condition 3	\$100,000	\$160,000	\$300,000	\$350,000	\$500,000
	Total	\$1,288,969	\$2,489,492	\$3,795,968	\$5,215,981	\$6,757,627

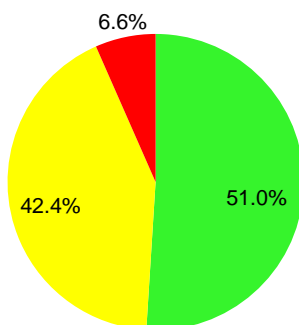
¹ The amounts allocated in this table totaling \$19,548,037 are based on a Rate Peg of 1.8% for 2016/17 as per the announcement by IPART on Friday 4 December 2015. The amount of \$18,538,958 stated elsewhere in this document was based on the assumed Rate Peg of 2.5% for 2016/17.

Roads (Transport Asset Group)

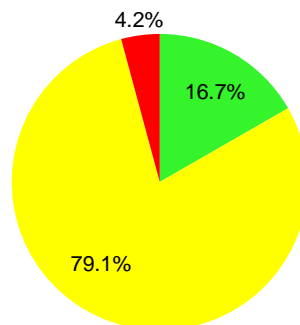


SUMMARY OF ASSET COSTS	Current Value / Written Down Value	Replacement Value	Funding Shortfall per Annum/Per 10 Years	Cost to Bring to Satisfactory (SS7 2014/15)	Required Annual Maintenance (SS7 2014/15)
Sealed Roads	\$413,710,074	\$508,156,172	\$7,822,297	\$23,882,657	\$6,182,254
Unsealed Roads	\$54,350,825	\$89,357,731	\$330,145	\$820,702	\$4,314,139
Formation	\$176,067,381	\$176,067,381	-	-	-
Total	\$644,128,280	\$773,581,284	\$8,152,000	\$24,703,359	\$10,496,393

Sealed Roads Condition



Unsealed Roads Condition



Key Data	<ul style="list-style-type: none"> Total value of current Holdings \$773,581,284 Current (2015/16) maintenance/renewal budget: 			
		Sealed Roads	Unsealed Roads	TOTAL
	Operations	\$184,000	\$0	\$184,000
	Maintenance	\$3,306,698	\$3,623,700	\$6,930,398
	Asset Renewal	\$3,896,560	\$0	\$3,896,560
	New/Upgrade Assets	\$1,943,462	\$290,000	\$2,233,462

	TOTAL		\$9,330,720	\$3,913,700	\$13,244,420																																																
Last Condition Survey	<ul style="list-style-type: none">Valuation dated December 2013 by APV Valuers and Asset Management.Condition assessment undertaken by Clarence Valley Council with random data validation by APV Valuers and Asset Management.																																																				
General Assessment of Condition	Sealed Roads:																																																				
		Condition Rating		% of Asset Value																																																	
	1	Excellent condition		7.8																																																	
	2	Good condition		43.2																																																	
	3	Moderate condition		42.4																																																	
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Critical Risks & Risk Management	<table><thead><tr><th colspan="5">RISK IDENTIFICATION</th><th colspan="3">RISK TREATMENT</th></tr><tr><th>Asset at Risk</th><th>What can happen?</th><th>When can it occur?</th><th>Possible cause</th><th>Existing controls</th><th>Treatment option(s)</th><th>Residual risk</th><th>Risk treatment plan</th></tr></thead><tbody><tr><td>Sealed Roads</td><td>Vehicle accident</td><td>Anytime now</td><td>Road failure caused by inadequate maintenance/rehabilitation</td><td>Reactive maintenance</td><td>Undertake minor rehabilitation on works and increased surface maintenance on prioritised basis</td><td>Medium</td><td>Increased road inspections and increased minor rehabilitation on works and maintenance</td></tr><tr><td>Sealed Roads</td><td>Reduction on vehicle travel speed from poor condition roads</td><td>Anytime now</td><td>Loss/failure of sealed surface; inadequate maintenance</td><td>Reseal program on 32 year cycle; reactive maintenance</td><td>Reseal all roads on a 15 year cycles</td><td>Medium</td><td>Reseal all roads on a 15 year cycle</td></tr><tr><td>Unsealed Roads</td><td>Vehicle accident</td><td>Anytime now</td><td>Slippery/inconsistent road surface</td><td>Resheet program</td><td>Resheet gravel roads on an average 8 year program</td><td>Medium/Low</td><td>Develop a priority based resheeting schedule based on available funding</td></tr><tr><td>Unsealed Roads</td><td>Loss of all-weather access</td><td>Anytime now</td><td>Loss of gravel pavement</td><td>Resheet program</td><td>Resheet gravel roads on an average 8 year program</td><td>Medium/Low</td><td>Develop a priority based resheeting schedule based on available funding</td></tr></tbody></table>					RISK IDENTIFICATION					RISK TREATMENT			Asset at Risk	What can happen?	When can it occur?	Possible cause	Existing controls	Treatment option(s)	Residual risk	Risk treatment plan	Sealed Roads	Vehicle accident	Anytime now	Road failure caused by inadequate maintenance/rehabilitation	Reactive maintenance	Undertake minor rehabilitation on works and increased surface maintenance on prioritised basis	Medium	Increased road inspections and increased minor rehabilitation on works and maintenance	Sealed Roads	Reduction on vehicle travel speed from poor condition roads	Anytime now	Loss/failure of sealed surface; inadequate maintenance	Reseal program on 32 year cycle; reactive maintenance	Reseal all roads on a 15 year cycles	Medium	Reseal all roads on a 15 year cycle	Unsealed Roads	Vehicle accident	Anytime now	Slippery/inconsistent road surface	Resheet program	Resheet gravel roads on an average 8 year program	Medium/Low	Develop a priority based resheeting schedule based on available funding	Unsealed Roads	Loss of all-weather access	Anytime now	Loss of gravel pavement	Resheet program	Resheet gravel roads on an average 8 year program	Medium/Low	Develop a priority based resheeting schedule based on available funding
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	Main Findings																																																				
	<ul style="list-style-type: none">Council maintains 1,464 km of sealed road and 980 km of unsealed road network.Floods over recent years have had a major impact on road condition, especially the sealed road network and have impacted on Council's ability to complete scheduled works. It is																																																				

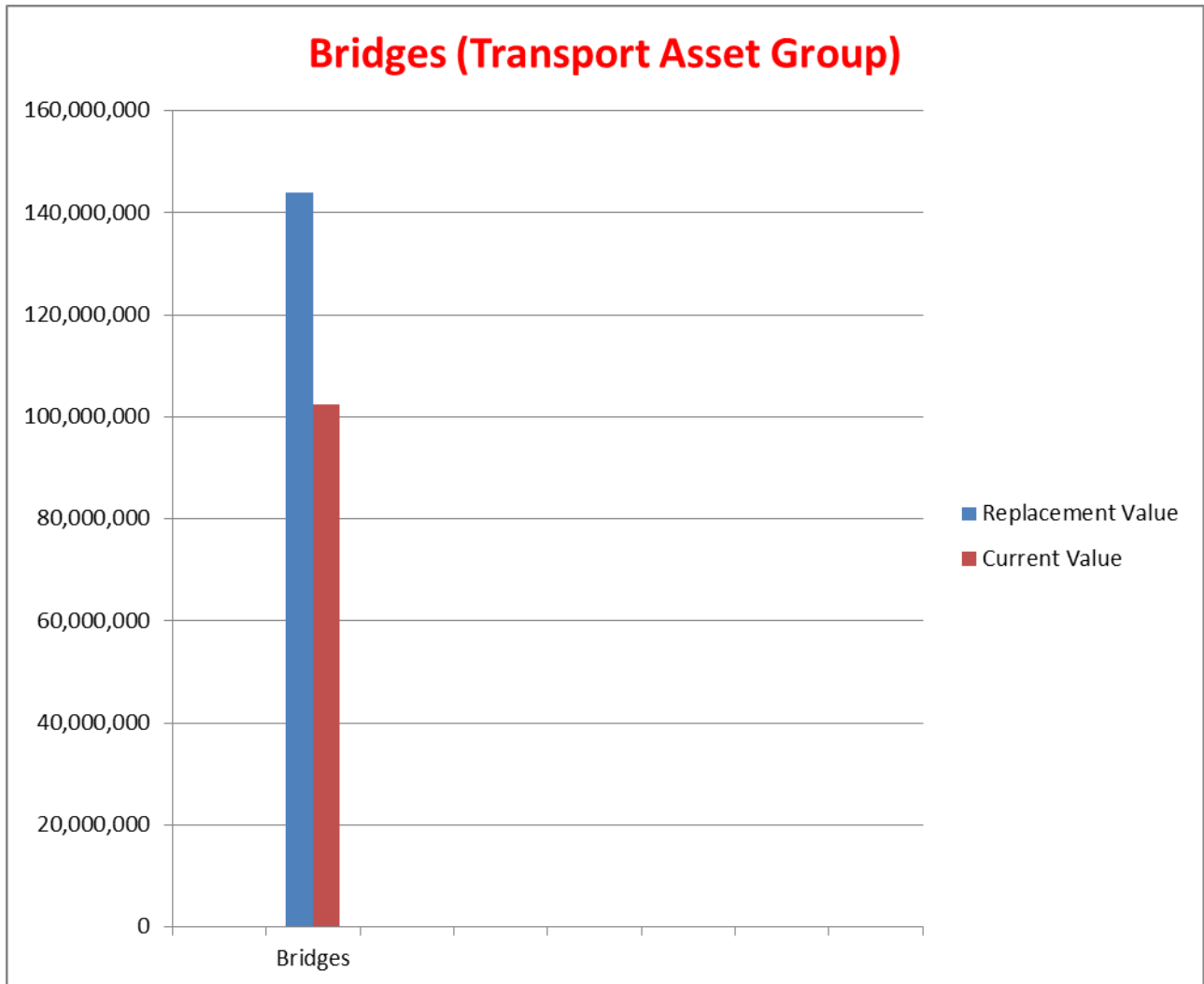
	<p>anticipated that this will continue in the future.</p> <ul style="list-style-type: none"> Major emphasis is to increase maintenance levels in the following areas: <ul style="list-style-type: none"> Sealed road resealing; Sealed road shoulder maintenance; Unsealed road resurfacing; and Widening Regional roads where required to meet current traffic loading. General focus will be on managing condition 4 and 5 roads and maintaining roads at condition 3 and above. Additional data is to be gathered on the unsealed road network to better schedule resurfacing requirements. Further investigations to be carried out on program and requirements to seal currently unsealed roads and options to return very low trafficked sealed roads to unsealed roads.
Budget Implications	<ul style="list-style-type: none"> Based on the proposed program there is a funding shortfall of \$8,152,000 per year over the life of the 10 year plan for maintenance, renewal and provision of new/upgraded assets. Part of the funding shortfall is a result of increased maintenance levels, including: <ul style="list-style-type: none"> Sealed road resealing – increase in funding by \$1,619,000 per annum to reseal roads on a 15 year cycle for Regional roads and 20 year cycle for Local roads rather than the current 32 year cycle; Sealed road shoulder maintenance – increase in funding by \$847,000 per annum to implement a five year cycle to grade sealed road shoulders; Unsealed road resurfacing – increase in funding by \$330,000 per annum to increase the gravel resurfacing frequency on unsealed roads; and Widening Regional roads where required to meet current traffic loading – increase in funding by \$1,634,000 per annum to widen Regional roads and increase funding for general road renewal by \$1,779,000. Additional grant funding will be sought for programs, especially for capital programs. Grant funding where there is not certainty of the grant funding being available has not been included in the assessment.
Maintenance Programs	<ul style="list-style-type: none"> Appropriate maintenance programs are implemented to ensure all assets reach their maximum useful life within budgetary constraints Council is implementing a detailed inspection program to identify and rectify defects, especially those that pose a safety issue to motorists, in a timely manner.

Roads (Transport Asset Group)

Objective		To manage the road network is a safe and serviceable condition										
Performance Measures		Target										
(a) Ensure that maintenance works are undertaken effectively.		<ul style="list-style-type: none"> Implement detailed inspection system to better target maintenance works to areas required. Review and monitor maintenance procedures to ensure effective practices are utilised. Implement upgraded maintenance programs. 										
(b) Develop detailed forward works programs.		<ul style="list-style-type: none"> Collect detailed data, including updated condition data, on all assets. Prepare detailed maintenance, renewal and new/upgraded works programs targeting condition 4 and 5 assets and safety issues aligned to available budgets. Monitor effectiveness of implemented programs through over-all road condition assessments. 										
(c) Asset Management		<ul style="list-style-type: none"> Develop technical standards to assess and prioritise future works (e.g. standards to be met to seal unsealed roads). Review and update the Transport Asset Management Plan in line with updated asset data and developed standards on an annual basis. Seek additional sources of funding for capital works. 										
Activities	Who	When										
(a) Ensure that maintenance works are undertaken effectively	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Implement detailed inspection system		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

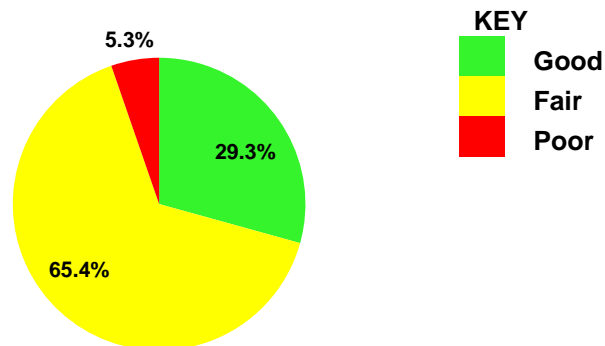
Review and monitor maintenance procedures		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Implement upgraded maintenance program		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Activities	Who	When									
(b) Develop detailed forward works programs	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Collect detailed data.		✓			✓			✓			✓
Prepare detailed maintenance, renewal and new/upgraded works programs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitor effectiveness of implemented programs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Activities	Who	When									
(c) Asset Management	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Develop technical standards		✓									
Review Transport Asset Management Plan		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Seek additional funding sources		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Roads (Transport Asset Group) – Maintenance Program for Sustainable Assets											
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	
Operations (\$'000)	314	314	314	314	314	314	314	314	314	314	
Maintenance (\$'000)	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	
Asset Renewal (\$'000)	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	8,787	
New/Upgraded Assets (\$'000)	2,953	2,953	2,953	2,953	2,953	2,953	2,953	2,953	2,953	2,953	
TOTAL (\$'000)	20,752	20,752	20,752	20,752	20,752	20,752	20,752	20,752	20,752	20,752	

Bridges



SUMMARY OF ASSET COSTS	Current Value / Written Down Value	Replacement Value	Funding Shortfall per Annum / Per 10 Years	Cost to Bring to Satisfactory (SS7 2015)	Required Annual Maintenance (SS7 2015)
Bridges	\$102,483,740	\$143,949,203	\$468,000	\$1,135,000	\$837,684

Bridges Condition



Key Data	<ul style="list-style-type: none"> Total value of current Holdings \$143,949,203 Current (2015/2016) maintenance/renewal budget: 	
	Operations	\$2,211
	Maintenance	\$529,823

	Asset Renewal		\$0					
	New/Upgrade Assets		\$550,000					
	TOTAL		\$1,082,034					
Last Condition Survey	<ul style="list-style-type: none">Valuation dated December 2013 by APV Valuers and Asset Management.Condition assessment undertaken by Clarence Valley Council with random data validation by APV Valuers and Asset Management.							
General Assessment of Condition	Condition Rating			% of Asset Value				
	1	Excellent condition			11.5			
	2	Good condition			17.8			
	3	Moderate condition			65.4			
	4	Poor condition			5.2			
	5	Very poor condition			0.0			
Critical Risks & Risk Management	RISK IDENTIFICATION				RISK TREATMENT			
	Asset at Risk	What can happen?	When can it occur?	Possible cause	Existing controls	Treatment option(s)	Residual risk	Risk treatment plan
	Bridges	Vehicle damage	Anytime now	Inadequate maintenance of bridge deck	Reactive maintenance	Instigate a pro-active maintenance program	Medium/Low	Instigate a pro-active maintenance program
	Bridges	Bridge failure/collapse	Anytime in the future	Aging timber bridges	Reactive maintenance	Implement bridge replacement program	Medium/Low	Develop updated bridge replacement program
Main Findings	<ul style="list-style-type: none">Council has 285 bridges (135 predominantly timber bridges and 150 predominantly concrete bridges)The deterioration of the timber bridges and the resulting increased maintenance requirements of those bridges, poses the biggest potential liability to Council in this asset group.Major emphasis is to increase maintenance levels in the following areas:<ul style="list-style-type: none">Timber bridge maintenance; andTimber bridge replacement.General focus will be on managing condition 4 bridges and maintaining bridges at condition 3 and above.Additional data is to be gathered on the timber bridges to better schedule maintenance requirements.							
Budget Implications	<ul style="list-style-type: none">Based on the proposed program there is a funding shortfall of \$468,000 per year over the life of the 10 year plan for maintenance, renewal and provision of new/upgraded assets.Part of the funding shortfall is a result of increased maintenance levels and capital programs, including:<ul style="list-style-type: none">Timber bridge maintenance – increase in funding by \$308,000 per annum to ensure that structural integrity of the bridges are retained;Timber bridge replacement – increase in funding by \$102,000 per annum to implement a timber bridge replacement program (note replacement costs for currently nominated bridge replacements have been averaged over a 16 year period);Additional grant funding will be sought for programs, especially for capital programs.Grant funding where there is not certainty of the grant funding being available has not been included in the assessment.							
Maintenance Programs	<ul style="list-style-type: none">Appropriate maintenance programs are implemented to ensure all assets reach their maximum useful life within budgetary constraintsCouncil is implementing a detailed inspection program to identify and rectify defects, especially those that pose a safety issue to motorists, in a timely manner.							
Bridges (Transport Asset Group)								
Objective		To maintain the Council bridges in a safe and serviceable condition.						
Performance Measures		Target						

(d) Ensure that maintenance works are undertaken effectively.	<ul style="list-style-type: none"> Implement detailed inspection system to better target maintenance works to areas required, specifically timber bridges. Review and monitor maintenance procedures to ensure effective practices are utilised. Implement upgraded maintenance programs.
(e) Develop detailed forward works programs.	<ul style="list-style-type: none"> Collect detailed data, including updated condition data, on all assets. Prepare detailed maintenance, renewal and new/upgraded works programs, targeting condition 4 assets and safety issues aligned to available budgets. Monitor effectiveness of implemented programs though over-all bridge condition assessments.
(c) Asset Management	<ul style="list-style-type: none"> Develop technical standards to assess and prioritise future works (e.g. standards to assess risk based replacement program). Review and update the Transport Asset Management Plan in line with updated asset data and developed standards on an annual basis. Seek additional sources of funding for capital works.

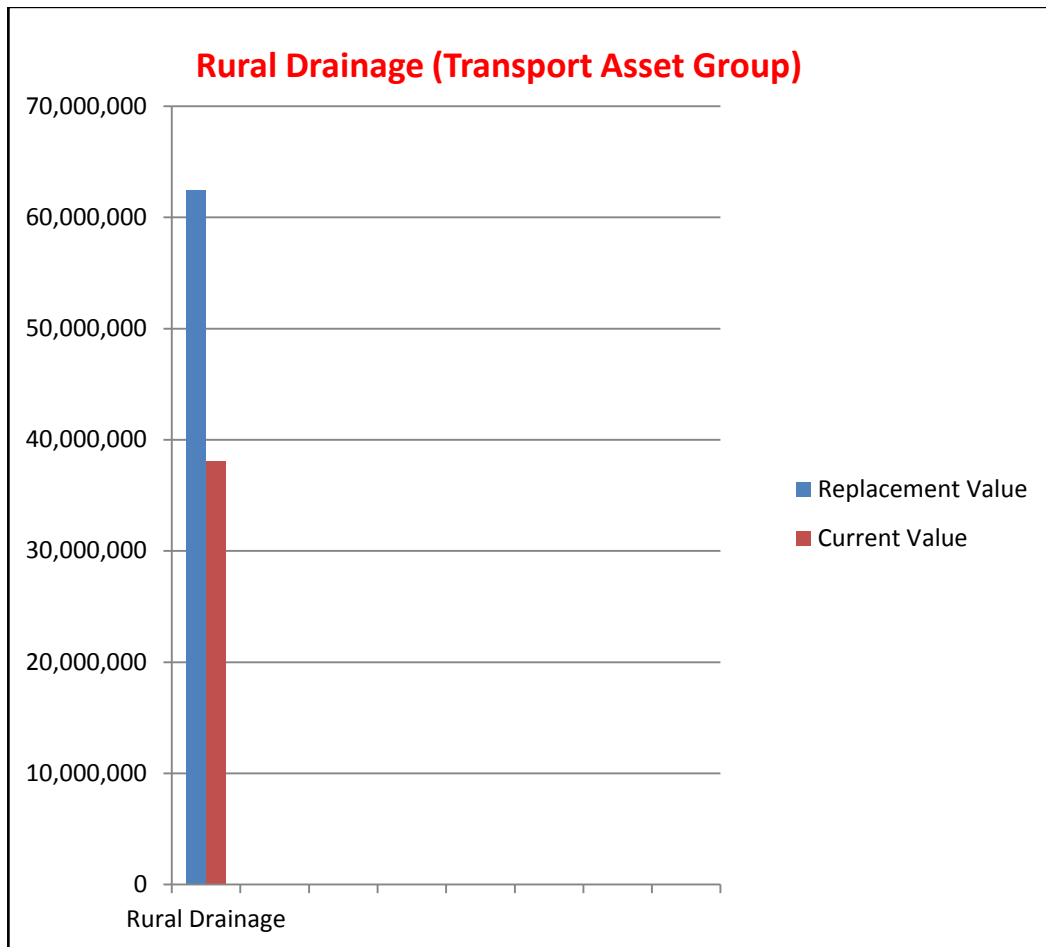
Activities	Who	When									
(a) Ensure that maintenance works are undertaken effectively.	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Implement detailed inspection system		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Review and monitor maintenance procedures		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Implement upgraded maintenance program		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Activities	Who	When									
(b) Develop detailed forward works programs.	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Collect detailed data.		✓			✓			✓			✓
Prepare detailed maintenance, renewal and new/upgraded works programs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitor effectiveness of implemented programs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Activities	Who	When									
(c) Asset Management	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Develop technical standards		✓									
Review Transport Asset Management Plan		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Seek additional funding sources		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

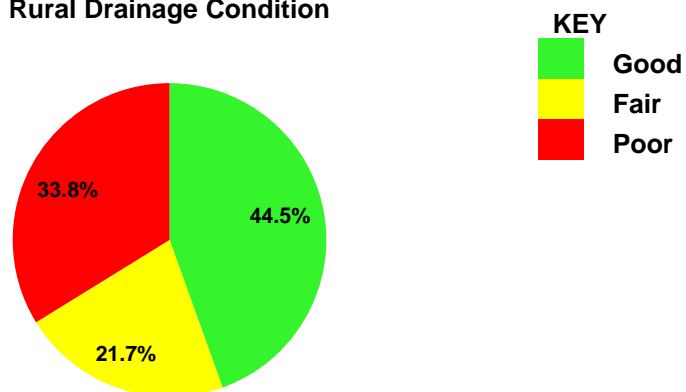
Bridges (Transport Asset Group) – Maintenance Program for Sustainable Assets										
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Operations (\$'000)	2	2	2	2	2	2	2	2	2	2
Maintenance (\$'000)	838	838	838	838	838	838	838	838	838	838
Asset Renewal (\$'000)	58	58	58	58	58	58	58	58	58	58
New/Upgraded Assets (\$'000)	652	652	652	652	652	652	652	652	652	652
TOTAL (\$'000)	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550

Rural Drainage



SUMMARY OF ASSET COSTS	Current Value / Written Down Value	Replacement Value	Funding Shortfall per Annum / Per 10 Years	Cost to Bring to Satisfactory (SS7 2015)	Required Annual Maintenance (SS7 2015)
Rural Drainage	\$38,891,676	\$63,739,470	\$517,000	\$20,481,270	\$704,829

Rural Drainage Condition



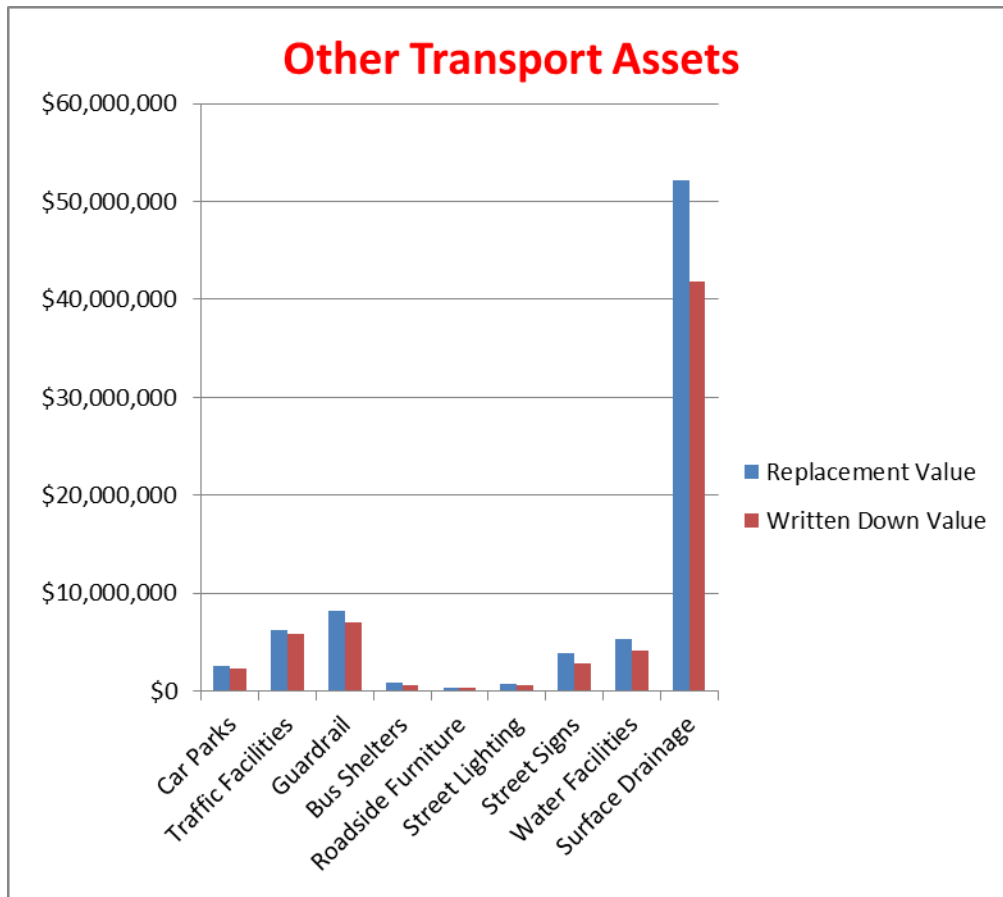
Key Data	<ul style="list-style-type: none"> Total replacement value of current Holdings \$63,739,470 Current (2015/16) maintenance/renewal budget: <table> <tr> <td>Operations</td> <td>\$871</td> </tr> <tr> <td>Maintenance</td> <td>\$412,700</td> </tr> <tr> <td>Asset Renewal</td> <td>\$144,000</td> </tr> <tr> <td>New/Upgrade Assets</td> <td>\$0</td> </tr> <tr> <td>TOTAL</td> <td>\$557,571</td> </tr> </table> 	Operations	\$871	Maintenance	\$412,700	Asset Renewal	\$144,000	New/Upgrade Assets	\$0	TOTAL	\$557,571
Operations	\$871										
Maintenance	\$412,700										
Asset Renewal	\$144,000										
New/Upgrade Assets	\$0										
TOTAL	\$557,571										

Last Condition Survey		<ul style="list-style-type: none">Valuation dated December 2013 by APV Valuers and Asset Management.Condition assessment undertaken by Clarence Valley Council with random data validation by APV Valuers and Asset Management.						
General Assessment of Condition		Condition Rating				% of Asset Value		
	1	Excellent condition				12.2		
	2	Good condition				32.3		
	3	Moderate condition				21.7		
	4	Poor condition				13.8		
	5	Very poor condition				20.0		
Critical Risks & Risk Management	RISK IDENTIFICATION					RISK TREATMENT		
	Asset at Risk	What can happen?	When can it occur?	Possible cause	Existing controls	Treatment option(s)	Residual risk	Risk treatment plan
	Road Culverts	Pipe collapse in roadway	Anytime now	Aging/ dislocated pipes	Reactive maintenance	Implement culvert replacement program	Medium/ Low	Complete culvert audit and commence culvert replacement on a priority basis
	Road Culverts	Localised flooding	Anytime now	Blocked pipes	Reactive maintenance	Instigate a pro-active maintenance program	Medium/ Low	Complete culvert audit and commence programmed maintenance on a priority basis
Main Findings		<ul style="list-style-type: none">Council maintains 7,771 pipe and box culverts.A majority of the pipe culverts have been constructed using butt jointed pipes. Many of these culverts have separated and become disjointed, causing them to not operate correctly and raise concern over their structural integrity.Culvert inspections also identified that many of the culverts, including inlets and outlets, are at least partially blocked causing them to operate inefficiently.Major emphasis is to increase maintenance levels in the following areas:<ul style="list-style-type: none">Culvert maintenance, clearing culverts on a regular cycle; andReplacing culverts where pipes have separated and become disjointed.General focus will be on managing condition 4 and 5 culverts and maintaining culverts at condition 3 and above.Additional data is to be gathered on the culverts to better schedule replacement and maintenance works.						
Budget Implications		<ul style="list-style-type: none">Based on the proposed program there is a funding shortfall of \$517,000 per year over the life of the 10 year plan for maintenance, renewal and provision of new/upgraded assets.Part of the funding shortfall is a result of increased maintenance levels, including:<ul style="list-style-type: none">Culvert maintenance – increase in funding by \$292,000 per annum to inspect and clear culverts on a five year cycle; andReplacing culverts – increase in funding by \$205,000 per annum to replace condition 5 rated culverts over a 20 year timeframe.Additional grant funding will be sought for programs, especially for capital programs.Grant funding where there is not certainty of the grant funding being available has not been included in the assessment.						
Maintenance Programs		<ul style="list-style-type: none">Appropriate maintenance programs are implemented to ensure all assets reach their maximum useful life within budgetary constraintsCouncil is implementing a detailed inspection program to identify and rectify defects, especially those that pose a safety issue to motorists, in a timely manner.						
Rural Drainage (Transport Asset Group)								
Objective		To manage the rural drainage network to ensure that the network allows the free passage of water and operates in a safe manner.						

Performance Measures		Target										
(f) Ensure that maintenance works are undertaken effectively.		<ul style="list-style-type: none"> Implement detailed inspection system to better target maintenance works to areas required. Review and monitor maintenance procedures to ensure effective practices are utilised. Implement upgraded maintenance programs. 										
(g) Develop detailed forward works programs.		<ul style="list-style-type: none"> Collect detailed data, including updated condition data, on all assets. Prepare detailed maintenance, renewal and new/upgraded works programs targeting condition 4 and 5 assets and safety issues aligned to available budgets. Prioritise program based on risk assessment of projects. Monitor effectiveness of implemented programs through over-all rural drainage condition assessments. 										
(h) Asset Management		<ul style="list-style-type: none"> Develop technical standards to assess and prioritise future works (e.g. standards to assess risk based replacement program). Review and update the Transport Asset Management Plan in line with updated asset data and developed standards on an annual basis. Seek additional sources of funding for capital works. 										
Activities	Who	When										
Ensure that maintenance works are undertaken effectively.	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Implement detailed inspection system		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Review and monitor maintenance procedures		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Implement upgraded maintenance program		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Activities	Who	When										
(b) Develop detailed forward works programs.	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Collect detailed data.		✓			✓			✓				✓
Prepare detailed maintenance, renewal and new/upgraded works programs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Determine priority based system based on risk assessment.		✓	✓									
Monitor effectiveness of implemented programs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Activities	Who	When										
(c) Asset Management	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Develop technical standards		✓										
Review Transport Asset Management Plan		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Seek additional funding sources		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

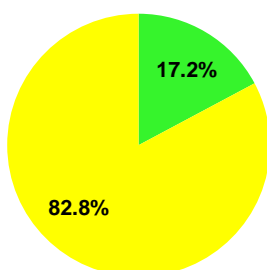
Rural Drainage (Transport Asset Group) – Maintenance Program for Sustainable Assets										
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Operations (\$'000)	1	1	1	1	1	1	1	1	1	1
Maintenance (\$'000)	705	705	705	705	705	705	705	705	705	705
Asset Renewal (\$'000)	349	349	349	349	349	349	349	349	349	349
New/Upgraded Assets (\$'000)	20	20	20	20	20	20	20	20	20	20
TOTAL (\$'000)	1,075	1,075	1,075	1,075	1,075	1,075	1,075	1,075	1,075	1,075

Other Transport Assets

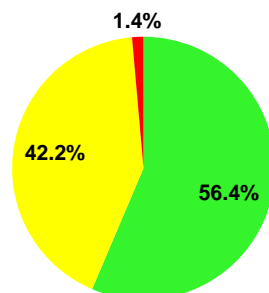


SUMMARY OF ASSET COSTS	Current Value / WrittenDown Value	Replacement Value	Funding Shortfall per Annum / Per 10 Years	Cost to Bring to Satisfactory (SS7 2015)	Required Annual Maintenance (SS7 2015)
Car Parks	\$2,294,003	\$2,579,512	\$6,000	\$0	\$49,813
Traffic Facilities	\$5,865,830	\$6,265,512	\$2,000	\$0	\$0
Guardrail	\$6,983,770	\$8,191,308	\$0	\$0	\$144,516
Bus Shelters	\$602,559	\$825,962	\$25,000	\$0	\$40,597
Roadside Furniture	\$305,516	\$312,045	\$113,000	\$0	\$238,927
Street Lighting	\$567,692	\$768,499	\$16,000	\$0	\$0
Street Signs	\$2,855,192	\$3,879,542	\$167,000	\$0	\$379,081
Water Facilities	\$4,050,889	\$5,334,664	\$234,000	\$1,746,066	\$94,458
Surface Drainage	\$41,802,949	\$52,110,103	\$346,000	\$1,024,341	\$743,236
Total	\$65,328,400	\$80,267,147	\$909,000	\$2,770,407	\$1,690,628

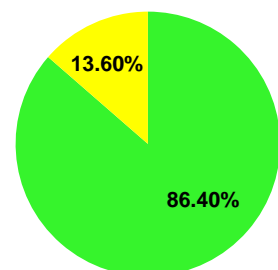
Car Parks Condition



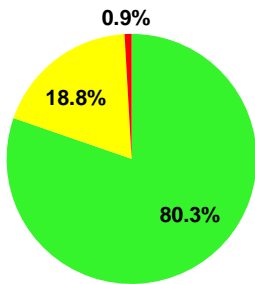
Traffic Facilities Condition



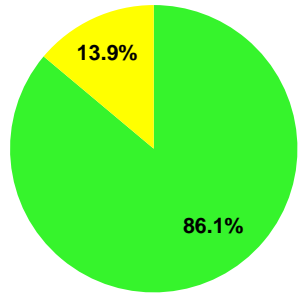
Bus Shelters Condition



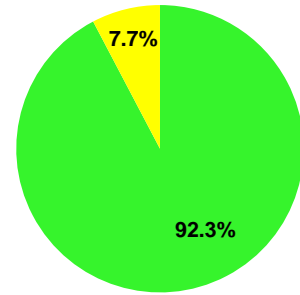
Roadside Furniture Condition



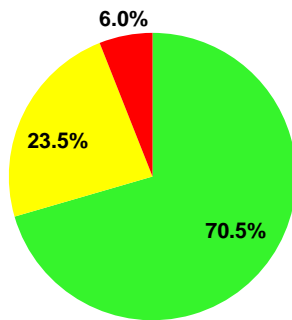
Street Signs Condition



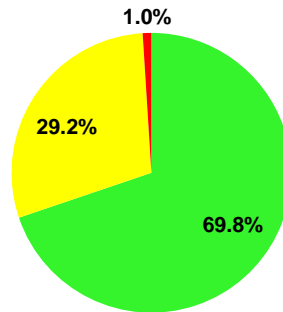
Street Lighting Condition



Water Facilities Condition



Surface Drainage (Roads) Condition



Key Data	Total replacement value of current holdings is \$80,267,147				
	Current (2015/16) maintenance/renewal budget:				
		Car Parks	Traffic Facilities	Bus Shelters	Guardrail
	Operations	\$35,160	\$0	\$0	\$46
	Maintenance	\$14,653	\$0	\$40,600	\$36,200
	Asset Renewal	\$0	\$0	\$0	\$0
	New/Upgrade Assets	\$0	\$0	\$0	\$0
	TOTAL	\$49,813	\$0	\$40,600	\$24,646
		Street Lights	Signs	Water Facilities	Surface Drainage
	Operations	\$96	\$464	\$21,292	\$347,500
	Maintenance	\$101,063	\$181,600	\$73,900	\$306,000
	Asset Renewal	\$33,500	\$0	\$140,000	\$0
	New/Upgrade Assets	\$0	\$30,000	\$880,000	\$0
	TOTAL	\$134,659	\$212,060	\$1,115,192	\$653,500
Last Condition Survey	<ul style="list-style-type: none"> Valuation dated December 2013 by APV Valuers and Asset Management. Condition assessment undertaken by Clarence Valley Council with random data validation by APV Valuers and Asset Management. 				
General Assessment of Condition	Car Parks:				
		Condition Rating	% of Asset Value		
	1	Excellent condition	10.3		
	2	Good condition	6.9		
	3	Moderate condition	82.8		
	4	Poor condition	0.0		
	5	Very poor condition	0.0		

	Traffic Facilities:									
		Condition Rating			% of Asset Value					
	1	Excellent condition			3.2					
	2	Good condition			53.2					
	3	Moderate condition			42.2					
	4	Poor condition			1.4					
	5	Very poor condition			0.0					
	Bus Shelters:									
		Condition Rating			% of Asset Value					
	1	Excellent condition			9.1					
	2	Good condition			77.3					
	3	Moderate condition			13.6					
	4	Poor condition			0					
	5	Very poor condition			0					
	Roadside Furniture:									
		Condition Rating			% of Asset Value					
	1	Excellent condition			21.4					
	2	Good condition			58.9					
	3	Moderate condition			18.8					
	4	Poor condition			0.9					
	5	Very poor condition			0.0					
	Street Lights:									
		Condition Rating			% of Asset Value					
	1	Excellent condition			38.5					
	2	Good condition			53.8					
	3	Moderate condition			7.7					
	4	Poor condition			0.0					
	5	Very poor condition			0.0					
	Signs:									
		Condition Rating			% of Asset Value					
	1	Excellent condition			4.0					
	2	Good condition			82.1					
	3	Moderate condition			13.9					
	4	Poor condition			0.0					
	5	Very poor condition			0.0					
	Water Facilities:									
		Condition Rating			% of Asset Value					
	1	Excellent condition			27.3					
	2	Good condition			43.2					
	3	Moderate condition			23.5					
	4	Poor condition			4.4					
	5	Very poor condition			1.6					
	Surface Drainage:									
		Condition Rating			% of Asset Value					
	1	Excellent condition			1.1					
	2	Good condition			68.7					
	3	Moderate condition			29.2					
	4	Poor condition			1.0					
	5	Very poor condition			0.0					
Critical Risks & Risk Management	RISK IDENTIFICATION					RISK TREATMENT				
	Asset at Risk	What can happen?	When can it occur?	Possible cause	Existing controls	Treatment option(s)	Residual risk	Risk treatment plan	Actions	Res
	Surface Drainage	Localised flooding	Anytime now	Inadequate maintenance	Reactive maintenance	N/A	N/A	N/A	N/A	N/A
	Water Facilities	Injury from slip on boat ramp	Anytime now	Inadequate controls	Planned maintenance	N/A	N/A	N/A	N/A	N/A

Main Findings	<ul style="list-style-type: none"> • Council maintains: <ul style="list-style-type: none"> ○ 15 car parks; ○ 727 traffic facility items (including traffic medians, pedestrian refuges, kerb blisters, speed humps, school crossings and edging around trees); ○ 48.2 km of guardrail and road fencing; ○ 290 roadside furniture items (including bus shelters, bollards, seating and bicycle racks); ○ 69 Council owned street lights (this does not include general street lights that are not owned by Council); ○ 12,545 signs; ○ 26 wharves/jetties and 44 boat ramps; and ○ 279.8 km of kerb and gutter and 277.6 km of open drain. • Charges associated with operation of general street lights not owned by Council have not been included in the assessment as these are not Council assets. Council does have a commitment however, to make a contribution to replace the lanterns associated with these lights over time and this cost has been included in the assessment. • As part of the assessment no allowance has been made for the construction of new kerb and gutter not associated with provision of new stormwater drainage. Construction of new kerb and gutter in this situation will be included in the costs associated with the provision of the stormwater drainage. • Major emphasis is to implement programs in the following areas: <ul style="list-style-type: none"> ○ Making provision for the resealing and remarking of Council car parks; ○ Providing new bus shelters for bus interchange areas over a three year period and implement an on-going upgrade of existing bus shelters associated with regular public transport to required disability access standards; ○ Implement a program to replace warning signs over a 15 year period to ensure continued performance; ○ Limited funding to be provided for the installation of new street lights; ○ Renew water facility components currently condition rated 4 or 5 over a four year period and implement the programs previously adopted by Council and those identified in the Clarence River Wharves Development Plan over a 20 year period; and ○ Renewing surface drainage condition rated 4 or 5 over a 20 year period and not constructing any new kerb and gutter unless associated with stormwater works. • General focus will be on managing condition 4 and 5 assets and maintaining assets at condition 3 and above. • Additional data is to be gathered on the condition of the "Other" transport assets to better schedule resurfacing requirements.
Budget Implications	<ul style="list-style-type: none"> • Based on the proposed program there is an average funding shortfall of \$909,000 per year over the life of the 10 year plan for maintenance, renewal and provision of new/upgraded assets. • Part of the funding shortfall is a result of increased maintenance levels, including: <ul style="list-style-type: none"> ○ Car park resealing – increase in funding by \$6,000 per annum to reseal car parks on a 20 year cycle. No definitive program currently exists; ○ Bus shelters – increase in funding by \$15,000 per annum over three years to provide bus shelters at bus interchanges and increase funding by \$10,000 per annum to implement upgrades at regular public transport bus shelters to make them disability access compliant; ○ Warning sign replacement – increase in funding by \$54,000 per annum to replace motorist warning signs on a 15 year cycle; ○ Water facilities – increase funding by \$69,000 for a four year period to replace defective component on existing structures and \$143,000 per annum to implement Council adopted programs for the provision of new structures over a 20 year period; and ○ Surface drainage – increase funding by \$346,000 to renew condition 4 and 5 rated assets over a 20 year period. • Additional grant funding will be sought for programs, especially for capital programs. • Grant funding where there is not certainty of the grant funding being available has not been included in the assessment. •
Maintenance Programs	<ul style="list-style-type: none"> • Appropriate maintenance programs are implemented to ensure all assets reach their maximum useful life within budgetary constraints • Council is implementing a detailed inspection program to identify and rectify defects, especially those that pose a safety issue to the community, in a timely manner.
Other Transport Assets (Transport Asset Group)	
Objective	<p>To manage:</p> <ul style="list-style-type: none"> • Car parks to provide adequate parking opportunities for the community; • Traffic facilities to provide increased safety to motorists in using the road network; • Guardrail/safety fencing so that it offers protection to motorists; • Roadside furniture to provide additional amenity for pedestrians at required locations; • Street lighting to improve safety in car parks and on urban streets; • Signs to provide warning and advice to motorists;

	<ul style="list-style-type: none"> Water facilities to provide improved assets to enhance the usage of Council's natural water resources; Surface drainage assets to provide effective drainage from Council's urban areas; and Maintain all these assets in a safe and serviceable condition.
Performance Measures	Target
(l) Ensure that maintenance works are undertaken effectively.	<ul style="list-style-type: none"> Implement detailed inspection system to better target maintenance works to areas required. Review and monitor maintenance procedures to ensure effective practices are utilised. Implement upgraded maintenance programs.
(m) Develop detailed forward works programs.	<ul style="list-style-type: none"> Collect detailed data, including updated condition data, on all assets. Prepare a street lighting strategy for urban and rural residential areas; Review existing programs for the provision of water facilities; Prepare detailed maintenance, renewal and new/upgraded works programs targeting condition 4 and 5 assets and safety issues aligned to available budgets. Monitor effectiveness of implemented programs through over-all road condition assessments.
(n) Asset Management	<ul style="list-style-type: none"> Develop technical standards to assess and prioritise future works (e.g. standards based on a risk approach). Review and update the Transport Asset Management Plan in line with updated asset data and developed standards on an annual basis. Seek additional sources of funding for capital works.

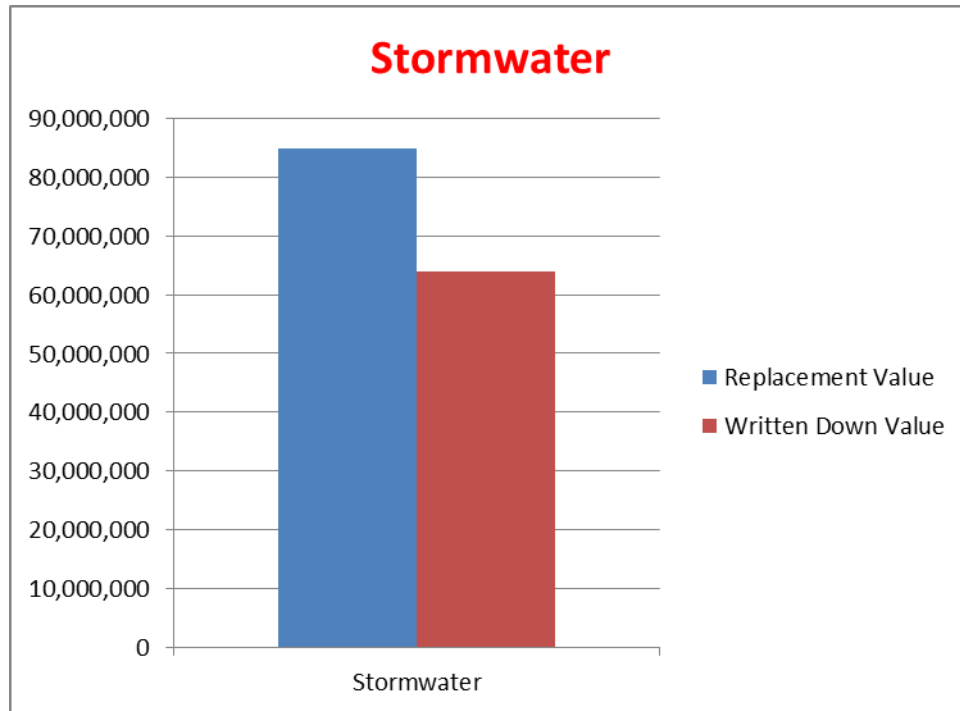
Activities	Who	When									
Ensure that maintenance works are undertaken effectively.	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Implement detailed inspection system		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Review and monitor maintenance procedures		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Implement upgraded maintenance program		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Activities	Who	When									
(b) Develop detailed forward works programs.	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Collect detailed data.		✓			✓			✓			✓
Prepare street lighting strategy			✓	✓							
Review existing water facility programs			✓	✓							
Prepare detailed maintenance, renewal and new/upgraded works programs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitor effectiveness of implemented programs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Activities	Who	When									
(c) Asset Management	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Develop technical standards		✓	✓								
Review Transport Asset Management Plan		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Seek additional funding sources		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

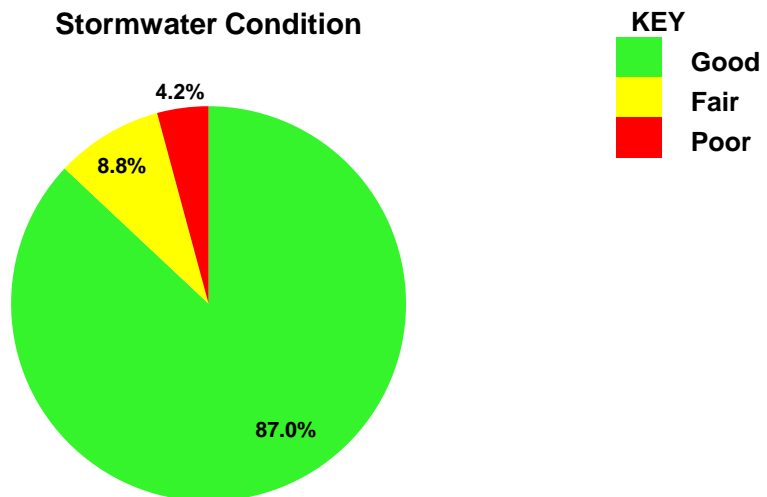
Other Transport Assets (Transport Asset Group) – Maintenance Program for Sustainable Assets										
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Operations (\$'000)										
Car Parks	35	35	35	35	35	35	35	35	35	35
Traffic Facilities	0	0	0	0	0	0	0	0	0	0
Bus Shelters	7	7	7	7	7	7	7	7	7	7
Guardrail	0	0	0	0	0	0	0	0	0	0
Roadside Furniture	0	0	0	0	0	0	0	0	0	0
Street Lights	1	1	1	1	1	1	1	1	1	1
Street Signs	23	23	23	23	23	23	23	23	23	23
Water Facilities	396	396	396	396	396	396	396	396	396	396
Surface Drainage										
Maintenance (\$'000)	15	15	15	15	15	15	15	15	15	15
Car Parks	2	2	2	2	2	2	2	2	2	2
Traffic Facilities	41	41	41	41	41	41	41	41	41	41
Bus Shelters	145	145	145	145	145	145	145	145	145	145
Guardrail	239	239	239	239	239	239	239	239	239	239
Roadside Furniture	99	99	99	99	99	99	99	99	99	99
Street Lights	280	280	280	280	280	280	280	280	280	280
Street Signs	94	94	94	94	94	94	94	94	94	94
Water Facilities	743	743	743	743	743	743	743	743	743	743
Surface Drainage										
Asset Renewal (\$'000)	6	6	6	6	6	6	6	6	6	6
Car Parks	0	0	0	0	0	0	0	0	0	0
Traffic Facilities	0	0	0	0	0	0	0	0	0	0
Bus Shelters	0	0	0	0	0	0	0	0	0	0
Guardrail	32	32	32	32	32	32	32	32	32	32
Roadside Furniture	54	54	54	54	54	54	54	54	54	54
Street Lights	69	69	69	69	0	0	0	0	0	0
Street Signs	51	51	51	51	51	51	51	51	51	51
Water Facilities										
Surface Drainage										
New/Upgraded Assets (\$'000)	0	0	0	0	0	0	0	0	0	0
Car Parks	0	0	0	0	0	0	0	0	0	0
Traffic Facilities	25	25	25	25	25	25	25	25	25	25
Bus Shelters	0	0	0	0	0	0	0	0	0	0
Guardrail	0	0	0	0	0	0	0	0	0	0
Roadside Furniture	10	10	10	10	10	10	10	10	10	10
Street Lights	44	44	44	44	44	44	44	44	44	44
Street Signs	143	143	143	143	143	143	143	143	143	143
Water Facilities	0	0	0	0	0	0	0	0	0	0
Surface Drainage										
TOTAL (\$'000)	2,554	2,554	2,554	2,554	2,485	2,485	2,485	2,485	2,485	2,485

Stormwater



SUMMARY OF ASSET COSTS	Current Value / WrittenDown Value	Replacement Value	Funding Shortfall per Annum / Per 10 Years	Cost to Bring to Satisfactory (SS7 2015)	Required Annual Maintenance (SS7 2015)
Stormwater	\$64,045,519	\$84,885,605	\$261,000	\$2,510,205	\$320,426

Stormwater Condition



Key Data	<ul style="list-style-type: none"> Total value of current Holdings \$84,885,605 Current maintenance/renewal budget: <table> <tr> <td>Operations</td> <td>\$1,347</td> </tr> <tr> <td>Maintenance</td> <td>\$120,000</td> </tr> <tr> <td>Asset Renewal</td> <td>\$200,000</td> </tr> <tr> <td>New/Upgrade Assets</td> <td><u>\$211,276</u></td> </tr> <tr> <td>TOTAL</td> <td>\$532,623</td> </tr> </table> 	Operations	\$1,347	Maintenance	\$120,000	Asset Renewal	\$200,000	New/Upgrade Assets	<u>\$211,276</u>	TOTAL	\$532,623
Operations	\$1,347										
Maintenance	\$120,000										
Asset Renewal	\$200,000										
New/Upgrade Assets	<u>\$211,276</u>										
TOTAL	\$532,623										
Last Condition Survey	<ul style="list-style-type: none"> Valuation dated December 2013 by APV Valuers and Asset Management. Condition assessment undertaken by Clarence Valley Council with random data validation by APV Valuers and Asset Management. 										

General Assessment of Condition	Condition Rating					% of Asset Value			
	1	Excellent condition					4.1		
	2	Good condition					82.9		
	3	Moderate condition					8.8		
	4	Poor condition					4.1		
	5	Very poor condition					0.0		
Critical Risks & Risk Management	RISK IDENTIFICATION					RISK TREATMENT			
	Asset at Risk	What can happen?	When can it occur?	Possible cause	Existing controls	Treatment option(s)	Residual risk	Risk treatment plan	
	Stormwater	Pipe collapse in roadway	Anytime now	Aging infrastructure	Reactive maintenance	Complete stormwater system audit and commence programmed maintenance on a priority basis	Medium / Low	Instigate pro-active maintenance program	a
	Stormwater	Localised flooding	Anytime now	Aging infrastructure	Reactive maintenance	Complete stormwater audit and commence programmed maintenance on a priority basis	Medium / Low	Instigate pro-active maintenance program	a
Main Findings	<ul style="list-style-type: none">• Council maintains 168 km of stormwater pipeline and 6,118 pits (including junction pits and inlets).• Floods over recent years have had an impact on some of the stormwater network condition, with pipes becoming separated and disjointed. It is possible that there are sections of pipeline where this has occurred but has not yet appeared as a defect on the surface.• Major emphasis is to increase maintenance levels and capital works in the following areas:<ul style="list-style-type: none">○ Stormwater system inspection and cleaning;○ Replacement of pipe segments condition rated 4 or 5; and○ Extension of the stormwater network to provide additional flooding protection in urban areas.• A program to inspect critical sections of the stormwater network through CCTV inspection on an on-going basis will be implemented to better determine the structural integrity and functioning of the network.• General focus will be on managing condition 4 and 5 stormwater segments and maintaining stormwater segments at condition 3 and above.								
Budget Implications	<ul style="list-style-type: none">• Based on the proposed program there is a funding shortfall of \$261,000 per year over the life of the 10 year plan for maintenance, renewal and provision of new/upgraded assets.• Part of the funding shortfall is a result of increased maintenance levels and proposed capital works, including:<ul style="list-style-type: none">○ Stormwater system maintenance – increase in funding by \$40,000 per annum to conduct CCTV inspection and programmed maintenance;○ Stormwater system renewal – replace condition 4 and 5 pipe segments over a 15 year period;• Additional grant funding will be sought for programs, especially for capital programs.• Grant funding where there is not certainty of the grant funding being available has not been included in the assessment.								
Maintenance Programs	<ul style="list-style-type: none">• Appropriate maintenance programs are implemented to ensure all assets reach their maximum useful life within budgetary constraints• Council is implementing a detailed inspection program to identify and rectify defects, especially those that pose a safety issue to motorists, in a timely manner.								
Stormwater									
Objective		To manage the stormwater network is a safe and serviceable condition so that stormwater system operates efficiently under normal rainfall conditions.							
Performance Measures		Target							

(o) Ensure that maintenance works are undertaken effectively.	<ul style="list-style-type: none"> Implement detailed inspection system to better target maintenance works to areas required, including the implementation of a CCTV inspection system for the major parts of the stormwater network. Review and monitor maintenance procedures to ensure effective practices are utilised. Implement upgraded maintenance programs.
(p) Develop detailed forward works programs.	<ul style="list-style-type: none"> Collect detailed data, including updated condition data, on all assets. Prepare detailed maintenance, renewal and new/upgraded works programs targeting condition 4 and 5 assets and safety issues aligned to available budgets. Monitor effectiveness of implemented programs through over-all stormwater network condition assessments.
(q) Asset Management	<ul style="list-style-type: none"> Develop technical standards to assess and prioritise future works (e.g. priority system based on cost, risk and protection offered). Review and update the Stormwater Asset Management Plan in line with updated asset data and developed standards on an annual basis. Seek additional sources of funding for capital works.

Activities	Who	When									
(a) Ensure that maintenance works are undertaken effectively.	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Implement detailed inspection system (Council staff)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Undertake CCTV inspection system		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Review and monitor maintenance procedures		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Implement upgraded maintenance program		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Activities	Who	When									
(b) Develop detailed forward works programs.	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Collect detailed data.		✓			✓			✓			✓
Prepare detailed maintenance, renewal and new/upgraded works programs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitor effectiveness of implemented programs		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Activities	Who	When									
(c) Asset Management	Manager Civil Services	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Develop technical standards		✓									
Review Stormwater Asset Management Plan		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Seek additional funding sources		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Stormwater – Maintenance Program for Sustainable Assets										
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Operations (\$'000)	1	1	1	1	1	1	1	1	1	1

Maintenance (\$'000)	129	129	129	129	129	129	129	129	129	129
Asset Renewal (\$'000)	168	168	168	168	168	168	168	168	168	168
New/Upgraded Assets (\$'000)	139	139	139	139	139	139	139	139	139	139
TOTAL (\$'000)	437	437	437	437	437	437	437	437	437	437