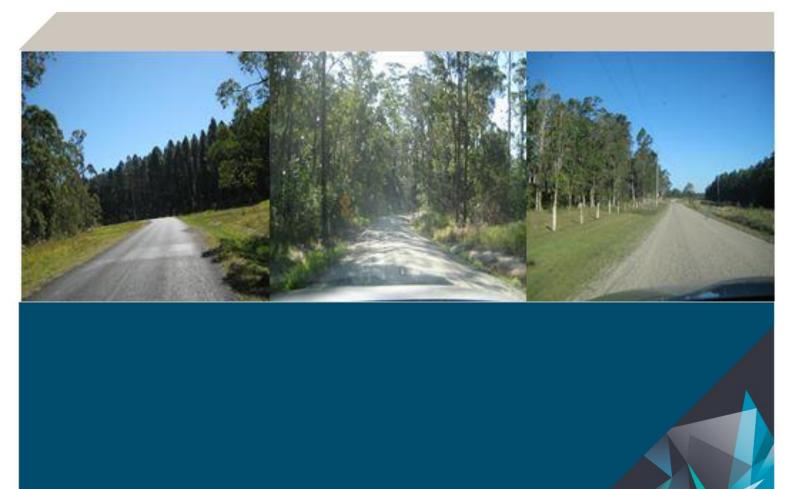


Sunshine Coast Council Unsealed Roads Upgrade Plan 2015 – 2035



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Disclaimer

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Executive Summary

Expectations of the public regarding the level of service provided by the road network are increasing. This includes both long term residents and recent new arrivals. Unsealed roads are often seen as being not acceptable, due to concerns such as dust nuisance, corrugations, loose material, environmental issues and safety. There is also a perception that unsealed roads are more expensive to maintain as the surface needs ongoing maintenance including grading, additional material added and drains cleared, although in reality, an unsealed road typically costs less to maintain than a fully sealed road over its life due to the high cost of upgrading the unsealed road to sealed standard.

This Unsealed Roads Upgrade Plan has been developed in response to a council request to undertake an investigation to develop a suitable process for determination and validation of the highest priority unsealed roads for upgrading, and to then develop a 20 year upgrade plan to tackle the highest priority roads. The process was to include consideration of a range of factors such as road use, road function, maintenance requirements, rural impacts, dust impacts, traffic attractors etc.

Council's road network currently is of an approximate total length of 2370 kms with 1770 kms of sealed roads and 600 kms of unsealed roads. The unsealed road network generally comprises lower order roads which provide a variety of functions and typically carry a range of daily traffic volumes of between 30 and 500 vehicles per day (for no through roads and through roads respectively).

An assessment and prioritisation process was developed involving a range of road form and function criteria which had been highlighted during the discussions. Each road was assessed against these criteria and scored, a weighting was applied to each score relevant to its relative importance and the weighted scores added to provide an overall score for the road. The roads were then ranked in order of overall scores. This process was refined through a number of iterations and trial assessments of selected roads of varying hierarchy.

Assessment of council's unsealed road network has been undertaken for approximately 100kms of the total 600 kms of unsealed roads. A program to undertake assessment of the remainder of the unsealed roads is progressively being undertaken as requests are received from the community.

The assessment and prioritisation process has been utilised to develop an indicative 20 year program for the upgrading of approximately 45kms of unsealed roads based on highest priority projects and a budget commitment of \$3 million per year. Upgrading of more than 45kms over the 20 year period would involve a significant increase in funding.

Each year the priority list of unsealed roads will be reviewed and the 20 year indicative program amended. The first year of the program will be submitted annually through council budget process, as part of the capital works program, and the Plan will be updated annually in accordance with the budget outcomes. The following 19 years are indicative only and subject to confirmation each subsequent year, however the Plan provides Council and the community a strong indication as to the status of individual roads and their likely timing for future full upgrading.

1. Purpose

The Sunshine Coast Council Unsealed Roads Upgrade Plan 2015 – 2035 sets out the strategic planning for the upgrading of the unsealed road network.

The plan has been prepared as a supporting plan of the Sunshine Coast Sustainable Transport Strategy 2011-2031. The plan provides more detail regarding the assessment, planning and implementation of projects to upgrade unsealed roads and is closely aligned with council's Road Safety Action Plan objectives.



2. Introduction

In 2013, the councillors whose divisions contain the vast majority of the unsealed roads requested officers to develop a plan and assessment methodology to increase the rate of upgrading of unsealed roads, based on a defined prioritisation process. The outcome of the review was that, of the 600 kms of unsealed roads, approximately 100km could potentially be considered to be of highest priority for upgrading. Subject to funding availability, a program to upgrade up to 100km over 20 to 25 years was seen as being possibly achievable, subject to funding availability.

Council requested that an investigation be undertaken to develop a suitable process for determination and validation of the highest priority unsealed roads for upgrading. The process was to include consideration of a range of factors such as road use, road function, maintenance requirements, rural impacts, dust impacts, traffic attractors etc.

This plan outlines council's unsealed road network, the assessment and prioritisation process, unsealed road management and presents an indicative 20 year program for upgrade of the highest priority unsealed roads.



3. Extent of Network

Council's road network currently comprises a total length of approximately 2370 kms with 1770 kms of sealed roads and 600 kms of unsealed roads.

The unsealed roads are primarily located within council divisions 1, 5, 9 & 10 with some minor lengths of unsealed roads in divisions 2, 3, 6 and 8.

Council divisions in which the majority of the unsealed road network is located are as follows:

Division	Localities
	(as per 2014 Council boundaries)
1	Bald Knob, Beerburrum, Beerwah, Bells Creek, Bellvista, Booroobin, Bribie Island North, Caloundra South, Caloundra West, Coochin Creek, Crohamhurst, Glass House Mountains, Glenview, Landsborough, Maleny, Meridan Plains, Mooloolah Valley, Mount Mellum, Palmview, Peachester, Wootha
5	Balmoral Ridge, Booroobin, Cambroon, Chevallum, Conondale, Curramore, Diamond Valley, Dulong, Elaman Creek, Eudlo, Flaxton, Hunchy, Ilkley, Kidaman Creek, Landers Shoot, Maleny, Montville, Mooloolah Valley, Nambour, North Maleny, Obi Obi, Palmwoods, Reesville, Tanawha, West Woombye, Witta, Woombye.
9	Bli Bli, Coolum Beach, Doonan, Eumundi, Kulangoor, Maroochy River, Ninderry, North Arm, Peregian Springs, Point Arkwright, Valdora, Verrierdale, Weyba Downs, Yandina, Yandina Creek, Yaroomba
10	Belli Park, Bridges, Burnside, Coes Creek, Coolabine, Cooloolabin, Dulong, Eerwah Vale, Eumundi, Gheerulla, Highworth, Image Flat, Kenilworth, Kiamba, Kidaman Creek, Kulangoor, Kureelpa, Mapleton, Nambour, North Arm, Obi Obi, Parklands, Perwillowen, Rosemount, Towen Mountain, West Woombye, Yandina

4. Road Hierarchy

Roads which comprise council's road network are classified according to their function in accordance with the Sunshine Coast Planning Scheme 2014. (refer SC6.17 Planning Scheme Policy for the Transport and Parking Code.)

Unsealed roads are typically located in rural areas and generally comprise lower order roads under the road hierarchy with approximate current daily traffic volume ranges as follows:

Corridor Classification	Hierachy	Approximat e daily traffic volumes
Neighbourhood Street	Neighbourhood Collector Street	70 – 500
Local Streets	Access Street	60 – 200
	Access Place	30-50

5. The Challenge Ahead

Expectations of the public regarding the level of service provided by the road network are increasing. This includes both long term residents and recent new arrivals. Unsealed roads are often seen as not being acceptable, due to concerns such as dust nuisance, corrugations, loose material, environmental issues and safety. There is also a perception that unsealed roads are more expensive to maintain as the surface needs ongoing maintenance including grading, additional material added and drains cleared, although in reality, an unsealed road typically costs less to maintain than a fully sealed road over its life due to the high cost of upgrading the unsealed road to sealed standard.

Based on current construction costs, the 2013/14 financial year budgeted level of funding allows for the upgrading of approximately 2 to 3 kilometres of unsealed road each year. With this current level of expenditure it will take many years to upgrade most of the unsealed roads in council's road network, and the majority of gravel roads will remain unsealed due to both the cost of upgrades and the lack of traffic volumes to justify an upgrade.

An important part of the unsealed roads upgrade strategy, is to include provision for appropriate management of those roads which, in terms of their priority for upgrade, will not be sealed for many years, if ever. Council currently undertakes routine and programmed maintenance of roads in accordance with council's Road Management Plan. As part of this, there needs to be appropriate consideration of particular safety issues which may be raised as part of a request for upgrading. This could include such things as areas of poor visibility,

narrow width on crests and curves and road side hazards.



6. Assessment and Prioritisation Process

Council receives many requests to upgrade the existing unsealed road network. Whilst it may be desirable to upgrade some of the unsealed roads across the region, it is considered that council should utilise available funding on upgrading those roads which are of the highest priority.

The prioritisation process, which has been developed, involves consideration of the following criteria.

- Traffic volumes
- Percentage heavy commercial vehicles
- If road is a school bus route
- Crash history
- Road function
- Maintenance frequency
- Number of dwellings
- Number of dwellings less than 40 metres from road
- If crops affected by dust
- · Presence of trip attractors
- If road is a farm produce route
- If road connects centres
- If project completes an existing project on a through road

Each criteria is scored, a weighting applied to each criteria score and the weighted scores are added to provide an overall score for the road. The roads are then prioritised by total score.

Details of the Criteria, Scores and Weightings are attached as Appendix 2.

The criteria, against which each unsealed road is assessed, were determined through consultation with councillors and supervisory staff. The weightings were developed via a number of iterations and trial assessments of a number of sealed and unsealed roads of varying hierarchy.

Assessment of council's unsealed road network has been undertaken for approximately 100kms of the total 600kms of unsealed roads. This initial 100kms was identified through workshops with councillors, engineering officers and council's road maintenance supervisors. The detailed assessment table is attached as Appendix 3.

A program to undertake assessment of the remainder of the unsealed roads is progressively being undertaken as requests are received from the community.



7. Project Validation

Use of the assessment and prioritisation process has enabled projects to be ranked in order of priority. Refer Appendix 3.

The development of an indicative 20 year forward works program is dependent on the adoption of estimated construction costs.

An initial program has been prepared on the basis of current estimated costs based on a preliminary scoping of the required extent of works at an average rate of approximately \$1.4 million per kilometre. Refer Appendix 4. It should be noted that actual construction costs may well be less or greater than the average rate depending on the characteristics of the particular site.

These preliminary scoping estimates for each project need to be validated prior to submission of the projects to Council for funding consideration each year.

It is proposed that this will entail an initial site inspection and assessment by experienced design and construction staff.

The assessment would include consideration of the existing horizontal and vertical alignment of the road, whether the desired width two lane road could be constructed and if not, if a single lane road width could be constructed with passing opportunities.

It would also include consideration of the depth and strength of the existing subgrade, presence of significant vegetation and road side hazards.

This would be followed by obtaining broad level survey data over the project extent and using this survey data as the basis for preparation of a preliminary design and estimate of cost.

It is proposed that validation of projects proposed for funding in the first 10 years of the program be progressively undertaken over the next 12 months.

8. Funding

Council has many demands on its funds and has recently, in the 2014/15 budget, increased funding for upgrading of gravel roads from \$2 million to \$3 million, and has included this amount in the forward ten year capital works program. This level of funding enables approximately 45kms of gravel road to be upgraded to a sealed standard over a 20 year timeframe.



9. Contributions

From time to time, council is approached by private parties to either (i) upgrade an unsealed road at their cost or (ii) to provide a contribution towards the cost of the upgrade.

In the first case, council has agreed to this on a number of occasions, subject to the works being designed and constructed to current standards.

This is a similar process to a road being constructed as part of a development. It is considered that this practice should continue as opportunities arise.

In the second case, it may be appropriate for council to consider bringing the construction of a project forward as a consequence of an external funding offer. It is considered that each application should be assessed on its merits and be the subject of an investigation and report to council in each instance.

10. Design Standards

Roads must be designed to provide safe travel at an adopted design speed taking into account the expected volume of traffic. Designs are required, under legislation, to be certified by a registered professional engineer, and must be undertaken in accordance with the relevant engineering standards, such as the Transport and Main Roads specifications and the Austroads specifications.

The upgrading and sealing of roads may increase the speed of vehicles due to the better surfacing of the pavement and the removal of weather effects on gravel pavements such as scouring, corrugations etc. If the trafficable width, horizontal and vertical alignment of the road, and the roadside clear zones are not appropriate, this increase in vehicle speed may compromise the safety of road users.

The methodology of road design involves a few steps which in a simplistic form include the following:

- Assessment of the horizontal & vertical alignment of the road to determine an appropriate operating speed.
- Where deficiencies or discrepancies are identified in either of these alignments for a nominated operating speed, appropriate remedial treatments are to be determined and incorporated into the design. This may involve modification of the alignment and/ or installation of signage in accordance with the design processes.
- 3. From the preferred alignment and operating speed, the clear zones i.e. the distance from the edge of the road to a non-frangible object e.g. a large tree or rock, are then assessed. Where the clear zones can easily be achieved, the design is finalised. Where the clear zones cannot be achieved, remedial treatments are investigated and incorporated into the design to maintain the safety of road users.



11. Unsealed Road Management Plan

Unsealed roads are maintained in accordance with council's Road Management Plan which sets out the level of service and time frames for routine maintenance (e.g. grading, drain cleaning and vegetation clearing/slashing) and gravel re-sheeting, which involves the periodic replacement of the gravel pavement surface.

Properly formed and maintained, with appropriate levels of traffic, an unsealed road will perform well.

Council receives complaints from residents regarding the contamination of rain water collected from rooves. Advice is provided regarding appropriate management of rain water collection through the use of "first flush" devices, which divert the initial flow of water from a roof to ground, filters and the regular desludging of rainwater tanks.

Council also receives concerns from residents regarding the detrimental effect that they feel the dust has on their health. An extensive search of published literature regarding this has been undertaken however no documented evidence has been found to substantiate this concern.

Dust nuisance to residences adjacent to an unsealed road does occur from time to time and is exacerbated in times of dry weather and by the volume and speed of passing traffic. The level of dust generation is also influenced by the pavement material type. Council has undertaken a number of trials of dust suppressant treatments to unsealed roads however the trials have not yielded any positive results.

Council has an ongoing interest in exploring possible alternative treatments which may be utilised to improve dust suppression and the overall condition of unsealed roads. If such treatments are found to be successful in the future, it is anticipated that they could be utilised on roads which are not ranked as high priorities for upgrading.

Council does not consider it appropriate to undertake sealing of short lengths of unsealed roads adjacent to residences for the purpose of reducing dust nuisance for the following reasons;

- there are a large number of such locations across the region
- it is inefficient to undertaken upgrading of short sections of roads
- the practice does not accord with the prioritisation process which has been developed
- undertaking such works would reduce the available funding for upgrading of higher priority roads

12. Unformed Roads

There is increasing pressure from the community to include some unformed roads in council's road network. These are roads which council has not previously accepted responsibility for maintenance of due to the low standard of their construction. Generally these unformed roads provide access to one or two properties only and are essentially farm tracks.

Many of these unformed roads traverse steep or low lying areas with little or inadequate drainage structures and are usually formed of low strength local materials.

Acceptance of unformed roads into council's road network will expose council to the risk of significant expenditure to bring them up to a reasonable standard which can be maintained. This risk could be minimised by adoption of a strategy which sets out council's position in regards to maintenance and upgrading of unformed roads.

A project is to be undertaken in 2015 to identify all unformed roads in the council region and to assess which, if any, should be included in council's road network and to develop a strategy for consideration by council.



13. Unsealed Roads Upgrade Program

A 20 year indicative capital road works program for the upgrading of unsealed roads has been developed on the basis of an annual funding allocation of \$3 million and would enable approximately 45kms of road to be upgraded. The program has been developed using the assessment and prioritisation process. A copy of the program is attached as Appendix 4.

The program has been developed on the basis of the roads which have been assessed and prioritised to date. These roads total approximately 100km of the total 600km of unsealed roads.

Whilst it is considered that the majority of the potential higher priority roads have been included, it is likely that some roads of a high priority will be identified as the assessment of the remainder of the unsealed roads progresses as requests are received.

Each year the priority list of unsealed roads will be reviewed and the 20 year indicative program amended. The first year of the program will be submitted annually through the Investment Steering Committee for adoption by council as part of the capital works program. The following 19 years are indicative only and subject to change.



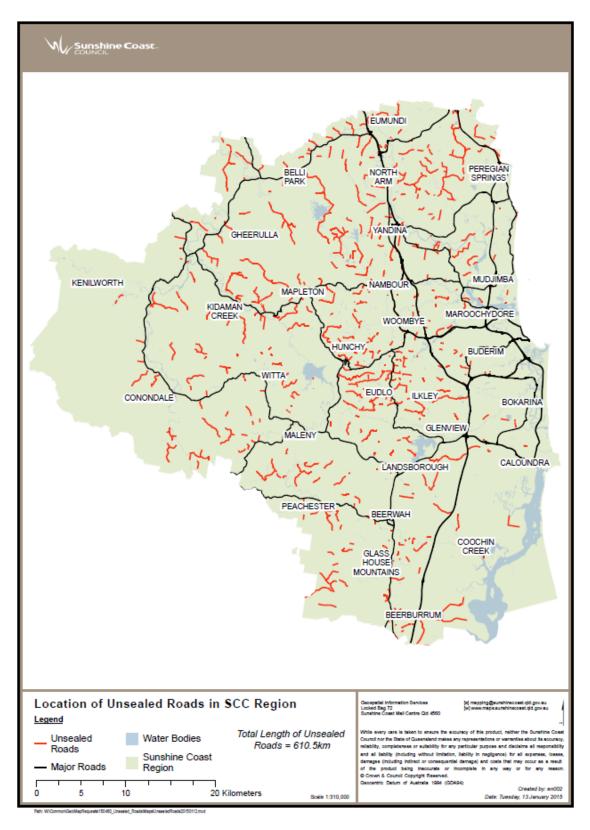
References

Sunshine Coast Council,2014 Sunshine Coast Planning Scheme 2014

Department of Transport and Main Roads 2012 Guidelines for Road Design on Brownfield Sites

Austroads Guide to Road Design

Appendix 1: Unsealed Road Network



Appendix 2: Prioritisation Model - Criteria, Unit and Weighting Summary Table

Criteria	Unit	Weighting						
Traffic Volume	Average Daily Traffic	Average Daily Traffic (less commercial heavy vehicles)/10						
	% heavy commercial vehicles	% heavy commercial vehicles x Average Daily Traffic						
School Bus Route	yes or no	yes = 10						
		no = 0						
Accident History	Number of reported accidents in last 5 years within road section involving;	(based on comparative costs to the community)						
	 Fatalities 	Number of fatalities x 16.6						
	 Hospitalisations 	Number of hospitalisations x 4 Number of medical treatments x						
	Medical treatments	0.14						
Maintenance	Number of gradings required in last 3 years	Number of gradings > 1 per year x 10						
Residential Dust	Total number of houses accessed from the road	Total number of houses accessed from the road						
	Number of houses < 40 metres from the road	Number of houses < 40 metres from the road per km						
Farm Dust	yes or no	yes = 10						
		no = 0						
Trip Attractor	yes or no	yes = 10						
		no = 0						
Farm Produce Route	yes or no	yes = 30						
		no = 0						
Connects Centres	yes or no	yes = 10						
		no = 0						
Completes Project	yes or no	yes = 10						
		no = 0						

Appendix 3: Currently Assessed Unsealed Roads List

Appendix	3:			sealed Roads List (ranked in order of priority)												C	riteria							
		Prepared by TIM / PD		1-Dec-14	Version CL		ion length shall be h for roads less th		Traff	ic volume	School Bus Route		Accident History		Maintenance	Residential Dust	Residential Dust	Farm Dust Problem	Trip Attractors	Demonstrated regular Farm produce route	Connections towns or centres	Completes existing project on through road		
Capital Works ID No	Division	Road name	Location	Start	Finish	Start Chainage	End Chainage	Length (m)	Average Daily Traffic	% Commercial Vehicles	Insert Yes or No	No.	f reported accidents in within road section No.	n No. Medical	Number of gradings required in last three years	All houses on road section	Number of houses wihin 40 metres of road in section	Insert Yes or No	Insert Yes or No	Insert Yes or No	Insert Yes or No	Insert Yes or No	Score	Road Hierarchy
												fatalities	hospitalisations	treatments										
13125	9	1.0 North Arm Yandina Creek Road	North Arm	Hidden Valley Road	Zgrajewski Road	700	2800	2100	501	13.60%	yes	0	1	1	6	3	1	no	no	no	no	no	157	Neighbourhood Collector
16844	10	1.0 Delicia Road	Mapleton	Mc Leod Road	hill section	1300	2400	1100	483	6.00%	no	0	0	0	9	4	1	no	yes	no	no	no	149	Local Street
13167	9	2.0 Doonan Bridge Road	Doonan	Arcoona Road	Verrierdale Road	900	1700	800	200	8.30%	yes	0	0	1	12	8	1	no	no	no	no	no	146	Neighbourhood Collector
18091	9	3.0 Doonan Bridge Road	Doonan	Arcoona Road	Verrierdale Road	2050	3600	1550	200	8.30%	yes	0	0	1	12	9	2	no	no	no	no	no	142	Neighbourhood Collector
18092	9	1.0 Doonan Bridge Road	Doonan	Arcoona Road	Verrierdale Road	0	600	600	200	8.30%	yes	0	0	1	12	3	0	no	no	no	no	no	140	Neighbourhood Collector
17306	5	2.0 McGilchrist Road	Eudlo	Dales Road	Ilkey Road	2000	3200	1200	257	5.00%	yes	0	1	1	9	11	2	no	no	no	no	no	122	Neighbourhood Collector
18093	5	1.0 McGilchrist Road	Eudlo	Dales Road	Ilkey Road Mossy Bank	0	500	500	257	5.00%	yes	0	1	1	9	1	0	no	no	no	no	no	113	Neighbourhood Collector
13113	5	3.0 Perrins Road	Eudlo	Logwoods Road	Road	1900	2150	250	238	2.50%	no	0	0	0	6	6	2	no	no	no	yes	no	101	Neighbourhood Collector
18094	5	2.0 Perrins Road	Eudlo	Logwoods Road	Mossy Bank Road	1100	1350	250	238	2.50%	no	0	0	0	6	5	3	no	no	no	yes	no	101	Neighbourhood Collector
13096	10	2.0 Kiamba Road	Kiamba	Bridge south Maroochy	Cooloolabin Road	400	2200	1800	198	7.20%	yes	0	0	0	6	10	4	no	no	no	yes	yes	100	Neighbourhood Collector
15789	5	1.0 Mossy Bank Road	Eudlo	Perrins Road	Brooks Road	0	800	800	71	5.00%		0	0	0	10.5	9	3	no	no	no	no	no	100	Neighbourhood Collector
13347	9	3.0 North Arm Yandina Creek Road	North Arm	Hidden Valley Road	Zgrajewski Road	5100	5700	600	382	6.00%	yes	0	1	1	4	7	2	no	no	no	no	no	98	Neighbourhood Collector
18095	10	1.0 Kiamba Road	Kiamba	Bridge south Maroochy	Cooloolabin Road	0	400	400	198	7.20%	yes	0	0	0	6	1	1	no	no	no	yes	yes	98	Neighbourhood Collector
13344	9	Zgrajewski Road	Yandina Creek	McCords Road	Doonan Bridge Road	0	1800	1800	209	7.00%	yes	0	0	0	7	19	2	no	no	no	no	no	96	Neighbourhood Collector
17996	0	Lakewood Drive incl	Peregian	Murdering Creek Road	Ť	0	2100	2100	186	3.90%		0	0	0	7	25	17	no	no	no	no	no	95	Neighbourhood Collector
13416	10	Monak Road 1.0 Lees Road	Beach Bridges	Browns Creek Road	end of gravel Bunya Road	0	350	350	104	6.60%	yes	0	0	0	6	8	5	no	no	no	no	no	95	Local Street
13102	5	Logwoods Road	Eudlo	Perrins Road	Mossy Bank	0	600	600	131	11.80%	yes	0	0	0	6	6	4	no	yes	no	no	no	94	Neighbourhood Collector
16017	10	Colemans Farm Road	Yandina	Colemans Road	Road Wappa Falls	0	1600	1600	83	8.40%	no	0	0	0	6	7	7	yes	no	yes	no	no	93	Local Street
					Road Cooloolabin					-		0	0											
18097	10	4.0 Kiamba Road	Kiamba	Bridge south Maroochy	Road Cooloolabin	2800	3200	400	198	7.20%	yes		0	U	6	0	0	no	no	no	yes	yes	93	Neighbourhood Collector
18098	10	5.0 Kiamba Road	Kiamba	Bridge south Maroochy	Road	3200	3300	100	198	7.20%	yes	0	0	0	6	0	0	no	no	no	yes	yes	93	Neighbourhood Collector
18099	10	3.0 Kiamba Road	Kiamba	Bridge south Maroochy	Cooloolabin Road	2200	2300	100	198	7.20%	yes	0	0	0	6	0	0	no	no	no	yes	yes	93	Neighbourhood Collector
18100	9	2.0 North Arm Yandina Creek Road	North Arm	Hidden Valley Road	Zgrajewski Road	3400	4100	700	382	6.00%	yes	0	1	1	4	4	2	no	no	no	no	no	92	Neighbourhood Collector
16603	5	2.0 Mossy Bank Road	Eudlo	Logwoods Road	Highlands Road	0	400	400	131	11.80%	yes	0	0	0	6	3	2	no	yes	no	no	no	90	Neighbourhood Collector
15957	9	North Arm Road	North Arm	House 52 end of seal	end of gravel	0	2000	2000	218	6.80%	yes	0	0	1	6	22	6	no	no	no	no	no	89	Local Street
13138	5 10	1.0 Sippy Creek Road 2.0 Colemans Road	Tanawha Yandina	Bruce Highway Colemans Farm Road	end of gravel start of seal	0 900	300 1500	300 600	150 167	15.80% 11.30%	no no	0	0	0	6	3 8	3 5	no no	no no	no yes	no no	no no	86 85	Local Street Local Street
16158	9	4.0 North Arm	North Arm	Valdora Road	Zgrajewski	6100	7600	1500	382	6.00%	yes	0	0	1	4	3	1	no	no	no	no	no	82	Neighbourhood Collector
13331	9	Yandina Creek Road Cash Road	Eumundi		Road			300	253	8.30%	no	0	1	0	3	7	2	no	no	no	no	no	78	Local Street
	10	1.0 Colemans Road	Yandina	Gobberts Road	Colemans Farm Road	0	900	900	167	11.30%	no	0	0	0	3	3	0	yes	no	yes	no	no	77	Local Street
	7	1.0 Andreasens Road	Rosemount	Paynters Creek Road	end of gravel	0	400	400	162	19.00%	no	0	0	0	4	5	4	no	no	no	no	no	76	Local Street
13138	5 7	2.0 Sippy Creek Road 2.0 Andreasens Road	Tanawha Rosemount	Bruce Highway Paynters Creek Road	end of gravel end of gravel	300 400	3800 900	3500 500	150 162	10.00% 19.00%	no no	0	0	0	6 4	20 8	7	yes no	no no	no no	no no	no no	76 76	Local Street Local Street
13113	5	1.0 Perrins Road	Eudlo	Logwoods Road	Mossy Bank	0	450	450	238	2.50%	no	0	0	0	6	2	0	no	no	no	yes	no	74	Neighbourhood Collector
17646	9	Burtons Road	Bridges	Yandina Bli Bli Road	Road end of gravel	0	1300	1300	127	5.90%	no	0	0	0	8	2	2	no	no	no	no	no	73	Local Street
11487	10	1.0 Cedar Creek Road	Gheerulla	Eumundi Kenilworth Road	End of gravel	3400	6100	2700	125	9.50%	yes	0	1	1	6	5	5	no	no	no	no	no	71	Local Street
11487	10	2.0 Cedar Creek Road	Gheerulla	Eumundi Kenilworth	End of gravel	6100	6800	700	100	9.50%	yes	0	1	1	6	4	0	no	no	no	no	no	68	Local Street
	10	2.0 Gobberts	Yandina	Road Wappa Falls Road	Colemans	0	800	800	100	9.00%	no	0	0	0	3	4	4	yes	no	yes	no	no	68	Local Street
16881	5	Road(with bridge) Herron Road	Conondale	Maleny Kenilworth Road	Road end of gravel	0	400	400	135	7.80%	no	0	0	0	1	13	13	no	no	no	no	no	68	Local Street
11487	10	3.0 Cedar Creek Road	Gheerulla	Eumundi Kenilworth Road	End of gravel	6800	9200	2400	75	9.50%	yes	0	1	1	6	17	3	no	no	no	no	no	66	Local Street
15844	5	Christensens Road	Hunchy	end of seal at #161	end of gravel	0	520	520	152	5.00%	no	0	0	1	3	19	2	no	no	no	no	no	63	Local Street
13416	10	2.0 Lees Road	Bridges	Browns Creek Road Eumundi Kenilworth	Bunya Road	350	1700	1350	104	6.60%	yes	0	0	2	6	6	1	no	no	no	no	no	62	Local Street
\vdash	10	Ceylon Road	Belli Park	Road	Council bdy	150	1400	1300	180	5.80%	yes	0	0	0	3	12	6	no	no	no	yes	no	61	Neighbourhood Collector
17316	7	Clarkes Road	Diddillibah	Diddillibah Road	David Low Way	450	1200	750	85	2.50%	no	0	0	0	3	4	4	yes	no	yes	no	no	61	Local Street
	5	Johnsons Road	Eudlo	Johnsons Road	Entrance statement			300	137	1.80%	yes	0	0	0	4.5	1	0	no	yes	no	no	no	54	Local Street
11747	10	Kocho Road	Image Flat	Duhs Road	start of seal	0	600	600	90	10.00%	no	0	0	0	3	12	10	no	no	no	no	no	54	Local Street
16188	5	Brandenburg Road	Diamond Valley	end of seal	Hovard Road	0	2400	2400	195	3.00%	no	0	1	1	5	9	2	no	no	no	no	no	53	Neighbourhood Collector
10590	1	Johnston Road	Glass House Mountains	Andersen Road	End of gravel	0	700	700	46	7.60%	yes	0	0	0	2	4	0	yes	no	yes	no	no	53	Neighbourhood Collector
11558	10	Perwillowen Road	Perwillowen	End of seal	End of gravel	0	1300	1300	259	5.90%	no	0	0	0	3	14	9	no	no	no	no	no	57	Local Street
10590	1	Moffatts Road	Glass House Mountains	Steve Irwin Way	Anderson Road	0	800	800	46	7.60%	yes	0	0	0	2	0	0	yes	no	yes	no	no	48	Neighbourhood Collector
10590	1	Andersen Road	Glass House Mountains	Moffatts Road	Johnston Road	0	200	200	46	7.60%	yes	0	0	0	2	0	0	yes	no	yes	no	no	48	Neighbourhood Collector
		-		•				•	•				•			•	•	•			•	•		

		1	I	I	1			I !	1	I		i -	1 .			l	1 .		į į	ī		ī		
	10	3.0 Delicia Road	Mapleton	hill section	end of gravel	5600	10000	4400	250	6.00%	no	0	0	0	3	30	0	no	no	no	no	no	45	Local Street
45770	5	2.0 Rambert Road	Eudlo	end of seal	Johnsons Road	•	200	300	197	3.30%	yes	0	0	0	1.5	2	2	no	yes	no	no	no	44	Local Street
15773	10	Burnside Road	Perwillowen	Henebury Road	End of gravel	0	360	360	67	5.20%	no	0	0	0	3	9	3	no	no	no	no	no	43	Local Street
11228	1	1.0 Forestry Road	Landsborough	Steve Irwin Way	Hapgood Road	1700	3100	1400	129	13.30%	yes	0	0	0	3	4	0	no	no	no	no	no	41	Local Street
13170	/	1.0 Taylors Road	Buderim	Mooloolaba Road Upper rosemount	end of gravel	0	600	600	90	10.00%	no	0	0	0	3	10	4	no	no	no	no	no	40	Local Street
10605	7	Paynters Creek Road	Rosemount	Road	Petrie Creek Road	2800	3300	500	116	10.80%	yes	0	0	0	2	3	0	no	no	no	no	yes	39	Neighbourhood Collector
-	10	Savilles Road	Image Flat	End of seal	end of gravel	400	800	400	60	4.00%	no	0	0	0	3	8	4	no	no	no	no	no	38	Local Street
	1	Laxton Road	Palmview	Elia di Scai	cha or graver	100	000	500	50	11.30%	no	0	0	0	1	2	2	yes	no	yes	no	no	38	Local Street
13120	9	Thompsons Road	Maroochy River	Yandina Bli Bli Road	end of gravel	0	1300	1300	79	8.00%	no	0	0	1	4	11	7	no	no	no	no	no	38	Local Street
15120	5	1.0 Ramberts Road	Eudlo	Highlands Road	start of seal		1500	150	197	3.30%	ves	0	0	0	1.5	1	0	no	ves	no	no	no	37	Local Street
17604	10	2.0 Hunsley Road	Coolabine	End of seal	Coolabine Road	1500	4600	3100	54	4.50%	yes	0	1	1	3	11	4	no	no	no	yes	no	37	Local Street
		·		Nambour Connection									_		_				7					
17633	10	1.0 Ferntree Creek Road	Kulangoor	Road	National Park	0	700	700	160	7.80%	no	0	0	0	2	8	5	no	no	no	no	no	36	Local Street
	1	Link Road	Glass House Mountains	Plantation Road	Scotts Road	0	600	600	126	11.50%	yes	0	0	0	3	0	0	no	no	no	no	no	36	Local Street
11387	9	Oyster Bank Road	Bli Bli	start of road	end of gravel	150	600	450	109	2.70%	no	0	0	0	1	10	10	no	yes	no	no	no	48	Local Street
17604	10	1.0 Hunsley Road	Coolabine	End of seal	start of seal	250	1000	750	54	4.50%	yes	0	1	1	3	2	0	no	no	no	yes	no	34	Local Street
12976	9	Stoney Wharf Road	Bli Bli	Twin Peaks Road	end of gravel	300	900	600	75	9.90%	no	0	0	0	3	6	6	no	no	no	no	no	34	Local Street
16769	9	Espin Road	Bli Bli	Lefoes Road	end of gravel	0	1900	1900	111	5.00%	no	0	0	0	3	21	9	no	no	no	no	no	32	Local Street
16949	10	Kidaman Creek Road	Kidaman Creek	Curramore Road	Obi Obi Road	900	8900	8000	125	5.00%	yes	0	0	0	3	16	0	no	no	no	no	no	30	Neighbourhood Collector
11358	1	Meyricks Road	Glass House Mountains	Glass House	Woodrows Road	0	1400	1400	114	4.00%	ves	0	0	0	2		2	no	no	no	no	no	30	Neighbourhood Collector
11338		· ·		Woodford Road		U					yes		Ü		,	,	3	110	110	110	110	110		
	9	Wegners Road	North Arm	Seib Road	North Arm Road	0	1000	1000	86	3.50%	no	0	0	0	4	4	4	no	no	no	no	no	29	Local Street
17308	9	Kirra Road. Section through forest	Maroochy River	Yandina Bli Bli Road	Kirra Road			500	30	3.20%	no	0	0	0	4	7	0	no	no	no	no	no	28	Local Street
	10	1.0 Gobberts Road (no bridge)	Yandina	Wappa Falls Road	Colemans Road	0	800	800	49	2.70%	no	0	0	0	3	4	4	yes	no	no	no	no	26	Local Street
17313	1	Beerburrum Woodford Road	Beerburrum	Beerburrum Road	Glass House Woodford	6.1	8.2	2100		13.10%	no	0	1	1	4	0	0	no	no	no	yes	no	24	District Collector
					Road				60						2	42	_							
	5	Brooks Road	Eudlo	Rambert Road	Neil Road			1000	60	2.30%	no	0	0	0	3	12	2	no	no	no	no	no	21	Local Street
17633	9	2.0 Ferntree Creek Road	Kulangoor	Nambour Connection Road	National Park	700	1700	1000	160	7.80%	no	0	0	0	2	2	0	no	no	no	no	no	19	Local Street
-	6	Ironbark Road	Buderim	Mooloolaba Road	end of gravel	400	600	200	30	4.40%	no	0	0	0	3	3	0	no	no	no	no	no	19	Local Street
11228	1	2.0 Forestry Road	Landsborough	Steve Irwin Way	Hapgood Road	3300	3800	500	48	4.60%	yes	0	0	0	3	0	0	no	no	no	no	no	17	Local Street
		Kirra Road. Section through bushland	Lanusborougn	Steve II WIII Way	нардооц коац	3300	3800		46		yes	0	0		,	U	- 0	110	110	110	110			Local Screet
15104	9	reserve	Maroochy River	Kirra Road	Kirra Road			230	30	3.20%	no	0	0	0	4	0	0	no	no	no	no	no	14	Local Street
15655	7	Tanawha Road	Tanawha	End of seal	end of gravel	0	500	500	67	6.80%	no	0	0	0	0	9	7	no	no	no	no	no	13	Local Street
13170	7	2.0 Taylors Road	Buderim	Mooloolaba Road	end of gravel	600	1100	500	50	5.00%	no	0	0	0	3	2	0	no	no	no	no	no	11	Local Street
	5	Neil Road	Diamond Valley	Brooks Road	Mossy Bank Road			2100	60	2.30%	no	0	0	0	3	2	2	no	no	no	no	no	9	Local Street
17317	9	Chants Road	Valdora	Valdora Road	driveway	400	500	100	70	4.00%	no	0	0	0	1	2	0	no	no	no	no	no	10	Local Street
				Yandina Bli Bli Road													_						1	
	9	Flowers Road	Maroochy River	(w)	Yandina Bli Bli Road (e)	0	600	600	46	10.90%	no	0	0	0	1	5	3	no	no	no	no	no	2	Local Street
	1	Logie Road	Beerburrum	Rapkins Road	End of gravel	900	1300	400	49	7.90%	no	0	0	0	1	1	0	yes	no	no	no	no	1	Local Street
18069	9	Ball Road	Eumundi	Sunrise Road	end of gravel	0	540	540	24	5.00%	no	0	0	0	3	3	0	no	no	no	no	no	9	Local Street
13137	1	1.0 Macdonalds Road	Peachester	Francis Road	end of gravel	0	1700	1700	68	2.50%	no	0	0	0	3	9	2	no	no	no	no	no	15	Local Street
13137	1	2.0 Macdonalds Road	Peachester	end of seal	end of gravel	2200	2400	200	68	2.50%	no	0	0	0	3	5	1	no	no	no	no	no	38	Local Street
12201	7	1 0 Ameiro Bood	Favort Class	Intersection of	and of annual	0	240	240	80	2.50%			0	0	2	7							FC	Lauri Street
13381	,	1.0 Anning Road	Forest Glen	Parsons Road	end of gravel	U	240	240	80	2.50%	no	0	U	Ü	3	,	4	no	no	no	no	no	56	Local Street
18077	9	1.0 Pathara Road	North Arm	Wegner Road	end of gravel	0	100	100	100	2.50%	no	0	0	0	2	3	1	no	no	no	no	yes	52	Local Street
18077	9	2.0 Pathara Road	North Arm	Hidden Valley Road	end of gravel	0	100	100	100	2.50%	no	0	0	0	2	1	0	no	no	no	no	yes	22	Local Street
16119	10	1.0 Kanes Road	Bridges	Browns Creek Road		0	600	600	160	3.00%	no	0	0	0	3	16	8	no	no	no	no	no	60	Local Street
16119	10	2.0 Kanes Road	Bridges		End of reserve	600	1000	400	30	3.00%	no	0	0	0	3	3	2	no	no	no	no	no	16	Local Street
18084	1	Sargeants Road	Beerwah	Old Gympie Road	end of road	0	1000	1090	32	2.50%	no	0	0	0	3	4	1	no	no	no	no	no	9	Local Street
13101	5	MacDonald Road	Palmwoods	Palmwoods-	End of road	0	1290	1290	200	2.50%	yes	0	0	0	5	25	7	no	no	no	no	no	79	Local Street
				Montville Road													,							
17042	5	Hill Street	Woombye	end of seal	End of Road	0	80	80	59	20.40%	no	0	0	0	3	2	2	yes	yes	no	no	no	87	Local Street
16691	5	Krucks Road	Conondale	Maleny Kenilworth Road	End of Road	0	1020	1020	56	2.50%	no	0	0	0	3	7	0	no	no	no	no	no	14	Local Street
-				Koad	I km from start (in front of						1	1		1	1									
	5	Brandenburg Road - Steep section	Mooloolah Valley	end of seal	I km from start (in front of 286)	0	1000	1000	195	3.00%	no	0	1	1	5	7	2	no	no	no	no	no	58	Local Street
15844	5	Christensens Road	Hunchy	end of seal at #161	end of gravel	0	520	520	152	5.00%	no	0	0	1	3	19	2	no	no	no	no		63	Local Street
18157	10	Hinkaboomba Lane	GHEERULLA	end of seal	end of road	0	140	140	32	2.50%	no	0	0	0	2	4	4	no	no	no	no	no	51	Local Street
18166	5	Hunchy School Road	Hunchy	Hunchy Road	end of road	0	690	690	64	2.50%	no	0	0	0	3	8	3	no	no	no	no	no	24	Local Street
18161	5	Geraghty Lane	Wootha	Burnett Lane	end of road	0	1400	1400	24	2.50%	no	0	0	0	3	3	1	no	no	no	no	no	6	Local Street
18165	5	Engle Road	Reeseville	In front of # 31	end of road	0	1600	1600	104	2.50%	no	0	0	0	2	13	6	no	no	no	no	no	15	Local Street
		Lingic Rodu	recesevine	Intersection of Nicklin	Cha of road	Ů	1000	1000	104	2.50%	110		Ů	Ü	-	13	Ů	110	110	110	110			Eocal Street
10103								670	450	2.500/	no	0	0	0	2	2	1	I				1 '	1	Laurel Charact
	5	Nicklin Road	Palmwoods		#38	0	550	6/0	150	2.50%			U				1	no	no	no	yes	ves	33	Local Street
16723	5	Nicklin Road	Palmwoods	Road and Nicklin Lane	#38	0	550	670	150	2.50%	110	0	U	· ·	2	2	1	no	no	no	yes	yes	33	Local Street
16723	5			Road and Nicklin							-						1							
	5	Nicklin Road King Creek Road	Palmwoods Eerwah Vale	Road and Nicklin Lane Intersection of Gold Creek Road	#38 Browns Creek Road	0	550	550	40	2.50%	no	0	0	0	2	5	1	no	no	no	no	yes no	6	Local Street
16723	5 10 5		Eerwah Vale Eudlo	Road and Nicklin Lane Intersection of Gold							-						1 6							
16723 18167	5 10 5 5	King Creek Road	Eerwah Vale	Road and Nicklin Lane Intersection of Gold Creek Road	Browns Creek Road	0	550	550	40	2.50%	no	0		0	2	5	1	no	no	no	no	no	6	Local Street

Note: Roads which have been assessed insections are shown as e.g. 1.0 Perrins Lane / 2.0 Perrins Lane



Appendix 4:

Indicative 20 Year Unsealed Road Upgrade Program

		Estimated		opg. a.	Project	J. a				1		I			I	1		I				I	1		I	I
Road Name	Score	Cost	Length	Division	ID	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	Comment
		(\$)	(km)			-				-			-											·		
ture year design					17168	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
0 North Arm											-															
andina Creek Road	157	3,200,000	2.10	9	13125	2,300,000	900,000																			
																										commence
0 Delicia Road	149	1,600,000	1.10	10	16844	600,000																				14/15
.0 Doonan Bridge				_																						
oad	146	900,000	0.80	9	13167	ļ	900,000			ļ												1	1			
.0 Doonan Bridge	442	1 750 000	4 55	0	10001		1 100 000	CEO 000																		
oad	142	1,750,000	1.55	9	18091		1,100,000	650,000																		
.0 Doonan Bridge oad	140	700,000	0.60	9	18092			700,000																		
.0 McGilchrist Road	122	2,050,000	1.20	5	17306			1,550,000	500,000							-										
0 McGilchrist Road	113	750,000	0.50	5	18093			1,550,000	750,000																	
0 Perrins Road	101	300,000	0.25	5	13113				300,000																	
0 Perrins Road	101	300,000	0.25	5	18094				300,000																	
0 Kiamba Road	100	2,200,000	1.80	10	13096				1,050,000	1,150,000																
lossy Bank Road	100	1,200,000	0.80	5	15789				2,000,000	1,200,000						i e										
0 North Arm		_,0,000	2.00	Ť						_,0,000																
andina Creek Road	98	700,000	0.60	9	13347					550,000	150,000															
.0 Kiamba Road	98	2,500,000	0.40	10	18095		1			-,	2,500,000								1							
grajewski Road	96	2,350,000	1.80	9	13344						250,000	2,100,000														
akewood Drive incl				İ		İ	İ	İ		İ																
lonak Road	95	2,400,000	2.10	9	17996							800,000	1,600,000													
.0 Lees Road	94	350,000	0.35	10	13416								350,000													
gwoods Road	94	750,000	0.60	5	13102								750,000													
olemans Farm Road	93	1,900,000	1.60	10	16017								200,000	1,700,000			_									
0 Kiamba Road	93	500,000	0.40	10	18097									500,000												
.0 Kiamba Road	93	150,000	0.10	10	18098									150,000												
.0 Kiamba Road	93	150,000	0.10	10	18099									150,000												
.0 North Arm																										
'andina Creek Road	92	800,000	0.70	9	18100									400,000	400,000											
Aossy Bank Road	90	500,000	0.40	5	16603										500,000											
Iorth Arm Road	89	2,000,000	2.00	9	15957										2,000,000											
.0 Sippy Creek Road	86	350,000	0.30	5	13138	ļ										350,000			1			1	1			
2.0 Colemans Road	85	600,000	0.60	10		ļ										600,000			1			1	1			
I.0 North Arm	00	1.050.000	1.50	0	16158											1 050 000										
andina Creek Road Cash Road	82 78	1,950,000 350000	1.50 0.30	9	13331											1,950,000	350,000									
0 Colemans Road	77	750,000	0.30	10	13331	1										1	750,000		+			+	+			
.0 Andreasens Road	76	800,000	0.40	7													800,000		+							
.0 Sippy Creek Road	76	5,200,000	3.50	5	13138												1,000,000	2,300,000	1,900,000							
.0 Andreasens Road	76	600,000	0.50	7	13130												1,000,000	600,000	1,300,000							
.0 Perrins Road	74	450,000	0.45	5	13113		<u> </u>									 		550,000	450,000							
Surtons Road	73	910,000	1.30	9	17646											i e			550,000	360,000						
.0 Cedar Creek Road	71	3,240,000	2.70	10	11487														330,000	2,540,000	700,000					
.0 Cedar Creek Road	68	840,000	0.70	10	11487											1				,- ,,	840,000					
2.0 Gobberts		,		<u> </u>												1					,					
Road(with bridge)	68	2,800,000	0.80	10																	1,360,000	1,385,000	55,000			
lerron Road	68	280,000	0.40	5	16881																	280,000	,			
.0 Cedar Creek Road	66	2,160,000	2.40	10	11487																	1,235,000	925,000			
hristensens Road	63	520,000	0.52	5	15844																		520,000			
.0 Lees Road	62	1,215,000	1.35	10	13416																		1,120,000	95,000		
eylon Road	61	4,300,000	1.30	10																				1,685,000	2,615,000	
larkes Road	61	1,400,000	0.75	7	17316																		280,000	1,120,000		
					_														1							carryover
ocho Road	54	380,000	0.60	10	11747																				285,000	35/36
	Total																		1							
	Length																		1							
	(km)		43.37															1	1							
		1	otal Annual	Allocation		3,000,000	3,000,000	3,000,000	######	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	

Notes:

^{1.} Projects included in this indicative program are those of highest priority as assessed, up to 1 December 2014, in accordance with council's assessment and prioritisation process and are ranked in order of score. Whilst it is considered that the majority of the potentially higher priority roads have been included it is likely that some further roads will be identified as having high priority as the assessment of the remaining roads progresses.

2. The first year of the indicative program will be submitted annually to council's Investment Steering Committee for adoption by council as part of the capital works program.

3. The following 19 years are indicative only, will be reviewed annually and changed to reflect projects in order of priority.



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