

We manage our region's urban and rural roads and drainage.



1.3 ROADS & DRAINAGE

What we do

We manage the region's road and drainage network including:

- Rural roads;
- Urban roads (Streets);
- Roads impacted by major industry (including forestry and coal seam gas);
- State-controlled roads where Council delivers works via a Road Maintenance Performance Contract (RMPC);
- Flood restoration.

Rural roads

We manage 5,607.563 kms of rural roads, with the Maranoa Region ranking 3rd in the State (out of 77 Councils) for the length of our road network.

Our rural roads provide an important transport link for residents, visitors, primary producers, other businesses and major industries.

Our roads are a mix of:

- sealed/bitumen roads (20%); and
- unsealed roads (51% gravel and 29% formation/'dirt').

These roads connect a rural area of 58,802.8 km² (equivalent to 91% of the size of mainland Tasmania).

To put this in further context, whilst Tasmania services a population of more than 500,000, the Maranoa region has a population of 12,688, with approximately 30% of our residents living in the rural parts of our region.

Urban roads

Council delivers road services to ten regional townships (Roma, Wallumbilla, Yuleba, Jackson, Surat, Injune, Muckadilla, Amby, Mitchell and Mungallala).

Our teams undertake the approved level of service for its urban street networks with the aim of delivering the services in the most cost effective manner while considering associated risks. The elected Council considers the service levels to be provided for the region and what funds are allocated each year to provide those services. The Maranoa region has:

- 224.707 kilometres of urban streets (77% - sealed, 16% - gravel pavement, 6% - formed)
- 28.762 kilometres of footpath
- 168.456 kilometres of kerb and channel.

Why we do it

We connect those who live and work within our region (our residents, visitors, primary producers, other businesses and industry) who use the road network for economic, social and educational purposes.

Did you know?

The term bitumen is often mistakenly used to describe asphalt. Bitumen is actually the liquid binder that holds asphalt together.

A bitumen-sealed road has a layer of bitumen sprayed and then covered with stone (normally produced at a quarry). This is then repeated to give a two-coat bitumen seal.

Asphalt however is produced at a batch plant (not too dissimilar to a concrete batch plant) that heats, dries and mixes aggregate, bitumen and sand into a complete mix. It is then applied through a paving machine on site as a solid material at a required thickness, relative to the end use.



Asphalt



Bitumen

Resource sector roads

With the Maranoa region being located within the Surat Basin, several major Coal Seam Gas (CSG) developments within the region have added another major user group to Council's urban and rural road network. Use of our road network by project traffic raises additional challenges, such as:

- greater traffic volumes on roads – some of which may have only provided a service to a small number of rural properties in the past;
- larger percentage of heavy vehicles operating on Council's road network;
- increased maintenance requirements due to the traffic volume and compositions (i.e. the types of traffic); and
- accelerated damage to, and deterioration of, Council's road network asset.

These challenges make it vitally important for Council to have systems and processes in place to ensure the additional costs associated with the industry development is not borne by Council's already limited funding base.

Sustainably managing this process is not easy. Whilst focus is on ensuring roads are suitable for the current need, it is also important to ensure that Council and the region's ratepayers can afford to fund the renewal and maintenance of our road network over the long term.

1. Source: Australian Bureau of Statistics, *Regional Population Growth, Australia* (3218.0). Compiled and presented in *economy.id* by *.id* the population experts

What we must do

Australian Government

Electricity Supply Act 1995
Telecommunications Act 1997

Queensland Government

Aboriginal Cultural Heritage Act 2003
Environmental Protection Act 1994
Heavy Vehicle National Law Act 2012
Land Act 1994
Local Government Act 2009
Local Government Regulation 2012
Mineral and Energy Resources (Common Provisions) Act 2014
Manual of Uniform Traffic Control Devices (MUTCD)
Petroleum and Gas (Production and Safety) Act 2004

Local Laws and Subordinate Local Laws

Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2011
1.14 Undertaking Regulated Activities on Local Government Controlled Areas and Roads 2011
1.15 Carrying out Works on a Road or Interfering with a Road or its Operation 2011
4 Local Government Controlled Area Facilities and Roads 2011
1.2 Commercial Use of Local Government Controlled Areas and Roads 2011
1.1 Alteration or Improvement to Local Government Controlled Areas and Roads 2011

Other documents

Capricorn Municipal Development Guidelines (CMDG)
Any relevant Coordinator General Reports
Road Infrastructure Agreements

1.3 ROADS & DRAINAGE

Corporate Plan 2018-2023 and Operational Plan 2021/22

Corporate Plan (What we aim to do)	Operational Plan 2021/22
<p>1.3.1 Undertake the restoration of roads following a flood event in accordance with the Australian Government's Disaster Recovery Funding Arrangements (DRFA) which are administered by the State Government (Queensland Reconstruction Authority 'QRA').</p> <p><i>* The 2021/22 works differs from a normal year:</i></p> <ul style="list-style-type: none"> • Size - 2.5 times the normal resheeting program value • Area - Dispersed across the region for approximately 250+ sites (compared to around 20 sites per annum) • Length of work - Largest project 3.8kms compared to 10 to 15 kms. <p><i>* These include agreed segments of impacted roads and negotiated works.</i></p>	<p>Complete by 30 June 2022 - no extensions (February 2020 event) "Event 12"</p> <p>Refer note *</p>
<p>1.3.2 Administer the Road Infrastructure Agreements including:</p> <ul style="list-style-type: none"> • consideration of the long term sustainable outcomes for the region; <p><i>* Gas field development program</i></p> <ul style="list-style-type: none"> • validating actual vs forecast road use with a Council administered traffic counter program. 	<p>Negotiate the relevant roadworks and formalise in a Service Level Agreement with the Coal Seam Gas proponent.</p> <p>APLNG road use funded projects* Mt Everdale</p> <p>Annual subscription, counter deployment and hardware renewal as required.</p>

Corporate Plan (What we aim to do)	Operational Plan 2021/22
1.3.3 Undertake an annual program of resheet, reseal and rehabilitation works based on: <ul style="list-style-type: none"> • expected life of the seal; • current level of service based on roughness measures; • condition determined by inspection; • priority within the road network; • available funding. 	<p>Programs:</p> <ul style="list-style-type: none"> • Urban reseal • Urban bitumen rehabilitation • Rural reseals • Rural bitumen rehabilitation <p>Prioritising Council funding towards rehabilitation works (while flood recovery efforts focus on gravel resheet/renewal works).</p>
1.3.4 Identify and undertake a program each year for minor works on lower order roads where a solution is economically viable for the longer term.	<p>Merino Downs Rd Sandlewood Downs Rd Riversleigh Rd Munnaweena Rd</p>
1.3.5 Partner with the Queensland Government to deliver the Transport Infrastructure Development Scheme which is focussed on renewal and upgrade investment on Council's Local Roads of Regional Significance (LRRS).	<p>Gravel resheeting for:</p> <ul style="list-style-type: none"> • Hoganthulla Rd • Redford Rd <p>Ashmount Rd Long Distance Coach Stop</p>
<i>* These include agreed segments of Local Roads of Regional Significance and approved works.</i>	<p>Completed within the approved year.</p> <p>Annual review of the 4 year program (including confirmation of LRRS) completed.</p>
1.3.6 Undertake for roads and drainage network assets: <ul style="list-style-type: none"> • data collection and condition assessment; 	<p>Kerb and channel.</p>
<ul style="list-style-type: none"> • analysis and long term planning (update to asset management plan). 	<p>Roads Footpaths Kerb and channel</p> <p>Planning and prioritising our infrastructure regionally, with local input and knowledge.</p>
1.3.7 Implement the prioritised other transport network asset renewal and special maintenance program based on the asset management plan for: <ul style="list-style-type: none"> • Footpaths; 	<p>McDowall St, Roma Bowen St, Roma</p>
<ul style="list-style-type: none"> • Kerb and channel. 	<p>Fifth Ave, Injune Second Ave, Injune Louisa St, Mitchell</p>

1.3 ROADS & DRAINAGE

Corporate Plan 2018-2023 and Operational Plan 2021/22 continued

Corporate Plan (What we aim to do)	Operational Plan 2021/22
<p>1.3.8 Annually review funding available for extensions or upgrade works having regard to priorities, practical safety improvements, economies of scale and mobilisation costs:</p> <ul style="list-style-type: none"> • Bitumen 	Not applicable for 2021/22 - Minimum / critical projects only (i.e. renewal).
<ul style="list-style-type: none"> • Footpaths 	<p>Regional footpath improvement project</p> <p>Surat Riverwalk Extension Stage 2</p>
<ul style="list-style-type: none"> • Kerb and channel 	-
<ul style="list-style-type: none"> • Stormwater. 	-
<p>1.3.9 Undertake works to increase flood immunity, manage stormwater and reduce maintenance costs.</p>	<p>2 locations for concrete floodways.</p> <p>Stormwater relining/cleaning including Lovell Street / Elanora Avenue.</p> <p>Bridge pedestrian handrail replacement program.</p> <p>Ivy Street, Roma outlet protection / treatment.</p>
<p>1.3.10 Identify and annually consider instances where entire levels of service have been affected due to asset failure.</p>	<p>Muggins Lane, Yuleba</p> <p>Riggers Rd Bridge, Roma</p> <p>Arthur St, Roma Carpark Shade Sail replacement</p>
	Dunkeld Road culvert replacement
<p>1.3.11 Develop a 'taxi rank' of shovel ready projects so that Council is ready for funding opportunities as they arise - with work to include design, construction estimating and other pre-construction activities.</p>	<p>Hoganthulla / Mt Moffatt Rd intersection</p> <p>Mary St, Mitchell stormwater design</p> <p>Charles St, Roma widening design</p> <p>Unsealed Urban Streets within the Priority Infrastructure Area.</p>

Corporate Plan (What we aim to do)	Operational Plan 2021/22
1.3.12 Undertake programmed (planned) maintenance within approved service levels and budget. Undertake adhoc/reactive maintenance prioritised through officer inspections and reports.	Annual service
	Coordination with flood recovery works
1.3.13 Undertake ongoing condition monitoring of the road network by Council's road officers to identify defects and maintenance priorities.	Annual service
	Involvement in the documentation and recording of flood recovery works.
1.3.14 Advocate to other tiers of government in relation to regional issues impacting the management of the road network (e.g. heavy vehicles) and for additional funding.	Project delivery: - Primaries Rd loop extension (Roma Saleyards) - Heavy vehicle route upgrade (Amby)
1.3.15 Continue to administer the National Heavy Vehicle laws within the region.	Annual service
	Review process under Operating Locally.
1.3.16 Undertake a review of Council's road policies to ensure they are financially sustainable.	Construction of Roads for Access to Property Dust Seal Policy External Requests for Temporary Road Closure Policy Grids and Gates Policy Property Accesses & Access Driveways Register of Roads including Road Hierarchy Requests for Capital Upgrade of Roads Road Naming Policy Road Network Standards - Maintenance Renewal and Upgrade - Road Network Design Standards Work in Road Reserves Policy

1.3 ROADS & DRAINAGE

Corporate Plan 2018-2023 and Operational Plan 2021/22 continued

Corporate Plan (What we aim to do)	Operational Plan 2021/22
1.3.17 Provide information to the community to raise awareness of key network management practices.	Finalisation of factsheets and public release.
1.3.18 Continual improvement of work practices through development of an Integrated Management System (for Quality, Safety & Environment).	<p>Surveillance audit - Third Party Certification.</p> <p>Maintenance</p> <p>RPEQ Engineer review of standard maintenance practices.</p> <p>Detailed review of high value / high risk maintenance activities, and associated employee engagement and training (e.g. grading)</p> <p>Construction</p> <p>Use and refinement of project management plans, with a focus on identifying opportunities to streamline documentation for like projects.</p> <p>Contract Management</p> <p>Finalisation of contract selection matrix (for use by project officers).</p>

Annual services

What we do	Corporate plan reference	Target service levels
Rural Roads		
Programmed (planned) maintenance, and prioritised ad-hoc / reactive maintenance based on officer inspections and reports		
Vegetation management – Slashing / vegetation management of roads > average 250 vehicles / day	1.3.12	Within budget. Higher order roads are slashed as the priority when resources are limited.
Vegetation management of roads > average between 40 and 249 vehicles per day	1.3.12	Programmed during peak growing season, supplemented by contract resources. Slashing operations are restricted when fire rating conditions are unfavourable.
Vegetation management - Herbicide spraying on all roads	1.3.12	Within budget. Programmed following the roadside slashing delivery and at optimum times (peak growing season).
Unsealed roads maintenance - Minor maintenance grading ('patrol grading')	1.3.12	Within budget.
Unsealed roads maintenance - Major maintenance grading		
Unsealed roads maintenance - Shoulder maintenance grading		
Unsealed roads maintenance - Network inspections by Council officers by local area		
Sealed roads maintenance – Sealed network shoulder grading		
Sealed roads maintenance - Reactive maintenance <ul style="list-style-type: none"> Sealed surface defect repair program Replacement or repair of signs or posts that are damaged or deteriorated Reinstatement of line marking on sealed surfaces where existing markings have deteriorated Surface repair (pothole patching) 	1.3.12	Within budget. Programming based on: - inspections - timing of other planned works in the area - notifications of asset failures - severity of defect
Drainage maintenance - Clearing of debris and silt through culverts, pipes and pits and undertake minor repairs to head-walls	1.3.12, 1.3.9	Within budget.
Flood damage restoration - Administration in accordance with the Australian Government's new Disaster Recovery Funding Arrangements model (effective 1 July 2018)	1.3.1	Resources prioritised based on emergent works (i.e. make safe after an event). Completion of works within approved timeframes after approval is received from the Queensland Government.
Rural signs and lines	1.3.12	As identified through inspections and reports and within budget.
Ad-hoc maintenance	1.3.12	Additional works as required and within the allocated budget.

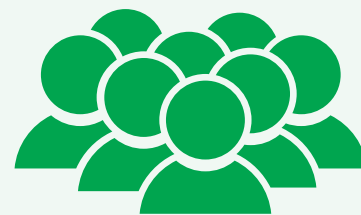
1.3 ROADS & DRAINAGE

Annual services continued

What we do	Corporate plan reference	Target service levels
Urban Roads		
Delivery of the following services:		
Programmed (planned) maintenance, and prioritised ad-hoc / reactive maintenance based on officer inspections and reports		
Vegetation management – Slashing program	1.3.12	As required and within maintenance budget. Programmed during peak growing season, supplemented by contract resources.
Vegetation management – Mowing program (urban streets)	1.3.12	Mowing performed by zone and according to the service level that has been set for streets. Priority 1: Mowing of urban streets in Roma CBD zone 12 times a year – on average each street is mowed once a month. Priority 2: Mowing of urban street Roma all zones – on average each street is mowed once every 4 to 6 weeks. Priority 3: Mowing of urban streets Roma all zones – on average each street is mowed once every 6-8 weeks. All other regional towns are mowed by priority; 1. main entrance ways 2. higher order roads 3. lower order roads Programmed during peak growing season, supplemented by contract resources.
Unsealed roads maintenance: <ul style="list-style-type: none"> Minor maintenance grading Major maintenance grading Shoulder maintenance grading 	1.3.12	Within budget.
Sealed roads maintenance – Sealed network shoulder grading	1.3.12	Repair of potholes as required and within maintenance budget.
Reactive maintenance: <ul style="list-style-type: none"> Sealed surface defect repair program Replacement or repair of signs or posts that are damaged or deteriorated Reinstatement of line marking on sealed surfaces where existing markings have deteriorated Surface repair (pothole patching) 	1.3.12, 1.3.3	As required and within budget.
Urban drainage maintenance - Clearing of debris and silt that may be impeding the free flow of water through culverts, pipes and pits and undertake minor repairs to head-walls	1.3.12, 1.3.9	As identified through inspections and reports and within budget.
Flood damage restoration - Administration in accordance with the Australian Government's new Disaster Recovery Funding Arrangements model (effective 1 July 2018)	1.3.1	Resources prioritised based on emergent works (i.e. make safe after an event). Completion of works within approved timeframes after approval is received from the Queensland Government.
Urban signs and lines	1.3.12	As identified through inspections and reports and within budget.
Kerb and channel		
Pathways / footpaths		
Ad-hoc maintenance		
Street sweeping	1.3.12	Streets in Roma CBD zone 120 times a year – on average each street is swept twice a week. Streets classified as commercial outside the Roma CBD zone 12 times a year – on average each street is swept every four weeks. All other streets 10 times a year – on average each street is swept every five weeks.
Miscellaneous activities	1.3.12	Activities in the urban network including: removal of illegal dumping, toilet cleaning, BBQ cleaning, rubbish bin cleaning, sharps collection, sanitary bins, tree maintenance and removal, noxious weeds control.
Inter-departmental service agreements	1.3.12	As required, to meet legislative compliance and Departmental needs in conjunction with the relevant Department Managers. Assistance is provided to: Airports, Water, Sewerage and Gas, Waste, Flood Mitigation/Levee, Cemeteries, Bassett Park, Disaster Management, State Road Maintenance Performance Contract (RMPC), Coal Seam Gas works' delivery.

What we do	Corporate plan reference	Target service levels
Resource sector roads		
Delivery of the following services:	1.3.2	Administration in accordance with the Road Infrastructure Agreements and relevant legislation.
Traffic monitoring	1.3.2	Roads included in traffic counter program as developed.
Regular network defect inspections	1.3.2	Ongoing
Joint network inspections (with Coal Seam Gas representative)	1.3.2	6 monthly
Steering committee meetings (with Coal Seam Gas and Council representatives)	1.3.2	Quarterly
Technical working group meetings (Engineering representatives)	1.3.2	Monthly
Road maintenance	1.3.2, 1.3.12	As required, based on defect intervention levels.
Capital renewals and upgrades	1.3.2, 1.3.3	Negotiation of renewals (return to new) or upgrade of the roads based on traffic use by the Coal Seam Gas industry.
Coal seam gas activities within road reserves – e.g. pipeline crossings, new accesses.	1.3.2	Application reviews and relevant conditions imposed.
Resource sector roads		
Compliance inspections	1.3.2	As required – based on number of permits issued and type of activity being undertaken.
Auditing and acquittal	1.3.2	Annually

Our business partners, stakeholders and customers



Quality

- Department of Transport & Main Roads (DTMR) – Road Maintenance Performance Contract and other works
- Developers in the region
- Tenderers for Council works
- Contractors for Council works (Wet hire, dry hire, minor and major works)
- Community
- Utility providers (Telstra, Ergon)
- Suppliers of road materials (including Council's quarry and quarry pits)
- Road users temporarily impacted by roadworks
- Entities undertaking work on Council roads
- Department of Resources (roads off alignment, mapping)
- APA (Gas pipelines crossing Council roads)
- National Heavy Vehicle Regulator (Australian Government).

Safety

- Rural property owners and residents
- School bus operators
- Travelling public, including visitors to the region
- Heavy vehicle users of Council roads
- Feedlot owners and other commercial and industrial users of the road network.

Environment

- Cultural heritage organisations (Mandandanji, Bidjara)
- Department of Resources *
- Department of Environment and Science *
- Department of Agriculture and Fisheries *.

*Refer also compliance obligations

Affordability

Internal

- Elected Council (efficiency of works and compliance with policies and service levels)
- Plant, Fleet and Workshops team (scheduling of plant repairs and maintenance)
- Strategic finance (accuracy of annual budgets and long-term financial forecasts).

External

- South West Regional Road and Transport Group (SWRRTG) including:
 - Balonne Shire
 - Bulloo Shire
 - Murweh Shire Council
 - Paroo Shire Council
 - Quilpie Shire Council
 - Queensland Department of Transport and Main Roads (Downs South West Region)*(This includes administration of the Transport Infrastructure Development Scheme (TIDS) funding for local roads of regional significance).*
- South West Regional Roads Technical Working Group
- Major industry including:
 - Petroleum leases
 - Other oil and gas operations
 - Refineries
 - Workers camps
 - Extractive industries
 - Electricity providers (transformers)
- Queensland Audit Office (Road Valuations, Depreciation, Asset Management Plans)
- Local Government Grants Commission (Identified Road Grant data)
- Coal Seam Gas industry (Road Infrastructure Agreements) – Santos, Origin/APLNG, Senex, QGC, Armour Energy
- Funding bodies
 - Australian Government - Department of Infrastructure, Regional Development and Cities (Roads to Recovery funding program)
 - State Government
 - Department of State Development, Infrastructure, Local Government and Planning
 - Queensland Reconstruction Authority (QRA) - Restoration of public assets.
 - Department of Transport and Main Roads
- Advocacy
 - Local Government Association of Queensland (LGAQ)

How we are managing the key operational risks - Roads and drainage

Risk	Actions
<ul style="list-style-type: none"> Funding cuts to critical renewal works (bitumen resealing) increase the cost of maintenance and rehabilitation 	<ul style="list-style-type: none"> Detailed assessment of the full network and current condition using specialised equipment and software - to review road roughness, rutting and cracking to determine the optimal reseal program. Programming reseal intervention prior to complete failure. Annual review prior to operational plan and budget preparation. Undertaking reseal preparation works to maximise the life of the new seal. Implementation of a program of proactive maintenance for crack sealing.
<ul style="list-style-type: none"> The need for road expenditure exceeds funds available <p>(Note: This has been identified in Council's Corporate Plan as a strategic risk, and is also an operational risk, given that our roads officers have the difficult task of managing expectations on a daily basis, with limited funding).</p> <p>The Maranoa region has the third highest length of roads in Queensland (out of 77 Councils). However, we have a population of less than 13,000 which provide a very small ratebase compared to the two Councils that rank first (Western Downs region) and second (Toowoomba region) in the State.</p> <p>It is shorter to drive from Cairns to Perth than it is to drive our rural road network.</p> <p>Our rural roads connect a rural area of 58,802.8km² (equivalent to 91% of the size of mainland Tasmania).</p> <p>To put this in further context, whilst Tasmania services a population of more than 500,000, the Maranoa region has an estimated resident population of 12,843, with approximately 30% of our residents living in the rural parts of our region.</p> <p>With a relatively small rural population, we have very few ratepayers to fund the upkeep of our large network of roads.</p> <ul style="list-style-type: none"> 25.8% of the rural road network has an average daily traffic volume of less than 10 vehicles per day. 49.2% of the rural road network has an average daily traffic volume of less than 40 vehicles per day. 	<ul style="list-style-type: none"> Local focus for roads and drainage - delivery of local services, as well as regional planning of investment priorities. Planned review of service levels for maintenance. Continuing commitment to a local road network monitoring officer for each of the local areas to inspect the network and prioritise defects (both programmed and requested inspections). A long term asset management plan has been adopted for both Urban and Rural Roads to plan for works on existing roads across the whole network. A detailed condition review has recently been completed to inform an update to the plan. Continuing to incorporate in the Organisational Structure dedicated resources for infrastructure funding. Ensuring that all funding opportunities are pursued, and successful funding agreements are acquitted by the due dates with the reports required. This also aims to ensure that Council has a positive reputation in the eyes of funding bodies, which positions Maranoa well with advocacy for future funding.
<ul style="list-style-type: none"> Sourcing sufficient funding to retain our existing construction teams 	<ul style="list-style-type: none"> Maintaining third party certification for Council's road maintenance and construction - this positions Council well to secure additional works for our teams, and also ensures that we continue to improve all parts of our operations (stretching the dollars that we do have further). Advocacy to Australian and Queensland Governments is undertaken to maintain and grow funding for road works. Teams are mobile within the region, to follow the funded works on local roads of regional significance.
<ul style="list-style-type: none"> Customer expectations are increasing over time <p>Customer and community expectations to provide road services are frequently beyond the resourcing and budget available (e.g. all weather low traffic volume roads, change in development, commercial/industrial use and resident profile over time).</p>	<ul style="list-style-type: none"> Preparation of fact sheets for the community on how the road network is managed. Community engagement will be undertaken both regionally and locally when the new road policies are developed, and information provided when requests are being managed to raise awareness of Council policies. A policy review is planned for capital upgrade requests.

1.3 ROADS & DRAINAGE

New initiatives in 2021/22

New or upgraded assets	How we are reducing operational risks in 2021/22
Roma CBD Asphalt Upgrade Program - Hawthorne Street (McDowall to Bowen)	Renewal of a deteriorating asset on a major urban street within the Roma CBD to reduce service interruptions due to maintenance intervention treatments.
Regional Footpath Improvement Project	Upgrade of existing infrastructure to maximise use of, and access to, Council's footpath network for people who use mobility aides (i.e. walkers / scooters etc).
Stormwater Bulk Maintenance Program - including silt removal	Addressing reduced capacity of Council's underground stormwater network to improve the management of stormwater during events.
Stormwater Relining/Repair Program - including displacement repairs and relining of Lovell / Elanora Streets Roma	Addressing reduced capacity of Council's underground stormwater network to improve the management of stormwater during events.
Bridge Pedestrian Handrail Replacement Program	Upgrade of pedestrian bridge handrails to reduce the risk of falls and remove the need for the current temporary installations at these locations.
Ivy Street Roma Outlet Protection / Treatment	The project would improve the outlet's scour resistance and reduce the likelihood of scouring occurring, therefore reducing the requirement for continual maintenance at this location following rainfall events.
Miscamble and Queen Street Roma - Intersection Upgrade (50% contribution)	Improving road safety for all road users (including cyclists and pedestrians) at the intersection between two of Council's busiest collector roads (Subject to successful funding application).
Long Distance Coach Stop Program (People with Disabilities Compliance)	Maximising the use of currently available external funding to upgrade these facilities to ensure compliance with the updated standard regarding people with disability and public transport infrastructure.
Priority Street Lighting Upgrade Program - e.g. High Priority Pedestrian Crossings	Improving safety for pedestrians using the pedestrian crossing facilities at night. (Budget included under Street lighting and public space lighting function).
Hoganthulla / Mt Moffatt Road Intersection (assist with future funding applications) - Design Only	Strategic planning projects to: (1) help the project progress them through the project lifecycle; (2) position Council to seek external funding opportunities by reducing the project execution risk from a funding partner's perspective.

Financial sustainability in focus

Council manages **\$461.254 million** of road, drainage and bridge infrastructure:

Rural Roads: **5,607.8 kms**

Urban Roads/Streets: **224.1 kms**

This includes the maintenance, renewal and upgrade of the **3rd largest** (by length) local government road network in Queensland.

There key challenges in managing this significant infrastructure asset are:

- Although the infrastructure as a whole has a long life it has been maintained, renewed and constructed across many decades, therefore at any point in time, the infrastructure is at different stages of its useful life.
- The delivery of the roads and drainage function is heavily dependent (as one of its inputs) on the availability and economic extraction of suitable gravel supplies having regard to legislative and other regulatory compliance.
- Gravel, a key input to roads, however:
 - it is a finite resource that takes millions of years to form. It can take seconds to disintegrate (crushing/blasting/ripping)
 - it has a rate of consumption higher than it is being replenished.
 - over time gravel deteriorates to the point where it is no longer a useful road construction product (e.g. 7-15 years)
 - over time the unit cost of gravel extraction and sourcing (e.g. transport) will increase as the resource continues to be consumed.

Therefore the use/consumption needs to be considered over both the short and longer term - including the potential impacts on future renewal of assets in the vicinity of the gravel source.

- The roads and drainage infrastructure is subjected to weather events. Whilst every effort goes to mitigating the effects of these events, the severity and extent can sometimes result in considerable damage to the network and associated interruptions that may result.
- Given the region's relatively small population (and only 30% living across a large geographic area of over 90% the size of Tasmania), there is limited funding available to meet the needs of the network.

Council is therefore heavily dependent on other tiers of government to assist in narrowing the funding gap. Not all funding is predictable or sufficient, so there is a constant juggling of priorities.

It is critically important therefore that any investment in the network aims to achieve the maximum benefit for the region.

- The region consists of a variety of different conditions which makes it challenging to adopt a "one size fits all" approach for dealing with road and drainage infrastructure assets (e.g. construction and maintenance of a road in a sandy part of the region does require a different strategy and approach to one in an area of heavy clay).
- The estimated life for various components of the infrastructure assets (e.g. formation, pavement, seal, drainage). have widely varying estimated useful lives ranging from 10 to 200 years.
- The condition of infrastructure assets at any point in time can vary - for example, it can be dependant on the availability of construction inputs (e.g. gravel and water) and road use (for which Council has limited control for public roads).
- As the infrastructure ages there are more faults or failures (requiring more maintenance to keep operational), therefore it is important that the infrastructure is renewed (replaced) in a timely manner to minimise the risk of further service interruptions. For instance, the cost of rehabilitation of road assets is significantly higher than renewal at the appropriate time. Therefore any unfunding of the renewal program is exposing Council to more expensive works in the future.
- As stormwater infrastructure is underground, we rely on a number of indicators of condition prior to making additional investment decisions - performance of the network during heavy rainfall events, visual inspection of pipes by CCTV, criticality of the service and current capacity (e.g. stormwater in the CBD and location of asset).
- Planning for this long term infrastructure is therefore done over a longer term including:
 - asset management plan (10 years);
 - long term financial forecast (10 years);

Before investing, there is a stringent condition monitoring program, including video/imagery of the network, visual inspections, defect logging and roughness assessments.

1.3 ROADS & DRAINAGE

Looking forward

We plan for the future using the following principles:

- Our first priority is to sustain (look after) what we've got - i.e. investment decisions will prioritise renewal / replacement of existing roads and drainage infrastructure when needed.
- When considering renewal, new or upgrade works, we explore opportunities for "high value add" and cost effective complementary works - e.g:
 - in the case of footpaths, to complete missing links into the broader existing network;
 - potential additional maintenance or practical road safety initiatives while undertaking renewal works;
 - any required upgrades as part of a planned renewal (therefore minimising mobilisation and overall construction costs).
- A focus will be maintained on continual improvement of work practices (employees and contractors) and critical skill development for roads and drainage teams knowing the potential impact on the sustainability of the region's road network.
- We continue to manage the impacts of the coal seam gas industry through established Road Infrastructure Agreements while also being mindful of the need to ensure long term sustainable outcomes for the region.
- Now that the recent review and update of the roads and drainage asset data is complete, resources will focus on technical and engineering analysis to inform the next update to the Asset Management Plan.
- We prioritise the needs of the whole network (economic impact, traffic volumes and type of vehicle use), and then consider the most appropriate or available funding sources and resourcing having regard to the operating locally model.
- Where the region is affected by major flood events, we will aim to secure the maximum external funding, through:
 - prioritising the collection of evidence based data to support disaster recovery submissions; and
 - adherence to timelines by drawing on all available experienced and cost effective resources - e.g. providing opportunities for competitive local contractors.
- We will focus road advocacy efforts on communicating the impacts of the continuing evolution of heavy and freight efficient vehicles on our existing road network.
- We will consult and receive feedback regionally and locally about service levels going forward, also taking time to understand the basis for decisions previously made pertaining to sections of the road network.



Bonnydoon Road, Injune

Our finances - Roads & drainage

Operations and maintenance	2018/19 \$	2019/20 \$	2020/21 Quarter 4 review \$	2021/22 Cost and funding estimates \$	2021/22 Reduced budget \$
Operating revenue	\$9,890,727	\$13,542,372	\$11,342,016	\$16,734,650	\$15,586,950
Fees and charges	103,933	202,103	71,000	32,000	32,000
Grants, subsidies and contributions - operating					
Identified Roads Grant	3,616,586	3,769,406	3,713,599	3,713,599	3,713,599
Disaster Recovery Funding Arrangements	160,537	207,791	1,390,573	7,664,664	6,516,964
Energy sector	368,132	330,768	521,082	221,334	221,334
Black Spot Funding	-	-	100,000	-	-
Sales revenue (including recoverable works e.g. Road Maintenance Performance Contract (RMPC))	4,598,324	7,915,802	5,117,394	5,087,560	5,087,560
Other revenue (Energy sector)	1,043,215	1,116,502	428,368	15,493	15,493
Operating expenses	\$13,196,875	\$17,355,105	\$16,125,800	\$24,095,430	\$21,528,684
Employee costs	6,023,513	5,999,139	6,789,026	7,341,676	7,341,676
Materials and services - operations and maintenance	6,550,162	9,374,248	8,835,938	8,924,605	7,505,559
Materials and services - flood damage restoration	559,084	1,820,405	255,819	7,664,664	6,516,964
One-off initiatives (operating projects) Note (i)	64,116	161,313	245,017	155,000	155,000
Finance costs	-	-	-	9,485	9,485
Depreciation expense	\$11,300,083	\$11,061,787	\$11,325,881	\$10,582,413	\$10,582,413
Operating result / (deficit) - Contribution required from general revenue	(\$14,606,231)	(\$14,874,520)	(\$16,109,665)	(\$17,943,193)	(\$16,524,147)

Capital funding and expenditure (Renewal, new, upgrade works)	2018/19 \$	2019/20 \$	2020/21 Quarter 4 review \$	2021/22 Cost and funding estimates \$	2021/22 Reduced budget \$
Capital funding					
Queensland Disaster Resilience Funding	-	-	623,555	-	-
Transport Infrastructure Development Scheme	2,752,694	1,622,556	1,633,500	1,633,500	1,633,500
Works for Queensland	302,500	276,974	536,724	-	-
Disaster Recovery Funding Arrangements	-	-	-	16,064,731	15,261,494
Roads to Recovery	1,565,721	3,864,010	3,864,011	2,576,006	2,576,006
Local roads and community infrastructure	-	-	1,465,261	-	-
Heavy Vehicle Safety Productivity Program	-	-	832,500	-	-
Bridge Renewal Program	-	-	264,576	-	-
Grants, subsidies - other	170,500	623,374	528,351	454,324	454,324
Contributions	13,712,900	14,522,389	9,200,901	792,281	792,281
Loan proceeds	-	-	877,576	-	-
Cash reserve for capital	5,774,996	8,569,278	9,968,268	7,907,154	7,243,182
Total capital funding	\$24,279,311	\$29,478,581	\$29,795,223	\$29,427,996	\$27,960,787
Capital expenditure					
Asset renewal - annual program	11,469,441	11,856,092	12,107,393	11,535,801	10,871,829
Asset renewal - flood damage restoration	-	-	-	16,064,731	15,261,494
New works	83,212	1,066,999	1,901,075	185,000	185,000
Upgrade works	12,726,658	16,555,490	15,786,755	1,558,648	1,558,648
Loan repayments	-	-	-	83,816	83,816
Total capital expenditure - Note (ii)	\$24,279,311	\$29,478,581	\$29,795,223	\$29,427,996	\$27,960,787

Notes (i) and (ii) over the page.

1.3 ROADS & DRAINAGE

Our projects 2021/22

Project ID	Urban / Rural	Asset work type	Project name	Project type	Local area	Indicative scope			Cost estimates (\$)
						Start	End	Length	
1.3	Rural	Renewal	Hoganthulla Road - gravel resheet	Gravel resheet	Mitchell	ch. 56	ch. 76	20kms	2,774,121
1.3a	Rural	Renewal	Redford Road - gravel resheet / widen pavement	Gravel resheet	Mitchell	ch. 20.54	ch. 38.44	17.9kms	
1.3b	Rural	Renewal	Sandlewood Downs Road gravel resheet	Gravel resheet	Surat	ch. 2.48	ch. 3.60	1.12kms	
1.3c	Rural	Renewal	Riversleigh Road gravel resheet	Gravel resheet	Surat	TBC	TBC	0.7kms	
1.3d	Rural	Renewal	Munnaweena Road gravel resheet (various sections)	Gravel resheet	Mitchell	Varies	Varies	3kms	
u1.3j	Rural	Renewal	Teelba Road - Gravel resheet	Gravel resheet	Surat	Sections	To ch. 20		
1.3e	Rural	Renewal / Upgrade	Mt Everdale Road (246) - Gravel Resheet and Drainage Upgrade - APLNG	Gravel resheet	Yuleba				
1.3f	Rural	Renewal / Upgrade	Kangaroo Creek Road - Santos GLNG	Gravel resheet	Yuleba				TBA
1.3g	Rural	Renewal	Angry Jungle Road - Santos GLNG	Gravel resheet	Yuleba				
1.3h	Rural	Renewal / Upgrade	McLennans Road - Santos GLNG	Gravel resheet	Yuleba				
1.3i	Rural	Renewal	Restoration of Essential Public Asset - Flood Damage (completed by 30 June 2022)	Flood restoration	Regional				16,064,731
Bitumen Extensions - excluded from recommended budget due to requirement to present "minimum/critical" projects only									
1.3j	Urban	Renewal	Annual Urban Street Reseal Program	Bitumen reseal	Regional				2,484,360
1.3k	Rural	Renewal	Annual Rural Road Reseal Program	Bitumen reseal	Regional				
1.3l	Rural	Renewal	Ashmount Road - Bitumen Rehabilitation	Bitumen rehabilitation	Roma	ch. 0	ch. 9.500	9.5kms	5,944,820
1.3m	Rural	Renewal	Bulk special maintenance - bitumen rehab	Bitumen rehabilitation	Regional				
1.3n	Rural	Renewal	Beverley Road - Bitumen Rehabilitation	Bitumen rehabilitation	Roma			2.8kms	
1.3o	Rural	Renewal	Bindango Road - Bitumen Rehabilitation	Bitumen rehabilitation	Roma	ch. 6.971	ch. 8.753	1.782kms	
1.3p	Rural	Renewal	Bollon Road - Bitumen Rehabilitation	Bitumen rehabilitation	Mitchell	ch. 48.385	ch. 52.000	3.615kms	
1.3q	Rural	Renewal	Gunnawarra Road - Bitumen Rehabilitation	Bitumen rehabilitation	Mitchell	ch. 3.500	ch. 5.920	2.42kms	
1.3r	Rural	Renewal	Six Mile Road - Bitumen Rehabilitation	Bitumen rehabilitation	Roma	ch. 5.940	ch. 7.900	1.96kms	
1.3s	Rural	Renewal	Tiger Scrub Road - Bitumen Rehabilitation	Bitumen rehabilitation	Roma	ch. 0	ch. 2.800	2.8kms	
1.3t	Rural	Renewal	Warrong Road - Bitumen Rehabilitation	Bitumen rehabilitation	Mitchell	ch. 23.544	ch. 24.286	0.742kms	
1.3u	Rural	Renewal	Westgrove Road - Bitumen Rehabilitation	Bitumen rehabilitation	Injune	ch. 8.800	ch.12.660	3.86kms	
1.3v	Rural	Renewal	Womblebank Gap Road - Bitumen Rehabilitation	Bitumen rehabilitation	Injune	ch. 35.550	ch. 36.329	0.779kms	
1.3w	Urban	Upgrade	(1) Roma CBD Asphalt Upgrade Program - Hawthorne Street	Bitumen rehabilitation	Roma	McDowall	Bowen		275,000
1.3x	Urban	Renewal	Fifth Avenue Injune - Hutton to Ronald - Both Sides	Kerb and channel	Injune	Hutton	Ronald		
1.3y	Urban	Renewal	Second Avenue Injune - Ronald to Hutton - Both Sides	Kerb and channel	Injune	Ronald	Hutton		
1.3z	Urban	Renewal	Louisa Street Mitchell - Dublin to Short - Western Side	Kerb and channel	Injune	Dublin	Short		
Bitumen Extensions to Kerb - excluded due to requirement to present "minimum/critical" projects only									

Project ID	Urban / Rural	Asset work type	Project name	Project type	Local area	Indicative scope			Cost estimates (\$)
						Start	End	Length	
1.3aa	Urban	Upgrade	Regional Footpath Improvement Project	Footpaths	Regional				332,500
1.3ab	Urban	Renewal	(1) McDowall Street - Roma Outdoor Sports to Charles Street	Footpaths	Roma			42m	
1.3ac	Urban	Renewal	(2) McDowall Street - Roma Fire Station to Gregory Street	Footpaths	Roma			60m	
1.3ad	Urban	Renewal	(3) Bowen Street - Wyndham to Arthur Street (northern side)	Footpaths	Roma			105m	
1.3ae	Urban	New	Surat Riverwalk Stage 2 (Bridge to camping ground)	Footpaths	Surat				
1.3af	Urban	Upgrade	Upgrade of footpaths - 50 percent contribution	Footpaths	Regional				
	Connections / Extension - excluded due to requirement to present "minimum/critical" projects only								
1.3ag	Rural	Renewal	Dunkeld Road Culvert Replacement	Rural drainage/ stormwater	Mitchell				330,000
	Rural	Upgrade	Concrete culvert - Gunnewin West Road (design only)	Rural drainage/ stormwater	Injune				
1.3ah	Rural	Upgrade	Annual Concrete Floodway Program - 2 x Locations	Rural drainage/ stormwater	Regional				
1.3ai	Urban	Renewal	Stormwater Relining/ Repair Program - including displacement repairs and relining of Lovell St / Elanora Ave	Urban drainage/ stormwater	Roma				170,000
1.3aj	Urban	Upgrade	Bridge Pedestrian Handrail Replacement Program	Urban drainage/ stormwater	Regional				
1.3ak	Urban	Upgrade	Ivy Street Outlet Protection / Treatment	Urban drainage/ stormwater	Roma				
1.3al	Urban	Upgrade	Miscamble and Queen Street Roma - Intersection Upgrade (50% contribution)	Other	Roma				968,648
1.3am	Urban	New	Long Distance Coach Stop Program (People With Disability Compliance)	Other	Regional				
1.3an	Urban	Upgrade	Vehicle Rest Area - Eastern Approach to Roma (opposite Big Rig)	Other	Roma				
	Total capital (ii)								\$29,344,180
1.3ao	Urban	Operating	Stormwater Bulk Maintenance Program - including silt removal	Urban drainage/ stormwater	Regional				155,000
1.3ap	Rural	Operating	Hoganthulla / Mt Moffat Road Intersection (assist with future funding applications) - Design Only	Strategic planning	Mitchell				
1.3aq	Urban	Operating	Charles Street (Bowen to McDowall) Widening Project - Design Only	Strategic planning	Roma				
1.3ar	Urban	Operating	Unsealed Urban Streets within Priority Infrastructure Area - Design Only	Strategic planning	Regional				
	Total operating (i)								\$155,000
	Total projects								\$29,499,180