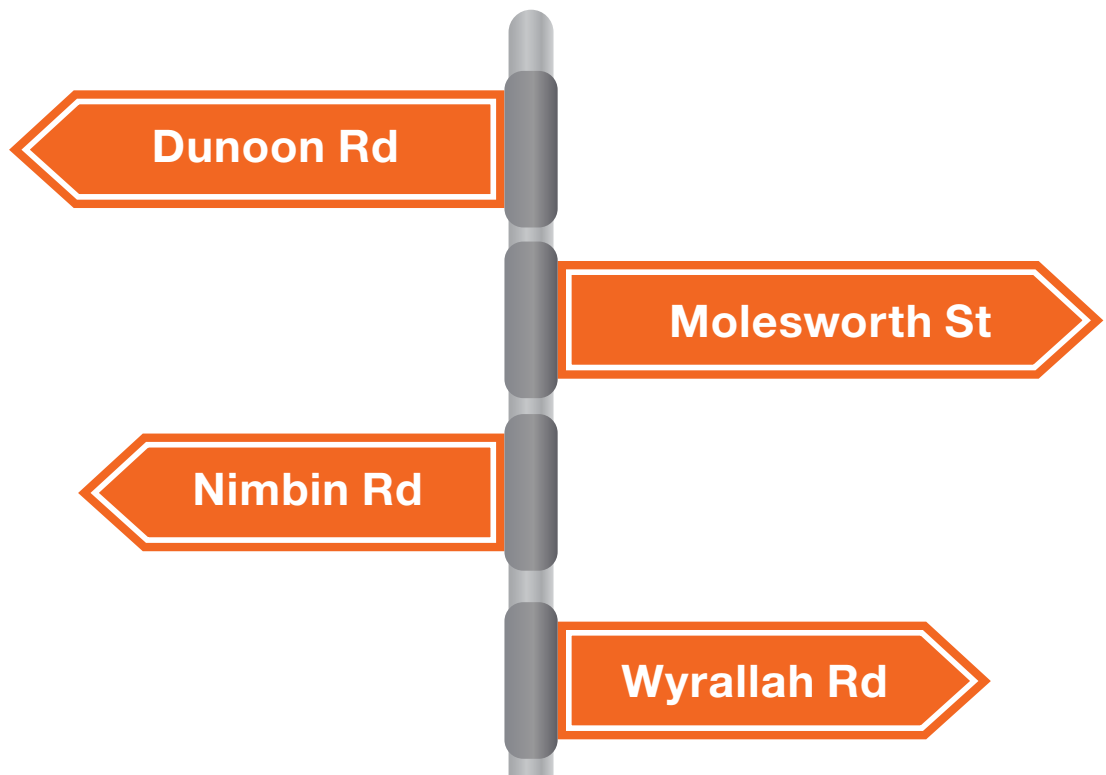


YOUR ROADS



**Important information
you need to know.**





The how and why of maintaining roads

Council maintains 1200km of roads in the Lismore Local Government Area – the distance from Brisbane to Canberra. 780km are bitumen sealed and 420km are gravel roads. In simple terms, we have a lot of roads.

The reality is, to fix all our sealed roads tomorrow would cost \$90 million. That's money we don't have. So we need to stagger the work and chip away at making our roads better. We also need to use our money to get the biggest bang for our buck.

In 2015/16 we have allocated \$31.7 million for roads and associated infrastructure, or 23.8% of our \$133 million budget.

We no longer split funding as we have in the past between urban and rural roads and instead look at all roads on a priority basis. We have also changed our practice of “fix the worst roads first”.

The new approach is to fix more bitumen surface so we stop roads falling into disrepair. Keeping the road surface in good condition keeps it waterproof and protects the gravel foundation from becoming damaged. This gets the most life out of every road.

The simple analogy for road surfacing is the painting of your weatherboard house. If you don't paint, sooner or later the rain will cause the weatherboards to rot and then you will have to replace them. So you repaint, to stop a bigger problem.

That's exactly what we are now doing with our roads. It will make our roads last longer and in the long term, it will save us millions of dollars.

One of the consequences of this change is that roads that are in very poor condition will take longer to become a priority. We will still do maintenance and fix potholes.

This new approach will deliver better value for money and in the long term will result in more roads in a better condition. We will review the strategy in four years.

We are now reducing the installation of kerb and gutter and piped drainage in urban areas to free up money to fix more kilometres of sealed road. With a huge road network, the priority is to fix as many kilometres of sealed road as possible.

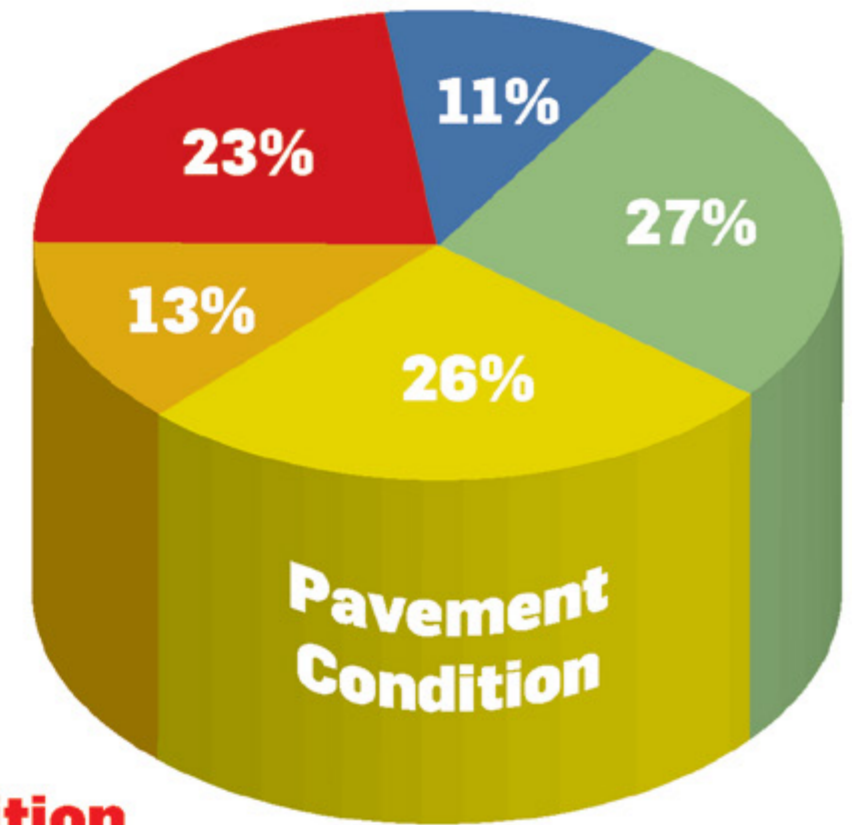
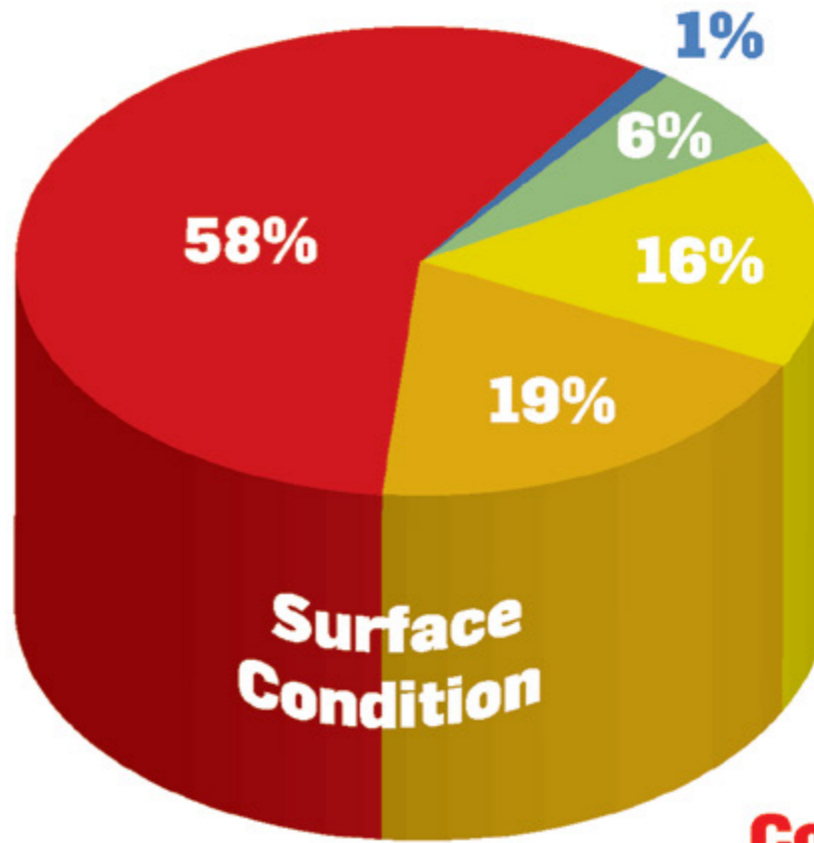
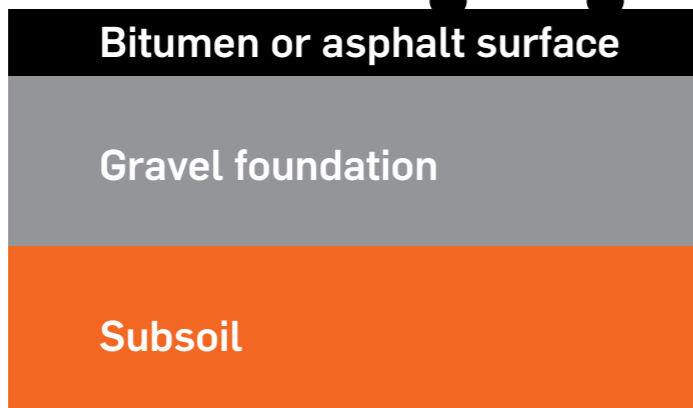
We want our residents to understand our new approach to roads. We hope to see a better outcome for the whole community as a result of these changes.

Road condition

The graphs on the right show the overall condition of Council's sealed roads. The surface graph shows the condition of the bitumen surface and the pavement graph shows the condition of the gravel foundation underneath the bitumen. As you can see we have more than half of our bitumen surface in very poor condition. The bitumen surface protects the gravel underneath from water. If water gets into the gravel, the road may fail.

We can fix the bitumen surface on a road that still has good gravel underneath for between \$5 and \$25 per square metre depending on what we need to do. If the gravel underneath has failed, the cost to fix it is somewhere between \$45 and \$100 per square metre.

So our strategy is to fix as much bitumen as we can, which stops the gravel foundations from getting wet, as these are much more expensive to fix.



Condition Rating





We're only human



This is Allen Newton, 61, from Goonellabah. Allen and his wife Joy have three children and six grandchildren. He has worked for Council for 34 years and nine months, and his father Ray worked for Council for 22 years up until his retirement.

Allen was a member of the Lismore City SES for more than 20 years, working as a land and sea rescue officer, as well as a volunteer during floods and storms, helping people in need.

He's been a member of the Bexhill P&C, Bexhill Hall Committee and the local bush fire brigade. He's a well-known member of the community and loves nothing more than a relaxing spot of beach fishing.

Allen's been with our Roads Crew since he started at age 27. In summer, Allen spends eight hours every day with a piece of equipment called a jetpatcher (*pictured right*), filling potholes with cold emulsion tar and stone. He said technology has come a long way and it beats the old days of standing in the heat shovelling hot bitumen into holes.

“With the heat of the sun, the hotmix and the road, it could get up to 50 or 60 degrees out there,” Allen said. “But about 15 years ago we started using the jetpatcher. It saved hundreds of thousands of dollars each year, which is better spent repairing more roads, and it's quicker, so we can fix a lot more potholes.”

In the last three and a half years alone, Allen has patched 129,000 potholes. Imagine how many he's patched in the last 34 years! His quietest time at Council was during the 2002/03 drought – he didn't fill a pothole for nine months.

“Just goes to show how the rainfall ruins our roads,” Allen said.

We know the community thinks we can do better on roads, and we are trying, with new systems in place to improve our performance. Our great strength is our employees and people like Allen, who are part of our community and work hard to get the job done.

They deserve our thanks.





Why we use a jetpatcher

Dispelling myths about pothole maintenance and repair

Council has been using a jetpatcher to fill potholes for many years. The community has not always been happy with jetpatcher repairs as they can look messy, and the quality is not always as good as when we fill by hand. However, there are many reasons why we use a jetpatcher – primarily so we can fill a lot of potholes quickly.

We can fill as many as 500 potholes with the jetpatcher in one day. With the high rainfall we experience, which creates a lot of potholes, it's important to fill them quickly before they get worse.

The jetpatcher fills potholes by blowing any loose debris or water out of the hole and then spraying bitumen emulsion combined with small aggregate to provide a waterproof repair.

The jetpatcher is much more economical than the old method of staff using a shovel to fill holes with hotmix (asphaltic concrete) plus it's a lot safer and we have a lot less workplace injuries. The jetpatcher is operated by a three-man crew, with one person driving the machine and two traffic controllers.

The other method we use to repair potholes is through a flocon machine. This process uses the asphaltic concrete (hotmix) and potholes are manually filled by hand. This process is much slower as it is more labour intensive. The flocon crew comprises of five staff, including two traffic



controllers, and in a typical day they can fill around 100 potholes.

We generally use the flocon machine in the urban area where the road network is not so widespread and many of the roads are made with an asphalt finish, rather than what's called a chip seal, or bitumen finish.

Constant rainfall is the biggest issue that affects our road network and after a heavy rain, we can literally have thousands of new potholes to fill. We are always battling to keep up with the pothole schedule and do our best to fill as many as we can as quickly as we can.





2015/16 Sealed Roads Rehabilitation Program

Basic rehabilitation of a road involves taking the bitumen off the top, adding some more gravel, mixing it with the existing gravel and then sealing the surface with bitumen. This treatment strengthens the gravel foundation and smooths out the surface.

Most roads in our network were constructed many years ago and not built for today's traffic volumes or heavy vehicles. Rehabilitation extends the road's life by 20 to 30 years by increasing the overall depth and strength of the road. Additionally, by recycling the existing road material, it minimises the overall cost of the project.

Following are details of rehabilitation works being undertaken in the next 12 months.

Road	Length of work
Brewster Street	From Ewing Street to Magellan Street
Magellan Street	From Cathcart Street to Brewster Street
Cathcart Street	From Magellan Street to Ewing Street
Cathcart Street	From Ewing Street to Conway Street
Hunter Street	From Orion Street to Gaggin Lane
Hunter Street	From Gaggin Lane to Laurel Avenue
Hunter Street	From Laurel Avenue to Uralba Street
Casino Street	From Caniaba Road to Hanlon Street
Zadoc Street	From Keen Street to Dawson Street
Pleasant Street	Roundabout at intersection of Pleasant/Fischer Streets
Diadem Street	Roundabout at intersection of Magellan/Diadem Streets

Kyogle Road	3 sections: total of 842m at Fernside
Wyrallah Road	295m at Monaltrie
Wyrallah Road	3 sections: total of 1.8km at Tucki Tucki
Rous Road	2 sections: total of 1.4km from Connor Road to East Street
Tuntable Falls Road and Blue Knob Road	642m at Nimbin



2015/16 Sealed Roads Resurfacing Program

Resurfacing means patching a road and putting a new bitumen seal over the existing road. Keeping the road surface in good condition keeps the gravel foundation of the road waterproof and makes it last longer.

Following are details of resurfacing works being undertaken in the next 12 months.

Road	Length of work
Brewster Street	From Cottee Street to laneway
Brewster Street	From Ballina Road to Ewing Street
Brewster Street	From Magellan Street toward the Square 100m
Dibbs Street	From Dalley Street to Jacaranda Avenue
Dibbs Street	From Dalziell Street to Gardner Avenue
Hunter Street	From Uralba Street to McKenzie Street
Uralba Street	From Dawson Street to Diadem Street



Bridge Street (North Lismore)	From Slater Street to Alexandra Parade
Lake Street	From Macaulay Street to change of seal
Lake Street	From Pitt Street to change in width
Lake Street	From change in width to Winterton Parade
Pitt Lane	From Winterton Parade to Pitt Street
Pitt Street	From Bridge Street to Lake Street
Bruxner Crescent	From Mountain View Drive to Ballina Road
Canterbury Chase	From Camelot Road to Camelot Road
Canterbury Chase	From Winchester Drive to Ballina Road
Cedar Street	From Homesleigh Drive to Hillview Drive
Homesleigh Drive	From Warrawee Court to Cedar Street
Invercauld Road	From Ballina Road to Simons Avenue
Invercauld Road	From Invercauld Road to Julie Crescent
James Road	From Eucalypt Grove to the dead end
Pleasant Street	From Rous Road to Norwood Avenue
Shearman Drive	From Campbell Crescent to the dead end
Sunnybank Avenue	From Northcott Drive to Deegan Drive
Caniaba Street	From Three Chain Road to 440m north
Elliott Road	From Crown Street to Wilson Street
Three Chain Road	From East Street to change of seal
Wilson Street	From Nimbin Road to bridge abutment
Donnans Road	From Suzette Street to Pendarra Crescent
High Street	From New Ballina Road to Renwick Street
High Street	From Simes Street to O'Flynn Street
High Street	From the service lane to Beardow Street
Keen Street	From change in road width to John Street
Molesworth Street	From Ballina Road to Bounty Street
Barham Street	From Wyrallah Road to Atlas Street
Barham Street	From the change of seal to Belvedere Drive
Dalley Street	Lismore High School service lane
Industry Drive	From Rifle Range Road to Military Road
Walker Street (East Lismore)	From College Street to Military Road
Ballina Road	The service road for Invercauld Road

Oliver Avenue	From Simeoni Drive to Taylor Avenue
Elliott Road	From Union Street to Crown Street
Nimbin Road	34 sections at various locations: a total of 18.5km or 68% of the road
Dunoon Road	17 sections at various locations: a total of 6.3km or 26% of the road
Stony Chute Road	8 sections at various locations: a total of 4.3km or 42% of the road
Cawongla Road	4 sections at various locations: a total of 1.8km or 11% of the road
Rosehill Road	7 sections at various locations: a total of 3.4km or 78% of the road
Duncan Road	5 sections at various locations: a total of 2.4km or 30% of the road
Corndale Road	8 sections at various locations: a total of 3.6km or 45% of the road
Eltham Road	11 sections at various locations: a total of 6.4km or 59% of the road
Pearson Road	5 sections: a total of 2.1km or 100% of the road
Lockton Road	3 sections at various locations: a total of 1.6km or 62% of the road
Alphadale Road	7 sections: a total of 4.6km or 100% of the road
Wyrallah Ferry Road	3 sections: a total of 1.1km or 100% of the road
Skyline Road	5 sections at various locations: a total of 2.3km or 34% of the road
Bridge Street (Wyrallah)	From Miriam Street to Emily Street
Tregeagle Road	14 sections at various locations: a total of 7.4km or 84% of the road
Rous Road	4 sections at various locations: a total of 2.4km or 29% of the road
Repentance Creek Road	9 sections at various locations: a total of 4.4km or 89% of the road





Gravel maintenance

Gravel roads make up 420km of our road network. They need continual grading, drain clearing and regular addition of gravel in order to stay in good condition.

Typically, our gravel roads were constructed many years ago as a result of the increasing demand from local farming and agriculture, and were not built with future traffic demands in mind.

There are a number of other factors that influence the overall performance of gravel roads: quantity and quality of gravel used in building the road, rainfall, drainage (table drains, mitre drains and piped drains), constructed causeways, heavy vehicle usage, crossfall, width, traffic volume and topography.

All gravel roads in the Lismore Local Government Area are graded as part of our gravel maintenance schedule.

Within the schedule, we group all our gravel roads into three classifications – Class A, B and C – to determine how often we grade them. The class of road is determined by how many people drive on the road. If it's a major road with high traffic volumes and school bus routes for instance, then it would be a Class A road. If it's an access road servicing only a few homes, it would be a Class C road.

Class A roads are graded once every year, Class B every two years and Class C every three years. Here's an example of some gravel roads and where they fit into Council's classification hierarchy.

Class A Roads	Class B Roads	Class C Roads
Terania Creek Road, Terania Creek	Casey Lane, Coraki	Browning Road, Numulgi
Boggumbil Road, Rock Valley	Bungabbee Road, Bungabbee	Charlton Road, Rosebank
Sheehan Road, Tuckurimba	Monaltrie Lane, Monaltrie	Lavis Road, McLeans Ridges

We try our best to stick to the gravel maintenance schedule. However, the reality is, some gravel roads wear out faster than others, and rainfall can mean we need to completely rejig our schedule to deal with gravel roads that need damage control.

Maintaining gravel roads is not a perfect science, but we inspect the network regularly and try to grade all roads before they get too rough. We basically try to get there before you think to call us!

We place our three-monthly gravel maintenance schedule on our website at www.lismore.nsw.gov.au. While this is subject to change, it will give you an idea of whether work is coming up on your road.

Road drainage

Rural ratepayers have been telling us for years, and we know ourselves, that good drainage helps roads last longer. The problem is, we don't have enough funding to do all the work that is needed. There are lots of roads that need a pipe culvert or a constructed causeway to deal with scouring and potholes at low points, which are often the major problem with gravel roads between gradings.

We will soon be doing a Service Level Review to look at what services ratepayers want us to fund and to what level. We will ask questions about everything from roads to arts, environment to sports. Drainage is one thing we want to discuss with rural ratepayers. We want to know what level you think we should fund this to and what you are prepared to pay for. Stay tuned in coming months, and read *Local Matters* for more on the Service Level Review and opportunities for you to be involved.

Stay informed

Our website contains lots of information to keep you informed. We have a weekly roads schedule with urban and rural pothole repairs and rural gravel maintenance. We also have a four-week roadworks calendar. Look for 'roadworks' at www.lismore.nsw.gov.au.

We hope ***Your Roads*** has provided some useful information and a better understanding of our approach to roads. If you would like to report a pothole that needs fixing, go to the Report a Problem link at www.lismore.nsw.gov.au or for more information phone **1300 87 83 87**.



For information on delays and road closures caused by accidents, flooding etc, download our free MyRoadInfo app from the App Store or Google Play Store, or visit www.myroadinfo.com.au.

