

# CASSOWARY COAST REGIONAL COUNCIL

## UNSEALED ROADS FACT SHEET



Cassowary Coast Regional Council is responsible for the maintenance of over 525km of unsealed roads and has an annual budget of approximately \$3 million dedicated to unsealed road re-sheeting. Unsealed roads are a highly dynamic asset as the condition of the road rapidly changes due to traffic movement, weather, and variability in terrain. Soil type and gravels also add to the complexity of maintaining unsealed roads. Unlike sealed roads, permanent speed limit signs are not used on unsealed roads because the condition of the roads cannot be assured, and vehicles must always drive to suit the conditions. Council has four grader crews that are used for maintenance grading, re-sheeting and road reconstruction works. We also regularly hire contractors to supplement our fleet.

### MAINTENANCE GRADING

The main purpose of a maintenance grade is to provide a good running-surface and to reform cross fall in the road so that water runs off and does not pool or cause scouring. This process includes the use of a grader roller and water truck to compact the material with the optimum water content. If the road is too wet, the grader can cause more damage to the road. On these occasions it is beneficial for the grader to leave the road unfinished and return once the weather permits.

Council also generally only grades roads when grading is required. This means that when we are in an area, we only work on the roads that have reached intervention levels for maintenance. Grading roads that don't require grading just because we are in an area wastes money and prevents the grader from moving to other roads that are rough enough to require intervention.

### CHANGING ROAD CONDITIONS

Over time, unsealed roads become corrugated, potholed, rough, slippery, muddy and/or dusty. All of these are normal and unavoidable conditions that change often, and drivers must remain vigilant when driving on unsealed roads, i.e. travel at lower speeds and expect the unexpected.

It is also important to note that road conditions change after grading; unsealed roads are often more slippery after they have been graded than they were before the grading.

### ROUTINE INSPECTIONS

Cassowary Coast Regional Council's routine inspection frequency on our unsealed roads is based on the road class as highlighted in the table below. During an inspection a calibrated roughometer is used to determine the roughness of the road, and a visual inspection is undertaken to identify any defects/hazards. This information is used to determine if the road has met the intervention level for maintenance grading and/or if isolated gravel patching is required.

To get an accurate reading of the roughness it is essential for the inspector to maintain a constant speed along the entire length of road being recorded. So if you see the inspection vehicle (as per photo) please give way to allow the inspection to be completed.

The factors that are used to determine if a road is to be re-sheeted includes, gravel depth, road profile and the cost of maintenance spent over the last few years. Re-sheeting is generally undertaken where it will provide the greatest reduction in maintenance.

ROAD CLASS	INSPECTION FREQUENCY	HIERARCHY RISK
A	6 weekly	High
B	8 weekly	Medium
C	3 monthly	Medium
D	4 monthly	Low
E	Half Yearly	Low
F	Yearly	Low

## UNSEALED ROAD CLASS

To help in managing its unsealed road network, Council has divided its roads into segments. Each unsealed road segment is classified into a road class based on criteria which dictates the level of service that the road provides to the community. This also forms a risk-based approach to maintenance which allows Council to prioritise works according to the risk profile. Roads that are used at a higher frequency generally deteriorate quicker and therefore require intervention more frequently.

ROAD CLASS	ESTIMATED AVERAGE DAILY TRAFFIC (ADT)	SERVICE (GUIDE)	FUNCTION	NETWORK LENGTH	UNSEALED ROAD NETWORK
A	>120 ADT	>15 houses	Major movements between population centres Part of the primary network	11.77 km	2.24%
B	75 - 120 ADT	11 - 15 houses May have less houses but connects to other roads >500ha bananas	Roads that link to primary network Connecting local centres	30.025km	5.71%
C	40 - 75 ADT	7 - 10 houses >1 industry >250ha bananas	Minimum standard for school buses Minor roads May have packing sheds and farms	135.364km	25.73%
D	20 - 40 ADT	2 - 6 houses 1 industry >100ha bananas	Provides access to low use areas (e.g. boat ramps) Minimum standard access to National Parks	170.13km	32.34%
E	8 - 20 ADT	1 - 2 houses Small industry >50ha bananas	Provides access to properties Only 1-2 residences Very low use Access to minor tourism site	112.34km	21.35%
F	<8 ADT	0 houses Very small to no industry	Used for infrequent recreation May provide access to rivers or paddocks 4WD tracks	66.489km	12.64%

## DID YOU KNOW?

It costs an additional \$12,000 per KM per year to own and maintain a bitumen road.

To seal all of our gravel roads would increase the Council maintenance budget by \$6.3m per year (a 19% rate rise).

## WHAT CAN YOU DO TO HELP?

### SLOW DOWN

Travelling quickly on unsealed roads causes more dust. Accelerating and braking causes more potholes and corrugations.

### UNDERSTAND THE NATURE OF UNSEALED ROADS

They will be rough and muddy or dusty at times; does the road really need grading now?

### DRIVE TO SUIT THE CONDITIONS

Drivers are responsible for their own safety and that of other users of the road. If a road is known to be rough or slippery, drive at an appropriate speed.

### EXPECT THE UNEXPECTED

Never assume an unsealed road is going to be the same as it was the last time you drove on it, even if it is the same day.