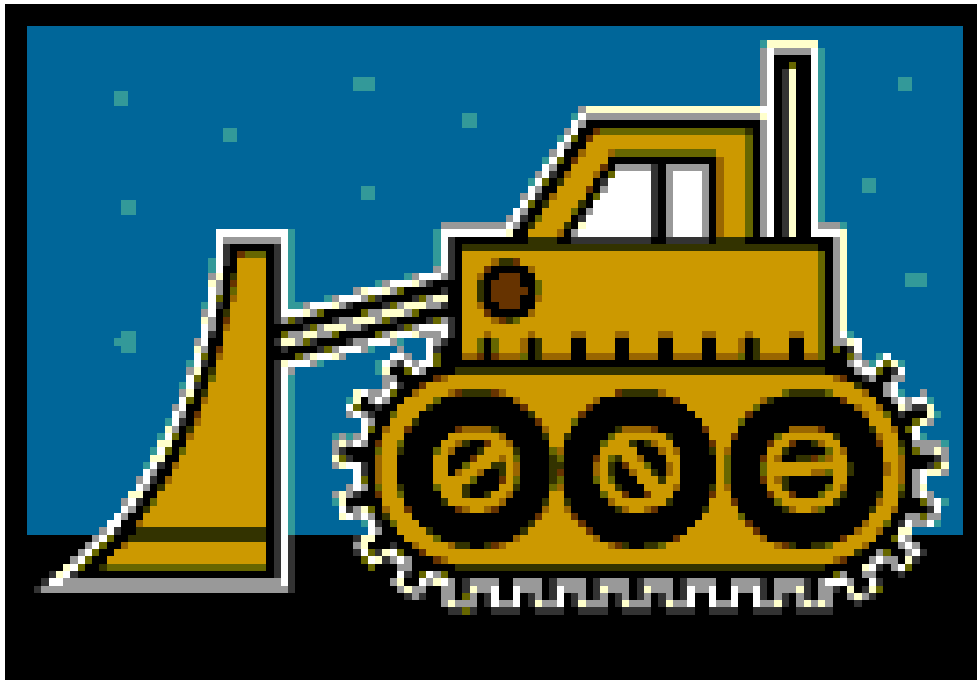


TALLAGANDA SHIRE COUNCIL

SECTION 94 CONTRIBUTIONS PLAN NO. 3



ROADWORKS

Adopted by Council on 17 November 2003
Resolution No. CW72/626

INTRODUCTION

Fundamental to the levying of s.94 is the establishment of a nexus between the proposed development and the need for increased amenities and services. If Council fails to demonstrate an increased demand for amenities and services, it cannot charge s.94 contributions.

Three aspects of nexus can be identified: causal, physical and temporal. These are:

- the need for the service or facility that the levy is being applied for, must be a direct result of the development being levied;
- the service or facility must be near enough in physical terms to provide benefit to the development, and
- that service or facility must be provided within a “reasonable time”.

The following defines Council’s policy for roadworks contributions.

(a) Policy application

This policy applies to all land within the Tallaganda Shire Local Government Area.

This policy applies to the following development activities where development approval is required:

- | | |
|-------------------------|--|
| □ Subdivisions | All subdivision (except boundary adjustments and consolidations, where no new allotments are created). |
| □ Dwellings | Where a dwelling is proposed on a existing title, and that title was sold off a current holding, and the original homestead utilises the road usage entitlement, a contribution, as identified in this plan will be applied on the dwelling development application approval, as a condition of consent. |
| □ Buildings | Where the traffic demand is greater than 7 vehicle movements per lot. |
| □ Commercial activities | Where the proposed vehicle movements exceed 7 vehicle movements per lot. |

Note: “current holding” means:

- (i) *except as provided in (ii), the area of a lot or portion of land as it was at 24th September 2003; or*
- (ii) *where, as at 24th September 2003, a person owned two or more adjoining or adjacent lots, portions or parcels of land, the aggregation of the areas of those lots, portions or parcels as they were at 24th September 2003;*

(b) The "Causal" Relationship

Determination of the additional population (or dwellings, floor space etc) generated by the development that will necessitate the upgrading of Shire roads and road networks.

In this case, the RTA's Manual, “Guide to Traffic Generating Developments”, provides the basis for traffic generation as follows:

Use	Vehicles Per Day
Dwelling houses	7 per dwelling
Flats - 2-bedroom	5 per unit
Flats – 3 bedroom	7 per unit
Aged / disabled housing	2 per unit
Motels	3 per unit
Office / Commercial	10 / 100m ² gross floor area
Retail	121 / 100m ² gross floor area
Restaurant	60 / 100m ² gross floor area
Recreation / tourist	Individual assessment
Road transport facilities	5 / 100m ² gross floor area
Industry	5 / 100m ² gross floor area
Warehouses	4 / 100m ² gross floor area

This policy covers State-wide traffic generation. Whilst it may be somewhat unreasonable on the more isolated subdivisions, it gives figures that Council can use as the maximum case. Where there is potential for commuter or commercial use, a vehicle generation rate as per the above table, will be used.

(c) **The “Physical and Temporal” Relationship**

This is determined from the above table and refers to the increased demand for amenities and services and where and when they will be needed.

The extent of impact due to the development can be determined from the break-up between existing traffic and newly generated traffic, for example:

Existing traffic:	9 vehicles/day
Generated traffic (3 lots):	<u>21</u> vehicle movements/day
Total:	30 vehicle movements/day

$$\text{Therefore, traffic share due to subdivision: } \frac{21}{30} = 70.0\%$$

$$\text{Traffic share due to existing users: } \frac{9}{30} = 30.0\%$$

If road improvements needed to upgrade the access road to a higher standard are, say, \$60,000, the developer could be required to contribute \$42,000, that is, the proportion of total traffic due to the development. However, this does not acknowledge that the original asset provided by Council may or may not be above or below an adequate level of service for existing users and therefore whether a greater or lesser proportion should be attributable to the developer. Similarly, such a simplistic approach does not recognise potential for future development.

To accommodate the variety of possible scenarios, Council has developed a series of reduction factors that will apply to various road standards. These are as follows:

Existing Road Type on Shire Access Road to New Subdivision	Percentage Discount
1, 2 and 3	Nil
4	30
5	40
6 and 7	50

(d) Calculation of Representative Costs for Roadworks

Council's policy has been to group each of its roads into 7 types as identified in Addendum

A. The cost for improving the roads as per classification is as follows:

Road Type	Standard of Road Construction	Cost of new works Unsealed (per km)	Cost of new works Sealed (per km)
1	State Roads – Main Road 51 and 79 which Council maintains as a contractor for the Roads & Traffic Authority under a Single Invitation Maintenance Contract system. Council requires RTA's approval for any construction within the road reserve.	-	1,000,000
2	These are the north-south arterials and generally include Regional Road 92 (Braidwood to Nowra), Regional Road 270 (to Captains Flat) and Regional Road 7625 (to Cooma). These roads are generally funded by the Roads & Traffic Authority under a various funding programs with various criteria and guidelines. Council can spend its own funds on these roads. Generally, major improvements are carried out on these roads on a dollar-for-dollar basis between the RTA and Council. The long-term objective is to have all classified roads upgraded to a sealed standard.	-	500,000
3	These are the local distributor roads which provide a backbone to local traffic and are the collectors. It is Council's objectives for these roads to be upgraded and, if the traffic volume becomes greater than 120vpd, to have them sealed. In some circumstances, if there is identified need, traffic volumes down to 80 vpd may necessitate the requirement for a road to be upgraded to a sealed standard.	-	400,000
4	These are local roads where Council's objective is for the road to have an all-weather surface and two lanes with appropriate shoulders constructed to an 80km/h standard. These roads could be anticipated to have traffic volumes in the order of 30-80vpd serving more than five occupied dwellings.	200,000	250,000
5	These are local roads providing access to occupied dwellings where Council's objective is to have two lanes with shoulders with an all-weather pavement. The daily vehicle counts would be in the order of 10-30vpd.	120,000	-
6	These are generally local roads serving one or two occupied dwellings. It is considered that there should be regular maintenance carried out to these roads and that the road should have a single lane with passing bays at appropriate locations. Due to budgetary constraints, Council would not anticipate these roads would be significantly upgraded but routine maintenance and some minor gravelling would take place within budgetary constraints to ensure that, under normal circumstances, all-weather access would be maintained. These roads would have a daily vehicle count of less than 10vpd.	60,000	-

7	<p>These are virtually access tracks that may have been kept opened on a traditional basis. These generally provide access to unoccupied rural lots. Due to budgetary constraints, Council cannot ensure that an all-weather access will be provided.</p> <p>The status of these roads can change, particularly if land is sold or there is development activity in the area. These roads will be reassessed and changes in class or classification determined as necessary.</p>	50,000	-
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(e) Minimum and Maximum monetary contributions per road

Determination of actual cost will be based upon the formula as set out in this plan. Council has acknowledged concern in respect of this potential contribution figure and the subsequent effect on development activity in the Shire, and has “capped” contributions as per the following table.

These figures are per lot or unit or entitlement only. These figures do not include any special factors (as identified in this Plan).

Road Classification Type	Minimum Contribution Value	Maximum Contribution Value
1	\$1,500	\$5,000
2	\$1,500	\$5,000
3	\$1,500	\$12,000
4	\$1,500	\$15,000
5	\$1,500	\$20,000
6	\$1,500	\$25,000
7	\$1,500	\$25,000
Village roads	\$1,500	\$2,500

(f) Road Conversion Calculation

The following steps will enable Council and a developer to determine whether potential vehicle movements would necessitate a road to be upgraded to a higher type and, if so, to calculate the likely cost involved and accords with the formula in (h). This formula applies both to roads not requiring to be upgraded and to roads necessitating upgrading.

1. Determine the existing road network to be used, and using Addendum A, identify road type for each road identified as servicing the development;
2. Identify, by applying the table in (b) and proposed development activity on the land, the potential increase in vehicle movements per day;
3. Consider the current estimated vehicle movements per day and add the potential increase in vehicle movements per day to identify total potential vehicle movements per day;
4. Identify from the table in (d) whether these potential vehicle movements would require the road to be upgraded to a new road type and if so, the cost of new works per kilometre for that road type;

(If the potential vehicle movements do not require the road to be upgraded to a higher level, the cost of new works per kilometre for the current road type from table (d) can be applied).

5. Determine the proportion of that cost per kilometre attributable to generated traffic in accordance with the example formula at (c).
6. Apply the reduction factor relating to the existing road type, if any, from the table in (c) to the kilometre rate;
7. Determine the road length involved and multiply the number of kilometres by the kilometre rate calculated in 6;

(The length of road to which contributions apply will be determined by the sphere of influence [area of impact] of the development. Generally, this will be taken to be the length of road until such time as the total use [generated plus existing] becomes greater than 2 x the generated traffic plus the existing use, ie [total > 2 x (generated) + existing]).

8. Identify from the table in (e) whether the calculated cost is less than the minimum contribution value for the particular road type, in which case the minimum will be applied, or exceeds the maximum contribution value in which case the maximum will apply.

Note that the figures in table (d) are approximate values and the actual cost estimate (ACE) is affected by:

- terrain (flat or hilly)
- gravel supplies and haulage costs
- soil types (loam, rock etc)

The cost of any special factors, to which the reduction factor for the particular road type is applied, is additional to the likely cost calculated above.

(g) Special Factors

In this large Shire with such varied regional conditions, some special factors will need to be considered. These may or may not always be present, but will depend on the specific site.

In the case of Special Factors, the sphere of influence will be taken to be the likely destination which will be regarded as either Braidwood or another main centre outside the Shire.

Special Factor (SF)	Details	Representative Value
1	<p><u>Box Culvert / Bridge Widening and Upgrading</u></p> <p>Bridge upgrading will be required when, in the opinion of the Council, existing bridges, as a result of a subdivision, will not meet adequate minimum standards for one or more of the following reasons:</p> <ul style="list-style-type: none"> - flooding / inundation recurrence intervals are too frequent for the number of vehicles using the road, and - inadequate alternative access during periods of inundation; - width is inadequate for the traffic increase - strength: bridge requires upgrading <p>The bridge waterway and level shall be set at a return period specified by Council (“the Authority”) in conjunction with other relevant regulatory bodies. The Annual Return Period of the design flood shall be calculated in accordance with Section 1 of the 1992 “AUSTROAD’s Bridge Design Code” and the latest revision of “Australian Rainfall and Runoff (Institution of Engineers, Australia)”.</p>	Case by case basis
2	Land acquisition and survey costs for requirement realignments	\$25,000
3	Special erosion control treatments	\$5,000
4	Standard supervision cost	As per Management Plan

Note: These are third order representative costs. The actual cost estimate (ACE) would be based on more detailed information, specific to the job. The developer would be advised of this for his/her specific project.

(h) Formula for Developer Contributions

The developer contribution is found by the following method:

Value of Developer Contribution (\$DC)

$$= 100\% - \text{Reduction Factor Percentage (RF)} \times [\text{actual cost estimate (ACE)}] \\ \text{per km} \\ \times [\text{length of access road to be upgraded (L)}] \\ + [\text{special site factors (SF)} \times (100\% - \text{RF percentage})]$$

$$\text{Therefore: } \$DC = 100\% - \text{RF percentage} \times [(\text{ACE per kilometre} \times L) + \text{SF}]$$

[L = length of road from the development on to the access road, where traffic becomes more than double the generated traffic + existing traffic.

That is, with a 5-lot subdivision on a Type 5 road with currently 20vpd, the length of road to which contributions apply would be that point where the traffic count becomes more than 90vpd ($5 \times 7 = 35 \times 2 = 70 + 20 = 90$).

(i) Adjustment

The plan will be adjusted annually and indexed to the consumer price index increase for the previous 12 months.

(j) Quarries, Extractive Industries and Other Heavy Vehicle Generating Development

A specific methods of calculation apply to quarries, extractive industries and developments likely to generate heavy vehicle movement.

The method of calculation used will be as follows:

Charge per tonne per kilometre = $\frac{\text{lifetime cost of road} \times \text{ESAs generated}}{\text{Road design life in ESAs}}$

$$\text{Road design life in ESAs} = \frac{(M \times Y) + C}{F \times DL}$$

where	ESA	=	Equivalent Standard Axles
	M	=	Annual Maintenance cost of the road
	Y	=	Road Design Life (years)
	C	=	Construction/Reconstruction cost of the road (ie replacement cost)
	F	=	A factor representing ESA for the size(s) and type(s) of truck
	DL	=	Road Design Life in ESAs

Approximate costs for Council's different road types for an articulated vehicle are as follows:

Type 1	=	\$0.03 / tonne / kilometre
Type 2	=	\$0.05 / tonne / kilometre
Type 3	=	\$0.10 / tonne / kilometre
Type 4-7	=	\$0.15 / tonne / kilometre

Calculations are based on:

Type 1	$\frac{(\$3,000 \times 20 \text{ years}) + \$200,000/\text{km}}{5 \times (3.3 \times 10^6 \text{ ESAs})}$
Type 2	$\frac{(\$2,500 \times 20 \text{ years}) + \$150,000/\text{km}}{5 \times (2 \times 10^6 \text{ ESAs})}$
Type 3	$\frac{(\$2,000 \times 20 \text{ years}) + \$50,000/\text{km}}{5 \times (3 \times 10^5 \text{ ESAs})}$
Type 4 - 7	$\frac{(\$2,000 \times 20 \text{ years}) + \$10,000/\text{km}}{5 \times (6 \times 10^4 \text{ ESAs})}$

A contribution will vary depending upon the road network serving the area and its current condition and length and types of truck using the road. The actual cost estimate (charge per tonne per kilometre) will be derived by individual calculation for each proposed development.

(k) Other Developments

In the case of development other than rural or residential subdivisions, a specific calculation of the traffic generation will be made. Estimates of likely traffic generation will be based on the RTA's "Guide to Traffic Generating Developments".

ADDENDUM A

ROAD CLASSIFICATION SYSTEM – SHIRE ROADS

MINIMUM AND MAXIMUM CONTRIBUTION VALUES PER ROAD

No	Name	Road	Projected type for full development	Existing type _ Designated Road Type with roads of varying type included at higher standard type	Current Vehicle Movements Per Day
	Village of Braidwood	Streets			
	Village of Majors Creek	Streets			
	Village of Araluen	Streets			
	Village of Mongarlowe	Streets			
	Village of Nerriga	Streets			
51	Kings Highway	SR 51	1	1	
79	Goulburn Road	SR	1	1	
3	Oallen Road	LR	3	3	
5	Little River Road	LR	3	3	
59	Saleyards Lane	LR	3	3	
105	Jamaleopa Road	LR	3	3	
1	Mayfield Road	LR	3	4	
9	Reidsdale Road	LR	3	4	
11	Majors Creek Road	LR	3	4	
12	Monga Lane	LR	4	4	
15	Wallaces Gap Road	LR	4	4	
16	Badja Road/Krawarree Road	RR7625 LR16	2	4	
20	Harolds Cross Road	LR	4	4	
25	Larbert Road	LR	4	4	
30	Euradux Road	LR	4	4	
87	McRaes Road	LR	4	4	
88	Webbs Road	LR	4	4	
92	Nerriga Rd	RR	2	4	
97	Hogg's Lane - Village	LR	3	4	
268	Tarago Road	RR	3	4	
270	Captains Flat Road	RR	3	4	
271	Araluen Road	LR	3	4	
6	Charleys Forest Road	LR	3	5	
13	Sawyers Ridge Road	LR	4	5	
14	Majors Creek Mountain Road	LR	3	5	
17	Jerrabatgulla Road	LR	4	5	
18	Kain Cross Road	LR	4	5	
21	Bombay Road	LR	3	5	
22	Farringdon Road	LR	4	5	
23	Glenmore road	LR	3	5	
26	Manar Road- Mulloon Road	LR	3	5	
28	Mount Fairy Road	LR	3	5	
29	Lower Boro Road	LR	3	5	
31	Cookanulla Road	LR	4	5	
35	Endrick River Road	LR	5	5	
36	Back Creek Road	LR	4	5	
37	Tally-Ho Road	LR	5	5	

39	Cargill's Lane	LR	5	5	
41	Sandholes Road	LR	3	5	
49	Jinglemoney Road	LR	5	5	
55	Deloraine Lane	LR	4	5	
58	Gillamatong Lane	LR	3	5	
60	Reservoir Lane	LR	5	5	
67	Red Hill Road	LR	5	5	
70	Half Moon Road	LR	5	5	
75	Sandhills Road	LR	4	5	
77	Elrington Lane	LR	5	5	
85	Boro Road	LR	3	5	
86	Burden Drive (Phipps Subdivision)	LR	4	5	
89	Torpy's Lane	LR	5	5	
90	Mt Fairy Subdivision Road	LR	5	5	
91	Jones Road	LR	5	5	
93	Dawsons Lane	LR	5	5	
94	Creek Close (Phipps)	LR	5	5	
95	Killarney Road	LR	5	5	
100	Kalbilli Close	LR	5	5	
101	Duralla Place	LR	5	5	
102	Duckfield Road	LR	3	5	
108	Meangora	LR	5	5	
109	T Gordon Subdivision	LR	5	5	
110	Bowden Subdivision	LR	5	5	
111	Watson Road	LR	5	5	
112	Fernbrook Drive	LR	5	5	
2	Stewarts Crossing Road	LR	5	6	
7	Northangera Road	LR	4	6	
8	Tudor Valley Road	LR	4	6	
19	Hereford Hall Road	LR	5	6	
24	Colombo Road	LR	5	6	
27	Hazeldell Road	LR	5	6	
32	Hoskinstown Road	LR	4	6	
34	Willow Forest Road	LR	5	6	
38	Budawang Road	LR	5	6	
40	Mt Elrington Road	LR	5	6	
42	Neringla Road	LR	4	6	
43	Mountain Creek Road	LR	5	6	
44	O'Briens Road	LR	5	6	
45	Harts Road	LR	5	6	
46	Berlang Forest Road	LR	5	6	
47	Quists Road	LR	5	6	
52	Callans Lane	LR	5	6	
53	Tates Lane	LR	5	6	
54	Halls Lane	LR	4	6	
56	Narranghi Lane	LR	5	6	
57	Stoney Ridge Road	LR	5	6	
61	Hawthorn Lane	LR	4	6	
62	Wyanbene Road	LR	4	6	
63	C of E Cemetery Road	LR	5	6	
65	Catholic Cemetery Road	LR	5	6	
66	Myrtle Grove Road	LR	5	6	
73	Morgans Road	LR	5	6	

74	Mayfield Cross Road	LR	5	6	
76	Telowar Road	LR	5	6	
78	Griffins Road	LR	5	6	
80	Currumbene Road	LR	5	6	
81	Wallaby Hill Road	LR	5	6	
82	Kirriford Road	LR	5	6	
83	Boppings Crossing Road	LR	5	6	
84	Vernelli Road	LR	5	6	
104	Black Sallee Lane	LR	5	6	
106	G Bradley Subdivision	LR	5	6	
107	Tyndale-Biscoe Subdivision	LR	5	6	
4	Welcome Reef Road	LR	5	7	
10	Monga Mountain Road	LR	5	7	
33	Corang Post Office Road	LR	5	7	
48	Tallaganda Road	LR	5	7	
50	Izzards Lane/ Dawsons Lane?	LR	5	7	
64	Sun Cutting Road	LR	5	7	
68	Cawthornes Road	LR	5	7	
69	Flacks Road	LR	5	7	
71	Gumms Road	LR	5	7	
72	Grants Road	LR	5	7	
98	Rugby Road	LR	5	7	
99	Barnet Drive	LR	4	7	
103	Corang River Road (Booth)	LR	5	7	
96	Thompsons Road	LR			