



## LOCAL GOVERNMENT TRANSPORT ADVISORY PANEL

**Chairperson: Mayor Brian Hurn**

*Please direct inquiries to:*

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<b>VENUE</b>	<b>LGA House Meeting Room 1 Level 1 16 Hutt St ADELAIDE</b>
<b>DATE</b>	<b>Wednesday 13 May 2009</b>
<b>Time</b>	<b>2.30pm – 4.30am</b>

### **AGENDA**

The purpose of the meeting is to undertake consideration of the 2009/10 Regional LGA funding submissions.

1. **Welcome**
2. **Apologies**
3. **Minutes of the 30 April 2009 LGTAP meeting**
4. **Metropolitan Transport Strategy Update – Barry Parsons**
5. **Assessing the Financial Sustainability of Road Funding applications- Consideration of advice from John Olsen HDS**
6. **Budget overruns on previously funded projects - Consideration of advice from John Olsen HDS**
7. **Update on Heritage Drive and the Berri Barmera request for project alteration**
8. **Consideration of 2009/10 SLRP applications- Spreadsheet and applications**
9. **Other business**
10. **Closure**

## **Agenda Item 5. Assessing the Financial Sustainability of Road Funding applications**

### Part A - Financial Sustainability

The "financial sustainability" of proposed SLRP projects should be assessed by LGTAP (and next year at Regional LGA level as well) using the following outline model. I will refine this model over the next few days.

Step 1 - Calculate the life cycle (or whole of life) cost for the project, using the same guidelines as contained in the IPWEA Asset Management Plan approach, so that there is consistency of calculation methodology. In principle, the whole of life cost takes into account initial capital cost of the project, annual operation and maintenance costs, plus renewal of individual elements at their effective life (e.g. signs at 5 to 10 years, seal at 15 to 20 years, culverts at 30 to 50 years, pavement at 50 to 80 years, earthworks at a nominal 100 years). I recommend a 50 year analysis period, but would be comfortable in using whatever the IPWEA approach recommends. The LGA's Local Government Price Index and/or Benchmark Interest Rate would then be used to convert costs over the project's life back into a net present value. This process has already been undertaken on a network basis by all councils who have adopted the IPWEA methodology, so it is not creating a new requirement for councils.

Step 2 - Calculate the whole of life savings achieved by the project, typically as a result of replacing a sheeted road which may be the subject of heavy traffic loadings and therefore high maintenance costs. The whole of life savings would take into account the current value of the road (i.e. replacement cost less accumulated depreciation), annual operation and maintenance costs, plus renewal of asset components (typically sheeting every 10 to 15 years). Once again, Councils using the IPWEA methodology would already have calculated this figure.

Step 3 - Deduct whole of life cost savings (Step 2) from whole of life costs (Step 1) to achieve a figure for the net increase (in rare cases it might be a decrease) in whole of life cost.

Step 4 - Compare the result from Step 3 with the "Life Cycle Gap" identified for the council's overall network in their Asset Management Plan. By way of example, this is identified in Section 6.1.1 of the Barossa Council Asset Management Plan which you supplied to me at our last meeting.

Step 5A - If the council does not have a Life Cycle Gap (which would be rare), and the additional whole of life cost under Step 3 is less than the surplus, the project can automatically be considered financially sustainable.

Step 5B - If the council has a Life Cycle Gap, but has identified a reasonable process for closing the gap over the medium term (i.e. the 20 year period as generally required under their Asset Management Plan), then a statement from the council that they will incorporate the additional whole of life cost into their asset management planning processes would allow the project to be considered financially sustainable.

Step 5C - If the council has a Life Cycle Gap, and has not been able to identify any process for closing the gap over the medium term, then the council's existing road network is financially unsustainable and the new project should not be supported.

All data required from councils to undertake the above "financial sustainability test" is already available to councils who have completed an Asset Management Plan. I will further investigate the on-line IPWEA methodology to see how it might be adapted to allow new projects to be readily added as part of the SLRP application process.

## Part B - Enhanced SLRP Application Guidelines

I have not yet looked at the issue of enhanced guidelines to ensure consistency in the method for determination of project costs (including allowances for administration and overhead costs). I will address this in the next few days, but will once again check the IPWEA approach used for creating an Asset Management Plan to avoid duplication in the guidelines.

### **Agenda item 6 - Budget overruns on previously funded projects**

The following notes summarise my review of the submission by the District Council of Orroroo Carrieton for additional SLRP grant funding to cover cost overruns on the Orroroo to Laura Road Project.

1. From notes contained in Council's letter dated 10 September 2008, it is clear that the original 22.1km long project really consisted of two distinctly different projects, namely:
  - a. Upgrade of an existing unsealed (but sheeted) road to sealed road standard for a length of 16.9km, probably involving minor reshaping, widening and placement of a new base course layer prior to seal.
  - b. Construction of the Tarcowie Bypass as a "greenfields" project, using only an existing farm track alignment, requiring construction of floodways, plus significant earthworks and a full depth pavement (sub-base and base material) prior to seal.
2. The nature of proposed works, expected cost per km and potential benefits, would have been quite different between the above two elements. In hindsight (a useful skill that we all use from time to time!), Council should have submitted separate applications for each component, allowing independent assessment of the cost vs benefit for each aspect of the scheme. Therefore, to assist in determining Council's current request for a variation to the project budget, I have separately examined costs associated with the two parts of the project. I am unable to comment on relative benefits, as I don't have access to the original funding application.

### Orroroo to Laura Road Upgrade - Excluding Tarcowie Bypass

3. Paragraph 4.1 of Council's letter identifies that the original budget for the whole project was \$3,222,180 over 22.1km (i.e. \$145,800 per kilometre). This seems to be a reasonable cost per km (i.e. neither particularly high or low) for upgrading a sheeted road to rural sealed road standard. I have found the typical range over the last three years to be between (\$100,000 and \$180,000 per kilometre). On a simple linear pro-rata basis, the budget for the 16.9km section constructed from 1 July 2003 to 30 June 2007 (i.e all works excluding Tarcowie Bypass) would have been \$2,464,020. Actual costs (spread over a four year period) are reported in Paragraph 4.2 of Council's letter as being \$2,413,840. This is \$50,180 less than the pro-rata budget for this section.
4. At first glance, Item 3 shows that Council has actually built this section under forecast budget and thus is not entitled to any escalation payment for this part of the project. However, Council has identified in Paragraph 5.3.1 that the actual budget originally allowed for the Tarcowie Bypass was \$940,000 (out of the total \$3,222,180). Once again, I cannot verify this statement as I do not have access to the original funding application. It does seem reasonable, though, on the basis that the original estimate should have made some allowance for additional costs associated with a "greenfields" road construction. Deducting \$940,000 from the total project budget of \$3,222,180 leaves a budget of \$2,282,180 for the

16.9km section. At \$135,040 per kilometre, this is still a reasonable figure. Comparing Council's actual expenditure of \$2,413,840 with the modified budget of \$2,282,180 results in a cost escalation of \$131,660 (5.8%). Over the four year project period, this cost escalation is considered reasonable. **I therefore recommend that Council's requested escalation variation of \$131,660 for this part of the works be accepted, and that LGTAP approve an additional \$88,000 in SLRP grant funds (i.e. 2/3 of the total escalation - to the nearest \$1,000).**

#### Construction of Tarcowie Bypass

5. Paragraph 5.3.1 of Council's letter states that \$940,000 from the total project budget of \$3,222,180 was set aside for construction of the 5.2km section designated as the Tarcowie Bypass. At \$180,769 per kilometre, this estimate was probably on the low side, as I have seen actual figures for a "greenfields" rural sealed road vary from \$150,000 to \$250,000 per kilometre. Council's expected final cost for the works is identified in Paragraph 5.3.1 as \$1,578,000. At \$303,462 per kilometre, I consider this to be very high for a rural road project. It is certainly a rate well in excess of what was implied when LGTAP looked at the relative benefits of the project at the time grant funding was sought in 2002/03. It would have made a significant difference to the cost vs benefit calculation for that section of the project.

6. Arguably, the original cost estimate for the Tarcowie Bypass of \$940,000, as presented by Council and accepted by LGTAP at the time funding was sought, should stand as presented. Once again using hindsight, Council should have prepared a more rigorous concept design for this component of the works, given the uncertain nature of new road construction (compared with upgrading a sheeted road to sealed road standard). This would have reduced Council's risk of underestimating the project cost. It should be acknowledged that five years have passed since the original estimate was prepared. Cost escalation should be applied to the original estimate over that period. Paragraphs 6.2 to 6.7 of Council's letter identify valid increases in unit costs which, in most instances, have outstripped inflation over that period. Council would not have been able to predict the sort of increases which have occurred. While Council has not specifically quantified the contribution of the stated items to cost escalation by determining the quantities of those items used in the Tarcowie Bypass, they provide sound evidence that a 5% compounding increase in costs over 5 years (total increase of 27.5%) could be adopted as a reasonable overall escalation of costs (based upon the average of a range between 25% and 30%).

7. Applying the above escalation figure of 27.5% over five years, the original budget of \$940,000 for the Tarcowie Bypass becomes \$1,198,500 (say \$1,200,000). This implies that a reasonable cost escalation component of the Tarcowie Bypass is \$260,000. **I therefore recommend that LGTAP accept an escalation variation of \$260,000 for the Tarcowie Bypass component of the project, and that LGTAP approves an additional \$173,000 of SLRP grant funds (i.e. 2/3 of the total escalation - to the nearest \$1,000).**

8. The remaining \$378,000 increase in costs claimed by Council for the Tarcowie Bypass component of the project is most likely due to increases in the scope of works identified by Council (i.e. construction of floodways, blasting and additional earthworks) together with under estimation of the original cost due to the lack of a concept design being available at the time the estimate was prepared. I believe it is unreasonable for LGTAP to effectively carry the risk associated with this under estimated amount, as full disclosure of a more realistic estimate at the time funding was sought may have resulted in either Central Local Government Region or LGTAP amending their priorities and recommending an alternative project. LGTAP's support for this claimed increase in costs may also establish an inappropriate precedent which encourages other councils to under estimate a project's cost to improve the project's perceived "value for money", then seek additional funds at a later date. **I therefore recommend that the \$378,000 component of Council's requested variation in costs for Tarcowie Bypass potentially attributable to scope change and an original under estimate be acknowledged, but Council's request for an extra \$252,000 (i.e. 2/3 of the total increase) be rejected because such increases should be**

**considered a risk to be accepted by Council, unless a revised funding application is prepared and submitted prior to the works being undertaken.**

In summary, I recommend that \$261,000 of extra grant funds be allocated to the project (out of the total amount requested by Council of \$513,106).

I trust this information is of assistance to LGTAP in considering the grant funds variation request from DC Orroroo Carrieton. Please contact me if you or any LGTAP member wishes to discuss the issues I've raised in this email any further. I will be in the office all Thursday morning if you need to call.

Regards,

John Olson  
Managing Director

HDS Australia Pty Ltd  
Level 1, 176 Fullarton Road  
Dulwich SA 5065

**Agenda item 7. Update on the Berri Barmera request for project alteration**

Dear David,

To answer your question, the following is provided by way of background information:

Basically, Council received funding in 2006/07 to construct a road here in Berri and make safe a problem intersection. The road in question allows access to the large and locally important commercial/ industrial facilities operated by National Foods and Visy Board. Council committed funds to realign the road around the National Foods and Visy Board complex by utilizing portion of a defunct railway reserve acquired by Council for the purpose. The project also consists of upgrading an intersection with this road and a main tourist route to eliminate a major traffic hazard at this site.

Multiple services are located within the defunct railway corridor including: electricity, gas, water, and telstra. Provision for the relocation of a lot of this infrastructure was not fully investigated when the original application for funding was made. Consequently, several redesigns and delays with land acquisitions, also not taken into account has seen the cost of this project blown out. To emphasize this fact, an open tender was called for construction of stage one of this road. The two lowest tenders were approximately \$300,000 (35%) higher than Council's original budgeted figure

To try and cut a long story short, Council has asked me to investigate whether the funding can still be used on the upgrading of the intersection mentioned above and the reconstruction of the existing road on its present alignment. What Council is allowed to do with the current approved funding is a key issue on moving forward with the project. The sooner Council is aware of what it can do with the funding, further meetings with key stake holders can take place with Council then being in a better position to make a more informed decision on the progress of this project.

To this end, the CEO and I would like to attend a meeting of the LGTAP to put Council's case on retaining this funding albeit on a slightly modified basis to overcome this conundrum.

Regards

Tom King  
Manager Infrastructure Services