



QUEENSTOWN LAKES DISTRICT COUNCIL

EAR Cost Allocation Review



2 February 2017

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1 Introduction

SPM Assets has been requested to review the appropriateness of Council's proposed cost allocation for the Eastern Access Road, specifically against sections 101(3), 197AA and 197AB of the LGA2002, with particular regard to:

- a. The contributing area used.
- b. The allocation of cost to those within and outside the contributing area.
- c. The allocation of cost to existing and future individuals/groups.

2 Source Documents

The following documents provided by QLDC have been used as the basis for this review.

- Statement of Proposal – Proposed Amendments to the Policy on Development Contributions
- Policy on development contributions and financial contributions (including proposed amendments October 2016)
- Eastern Access Road Detailed Business Case, August 2016
- QLDC Revenue and Financing Policy – QLDC Website
- Discussions with Tom Lucas, Rationale

3 The Project Scope

The Eastern Access Road (EAR) is a new link road around the eastern extent of the airport connecting current and future business areas north and south of the airport. The road connects the development area to SH6.

The project cost estimate is \$14.95M inclusive of design, supervision and construction. Estimate is in 2015 dollars.

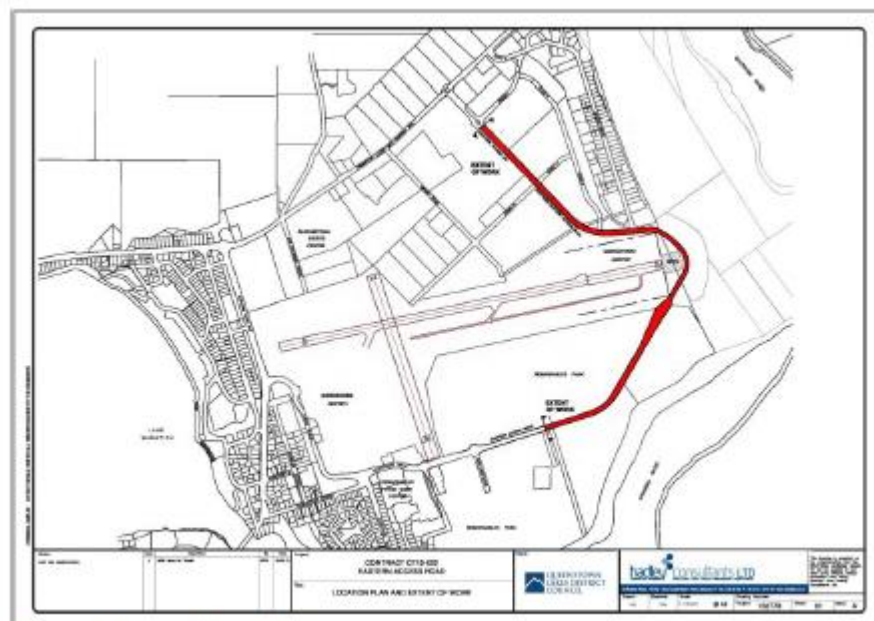


Figure 1: Eastern Access Road Location

Figure copied from Statement of Proposal

At this stage further extension of this road to the south to supplement access to Frankton Flats area has not been considered in the QLDC Long Term Plan.

Physical work on the project has commenced and is proposed to be completed by December 2017.

4 Project Funding

New Zealand Transport Agency has confirmed it will fund 51% of the project. The remaining 49% will be funded in accordance with the principles laid out in the Revenue and Financing Policy (B – Funding Sources – Capital Expenditure). First is recognition that there are three main cost drivers recognised by Council – Growth, Level of Service Shift and Renewal. The growth portion is to be funded entirely by Development or Financial Contributions. The remaining cost drivers are to be funded by grants, financial reserves, borrowing and ultimately by rates.

In a new development area such as the Frankton Flats it would be common to require the developer to provide this road with the Council supporting the developer by providing funding for the components of cost extra to the developer’s requirements. This approach significantly reduces Council expenditure and shifts most of the capital cost to the developer. It is understood that Council has considered this approach, however determined on balance that Council taking responsibility for provision of the asset was the best solution. It overcomes project delivery, timing and coordination issues arising from the road crossing land owned by multiple developers, and opened up the opportunity for funding support by NZTA.

5 Contributing Area

Council has determined that the EAR benefits specifically the developable land in the Franklin Flats area as shown on the following figure copied from the Statement of Proposal.



Transportation - Eastern Access Road Contributing Area.

Figure copied from Statement of Proposal – Appendix B

This area of development lies within the Queenstown contributing area identified in the QLDC Policy on Development Contributions and Financial Contributions – proposed amendments October 2016. The proposed contributing area is shown in Appendix B of the Statement of Proposal.

The principle of assigning the DC charges arising from the implementation of the EAR to the developments directly benefiting complies with the principles set out in Section 197AB of LGA Act 2002.

In reviewing the area benefiting from the EAR we consider that QLDC should give consideration to the existing developed area to the north and east of the EAR Contributing Area. There is little doubt that this area will benefit from the implementation of the EAR. Within this area there is vacant land which can be developed, and there will be extensions to existing business spaces. Under the DC Policy these additional developments will attract a DC Charge, either at land subdivision or at building consent. We recommend that this area should be included in the EAR contributing area.

This area is largely developed, therefore including the area to the north and east of the proposed contributing area may not have a significant effect on the DC Charge as it is only the future growth in Dwelling Equivalents in this area over the analysis period that will impact on the charge.

$$\text{Dwelling Equivalent Contribution} = \frac{\text{Sum of capex for growth consumed in analysis period}}{\text{Sum of new dwelling equivalents in analysis period}}$$

Council has also recognised that the EAR provides options for traffic from the wider Wakatipu Ward and have given consideration to distribution of costs to those wider beneficiaries of the EAR. We note that the wider Wakatipu Ward area is not clearly defined in the Policy. In particular, we are uncertain whether the Ward area includes or excludes the EAR area of benefit.

6 Assessment of the Cost of Growth

6.1 Project Cost Allocation

QLDC has an adopted Policy on Development Contributions and Financial Contributions. This policy is reviewed annually and amended and updated as required. Specifically related to this review of the cost of growth for the EAR, the policy includes the calculation methodology to be used for the allocation of costs to the 3 main cost drivers identified in the Revenue and Financing Policy. The calculation methodology has been adopted by Council along with the Policy and therefore forms the basis of this review.

We are aware that there are a number of cost allocation methodologies used by Councils for the determination of the cost of growth. The analysis is not an exact science and the analyst will be required to exercise some judgement in achieving the final result. The pragmatic result will be the one that recognises the requirements of the three primary stakeholders – the Developer, the Council and the Community and seeks a balanced outcome. Ideally this should be formulaic to eliminate debate. The calculation methodology adopted by QLDC allows some freedom in the analysis with a view to achieving a balanced outcome, however at the risk of encouraging debate. Even with a formulaic approach it is difficult to eliminate debate as the measures used to support the analysis are subject to interpretation and discussion.

Level of service shift is a term not commonly used in DC Policies, though clear in its meaning. Possibly should be more used in this context. In some policies it is called ILoS (improved level of service) and others backlog (existing community is not receiving the desired or planned level of service). Whatever the wording the intention is clear. It is the cost component of the works that relates to providing the desired level of service to the existing community. In a strict sense both the existing community and the future community will be provided with the same level of service. Level of service is a multifaceted state providing standards on style of construction, acceptable congestion, safety requirements, etc. All of which will be delivered equally for the community as a whole (existing and future). Where the level of service is currently not met for the existing community, or the level of service provided by the project is shared by the existing community, the cost allocation will determine the share of costs to the existing community.

6.2 Measures for Determination of Cost Shares

Selection of the appropriate measure for the cost allocation will depend on the project timing and amount of supporting information. The measure selected should be chosen to ensure a balanced outcome for the three primary stakeholders – the Developer, the Council and the Community. Measures are hierarchical with increasing complexity if the analyst seeks more detail. For example, the EAR measures in increasing detail could be:

- Hectares – the land areas within the area of benefit serviced by the road
- GFA – (Gross Floor Area) the anticipated floor areas that could be established in the area of benefit based on District planning rules.
- DE – the anticipated Dwelling Equivalents that could be established in the area of benefit based on equivalent demands of business types and dwellings.
- Traffic Counts – Counts of traffic arising from the anticipated development in the area of benefit. These can be further described as:
 - AADT – Annual Average Daily Traffic
 - Peak Daily Traffic – providing capacity for peak season traffic flows
 - Peak hour Traffic – a traffic congestion measure
 - Travel time delays

The more detailed the measure the greater the complexity in determining the numbers for the calculation. In addition, the more detailed the measure the more likely it is that there will similar, equally valid measures – all giving different outcomes. There is the risk of digging into the options for measures until one is found that suits an individual outcome. In the case of the EAR, AADT, and peak flows will determine valid but different proportions of growth. The EAR has further complexity in the multiple options for locations where the measures are selected. The analyst could choose the SH6/SH6a intersection, or the EAR/Lucas Place intersection, or the SH6/Grant Road intersection, or even combinations of locations. Again the risk is digging until a result is found that suits an individual outcome. In the event of the debate on appropriate measures reaching a hearing there is also a risk that the gravitas of the submitter (Council or developer) will sway the decision.

In coming to a decision on the appropriate measures the test is to ensure the outcome will on balance recognise the requirements of the three primary stakeholders – the Developer, the Council and the Community. For complex projects of this nature we would recommend use of less detailed measures, Dwelling Equivalents, or GFA. They are simpler to apply and in general will meet the test.

The DC Methodology recommends the Dwelling Equivalent as the basis for cost allocation. In general, we agree with that recommendation as it is relatively simple and pragmatic for many projects, particularly projects planned towards the end of the 10-year plan where design sophistication is low.

The analysis for the EAR uses both AADT and DE for the assessment of the cost shares to growth. We agree that these are appropriate measures to use. They are well understood, pragmatic and achieve a balanced outcome for the three primary stakeholders.

6.3 Design Horizon for Measures

The measures adopted for the cost allocation have been based on development potential and the traffic demands in 2045 – thirty years from its first introduction in the DC Process – 2015. The choice of the design horizon is not arbitrary. As required by section 197AB(b) of the LGA 2002 it relates to the 'capacity life' of the project. The time when it is anticipated the capacity provided by the project is planned to be consumed – and when additional investment will be required to provide additional capacity. We consider that the capacity life of the project has a further restraint, the time when the project reaches the end of its physical life and new investment is required to renew the asset. In the case of the EAR the capacity life will be driven by renewal. For a road of this nature 25 to 40 years would be a typical range for the economic life. The specific choice of 30 years is reasonable.

7 QLDC Methodology

7.1 Analysis

Preliminary Considerations

- The EAR project has one cost driver – capacity. It is being constructed to enable the business growth area in the Frankton Flats to proceed.
- There is significant supporting information.
- Project cost \$14.95M
- Third party funding, NZTA 51%
- Net project cost to be allocated to Growth, LOS Shift and Renewal = \$7.325M

Further Considerations

- The EAR supports 2 areas of benefit. The local ERA contributing area and the Wakatipu Ward

Project Cost Split Between Areas of Benefit

- See Section 7.2
- Ward share of project cost = $8.2\% * \$7.325M = \$0.600M$
- EAR Contributing area share of project cost = $91.8\% * 7.325M = \$6.725M$

Growth Strand

- Project provides capacity for future community
- Project is needed to enable growth
- Project has a growth component
- Growth is the main driver.

Level of Service Shift Strand

- A portion of the area serviced by the EAR includes existing businesses.
- The Project has a Level of Service Shift component.
- Level of Service Shift is not the main driver.
- $LOS\ shift\% = DE_{con} / DE_{cap}$ (see Section 7.3)
 - Ward area of benefit $LOS\ shift\% = 20\%$
 - EAR area of benefit $LOS\ shift\% = 0\%$

Renewal Strand

- New road, no renewal = 0%

Methodology Outcome

- Ward area of benefit
 - Growth % = 100% - 20% - 0% = 80%
 - LOS shift % = 20%
 - Renewal = 0%
 - **Project cost share to growth = 80% * \$0.600M = \$0.480M**
 - Project cost share to LOS shift = 20% * \$0.600M = \$0.120M
- EAR area of benefit
 - Growth % = 100% - 0% - 0% = 100%
 - LOS shift % = 0%
 - Renewal = 0%
 - **Project cost share to growth = 100% * \$6.725M = \$6.725M**
 - Project cost share to LOS shift = 0% * \$6.725M = \$0M

7.2 Project Cost Split Between Areas of Benefit

Table 2 of the Statement of Proposal summarises the AADT measures that have been used to determine the project cost split between the areas of benefit. We note that these measures have been determined by an appropriately skilled professional. The measures adopted are those at the end of the capacity life of the project. We consider these measures are appropriate.

Table 2: Trip Classification into Through Trips and To/From Trips

Through Trips on EAR				To/From Trips on EAR			
Origin	Destination	Trips		Origin	Destination	Trips	
6	24	99		All	7a	3,520	
24	6	76		7a	All	3,487	
7	24	219		All	20	908	
24	7	214		20	All	1,137	
3	7	402		All	21	2,693	
7	3	0		21	All	2,509	
2	24	136					
24	2	133					
Total		1,279	8.2%			14,254	91.8%
					Grand Total	15,533	

Table copied from Statement of Proposal

- Ward area of benefit% = $AADT_{through} / AADT_{total}$
- EAR area of benefit% = $AADT_{to/from} / AADT_{total}$
- $AADT_{through}$ = 1,279
- $AADT_{to/from}$ = 14,254
- $AADT_{total}$ = 15,533
- Ward area of benefit % = $1,279 / 15,533 = 8.2\%$
- EAR area of benefit % = $14,254 / 15,533 = 91.8\%$

7.3 Consideration of Level of Service Split

Ward Area of Benefit

- An 80% growth / 20% LOSS share of project costs was agreed by an expert panel at the first adoption of a DC Policy in 2006.

EAR Area of Benefit

- The assessment of the LOSS share in this area has been based on the DE's. As the area defined in the Policy totally comprises undeveloped land the LOSS share is 0%

We note our comment in Section 5 that consideration should be given to the adjacent areas also serviced by the EAR.

Determining project costs shares for Transport projects is challenging. Some Councils have adopted this approach of determining a generalised cost share based on analysis of a range of projects or a global analysis of traffic on the network as a whole. This approach has its merits. Once adopted it ensures consistency of approach, is reasonable for the bulk of projects and should reduce debate. There will be larger projects where the purposes and measures are clear. We would recommend that these larger projects should be treated on their merit. In this example the EAR is a larger project primarily implemented to enable the EAR area of benefit to be developed.

- Existing DE's that would share in the project = 0
- LOSS share = 0%

If some of the area of benefit is considered to be existing at the commencement, then there would be some existing DE's that would contribute to an LOSS share.

8 Further Considerations

Assessment of Transitional Benefits to the Existing Community

There is an argument put forward in Tony Penny's submission (Section 4) suggesting that in the short term the existing community will be the primary beneficiaries of the new road, as on completion they will be the only users of the road. And therefore the cost allocation share to the existing community should include consideration of these benefits.

The adopted cost allocation methodology referenced in the DC Policy does not require analysis to this level of sophistication. However, we recommend that these transitional benefits to the existing community should be considered. This should include:

- What consideration has been given to these benefits in the assessment of the funding confirmed by NZTA?
- Will the existing community genuinely enjoy the benefits?
- Will the traffic environment in the early years after construction be significantly improved over the current environment?
- How quickly will the growth in the development area come on stream? Growth will erode the benefits to the existing users.

9 Review Outcomes

We consider the cost allocation proposed for the assessment of the cost of growth for the EAR is appropriate and complies with the methodology adopted in QLDC's Policy on Development Contributions and Financial Contributions. We recommend that the contributing area is extended to include existing developed areas that benefit from the implementation of the EAR. We recommend that the Policy clearly defines the Ward Area of Benefit. We recommend that consideration be given to transitional benefits that may be enjoyed by the existing community in the early years after implementation of the EAR.

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