

Ken Ng

From: Craig Nicholson
Sent: Friday, 14 June 2019 4:52 pm
To: Greg Lee
Subject: RE: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Ok. I've left ^{section 9(2)} a message and I will try to make Tue or Wed work. If not, we 'll be into the following week, as I'm fully occupied on Thu and Fri next week.

Have a good weekend.

Craig

From: Greg Lee
Sent: Friday, 14 June 2019 4:40 PM
To: Craig Nicholson <Craig.Nicholson@nzta.govt.nz>
Subject: RE: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

In Palmy.

Are Tuesday or Wednesday options?

Greg Lee/ Principal Planner
System Design and Delivery
^{section 9(2)(a)}

From: Craig Nicholson
Sent: Friday, 14 June 2019 4:36 PM
To: Greg Lee <Greg.Lee2@nzta.govt.nz>
Subject: RE: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Yep, how are you placed on Monday afternoon?
CN

From: Greg Lee
Sent: Friday, 14 June 2019 4:35 PM
To: Craig Nicholson <Craig.Nicholson@nzta.govt.nz>
Subject: RE: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Cool – can I come to the meeting please.

Greg Lee/ Principal Planner
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^{section 9(2)(a)}

From: Craig Nicholson
Sent: Friday, 14 June 2019 4:25 PM
To: Greg Lee <Greg.Lee2@nzta.govt.nz>
Subject: RE: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Thanks Greg – I'll give ^{section 9(2)} a call to discuss his comments.

I agree with his suggestion to refer to the MOT Household Travel Survey data and his comments around heavy vehicle forecasts and willingness to pay values, but my understanding is there is a lack of data other than what has already been used. If there is a need to obtain more data, then it probably requires a larger consultancy company than me!

I'll let you know how I get on.

Craig

From: Greg Lee

Sent: Friday, 14 June 2019 2:35 PM

To: Craig Nicholson <Craig.Nicholson@nzta.govt.nz>

Subject: FW: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Hi Craig,

See below.

Stuff to think about.

Greg Lee/ Principal Planner

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section 9(2)(a)

From: section 9(2)(a)

Sent: Friday, 14 June 2019 2:17 PM

To: Greg Lee <Greg.Lee2@nzta.govt.nz>

Subject: RE: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Hi Greg

That's great that Craig can assist, and yes the approach you've outlined will work.

There will be a few details to confirm in the methodology around forecasts for heavy vehicles and willingness to pay values but it is generally sound.

In terms of outputs will require a report that shows a toll rate v traffic volume chart and includes for assumptions made and model version. In reviewing the modelling reports in the Business Case there were a few questions the peer reviewer had that appeared to be important – hence need to note model version and inclusions. Also will need comments around suitability of using the model for this analysis (as it doesn't have route choice). My initial thoughts are that its appropriate for the level of analysis required, but would like Craig to comment on that.

As part of other such assessments, NZTA secured access to the latest Household Travel Survey data from MoT which I'd like to be considered (depending on the sample relevant to the Manawatu-Tararua region), which may help confirm the O-D pairs in the spreadsheet model.

I agree completing a redo of the economic analysis for tolling can be done at a later stage, if required.

Thanks

section 9(2)

From: Greg Lee

Sent: Friday, 14 June 2019 9:39 AM

To: [section 9\(2\)\(a\)](#) [@nzta.govt.nz](mailto:section 9(2)(a)@nzta.govt.nz)>

Subject: FW: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Hi [section 9\(2\)\(a\)](#)

Please see the proposed methodology and approach from Craig re tolling.

This fits with a staged approach to tolling, which is to undertake a preliminary feasibility assessment first using tools available and then make a decision as to whether this should be advanced or not. This is good practice and in this instance responds to the fact that we don't have a sophisticated transport model that is likely needed to be developed in order to undertake a detailed and robust assessment of a tolling proposition, where I would estimate that such a model would take some 6-9 months to develop and potentially cost up to \$0.5 - 1M (which is typical to build a model from scratch).

So Craig is proposing to undertake an assessment in collaboration with you and the investment team as necessary to discuss and agree variables. Based on this output we should get a feel as to whether a tolling proposition could be viable or not. If it is viable then we can think about a social impact assessment and economics (BCR) assessment to further sense check the proposition. Then if that all lands ok, then we move to the next phase of detailed investigation which would be a much more significant investment.

Can you come back to me and advise if that all makes sense and if you are happy to proceed on this basis.

Kind regards,

Greg Lee/ Principal Planner

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[section 9\(2\)\(a\)](#)

From: Craig Nicholson

Sent: Thursday, 13 June 2019 11:44 PM

To: Greg Lee <Greg.Lee2@nzta.govt.nz>; Lonnie Dalzell <Lonnie.Dalzell@nzta.govt.nz>

Subject: RE: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Hi Lonnie and Greg,

Following up the emails between Greg and I yesterday and our conversation this afternoon, I'd be happy to undertake an initial toll viability assessment for Te Ahu a Turanga if you want me to.

As I discussed with Greg, I think the best (and probably the only) approach will be to:

1. interrogate the WSP-Opus spreadsheet traffic model (which I have) to list the proportions of trips that would use the new route, Saddle Road and the Pahiatua Track for each of the assumed origin/destination pairs, for trips that cross the ranges between Manawatu and Taranaki.
2. Use the two existing modelled scenarios (i.e. with and without the new route) as the "outer limits" of the tolling scenarios (since they also represent the toll scenarios with either a zero toll, or a very high toll (i.e. so high that nobody uses the new route, so the traffic pattern is as if the new route doesn't exist).)
3. Work with [section 9\(2\)\(a\)](#) to undertake an "expert assessment" of how the proportions of traffic (for each O/D pair) using each of the three routes will change as the toll rate increases (between the defined outer limits of the two existing scenarios)
4. Identify the optimum/maximum toll revenue.

I estimate this will take approximately 20 to 30 hours, including meetings with [section 9\(2\)\(a\)](#). However, as I discussed with Greg, that time estimate excludes any assessment of the change in economic benefits as a result of tolling

(which may or may not be required) which would be very time consuming, because the existing WSP-Opus spreadsheet model does not include any assessment of the economic benefits of the new route, so any new assessment of the affect of tolling would need to calculate the economic benefits from scratch.

The maximum budget of my existing/previous contract was almost full expected (to within \$2,000), so the budget will need to be extended if you want me to undertake this work.

Please let me know if/when you want me to proceed. I should be able to complete the work within two or three weeks of getting the go ahead.

Kind regards,

Craig

From: Greg Lee

Sent: Wednesday, 12 June 2019 12:50 PM

To: Craig Nicholson <Craig.Nicholson@nzta.govt.nz>

Subject: RE: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Yip, but section 9(2)(a) and Opus are conflicted for time being at least.

Greg Lee/ Principal Planner

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section 9(2)(a)

From: Craig Nicholson

Sent: Wednesday, 12 June 2019 12:49 PM

To: Greg Lee <Greg.Lee2@nzta.govt.nz>

Subject: RE: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Hi Greg,

That will be more than a bit tricky...

You may recall that the "traffic model" is just a spreadsheet with some assumptions section 9(2)(g)(i) section 9(2)(a) (and/or his team) at Opus and then "sense checked" by me about what proportion of traffic would divert to the new route / stay on Saddle Road / stay on the Pahaitua Track for each different O/D pair (with approx. start/end points to the west of the Gorge, and three to the east).

Any "toll model" will essentially just alter the assumed proportions to use the different routes.

I think section 9(2)(a) team would be best placed to do this, perhaps with section 9(2)(a) input. I suggest they should consider the proportions using each route for each O/D pair for different incremental toll costs.

The existing "modelled" route proportions obviously corresponds to no toll. Assess changing proportions on each route for toll of say \$1.00, \$1.50, \$2.00, \$2.50 and \$3.00. With each increment, the proportions would presumably move further away from the current "with the new route" scenario, and closer to the current "do minimum" scenario.

I'm happy ot get involved if you want me to, but I think the two section 9(2)(a)s are probably the best placed to look at it.

Cheers,

Craig

From: Greg Lee
Sent: Wednesday, 12 June 2019 12:12 PM
To: Craig Nicholson <Craig.Nicholson@nzta.govt.nz>
Subject: RE: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Need someone to undertake first cut assessment as to whether tolling is viable or not. First step is to re-run the traffic model with some tolling assumptions, working with [section 9\(2\)\(a\)](#) and investment colleagues to establish assumptions and agree outputs.

Greg Lee/ Principal Planner
System Design and Delivery
[section 9\(2\)\(a\)](#)

From: Craig Nicholson
Sent: Wednesday, 12 June 2019 12:09 PM
To: Greg Lee <Greg.Lee2@nzta.govt.nz>
Subject: RE: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Of course... what's up?

From: Greg Lee
Sent: Wednesday, 12 June 2019 10:27 AM
To: Craig Nicholson <Craig.Nicholson@nzta.govt.nz>
Subject: Te Ahu a Turanga - have you got time to assist with a transport modelling question?

Greg Lee/ Principal Planner
System Design and Delivery
[section 9\(2\)\(a\)](#)