Tauranga City Council
Response to Proposal to Proceed with Te Tumu at 2011
Peer Review

The Answer Company

10th September 2007

1.0 Introduction

Tauranga City Council, (TCC) engaged Richard Maher, (brief CV attached) from *The Answer Company,* in March 2007, to peer review TCC's "Response to Proposal to Proceed with TeTumu at 2011" (the Paper). The proposal referred to is that by the Te Tumu Land Owners Group to bring forward the development of the Te Tumu growth area to 2011, 10 years earlier than planned in the Draft SmartGrowth Strategy 2003 or provided for in the Council's Ten Year Plan (TYP) for 2006 – 2016.

In response an initial Peer Review report dated 18th April 2007 was submitted and briefly presented to the SmartGrowth Committee. TCC subsequently requested that the Peer Review report be extended to:

1. Provide further comment on the Paper with regard to TCC's obligations under the Local Government Act 2002 (LGA); and
2. Discuss the implications of converting the projected costs, identified within the Paper and supported by a spreadsheet titled "Capex with Te Tumu 2050" (the Original Model), to present value terms.

This Peer Review builds on the initial report of 18th April, extends the analysis to include these two points and takes into account the comments received on 30th July in relation to an earlier draft.

In undertaking this Peer Review we have considered:

- The SmartGrowth Strategy 2004;
- The relevant sections in the Environment Bay of Plenty Regional Policy Statement Change No. 2 which was notified in September 2005;
- The relevant sections of the Resource Management Act 1991 (RMA);
- The relevant sections of the Local Government Act, 2002 (LGA);
- The Paper and the presentation made to the SmartGrowth Committee by Christine Jones on 18th April; and
- The spreadsheets underpinning the financial analysis in the Paper.

We have not been provided with a copy of the actual proposal made by the Te Tumu Landowners, and have assumed that the summary in the Paper is fair and accurate.

2.0 Local Government and Resource Management Acts

2.1 General Approach

Our overall approach in preparing this section of the review has been to:

- Identify and summarise the relevant rules governing any proposal to change the regional policy statement through which any recommendations made by SmartGrowth are likely to be implemented;
- Identify and summarise the relevant rules governing TCC's obligations when formulating its own plans; and
- Provide general comments on the approach taken in the Paper when analysing the Te Tumu Landowners Proposal.

We have not attempted a detailed analysis of the factual basis for the arguments against the Te Tumu Landowners Proposal set out in the Paper.

2.2 Resource Management Act 1991

The rules in the RMA relating to regional plans are summarised below:

1. Section 59 provides that:
   *"The **purpose** of a regional policy statement **is to achieve the purpose of the Act by providing** an overview of the resource management issues of the region and **policies and methods** to achieve integrated management of the natural and physical resources of the whole region."*

2. Section 5(1) provides that
   *"The **purpose of this Act** is to promote the **sustainable management** of natural and physical reso*urces"

3. Section 5(2) defines "*sustainable management"* to mean
   *"managing the use, development, and protection of natural and physical resources in a way, **or at a rate**, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while*
   (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
   (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
   (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment"

So, in our view the RMA clearly contemplates an RPS containing "*policies and methods"* regulating both:

- The way; and
- The **rate** at which

the use and development of natural and physical resources takes place in order to achieve integrated management of the natural and physical resources of the whole region.

In addition section 32 requires a regional council promoting a plan change to evaluate:

- The extent to which each **objective** in the plan is the most appropriate way to achieve the purpose of the Act (s32(3)(a)); and

- "*whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods* [in the proposed plan] *are the most appropriate for achieving the objectives*" (s32(3)(b))

The evaluation must take into account (s32(4)):

(a) " the benefits and costs of policies, rules, or other methods; and
(b) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods."

In our view, since the objectives of the plan must be to promote sustainable management so as to "*enable people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety"* that evaluation of benefits and costs must relate to how the policies, rules etc will affect the health and safety, social, economic, and cultural wellbeing of the people and communities affected.

In other words, in addition to the financial effects of a rule or policy on a territorial authority and its community the social, economic, cultural, health and safety effects of the rule or policy must also be considered.

2.3 Local Government Act 2002

The LGA complements the RMA in many respects. In particular it provides that the purpose of local government is;[1]

"(a) to enable democratic local decision-making and action by, and on behalf of, communities; and
(b) to promote the social, economic, environmental, and cultural well-being of communities, in the present and for the future."

The requirement to consider the social, economic, environmental and cultural wellbeing of the community paragraph (b) is similar to that in section 5(2) of the RMA, and both paragraphs affirm the need for local politicians to interpret the needs and give effect to the values of their communities.

The LGA requires councils to lay out what they plan to do and spend on behalf of their communities in reasonable detail[2], and to consult their communities[3] before adopting and acting on those plans.

The long term council community plan (TYP) is the most important plan required under the LGA. Every council is required to adopt a TYP every three years, using the special consultative procedure.[4] The TYP must be supplemented by an Annual Plan providing more detailed information about actions planned for the coming year. For the purposes of this review, it is enough to note the following significant features of TYPs:

[1] Section 10 LGA
[2] Local Authorities' obligations regarding planning and decision making are set out in Part 6 Subpart 1 of the LGA, with specific rules about the content of plans in Schedule 10. This paper summarises only the most important provisions relevant to this discussion.
[3] The consultation requirements are set out in sections 82-89 of the LGA, but will not be discussed further.
[4] Section 93 LGA(2).

- They must describe the community outcomes of the city.[5] These are the outcomes identified as priorities for the area, and usually reflect the values of the community. The outcomes can be likened to the "objectives" in a regional policy statement.

- They cover a ten-year period.[6]

- They must describe the activities of the council planned for that period, including the rationale for those activities.[7]

- They must identify the assets required to deliver the activities, the costs of maintaining or adding to them, and how they will be managed.[8]

- They must identify the levels of service the council intends to provide, the costs of providing that level of service, and how those costs will be met.[9]

In summary a city council's TYP should provide a 10 year picture of what the community wants to achieve, the actions the council proposes to take to contribute to those outcomes and why, together with details of what those actions will cost, including the cost of any assets necessary to support the activities.

The LGA also contains rules regulating how councils make decisions. In particular, section 77 requires a local authority, in the course of the decision-making, to:

"(a) Seek to identify all reasonably practicable options for the achievement of the objective of a decision; and
(b) Assess those options by considering -
(i) The benefits and costs of each option in terms of the present and future social, economic, environmental, and cultural well-being of the district or region; and
(ii) The extent to which community outcomes would be promoted or achieved in an integrated and efficient manner by each option; and
(iii) The impact of each option on the local authority's capacity to meet present and future needs in relation to any statutory responsibility of the local authority; and
(iv) Any other matters that, in the opinion of the local authority, are relevant."

In addition, the council must consider (among other things) "*the views and preferences of persons likely to be affected by, or to have an interest in, the matter",* [10]

However, councils have discretion as to:
- The range of options to be assessed;
- The extent to which benefits and costs are quantified; and
- The amount of information gathered and considered in the decision-making process.[11]

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[5] Section 93(6) LGA.
[6] Section 93(7) LGA. Compare the requirement in the RMA for regional policy statements and other plans under that Act to be reviewed not later than 10 years after the plan became operative – section 79 RMA.
[7] Section 93(6) and Schedule 10, clause 2(1)(b) LGA.
[8] Schedule 10, clause 2(1)(d) LGA.
[9] Schedule 10, clause 2(2) LGA.
[10] Section 78 LGA

There is clearly a broad similarity between the process stipulated in the LGA for making decisions regarding the content of TYPs and other plans and the requirements of the RMA in relation to the preparation and content of regional policy statements, and other plans required under the RMA. The key differences in the approach of the two statutes can be summarised as follows:

- Section 5 of the RMA (the purpose of the Act) must clearly be reflected in regional policy statements. There is no explicit requirement for the purpose of local government to be reflected in a TYP: rather communities are given wide latitude in determining "*outcomes*".[12]
- The list of factors that regional policy statements, and other RMA plans, must "*recognise and provide for*", "*have particular regard for*" or "*take into account"* under the RMA is far longer and more specific than any of the requirements in the LGA for TYPs or other plans under the LGA. Conversely the LGA is far more specific about the range and amount of information that must be in any TYP; and
- The LGA gives local authorities an explicit discretion as to how they gather and weigh information necessary to make the decisions reflected in the TYP. Under the RMA, any discretion can only be implied from what one judge has termed the "open language[13]" used in the relevant provisions.
- The contents of a regional policy statement can be reviewed and changed by the Environment Court through the objection procedures provided in the RMA. A council's decsions on the form and content of its TYP are generally not subject to judicial oversight.

2.4 Review

The key issue addressed in the Paper is whether it is appropriate to develop the Te Tumu land in 2011 – 2016 (as proposed by the Te Tumu landowners and adopted in the SmartGrowth Strategy 2004) or after 2021 (as initially proposed by the SmartGrowth Committee in 2003, and now affirmed following the 2006 review).

Using the language of the RMA, this is a question regarding the appropriate way to manage the use or development of greenfield land within the City at a rate which enables people and communities to provide for their social, economic, and cultural wellbeing.

In forming a judgement on this question, the Council must follow the process described in section 2.3, and endeavour to promote the present and future social, economic, environmental, and cultural well-being of the Tauranga communities.

2.4.1 Financial and Economic Considerations

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[11] Section 79 LGA.
[12] See the definition of "community outcomes" in section 5 of the LGA.
[13] Justice Greig in *New Zealand Rail Limited v Marlborough District Council* [1994] NZRMA 70 at 86.

The focus of the Paper is on the financial consequences for TCC of developing the Te Tumu land from 2011, rather than 2021. We have previously noted that the Paper contains a robust financial argument, which makes it clear that, without mitigation, there would be substantial additional costs to the community over and above those provided for in TCC's TYP from proceeding with the development earlier than 2021. In addition section 3 of this Peer Review discusses appropriate ways to quantify those additional costs.

The Paper notes[14] that the option of proceeding with the earlier development was considered when the TCC TYP was being developed, but was rejected upon the basis that it would (among other things) "*not be financially sustainable"*."

TCC has an obligation to manage its financial affairs *"prudently and in a manner that promotes the current and future interests of the community*"[15]. The Council itself is the only body that can make the judgement about whether or not it should incur additional debt, or find some other way to finance, the additional capital required to begin the development of Te Tumu in 2011, and still satisfy the requirement to manage its affiars prudently in the current and future interests of the community. However, we are satisfied that the facts, analysis and arguments in the Paper would:

- Satisfy the process requirements of section 77 of the LGA; and
- Justify the Council reaching the conclusion summarised in the last paragraph of the Executive Summary.[16]

2.4.2 Social, Environmental and Cultural Considerations

The Paper also discusses various social, environmental and cultural consequences of proceeding with the development of the Te Tumu land in 2011 rather than 2021.

Generally the Paper focuses this part of the discussion on the impact on the rest of the SmartGrowth management area of transferring a large portion of future growth to Te Tumu[17]. Among other things, the Paper notes that allowing Te Tumu to develop from 2011 is likely to:[18]

- Displace growth planned to go to other areas;
- Encourage development along the coastal strip;
- Discourage intensification of existing nodes;
- Reduce the range of accommodation available to the community;
- Create potential traffic problems; and
- Be contrary to a number of policies and strategies adopted by the Council, after consultation with the community.

It is helpful to refer back to the SmartGrowth Strategy to obtain a full analysis of the reasons why these consequences may not promote the long term well being of the community in the City.

[14] Paragraph 1.3 on page 4.
[15] Section 101(1) of the LGA.
[16] Page 2 of the Paper.
[17] See page 8 paragraph 3.1 of the Paper.
[18] See pages 9, 10, 20-25 of the Paper

However, we are satisfied that the facts and analysis in the Paper would:

- Satisfy the process requirements of section 77 of the LGA; and
- Justify the Council reaching the conclusion that the present and future social, environmental and cultural well being of the community is likely to be promoted by delaying the development of Te Tumu until after 2021.

3.0 Economic Analysis Issues

We reviewed two earlier drafts of the Paper in addition to the final version. The Paper presents the outputs from the financial model within the Microsoft Excel Spreadsheets titled “Capex with TeTumu 2050”, (the Original Model).

3.1 Original Model

3.1.1 Assumptions

The key assumptions underpinning the Original Model calculations are summarised as follows:

- The Original Model shows ‘Planned’ growth related capital expenditure - being the capital expenditure provided in the Ten Year Plan (TYP) plus the capital expenditure in the subsequent years through to 2050 based on the assumptions developed with regard to the prioritisation of development within the TYP.

- Applying the TYP plan interest rates and 7.5% for the subsequent years through to 2050, the interest costs of the ‘Planned’ development have been calculated on the basis that all growth related costs are borrowed.

- Projects have been reviewed and the timing of capital expenditure relating to those projects adjusted where possible to reflect the timing suggested in the Te Tumu Landowners submission. The overall effect is to accelerate $285 million of capital expenditure as shown in Figure 3 of the Paper to dates earlier than ‘Planned’. However total capital expenditure remained the same over the 43 year period to 2050.

- Reprioritising of areas for development is not expected to alter the level of population growth and consequent demand for housing within the city as discussed in section 4.2.1 of the Paper. The assumption is that overall, the ‘Planned’ development contributions will thereby not be affected by any reprioritisation. This is on the basis that the pattern of development will not materially alter the annual quantum of development contribution revenue.

This change to the rate of capital expenditure without any compensating adjustment to revenue would add to Council borrowings as shown in Figure 4 of the Paper and this would significantly increase interest costs.

3.1.2 Outputs

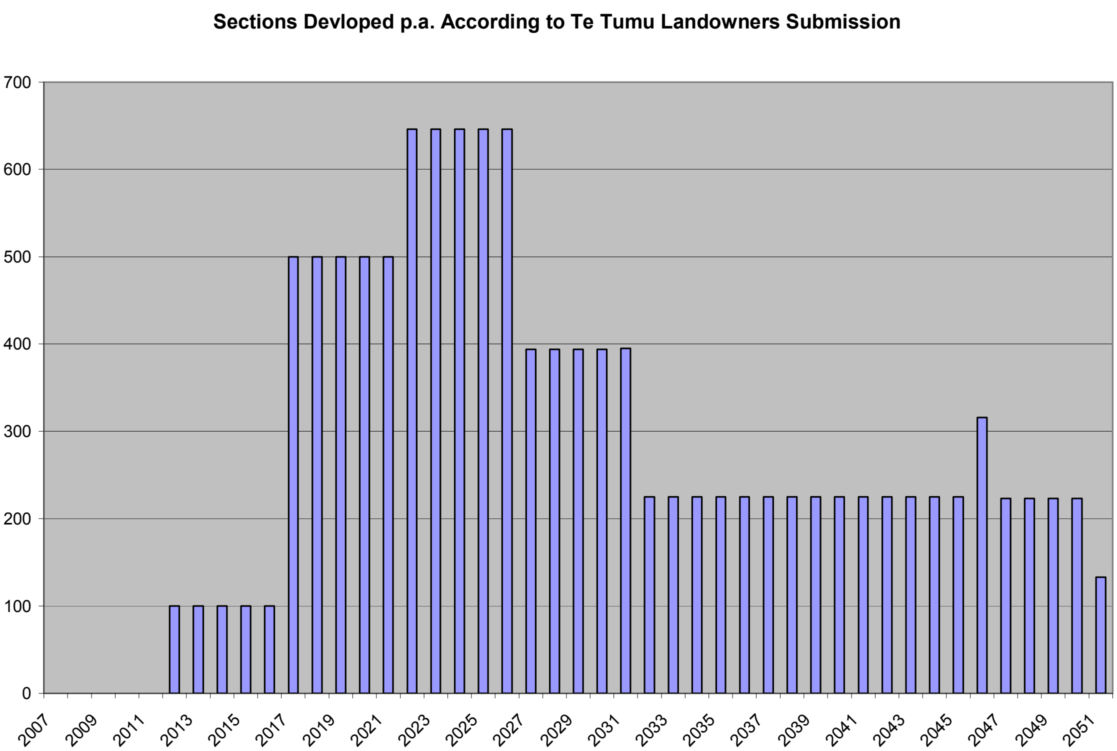
The key outputs from the Original Model are summarised below:

- The report recommends that an 'exacerbator pays' principle be adopted as the "only viable mitigation option which does not transfer a significant debt burden to TCC…."

- The Original Model:

1. Identifies the development of the 12,692 sections by year through to 2050 in accordance with the Te Tumu Landowners Group submission as shown in Figure 1 below;

Figure 1:



2. Assesses the effect of bringing together:
    - The bringing forward the $285 million of development, which increases capital expenditure up until 2022 and reduces capital expenditure from 2023 to 2050; which
    - Results in costs from the need to borrow additional funds earlier than would otherwise have been necessary. This is compounded and shown as cumulative borrowings.

    The Model then calculates which, if applied at the time of development of the sections (which is in some cases several years later than the expenditure of the additional capital costs), would.

3. Calculates (using presumably a goal seek function) a cost per section to the landowners of an additional $31,200 per section developed, received by TCC in accordance with the Te Tumu Landowners Group timing (depicted in

Figure 1 above). These amounts paid by the land owner to TCC would return the TCC cumulative borrowings to zero. This based upon:

a. The changes to Capital Expenditure by year as depicted in Figure 3 of the Report being funded at the TYP plan interest rates and 7.5% for the subsequent years through to 2050; less
b. The revenue generated from payments by the landowner at the time of development at the rate of $31,200 per section developed.

3.2 Issues

Implementing an Exacerbator pays principle has practical issues in both:

- The assessment of the level of payment; and
- A Cost recovery approach should this be necessary.

3.2.1 Assessment

The Paper acknowledges that:

> *"The impact on Council's total level of debt is due to the change in timing of the capital expenditure programme. This increase of debt can be prevented by Council receiving contributions that directly offset the additional capital expenditure. This would mean that Council's total debt would be unchanged to that outlined in the originally modelled position. This would require payments to be received into / (paid by) Council on the same basis as set out in Figure 3."*

Mitigation payments, assumed in the Original Model to be collected upon the development of the sections compensate for the mismatch in the timing of the receipts and reprioritised capital costs. The quantification of the mitigation payments is based on the application of the principle of the 'time value of money'.

a) Method

Two methodologies can be applied to the assessment of :

1. The Paper based on the Original Model converts the changes to Capital Expenditure by year as depicted in Figure 3 to future values (FVs) through applying a compounding cost of capital. These expenditure and revenue flows have been forecast by year over the 43 year term of the project. The reason that we have referred to these costs as future values is that they are estimates based on the timing of cash flows into the future albeit in $2007; and

2. The stream of changes to Capital Expenditure by year be converted to a net present value, (NPV) which would be an equivalent of the value of this stream of payments and receipts as a lump sum transacted today (i.e. 2007).

The assumptions required to calculate a NPV are the same as those applying to the calculation within the Original Model to calculate FVs and comprise:

1. Timing of projects, which is the essence of the cost increases:

The timing of both the capital works depicted in Figure 3 of the Paper and the development of sections as shown in Figure 1 requires assumptions of changes to the timing of $285 million of projects. This is understood to be based on opinions by the appropriately qualified TCC staff. It is also understood that this timing may alter when more knowledge of particular circumstances is acquired, however it is the best available information for undertaking the assessment;

2. Projected rate of inflation:

   The assumption built into the original model is that that all costs are expressed in constant $2007, (i.e. real dollars excluding any effect of inflation). Whilst to accurately assess costs with regard to any potential settlement these projected cash flows would ideally be stated in nominal dollars, (i.e. inclusive of inflation), however the assumption applied is considered sufficient for comparative purposes at this stage;

3. Cost of capital:

   The assumption that the TCC borrowing rate equates the real cost of capital for the purposes of this calculation is sufficient. There is an inter-relationship between the interest rate and the inflation rate. Using the TCC borrowing rate as a proxy for the real cost of capital is sufficient to provide the indications within the Paper and for comparison purposes. However as with the assumption in regard to inflation, a full cost of capital calculation would be recommended to evaluate any potential settlement;

4. Project costs, (i.e. Actual Costs versus projected costs):

   The assumptions underpinning the project costings are:
   - The costing methodology applied is consistent for the whole $1.3 billion programme of forecast projects. It is assumed that this costing methodology has built in contingency provisions that have been assessed from previous TCC experience and that these costs are likely to be accurate to a level approximating plus or minus 30%;
   - The $285 million of reprioritised projects (or 22% of the programme) doesn't materially change the scope or specification of the work, only the sequence of the work undertaken;

b) Outputs

1. Future Values

The Paper records that an average payment of $31,200 per individual section over the 43 year term of the project would equate to the cost of the additional debt servicing. This is an average of the FVs paid in accordance with the section development pattern shown in Figure 1 above, based on the 4 key assumptions recorded in section 3.2.1 a).

2. Net present Value

The Answer Company considers that these costs should be brought to an NPV in today's terms on the grounds that:

- Economic effects can be addressed prior to decisions being finalised, (i.e. all costs can be assessed in advance in the same context to determine the economics of the development for all stakeholders); and
- All costs and expenditures are expressed in the same context i.e. today's dollars.

Applying the assumptions recorded to the stream of changes to Capital Expenditure by year, results in an NPV of $100 million, (or $7,879 per individual section). This means that a payment of $100 million in 2007 would return TCC's total debt to the position prior to the reprioritisation requested by the Te Tumu Landowners Group.

Each of the calculations (i.e. the FVs and the NPV) serve as indications only and in addressing the comprehensive economic effects, especially if applied in negotiating a settlement, it is recommended that further analysis be undertaken to ensure inclusion of all costs and timing effects prior to final determination.

3.2.2 Cost Recovery Approach

The above assumptions are valid for assessing values for the costs to TCC, however there are a number of risks associated with the practical application of either of these approaches to the actual recovery of the costs. The following table identifies the risks and where practical, suggests compensatory mitigation approaches.

The table is structured into three columns:

1. Column 1: Identifies the issue to be addressed;

2. Column 2: Addresses the practical issues of using the basis of the Original Model (i.e. FVs) for actual recovery on a year by year basis. For the purposes of this discussion it is assumed that the average cost across the 12,692 sections would be applied to all sections regardless of the individual section's time of development; and

3. Column 3: Addresses the practical issues of using a NPV basis for actual recovery by way of an agreed settlement of the receipt in 2007 of the NPV equivalent of the stream of net capital expenditure up front.

Issue	Original Model (FVs)	NPV Basis
1. Projected timing of projects within the growth programme	Progressive recovery on a year by year basis enables adjustments to the costs in accordance with changes to the timing.	A settlement from the landowners in 2007 which mirrors the changes to the capital expenditure in NPV terms would be based on a fixed forecast of project timing.

	However the full project would require costing under any change to project timing either actual or forecast. Individual sections already developed and paid for would either be due a refund or a cost extra. It is unlikely that any cost extras would be recoverable and therefore these un-recovered costs would then need to be apportioned over the remaining un-developed sections. This may be open to challenge from the remaining landowners and also be unrecoverable. Similarly any cost reductions may be claimable by both the remaining landowners and those previously 'overcharged'.	TCC would carry the risk of any detrimental cost effects of subsequent alterations to project timing. Therefore TCC would need to carefully review the assumptions of changes to project timing and ensure that these risks were covered. Any favourable cost variances resulting from unforeseen timing alterations would of course accrue to TCC.
2. Projected Inflation Rate	The forecast costs would need to be converted from $2007 to nominal amounts through applying a forecast inflation rate. Progressive recovery on a year by year basis enables changes to inflation to be applied to the amount costed which could then be recovered in an adjusted charge. This would reduce the risk of under recovery to the forecast inflation rate for one year, (i.e. the term of the Annual Plan). However as with issue number 1 above, the full project would require costing under any change to inflation rates either actual or forecast. Individual sections already developed and paid for would either be due a refund or a cost extra. Recovery of costs on remaining sections and or refunds on previous charges could be problematic.	The forecast costs would similarly need to be converted from $2007 to nominal amounts through applying a forecast inflation rate. To counter a potential under recovery, in the calculation from changes to inflation the compensation would need to be inflation proof over a long period of time. This could be achieved by a settlement of land, which could be held in perpetuity by TCC or released progressively to coincide with the cost imposition.
3. Cost of	Progressive recovery on a year	A funding facility purchased with

Capital	by year basis enables adjustments to the costs in accordance with changes to the interest rate. However the full project would require costing under any change to interest rates either actual or forecast. Individual sections already developed and paid for would either be due a refund or a cost extra. It is unlikely that any cost extras would be recoverable and therefore these un-recovered costs would then need to be apportioned over the remaining un-developed sections. This may be open to challenge from the remaining landowners and also be unrecoverable. Similarly any cost reductions may be claimable by both the remaining landowners and those previously 'overcharged'.	an NPV settlement from the landowners in 2007 which mirrors the changes to the capital expenditure would eliminate costs to TCC. However finding a provider of such a facility could be problematic, the market for fixed term interest rates generally extends up to 5 years which would mean that the 38 year balance of the 43 year term of this project may be at risk to interest rate fluctuations. The exposure for TCC is two fold: 1. Interest rates increasing beyond the level forecast for the first 16 years when the additional costs require funding; and 2. Interest rates reducing below the level forecast for the remaining 27 years when there are reductions to capital expenditure to be refunded. Anecdotally a separate exercise carried out recently by *The Answer Company* assessed current forecast long term yield curve to be declining. Further analysis would need to be done on this issue should the NPV option be pursued further.
4. Project costs, (i.e. Actual Costs versus projected costs)	As with the issues above progressive recovery on a year by year basis enables adjustments to the costs in accordance with changes to project costs. Also the same provisos with regard to the effect on the total project in regard to recovery of under-costed projects and	A settlement from the landowners in 2007 which mirrors the changes to the capital expenditure in NPV terms would be based on a fixed forecast of project costs. As with issue number 1, TCC would carry the risk of any detrimental cost effects of subsequent alterations to

	potential exposure to refunds for over-costed projects would require consideration.	prices. Therefore TCC would need to carefully review the assumptions underpinning costs. Any favourable cost variances resulting from over-costed projects would of course accrue to TCC.
5. Rate of Development of Individual Sections	Change to the rate of development of individual sections is largely in the hands of the Landowners once the Plan is settled. Cost reduction will be a prime driver in how decisions are made. Many of these decisions will be outside TCC's ability to influence, however economies for the landowners will be pursued with vigour. Acceleration in the rate of development will reduce the cost imposition on the Landowners. This may in turn create further detrimental effects to development patterns for the rest of the city. The basis of costing may alter as a result of changes to the rate of Te Tumu development. This may create ongoing debate between the Landowners and TCC..	A settlement from the landowners in 2007 which mirrors the changes to the capital expenditure in NPV terms would be based on those Te Tumu Landowner Group submission's agreed by TCC. Once settled there will no economic incentive, (other than the rate of growth induced demand) with regard to these costs for the Landowner Group to alter the agreed pattern of development. This would provide a better basis for future harmony and partnership in TCC's planning.
6. Credit Risk	Progressive recovery on a year by year basis exposes TCC to some credit risk on the part of the Landowners. This could affect recovery and becomes a greater issue if the Landowners become fragmented over time.	A settlement from the landowners in 2007 which mirrors the changes to the capital expenditure in NPV terms would be settled with an up front payment with no further collection issues.

3.3 Summary

The key issues are how the assessed additional costs of any reprioritisation of development is:

- Firstly; assessed; and
- Secondly; compensated to generate an outcome that is fair to the community without shifting undue risk to TCC.

3.3.1 Assessment

This Peer Review has briefly discussed two bases of calculation:

- FVs as reported in the Paper from the Original Model; and
- NPV which brings the costs into present day terms as recommended by *The Answer Company*.

Both calculations are necessarily founded on a number of common critical assumptions.

The advantage of stating the cost imposition on the community in NPV terms relates to the context. All other costs are established in present day terms and therefore the additional costs can be reviewed in the same context.

3.3.2 Cost Recovery

Both calculations referred to above are indicative based on the factors considered to date, however should there be a need to reach any settlement by way of compensation, the issues would require careful consideration.

a) Comparison of Bases

(i) Future Value

Whilst it is possible and indeed would be necessary to recalculate the effects of the key cost drivers on the total cost of the reprioritisation, there are potential issues with the under or over recovery of any of the resultant changes to the reassessed costs. Added to this, the ongoing debate that could arise from changes to the rate of development could continue for a protracted period of time and may not be the best platform for an ongoing relationship. The protracted collection period (43 years) may also create an issue with credit risk with any ongoing land ownership changes.

(ii) Net Present Value

Dealing with the issue at the commencement of the project through a settlement assessed on a NPV calculation exposes TCC to the risk of detrimental cost variances arising from 3 of the 4 key cost drivers, (on the basis that inflation is countered by the settlement in land). These risks can be partially mitigated through attention to the basis of assessment and in the case of arranging a Funding facility with a trading bank, (discussed under the issue of Interest rates) further discussion. Furthermore there are no ongoing issues with regard to the perverse development rate incentives or credit and other risks resulting from protracted collections.

b) Counter Party Considerations

The land owners will, in our opinion, relate to these costs in NPV terms on the basis that all of their current costs and values will be in today's terms. We would assume that they will undertake their assessment of whether to go ahead with the accelerated development on a basis of whether it will be more profitable for them to:

- Pay the additional costs and generate the development revenues earlier (with the market determining the level of additional cost recovery); or
- Save these costs and defer development.

We consider that the steps that they will consider will be directed toward reducing costs and or time, through a number of avenues possibly running concurrently:

- Continuing to appeal the planning process;
- Negotiating with TCC to reduce the additional costs and the extent of accelerated capital works; and
- Negotiating a basis under which they may compensate TCC for any agreed additional costs and achieve their aim of an accelerated development.

4.0 Conclusion

4.1 Local Government and Resource Management Acts

The key issue addressed in the Paper is whether it is appropriate to develop the Te Tumu land in 2011 – 2016 or after 2021.

Using the language of the RMA, this is a question regarding the appropriate way to manage the use or development of greenfield land within the City at a rate which enables people and communities to provide for their social, economic, and cultural wellbeing.

Under the Local Government Act, TCC has an obligation to manage its financial affairs *"prudently and in a manner that promotes the current and future interests of the community"*[19] and has made a judgement that the propsal for earlier development would "*not be financially sustainable"*.

TCC also has an obligation to promote the social, economic, environmental, and cultural well-being of the communities it represents, in the present and for the future, and the Paper has identified a number of reasons why developing the land in 2011-2016 could have undesireable social, environmental and cultural consequences.

We are satisfied that the facts, analysis and arguments in the Paper would:

- Satisfy the process requirements of section 77 of the LGA; and
- Justify the Council reaching the conclusion that the present and future social, economic, environmental and cultural well being of the community is likely to be promoted by delaying the development of Te Tumu until after 2021.

4.2 Economic Analysis Issues

Based on the information provided regarding:

[19] Section 101(1) of the LGA.

- The timing of capital works necessary for the proposed development of Te Tumu; and
- The consistency of forecast demand as demonstrated by the consistent population growth forecasts together with the accuracy of the previous forecasts

in our opinion:

1. The Paper outlines a robust financial argument, which clearly identifies that, without mitigation, there would be substantial cost to the community from proceeding with the development earlier than planned.

2. Whilst the analysis shows that the total amount of capital required over the 43 year period remains unchanged, there are additional costs related to phasing. Bringing forward the capital expenditure necessary to enable the earlier development of Te Tumu with a corresponding reduction in later years without any compensating increase in revenue creates net additional costs due to the principle of the 'time value of money'.

3. These additional costs arise from the 'time value of money' principle, (i.e. a dollar today is worth more than a dollar tomorrow, on the basis that a dollar today can be invested and start earning a return immediately). This is a cost impost on the community through the earlier use of capital.

4. Following the review of the issues in regard to the basis of presenting and potentially recovering the additional costs as discussed in this Peer Review we conclude that both methods of calculation, (FV and NPV) generate issues if used as an approach to cost recovery.

   The Answer Company suggests that both methods be considered as options to be applied to any compensation under consideration and that TCC select the most effective and efficient method, having regard to the issues identified within this Peer Review as they may apply to the particular circumstances.

Addendum

Introduction

TCC have advised that they are considering a compensation approach where land owners "directly recompense Council for the construction costs of the agreed works".

This Addendum:
- Discusses some of the specific issues to be addressed in the approach under consideration (TCC's approach); and
- Contrasts this with a settlement based on assessed NPV of the costs.

TCC's approach is ostensibly the most straight forward method of applying the preferred compensation principle of 'exacerbator pays'. Such a process would entail 2 steps:
1. The cost of these agreed works being paid by the landowners to TCC in accordance with the re-prioritised programme. This takes place over the period between 2010 and 2024 as currently identified; and
2. A refund being paid to the same landowners, (or their successors in title) at the time agreed as being the time the project would have been undertaken pre any re-prioritisation. This takes place over the period 2023 and 2050.

TCC's Approach

There are several key issues to be addressed in applying such an approach.

1. Agreed Works

The first issue to be addressed is a process for the identification of the agreed works. This will entail agreeing:
- An opening position;
- The necessary alterations; and
- A tracking method to match costs with the agreed works.

a. Opening Position

The opening position will be based on the 'Planned Programme' as discussed in the Paper

Given the extensive 43 year term of the project, (covering payments and refunds) care will be required in determining and documenting the opening position, i.e. the sequence of projects and costs agreed to be undertaken by TCC prior to any reprioritisation.

The necessity of undertaking these projects and the basis for the planned timing will need to be established and agreed with the parties.

b. The Necessary Alterations

Agreement on the new programme of work post re-prioritisation will be required. This assessment has been to date undertaken by TCC's engineers and this would obviously be the starting point. However it is likely that the land owners will want to understand and agree to the supporting rationale.

c. Tracking Method

The comparison of the new programme with the opening position will identify projects to be re-sequenced.

(i) Projects

The preferred basis for tracking and controlling such a long term project would in our opinion be based on the projects or separable parts of projects that are required to be re-sequenced to facilitate the earlier development of the Te Tumu land. This will enable only time and costs related to these projects to be tracked. However this carries a risk that only costs related to the projects identified will be able to be recovered.

(ii) Level of Service

The alternative approach is based around providing a level of service which would entail a periodic reassessment of the new programme of projects compared with the remaining forecast of the opening position. Such a comprehensive approach would enable TCC to alter the projects, as well as the costs of those projects, to be re-sequenced as new information comes to hand. Given that the costs to be recompensed will relate to changes from the pre-prioritised programme, this approach would require care in tracking the changes. Changes such as delays or acceleration in the new programme or parts of the programme, (some of which may impact on the timing of, or identification of re-sequenced projects) may in turn shift the remaining forecast opening position.

2. Payment

The Te Tumu land owners are presumably a group of independent persons or entities, all of whom would be required to enter agreements to pay their proportion of the compensation. These agreements would each need to bind their successors in title to the land to ensure recovery by TCC against subsequent owners.

a. Payment in Advance

An upfront payment that is calculated by reference to specific assumptions about:

- The design, timing and cost of specific capital works; and
- Interest rates for the period until the capital works are completed,

and reserves the right for Council to recover contributions from the landowners from sales as and when they occur to recover any shortfall that results if those assumptions turn out to be incorrect.

Payment secured in advance of the work provides TCC with the power of veto not to commence the work unless payment is secured to TCC's satisfaction. However there will be room for debate with the landowners given the likely extent of change over the term of the project. The risk for TCC is an escalation of the debate to Council level following commencement of some of the projects, where there may be potential for confusion among Councillors assuming that that the issue had been settled earlier. The political will to recover what may be viewed as sunk costs in the face of arguments about the need to grow the city and provide affordable housing may hinder recovery.

b. Payment in Arrears

There would be credit risk for TCC in advancing any costs on the capital works and only being able to enforce recovery of these capital costs by restricting the ability of the landowners to deal with the land. Should market conditions be such that the land owners defer their developments, TCC will then bare this risk. The prospect of added costs will, if anything, defer further development. In summary the risks for the landowners are significantly reduced. They can simply delay or stage the development to match market conditions.

3. Summary

The capital costs applying to the re-sequenced projects which are advanced by the landowners and subsequently refunded by TCC will be the same. However as has been discussed within this Peer Review the cost relates to both the time between the advance and refund as well as the amount of the advance.

The basis of establishing the forecast capital costs applying to the re-sequenced projects is likely to be carefully analysed by the landowners. Landowners will need the most accurate possible capital costings for their cash flow planning and indeed their operational costings.

Any agreement with the Te Tumu Landowners and their successors in title will accommodate the recovery of cost fluctuations.

Under the basis of tracking only the projects identified as being re-sequenced, compensation can be timed to coincide with contractual progress payments which will meet the required objective of neutralising any borrowing effects. Tracking based on a level of service approach is a little more problematic.

The TCC approach in our opinion is likely to be a staff intensive process and require extensive documentation. There will be incentives for the landowners to reduce payments to TCC in the first period up until 2024 and then agitate for early refund in the period through to 2050. In addition there may be a requirement to increase or decrease the cost to the land yet to be developed to the credit or expense of the land already developed. Recovery of any such charges could be problematic where as any credits would likely be pursued with some vigour.

In our opinion whilst appearing to minimise the risk of under recovery by TCC, the cost of staff time to manage and track such a system for the 43 year term of the project coupled with the risk of ongoing debate at Council level could mean that this approach is not as straight forward as what may first appear.

NPV Settlement

Under this approach developers pay the NPV of the anticipated cost of all capital works now. This would require a one time identification and quantification of the difference between a new Programme and the opening position. This would mean that TCC takes a risk in relation to:

- Cost escalation of the capital works, (including inflation if compensation not taken in land); and
- Interest rates payable on the capital invested for the period until the capital works are completed.

The fact that there are a number of land owners should not be a significant issue - TCC could refuse to enter into any agreement or proceed with the work until an agreed amount is paid, leaving it to the landowners to agree their respective contributions.

It should be noted that the landowners take a risk on interest rates and the market for the land until sufficient sales have been made to repay any capital borrowed in order to pay the Council.

Summary

In our opinion, reaching a lump sum agreement for immediate payment with the current land owners would be a more workable solution for TCC.

Richard Maher
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Chairman Dextar Mobile Software Ltd,
Member of Academic Advisory Board, Advanced Business Education Ltd
Chairman of the AIS St. Helens Post Graduate Advisory Committee
Deputy Chairman, National Corporate Sector Committee, NZ Institute of Chartered Accountants

Previous positions:

- Chief Executive Officer of Infrastructure Auckland (1998 – June 2004)
- Commercial Director, Fletcher Wood Panels Limited (1991 – 1998)
- Planning and Development Manager, Fletcher Building Products (1990 – 1991)
- General Manager Fletcher Reinforcing (1987 – 1990)

Professional qualifications and memberships:

- Chartered Accountant, member of the New Zealand Institute of Chartered Accountants (including member of the National Corporate Sector Committee)
- Diploma in Corporate Management from the Institute of Corporate Managers and Institute of Corporate Secretaries
- Masters of Business Administration in International Management from Asia Pacific International Graduate School of Management
- Member of the Institute of Directors