

# **DEVELOPMENT CONTRIBUTIONS POLICY**

SUPPORTING DOCUMENT

**COST ALLOCATIONS** 

# **METHODOLOGY AND CONSULTANT REPORTS**

- I. COVEC LIMITED COST ALLOCATION GUIDELINES
- II. BSAS Ltd GROWTH CAUSATION AND GROWTH BENEFIT 'BANDS' RATIONALE
- III. COVEC COST ALLOCATIONS REVIEW LETTER
- IV. BSAS Ltd COST ALLOCATIONS REVIEW LETTER



# Cost Allocation Guidelines for Development Contributions

Prepared for

# Hamilton City Council

economics research forecasting public policy

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# 1 Introduction

These guidelines are intended to help you allocate the costs of capital works for development contributions.

# 1.1 Process Steps

These guidelines are based on the following four steps:

- 1. Identify whether each project caters for growth. If so:
- 2. Determine the net cost to council,
- 3. Allocate costs to project drivers, and
- 4. Decide how the growth-related portion will be recovered over time

# 1.2 Definitions

Following are the definitions of key words that appear in this document.

#### Backlog

New assets or enhancements to existing assets required for historic 'catch-up'. *i.e.* to bring levels of service up to the required standard. This may occur if service levels have been below standard in the past and/or if council has set a higher level of service.

#### **Capacity Life**

The period over which an asset has capacity to accommodate new users.

#### HEUs

HEU stands for household unit equivalent. It represents the infrastructure demands of an average household, and is used to convert non-residential demand into residential terms for aggregation purposes.

#### Renewal

The replacement of assets (or components of assets) that have reached the end of their useful lives with assets of the same capacity and service levels.

#### **Stand Alone Project**

A project that caters for the needs of only one group. For example, Council may build a wastewater treatment plant that serves just the residents of a new subdivision. Alternatively, Council may replace a stormwater pipe that caters only for existing residents. Both of these are examples of stand-alone projects.

#### Stand Alone Cost

The cost of a stand-alone project.

#### **Useful Life**

The period over which an asset provides service to users. This should not be confused with capacity life, as defined above.

# 2 Methodology Overview

These guidelines are based on the following 3-phase methodology developed by Covec.



Figure 1: Covec DC Methodology Schematic

# 3 Legal Requirements

The Local Government Act 2002 (the LGA) is the overarching legislation under which development contributions may be taken. It specifies a number of things that must be considered when designing a development contributions policy. It also sets out a number of factors that must be taken into account when allocating costs. They are:

- the community outcomes to which the activity primarily contributes; and
- the distribution of benefits between the community as a whole, or in part, and individuals in the community; and
- the period in or over which the benefits are expected to occur; and
- the extent to which the actions or inactions of particular individuals or a group contribute to the need to undertake the activity; and
- the costs and benefits of funding the activity distinctly from other activities.
- the overall impact of allocating funding from any particular source or mechanism on the four wellbeings, current and future.

These guidelines have been designed to take account of these factors to the greatest extent possible, but there may still be instances where a different approach is required. This is perfectly fine. But please remember to record the details of any departures from these guidelines (including the rationale for doing so) so that a clear audit trail exists.

# 4 Does this Project Cater for Growth?

The first step for each project is to determine whether it caters for growth. If it does, we continue with the remaining steps of the process. Otherwise, we stop, move to the next project, and start again.

To decide whether a project caters for growth, we must first define the level of service. This can usually be found in asset management plans or related documents. If not, a level of service should be defined before going any further.

Once the level of service has been defined, we can identify whether a project contains an element of growth by asking two simple questions:

- 1. Has growth influenced the scope or scale of this project?
- 2. Will growth use, or benefit from, this project?

If the answer to either question is "yes", the project caters for growth. Otherwise, it does not. Below is a graphical representation of this test.





\*Please remember that you can also charge a development contribution for past projects provided they are (i) growth-related and (ii) not yet fully-repaid.

# 5 Determine the Net Capital Cost

Having determined that a project caters for growth, the next step is to calculate the net capital cost to council (which is then allocated to project drivers).

The net capital cost to council is calculated as follows:

- 1. Estimate the size and timing of costs
- 2. Deduct any third party funding
- 3. Deduct any operations and maintenance costs

# 5.1 Estimate the Size and Timing of Costs

Information on the size and timing of project costs will usually be contained in Council's asset management plans (AMP) and/or its LTP. In most cases, these will be only estimates, with more accurate estimates (or actual costs) substituted later.

# 5.2 Deduct Any Third Party Funding

Since the LGA expressly disallows council to recover costs that will be funded by third parties, the next logical step is to deduct any third party funding. In some cases, council will already have received these funds, while in other cases they may still be waiting. Regardless, they should be deducted from project costs.

Some common forms of third party funding include (but are not limited to) transport subsidies, payments from other local authorities and financial contributions levied for the same purpose.

# 5.3 Deduct any Operations and Maintenance Costs

Finally, since the LGA also prohibits the recovery of non-capital expenditures via development contributions, the final step for calculating net capital costs is to deduct any operations and maintenance components.

In most cases, these will already have been removed. However, it always pays to check.

# 6 Determine the Growth Share of Cost

Having identified that a project contains elements of growth (and having determined the net capital cost to council), the next step is to quantify how large the growth share is. This is the essence of the cost allocation problem.

Our approach to determining the growth share is based on the following steps:

- 1. Select the catchment associated with the project
- 2. Deduct the stand alone cost of renewal (if any)
- 3. Allocate the cost of non-renewal
- 4. Check that the allocations are reasonable

# 6.1 Select the Catchment

The first step in allocating costs is to select the growth catchment. This is the area of growth that will receive service or benefit from the project. Catchments may span the entire district, or just some part of it.

For reticulated services, catchments will often be quite easy to delineate, because the specific dwellings or buildings connected to a reticulation system are readily identified. The catchments applying to other services, however, may not be so obvious. A greater degree of thought and discretion is therefore required when setting and selecting catchments for non-reticulated services (such as roading and community facilities).

# 6.2 Deduct the Stand Alone Cost of Renewal (if any)

Many projects will feature elements of both (i) renewal and (ii) capacity expansion. Since the renewal portion of each project relates only to the existing community, the next step is to deduct any such costs.<sup>1</sup>

This is done by designing a hypothetical (stand alone) project that just caters for renewal and estimating its cost.<sup>2</sup> Once estimated, this cost is subtracted from the net capital cost identified in the preceding section.

# 6.3 Allocate the Cost of the Non-Renewal Component

Next, we must allocate non-renewal costs between growth and the existing community. This can be done as follows:

<sup>&</sup>lt;sup>1</sup> There is a small issue of terminology that needs to be addressed here. Sometimes a project will be referred to as 'renewal' yet it actually contains an element of growth. This may be the case if the new asset is of a higher capacity and/or higher service level than the one it is replacing. In such cases, the cost of the growth component (if any) needs to be identified and allocated accordingly.

<sup>&</sup>lt;sup>2</sup> *Note:* A stand alone project is one that can be carried-out in complete isolation. *i.e.* without any reliance on other projects or workstreams. It represents the maximum cost of achieving a certain objective.

- Allocate costs using capacity measures
- Modify to take account of benefits, and
- Modify to take account of well-beings

# 6.3.1 Allocate costs on the basis of capacity

The first step is to allocate costs on the basis of capacity consumed. The approach taken here will depend on two key factors, namely whether there is any:

- 1. Existing shortfall (backlog), and
- 2. Growth in demand from sources other than development.

The following four graphs cover the main possibilities, and show the corresponding growth allocations for each.

# Scenario 1: No Existing Shortfall & All Growth is Development-Related

In Figure 3, current demand equals current capacity. As a result, there is no existing shortfall and hence no need for any backlog/catch-up work. In addition, all growth in demand is related to future development. This means that all project capacity is being provided specifically for future development, and hence that <u>the causation share for future development is 100%</u>.



Figure 3: No Current Shortfall & All Growth is Development-Related

### Scenario 2: Existing Shortfall but All Growth is Development-Related

In Figure 4, current demand *exceeds* current capacity, so there is an existing shortfall to be rectified. However, all growth beyond today is development-related. Accordingly, causation shares are based on the relative proportions of project capacity required to (i) fix the shortfall, and (ii) accommodate development-related growth. In this particular

example, project capacity is 100 units, 70 of which are required for future development. Hence, the causation share for future development is 70%.



Figure 4: Existing Shortfall but All Growth is Development-Related

#### Scenario 3: No Existing Shortfall but Future Growth from Various Sources

In Figure 5, there is no existing shortfall to address, but there will be future growth from a range of sources (including future development).<sup>3</sup> As in the previous example, the causation share for future development equals their share of project capacity. Thus, in this particular example, the causation share for future development is 60%.



Figure 5: No Current Shortfall but Growth from a Range of Sources

<sup>&</sup>lt;sup>3</sup> These other sources of growth in capacity demand might include, for example, increased demand from the existing community, or increases required to meet changes in national standards.

#### Scenario 4: Existing Shortfall & Not All Growth is Development-Related

In the final example, there is an existing shortfall plus future growth from various sources. Again, the causation share for future development equals their share of project capacity. Thus, in this example, <u>the causation share for future development is 40%</u>.



Figure 6: Current Shortfall plus Growth from a Range of Sources

#### Example

Suppose a new library is built to service growth, but the existing network is also insufficient. Specifically, suppose there are 90,000 books currently in circulation, but existing demand is 100,000 books. Further, assume that the new library will boost book numbers by 25,000.

Using the formula shown above, the share of cost allocated to growth on the basis of capacity is:

$$Growth = \frac{25,000 - \max(100,000 - 90,000,0)}{25,000} = \frac{25,000 - (10,000)}{25,000} = \frac{15,000}{25,000} = 60\%$$

Ok, but how do we measure existing demand? This can be done using your level of service. For instance, suppose Council's level of service is 1 book per person. If there are 100,000 people, then existing demand is 100,000 books. As another example, suppose Council has a reserves level of service of 4 hectares per 1000 people. If there are 90,000 people, existing demand is 360 hectares.

Before moving on to the next section, it is important to note that existing demand may not remain constant. Rather, it may naturally grow over time (even in the absence of additional households or businesses). For instance, people tend to do more stuff (such as drive their vehicle or go to the swimming pool) as household wealth and incomes increase. Thus, when measuring existing demand, it is important to take account of any likely growth from existing residents and businesses, and use future demand in place of the current figure if necessary.

# 6.3.2 Modify to take account of benefits

Until now, the cost allocation has focused solely on capacity. The next step therefore is to take account of benefits.

Benefits assessments reflect the fact that, although some projects may be caused by a small sector of society, they often provide benefits to a much wider group. For instance, a park developed to service a new subdivision may be used by both new and existing residents alike.

But, how do we measure benefits? Unfortunately, there is no easy answer. You must use your expert judgment, along with information on each project to make a decision. Just remember that the objective here is to divide beneficiaries into:

- those that already live in the district,
- those that live outside the district (either now or in the future),
- and those that will arrive in the district in the future.

Only benefits that fall into the last category are attributable to 'growth' for the purposes of development contributions. Some important points to keep in mind when allocating benefits are:

- The effect of the project on levels of service, community outcomes and wellbeings, and
- Whether the main users will be growth, existing ratepayers or people from outside the district (or some mix of the three)

If you are really stuck, a good rule of thumb is to allocate benefits on a per-population or per-household basis.<sup>4</sup> The only task, then, is to decide how much weight to place on benefits (and how much to place on capacity or causation).

### Example

Suppose we have performed a capacity-based cost allocation and arrived at a split of 80% growth, and 20% existing. Further, suppose that benefits will be allocated on a percapita basis and that growth will account for 20% of the future population.

Now, if we give equal weight to capacity and benefits, the modified cost share for growth becomes:

Growth share =  $0.5 \times \text{capacity share} + 0.5 \times \text{benefit share}$ =  $0.5 \times 80\% + 0.5 \times 20\%$ = 50%.

<sup>&</sup>lt;sup>4</sup> Note that these population shares can be calculated at the catchment - rather than district wide - level.

If, however, we gave only 10% weighting to benefits, the modified growth share would be 74%.

# 6.3.3 Modify to take account of well-beings

The final step in the process is to (possibly) modify the allocations once more to take account of the four wellbeings – economic, social, cultural and environmental.

In reality, these factors are pretty hard to measure, so it's useful to have some rules of thumbs. Here, I outline one such rule.

#### Rule of Thumb - Cost per Unit of Demand

This relates to the average cost per unit of demand. It takes the total cost allocated to each group and divides by the number of HEUs.

For instance, suppose we allocated \$1m of cost to both existing and future ratepayers (i.e. a 50/50 split on a \$2m project), and that there are 20,000 existing households and a further 4,000 households expected in the future. Ignoring interest effects, the cost per capita of this cost allocation is:

- Existing = 1,000,000/20,000 = \$50 per HEU
- Growth = 1,000,000/4,000 = \$250 per HEU

Hence, growth pays five times as much per capita as existing ratepayers.

Having performed this calculation, the final step is to stand back and ask the following questions:

- 1. Does this seem reasonable given the allocation of benefits, and the extent to which each group caused the project?
- 2. Is this allocation likely to negatively affect any of the four wellbeings?

Based on the answers given to these questions, there may be grounds for further modification. Please note that, if further modifications are undertaken, it is important to document both the extent of modification and the rationale.

<u>Please also note that 'well-beings modifications' can only reduce the cost allocated to</u> <u>growth, not increase it.</u>

### 6.3.4 Check that the Final Cost Allocation is 'Reasonable'

The final step is to ensure that the cost allocated to growth is reasonable. This can be established by comparing the allocated growth cost to the cost of a stand-alone growth project. If the allocated growth cost is less than or equal to this amount, it is reasonable. If not, an error must have occurred – either the allocations were calculated incorrectly, or there is some diseconomy of scale associated with the project that means stand alone projects should be undertake instead. Go back and trace the source of the problem and rectify accordingly before proceeding with the remainder of this process.

# 7 Determine the Capacity Period

The final task is to determine the time period over which growth costs should be spread. In general, this should reflect the capacity period of the project's growth component.

The capacity period of the growth component is found by calculating (i) the date at which the growth component starts to provide capacity and (ii) the number of years that this capacity lasts.

In general, the start date should be taken as the year following project completion, where project completion is defined as the last year in which project expenditures are incurred.

The number of years that this capacity lasts should be based on the number of HEUs that the growth component will accommodate.

# 7.1 General Points on Spreading Costs

Some important points to bear in mind during this phase of the process are:

- Always use the capacity life of the asset when determining the period over which to spread growth costs, not its useful life (see section 1.2 for definitions).
- The longest period over which growth costs should be spread is 25 or 30 years. Thus, if you calculate a period longer than this period, just use 25 or 30.
- You may wish to refer to Council's growth projections to determine the number of years that growth capacity will last.

# 7.1.1 Example 1

A new stormwater pipe (serving just growth) will be completed at the end of 2012. It has a useful life of 60 years, but its capacity will be reached after 12 years. The start date is therefore 2013 and the number of years of growth capacity is 12.

# 7.1.2 Example 2

A new arterial road will be completed mid 2014. It has a useful life of 80 years, but its growth capacity will be reached in 20 years. This gives us a start date of 2015 and 20 years of growth capacity.

# 7.1.3 Example 3

A new wastewater pipe will be installed in 2017. It will provide capacity for only the next 5 years of growth (but has a useful life of 60 years). The start date is 2018 and the number of years of growth capacity is 5.

# 8 Frequently-Asked Questions

This section provides brief answers to frequently-asked questions.

# 8.1 What do we mean by growth?

For the purposes of development contributions, <u>'growth' means increased demand for</u> <u>infrastructure caused by development within the district</u>. It *does not* relate to increased demand from people outside the district; or increased demand from existing ratepayers.

# 8.2 What projects can I charge for?

You can charge a development contribution for any capital works project in the LTP provided it is (at least partially) growth-related. You can also charge for projects completed in the past provided that:

- they are also (at least partially) growth-related, and
- they are not yet fully-repaid

# 8.3 How do I measure benefits?

This is a very good question, but one for which there is no clear answer. In general utilities projects are easier to deal with because the specific users are easy to identify. Community facilities and roading project, on the other hand, are more difficult. For these projects, you need to use your expert judgement and consider things such as:

- The effects of the project on levels of service, community outcomes and wellbeings, and
- Whether the main users will be growth, existing ratepayers or people from outside the district (or some mix of the three)

If you are really stuck, a good rule of thumb is to allocate benefits on a per-population or per-household basis.

# 8.4 How much weight should be given to benefits?

There are no clear answers for this question, either. It is merely a matter of judgement. In general, if there are no other compelling reasons otherwise, equal weight should be given to benefits and causation (capacity consumed).

# 8.5 What happens if useful life is shorter than capacity life?

In general, growth-related costs should be spread over the capacity life of the asset. However, in rare cases where useful life is shorter than capacity life, costs should be spread over useful life.

# 8.6 How do I allocate maintenance and other operational costs?

Development contributions cannot be charged for maintenance or other operational costs. These must be stripped out before performing the cost allocation.

# 8.7 What is the maximum share that can be allocated to growth?

For each project, the maximum that can be allocated to growth is either the capacitybased or benefit-based cost allocation. You cannot use wellbeings or community outcomes as reasons for increasing the growth cost share.

# 8.8 How accurate do I need to be?

It is important to remember that development contributions are not an exact science. There is considerable uncertainty around the size and timing of costs, as well as the likely rate of future development. There is also limited time to complete these exercises, so one must work at a reasonable pace. The most important thing, however, is to clearly document your reasoning. This will avoid issues down the track if you are asked to explain your rationale.

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Dear Sir

### Hamilton City Council - Development Contributions Policy Review 2012/13 Growth Causation and Growth Benefit 'bands' and rationale

# Introduction

This paper has been prepared to more fully explain the decision making process and rationale supporting the Development Contribution (DC) assessment process. There is an overarching DC methodology which has been prepared by Covec Limited. To better populate the assessment of individual projects that might, in terms of the policy, attract DCs a spreadsheet and template has been prepared which gives guidance as to the factors and assessment criteria by which individual projects are considered.

This paper provides a background on the steps and additional rationale on how the DC model and template has been derived, and how "assessment bands" have been arrived at.

The paper is split into the following headings on the 'stepping through' of the decision making process;

Legislative Context Practical considerations Options considered for DC decision making The preferred option Main features of the Preferred Model Key features of the Preferred Model – Levels of Service assessments Key features of the Preferred Model – Growth assessments Other elements of the Preferred Model

# Legislative Context

Schedule 10 (3) of the Local Government Act 2002 (as amended in 2010) requires Council capex projects, as described in the LTP, to be split into three categories;

- Projects driven by additional demand
- Projects which improve the level of service of an activity or group of activities
- Projects which replace existing assets

This split is important in the DC context as significant information is required on the purpose and scope of various capital projects.

Projects which replace existing assets are commonly referred to as renewal projects. The International Infrastructure Management Manual (IIMM) defines renewals or replacements as "works to replace existing assets or facilities with assets or facilities of equivalent capacity or performance capability". Therefore, because these projects are not normally growth related projects, they are excluded or removed from HCC's list of projects that form the basis of DC charges.

That leaves capital projects which are either improving the level of service of an activity, or capital projects which are driven by additional demand. The latter form the basis of projects that attract development contributions.

# Practical Context

In practice, however, levels of service (LOS) projects can be partly demand driven, and demand projects can have an element of improving the LOS. Additional complications arise as to whether LOS improvement projects are targeted at existing residents, or both existing and future residents. Projects driven by additional demand are usually due to an expectation of growth in the City. If demand projects are growth driven then there must be a causal nexus between the identified development and the demand for infrastructure it, either alone or jointly with another development.

From a practical perspective, precise information about the scope and purpose(s) of each past and future capital project may not always be readily available. Details that are available may not match the form required for particular aspects of DC cost allocations. Inevitably different officers have recorded project information in different ways and in varying levels of detail.

In the absence of precisely calibrated information about each HCC capital project as it relates to DCs, a project "cost allocation" model has been developed to act as an efficient and effective mechanism for establishing the intent and parameters of a capital project and to populate the project with information that will inform the DC levies.

# Options considered regarding determining cost allocations for the DC Model

We considered three options in developing a model to generate cost allocations;

- a. A 'qualitative' model where there would be fewer parameters and guidelines for those officers populating the model; or
- b. A 'full quantitative' model where we required full and detailed information about every relevant facet of each capital project; or
- c. A 'balanced qualitative and quantitative' model that provided a template of consideration factors ('assessment bands") and assisted by detailed guidelines for those officers populating the model.

The initial screening test is whether the proposed model would provide demonstrable compliance with the LGA. It was assessed that option a) would present a significant risk of non-compliance and hence was ruled out as an option, however for comparison to option b) and c), it is included in the decision matrix below.

We prepared criteria to judge the efficacy of each of the options, using a scale of 1-3, where 1 represents low efficacy, 2 medium, and 3 high efficacy.

Criteria	Option a) - Qualitative	Option b) Full Quantitative	Option c) Balanced Qualitative/Quantitative
Ability to source required project data	3	1	2
Ability to populate model in a reasonable timeframe	3	1	2
Ability to fund internal resource requirements	3	1	2
Ability to transparently show how decisions arrived at (trail)	1	3	2
Process replicable to different types of projects	3	2	3
Process understandable and replicable to different project officers populating model	1	3	2
Ability to moderate and QA project information	1	3	3
Demonstrable compliance with LGA	1	3	3
Total	16	17	19

# The Preferred Model

Using the above 'scoring' system to guide a decision, option a), the qualitative model, attracted the lowest efficacy score. While simple and time friendly it would not have provided sufficient robustness and transparency to satisfy the requirements of the LGA, nor the standards demanded internally by staff and management.

Option b), the full quantitative model, returned the next lowest score. It may have been preferable from a purely theoretical basis, but the practical difficulties in sourcing every potential element of project information meant that the time and funding required would be prohibitive.

On the basis of the above criteria, the most efficient and effective option was option c) – the "Balanced qualitative- quantitative model'. It was both practicable and met the key criteria of a robust and transparent model that would be demonstrably compliant with the LGA.

# What are the main features of the Preferred Model?

The main features of the preferred model are;

- To rigorously capture what is meant by Levels of Service and the different dimensions and significance of LOS
- To assess capital projects on the extent to which they are driven by LOS
- To use "assessment bands" to help determine the likely LOS component for each project and the benefit split between growth and the existing ratepayer base
- Guidance on the application of assessment bands
- Guidance for allocation of costs to individual catchments, including criteria for allocating projects to a "Citywide" catchment
- Consideration of \$/capita allocated to growth and existing community as a reasonableness test.
- Reliability assessments of project costing estimates

# Key features of the Preferred Model – Levels of Service assessments

Before outlining how the LOS aspects have been considered for DC purposes it is useful to record what we mean by the term LOS.

The NAMS Group, in its manual *Developing Levels of Service* defines Level of Service as "the outputs or objectives that an organisation intends to deliver to its users". In the local authority context levels of service are categorised by activity. Performance measures are used to indicate how well the Council (or an activity of Council) is delivering to the agreed LOS.

The NAMS Manual also states that there are multiple service attributes (also described as dimensions or elements) which are characteristic to many Council activities. Common service attributes include accessibility (to a service), affordability, efficiency, quality (which may contain various sub-attributes), service reliability, safety and responsiveness.

When a capex project is categorised as 'improving a level of service' we need to be cognisant of;

- The various attributes that make up the existing LOS and what attributes might be enhanced in the LOS improvement project(s)
- Whether the project is rectifying a LOS deficiency, or is designed to improve the LOS from the existing
  agreed LOS. If a council knows that an activity is not presently performing to existing agreed LOS then
  there is a LOS deficiency. Alternatively the council may want the LOS to be enhanced to a new,
  elevated LOS. Many LOS projects may do both rectify a deficiency and also raise the LOS 'bar'
- The users or recipients of the service. This will include present customers or users, but also new users

   perhaps through growth or perhaps through people outside the council boundaries using council services. There may also be a different user 'mix' e.g. passive recreational users versus active recreational users.
- LOS projects often are not solely about LOS. They may contain an element of asset renewal and they often factor in the growth in the demand for the service.

Because the intent of many HCC capex projects straddles LOS improvements and projects driven or caused by growth the Preferred Model;

- Applies industry best practice (via the NAMS manuals) to consider the various service dimensions inherent in a project
- Assesses the variety of LOS dimensions that will be enhanced by virtue of the project we called this the 'breadth' of improvement. Nine LOS dimensions are considered in the 'Breadth' consideration.
- Assesses the 'depth' or 'significance' of the LOS improvement. This considers the intensity of the improvement either generally or for particular LOS dimensions. This could be looked at by the number of users or recipients who will receive better service levels i.e. the more users that stand to gain the more 'depth' to the LOS improvement. The significance of the LOS impacts generally outweighs the breadth impacts.
- Includes a template and guidance to assist in the assessment of the above matters. A core feature in the template is the preparation of "LOS assessment bands" (see more details below)

### LOS Assessment Bands

As part of the Preferred Model five assessment bands were formulated to delineate project information into discernible patterns.

### Why 5 bands?

Because of the number of LOS factors, and the possible permutations and combinations of those factors, there could have many assessment bands. However such an approach would have made it difficult for project managers, when populating the template, to differentiate the nuances between many bands. On the other hand, if there were say just two (0-50%, 51-100%) or three bands (0-33%, 34-66%, 67-100%) there is likely to be different approaches and interpretation by various project managers. Also, well quantified projects, or projects where there was low degree of uncertainty would have that accuracy diluted. Finally the impact of each cost allocation moving from one band to the adjacent band (as a sensitivity test) could be substantial and not represent the actual level of quantitative/qualitative data and engineer/specialist knowledge.

Based on these factors - the understanding of city assets and networks by experienced specialists; the framework provided by legislation, and the experience and expertise of external consultancy, we captured the information into five bands. This allows realistic conversion of any contributing qualitative assessment to a quantitative band, and provides a balance between impractical detailed quantitative analysis and broad qualitative assessments that would lead to unacceptable levels of uncertainty.

The factors which are marshalled into the bands are described in tables A and B below. This gives the project managers a good steer as to how to judge the nature of the project. Project managers still have an override assessment capability if the bands don't work for a particular project.

#### Table A – Breadth of LOS Dimensions

Number of LOS Dimensions improved:	1	2	3	4	5	6	7	8	9	10
does the number translate to breadth of LOS enhancement? Low				Med			Hig	า		

Breadth of LOS enhancement	Assessment of Significance of LOS	Giving rise to following Percentage Band	Standard wording for percentage bands				
Low	Minimal	0-20%	Project not primarily driven by LOS considerations. Minor enhancement or improvement to LOS dimensions for existing community will occur but this is incidental to the purpose of project				
Med							
High							
Low	Low						
Low	Med	21-40%	Low to moderate enhancements or improvements to LOS for				
Med	Low		existing community but LOS still not the predominant reason for undertaking the project				
Med	Med	41-60%	LOS considerations in undertaking the project about equal to other				
Low	High	number of dimensions and the extent of improvement of LC					
High	Low		dimensions for the existing community				
Med	High	61-80%	Significant improvements and enhancements to LOS both in terms of the breadth of LOS dimensions improved and the extent of enhancement. LOS the principal driver for the project				
High	Med						
High	High	80-100%	The rationale for the project is almost exclusively LOS				
Low	Overriding		There are major advances in terms of the number of LOS				
Med			dimensions improved and /or the extent of LOS enhancement.				
High							

#### Table B – LOS Breadth, Significance and Percentage Bands

**Diagram B** (below) is a derivation of Table B. It highlights, through a continuum analogy, the swing between LOS driven projects and growth related projects. It also provides typical profiles of projects within each percentage band. These descriptions have naturally been worded in generic terms.

# Diagram B – LOS Projects Continuum Significance of project capex related to Level of Service for existing residents



# Key features of the Preferred Model – Growth assessments

In the Preferred Model there are two major aspects to considering growth in respect to DC policy and assessments- the growth causation assessment and the growth benefits assessment.

Firstly the **DC Growth Causation assessment** represents the extent to which the need for the project has been caused by growth for which DCs will be assessed. Other types of growth (e.g. growth in the demand that existing users place on infrastructure or growth those users from outside Hamilton City place on infrastructure) are excluded from this assessment. In cases where these 'other' types of growth are not significant, DC Growth Causation will be 100% less the LOS % assessment, as per Covec's methodology

Secondly the **Growth Benefits assessments** reflect that while some growth projects may be caused by a small group or sector, the projects often provide benefits to a much wider group. Growth benefits are likely to be higher for projects that are specific to a locality or subdivision and lower for Citywide oriented projects. In considering the growth benefits the factors that should be taken into account are;

- Who are the beneficiaries of the project?
- How many or what proportion of the beneficiaries live within the City?
- How many or what proportion of the beneficiaries live outside the City?
- How many or what proportion of the beneficiaries will move to the City in the future

An example here could be a neighborhood park or local reserve developed to service a newly constructed subdivision. The growth benefit would therefore accrue predominantly to new residents moving into the subdivision rather than providing benefits to existing residents. However if a regional or feature park was being developed, even though it may be located in or near the above subdivision, the cumulative benefit may accrue more to existing residents as they would more likely be the beneficiaries or users of the regional or feature park.

The growth benefit duration is the expected timeframe over which the project will provide a benefit. This is not to be confused with the life of the assets created, although in some cases the life of the project assets and the growth benefit timeframe will be similar. For practical purposes the maximum period of benefit is assumed to be 30 years.

# Growth Benefit Assessment Percentage Bands

Under the Preferred Model, and in similar vein to the LOS assessment bands, assessment bands have been established for the growth benefit assessment. The bands and their description are;

Growth Benefit % Bands	Description
0-25%	There will be Growth benefits that accrue to new residents, but the growth benefits are predominantly accruing to existing residents
26-50%	Growth benefits for the project accruing to new residents over the DCL* period are significant but marginally outweighed by growth benefits to existing residents
51-75%	Growth benefits for the project accruing to new residents over the DCL period are significant and marginally outweigh growth benefits to existing residents
> 75%	Growth benefits for the project accruing to new residents over the DCL period are predominant and significantly outweigh growth benefits to existing residents

\* Development Contributions Loan (DCL)

### What is the rationale for four percentage bands?

As a starting point the same number (5) of percentage bands as for the LOS percentages was considered. Upon further analysis and practical tests, four bands were selected

- due to the greater complexity and permutations/combinations inherent in the LOS assessment
- to best reflect the more qualitative nature of the growth benefit assessments vs the growth causation assessments

At the moment the spreadsheet rules are to allocate the mid-point of the four bands (13%, 38%, 58%, and 88%) but there is an override provision if these rules are too imprecise and better information is available.

# Other elements of the Preferred Model

Other aspects of the Preferred Model include the following information metrics for each project;

- Project description
- Linkages of the project to Council plans and strategies
- Community Outcomes to which the project primarily contributes to
- Listings of internal and external stakeholders that have an interest in the project
- Links to any related projects
- The catchments for the project and the rationale for the catchment selected
- Total cost (spread over relevant years for future projects); and
- The reliability of the cost estimates for future projects.

In this paper we have not examined these other elements, as we have focused on the major elements of Levels of Service and Growth. However the above metrics are noted here to show that a comprehensive suite of information has been gathered for each project giving details of each projects as well as the organisational context around the project.

South

Brian Smith Brian Smith Advisory Services B Com CA



4 April 2013

Hamilton City Council Private Bag 3010 HAMILTON 3240

#### **Development Contributions Policy Review 2013/14**

To Whom it May Concern,

#### **Purpose of this Letter**

This letter confirms work that I have completed in relation to the aforementioned review of Council's development contributions (DC) policy.

#### Agreed Scope of my Involvement

The scope of my involvement was agreed in a contract dated 19 October 2012, and included:

- To provide a methodology for a life-cycle growth funding model, that will be will be used to inform advance funding proposals.
- To review this growth funding model to verify it is robust and provides outputs that can be relied upon to inform advance funding proposals, given specified limitations, including from a legal standpoint.
- To review applicable sections of the Growth Funding policy.
- To review HCC's application to cost allocations of Covec's Cost Allocation Guidelines for Development Contributions (received and dated 15 October 2012), and test and confirm the reliability, consistency and reasonableness of these allocations including from a legal standpoint.
- To provide a full review of HCC's DC calculation model, including robustness, application to methodology, linkage to and from the Growth Funding model, and verify accuracy of calculations.
- To review cost allocation and any other related or relevant sections of the DC policy
- To attend 3 further day equivalent workshops: 1 to inform / review cost allocations; 1 for specifications / review of life-cycle cost model; 1 for final model / policy review
- To maintain permanent membership of the GF & DC policy review Project Control Group (PCG) albeit in an absent capacity, except where requested, including being present for at least two PCG meetings in Hamilton (approx 3 hours each). Membership is to include reviewing meeting minutes and tabled documents from the 12 PCG meetings scheduled before project completion.

### Work Completed to Date

Since October 2012, I have undertaken the following work in relation to this project:

- Provided a methodology document that outlined the purpose and structure of a growth funding model to assist council with its decision making on growth funding.
- Reviewed Council's growth funding policy
- Reviewed the cost allocation methodology developed during the course of the project, and assessed its application to different sets of projects, namely:
  - Top 10 most expensive projects the application of the methodology was reviewed in considerable detail along with various Council staff
  - The remaining top 50 most expensive projects which were also reviewed in detail, but less so than for the top 10, and
  - All remaining projects, whose allocations were derived from the cost allocations associated with similar projects in the top 50. These were not examined in any detail given the sheer number of projects involved, but I am satisfied that extrapolating the top 50 project allocations to cover all remaining ones is a sound and pragmatic solution given time and resource constraints.
- Reviewed the report drafted by Brian Smith Advisory Services in relation to the cost allocation bands.
- Audited the cost allocation template designed to assist with implementation of the cost allocation methodology.
- Completed a detailed walkthrough of the new development contributions funding model at Council's offices, but have not independently audited the underlying logic and calculations.
- Attended various workshops with Council staff and PCG meetings as/when required.
- Reviewing the minutes of PCG meetings and providing feedback where required.

### Summary and Conclusion

Based on my involvement, I believe that the approach taken by Council has been sound and thorough, and that the development contributions and growth funding policies that have resulted are also sound. In addition, I endorse the approach that Council has taken to allocate the costs of key projects.

Yours sincerely

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Fraser Colegrave Director Covec Limited

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5 April 2013

Hamilton City Council Private Bag 3010 HAMILTON 3240

To Whom It May Concern

# **Development Contributions (DC) Policy Review 2012-13**

This letter outlines the work conducted to date by me as the independent consultant assisting Council on the development of the 2012-13 DC policy and the documentation of DC-related projects into a transparent and robust dataset.

My scope of work, agreed in October 2012, included;

- Review of cost allocations for higher value growth projects and a representative selection, across all activities, of other lesser value projects;
- To provide assistance to develop a robust body of evidence supporting allocations and the causal nexus between infrastructure and growth development, built around sound infrastructure management analysis.
- To test the reliability, consistency and reasonableness of estimates of future growth projects costings; and
- To assess the consistency of allocation methods for projects that may be closely related to each other

Excluded from the scope are consideration of the legality of the DC Policy and the DC methodology developed by Covec Limited.

Since October 2012 I have undertaken the following work;

- Review of the DC allocation work prepared by Council prior to my engagement, and preparation of a paper critiquing the weaknesses and areas of improvement needed;
- Preparing a draft template of the various elements of DC project information that I believed was necessary to provide transparency and sufficient evidence to justify proposed DC levies;
- Discussion and refinement of the 'information template' with Council officers;
- Review of the DC project spreadsheet, developed by Council, which incorporated the 'information template'.

- Various discussions with Council engineers and project managers on how the DC project spreadsheet should be completed and to get 'a meeting of minds' on all the factors and elements that should be considered for each DC related project;
- Preparation of an explanatory rationale on the DC policy. This included a number of drafts and also discussion and feedback from Covec Limited. I understand this has also been provided to Council's legal advisor for comment. The final version of the rationale is dated 16 January 2013; and
- Review of the "Top 10" project report prepared by Council officers. I have reviewed the higher value '3
  Waters' and Transportation projects included in this report for consistency of approach to the DC
  rationale and for robustness of project information from a DC perspective. I have discussed my
  observations with the project managers who prepared the project information. There will be minor edits
  and amendments to some project information resulting from these discussions.
- Reviewed the Status Report letter dated 4 April 2013 by Covec Limited to ensure there is congruence between the work of Covec and my work.

### **Summary and Conclusion**

Based on the work conducted thus far, I am of the opinion that;

- The DC rationale is comprehensive and is consistent with the DC methodology prepared by Covec Limited;
- The template spreadsheet developed to capture the DC project information is also comprehensive and will capture all relevant information for each DC project; and
- The project information in the 'Top 10' report is robust, well reasoned and consistent with the DC methodology.

Yours faithfully

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Brian Smith Brian Smith Advisory Services