
The socio-economic impact of development contributions

for

Waitakere City Council

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Executive Summary

The long-awaited Local Government Act 2002 (LGA 2002) has ushered in a raft of new council procedures, policies and controls. One of the most significant new policies, development contributions, enables councils to impose costs for growth-related infrastructure on those who cause such costs to be incurred – property developers.

Until now, only some of the costs for growth-related infrastructure have been collected from developers as financial contributions, with the remainder being financed by general ratepayers. The adoption of a development contributions policy on 1 July 2004 therefore represents a significant change to council's current funding mix, the exact socio-economic effects of which remain unknown.

In order to address this information gap and gain a better understanding of the effects of the policy, Waitakere City Council (WCC) issued a request for proposal. This report responds to that request and analyses the potential impacts of development contributions on the property market and residential ratepayers in general. Further analyses that focus on other aspects of the policy shall follow at a later date.

Impact on construction activity

One of WCC's main concerns is the potential impact of development contributions on the city's construction industry. Indeed, construction is an important facet of the Waitakere City economy, accounting for over 20% of all registered enterprises and nearly 12% of full-time equivalent employment.

To investigate the possible impacts of development contributions on construction activity, we first consider the predictions of economic theory. In particular, what does economic theory predict will happen to the equilibrium price and quantity of new developments?

By observing that development contributions have essentially the same effect as a unit tax (although they are not a tax *per se*), the predictions of economic theory are readily identified. In essence, development contributions increase the cost of supply, and therefore shift the supply curve vertically upward. Once supply shifts upward, demand exceeds supply at the current price. This excess demand causes inflationary pressure, which gradually pushes prices up. As prices increase, the gap between demand and supply diminishes until equilibrium is restored at a higher equilibrium price and lower equilibrium quantity. Thus, economic theory predicts that the imposition of development

contributions will increase the price of new developments and reduce the quantity sold. But who bears the greatest incidence of the levy? In other words, to what extent will developers absorb the costs of development contributions and to what extent will they simply pass them on?

As it transpires, the degree to which contributions are borne by developers and property buyers depends on the relative price elasticities of demand and supply (for development in Waitakere City). Specifically, if the elasticity of demand is higher than that of supply at the current equilibrium, developers will bear a greater incidence of the levy than property buyers, and vice versa. At the extremes, when either demand or supply is perfectly elastic or inelastic, the entire burden is borne by only one party.

In order to deduce the likely outcome, the natural next step therefore is to obtain empirical estimates of demand and supply elasticities. Unfortunately, however, comprehensive literature reviews failed to reveal any such information. Indeed, we were unable to source development elasticity estimates for any area of New Zealand (or overseas). Consequently, an alternative source of elasticity estimates is required.

The next obvious approach is to undertake primary research. Although time and cost constraints precluded us from conducting demand-side surveys, we were, however, able to conduct telephone interviews with six Auckland property developers. Our key question was: "To what extent will you pass the additional costs of development contributions on and to what extent will you simply absorb them?" This question, while not a direct measure of demand and supply price elasticity, provides the same information.

Of the six developers surveyed, five of them insisted they would pass on the full cost of development contributions, while the sixth expected to absorb them. The two main reasons given for passing on costs were that they had insufficient margin to absorb any cost increases and that market demand was strong enough to accept them.

We have some doubts about the first of these reasons. According to Statistics New Zealand's Annual Enterprise Survey 2002, the New Zealand construction industry had a pre-tax operating surplus of over \$1.9 billion. This equates to a 74% return on equity and a 24% return on assets. While these figures may be lower for developers in Waitakere, we doubt their inability to absorb at least *some* of the additional cost. Thus, in our view it is more a question of willingness to absorb, rather than ability.

The second reason, in contrast, is highly plausible. In 1998, 3,271 houses were sold in Waitakere City at an average price of nearly \$215,000. In 2003, 5,849 houses were sold at an average price of over \$274,000. That represents a 79% increase in the number of houses sold and a 28% increase in average price. Demand for houses in Waitakere is thus strong.

In any case, it seems that developers *will* be able to increase prices to nearly fully offset the cost of development contributions. The price received by developers will therefore fall only slightly, with nearly the entire burden passed on to property buyers.

Since developers seem able to pass on costs and property buyers seem willing to accept them, the overall economic impact of the new policy is likely to be small. This, in turn, implies that development contributions will have an immaterial impact on construction activity. However, some additional comments seem useful.

First, the price rises expected to occur as a result of development contributions are insignificant compared to recent price rises caused purely by market forces. Hence, the effects of development contributions on prices will quickly be enveloped.

Second, Papakura District Council has been operating a development contributions policy since 1 July 2003 and discussions with their staff indicate virtually no demand-side response. In fact, over the 8-month period from 1 July 2003 to 29 February 2004, house prices rose 8% relative to the same period in the previous year but the number of houses sold increased by over 39%. Despite strong market conditions prevailing at that time, these figures suggest very little (or no) market reaction to development contributions in Papakura.

Moreover, If Papakura District council's policy had little or no effect on the property market at a time when it was the *only* council to operate one, it seems highly unlikely that a similar policy in Waitakere would cause different effects, especially when most other Auckland councils will adopt their own policies at the same time.

Finally, although developer responses implied that development contributions may cause a *temporary* fall in the number of houses sold, this small initial effect will quickly be overshadowed by higher demand stemming from higher population and higher incomes. Hence, we actually expect both the average price and the number of houses sold to increase overall in the coming year. If

anything, development contributions may simply slow the rate at which houses within the city are sold, although this effect would be minor.

Wider implications for Waitakere City property market

Next we consider wider implications of the policy for the property market, namely its possible impact on the market for undeveloped land and the market for existing houses.

We find that, since the demand for land depends on demand for its final uses and because demand for one of its main final uses (property development) will fall, we expect a small initial reduction in demand for undeveloped land. This will decrease its equilibrium price and quantity. Of course, as with the market for new developments, these effects will be quickly overshadowed by increasing demand associated with higher population and income.

Unlike demand for undeveloped land, demand for existing houses is expected to increase. This is because, when the prices of new properties rise, some property buyers who were previously seeking a new property will switch to looking for an existing house instead. As demand for existing houses increases, their equilibrium price and quantity increase too.

The next issue relates to possible impacts on the affordability of housing for lower income families.

Because development contributions are independent of property value, they will have a regressive impact on housing prices and, therefore, housing affordability. This regressive nature suggests a much tougher impact on affordability for lower income families, who typically seek lower value properties, than on higher-income families seeking higher value homes. Indeed, many lower income families are *only* just able to afford property at current prices and any factor that increases house prices may render them unaffordable.

For example, if a family takes out a 20-year mortgage for \$200,000 and pays it off monthly, the monthly repayments at 7.5% interest are \$1,611. If the mortgage increases to \$209,000 (*i.e.* if house prices increase by the amount levied as development contributions), monthly repayments increase by \$73 to \$1,684. Over the term of the loan, the family will pay an additional \$8,401 in interest and an additional \$9,000 in principal. The total cost of the loan will therefore increase by \$17,401. Clearly then, development contributions may have a significant impact on housing affordability for lower income families.

As an aside, we note that the only way the above impacts could be mitigated would be to base development contributions on property value.

Unfortunately, however, the LGA 2002 explicitly precludes this by requiring that development contributions be attributed to units of demand purely on the basis of costs.¹ That is to say, since growth-related infrastructure costs for a single dwelling are independent of its value, the LGA 2002 (and standard cost recovery principles) dictates that development contributions should also be independent of value. Thus, even if councils wanted to address this issue, they simply are unable to.

Next is the impact of development contributions on the property rental market. This can be deduced along the same lines as those used to examine the likely effects on existing house prices. This stems from the fact that rental properties and existing houses are both substitutes for new houses. We therefore expect the policy to place some pressure on the rental market and possibly increase weekly rentals.

Unlike the prices for existing houses, however, which are expected to react immediately upon adoption of the policy, the effect on rental prices may take longer to transpire. This is because many rental properties have long-term leases and rental prices are thus somewhat 'sticky' in the short-term. Furthermore, as with the markets for new and existing houses, the market for rentals also faces constant pressure from higher population and higher incomes, which will likely eclipse any effects of development contributions.

Impact on relative cost of development

Another important issue is the impact that development contributions will have on the cost of development in Waitakere City. Overall, we anticipate development contributions to increase the cost of development in Waitakere by between 2.6% and 5.1% depending on the cost definition that is used.

Comparing Waitakere's development contributions with those of other Auckland councils, we find they are roughly on par when expressed in absolute terms, but are higher when expressed relative to the average cost to build. This stems from the fact that developments in Waitakere City have much lower average building costs than neighbouring areas. This, in turn, may reflect the fact that dwellings in Waitakere City have lower average floor areas than new dwellings in other areas of Auckland.

¹ Schedule 13 (2), Local Government Act 2002.

In any case, inter-council comparisons like this are fraught with danger. The total contributions made by developers will comprise both financial contributions and development contributions. Comparing only one of these components in isolation can be misleading. Unfortunately, time and budget constraints coupled with the site-specific nature of financial contributions precluded us taking a broader perspective in this comparison. One option may be to commission a joint study with all other Auckland councils to fully compare the development and financial contributions that each levies. This is likely to be the only way to get 'buy-in' from all the parties involved and truly understand inter-council differences in contribution policies.

Impact on revenue and debt-servicing costs

Next we examine the impact of development contributions on council revenue and debt-servicing costs.

According to council staff, development contributions will yield \$98 million over the remainder of the LTCCP period, which is 9 years in duration. To the extent that this additional revenue reduces council's need to raise debt, debt-servicing costs will fall. But how large will this fall in costs be? The answer depends on a host of factors, not least of which is the timing with which debt foregone would have been sequenced.

For illustrative purposes, we have used a borrowing sequence provided by WCC (which assumes all borrowing falls in the last quarter of each year) and assume an interest rate of 7.5% to calculate the impact on debt-servicing costs over the next 9 years.

The expected reductions in debt-servicing costs are quite small in the earlier years but grow rapidly as the cumulative loan total increases. Overall, under the assumptions listed above, development contributions are expected to reduce debt-servicing costs by \$33.78 million over the next 9 years.

Efficiency and equity implications

The last section of this report addresses the potential impact of development contributions on the efficient allocation of resources and on intergenerational equity.

Overall, we expect development contributions to improve economic efficiency. Our rationale is as follows. When land is developed, pressure is placed on local infrastructure systems. To relieve this pressure, local infrastructure capacity is increased. Because the resources used to extend this

capacity had valuable alternative uses, they have significant 'opportunity costs'. If developers don't pay a price for those resources that accurately reflect their opportunity cost, such resources will be allocated inefficiently. The absence of development contributions thus leads to allocative inefficiency by distorting the true value attached to scarce resources. When development contributions are introduced, each resource earns an amount equal to its opportunity cost and price distortions are removed. The end result is an improvement of economic efficiency.

Finally, we investigate intergenerational equity effects, which are a cornerstone of local government policy. In basic terms, intergenerational equity states that current ratepayers should not be subsidising activities that benefit future ratepayers, and vice versa.

Perhaps the best way to understand the impact of development contributions on intergenerational equity is to see how they influence the allocation of costs between current and future ratepayers. For these purposes, we can identify two types of cost: the initial capital expenditures and any associated debt-servicing costs, plus asset depreciation. Let's start with capital expenditures. At present, capital expenditures for growth-related infrastructure are funded from debt, while in future they will be funded by development contributions. Although this will preclude the need to raise debt in the future, only the associated changes in interest costs are relevant from the perspective of intergenerational equity. This follows from the fact that debt principal is not repaid by ratepayers. Instead, debt is managed within a sophisticated portfolio, and is continuously rolled-over from one year to the next.

The associated changes in debt-servicing (*i.e.* interest) costs are, however, a major source of improvements to intergenerational equity. Since development contributions will raise approximately \$98 million over the next 9 years, they reduce future borrowing requirements by \$98 million. Assuming an interest rate of 7.5% and that the debt foregone would have been sequenced as indicated before, this reduces debt-servicing costs by \$33.78 million over the next 9 years. These savings represent direct improvements to intergenerational equity.

Unfortunately, development contributions will not affect the allocation of depreciation costs. Indeed, the LGA 2002 does not offer such scope. We note in passing, however, that even if the LGA 2002 did permit reallocation of depreciation costs, it would be very difficult to implement. Indeed, each asset

would need to be uniquely linked to the demands of each ratepayer in order for depreciation to be allocated equitably.

In conclusion, we believe that development contributions will cause significant improvements to intergenerational equity. Debt-servicing costs, which are currently borne by ratepayers, will be eliminated. Although ratepayers will continue to bear associated depreciation costs, this is difficult to avoid. Thus, if well implemented, development contributions shall mark a significant improvement in the overall fairness of WCC's funding policy.

1. Introduction

The long-awaited Local Government Act 2002 (LGA 2002) has ushered in a raft of new council procedures, policies and controls. These new provisions are designed to improve transparency and accountability and to ensure that councils have regard for the current and future social, economic, cultural and environmental wellbeing of their communities.

One of the most significant new policies enacted by the LGA 2002 is the ability for councils to collect development contributions. Development contributions acknowledge that development places additional demands on infrastructure networks (such as roads and stormwater) and therefore give rise to increased capital expenditures. Rather than spreading these incremental infrastructure costs across all ratepayers, development contributions allow council to levy these costs directly on those who cause them to be incurred – property developers.²

Until now, some of the costs for increased capital expenditures associated with development have been collected by Waitakere City Council (WCC) as financial contributions under provisions of the Local Government Act 1974 (LGA 1974), with the remainder being financed by general ratepayers. However, from 1 July 2004, WCC will adopt a comprehensive development contributions policy aimed at recouping the majority of costs of development-associated capital expenditures from developers. The adoption of this policy represents a significant change to council's current funding mix, the exact socio-economic effects of which remain unknown.

In order to address this information gap and gain a better understanding of the likely effects of the policy, WCC issued a request for proposal to assess (and quantify where possible) the socio-economic effects of their development contributions policy. This report responds to that request and gives specific focus to the potential impacts on construction activity and the Waitakere City property market. Further analyses, which focus on other aspects of the policy, are expected to follow in due course.

² Development contributions are separate from financial contributions as provided for in the Resource Management Act 1991 (RMA), which allow councils to recover costs for remedying, mitigating or avoiding the adverse environmental effects of development.

The remainder of this document is organised as follows. Section two provides context to the impact on construction activity by characterising the size and importance of Waitakere City's construction industry. Section three then considers potential construction activity impacts. In section four, we discuss wider implications for the property market, including impacts on existing house prices, the price of undeveloped land, the affordability of housing for lower income families, and rental prices. Section five then examines the impact of development contributions on the relative cost of development. Section six briefly considers potential effects on council revenue and debt-servicing costs, while section seven addresses likely efficiency and equity implications.

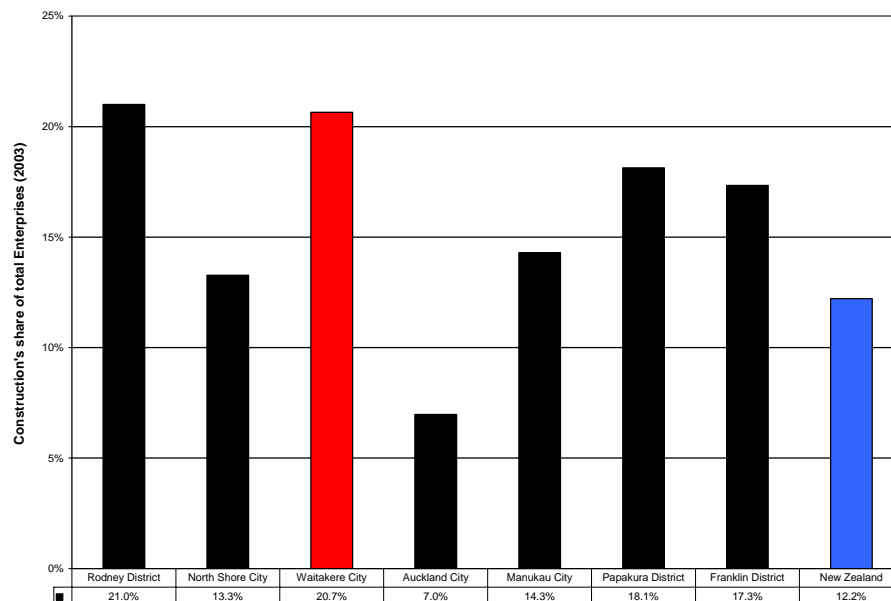
2. The Waitakere City construction industry

One of WCC's main concerns is the potential impact of development contributions on the city's construction industry. Before investigating these potential effects, this section first provides some context by characterising the size and relative importance of Waitakere City's construction industry.

2.1. Construction enterprises and employment

Two key measures of the size and importance of any industry is the number of businesses engaged and the number of full-time equivalents (FTEs) employed. Figure 1 and Figure 2 show the proportion of businesses and the proportion of employees engaged in the construction industry in each of Auckland's seven local authorities. The right-most bar in each graph represents the national average.

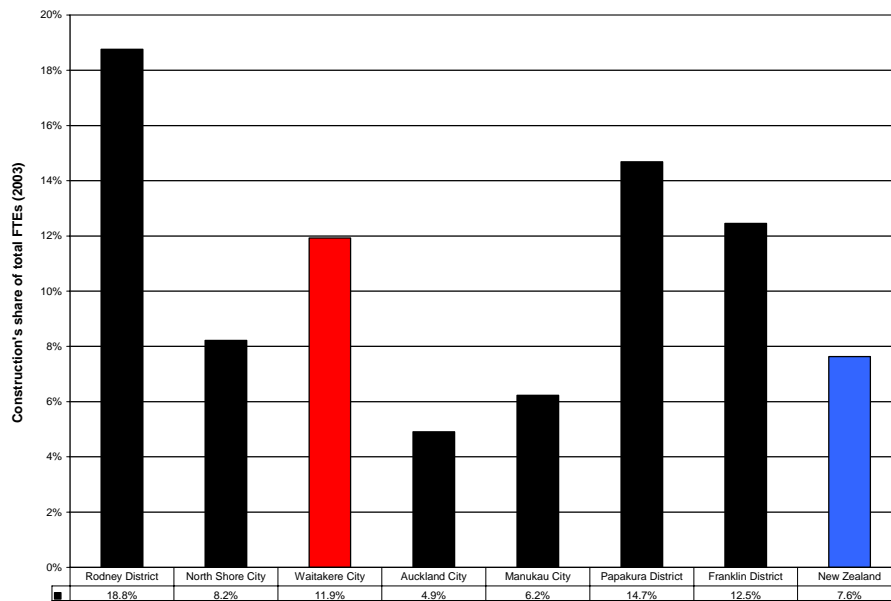
Figure 1: Construction's share of total enterprises in 2003



Source: Statistics New Zealand and Covec

According to Figure 1, over 20% of all registered enterprises in Waitakere City are in the construction industry. This is second only to Rodney District, where 21% of businesses are in the construction industry. Both are well above the national average of 12.2%. Auckland City has the lowest proportion of construction businesses, with only 7%.

Figure 2: Construction's share of total FTEs in 2003



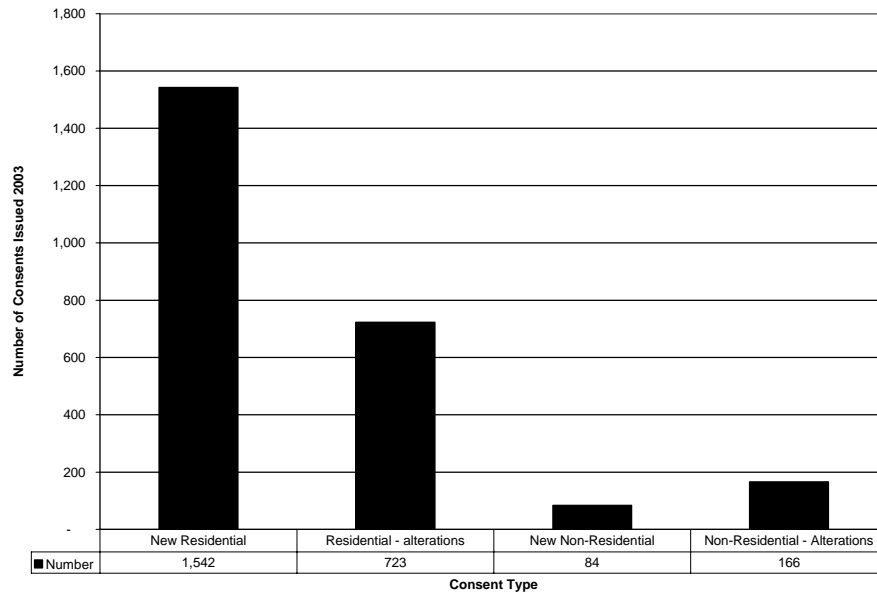
Source: Statistics New Zealand and Covec

According to Figure 2, nearly 12% of all FTEs in Waitakere City are employed in the construction industry. This is second (once again) only to Rodney District, where almost 19% of FTEs are in the construction industry. Both are well above the national average of 7.6%. Auckland City has the lowest proportion of construction FTEs, with only 4.9%.

2.2. Building consents issued in 2003

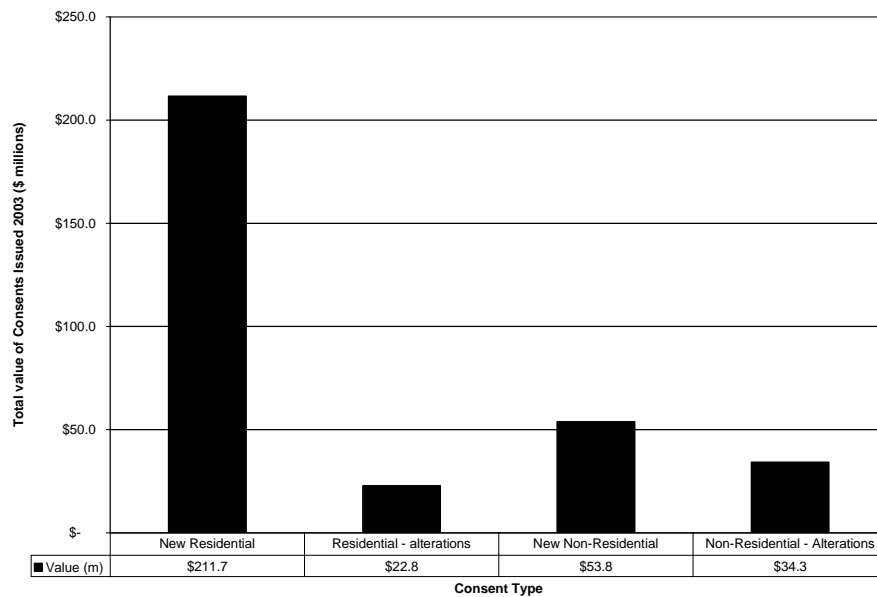
Building consents are another key indicator of the size and importance of the construction industry in any given area. In 2003, WCC issued 1,542 building consents for new residential dwellings, with a total construction value of over \$211m. In addition, WCC issued 723 consents for dwelling alterations (\$23m), 84 for new non-residential buildings (\$54m) and 166 for alterations to non-residential buildings (\$34m). WCC thus issued 2,515 building consents with a total value of \$322m. These statistics are summarised in Figure 3 and Figure 4.

Figure 3: Number of building consents issued in Waitakere City in 2003



Source: Statistics New Zealand and Covec

Figure 4: Value of building consents issued in Waitakere City in 2003 (\$ millions)

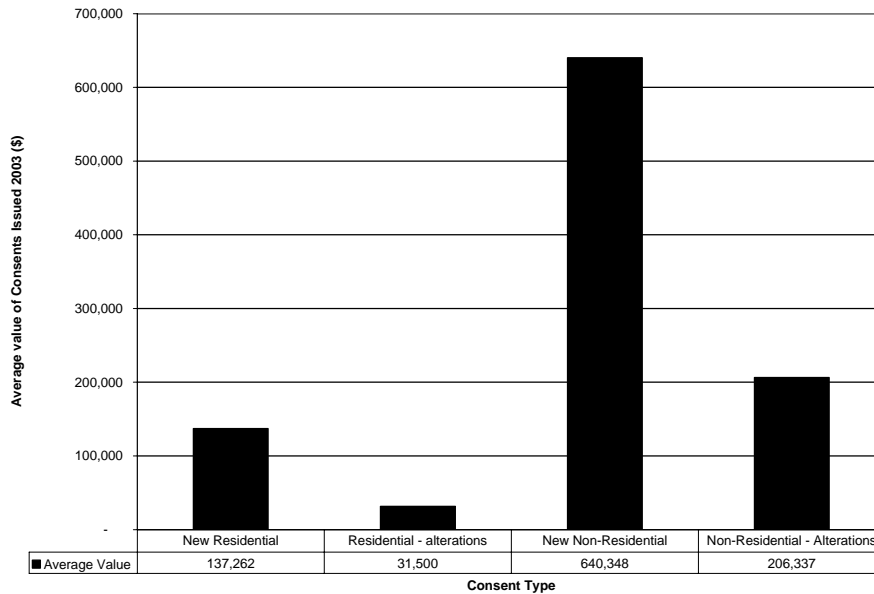


Source: Statistics New Zealand and Covec

Despite accounting for only 3% of consents issued, new non-residential buildings account for 17% of total consent value. Non-residential buildings therefore have much higher average building costs than residential buildings.

This is reflected in Figure 5, which presents the average value of consents by consent type.

Figure 5: Average value of building consents in Waitakere City in 2003



Source: Statistics New Zealand and Covec

2.3. Summary

The employment, business and consent statistics presented in this section illustrate the immense importance of construction to the Waitakere economy. However, some qualifying remarks are in order. First, although a high number of businesses and employees are registered in Waitakere, at any point in time, many of them may be working on projects outside the city. Similarly, not all of the consents granted within Waitakere City will be developed by Waitakere-based developers. A proportion may be developed by developers based from other areas of Auckland (or New Zealand).

However, if the number of Waitakere-based workers engaged outside the city roughly equals the number of outside workers engaged in Waitakere, the various statistics presented in this section provide an accurate picture of the size and importance of Waitakere City’s construction industry.

3. Potential effects on construction activity

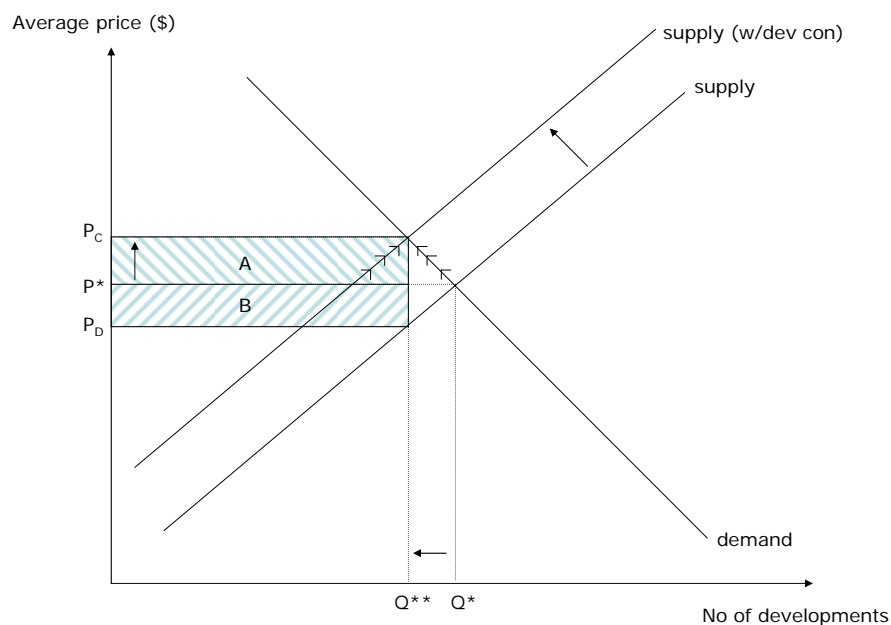
Having characterised the size and importance of Waitakere’s construction industry, we now seek to understand the impact that development contributions may have on it.

3.1. Predictions of economic theory

The first natural step in understanding likely effects on the construction industry is to consider the predictions made by economic theory. In particular, what does economic theory predict will happen to the equilibrium price and quantity of new developments? Who will bear the greatest burden of the associated costs – developers or property buyers?

Standing back momentarily, one can observe that development contributions have essentially the same effect as a per unit tax (although they are not a tax *per se*). That is to say, they are a lump sum levy on every unit of development. The standard effects of a per unit levy on market equilibrium are depicted in Figure 6, which shows a hypothetical market for development in Waitakere City.

Figure 6: Impact of per unit levy on price and quantity



Prior to the introduction of development contributions, the market is in equilibrium, with Q^* developments sold at an average price P^* . Following the

introduction of development contributions, the supply curve shifts vertically upward. This reflects the impact of development contributions on the cost of supply. Once supply shifts upward, demand exceeds supply at the current price, P^* . This excess demand causes inflationary pressure, which gradually pushes prices up. As prices increase, the gap between demand and supply diminishes until equilibrium is restored at the higher price of P_c and lower quantity, Q^{**} .

Thus, economic theory predicts that the imposition of development contributions will increase price and reduce the quantity sold. But who bears the greatest incidence of the levy? This can also be readily inferred from Figure 1 by looking at the changes in prices. After the introduction of development contributions, the property buyer's price increases from P^* to P_c and the developer's price falls from P^* to P_D . The difference between the two prices (*i.e.* $P_c - P_D$) is the per unit levy. The incidence of contributions is therefore shared as follows:

- Property buyers pay area A
- Developers pay area B

In this example, the burden of development contributions is fairly evenly shared. That is to say, the amount passed on to property buyers is roughly equal to the amount absorbed by developers. In practice, however, several other outcomes are possible. At one end of the spectrum, developers may absorb all the additional costs, while at the other end the entire cost may be passed on to property buyers. Readers familiar with economic theory will realise that the actual outcome depends on the relative elasticities of demand and supply.

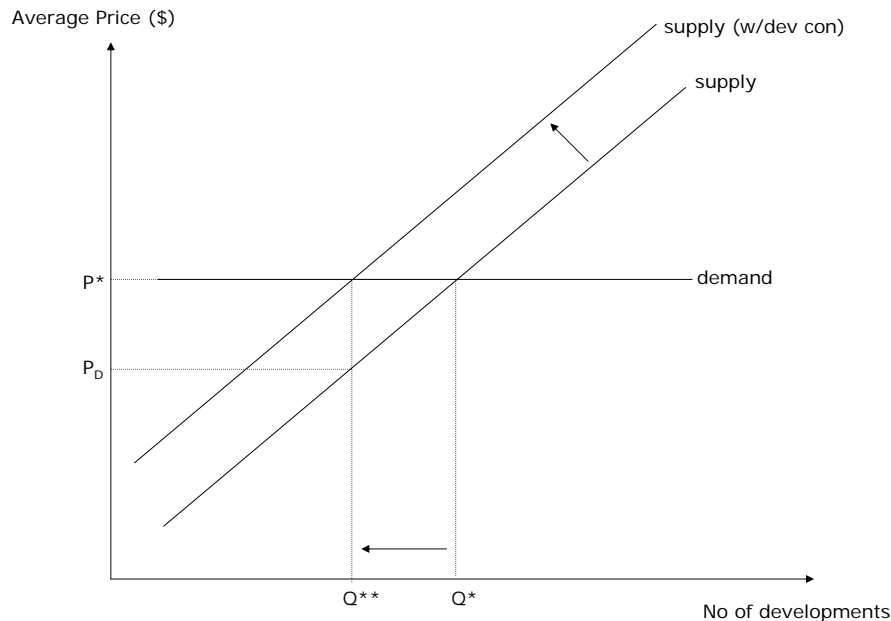
3.2. Price elasticities of demand and supply

Price elasticities measure the extent to which demand and supply react to changes in price. More formally, the price elasticity of demand equals the percentage change in quantity demanded resulting from a 1% change in price. Similarly, price elasticity of supply equals the percentage change in quantity supplied resulting from a 1% change in price.

$$\text{Price Elasticity} = \frac{\% \text{ change in quantity}}{\% \text{ change in price}}$$

If the elasticity of demand is higher than that of supply at the current equilibrium, developers will bear a greater incidence of the levy than consumers, and vice versa. At the extremes, when either demand or supply is perfectly elastic or inelastic, the entire burden is borne by only one party. These polar cases are depicted in Figure 7 and Figure 8.³

Figure 7: Impact of levy on price and quantity (perfectly elastic demand)



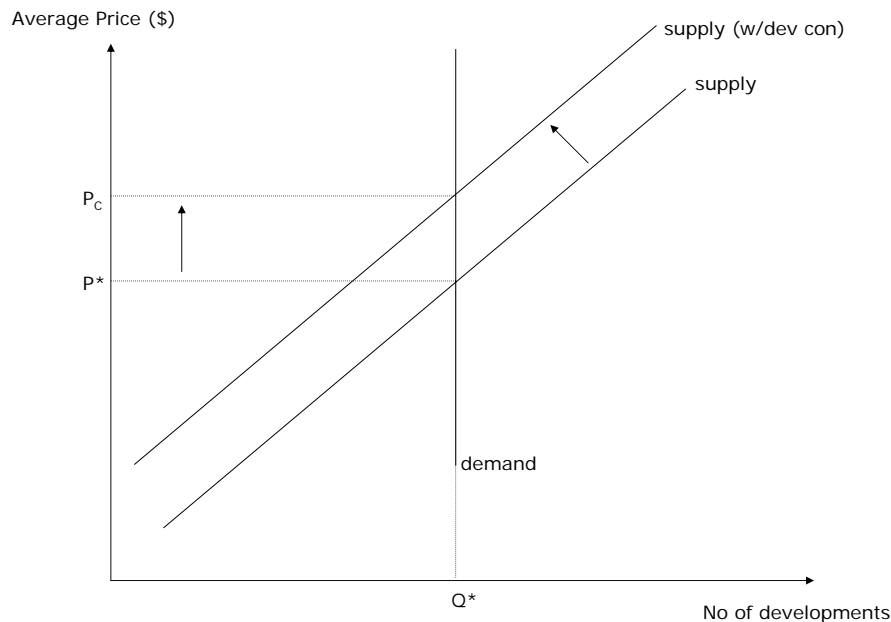
In Figure 7, demand for new developments is perfectly elastic. This means that even a small increase in price will be met by a 100% fall in demand. Accordingly, following imposition of development contributions, the market price paid by property buyers remains at P^* . The entire burden therefore falls on developers, with the price they receive falling by an amount equal to the levy. In this example, the imposition of the levy also results in a significant fall in equilibrium quantity (from Q^* to Q^{**}).

Figure 8 provides the opposite extreme, where demand is perfectly inelastic. This means that the same quantity is demanded irrespective of price; in other words, quantity demanded is completely price-insensitive. Following the imposition of development contributions, developers are able to increase the price paid by property buyers to completely offset the levy. The price received by developers therefore does not change and the entire burden of

³ We note that these outcomes could also be replicated by assuming perfectly inelastic supply and 'normal' demand in Figure 7, and perfectly elastic supply and 'normal' demand in Figure 8.

contributions is borne by property buyers. Unlike the outcome in Figure 7, the quantity demanded (sold) remains constant and only prices change as a result of development contributions.

Figure 8: Impact of levy on price and quantity (perfectly inelastic demand)



One can think of the outcomes presented in Figure 7 and Figure 8 as representing polar extremes along a continuum. Where then on this continuum will Waitakere City lie? What *will* be the effects of development contributions? As noted earlier, the answer depends solely on the relative elasticities of demand and supply, which we now discuss.

3.3. Developer interviews

The previous section showed how the effects of development contributions can be inferred from estimates of demand and supply price elasticities. However, in practice, such information is scarcely available. Indeed, comprehensive reviews of many literature sources failed to reveal any relevant information. An alternative approach was therefore required.

In the absence of reliable data, economists sometimes engage in primary research to better understand market demand and supply conditions. This approach often comprises telephone or face-to-face interviews, and usually yields sensible results. It also has the added attraction that any results

obtained are specific to the market under consideration and are not based entirely on theory.

Unfortunately, time and cost constraints precluded us from conducting demand-side surveys. We were, however, supplied with a list of Auckland property developers, with whom informal interviews could be conducted. Based on this list, we conducted telephone interviews with six Auckland property developers.⁴ Our key question was: “To what extent will you pass the additional costs of development contributions on and to what extent will you simply absorb them?”⁵ This question, while not a direct measure of demand and supply price elasticity, essentially provides the same information.

Of the six developers surveyed, five of them insisted they would pass on the full cost of any development contributions, while the sixth expected to absorb the majority of it. The two main reasons given by developers for fully passing on costs were that they had insufficient margin to absorb any cost increases and that market demand was strong enough to accept them.

We have some serious doubts about the first of these reasons. According to Statistics New Zealand’s Annual Enterprise Survey 2002, the New Zealand construction industry had a pre-tax operating surplus of over \$1.9 billion. This equates to a 74% return on equity and a 24% return on assets. While these figures may be lower for developers in Waitakere, we doubt their inability to absorb at least some of the additional cost. Thus, in our view it is more a question of *willingness* to absorb, rather than ability.

The second reason, in contrast, is highly plausible. In 1998, 3,271 houses were sold at an average price of nearly \$215,000. In 2003, 5,849 houses were sold at an average price of over \$274,000. That represents a 79% increase in the number of houses sold and a 28% increase in average price. Demand for houses in Waitakere is thus strong.

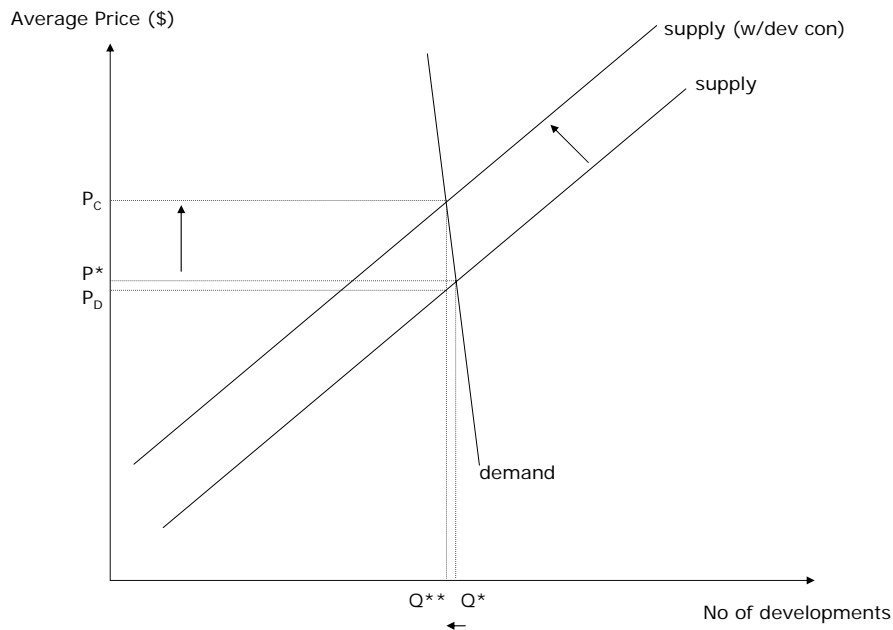
⁴ The questionnaire and a list of developers surveyed are provided in the Appendix.

⁵ One must be careful not to read too deeply into these responses - developers have a strong incentive to portray supply-side detriment from the policy, even though this may not be the case. However, since developers set prices for new developments, they do have initial control over the extent to which additional costs are passed on or absorbed.

3.4. Implications of developer interviews

The information gleaned from developer interviews provides a fairly good picture of the likely effects of development contributions. Returning to our earlier supply and demand diagrams, developer responses imply the following outcome.

Figure 9: Effects implied by developer interviews



In Figure 9, demand for developments is very inelastic (but not perfectly). Thus demand is relatively price-insensitive, at least in the short term. Following the imposition of development contributions, developers are able to increase the price (from P^* to P_C) and nearly offset the levy completely. The price received by developers therefore falls only slightly with nearly the entire burden borne by property buyers. Because demand is relatively price-insensitive, the higher price resulting from development contributions causes only a very small fall in demand (from Q^* to Q^{**}).

3.5. Conclusion

In our formal proposal for this project, we noted that if developers could pass on the majority of development contributions costs and property buyers were willing to accept them, the economic impact of the new policy would be negligible. This indeed seems to be the case, although some additional comments seem useful.

Buying a home is an emotional undertaking. Anecdotal evidence suggests that people choose a location to live and then, within that location, choose a house they can afford. Waitakere City has a strong niche as a 'clean green city' and is a highly desirable place to live.⁶ Development contributions won't change this.

Furthermore, the price rises expected to occur as a result of development contributions are not highly significant compared to recent price rises caused purely by market forces. For instance, house prices in Waitakere City have increased by 28% over the last 5 years and yet the number of houses sold increased by 79%. Given that development contributions are expected to increase prices by no more than 5%, we do not expect a strong adverse reaction to any price-related impacts of the policy.

Papakura District Council provides an interesting test case. They have been operating a development contributions policy since 1 July 2003 and discussions with their staff indicate virtually no demand-side response. In fact, over the 8-month period from 1 July 2003 to 29 February 2004, house prices rose 8% relative to the same period in the previous year but the number of houses sold increased by over 39%. Despite strong market conditions prevailing at that time, these figures suggest very little (or no) market reaction to development contributions in Papakura.

Moreover, If Papakura District council's policy had little or no effect on the property market at a time when it was the *only* council to operate one, it seems highly unlikely that a similar policy in Waitakere would cause different effects, especially when most other Auckland councils will adopt their own policies at the same time. If the property market is largely unaffected, then the underlying construction industry is also likely to be unaffected.

Although the results of developer interviews implied that development contributions may cause a temporary fall in the number of houses sold, this small initial effect will quickly be overshadowed by constantly higher demand stemming from higher population and higher incomes. Hence, we actually expect both the average price and the number of houses sold to increase in the coming year. If anything, development contributions may simply slow the rate at which houses within the city are sold, although this effect would be minor.

⁶ This characterization was gleaned from informal discussions with several people, including property developers and the staff of other councils. It also accords with our personal perceptions of Waitakere City.

4. Wider implications for the property market

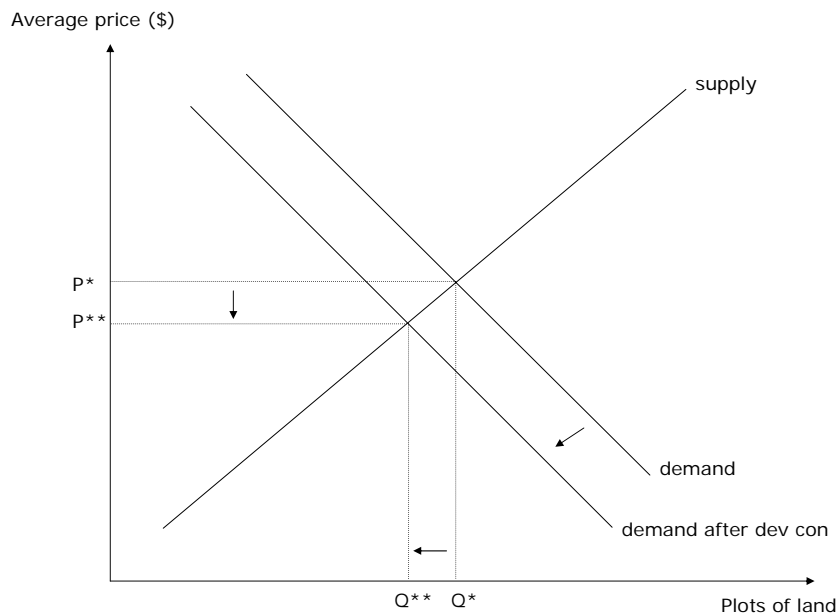
The previous section concentrated on the likely effects of development contributions on new housing developments. But what might happen to the market for undeveloped land and the market for existing houses? What about the affordability of housing for lower income families?

4.1. Impact on market for undeveloped land

Land is primarily an input to many productive processes, such as farming, mining and property development. Accordingly, demand for land is *derived* from demand for the goods and services that can be produced with it. Thus, as demand for any of land's final uses changes, so too does the demand for land.

Now, since our analysis predicted a small initial decrease in demand for new housing developments, this also implies a small initial reduction in demand for undeveloped land (holding constant the demand for land for other uses). This outcome is portrayed in Figure 10.

Figure 10: Impact on market for undeveloped land



In Figure 10, the market for undeveloped land is initially in equilibrium with Q^* plots of land sold at an average price of P^* . Following introduction of development contributions, demand for new development falls (at least initially). This, in turn, reduces demand for undeveloped land. As demand for

undeveloped land falls, so too does its price (from P^* to P^{**}) and equilibrium quantity (from Q^* to Q^{**}).

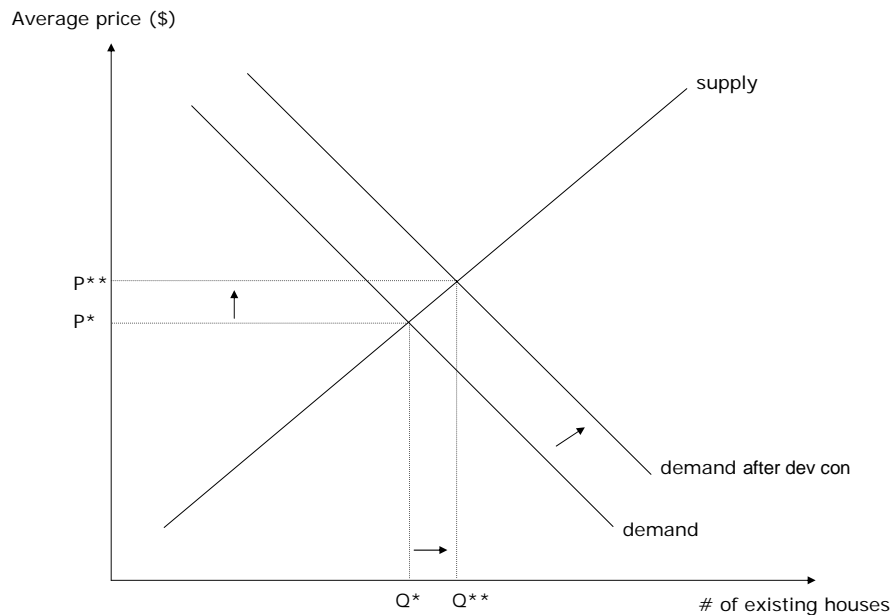
However, this effect will be relatively small and transient in nature. The impact of development contributions on the demand for new developments will quickly be overshadowed by ever-increasing demand caused by higher population and incomes. Any effect on the market for undeveloped land, therefore, will also be minor and short-lived.

4.2. Impact on market for existing houses

People seeking to purchase property in Waitakere City can either buy a newly-developed house or an existing one. That is to say, new developments are substitutes for existing houses, and vice versa.⁷

This substitutability means that as development contributions increase the price of new developments, buyers will switch to seeking an existing house. As they do so, demand for existing houses increases. As demand increases, the market price for existing houses increases too. This outcome is depicted in Figure 11.

Figure 11: Impact on market for existing houses



⁷ We acknowledge that new developments and existing houses are not perfect substitutes. However, for the average property buyer, the degree of substitutability is reasonably high.

In Figure 11, the market for existing houses is initially in equilibrium with Q^* houses sold at an average price of P^* . Once development contributions are introduced, the market price for new developments increases, which increases demand for existing houses. As demand for existing houses increases, the equilibrium price increases (from P^* to P^{**}) and so to does the equilibrium quantity (from Q^* to Q^{**}).

It is important to note that this characterisation concerns only first-round effects. Secondary effects stemming from first round effects will partially offset one another. That is to say, as the price of new developments increases due to development contributions, demand for (and hence the market price of) existing houses increases. However, as the price of existing houses increases, there will be small shift in demand back to new developments. These second- and subsequent-round effects will oscillate between the two markets until long-run equilibrium is finally restored. The likely overall impact will be increases in the prices of both new houses and existing ones.

4.3. Housing affordability for lower income families

This section seeks to assess the impact that development contributions may have on the affordability of housing for lower income families.

Earlier in this report we concluded that development contributions would increase the price of newly-developed houses (see section 3.5) and also the price of existing houses (see section 4.2). What implications do these have for the affordability of housing, particularly for lower income families?

First, since development contributions are essentially a flat levy, they will increase the price of all new houses by roughly the same amount.⁸ This implies that the lower a property's value, the higher the percentage increase in price caused by the introduction of development contributions. Development contributions will hence have a regressive impact on housing prices and, therefore, housing affordability.

This regressive nature suggests that development contributions will have a much tougher impact on housing affordability for lower income families, who typically seek lower value properties, than they will on families seeking higher value homes. Indeed, many lower income families are *only* just able to

⁸ This implicitly assumes that all developers will pass on the full cost of development contributions, which they probably will – see section 3.3.

afford property at current prices and any factor that increases house prices may render them unaffordable.

For example, if a family takes out a 20-year mortgage for \$200,000 and pays it off monthly, the monthly repayments at 7.5% interest are \$1,611. If the mortgage increases to \$209,000 (*i.e.* if house prices increase by the amount levied as development contributions), monthly repayments increase by \$73 to \$1,684. Over the term of the loan, the family will pay an additional \$8,401 in interest and an additional \$9,000 in principal. The total cost of the loan will therefore increase by \$17,401.

As another example, suppose a family takes out a 15-year mortgage for \$150,000 and pays it off monthly. If house prices all increase by roughly \$9,000, the monthly repayments at 7.5% interest will increase from \$1,391 to \$1,474. Over the term of the loan, the family will pay an additional in \$6,017 interest and an additional \$9,000 in principal. The total cost of the loan will increase by \$15,017.

Clearly then, development contributions may have a significant impact on housing affordability for lower income families. In fact, in the second example, the increase in monthly interest costs (of \$83) equates to around 6% of monthly disposable income for families in the poorest areas of Waitakere City.⁹ It follows that the regressive nature of the policy may have social implications for lower-socio economic sectors of the city.

As an aside, we note that the only way the above impacts could be mitigated would be to base development contributions on property value. Unfortunately, however, the LGA 2002 explicitly precludes this by requiring development contributions to be attributed to units of demand purely on the basis of costs.¹⁰ That is to say, since growth-related infrastructure costs for a single dwelling are independent of its value, the LGA 2002 (and standard cost recovery principles) dictates that development contributions should also be independent of value. Thus, even if councils wanted to address this issue, they simply are unable to.

⁹ According to census 2001, families in the poorest area of Waitakere City had annual disposable incomes of only \$16,195. Allowing this to grow at 2% per annum, this equates to an annual disposable income of only \$17,186 in 2004.

¹⁰ Schedule 13 (2), Local Government Act 2002.

Finally, we also note that many lower income families may seek to purchase an existing home, rather than a new one. In either case, the examples above will hold (at least to some degree), since the prices of both new and existing homes are expected to increase as a result of the policy (see section 4.2).

4.4. Impact on rental property market

The impact of development contributions on the property rental market can be deduced along the same lines as those used in section 4.2 to examine the likely effects on existing house prices. This duality stems from the fact that rental properties and existing houses are both substitutes for new houses. Rather than repeating the logic from section 4.2, suffice to say that we expect the policy to place some pressure on the rental market and therefore possibly increase weekly rentals.

Unlike the prices for existing houses, however, which are expected to react immediately upon adoption of the policy, the effect on rental prices may take longer to transpire. This is because many rentals have long-term leases and rental prices are therefore 'sticky' in the short term. Moreover, as with the markets for new and existing houses, the market for rentals also faces constant pressure from higher population and higher incomes. These market forces are likely to eclipse any price effects associated with development contributions.

5. Impact on relative cost of development

Another important issue is the impact that development contributions will have on the cost of development in Waitakere relative to other areas of greater Auckland. This can be thought about in a number of ways.

First, we can compare average contributions under the current and new policies to see how development levies are likely to change within the city. Second, we can see how the average level of development contributions in Waitakere compares with those of other territorial authorities in absolute terms. Finally, using building consent data for each territorial authority, we can compare Waitakere's development contributions with those of other councils in relative terms. *i.e.* we can see how development contributions across the councils compare when expressed as a proportion of the average value of consents.

5.1. Changes within Waitakere City

The cost of development in any given area comprises three parts: the cost of land, the cost of building on the land, and the cost of development and/or financial contribution levies.

From developer interviews, we deduced that the average cost of a piece of land suitable for a single dwelling in Waitakere is currently around \$130,000. Next, from building consent data, we found that the average cost to develop a single new dwelling in Waitakere is just over \$137,000.¹¹ The final piece of the puzzle is the average cost of development or financial contributions. While estimates of the former are readily available in WCC's Long-Term Council and Community Plan (LTCCP), estimates of the latter unfortunately are not.

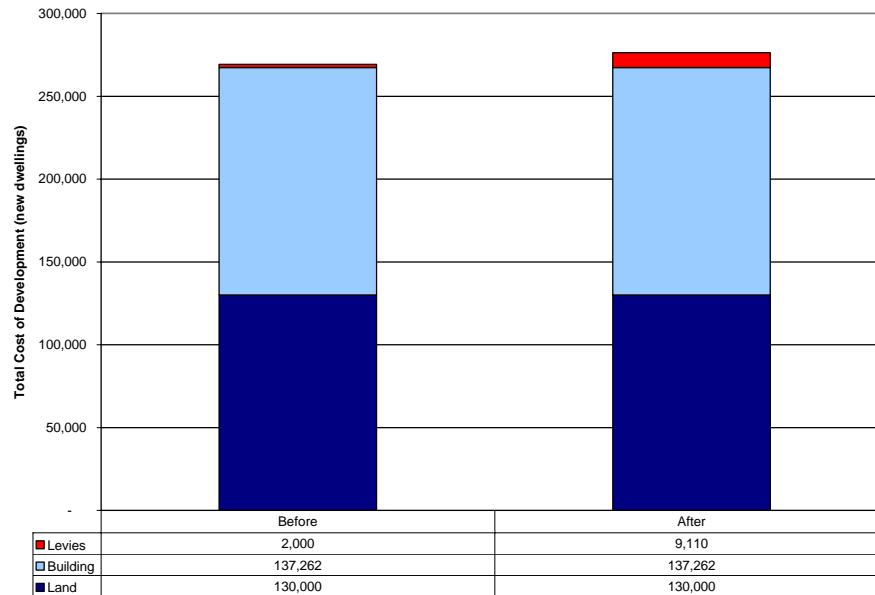
Indeed, we have gone to great lengths to understand the average financial contributions paid by developers but this was made very difficult by the site-specific nature of the policy. Following discussions with several members of council staff, however, we have estimated the average financial contribution to be approximately \$2,000.

Figure 12 graphs our estimates of the three cost components before and after the imposition of development contributions. The total cost of development prior to introduction is just over \$269,000. When development contributions are introduced, this will increase to just over \$276,000, an increase of 2.6%. If

¹¹ This cost covers all the materials and labour required to construct a house.

the cost of development is defined to exclude land purchases, the cost of development increases from just over \$139,000 to around \$146,000. This equates to an increase of 5.1%.

Figure 12: Cost of developing a new dwelling before and after the policy (\$)



Source: Covec

Thus development contributions are expected to increase the cost of development in Waitakere by between 2.6% and 5.1% depending on the cost definition that is used. We note in passing though that these cost increases are rather immaterial from the developer's perspective since any increased costs will most likely be passed straight on to property buyers.

5.2. Auckland councils comparison (absolute terms)

Next we see how development contributions in Waitakere City compare with those levied (or about to be levied) by other councils in the Auckland region. First, though, it is important to note that inter-council comparisons like this are fraught with danger. The total contributions made by developers in the future will comprise both financial contributions and development contributions. Comparing only one of these components in isolation can be misleading.

Unfortunately, time and budget constraints coupled with the site-specific nature of financial contributions precluded us taking a broader perspective in this comparison. Indeed, it took considerable time and effort to obtain

approximate financial contributions figures for Waitakere City, despite being the client for this project. Other councils were understandably reticent to engage in the same level of effort with little or no perceived reward. The comparisons contained in this section must therefore be interpreted with a degree of caution.

At present, only Papakura District council has an operational policy, with Waitakere City, Manukau City, North Shore City and Franklin District planning to start on 1 July this year. This provides 4 councils against which to compare the Waitakere situation.

Of the five councils that will operate a development contributions policy this year, North Shore council is the most expensive, with an average of \$10,500.¹² Next is Waitakere with an average of \$9,110, followed by Franklin (\$7,895), Papakura (\$7,757) and Manukau (\$6,591). In this context, Waitakere's development contribution appears to be near the upper end of the scale, but one should be cautious not to read too deeply into this comparison. It does not encompass the full suite of contributions levied on developers – *i.e.* financial contributions *and* development contributions – and thus does not accurately portray the true picture.

5.3. Auckland councils comparison (relative terms)

A slightly more informative inter-council comparison, albeit one subject to the caveats previously noted, places each councils' development contributions in context of the average cost to build (which is sourced directly from building consent data).

Overall, Waitakere city's development contributions equate to 6.6% of the average cost to build and therefore are the most expensive in relative terms. Next is North Shore City, whose contributions are just over 5% of the average cost to build. Development contributions in the remaining three Auckland councils are roughly the same in relative terms, accounting for between 4%-5% of the average cost to build.

The reason Waitakere's contributions seem so expensive in relative terms stems from the fact that the average cost to build in Waitakere is so much

¹² North Shore's policy is arguably also the most complex. It contains over 200 catchments and has contributions ranging from \$8,000 to \$33,000 per household equivalent unit.

lower than other areas of Auckland.¹³ For example, the average cost to build in Waitakere is only around \$137,000, compared to nearly \$200,000 in Rodney and North Shore. This, in turn, may reflect the fact that dwellings in Waitakere City have smaller average floor areas than dwellings in Rodney District and North Shore City. For instance, in 2002, new dwellings in Waitakere City had an average floor size of 162 m², whereas new dwellings in Rodney District and North Shore city had average floor sizes of 207m² and 188m², respectively.

5.4. Conclusion

Waitakere's proposed development contributions are roughly on par with those of neighbouring councils when expressed in absolute terms but are higher when expressed relative to the average cost to build. The latter result stems from the fact that developments in Waitakere City have much lower average building costs than neighbouring areas. This, in turn, may be due to the fact that dwellings in Waitakere City have lower average floor areas than new dwellings in other areas of Auckland.

In any case, these comparisons do not reflect the full picture since they exclude financial contributions. We have spent significant time and effort trying to incorporate each council's financial contributions in the comparison, but other councils have neither the time nor the incentive to undertake such lengthy investigative work on our behalf.

One option may be to commission a joint study with all other Auckland councils to fully compare the development and financial contributions that each levies. This is likely to be the only way to get 'buy-in' from all the parties involved and truly understand inter-council differences in contribution policies.

¹³ The term average cost to build used here is synonymous with that used in building consent data. It represents the total cost of building a dwelling, including the cost of materials and the cost of labour etc. It does not include any council levies or fees.

6. Impact on revenue and debt-servicing costs

This section seeks to quantify the impact development contributions will have on council's total revenue and the potential downstream effect on council's debt-servicing costs.

6.1. Impact on revenue

Development contributions will have a significant impact on council revenue. In fact, according to WCC's LTCCP and discussions with council staff, development contributions will raise \$98 million over the next 9 years. In addition, council will continue to raise financial contributions to help remedy, mitigate and avoid the adverse environmental effects of development.

6.2. Impact on debt-servicing costs

As noted above, development contributions will have a profound effect on council's revenue. To the extent that this additional revenue reduces council's need to raise debt, debt-servicing costs will fall. But how large will this fall in costs be? The answer depends on a host of factors, not least of which is the timing with which debt foregone would have been sequenced.

For illustrative purposes, we have used a borrowing sequence provided by WCC (which assumes all borrowing falls in the last quarter of each year) and assume an interest rate of 7.5% to calculate the impact on debt-servicing costs over the next 9 years. The results are presented in Table 1.

Table 1: Reduced debt-servicing costs due to development contributions

Years	Loan Amount (\$m)	Annual Interest (\$m)
1	13.76	0.26
2	27.51	1.29
3	39.77	2.29
4	52.21	3.22
5	60.30	4.07
6	68.17	4.67
7	77.08	5.28
8	87.09	5.97
9	98.05	6.74
Total Interest		33.78

Source: WCC and Covec

Table 1 shows that the expected reductions in debt-servicing costs are quite small in the earlier years but grow rapidly as the cumulative loan total increases. Overall, under the assumptions listed above, development

contributions are expected to reduce debt-servicing costs by \$33.78 million over the next 9 years.

How council chooses to allocate these savings depends on its future funding and expenditure policies, a detailed discussion of which is beyond the scope of this paper.

7. Equity and efficiency implications

This section investigates possible equity and efficiency implications of the new policy. In particular, it discusses the impact on the efficient allocation of resources and the impact on intergenerational equity.

7.1. Impact on efficient resource allocation

At present, developers pay financial contributions to help remedy, mitigate or avoid any adverse environmental effects associated with development.

Although some portion of these contributions may go towards local infrastructure costs, they fall well short of true growth-related infrastructure costs.

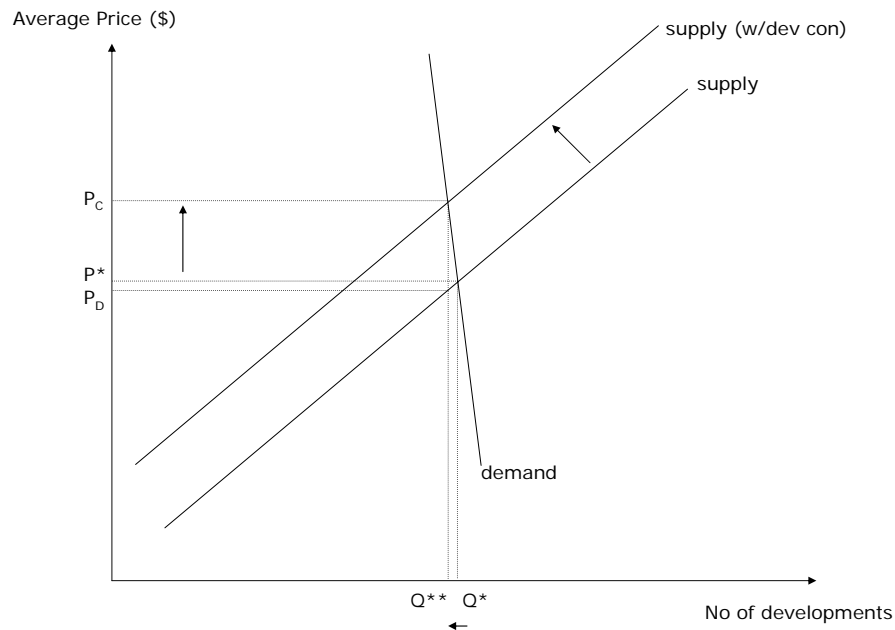
When producers fail to account for the true costs of their productive activities, or are not forced to do so, they impose costs on other members of society. In other words, parties *external* to the productive activity bear costs for which they receive no direct benefits. Economists refer to this as productive externality, which is one of the most common forms of market failure.

Market failure occurs when the level of production dictated by pure market forces differs from that which is socially optimal. Such outcomes are economically inefficient and provide scope for 'correction' via (local or central) government intervention. Figure 13 helps to explain this.

In the absence of development contributions, the market produces Q^* developments at an average cost of P^* . This is the privately-optimal level of development. It is the level deemed optimal by the parties directly involved – developers and property buyers – when external costs are ignored.

When development contributions are imposed, developers are forced to 'internalise' the additional costs previously borne by society. The supply curve now reflects both the direct costs of development plus all the external costs of growth-related infrastructure. The new equilibrium quantity, Q^{**} , is socially optimal since all the costs associated with the activity are fully accounted for.

The fact that the socially-optimal level of development (Q^{**}) is lower than the private optimum (Q^*) implies that, in the absence of development contributions, the market overestimates the 'correct' level of development. That is to say, the number of developments produced in the absence of development contributions is higher than the level that is truly 'best for society'.

Figure 13: Correction of inefficient resource allocation

Because production levels are too high, too many scarce resources (such as land, labour, capital etc) are allocated towards this activity. This over-allocation causes under-allocations of scarce resources to other activities and thus results in allocative inefficiency. When local government intervenes by imposing development contributions, they resolve this problem and improve allocative efficiency. Hence, well-designed and correctly-implemented development contributions policies improve economic efficiency.

Since this is a pretty tricky concept to understand, it may help to think about it from a slightly different angle. When land is developed, pressure is placed on local infrastructure systems. To relieve this pressure, local infrastructure capacity is increased. Because the resources used to extend this capacity had valuable alternative uses, they have a significant 'opportunity cost'. If this opportunity cost is not priced in the market (in other words, if developers don't pay a price for those resources that accurately reflects their value in alternative uses) such resources will be allocated inefficiently. The absence of development contributions thus leads to allocative inefficiency by distorting the true value attached to scarce resources. When development contributions are introduced, each resource earns an amount equal to its opportunity cost and price distortions are removed. The end result is an improvement of economic efficiency.

Of course, the extent to which development contributions do in fact improve economic efficiency depends largely on the degree to which they accurately reflect the underlying costs of growth-related infrastructure. Unfortunately, however, discussion of this topic is beyond the current scope but may constitute an interesting topic for future research.

7.2. Impact on intergenerational equity

Intergenerational equity is a cornerstone of local government policy. It concerns the fairness of council policies not only on current ratepayers, but also ratepayers in the future. In basic terms, intergenerational equity states that current ratepayers should not be subsidising activities that benefit future ratepayers, and vice versa.¹⁴

For most annual council activities, such as noise control and rubbish collection, intergenerational equity is not a concern. This is because the ratepayers that fund these activities are also the ratepayers that benefit from them. However, capital expenditures on infrastructure are a different story. Because the assets underlying infrastructure investment have long useful lives, they confer significant benefits to future ratepayers. This implies that future ratepayers should bear a significant proportion of their costs, but often they do not.

Unfortunately, capital expenditures on growth-related infrastructure are no exception. At present, the majority of their costs are borne by current ratepayers for the sole benefit of future ratepayers. Clearly, this has implications for intergenerational equity. But will development contributions help to resolve this? In part, yes.

Perhaps the best way to understand the impact of development contributions on intergenerational equity is to see how they influence the allocation of costs between current and future ratepayers. For these purposes, we can identify two types of cost: the initial capital expenditures and any associated debt-servicing costs, plus asset depreciation. Let's start with capital expenditures.

¹⁴ This notion is reflected in §101(3) of the LGA 2002, which states: "The funding needs of the local authority must be met from those sources that the local authority determines to be appropriate, following consideration of ... the period in or over which those benefits are expected to occur".

At present, capital expenditures for growth-related infrastructure are funded from debt, while in future they will be funded by development contributions. Although this change will preclude the need to raise debt in the future, only the associated changes in interest costs are relevant from the perspective of intergenerational equity. This follows from the fact that debt principal is not currently repaid by ratepayers. Instead, it is managed within a sophisticated portfolio, and is continuously rolled-over from one year to the next. Thus, even though development contributions will eliminate such borrowing in the future, the associated reduction in principal has no bearing on intergenerational equity.

The associated changes in interest costs are, however, a major source of improvements to intergenerational equity. Recall from section 6.1 that since development contributions will raise approximately \$98 million over the next 9 years, they reduce future borrowing requirements by \$98 million. Assuming an interest rate of 7.5% and that the debt foregone would have been sequenced as stated earlier, this reduces debt-servicing costs by \$33.78 million over the next 9 years. These savings represent direct improvements to intergenerational equity.

Unfortunately, development contributions will not affect the allocation of depreciation costs. Indeed, the LGA 2002 does not offer such scope. We note in passing, however, that even if the LGA 2002 did permit reallocation of depreciation costs, it would be very difficult to implement. Indeed, each asset would need to be uniquely linked to the demands of each ratepayer in order for depreciation to be allocated equitably. It should be obvious that the costs of such a regime would far outweigh its benefits.

In conclusion, we believe that development contributions will cause significant improvements to intergenerational equity. Debt-servicing costs, which are currently borne by current ratepayers, will be eliminated. Although ratepayers will continue to bear associated depreciation costs, this is difficult to avoid. Thus, if well implemented, development contributions shall mark a significant improvement in the overall fairness of council's funding policy.

Appendix 1: Developer questionnaire

Following are the questions comprising our developer questionnaire along with a summary of developer responses.

1. Do you build solely in Waitakere? If no, what percentage of your developments are in Waitakere and what percentage are in the rest of Auckland?

This question aimed to provide context by identifying the overall importance of Waitakere as a development location for the participants in the survey.

Overall, one developer built solely in Waitakere with the rest covering most of the Auckland region. Of the five who built in several areas, Waitakere accounted for between 50%-80% of their total developments.

2. Are you aware of WCC's new development contributions policy?

Half of the respondents were aware of the policy and the other half were not. Interestingly, the details of the 3 who knew about the policy were provided by council because they had been vocal lobbyists in recent times. Even still, they were unfamiliar with the finer details of the policy or their likely impacts.

In general, it seems that developers and builders are largely *unaware* of the impending policy and its implications for the development industry.

3. How do these fees compare with what you currently pay as financial contributions?

This question drew varied responses. Two developers had no idea how much they were currently paying, with the remainder reporting a range of estimates. One developer stated they paid about \$2,000-\$3,000 per lot but were occasionally charged \$5,000. Another noted they paid around \$3,000 for stormwater. The other two indicated average financial contributions of around \$1,500-\$2,000 but were unaware of what they covered.

4. Do you think the new fees are fair?

Since most developers didn't know much about the new policy, we first provided brief details before asking this question. This allowed respondents to make more informed and meaningful responses.

Having provided background information, the six respondents unanimously denounced the policy and claimed it unfair. This is hardly surprising.

Two made additional comments. The first believed that the word 'development' was misconstrued in the legislation (LGA 2002) and the second thought that some elements of the policy were inequitable. In particular, they believed that developers were paying for some costs that were not growth-related.

Overall, it seems developers agree with the basic intentions of the policy but are unhappy with the magnitude of contributions generated by it.

5. Do you think this will affect your decision to build in WCC versus other areas of Auckland? To what extent is land in other areas of Auckland substitutable for land in Waitakere?

Many of the respondents initially noted they *would* change their decision on where to develop but changed their mind when they discovered that most Auckland councils would be adopting a similar policy this year.

They noted that land in Waitakere was generally substitutable from a developers' perspectives, but not from the demand perspective. This seems to corroborate our finding that Waitakere City has a strong niche and that people seeking to live in Waitakere do not wish to live in other areas of Auckland.

One respondent claimed there was a shortage of land available for development (not just in Waitakere but the entire Auckland region) and that this was the key constraint, not council policies.

6. Do you expect to pass much of these additional costs on? If so, what %?

This was the most important question for the purposes of our report. As noted therein, five plan to pass on the full costs and the sixth expects to absorb them. The reasons cited for passing on costs were insufficient margin to absorb and that demand was strong enough to cover any associated price increases.

7. Would you build more/less or the same in WCC in the absence of development contributions?

Most respondents seemed to think they would build the same amount regardless of the presence or absence of development contributions. This probably reflects the fact that any associated costs would be passed on anyway.

8. Are there any other major issues (aside from development contributions) that will affect future development in Waitakere?

This question elicited a range of responses. One developer (who was rather vocal) described WCC as 'developer unfriendly'. This sentiment was not shared by the other respondents. However, three respondents noted that red tape (such as consent processing) was a problem. Yet another developer claimed that high staff turnover within the council (and the subsequent loss of continuity) made it difficult to liaise with council and address any issues. Finally, one developer believed that the rapid growth in land values was squeezing margins and making development less profitable.

9. Finally, what do you estimate to be the average price paid for land for a single dwelling?

This question was asked so that we could build up a picture of the total cost to build in Waitakere. The average was reported at around \$130,000.

Appendix 2: Developers surveyed

Following are details of the six developers surveyed for this project. We note that these represent only a small percentage of the total number of developers contacted. Unfortunately, many were too busy to participate or were completely unaware of the topic under discussion.

1. Shane Helms
Golden Homes – West Auckland
30 Summerland Drive
Waitakere City
(09) 478 0440
2. Grant Brebner
Neil Construction Group
PO Box 6641
Wellesley Street
(09) 309 7838
3. Andrew Ellis
GJ Gardner Homes
291 Lincoln Road
Henderson
(09) 835 1671
4. Brent Mitchell
Mitchell Homes
40 Springs Road
East Tamaki
(09) 274 1152
5. Brian Bellard
Bellard Consultants
PO Box 21252
Henderson
(09) 837 2011
6. Susan Mudge
(027) 483 685

Appendix 3: Council staff interviewed

Following are the names of council staff members interviewed during the course of this project.

Auckland City Council

1. Catherine Temple

Franklin District Council

1. Ian Carstens

Manukau City Council

1. Ken Coulam
2. Rod Sara

North Shore City Council

1. Ian Wallace
2. Graeme Neilson

Papakura District Council

1. David Cox

Rodney District Council

1. Rachel Helm

Waitakere City Council

1. Airya Randeni
2. Bob Preston
3. Bruce Wilkin
4. Matt Heale
5. Ron Jackson