



Department of
Building and Housing
Te Tari Kaupapa Whare

Identification and analysis of building consent, inspection and approval costs

October 2008



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1. Introduction

The Building Act 2004 provides a framework to support and promote safe, high quality developments that will satisfy the expectations of consumers, government and the building industry. Since the Act was passed in 2004, concerns have been raised by territorial authorities and consumers (eg, builders, property developers and building owners) about increased costs for building projects. Cost increases are often attributed, to a varying degree, to the implementation of the Act. The Department of Building and Housing (the Department) wishes to clarify, as far as practicable, whether and how implementation of the Act has led to increased costs and, if so, to identify the significance of the impact on the overall cost of building projects.

This report focuses on changes in building control costs and building costs in the period from 2000/01 to 2006/07, and the contribution of the Building Act to those changes. The report does not consider changes to land prices as they do not directly influence the total costs of construction. The effect of land prices on total project costs is dealt with in housing affordability studies such as the *Final Report of the House Prices Unit: House Price Increases and Housing in New Zealand – March 2008* prepared for the Department of Prime Minister and Cabinet (DPMC).

Data for this report was sourced from:

- councils by way of questionnaire and by further direct information requests and discussions with council building control departments
- schedules of fees and charges published on council websites
- discussions with participants in the building industry
- construction cost tables developed by independent industry consultants
- Statistics New Zealand.

Fifty five councils (refer to Appendix 1 for the list of Councils) returned the questionnaire (refer to Appendix 2 for a copy of the questionnaire). All councils were also asked to provide fee schedules covering the period from 2000/01 to 2006/07, and 43 provided schedules covering at least some of this period. Of the ten largest cities, only Christchurch and Manukau Cities did not complete the questionnaire.

A selected group of councils were also provided with details of two sample non-residential buildings and asked to provide estimates of processing, inspection and approval costs under their fee structures for each of the years 2004/05 and 2006/07.

In undertaking the analysis of costs, we note that:

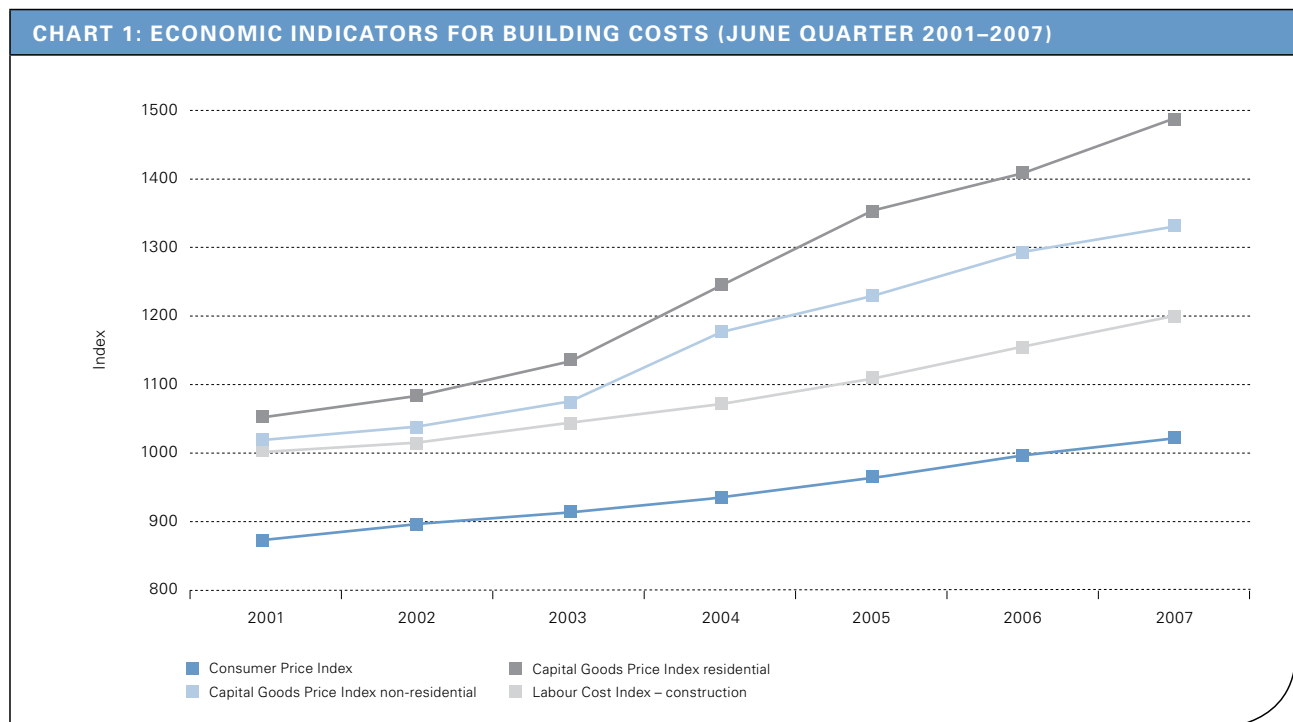
- there is a wide range of policies, charging methods and fee calculations across councils that limits the comparability of building consent fees and other fees and charges
- the lack of comparability prevents simple analysis and requires significant additional research to ensure valid comparison
- there is a lack of data for 2000/01
- judgement has been applied in many cases to interpret the application of costs obtained from council fee schedules.

2. Economic Environment

Increases in building consent fees, the number and cost of inspections and approval costs must be considered within the context of the overall increases in prices that occurred during the period from 2001 to 2007. Several economic indicators are available that illustrate the overall changes in building and construction costs. These are:

- Consumer Price Index (CPI) – the general indicator for inflation within the economy.
- Capital Goods Price Indices (CGPI), which measures the movements in the average levels of prices for both residential building (dwellings and outbuildings, hostels, boarding houses) and non-residential building (shops and offices, warehouses, factories, farm buildings, and other non-residential buildings).
- Labour Cost Index (LCI) – wage and all labour costs for construction labour.

Chart 1 below shows the increase in these indices over the period 2001 to 2007 and the general increase in building costs compared with inflation.



CPI inflation during this period is 16.4% and is not incorporated into the other indices. The rate of changes is important rather than the actual index number.

The total increase of the Labour Cost Index for construction over the period is 20%. It should be noted that LCI is only a unit price of time and does not represent the total cost of labour including overheads or changes in contractor and subcontractor charges. It also does not take into account the quantity of labour provided.

The total increase in the Capital Goods Price Index over the period is 41% for residential building and 32% for non-residential building. These indices are based on the general level of purchase costs of fixed capital assets and are specifically adjusted to exclude the price effects of changes to quality. The steady increase of the CGP index has been linked to increased costs of construction inputs (especially structural steel in the case of non-residential buildings) and increases in subcontractor charges, although industry sources cited increased council fees and charges as an important contributor to increasing costs in 2005.

The 2001–2007 period has been marked by increases in residential and non-residential building costs, which are more than double the increases in CPI inflation and all sectors' capital goods prices. Construction labour cost indices show an increase in construction wages of 2.9% more than the increase in wages for all sectors. Contractor charges, which are not included in the construction LCI, have also been noted as a driver of construction price increases.

3. Building consent fees

Building control costs are funded by councils from building consent fees and rates in proportions set by each council in its revenue and financing policy. The proportion of costs that councils sought to recover from fees ranged from 100% down to 30% in 2004/05, and 100% down to 45% in 2006/07. Table 1 shows the movement in funding percentages between 2004/05 and 2006/07 for the 48 councils that provided funding details for both years.

TABLE 1: PERCENTAGE OF BUILDING CONTROL COSTS FUNDED FROM FEES AND CHARGES		
% funded from fees	Number of councils	
	2004/05	2006/07
90–100%	29	31
70–89%	6	10
50–69%	12	7
0–49%	2	1
Lowest	30%	45%

Fifteen of these councils funded a higher proportion of building costs from fees and charges in 2006/07 than in 2004/05, while seven funded a lower proportion from fees and charges in 2006/07 than in 2004/05.

Having decided their theoretical funding split, councils then set their building consent fees at a level they believe will meet their funding objectives. In times of large fluctuations in building consent application numbers, the level of funding received from consent fees will greatly exceed or fall short of the desired level. This is evident in a number of responses to the council questionnaire, where a comparison of stated building consent revenue and building control costs fluctuates widely from the stated funding percentages.

Consent fees consist of a number of elements. These are:

- project information memorandum¹ (PIM) fees, which cover processing and issuing a PIM in respect of the building work
- application fees, sometimes called lodgement fees, which may cover an initial vetting of the application to ensure all required documents are present, and lodging the application into the council’s system
- administration fees, which may cover activities such as scanning, photocopying etc.
- assessment fees, which cover the technical assessment of the application for compliance against the Building Code, and issuing the consent
- inspection fees, which cover the required inspections for the project to ensure it is built in accordance with the consented documents and the Building Code
- certification fees, which cover issuing a code compliance certificate (CCC) and, where necessary, a compliance schedule.

¹ A project information memorandum is issued by the territorial authority, and provides information about the land on which building work is proposed and about the requirements of other Acts that might be relevant to proposed building work. A PIM must be issued before a building consent can be issued.

In addition to the fees charged by councils, applicants for building consents must also pay levies, which consist of the BRANZ levy of \$1 per \$1,000 of value of building work (where the value is over \$20,000), and the Building Levy of \$1.97 per \$1,000 of value of building work (where the value is over \$20,000). These levies are collected by councils, on behalf of BRANZ and the Department of Building Housing. For the 2006/07 year, Building Levies totalled \$22.028 million and BRANZ Levies totalled \$11.198 million.

Within council fees there may be other costs such as peer review of designs, or referral to the Design Review Unit of the New Zealand Fire Service. These apply on a case-by-case basis. While some councils have set fees for these elements, usual practice is to recover actual costs from the consent applicant.

Councils use a variety of methods to set consent fees, some of which are described below.

1. Time based

- The actual time spent on administration and assessment is charged at set hourly rates.
- Charges are published as a dollar per hour figure ranging from \$60 to \$196 per hour (average \$94, median \$87), or as a formula. These are calculated by applying a multiplier (to cover overheads) to the salary of the staff member doing the work, and dividing that by a notional number of chargeable hours for the year.

2. Per consent

- A range of fees is set to cover various types or values of building work.
- Typically a fixed fee for minor works such as solid fuel heaters and proprietary garages.
- For larger projects, the fee scale may be based on:
 - value bands, with a set fee for each band
 - type of work (eg, new dwelling, commercial, industrial), with a set fee for each type
 - a combination of the two.
- Value bands are usually set up to \$500,000 or \$1,000,000. Above those levels, the fee charged is usually the fee for the top band plus an extra amount per \$50,000 or \$100,000 of value.
- Fees may include all fees from PIM to CCC or may just cover application to assessment, with PIMs, inspections and CCCs charged separately.
- Councils reserve the right to charge additional fees where the actual costs incurred in processing the application exceed the fee, or if extra inspections not provided for in the fee are required.

3. Value of work

- Consent fees are based on the value of the building work, and are charged at a fixed rate per \$1,000 of value.
- Fees are either set at a level to cover all charges (except for levies), or to cover application, administration and assessment stages only, with separate charges for PIMs, inspections and CCCs.
- Councils reserve the right to charge additional fees where the actual costs incurred in processing the application exceed the fee, or if extra inspections not provided for in the fee are required.

4. Case by case

- Fees are charged on the maximum building work value up to which the chosen method of charging applies.
- All consents above that value are considered on a case-by-case basis.
- This method is used by both smaller rural councils and larger councils such as Dunedin City.

There are also councils that use combinations of the above methods for setting fees. Regardless of the system used, typically a deposit is set, and collected, at the time of application. The deposit may be estimated at a level to cover all fees, or just those from PIM to assessment. Typically, councils will process the application, grant it, and invoice the applicant for any assessment fees, estimated inspection fees, and certification fees not covered by the deposit. The fees are usually required to be paid before the consent is issued. Some councils set a non-refundable deposit to cover assessment.

In most cases where there is not a single set charge to cover all fees, councils charge for inspections at a set rate per inspection. Inspection fees range from \$75 to \$155 per inspection, with an average of \$101 and a median of \$98. Some councils with large areas to cover also charge for travel, either on a time or distance basis. Others average the time taken for inspections, including travel, and charge a flat rate regardless of where the inspection takes place.

4. Changes in building consent fees

RESIDENTIAL

Table 2 compares maximum, minimum, average and median building consent fees for houses as a percentage of the building cost in 2000/01, 2004/05 and 2006/07 for the councils who provided information. Charts 2 and 3 show these changes graphically.

TABLE 2: BUILDING CONSENT FEES AS A PERCENTAGE OF BUILDING COST						
	House 145 m ²			House 202 m ²		
	2000/01	2004/05	2006/07	2000/01	2004/05	2006/07
Maximum	1.11%	1.16%	1.31%	0.87%	0.94%	1.12%
Minimum	0.16%	0.26%	0.29%	0.13%	0.21%	0.25%
Average	0.66%	0.71%	0.78%	0.54%	0.60%	0.67%
Median	0.61%	0.72%	0.74%	0.53%	0.60%	0.62%

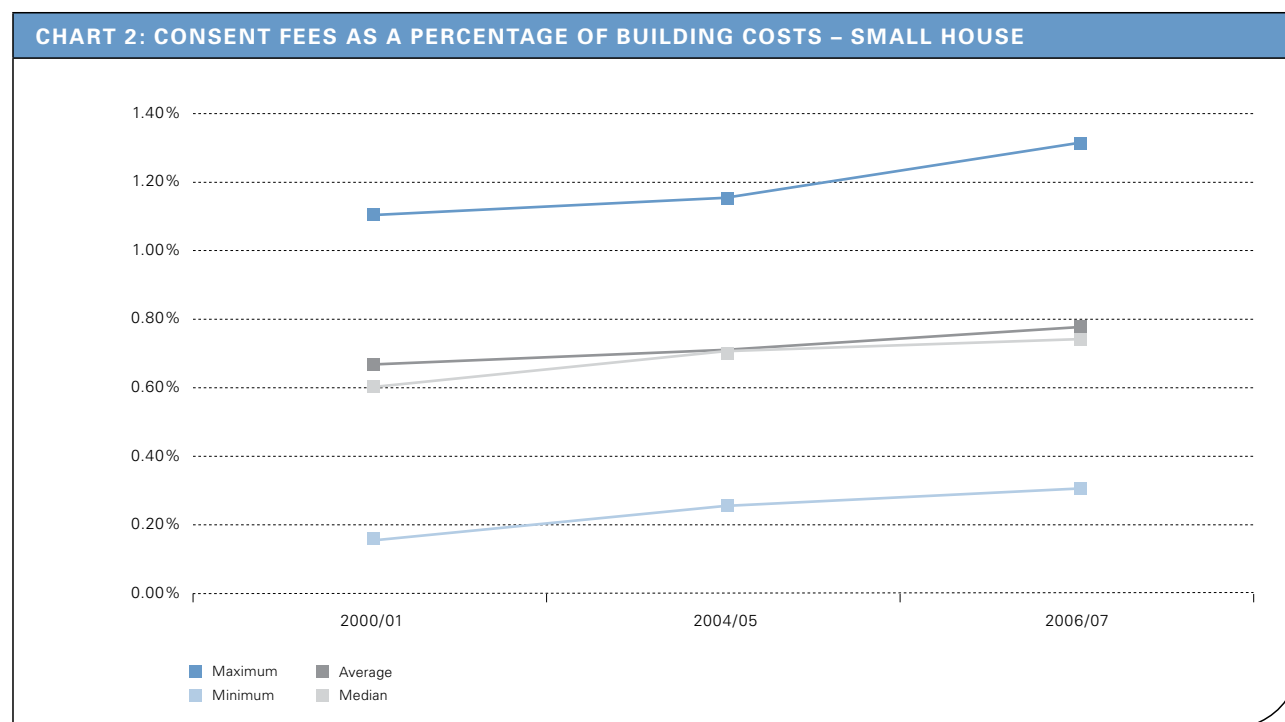


CHART 3: CONSENT FEES AS A PERCENTAGE OF BUILDING COSTS – LARGE HOUSE

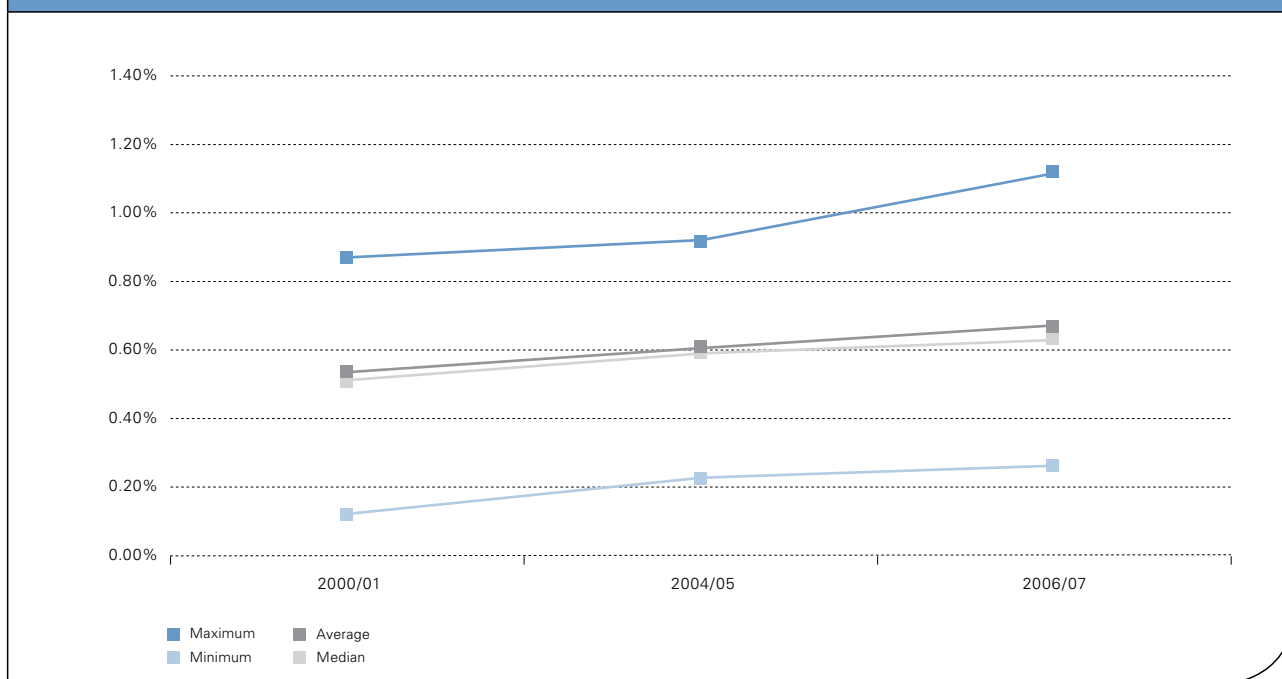


Table 3, and Charts 4 and 5, show the maximum, minimum, average and median building consent fee for each of the 2000/01, 2004/05 and 2006/07 years.

TABLE 3: BUILDING CONSENT FEES FOR SMALL AND LARGE HOUSES

	House 145 m ²			House 202 m ²		
	2000/01	2004/05	2006/07	2000/01	2004/05	2006/07
Maximum	\$1,680	\$2,280	\$3,202	\$1,680	\$2,280	\$3,202
Minimum	\$240	\$498	\$694	\$240	\$498	\$694
Average	\$996	\$1,383	\$1,856	\$1,034	\$1,446	\$1,886
Median	\$920	\$1,395	\$1,759	\$1,005	\$1,455	\$1,760

CHART 4: CONSENT FEES – SMALL HOUSE

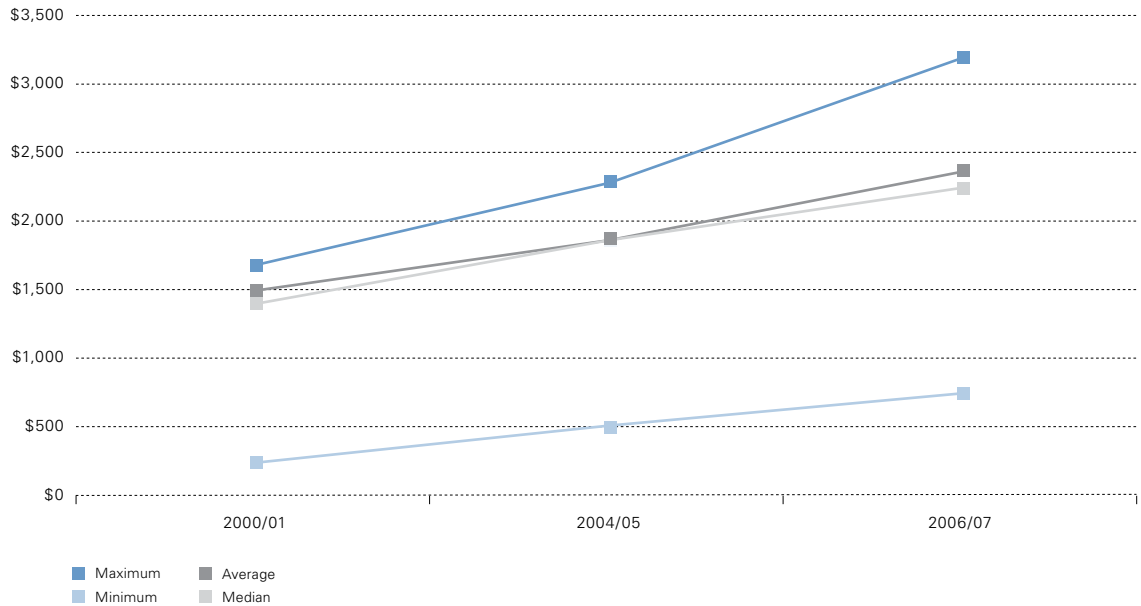
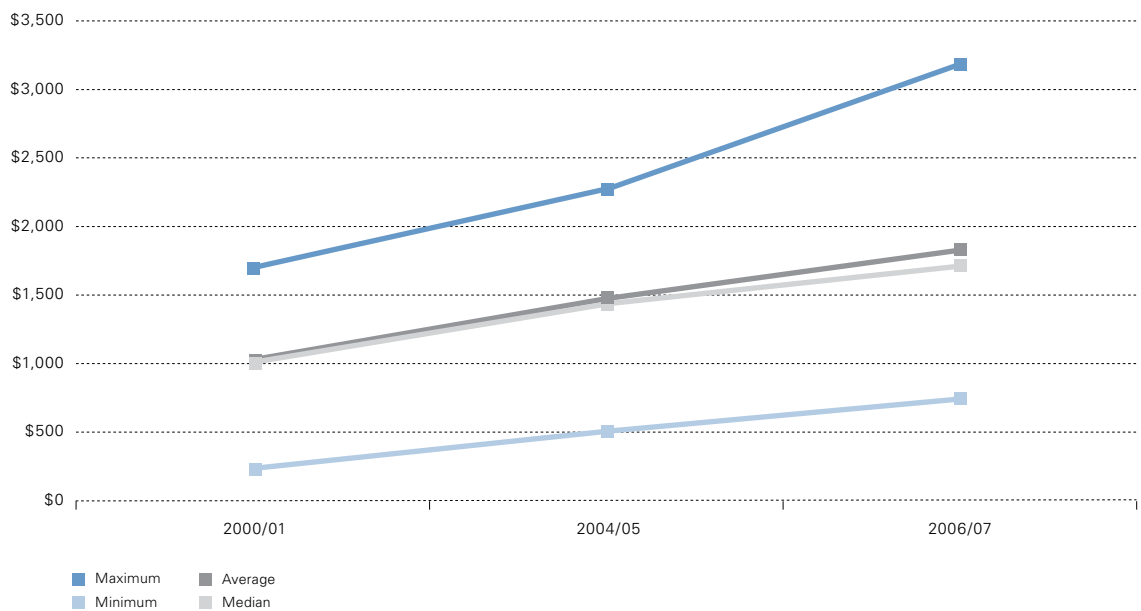


CHART 5: CONSENT FEES – LARGE HOUSE



NON-RESIDENTIAL

Data on processing, inspection and approval costs for non-residential buildings was sought from 17 large metropolitan and provincial urban councils. Where possible, fees were calculated using published fee schedules, and the calculations sent to councils for confirmation. The calculations were based on descriptions of two non residential buildings (as used for example purposes on the the Department's website), with supporting detail on specified systems and other assumptions. Where it was not possible to calculate the fees using published fee schedules, councils were asked to provide processing, inspection and approval costs for the years 2004/05 and 2006/07. In some cases it was possible to calculate fees for the industrial building from the published schedule, but not the commercial building. This is because some councils set a dollar limit on building value above which all processing, inspection and approval fees are set on a case-by-case basis.

As a result of this exercise, data was collected from 13 councils for the industrial building, and 11 councils for the commercial building. Some councils declined to provide information on the basis that every case is different, and variables such as the quality of accompanying documentation make it impossible to provide an estimate for a theoretical case.

Table 4 compares maximum, minimum, average and median building consent fees for a 414 square metre industrial building, and a commercial building of 896 square metres, as a percentage of the building cost in 2004/05 and 2006/07. Charts 6 and 7 show these changes graphically.

TABLE 4: BUILDING CONSENT FEES AS A PERCENTAGE OF BUILDING COST				
	Industrial		Commercial	
	2004/05	2006/07	2004/05	2006/07
Maximum	0.91%	1.01%	0.58%	0.67%
Minimum	0.18%	0.30%	0.08%	0.17%
Average	0.58%	0.69%	0.35%	0.40%
Median	0.67%	0.72%	0.38%	0.46%

CHART 6: CONSENT FEES AS A PERCENTAGE OF BUILDING COST – INDUSTRIAL

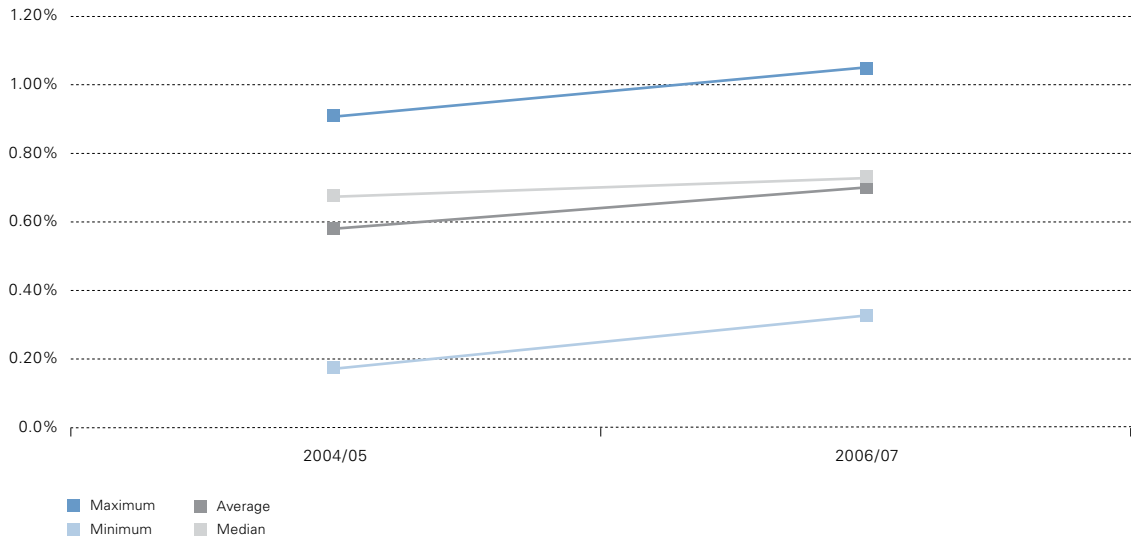


CHART 7: CONSENT FEES AS A PERCENTAGE OF BUILDING COST – COMMERCIAL

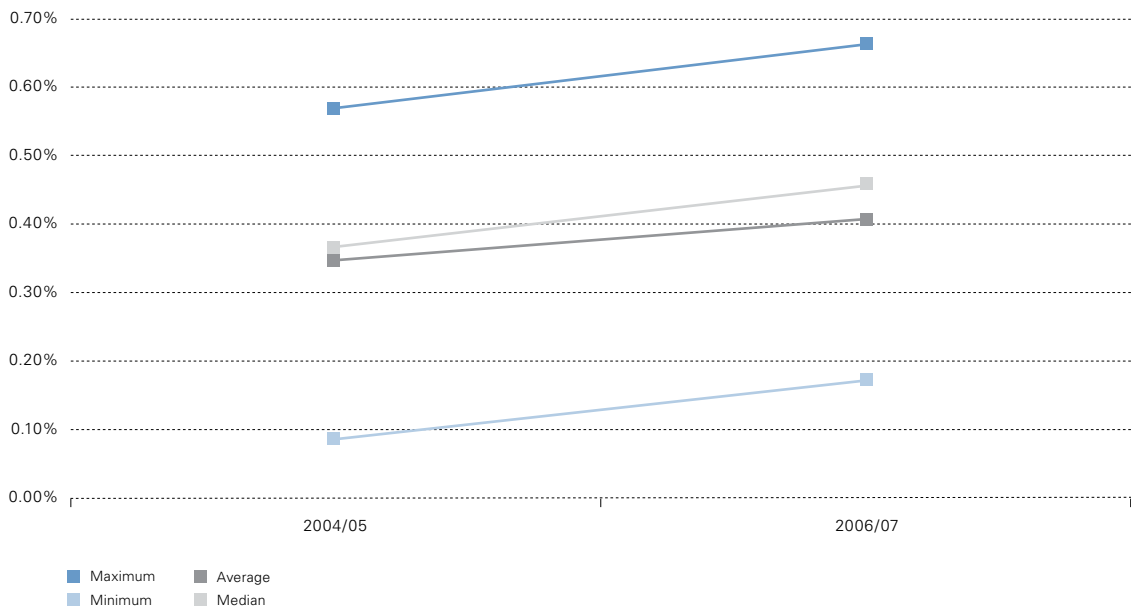


Table 5, and Charts 8 and 9, show the maximum, minimum, average and median building consent fee for each of the 2004/05 and 2006/07 years.

TABLE 5: BUILDING CONSENT FEES FOR INDUSTRIAL AND COMMERCIAL BUILDINGS				
	Industrial		Commercial	
	2004/05	2006/07	2004/05	2006/07
Maximum	\$3,593	\$4,857	\$5,112	\$7,002
Minimum	\$714	\$1,436	\$714	\$1,836
Average	\$2,344	\$3,293	\$3,072	\$4,344
Median	\$2,700	\$3,460	\$3,404	\$4,835

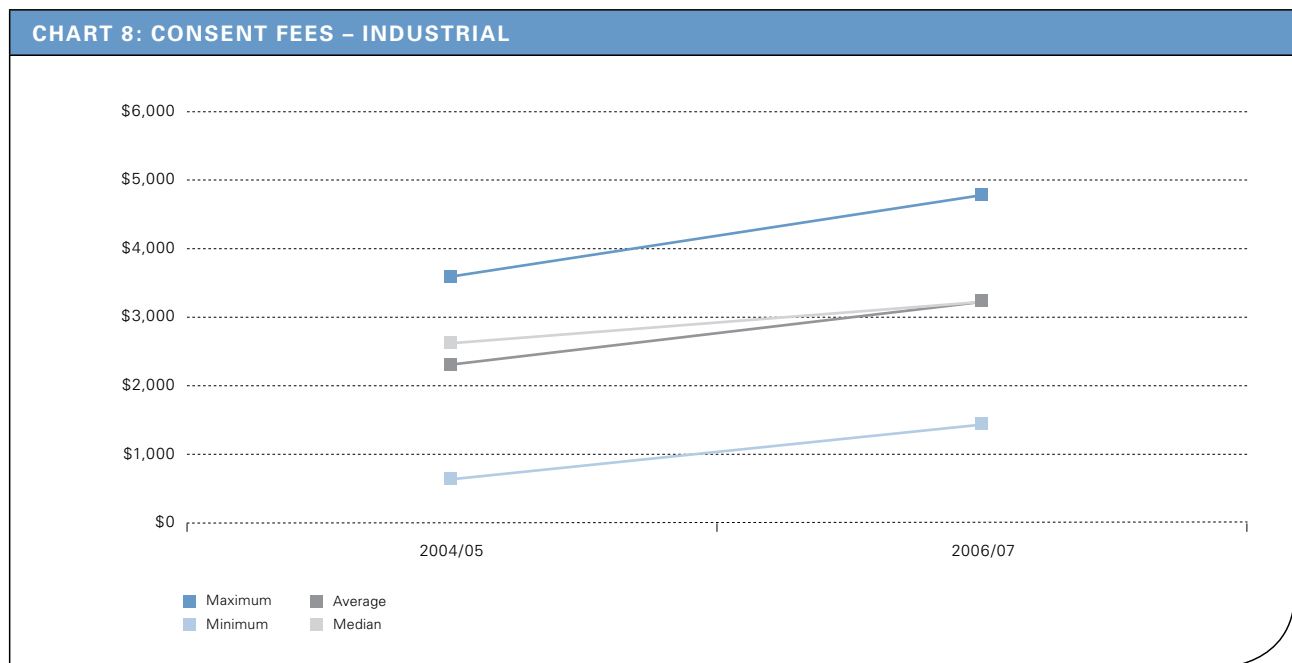
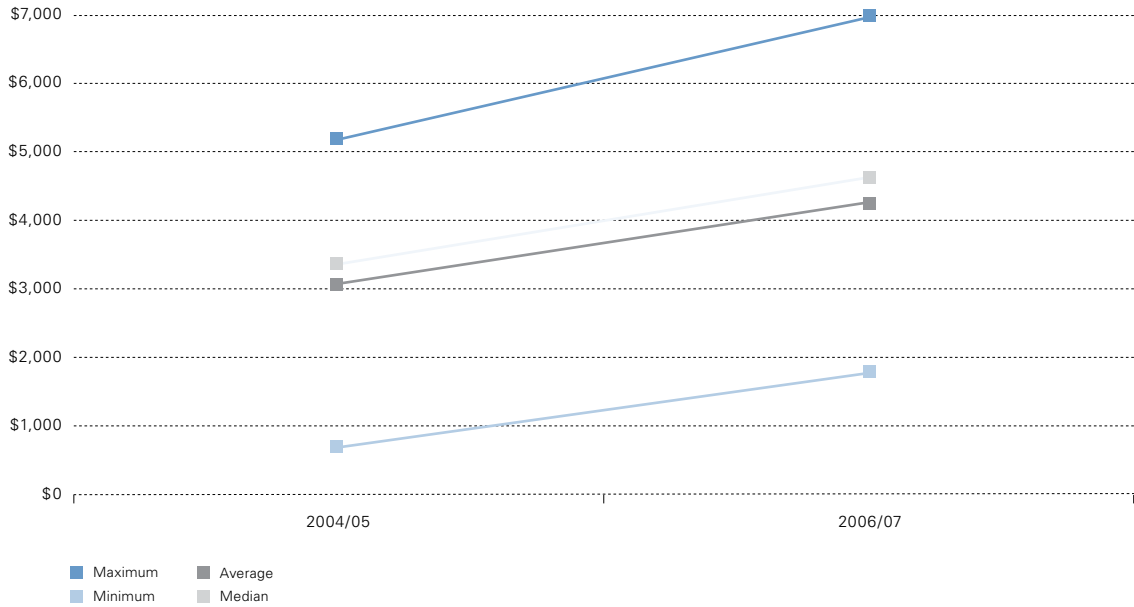


CHART 9: CONSENT FEES – COMMERCIAL



5. Building costs

To better determine how these building and construction costs have changed and how consent fees have changed relative to them, representatives from a number of organisations within the building industry, including several major national building and construction firms, were interviewed. (Refer to Appendix 3 for the list of organisations.) Some were able to provide detailed analyses of their costs over the period 2001 to 2007 based on a standard design.

Maltby & Partners Ltd (Maltbys) and Rawlinsons also prepare annual analyses of building costs based on a range of standard residential and non residential buildings.

Construction cost estimating tools

The Department provides indicative construction costs (and a related index), developed by Maltbys, to guide building officials in assessing building consent fees. These figures are presented on a square metre basis for five different building types.

- Small house (145 m²)
- Large house (202 m²)
- Light commercial building (414 m²)
- Retirement home (394 m²)
- Commercial (bulk retail) building (896 m²)

The unit construction costs for these building types are built up from the commercial prices of materials and labour current for each year along with allowances for contractors' overheads and margins (assuming one contractor is engaged to provide the entire construction). The costs include GST but do not take into account any regulatory or compliance costs. Pricing is provided for six separate regions covering the whole of New Zealand. Residential housing costs are calculated for speculative houses and do not represent the economies of scale gained by franchise building of similar homes, or the additional costs of one-off homes with a significant amount of architectural input.

Maltbys assesses group houses as 21% cheaper on average and architecturally designed houses as 20% more expensive.

Tables 6–9 set out the changes in building costs for each type of house between 2001 and 2007.

TABLE 6: MALTBY'S ESTIMATES FOR THE SMALL HOUSE BUILT IN AUCKLAND			
Year	Index	Unit cost/m²	Total building cost
January 2001	1000	\$1,058	\$153,410
January 2002	1021	\$1,080	\$156,600
January 2003	1074	\$1,136	\$164,720
January 2004	1191	\$1,121	\$182,845
January 2005	1284	\$1,359	\$197,055
January 2006	1411	\$1,493	\$216,485
January 2007	1590	\$1,683	\$244,035

TABLE 7: MALTBY'S ESTIMATES FOR THE SMALL HOUSE BUILT IN CHRISTCHURCH			
Year	Index	Unit cost/m²	Total building cost
January 2001	1000	\$1,026	\$148,754
January 2002	1049	\$1,076	\$156,020
January 2003	1085	\$1,113	\$161,385
January 2004	1208	\$1,239	\$179,655
January 2005	1310	\$1,344	\$194,880
January 2006	1446	\$1,483	\$215,035
January 2007	1601	\$1,642	\$238,090

TABLE 8: MALTBY'S ESTIMATES FOR THE LARGE HOUSE BUILT IN AUCKLAND			
Year	Index	Unit cost/m ²	Total building cost
January 2001	1000	\$966	\$195,036
January 2002	1022	\$987	\$199,374
January 2003	1077	\$1,040	\$210,080
January 2004	1186	\$1,145	\$231,290
January 2005	1247	\$1,204	\$243,208
January 2006	1352	\$1,305	\$263,610
January 2007	1472	\$1,421	\$287,042

TABLE 9: MALTBY'S ESTIMATES FOR THE LARGE HOUSE BUILT IN CHRISTCHURCH			
Year	Index	Unit cost/m ²	Total building cost
January 2001	1000	\$935	\$188,905
January 2002	1041	\$973	\$196,546
January 2003	1096	\$1,024	\$206,848
January 2004	1208	\$1,130	\$228,260
January 2005	1269	\$1,187	\$239,774
January 2006	1390	\$1,300	\$262,600
January 2007	1483	\$1,387	\$280,174

These estimates indicate that the cost of building in Auckland over the period January 2001 to January 2007 increased by 59.0% for a small house, and 47.2% for a large house. In Christchurch the increases were 60.1% for a small house, and 48.3% for a large house. These increases were in the middle of the range for construction in all regions over the period.

Rawlinsons also produce unit costs for a wide range of building types and building components, including a single-level residential house 90–130 m² similar to the ‘small house’ surveyed by Maltbys (although the Maltbys house has an internal garage). The unit costs proposed for these houses built in Auckland in 2007 are \$1,750/m² for Maltbys and \$1,200–\$1,400/m² for Rawlinsons. The basis of a single speculative house is the same, but the Maltbys estimate includes GST and higher specification including the internal garage. An independent estimate by a Hawke’s Bay valuation firm found that, once these differences (which amount to a difference of about 20% in total costs) are adjusted for, the Maltbys estimate reduces to \$1,400/m² and aligns with the top of the Rawlinsons estimated range.

These unit costs are therefore sufficiently similar that either could be used with confidence. This report uses the Maltby estimates.

Actual construction costs

A range of stakeholders from the building sector were interviewed for their perspective on cost increases and the effects of the Act.

This discussion revealed that there is very limited readily available hard data on detailed cost increases in the building industry over the period 2001–2007.

However, one company originally established in Christchurch but now building homes nationally has built a comprehensive dataset. This data provides further verification of total building cost increases, but also provides a breakdown of the increases by cost category. Building industry groups consider this data to be sufficiently representative to be used to support industry submissions on public policy.

The data consists of year-by-year as-built costs from 2002–2007 for a single house design in Christchurch that has been on the market throughout the period. It is a three bedroom, two bathroom 191 m² home with two living areas and an internal access garage. Costs are exclusive of GST.

TABLE 10: TOTAL COST BREAKDOWN 2002–2007						
	2002	2003	2004	2005	2006	2007
Project management and overhead ²	\$23,719 (15.9%)	\$27,079 (16.6%)	\$36,978 (20.1%)	\$34,754 (18.5%)	\$32,008 (16.7%)	\$44,165 (20.5%)
Infrastructure levies	\$1,000 (0.7%)	\$1,500 (0.9%)	\$2,000 (1.1%)	\$5,000 (2.7%)	\$7,500 (3.9%)	\$10,000 (4.6%)
Total fees (refer Table 11)	\$1,510 (1.0%)	\$1,565 (1.0%)	\$1,599 (0.9%)	\$2,002 (1.1%)	\$2,005 (1.0%)	\$2,393 (1.1%)
Labour	\$20,117 (13.5%)	\$24,409 (15.0%)	\$27,830 (15.1%)	\$27,423 (14.6%)	\$27,337 (14.3%)	\$30,293 (14.0%)
Materials	\$102,703 (68.9%)	\$108,425 (66.5%)	\$115,812 (62.9%)	\$118,744 (63.2%)	\$122,827 (64.1%)	\$128,840 (59.7%)
Total	\$149,049	\$162,978	\$184,219	\$187,923	\$191,677	\$215,691
Total without fees and charges	\$146,539	\$159,913	\$180,620	\$180,921	\$182,172	\$203,298

² Project management and overhead includes design costs and margin

The total fees noted here include building consent fees, inspections, Building and BRANZ Levies, vehicle crossing, water connection and PIM charges. This group of consent costs goes beyond those that apply for building consent, inspection and approval activities, as set out in Table 11 below.

TABLE 11: TOTAL FEES AND LEVIES BREAKDOWN 2002–2007						
	2002	2003	2004	2005	2006	2007
Building consent-related fees	\$856	\$866	\$866	\$992	\$1,046	\$1,262
Vehicle crossing inspection fee	\$60	\$60	\$60	\$53	\$53	\$53
Water connection fee	\$345	\$370	\$370	\$378	\$378	\$444
BRANZ Levy	\$151	\$163	\$184	\$195	\$196	\$213
Building Levy	\$98	\$106	\$117	\$384	\$386	\$420
Total Fees	\$1,510	\$1,565	\$1,599	\$2,002	\$2,005	\$2,393

The following table and charts show the cost increase over time, how different cost categories have contributed to cost increase and how their overall proportion of the total cost has changed.

TABLE 12: TOTAL COST INCREASE FROM 2002–2007		
	Total cost increase	% of total cost increase
Project management and overhead	\$20,446	30.7%
Consent fees	\$406	0.6%
Infrastructure levies	\$9,000	13.5%
Other council fees	\$93	0.1%
BRANZ and Building Levies	\$384	0.6%
Labour	\$10,176	15.3%
Materials	\$26,137	39.2%
Total	\$66,642	100.0%

CHART 10 TOTAL BUILDING COST BREAKDOWN 2002

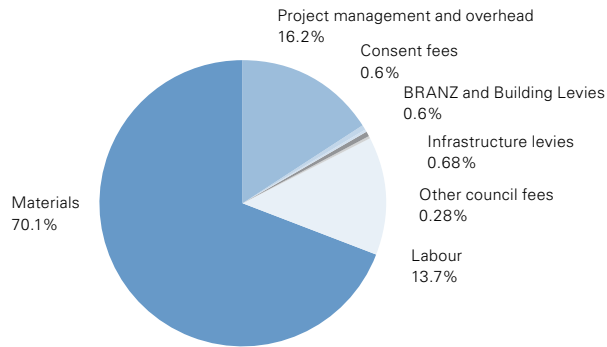
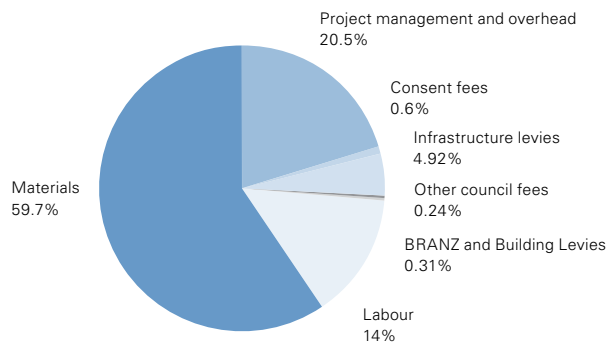


CHART 11 TOTAL BUILDING COST BREAKDOWN 2007



The building firm has separated the cost of specification upgrades from the total cost of building. They have also provided an assessment of direct and indirect costs perceived to have arisen from the building regulatory regime, which it has identified as 'compliance costs'. The key areas of compliance cost increases were noted as:

- Building Code changes, particularly E2 External Moisture
- increases in building consent fees
- increases in Building Levies
- blueprints and royalties associated with the requirement for more detailed plans
- new waste levies compliance
- new OSH compliance.

Of these costs, it should be noted that waste levies and OSH compliance costs do not arise from building legislation.

Additional industry data

Another data set was supplied by a national residential building firm that compared the total cost of building comparably sized and specified houses in Auckland and Manukau Cities to several council fees and charges over time.

TABLE 13: COMPARISON OF TOTAL RESIDENTIAL BUILDING COSTS WITH FEES AND CHARGES IN AUCKLAND AND MANUKAU CITIES BETWEEN 2001 AND 2007 (DATA SUPPLIED BY A NATIONAL BUILDING FIRM)						
Year	Job address	Building consent fees	Water connection fee	Development contribution	Build cost	Building consent as % of total cost
Manukau City						
2001	Manurewa	\$1,445	\$320	-	\$128,371	1.1%
2003	Wattle Cove	\$1,776	\$387	-	\$157,908	1.1%
2005	Wattle Cove	\$1,968	\$387	-	\$173,238	1.1%
2007	Wattle Cove	\$2,610	\$1,992	\$5,600	\$194,509	1.3%
Auckland City						
2001	Glendowie	\$1,895	\$515	-	\$176,833	1.1%
2003	Glendowie	\$2,349	\$515	-	\$212,183	1.1%
2005	Mt Wellington	\$2,292	\$2,405	-	\$225,827	1.0%
2007	St Johns	\$3,906	\$2,405	\$2,678	\$256,484	1.5%

Despite the fees quantum increasing around 100% over the period, building consent fees in these jurisdictions have increased only 0.2–0.4% as a percentage of total building costs over the period. Building consent fees remain only up to 1.5% of the total building cost. This assessment also identifies a significant increase in water connection fees, greater than the increase in building consent fees, and the introduction of development contributions fees in these jurisdictions during the period.

Industry response regarding new and increased costs arising from changes to building control

Stakeholders were asked to consider:

- changes to total building costs over the period 2001–2007
- direct and indirect costs arising from changes in the Building Act 2004
- other pressures on building costs during the period.

Cost increases related to building control

Interviewees were unanimous that building costs had increased significantly during the period, and considered that the Building Act 2004 was responsible for some of the cost increase. There was an abundance of anecdotal evidence that linked cost increases to implementation of the Act.

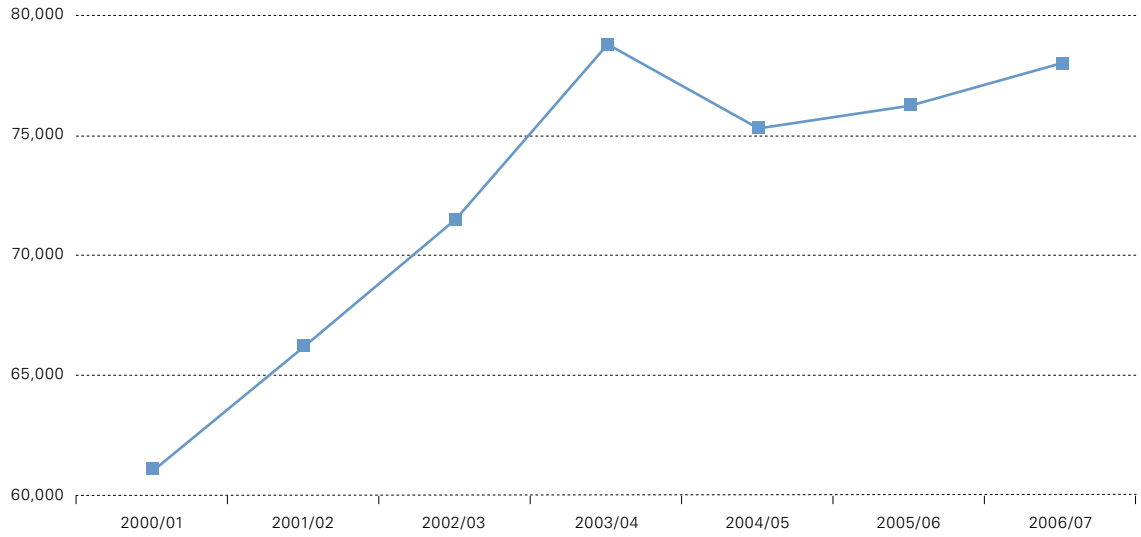
Stakeholders agreed with the range of compliance cost increases noted by the building company above and also identified some indirect costs related to implementation of the Act.

The building industry's major concern about councils' implementation of the Act is delays to building projects due to extended consent and approval timeframes. Holding costs arise due to extensions of the 20-day consent processing period, greater numbers of inspections required, and greater notice period required for inspections of time-sensitive construction steps, such as pouring concrete. Interviewees estimate the time taken from original consent application to code compliance certification averaged 2–3 months in 2001/02 but by 2006/07 had increased to 6–9 months in some jurisdictions.

Extending building timeframes can result in a number of unexpected costs. Delays in construction cause delays in progress payments, which can lead to late payment penalties and interest incurred on debt. Labour costs may be due to increased inspections and longer building timeframes causing poor use of subcontractor time. Delays can also expose developers to the risk of contract disputes due to late delivery. This is an increasingly important risk as the market slows and buyers may be looking for opportunities to not complete the contract. Respondents also noted delays where councils had information requests for clarification of consent documents very late in the 20-day period. Developers note that late requests for further information occur more regularly where there is heavy demand on building control services (eg, when there are a number of large projects seeking approval in the jurisdiction).

The delays mentioned above arose through a combination of circumstances, including strong demand for new building work. Figures from Statistics New Zealand, set out in Chart 11 opposite show a peak in building consent numbers in 2003/04, with a sharp drop in 2004/05 followed by a steady increase through to 2006/07. This increase coincides with the introduction of new requirements of the Building Act 2004, including accreditation of building consent authorities, which put added demands on the resources of council building control departments. The combination of these factors exposed capacity and capability issues in a number of council building control departments, which contributed to the delays experienced by the industry.

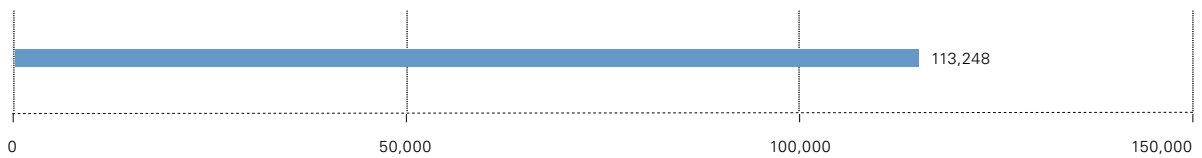
CHART 11: TOTAL BUILDING CONSENTS ISSUED



Source: Statistics New Zealand

(excludes consents under \$5,000 in value)

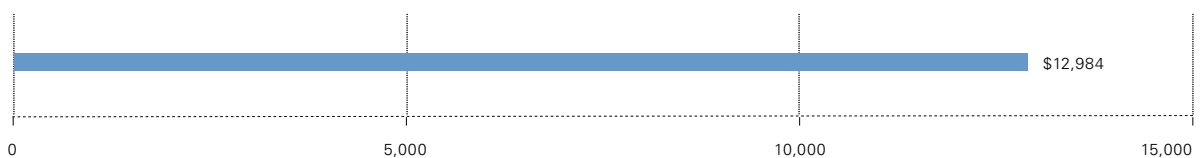
**NUMBER OF BUILDING CONSENTS GRANTED
1 JULY 2006 – 30 JUNE 2007**



Source: Department of Building and Housing

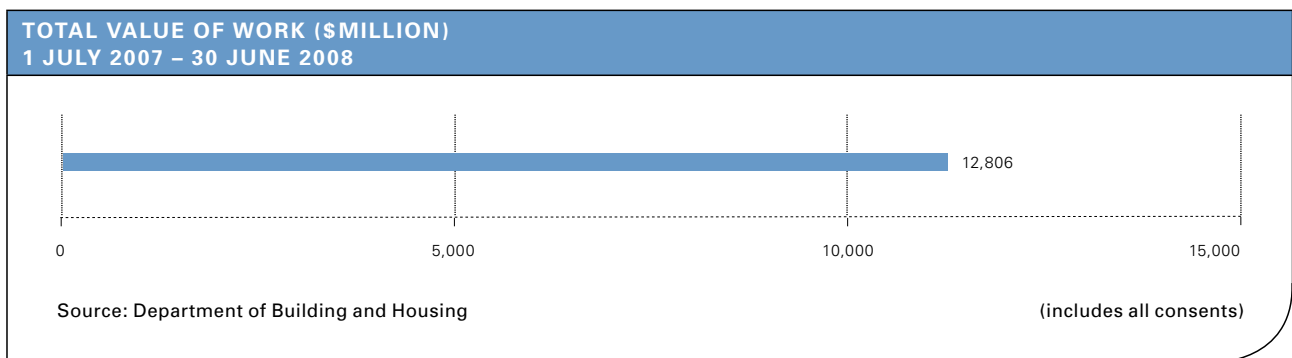
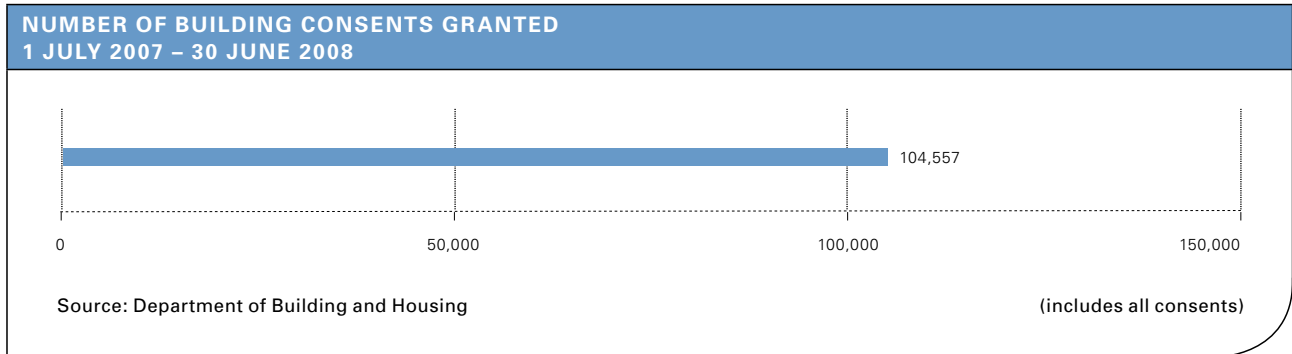
(includes all consents)

**TOTAL VALUE OF WORK (\$MILLION)
1 JULY 2006 – 30 JUNE 2007**



Source: Department of Building and Housing

(includes all consents)



The Department's own recent survey of consent statistics reveals a higher total number of consents issued by each authority than identified by official Statistics New Zealand data (Statistics New Zealand figures identify only those consents over \$5,000 value).

The industry also noted a significant compliance burden and additional costs arising from councils' increasing information requirements to be 'satisfied on reasonable grounds' that plans comply with the Building Code. Greater stringency is driven by local authorities' own policies, which are based largely on limiting council liability for failure of approved building projects. Industry identifies council requirements for more detailed plans as driving up drafting costs by as much as \$2,000 per standard house (ie, houses of similar design to the Maltbys large house and the comparable industry example).

More stringent requirements for approving alternative solutions and using producer statements have led to additional design work for some building and house manufacturing companies. Additional peer review requirements for large scale, complex projects can cost up to \$20,000, which is recovered from the applicant (although this is a small percentage of the total project cost on a high-rise residential or office development).

While the industry has noted that they will incur costs due to registration and that these costs will be passed on, the impact on total building costs is not likely to be significant. It is likely that registration will be an overhead component of contractor and subcontractor time that can be spread over a number of building projects.

Cost increases arising from other legislative changes

Other cost increases arising from changes to the compliance/legislative environment identified by the industry as significant include the following.

- Financial contributions and development contributions are the primary concern of developers. Development contributions vary widely across councils as they are linked to capital expenditure required to meet new demand from growth. Interviewees were aware of development contributions fees ranging from approximately \$2,500 to \$35,000 per household equivalent unit (HEU). The House Prices Unit report on housing affordability has estimated these indicatively at \$25,000 per HEU. There is further discussion of development contributions fees in section 6.
- Notified resource consent processes are a significant cause of delays, particularly for large-scale developers.
- Sharp increases in water and sewer connection charges have been noted in some jurisdictions. There is further discussion of these and other council fees in section 6.
- Occupational Safety and Health requirements for increased site safety and temporary on-site amenities. Industry members estimate these changes can impose extra project costs of up to \$5,000.

Industry members acknowledged that these compliance cost drivers, as well as other costs imposed through council fees and charges, other legislative change and changes to the Building Code, must be separated from costs related solely to the Building Act 2004 in order to robustly assess the impact of the Act.

Changes to the Building Code were mentioned as a source of new costs by most industry members, particularly those that were seen to be linked to leaky home issues (eg, Code requirements for treated timber, wall cavities and flashings). Industry estimates of the cost impact of these Code changes are in the range of \$1,000–\$2,000 per house. Interviewees were much more concerned with process timing and requirements and resulting delays or downtime than with the quantum of, or increases to, building consent fees.

Other notable cost increases

Interviewees' assessment of other cost increases was consistent with the data presented above.

Price increases to building materials make up most of the total building cost and most of the total building cost increase. The increase is lead by timber (due to lower harvesting volumes in New Zealand), structural steel, copper cabling and aluminium roofing and joinery (due to global commodity price increases).

Consumers are also demanding larger homes and increased building quality, including built-in garaging and higher-quality fixtures and finishes. Also, increasing energy costs have resulted in higher specification building in an attempt to reduce heating, lighting and other in-use costs.

Labour cost has increased as demand has increased and through increased subcontractor margins. Strong demand for new residential property in particular has stretched labour supply. Skilled labour shortages in the construction trade, noted by interviewees and reinforced by data from Quarterly Surveys of Business Opinion, have exacerbated cost increases.

6. Other council fees and charges

Fees and charges other than building consent fees typically comprise the majority of the fees charged, largely driven by financial contributions and other resource management compliance costs, and development contributions that have typically been implemented from 2004/05 onward.

The fees and charges for the example standard brick house in Christchurch, Auckland and North Shore cities are set out in Table 14 below:

TABLE 14: COUNCIL FEES AND CHARGES						
	Auckland City		Christchurch City		North Shore City	
	Fee	% of total fees	Fee	% of total fees	Fee	% of total fees
Project management memorandum	\$230		\$195			
Administration	\$266		\$145		\$305	
Process and Grant Consent	\$607		\$400		\$1,245	
Building Inspections	\$1,221		\$585		\$990	
Code Compliance Certificate	\$499		\$45		\$150	
Total Building Consent fees	\$2,823	10%	\$1,370	6%	\$2,690	9%
Development contributions (estimate)	\$20,918		\$21,637		\$27,457	
Vehicle crossing Permit/Inspection Fee	\$210		\$60			
Water Connection fee	\$2,405		\$500		\$635	
Waste Levy (charged by Environment Canterbury)			\$480			
Resource consent (lot share of subdivision consent)	\$542		\$500		\$750	
Resource consent monitoring fee			\$75			
Total other fees and charges	\$24,075	90%	\$23,252	94%	\$28,842	91%
Total Council charges	\$26,898		\$24,622		\$31,532	

Note that all three councils include in their development contributions reserves contributions which are assessed at 7.5% of land value. For the purposes of this Table, a land value of \$150,000 has been used for all three cities.

Building consent fees in the above examples range from 6% to 10% of the total fees charged by councils.

Fee policies and approaches to fee setting vary considerably across councils. Fees typically comprise a mix of:

- actual costs made up of a base fee, or deposit, plus additional charges based on actual time and costs incurred, and
- flat fees for service connections or earthworks applications and/or inspections.

Subdivision

- Fees typically comprise a base fee (deposit) plus time-based charges where these exceed the base fee.
- Deposits range between approximately \$250 and \$6,000, depending on whether the consent is non notified or notified.
- Associated certificate fees range between \$40 and \$150 per certificate required.

Street crossings

- Fees for those councils which charge them range from approximately \$40 to \$385, and may include charges for processing and inspection.

Service connections

- These range from separate fees for each of water supply, waste water and storm water, through to the council performing the connection at a set fee or actual cost, to being incorporated within a financial contribution charge.
- The wide variety of approaches is reflected in the following examples.
 - Hutt City – \$95 comprising water supply \$45, waste water \$25 and storm water \$25
 - Southland – \$270 comprising \$90 for each of water supply, waste water and storm water plus the actual cost to make the connection
 - Kaipara – \$600 for water supply, \$450 for each of waste water and storm water, plus inspection fees of \$200 for each, amount to \$1,900 for all three connections
 - Central Otago – \$25 per service connection
 - Water connection fees of \$2,405 in Auckland, \$635 in North Shore, \$500 in Christchurch, and \$60 in Wellington

Earthworks

- Typically about \$250 to \$300 (where specified), although Masterton is only \$22.

Development contributions and financial contributions

- Development and financial contributions typically range between nil and \$40,000, but can go higher.
- Approximately 50% of councils charge development contributions.
- All councils are required to have either a financial and/or development contributions policy under the Local Government Act 2002.
- Policies vary considerably across councils.
- A number of councils experiencing high growth introduced development contributions between 2004 and 2006, coinciding with the introduction of the Building Act 2004. Given their size, these development contributions contribute heavily to the perception that the Building Act caused the significant increases in fees.

Development contributions are explained further in Appendix 4.

7. Effects of the Building Act 2004

The Building Act 2004 introduced a range of reforms, to be introduced on a staged basis, designed to help improve the control of, and encourage better practice and performance in building design, regulatory building control and building construction. These reforms are the Building Consent Authority Accreditation and Registration Scheme, the Licensed Building Practitioners Scheme, the revision of the Building Code, and the Product Certification Scheme.

These requirements have had both direct and indirect impacts on the cost of building control, and consequently building consent fees. Table 15 sets out the one-off direct costs of accreditation as perceived by respondent councils.

TABLE 15: PERCEIVED ONE-OFF COSTS OF ACCREDITATION						
	Accreditaion Audit Fee	External Contractors	Staff time	Printing, Equipment, etc	Staff Training	Total for Accreditation
Maximum	70,000	1,259,000	359,000	26,000	110,000	1,656,000
Minimum	14,000	4,953	15,000	2,000	8,000	20,000
Average	30,648	101,602	106,363	13,500	47,600	163,974
Median	29,000	37,250	60,000	13,000	25,000	91,678

In addition to the one-off costs shown in Table 15, a number of councils cite ongoing costs of up to \$845,000 per annum which they attribute directly to accreditation. These costs are to cover additional staff needed to ensure councils meet accreditation requirements in accordance with the Act and Regulations.

Of the costs in Table 15, the accreditation audit fee (paid to IANZ) is clearly a cost attributable to accreditation. There is an argument for an element of each of the other costs listed to also be attributed to accreditation. As a number of councils noted in their questionnaire responses, much of the increase in staff, resources and documented systems would have happened anyway as councils moved to improve their business practices and/or limit liability from legal action arising in respect of poorly performed consent processing and inspection work. Even in the absence of the accreditation regime, this would have necessitated the implementation of competency assessment processes and higher staffing levels. The margin that is attributable to accreditation is perhaps the extra cost of more rigorous competency assessment processes and higher staffing levels than councils would otherwise have considered necessary to meet their building control obligations.

Several respondents cited only the accreditation audit fee as a direct cost of accreditation. Others claimed the costs were too diverse and difficult to quantify.

Increased processing and inspections

Responses from councils to the questionnaire, and follow-up discussions, reveal that most councils have increased the number of inspections undertaken on buildings of all types, and that the time to process consent applications has also increased. The main reasons cited for these increases are:

- weathertightness issues (23 councils)
- the Building Act 2004 (21 councils)
- accreditation requirements (12 councils).

Of the 30 councils that advised when inspection numbers increased, the majority had increased their inspections prior to the Building Act and the accreditation scheme taking effect. Specific examples of new inspections include cavity and flashings inspections. As with the costs discussion above, however, a number of councils maintain that these increases result from councils moving to improve their business practices and limit their liability in the wake of the leaky buildings issue, and that the changes made would have happened anyway.

In a number of cases, responses show that inspection numbers had increased prior to 2004.

Table 16 sets out the change in inspection numbers for houses and industrial and commercial buildings between 2000/01 and 2006/07. It shows that the average number of inspections for houses has increased by 54.9%, for industrial by 42.9%, and for commercial by 36.8%⁴.

TABLE 16: NUMBER OF INSPECTIONS CARRIED OUT ON A HOUSE, 2000/01 AND 2006/07						
	Houses		Industrial		Commercial	
	2000/01	2006/07	2000/01	2006/07	2000/01	2006/07
Maximum	10.1	20.0	20.0	25.0	20.0	30.0
Minimum	3.0	6.0	3.0	3.0	4.0	5.0
Average	7.1	11.0	7.0	10.0	8.7	11.9
Median	7.0	11.0	6.0	9.0	8.0	12.0

⁴ Industrial and commercial example buildings used are as per the Department’s website estimated building costs page – 414 square metre industrial building, and 896 square metre commercial building.

Table 17 shows a 110% increase in the average processing time for a building consent for a house. The range of percentage increases in processing time was 13% to 422%.

TABLE 17: TIME TAKEN TO PROCESS A CONSENT APPLICATION FOR A HOUSE		
	Hours to process	
	2000/01	2006/07
Maximum	4.0	6.5
Minimum	0.7	2.0
Average	1.9	4.0
Median	1.8	4.0

Other costs

The other costs directly attributable to the Building Act 2004 are the increase in the Building Levy from \$0.65 to \$1.97 per \$1,000 of value of building work over \$20,000. This represents an increase of 0.12% in total building costs.

Appendix 1

COUNCILS WHO RETURNED THE QUESTIONNAIRE

Auckland City Council
Buller District Council
Carterton District Council
Central Hawke's Bay District Council
Central Otago District Council
Clutha District Council
Dunedin City Council
Far North District Council
Franklin District Council
Gisborne District Council
Grey District Council
Hamilton City Council
Hastings District Council
Hauraki District Council
Horowhenua District Council
Hurunui District Council
Hutt City Council
Invercargill City Council
Kaikoura District Council
Kaipara District Council
Kapiti Coast District Council
Kawerau District Council
Mackenzie District Council
Marlborough District Council
Matamata-Piako District Council
Nelson City Council
New Plymouth District Council
North Shore City Council
Opotiki District Council
Palmerston North City Council
Papakura District Council
Queenstown Lakes District Council
Rangitikei District Council
Rotorua District Council
Ruapehu District Council
Selwyn District Council
South Taranaki District Council
South Waikato District Council
Southland District Council
Stratford District Council
Tararua District Council
Tasman District Council
Taupo District Council
Tauranga City Council
Upper Hutt City Council
Waimate District Council
Wairoa District Council
Waitakere City Council
Waitaki District Council
Waitomo District Council
Western Bay of Plenty District Council
Wellington City Council
Westland District Council
Whakatane District Council
Whangarei District Council

Appendix 2

QUESTIONNAIRE SENT TO COUNCILS

Council Name:						
Contact Person:						
Phone:			Email:			
Specific Data						
	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Total number of building consents issued						
Total value of building work consented						
Total revenue from consent fees						
Total building control costs						
Building control funding:						
% User charges						
% Rates						
Does Council charge for processing on a per consent basis or per hour basis?						
Did the basis for charging change in the period 2000/01 to 2006/07?						
If so, when?						
Rate per hour (if applicable):						
Does Council charge for inspections on a per inspection basis, or a per hour basis?						
Did the basis for charging change in the period 2000/01 to 2006/07?						
If so, when?						
Rate per inspection:						
Rate per hour:						

Has the number of inspections changed for the building types listed below?		
	Number of inspections required – 2001	Number of inspections required – 2007
Brick house, slab floor, single storey, trussed roof		
Single storey warehouse, slab floor, concrete columns, tilt-up precast walls, steel roof		
Single storey retail, two shops, slab floor, driven timber piles, steel columns, tilt-up precast walls, auto doors, steel framed firewall between shops, suspended ceiling		
Retirement home, single storey, 12 bdms with washbasins, sep sanitary facs, dining and lounge, commercial kitchens, staff accomm, office, slab floor, timber frame, timber trussed roof, clad in fibrecement with textured coating, prefinished steel roof, plasterboard lining		
When and why did this change?		
Comment		
Please list and quantify where possible and costs directly attributable to the Building Act 2004 (including costs of accreditation).		

Appendix 3

INDUSTRY STAKEHOLDERS INTERVIEWED

The following stakeholders were interviewed in late May and early July 2008 for their perspective on cost increases of building and the cost impact of implementation of the Act.

Certified Builders Association of New Zealand (Derek Baxter)

Registered Master Builders Federation (Pieter Burghout)

Fletcher Residential Limited (David Halsey)

Stonewood Homes Limited (Brent Mettrick)

Lockwood Homes Limited (Jeff Parker)

Property Council of New Zealand (Connal Townsend)

Symphony Property Development and Investment (Gary Nowland)

Davis Langdon (Craig Mills)

GJ Gardner

Ellis Gould Lawyers (Sue Simon)

Morice and Associates (Brian Sides)

Appendix 4

DEVELOPMENT CONTRIBUTIONS

Development contributions and financial contributions are means of recovering costs of infrastructure required as a result of development. Financial contributions are provided for under the Resource Management Act 1991 and are focused on mitigating the environmental effects of development. The Local Government Act in 2002 provided development contributions as a new tool to recover growth costs. It required councils to have either a financial contributions policy and/or a development contributions policy.

Development contributions are typically considered as more attractive than financial contributions as they allow for better planning of cost recovery in advance of expenditure, are not as limited to recovering costs of the direct effects of development, and can be subject to judicial review only (a test of reasonableness), avoiding Environment Court challenges.

Policies vary considerably across councils. Development contributions began to be introduced in 2004 with the first cycle of Long Term Council Community Plans (LTCCPs) for local government planning. Those that were experiencing considerable growth were typically early adopters (such as Christchurch, Queenstown and Northshore) although Rodney retained their financial contributions policy, albeit with very high charges of \$30,000 upwards per household equivalent unit (HEU).

The second round of LTCCPs in 2006 has seen more councils applying development contributions. Their introduction over 2004–2006 coincided with the introduction of the Building Act 2004 and, given their size, contribute heavily to the perception that the Building Act caused the significant increases in fees.

In 2008, around half of all councils charge development contributions fees, although a number of others, particularly smaller councils, continue to operate financial contributions regimes. Some mix development contributions with financial contributions for some infrastructure areas and some retain financial contributions only. Some rural and smaller councils where development has been limited often do not require contributions, preferring that developers build infrastructure where the need arises.

Development contribution charges can vary considerably within a council depending on the catchment area. New developments requiring considerable new infrastructure can be significant, whereas infill that utilises existing capacity can be much lower. Such variation makes it difficult to determine the overall impact of development contributions on total building costs or total fees.

In addition to the widening use of development contributions, there has been a general trend of development contribution fee increases as councils have broadened the range and extent of growth costs to be recovered. Fees per household equivalent unit are shown below:

- In 2004, Tauranga City Council set development contributions in a range from \$6,152.70 to \$20,900.79 depending on catchment. In 2007 this range was increased to \$13,319.11 to \$40,107.53
- Auckland City Council introduced a development contributions policy in 2005 which set a maximum fee of \$6,145.88 plus 7.5% of the land value for parks and reserves. The 2007 maximum fee was \$29,777.64 plus the equivalent of 5.65m² at the value of the land.
- Queenstown Lakes District Council's maximum fee increased from \$12,965.63 in 2004 to \$22,945.55 in 2006.

Other councils have set lower fees where ongoing growth pressure has been lower: for example, Hutt City Council set development contribution fees at \$2,536 in 2006. North Shore City Council is an example of a council that set comprehensive fees in 2004 which only increased around 8% to approximately \$26,000 in 2006.

Given the breadth of approaches to setting and reviewing contributions regime and range of growth costs being incurred, it is difficult to provide a generalised figure for development contributions, although the DPMC House Price Unit Report has suggested a range in 2007 of \$5,000 to \$40,000. The above examples are indicative of the range of fees and the range of increases over the period.

As these typically have been introduced in high growth areas, they are a key contributor to the perception that the Building Act has been the cause of major increases in building costs.



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