

Released by the Minister for Canterbury Earthquake Recovery

CERA Christchurch Central City
Commercial Property Market Study
Not Government Policy

May 2012

 **ERNST & YOUNG**

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RELIANCE RESTRICTED

15 May 2012

Canterbury Earthquake Recovery Authority
Level 2, 62 Worcester Boulevard
Christchurch 8011
Private Bag 4999
Christchurch 8140

Attention: Graham Matthews

Dear Graham,

Canterbury Earthquake Recovery Authority ("CERA")
Christchurch Central City Commercial Property Market Study

In accordance with your instructions, we have performed the work set out in our authority, without our prior consent in writing which will not be unreasonably withheld.
engagement letter dated 12 December 2011 except as set out below in connection with the proposed Commercial Property Market Study.

In order to complete our engagement we need to:

- ▶ Conduct feedback meetings with CERA and the Christchurch City Council

We will communicate to you our next steps to achieve these outstanding matters.

Purpose of our report and restrictions on its use

This report was prepared on the specific instructions of the representatives and employees of CERA solely for the purpose of assisting CERA form a view in respect of the rebuild of Commercial Property in the Central City area of Christchurch as defined in this report, and should not be used or relied upon for any other purpose. Save as set out in the attached engagement letter, it should not be quoted, referred to or shown to any other parties except those party to our engagement letter, unless so required by court order or a regulatory

Scope and nature of our work

The scope and nature of our work, including the basis and limitations, are detailed in our engagement letter.

Our report to you is based on the results of surveys and interviews with a sample of property owners, tenants and consumers. We did not achieve a sample size of 100% of the total population nor did we intend to, hence our viability testing requires the values of the remaining population to be extrapolated, based on the characteristics of the respondents.

Extrapolation introduces unknown errors into these estimates. The size of these errors is difficult to quantify.

Other errors occur for reasons such as respondent error and errors in processing.

Whilst every effort is made to minimise these errors, they still occur and it is not possible to quantify their effect.

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Our report

Conclusions and points of view contain our recommendations in respect of your approach to the engagement based on factually based conclusions derived from our analysis of information received.

The Databook is organised in the form of an Excel workbook. In the event that the Databook has been provided in electronic form, please note that it is not a financial model and is not suitable to be used as such. The Databook may not be suitable for purposes other than the specific purpose for which it was prepared.

Our work contained in the report was completed on 29 March 2012. Therefore our report does not take account of events or circumstances arising after that date.

The Report contains information collated from surveys. The surveys contain data received up to and including 9 February 2012, but do not include any responses received after this date. We note as previously discussed with CERA that certain surveys require anonymity of the respondents.

Should you have any questions in respect of this Report please do not hesitate to contact me.

Yours faithfully



Bruce Gemmell
Director

Abbreviations and definitions

Apollo Projects	Apollo Projects Limited
CCBA	Central City Business Association
CBD	Central Business District
CCP	Draft Central City Plan
Central City Area	Area within the Four Avenues of central Christchurch (being Fitzgerald Avenue, Bealey Avenue, Moorhouse Avenue and Rolleston Avenue)
Compact CBD	Area of Lichfield, Manchester and Kilmore streets and the Avon River / Otakaro (as defined by the CCP)
CERA	Canterbury Earthquake Recovery Authority
Colliers	Colliers International Valuation (ChCh) Limited
DEE	Detailed Engineering Evaluation
Earthquake	Canterbury Earthquake of 22 February 2011
EYTAS	Ernst & Young Transaction Advisory Services Limited
Net Rent	Rent excluding building operating expenses
OPL	Ocean Partners Limited
Project Team	EYTAS, OPL, Colliers and Apollo Projects
Study	Christchurch Central City Commercial Market Property Study
sqm	square metres

Definitions of building grades

This Study discusses different types of building grades. The grades are Christchurch specific in accordance with the grading system developed by Fright Aubrey (now Colliers Valuation) in 1993 and are defined as follows:

Grade A+	There are three recently completed major office buildings in the Christchurch CBD, comprising the IRD Building, HSBC Tower and the Christchurch Civic Building. These buildings are categorised as new generation superior A+ Grade buildings with HSBC Tower achieving 5 Star Green Star rating and Civic Building achieving 6 Star Green rating.
Grade A	There are three buildings in the A Grade, PricewaterhouseCoopers Centre, Forsyth Barr House, and Clarendon Tower which are now all in excess of 20 years old and although providing high quality accommodation, they do not incorporate the same technology now offered in new office buildings recently constructed in suburban locations.
Grade B	The B Grade represents predominantly modern office buildings constructed during the 1980's and early 1990's which are air conditioned. Any older substantial office buildings which have been refurbished and are now air conditioned are also categorised as B Grade. Examples include DTZ House, Westpac Canterbury Centre and URS House.
Grade C	The C Grade represents modern non air conditioned or partially air conditioned office buildings. Examples include Amuri Courts, Equitable House and Vero House.
Grade D	The D Grade represents older non air conditioned office buildings built between the 1950s and 1970s. Examples include St Elmo Courts and Kenton Chambers.
Grade E	The E Grade represents old dated office buildings built pre 1950 approximately.

Definitions of Green Star ratings

The NZ Green Building Council has developed a Green Star Performance tool to assess the environmental impact that is a direct consequence of a building's site selection, design, construction, and maintenance. The framework has eight separate environmental impact categories plus an innovation category.

Credits are awarded within each of the categories based on the building's environmental merits in a range of areas and they take into consideration the unique development requirements and impacts of each sector. Points are then weighted and an overall score is calculated, determining the project's Green Star rating.

Possible ratings

4 Star Green Star Certified Rating	Score 45-59 signifies 'Best Practice'
5 Star Green Star Certified Rating	Score 60-74 signifies 'New Zealand Excellence'
6 Star Green Star Certified Rating	Score 75-100 signifies 'World Leadership'

Statistical definitions

RiskNormal	Normal distribution output produced by Monte Carlo simulation
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Executive summary

Ernst & Young Transaction Advisory Services ("EYTAS") has been engaged by Canterbury Earthquake Recovery Authority ("CERA") to undertake the Christchurch Central City Commercial Market Property Study ("the Study"). EYTAS engaged Ocean Partners Limited ("OPL"), Colliers International Valuation (ChCh) Limited ("Colliers") and Apollo Projects Limited ("Apollo Projects") to assist with the Study. The overall objective of the Study was to identify the projected supply and demand for commercial property (office, retail, hotel and hospitality), the attractiveness of commercial property to investors and developers and to analyse the financial viability development.

There were three key elements to our work:

- ▶ Demand side analysis
- ▶ Supply side analysis
- ▶ Viability testing

Demand side analysis

Our methodology for analysing the demand for commercial property in the Central City Area primarily involved collecting data from tenants and consumers through online surveys and interviews with key tenants.

Tenant responses

252 tenants responded to the tenant survey, representing 161,987 sqm of pre Earthquake Central City commercial property. Approximately 88% (142,283 sqm) of these responses were from tenants who leased commercial office space.

Given the pre Earthquake total occupied space of 382,091 sqm (446,002 sqm total space) we estimate that approximately 45% of commercial office tenants (including owner occupiers) responded to the survey.

We did not have a strong response from retail, hospitality and accommodation tenants. Retail sector leaders were reluctant to commit to returning until there is

clear evidence of a compelling business case. Meanwhile, accommodation operators are reluctant to commit while insurance negotiations are in progress and while decisions are being made regarding the location of the convention centre.

80% of tenants indicated they are likely to return to the Central City Area and that they will require a total of 97,779 sqm of commercial office space. If we extrapolate that demand we project the total demand for commercial office space to be approximately 266,000 sqm.

There was strong preference towards new, low-rise buildings, with 75% of respondents preferring to return to new buildings and 75% of respondents stating they would not return to a building over four storeys. However, only 26% of respondents representing 25,000 sqm of commercial office space are willing to pay a net rental of \$450 per sqm (68,000 sqm extrapolated).

Tenant respondents indicated a preference for the business/office precinct to be in the following areas:

- ▶ Precinct 6 - around the Square (28%*)
- ▶ Precinct 1 - around the Arts Centre (22%*)
- ▶ Precinct 7 - around Cashel Mall (20%*)

* Of the total estimated required commercial office space post Earthquake

Tenants and consumers indicated a preference for the retail precinct to be in either Precinct 6 or Precinct 7 and for the hotel and convention centre precinct to be in Precincts 5 (Victoria Square), Precinct 6 or Precinct 1. Tenants preferred the restaurant and bar precinct to be in either Precinct 1 or Precinct 6. The above findings in respect of preferred precincts are broadly consistent with the CCP's proposal.

Consumers, property owners and tenants were asked what factors might prevent tenants and consumers from returning to the Central City. Respondents revealed the top five factors as being: the level of amenities available; availabilities of buildings; ability to isolate construction zones and carparking. Interestingly unwillingness or inability to pay rental costs was not as significant as other factors.

Consumer responses

3,166 consumers completed the consumer survey, 65% of these respondents stated they worked in the Central City Area immediately prior to the Earthquake.

64% of consumer survey respondents indicated they wish to work or are currently working in the rebuilt Central City. This number increases to 76% when only consumers that were working in the Central City prior to the Earthquake are considered.

56% of consumer respondents that were employees prior to the Earthquake stated they would not work in a building in the Central City over four storeys. However, 63% stated they would return to an existing building.

Supply side analysis

In order to understand developer and property owner attitudes to developing in the Central City Area; to quantify the likely construction costs for various new commercial buildings in the Central City Area; and to quantify the likely yields and margins required by property owners and developers intending to develop in the Central City Area, our Study was split into three parts.

- ▶ Property owner and developer online survey. This survey was distributed to 3,740 property owners in the Central City based on a database provided by CERA.
- ▶ Property owner and development interviews
- ▶ The preparation of costings for a series of commercial property buildings that would be marketable and be seismically strengthened to meet the anticipated demand

In addition to the above analysis, in order to quantify existing commercial stock in the Central City Area we reviewed the CERA demolitions database. Based on our analysis of the database, it is estimated that approximately 204,000 sqm of commercial office stock will not be demolished. We do however note that this figure is likely to reduce, possibly by a significant amount, in the coming months. Of this commercial office stock 87,700 sqm relates to Grade A+, A and Grade B

stock. The remaining stock relates to Grade C and below and there is a significant concern as to whether this stock is economically viable.

Property owner responses

239 property owners responded to the property owner survey, representing 417,305 sqm of pre Earthquake Central City commercial property. 112 respondents were owner occupiers (either in part or in full) and the remaining 127 were owners that were not occupiers of the building.

67% of respondents (based on sqm of property) indicated that their building has been or is likely to be demolished; 14% anticipate their building will be repaired and the remaining 19% own buildings that are currently tenanted.

Of the respondents whose buildings are likely to be repaired, 64% expect repairs to take less than 12 months, 21% between 12 and 18 months and the remainder expect repairs to take longer than 18 months.

Of the respondents who indicated their buildings had been or are likely to be demolished 21% do not intend to reinvest insurance proceeds in property in Christchurch and 6% intend to reinvest in suburban Christchurch property.

Property owners revealed the key factors that may prevent from redeveloping are the level of red tape/regulation; delays and lack of clarity regarding the building consent process; and access to insurance. Also, of interest were property owner responses to the level of lease commitment they require from tenants to rebuild. At least a 60% commitment from tenants was required by 56% of respondents. However, a quarter of all respondents stated that they did not require any commitment from tenants to commence rebuilding.

Generally property owners were open to land amalgamation, with 62% of respondents stating it was something they would consider.

Survey respondents who intend to redevelop require an average yield of approximately 10.2%, after adjusting for outliers the mean was reduced to 9.0%. This is notably higher than the long term average market yield of approximately 8.0% for Christchurch Central City. The premium may be a reflection of current underlying perceived risk in the Central City Area property market.

Approximately 70% of respondents did not expect to make any development margin. The mean minimum development margin required was 5.5%, which is significantly lower than traditional international property development margins of between 15% and 20%. Consequently, our analysis indicates that it will be difficult, if not, impossible to achieve the required development margin to attract outside capital.

Building cost

We have costed several commercial office buildings suitable for a rebuilt Central City. These buildings include 5, 10 and 15 story level buildings, firstly with a 500 sqm floorplate and secondly with a 1,000 sqm floorplate.

Based on the cost and design assumptions used the anticipated cost (including contingency and professional fees) per sqm for the following building heights is as follows:

Floorplate	500 sqm	1,000 sqm
Level 5	\$3,899	\$3,206
Level 10	\$3,045	\$3,236
Level 15	\$3,317	\$3,388

Viability testing

A Monte Carlo simulation technique was used to predict the level of rent that would be required for each of the building profiles described above.

Our analysis shows that for a five storey, 1,000 sqm floorplate building the rental charge to make the property viable from the perspective of the property owner is approximately \$460 per sqm.

At \$450 per sqm the extrapolated demand for commercial office space would be approximately 68,000 sqm. This drops to 46,000 sqm at \$500 per sqm.

Viability bridges

While there is significant demand for commercial office space in the Central City Area, based on our findings a limited portion of this demand is economically viable when rent levels required by property owners are considered. Furthermore, our analysis shows that there is likely to be a limited window of opportunity to attract interested tenants back to the Central City Area before they have to renegotiate new lease terms. Therefore there is a risk that if tenants are not attracted back to the Central City Area within the next two years then they may not be able to return for a significant period.

In order to make the Central City Area more viable either:

- ▶ The quantum of demand has to be increased at the price points that make the rebuild viable for property owners, by identifying opportunities for tenants to accept higher rents than what they are currently willing to pay; and/or

The supply side price points need to be reduced to levels that a higher number of tenants are willing to pay

Demand can be influenced either by government incentivisation or through education on workplace efficiency. Both of these points are discussed below.

Supply side price points can be reduced either by reducing the cost of the new building (through reduction in consenting costs or a form of government incentivisation) or removing the restrictions on building height (though this only has a marginal impact on cost and may not be met equally by demand).

However, there is a possibility that tenants may be able to afford higher rents than they are currently anticipating by improving workplace efficiency as it is noted from data collected in the tenant survey that they anticipated a weighted average of 19.5 sqm per employee workstation, which is significantly above the 14.6 sqm per employee national average from the Colliers Workplace Report.

If these efficiencies can be achieved the extrapolated demand for buildings with a rental of \$450 per sqm (or greater) could increase from 68,000 sqm to approximately 105,300 sqm, as theoretically tenants would be able to pay 25% more net rental costs per sqm for 20% less space without any significant financial

impact. If this office space takes the form of 5 storey, 1000 sqm floorplate buildings, this equates to approximately 21 new office buildings before considering the normal level of vacancy that can be expected with any commercial property.

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Key findings

In this section we summarise our key findings from the Study. Our key findings are presented in three sections:

- ▶ Demand side
- ▶ Supply side
- ▶ Viability testing

The objectives, methodology, analysis and conclusions for each of these three sections are presented in the following pages.

Demand side

Objective	<ul style="list-style-type: none">▶ The prime objective of our demand side research was to assess the dimensions of the demand-side market to determine the likely demand for new buildings and facilities within the Central City Area
Methodology	<ul style="list-style-type: none">▶ Our methodology primarily involved the collection of data from tenants and consumers through surveys. The detailed analysis of the profile and quantity of respondents is presented in Appendix C▶ The consumer survey was conducted online and targeted consumers who worked in the Central City or were regular visitors either for work, shopping or recreation▶ The tenant survey was distributed directly to 700 known tenants of commercial office space using a range of industry groups▶ The outputs from our work include qualitative and quantitative findings. The qualitative findings include an analysis of the perceptions of the tenants and consumers of the proposed rebuild of the Central City Area. The key demand-side qualitative findings are presented in Appendix D▶ The quantitative findings include an assessment of the likely quantum of space required and acceptable level of rents. The key quantitative findings are presented in Appendix E▶ A detailed methodology is presented in Appendix A

Subject	Supporting evidence & analysis	Conclusions
Profile of respondents to the tenant and consumer surveys		
Overview of tenant survey respondents	<ul style="list-style-type: none"> ▶ An overview of the tenant responses by business type and size is presented on page 44 ▶ A total of 252 tenants responded to the tenancy survey. This represents a total commercial space (pre-Earthquake) of 161,987 sqm ▶ There is no source data available in respect of some of the tenant sub-groups. Therefore we are not able to form definitive conclusions as to the size of our sample as a proportion of the total sample 	<ul style="list-style-type: none"> ▶ The response rate and the quantum of the office space occupied by the respondents provides a relevant sample on which to base our qualitative findings of tenant attitudes
Commercial office tenant respondents	<ul style="list-style-type: none"> ▶ Commercial office tenants represented 81% of the total respondents by number and 88% of the total respondents by pre-Earthquake total office space ▶ The total stock of commercial office space pre-Earthquake was approximately 446,000 sqm of which 382,000 sqm was tenanted (refer page 40) ▶ We received responses from tenants who stated that they leased 142,283 sqm of commercial office space in the Central City Area ▶ In addition, we estimate that, owner occupiers who represent approximately 30,000 sqm of commercial space responded to the property owners survey ▶ We therefore estimate that approximately 45% of commercial office tenants and owner occupiers, by commercial office space responded, to either the tenant survey or the property owner survey ▶ The overview of tenant responses on page 44 demonstrates that there was a strong response from the professional services firms and the banking/finance sector, with 79% and 84% of the total population (by total office space) responding ▶ Banking and professional services firms represented just under 	<ul style="list-style-type: none"> ▶ We are satisfied that the sample of commercial office tenants that responded to our survey represents a statistically relevant sample on which to base our quantitative findings for rental viability testing ▶ Professional services firms and the banking/finance sector are the groups most willing to engage in discussions around returning to the Central City Area. They will play key role in determining how, when and where the rebuild occurs

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one third of total commercial office space in the Central City Area pre-Earthquake

- ▶ Almost a quarter of pre-Earthquake commercial office space was occupied by central, local and regional government. In addition we note that several large government departments and State Owned Enterprises are currently located outside the Central City Area
- ▶ There was a consistent message in the anecdotal comments on the surveys in respect of the government's role in attracting tenants. One respondent stated, "both governmental and local authority agencies need to relocate to the central city"
- ▶ The following table provides an analysis of the total commercial office space pre-Earthquake, split by respondents and non-respondents

Breakdown of pre-Earthquake commercial office space responses

Occupied by respondents that have relocated	142,283
Occupied by respondents that have not relocated	7,832
Owner occupiers that responded to property owners survey	30,000
Other non respondents	26,976
Vacant at the time of the Earthquake	63,911
Total commercial office property	446,002

Retail and hospitality tenant respondents

- ▶ The total number of respondents to the tenant survey representing the retail and hospitality sectors was 19 and 24 respectively. The respondents occupied total commercial property (pre-Earthquake) of 6,446 sqm and 9,756 sqm respectively
- ▶ We do not have source data to be able to reliably determine the sample size as a percentage of the total population, however anecdotal evidence would suggest that the response rates are poor
- ▶ We received a high level of engagement from retail and hospitality sector leaders to identify possible reasons for the lack of engagement in the survey by the sector
- ▶ Discussions with retail sector leaders suggest this was due to a reluctance to commit to a Central City Area until there was a clear plan that economically supported a decision to return
- ▶ An industry leader stated, "Retail will follow demand driven by where people are. A decision to open a retail store will be made only after a detailed analysis of all economic factors including demographics of consumers in the catchment areas, assessment of competition and location and operating performance of other stores that may exist within the retailers' business. Then and only then can a decision be made as to whether a new location is viable. This level of information is not currently available - so no assistance can be provided at this time"
- ▶ Paul Lonsdale from the CCBA stated, "I am not surprised by the lack of response - many boutique retailers have not reopened and may never reopen and the retail chains are trading well with less stores"
- ▶ Retail and hospitality tenants are reluctant to complete the survey and express views as to the when they would return to the Central City Area until there is a clearer picture as to what the Central City Area will look like
- ▶ Our sample sizes for the retail and hospitality sectors means the data for quantitative analysis (e.g. rental viability testing) must be considered unreliable
- ▶ CERA should continue to maintain a continuous dialogue with the retail and hospitality sector and will need to formally re-engage in the discussions about returning to the Central City Area rebuild once there is a clearer view as to how the Central City Area will take shape
- ▶ Our discussions indicate that a direction and implementation plan would be required to detail how the retail sector would be brought back to the Central City Area/Compact CBD

Hotel tenant respondents

- ▶ There were only two hotel respondents to the tenants survey
- ▶ However we note that there was a good response from the hotel and hospitality sector to the property owners survey with 39 respondents representing 89,724 sqm of floor space
- ▶ Accommodation operators who were in the city have been reluctant to speak on record about their future intentions. We understand that this is a position taken while insurance negotiations are in progress
- ▶ We were also told that until a decision is made about the location of key public assets they will not comment on any course of action
- ▶ CERA should continue to maintain a continuous dialogue with the hotel sector and will need to formally re-engage in the discussions about returning to the Central City rebuild once there is a clearer view as to how the Central City will take shape

Qualitative responses to the tenants and consumer surveys

Profile of consumer respondents

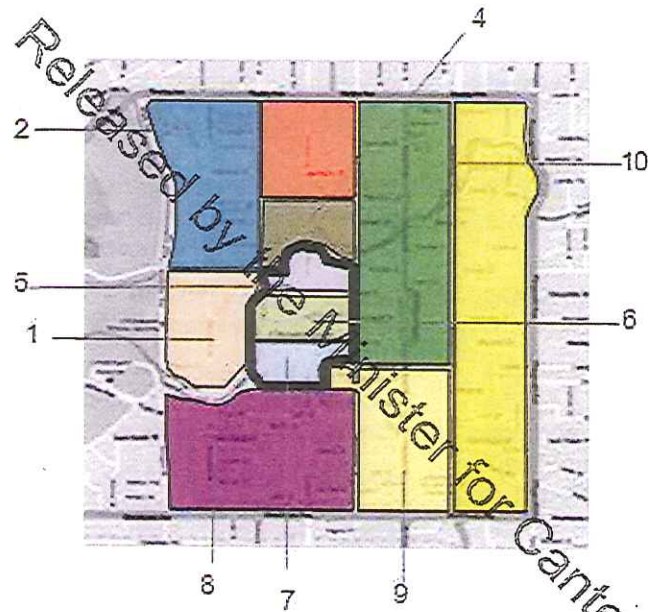
- ▶ The consumer survey was completed by 3,666 respondents
- ▶ Of respondents that chose to answer 65% worked in the Central City Area immediately prior to the Earthquake
- ▶ To test that we received a broad range of respondents from different economic and social groups we collated data in the following key areas:
 - ▶ Age
 - ▶ Income
 - ▶ Use of Central City pre-Earthquake
- ▶ The response rate from consumers provided a relevant sample on which to base our qualitative findings of tenants attitudes
- ▶ We were satisfied that the profile of the respondents to the consumer survey provided a diverse range and conclude that the sample provided a representative sample of views on which to base our findings

Probability of, and timeframes for tenants returning

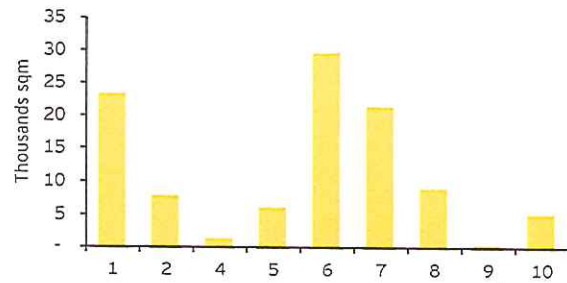
- ▶ Our survey showed that 80% of tenants that relocated after the Earthquake were likely to return; 37% were likely to return within two years, 28% between two and five years and 15% likely to return after 5 years
- ▶ Notably 100% of tenants that were looking to lease more than 500 sqm when they returned to the Central City Area were likely to return to the Central City Area, with 88% looking to return within 5 years
- ▶ A total of 60% of respondents (57% of those looking to lease more than 500 sqm when they returned to the Central City
- ▶ The respondents to the survey, and in particular the large tenants, have demonstrated a desire to return to the Central City Area
- ▶ The analysis shows that there is likely to be a limited window of opportunity to attract tenants back to the Central City Area before they have to renegotiate new lease terms
- ▶ Therefore there is a risk that if tenants are not attracted back to the Central City Area in the next two years then they may not be able to return for a significant period

	<p>Area) have a remaining existing lease term of less than two years</p> <ul style="list-style-type: none"> ▶ Only 3% of respondents had a remaining existing lease term of 6 years or longer 	<ul style="list-style-type: none"> ▶ CERA should consider the facilitation of attracting these tenants back on a one-to-one basis to exert influence over when and where commercial tenants will return to. This may require the appointment of a locally respected business leader to assist in the negotiation
<p>Preferred Office/business precincts by tenants</p>	<ul style="list-style-type: none"> ▶ Respondents to the survey indicated that they require 97,770 sqm of commercial office space (post adjustments for data cleansing) ▶ This contrasts to the 147,283 sqm of office space that was tenanted pre-Earthquake by the respondents ▶ All respondents were asked where they believed the business/office precinct should be in the Central City. The responses by percentage of respondents is presented on page 53 and the responses shown by the quantum of commercial office space required by tenants post Central City rebuild is presented on page 66 ▶ Our analysis shows that the majority of commercial office respondents preferred the following areas: <ul style="list-style-type: none"> ▶ Precinct 6 - Square (28%*) ▶ Precinct 1 - Arts (22%*) ▶ Precinct 7 - Cashel Mall (20%*) ▶ There was also reasonable support for the Precinct 2 - Victoria St (8%*) and areas around Precinct 8 - City South (9%*) ▶ There was little or no desire from tenants to have the business/office precinct located in any of the other precincts 	<ul style="list-style-type: none"> ▶ The analysis broadly supports the CCP in that the majority of the respondents preference was to have the office/business precinct situated in the Compact CBD as defined by the CCP ▶ However, there is also a significant level of support for the areas around Victoria Street and the Arts precinct ▶ Further we note that there are both existing commercial properties and new developments that have or are about to commence in these areas ▶ As buildings are available now there is a significant risk that tenants will be distributed over a wider area than in a Compact CBD, as proposed by the CCP

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Commercial tenants sqm of required space by preferred location - post-Earthquake



- 1 Area of Armagh St, Durham St, Cambridge Tce and Rolleston Ave (Arts)
- 2 Area of Victoria St (Victoria Street)
- 4 Area of Peterborough St, Manchester St, Oxford Tce and Durham St (PGC)
- 5 Area of Oxford Tce, Manchester St, Gloucester St and Durham St (Victoria Sq)

- 6 Area of Gloucester St, Manchester St, Hereford St and Oxford Tce (the Square)
- 7 Area of Hereford St, Manchester St, Lichfield St and Oxford Tce (Cashel Mall)
- 8 Area of Lichfield St, Barbadoes St, Moorhouse Ave and Antigua St (City South)
- 9 Area of High St (High)
- 10 Area of Bealey Ave, Barbadoes St, Cashel St and Manchester St (Latimer)

**Percentages are expressed as a proportion of total estimated required commercial office space post-Earthquake. Where respondents provided two preferred commercial business/office precincts the commercial office space post-Earthquake was allocated on a pro rata basis*

Factors that may prevent tenants from returning

- ▶ As part of the survey we asked consumers, property owners and tenants what factors may prevent tenants and consumers from returning to the Central City
- ▶ Tenants have identified a wide range of factors that may prevent them from returning. Whilst some of these factors can be controlled or influenced by CERA, the critical factor is the availability of buildings to which tenants can return
- ▶ The percentage of tenants that answered significant or very significant to the following factors is bracketed:
 - ▶ Level of amenities available in the future (94%)
 - ▶ Availability of buildings within their timeframes (93%)
 - ▶ Ability to isolate construction zone (noise traffic etc) (90%)
 - ▶ Car parking (90%)
 - ▶ Level of amenities being immediately available (89%)
 - ▶ Impact of working amongst a construction zone (86%)
 - ▶ Personal safety in the workplace (80%)
 - ▶ Unwillingness and inability to pay rental costs (72%)
 - ▶ Existing lease commitments (46%)
- ▶ Consistent with our findings throughout the survey a relatively small number of tenants saw existing lease commitments as a significant preventative factor
- ▶ The factor that the highest number of tenants (61%) felt would be very significant was the availability of buildings within their timeframes
- ▶ 35% of respondents identified an unwillingness or inability to pay rental costs as a very significant factor

Perceptions of consumers of returning to the Central City

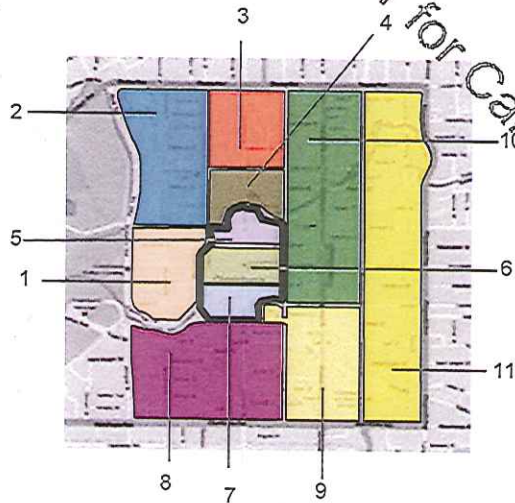
- ▶ Our analysis showed that 64% of consumer survey respondents wish to work, or are currently working, in the rebuilt Central City. Of the remainder 18% answered "don't know" and the balance responded "no"
- ▶ This number increases to 76% when only consumers that were working in the Central City prior to the Earthquake are considered
- ▶ Evidence from our discussions with tenants supports the notion that the views of employees are a significant factor in the decision to return. Telecom have stated that they "do not wish to force people back into the Central City Area]"
- ▶ The percentage of consumers that answered significant or very significant to the following as factors that may prevent them from returning to the Central City is bracketed:
 - ▶ Level of amenities available in the future (93%)
 - ▶ Personal safety in the workplace (84%)
 - ▶ Car parking (79%)
 - ▶ Level of amenities being immediately available (69%)
 - ▶ Ability to isolate construction zone (noise traffic etc) (60%)
 - ▶ Impact of working amongst a construction zone (64%)
- ▶ Consumers saw the following features as having the greatest significance when making their decision to return to the rebuilt central city post-Earthquake:
 - ▶ Open space/river/town square
 - ▶ Cafe/lunch bars
 - ▶ Restaurants/bars
 - ▶ Personal safety
 - ▶ Retail
 - ▶ Vibrant arts quarter
- ▶ Attitudes of consumers and their desire to return to the Central City are likely to change over time. We acknowledge that the timing of our survey was within several weeks of a significant level of seismic activity and may have had an impact of consumer attitudes. Hence we recommend that CERA should consider monitoring this response

Preferences in respect of building height

- ▶ Building height was a major issue for both tenants and consumers when assessing their return to the Central City, with 75% of tenants and 56% of consumers identifying that they would not work in a building over four storeys
- ▶ The building height remains a significant issue for both tenants and consumers, which broadly supports the building height restrictions included in the CCP
- ▶ The impact of building height restrictions and the trade off between rental costs and building height is further considered in our viability section

Preferred retail precincts by tenants and consumers

- ▶ There was a clear indication from both tenants and consumers regarding the location of the retail precinct with 68%* of tenants and 57%* of consumers preferring one of the following precincts:
 - ▶ Precinct 6 - Square
 - ▶ Precinct 7 - Cashel Mall
- ▶ Our findings are broadly consistent with the CCP's proposal to establish a "retail priority area" in the precinct around Cashel Mall and are broadly similar to the preferred business/office precincts indicated by commercial office tenants

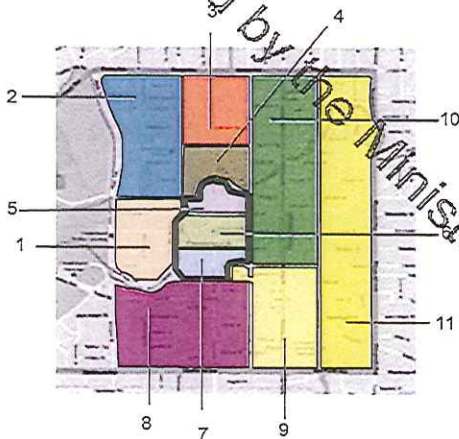


*Percentages are expressed based on the percentage of total responses. Where respondents provided two preferred retail precincts responses were allocated on a pro rata basis

Preferred hotel and convention centre precinct and restaurant and bar precincts by tenants and consumers

- ▶ Precinct 5 (Victoria Square) and Precinct 6 (Square) were the favoured precincts for hotels and the convention centre with 50% of tenants preferring these locations
- ▶ Consumers had a broader range of preferences with precincts 1 to 5 all receiving between 12%* and 23%* of the total responses

- ▶ There was no one distinct area of preference for the hotel and convention sector precinct
- ▶ The industry is awaiting the announcements in respect of the location of the Convention Centre before committing to the rebuild



- ▶ The location of the new convention centre will have a pivotal role in the determination as to where hotels will be located. One respondent stated "I am happy with the [Central City] plan, but identification of the Conference Centre site is urgently required"
- ▶ Tenants preferred the restaurant and bar precinct to be either in Precinct 1 - Arts (21%*) or Precinct 6 - Square (35%*)

*Percentages are expressed based on the percentage of total respondents. Where respondents provided two preferred hotel and convention centre precincts the responses were allocated on a pro rata basis

Quantitative responses from tenants

Likely quantum of space required by commercial office tenants

- ▶ The total sqm of commercial office space from tenants who responded to the survey was 97,770 sqm (*), which compares to the 142,283 sqm of space of commercial office space that the same tenants occupied pre-Earthquake
- ▶ In addition there are tenants who occupy approximately 7,000 sqm of commercial office space in the Central City who have not had to relocate. These tenants predominantly occupy the HSBC Tower
- ▶ The reduction represents both a reduction in the commercial office space required by respondents and a reduction in the number of tenants that will look to return to Central City
- ▶ Assuming that our sample is representative of the total population we estimate that the extrapolated demand for commercial office space is approximately 266,000 sqm
- ▶ We acknowledge that the our sample may be skewed towards respondents who are more likely than that the total population to return because:
 - ▶ Businesses that are returning are more likely to respond to our survey
 - ▶ The respondents to the survey are skewed towards the larger commercial office tenants
- ▶ However these issues are largely offset by the following factors
 - ▶ There is a significant portion of government entities representing a significant quantum of pre-Earthquake office space
 - ▶ The survey did not include the owner occupiers that completed the property owner survey and given they own property in the Central City Area they are more likely to return
- ▶ We estimate that the demand for commercial office space is approximately 266,000 sqm, before considering the impact of rental viability testing
- ▶ This estimate is anticipated to reduce over time if suitable sites are not available in the Central City as tenants leases expire and alternative permanent or semi-permanent locations are found
- ▶ The role of Government is pivotal in the achievement of this quantum of commercial office space
- ▶ The results demonstrate that the Central City will be a smaller area post the rebuild and hence there will be significant areas of open space within the Central City Area. Many respondents were conscious of this issue and expressed concern over how the vacant areas of derelict buildings and vacant land were treated. "Landscaping of demolished areas is essential to make the city an inviting place until fully developed" said one respondent

* After data cleansing

Demand for refurbished existing buildings

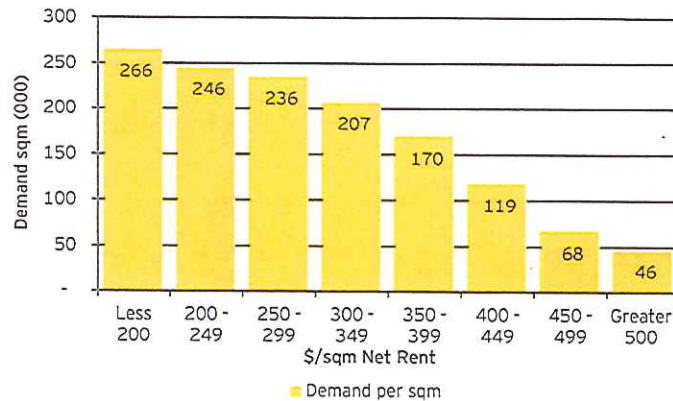
- ▶ There was a strong preference towards new buildings with 75% of all tenants and 90% of tenants planning to lease more than 500 sqm preferring to return to new buildings
- ▶ While there is an estimated 203,998 sqm of commercial office stock remaining in the Central City Area, we note that the largest buildings remaining in the Central City Area, being the Civic Building, HSBC Tower and the IRD building, are fully leased
- ▶ Of the consumers that were employees prior to the Earthquake, 63% would return to a refurbished and strengthened existing building
- ▶ Whilst tenants and consumers have expressed their preference at a point in time, tenants that are unwilling to pay the rents that a new build will command will inevitably have to re-examine their position

- ▶ We note that based on current estimates on the quantum of remaining commercial office space there will be a significant oversupply of existing commercial buildings
- ▶ However, this is largely dependant on an assessment as to how economically viable the existing buildings are. This point is discussed further in the viability section

Acceptable levels of rent for commercial office tenants

- ▶ As part of our survey we requested that tenants provided an upper and lower case for the net rent that they would be prepared to pay in the rebuilt Central City
- ▶ From this data (based on the upper end rent that tenants would pay) we were able to produce an extrapolated demand curve for commercial office tenants as shown in the table below

- ▶ The pressure point for demand appears to be between \$350 per sqm and \$450 per sqm net rent with the demand curve being at its steepest between these points
- ▶ The focus on making the Central City viable for commercial office tenants should focus on either enabling property owners to be able to build property for approximately \$350 per sqm or assisting tenants in being able to afford a high rent charge



- ▶ The chart shows that just fewer than 64% of tenants would pay more than \$350 per sqm. When extrapolated this equates to 170,000 sqm
- ▶ Tenants requiring 25,000 sqm of commercial office space stated that they would be willing to pay a net rental of \$450 per sqm or more. When extrapolated this equates to 68,000 sqm of commercial office space

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Supply side

The over-riding objective of the supply side research was to assess the likely supply for new buildings in the Christchurch City Area and at what cost.

Objective	<p>The objectives of our supply side research was as follows:</p> <ul style="list-style-type: none">▶ To understand developer and property owner attitudes to developing in the Central City Area▶ To quantify the likely lettable floor areas and building dimensions for new commercial buildings in the Central City Area▶ To quantify the likely construction costs for new commercial buildings in the Central City Area▶ To quantify the likely yields and margins required by property owners and developers intending to develop in the Central City Area
Methodology	<p>The methodology is split into two parts:</p> <ul style="list-style-type: none">▶ Firstly, we collected data from property owners and developers through surveys. The detailed profile of respondents is presented in Appendix C▶ The property owner survey was conducted online and was posted to 3,740 property owners in the Central City based on a database provided by CERA▶ The outputs from our work include qualitative and quantitative findings. The qualitative findings include an analysis of the perceptions of the tenants and consumers to the rebuild of the Central City Area. The detailed supply-side qualitative findings are presented in Appendix G▶ The quantitative findings include an assessment of the likely quantum of property investor yields and developers margins. The detailed quantitative findings are presented in Appendix H▶ Secondly we prepared costings for a series of commercial property buildings that would be marketable and be seismically strengthened to meet the anticipated demand requirements. We have prepared costings for buildings which are both compliant with the heights restrictions of the CCP as well as those that are not compliant for comparison purposes▶ The costings for each of the buildings are presented in Appendix F▶ The architectural designs are presented in Appendix K▶ A detailed methodology is presented in Appendix A

Subject	Supporting evidence & analysis	Conclusions
Profile of respondents to the property owner survey		
<p>Overview of property owner respondents</p>	<ul style="list-style-type: none"> ▶ In total there were 239 respondents to the property owner survey, of which 112 were owner occupiers (either in part or in full) and 127 were owners that were not occupiers of the building ▶ The total floor area of property owned by owner occupiers was 156,416 sqm ▶ The total floor area of property owned by owners that were not occupiers was 260,889 sqm ▶ The primary business use of all property as described by the respondents by lettable floor area was commercial (58%), visitor accommodation and hospitality (27%), retail (11%) and other (10%) ▶ There is no data relating to visitor accommodation, hospitality and retail to assess the total commercial property stock in Christchurch prior to the Earthquake and therefore we cannot comment on our response rate as a proportion of the total population. However, we can state that based on anecdotal discussions with key parties we are satisfied that our sample represents a significant portion of commercial property in the Central City Area 	<ul style="list-style-type: none"> ▶ The response rate and the quantum of the office space owned by the respondents provides a relevant sample on which to base our qualitative findings of property owner attitudes and data in respect of development margins and yield expectations
Qualitative responses from property owners		
<p>Overview of property owner intentions</p>	<ul style="list-style-type: none"> ▶ Based on the sqm of property from our sample population we note that 67% responded that the building they own has been or will be demolished (19% are awaiting an insurance assessment) ▶ Of the total population 14% anticipate that their building will be repaired (10% are awaiting an insurance assessment) ▶ The remainder (19%) own buildings that are either fully or partially tenanted 	<ul style="list-style-type: none"> ▶ Over a quarter of the respondents (by both number of respondents and by quantum of pre-Earthquake commercial office space) are still awaiting insurance assessments to be completed on their property ▶ Our analysis indicates that the settlement of insurance negotiations is still a significant factor impacting upon the demolition process

Expectations of property owners whose buildings are likely to be repaired

- ▶ Of the respondents whose buildings were likely to be repaired, 39% considered the repairs will take less than 6 months; a further 25% expect repairs to take 6 to 12 months, 21% between 12 to 18 months and the remainder of respondents (15%) expect repairs to take longer than 18 months
- ▶ 65% of respondents expect their insurance to cover at least 80% of the total repair cost, a further 25% are unsure
- ▶ Respondents were asked how confident they were to attract tenants to their building once repaired. 65% of respondents are confident to very confident that they would attract tenants, 11% of respondents are not confident and a further 25% are uncertain
- ▶ Respondents that had buildings that were in the process of being repaired were concerned about the progress being made. One respondent stated that, "Progress on the repair and demolition of existing buildings is limiting the rebuild progress and causing people to lose interest"

- ▶ The views of the property owners that are in the process of repairing their buildings are consistent with all property owners, in that the prohibiting factors to the rebuild being achieved in a timely manner is gaining access to sites and reduction in the time taken for red tape to be completed

Expectations of property owners whose buildings have been or are likely to be demolished

- ▶ 40% of respondents whose buildings were likely to be demolished answered that they have achieved a satisfactory settlement with their insurance company, 46% of respondents are still working towards an outcome, 10% do not consider they have achieved a satisfactory settlement and 4% of respondents did not have insurance
- ▶ Respondents were asked about their intentions in respect of any insurance proceeds they received from their property. 21% of respondents do not intend to reinvest in property in Christchurch, 6% intend to reinvest in suburban Christchurch property, 45% intend to reinvest in the Central City Area property and 28% responded as not applicable or property was not insured
- ▶ In respect of the reinvestment of equity one investor stated, "I will not reinvest substantial equity in the CBD core until I have confidence there is clear direction and leadership that will result in development of a vibrant and successful city centre"

- ▶ The settlement of insurance disputes remains a significant factor for the group of property investors who have buildings that have been or are likely to be demolished
- ▶ The lack of clarity as to how the Central City Area will look is fuelling uncertainty and is the main reason why those parties planning to take money out of Christchurch are doing so
- ▶ There needs to a clear communication structure with the key property owners to manage their concerns in respect of uncertainties and lack of clarity around the rebuild

Factors that may prevent property owners from returning to the Central City

- ▶ Property owners were asked which factors may prevent them from returning. The following percentages are based on the proportion of respondents that answered significant and very significant
 - ▶ Red tape/regulation (95%)
 - ▶ Building consents (94%)
 - ▶ Access to insurance (94%)
 - ▶ Level of commitment from tenants (83%)
 - ▶ Access to plant, labour and materials (79%)
 - ▶ Profit margin compared to other projects (79%)
 - ▶ Availability of funding (69%)
- ▶ The level of red tape and the ability to process consents was a theme during our discussions. "The consenting process needs to be streamlined. The Council's responsibility should be focused on an administration role and all technical issues should be addressed by independent, competent consultants" one respondent stated
- ▶ There were several consistent themes throughout the survey and in our discussions as to what property owners required to facilitate the development of their properties
 - ▶ These were:
 - ▶ Providing access to sites
 - ▶ Reducing the red tape in the building consent process
 - ▶ A greater degree of certainty as to what the Central City will look like and the process associated with the red tape is required

Attitudes to land amalgamations

- ▶ Of the property owners that felt land amalgamation was applicable to them (being 78% of the total respondents), 62% felt that land amalgamation was something that they would consider, 38% stated it was something that they would not consider
- ▶ We asked respondents what the success factors may be to achieving successful amalgamation. All the following factors were noted as being "significant" or "very significant" for 75% to 85% of respondents
 - ▶ Agreeing property values
 - ▶ Building/resource consents/regulation
 - ▶ Agreeing ownership structure
 - ▶ Agreeing leadership of amalgamation entity
- ▶ There was generally a positive attitude to amalgamations and they should be a consideration if there becomes a problem finding land areas with suitable plot sizes
- ▶ The survey responses highlight that there are some significant hurdles to be overcome for a successful land amalgamation programme

	<ul style="list-style-type: none"> ▶ Agreeing desired objectives of amalgamation entity ▶ Loss of liquidity 	
<p>Expectations in respect of yields</p>	<ul style="list-style-type: none"> ▶ On average the survey respondents require an average yield of approximately 10.2% compared to the long term average market yield of approximately 8.0% for Christchurch Central City. After adjusting for outliers the mean was reduced to 9.0% ▶ The survey respondents require a premium of 12.5% over the long term average market yield. The premium may be a reflection of current underlying perceived risk in the Central City Area property market ▶ The distribution of yield expectations is presented on page 79. It shows that the most popular outcome was 8% - 9%, but with a skew towards the higher yields 	<ul style="list-style-type: none"> ▶ We note that market forces will bring developers into the Christchurch market should the required yield rise above the long term market average. This should result in the long term average being restored over time ▶ For the purposes of our viability modelling we have concluded that using a long term average yield of between 8% and 9% is appropriate
<p>Expectations on developer margins</p>	<ul style="list-style-type: none"> ▶ The property owner survey gave respondents the opportunity to provide details of both their normal development margins and the minimum development margins that they would be prepared to accept ▶ Approximately 25% of respondents answered this question, being those whose property has been or is likely to be demolished, and who intend to rebuild / redevelop in the Central City area ▶ The survey highlighted that most of these respondents (70%) did not expect to make any development margin ▶ The mean response for the "normal development margin" was 6.3%, and the mean for the "minimum development margin" was 5.5% 	<ul style="list-style-type: none"> ▶ We note that there are a significant number of property owners that are willing to invest with no development margin ▶ For the purposes of our supply side viability testing we have a distribution of developers margins between 0% and 10%
<p>Level of lease commitment from tenants to rebuild</p>	<ul style="list-style-type: none"> ▶ Property owners were asked what level of commitment they require from tenants to rebuild ▶ The results were widely dispersed. At least a 60% commitment from tenants was required by 56% of respondents. A quarter of all respondents stated that they did not require any commitment from tenants to commence rebuilding 	<ul style="list-style-type: none"> ▶ The results were widely dispersed and there did not appear to be a significant obstacle for rebuilding for a large proportion of property owners

Quantative responses from property owners

Estimated building costs for new buildings

- ▶ As part of our engagement Apollo Projects has costed several commercial office buildings suitable for a rebuilt Central City
 - ▶ These buildings include a 5, 10 and 15 story level buildings; firstly with a 500 sqm floorplate and secondly with a 1,000 sqm floorplate
 - ▶ The buildings were designed based on anticipated market demand, what is proposed in the CCP (subject to height restrictions) and what previously existed
 - ▶ With no specific site for the buildings, the design and costings have been based on a site with "average" geotechnical conditions within the 4 avenues. The design allows for driven piles on all buildings of 5 levels and above. Final costs for this component of any building will require specific design and testing
 - ▶ It is assumed that with the low level of construction activity around New Zealand and also the region and world that overall construction costs will change little in the next few years - thus costs are based on today's values. Contributing to this thinking is the likely slow start to rebuilding activity
 - ▶ The foundation and building structural design has been completed using the proposed new seismic accelerations for the Canterbury Region. This has added significant build costs over existing building designs
 - ▶ Car parking ratios are somewhat arbitrary and vary between 1/90 sqm to 1/223 sqm. Final car parking levels would likely depend on tenant requirements and availability of public parking
 - ▶ The building specification is considered to be generally consistent with an equivalent Greenstar 4 star rating
 - ▶ All buildings are architecturally designed to be of "standard" form. Specific architectural features would add additional costs to the building
- ▶ The costs of new build per sqm do not vary greatly on a per sqm basis for size and floorplate
 - ▶ There may be limited opportunity to reduce the average costs, such as the configuration or public ownership of car parking

- ▶ The cost analysis showed, as expected, that as the building footprint increases the costs reduce. This is consistent with the assessment included within the Draft CCP
- ▶ All high-rise buildings are designed using structural steel frames similar to those utilised on the HSBC Tower
- ▶ Based on the assumptions used it is anticipated that the cost (including contingency and professional fees) per sqm for a 1,000 sqm floorplate for each of the following building heights is as follows:

Floorplate	500 sqm	1,000 sqm
Level 5	\$3,899	\$3,206
Level 10	\$3,045	\$2,236
Level 15	\$3,317	\$3,388

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Viability

Objective	The objectives of the viability testing was to compare our findings from the demand-side and supply-side to assess the financial viability based on the development scenarios and to test whether the property market in the Central City Area would be viable	
Methodology	<p>Our methodology included the following steps:</p> <ul style="list-style-type: none"> ▶ Considering the likely commercial space requirements, in light of the commercial office demolitions and the commercial office stock that will remain ▶ Analysing the data in respect of investor yields, developer margins and land values to provide an estimate of the rental charge required per sqm ▶ Considering the likely quantum (sqm) of demand of commercial office space at the price points implied by the supply-side analysis on building costs, anticipated yields and developers margins ▶ Based on this analysis making an assessment as to whether the Central City Area is viable for property developers and investors ▶ Identifying scenarios where the gaps between demand and supply can be narrowed 	
Subject	Supporting evidence & analysis	Conclusions
Viability of space requirements	<ul style="list-style-type: none"> ▶ We have reviewed the CERA demolitions database to assess the quantum of commercial stock available ▶ Based on our analysis of the database, it is estimated that approximately 204,000 sqm of commercial office stock will not be demolished. We do however note that this figure is likely to reduce, possibly by a significant amount, in the coming months ▶ Of this commercial office stock 87,700 sqm relates to Grade A+, A and Grade B stock. These buildings include: <ul style="list-style-type: none"> ▶ HSBC Tower - Fully leased ▶ Civic building - Fully leased ▶ IRD building - Fully leased ▶ Forsyth Barr building ▶ The remaining stock relates to Grade C and below. There is a significant concern as to whether this stock is economically viable 	<ul style="list-style-type: none"> ▶ There will be potentially a quantum of commercial office that will not be economically viable ▶ The precincts outside those with the greatest level of demand (being precincts 1,2,6,7,8) for commercial office space, are likely to have vacant lots ▶ If all Grade A+, A and B buildings are fully tenanted then (assuming a total demand of 212,900 sqm (i.e. adjusting for rental efficiencies), then 125,200 sqm of commercial office space will be required to be built (ignoring price viability considerations) ▶ This equates to 25 five storey buildings with a 1,000 sqm floorplate ▶ However, with potential vacancies in the existing buildings we estimate that the requirements of the new buildings could rise to 174,200 sqm or 35 buildings of a similar dimension