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Commercial Office Occupiers' Perceptions of the Office Market in Post-earthquake Christchurch, NZ

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Abstract:

The 22 February 2011 Canterbury earthquake had a devastating impact on Christchurch property with significant damage caused to land and buildings. As at April 2012, around 770 buildings have been demolished and another 180 identified to be demolished in central Christchurch. In terms of heritage listed buildings, by June 2012, 51 per cent of total heritage stock (117 buildings) in the Central City had been demolished and another 13 were slated for partial demolition.

Lincoln University and CBRE, a commercial real estate service provider, have been conducting research to investigate the on-going impacts of the Canterbury earthquake on the commercial office market in Christchurch. Surveys have been conducted every six months since August 2011 to determine changing perceptions. The broad aims of our ongoing research are to determine occupier's perceptions of the future: their location and space needs post the February earthquake, and the likelihood of relocating back to the CBD after the rebuild and the release of the Christchurch Recovery Plan. This paper reports on the third six-monthly survey. A total of 631 contacts received the survey.

The survey recorded a response rate of 15.4% (97), a decrease from the previous two surveys when response rates were 22% (139) and 21.8% (140) respectively. This lower response rate may be due to survey fatigue. Based on the findings of the initial survey, just over half of respondents were relocated CBD occupiers and 45% were existing suburban office occupiers. Results from the first survey indicate that 66% of respondents have reduced their office size since the earthquakes. More than a quarter of relocated tenants signed leases of one year or less, and 27% of businesses are now working out of residential premises. In comparison to the previous surveys, the CBD has become less attractive to office occupiers. Currently, only 27% (26 of the 97 respondents) of the occupiers surveyed have an intention to move into CBD, which decreased as compared to the January 2012 and August 2011 surveys, recorded at 32% and 38% respectively.

INTRODUCTION

Christchurch city is not on a fault line, unlike the capital city of NZ, Wellington, which is. The September Darfield earthquake occurred along a previously unknown east-west fault line, now known as the Greendale Fault (GNS Science, 2010). According to a report by the Royal Society of New Zealand & Office of the Prime Minister's Science Advisory Committee (2011) scientists did not know about the faults that caused the two Canterbury earthquakes as prior to September 4th, there were no surface signs of the Greendale Fault or the fault that generated the Lyttelton aftershock and there was no evidence for seismicity on these faults (i.e. 'foreshocks'). According to Berryman, manager, Natural Hazards Research Platform for GNS Science, Christchurch is considered a low-risk city because it is a reasonable distance from the Alpine fault (Rebuild Christchurch, 2011). Understanding the likely response to, and preparing and planning for, a natural disaster in an area with no recent history of such events has proven problematic.

The first major earthquake to occur in Canterbury was the magnitude 7.1 earthquake of 4 September 2010, near the town of Darfield. Six months later, the magnitude 6.3 earthquake struck on Tuesday, 22 February 2011 severely damaging New Zealand's second-largest city, Christchurch. As at 1 March 2013 there have

been 528 earthquakes and aftershocks over $4M_W$ since the September 2010 event. Other large earthquakes were the 6.41 magnitude earthquake on the 13 June 2011 and the magnitude 6 quake on the 23 December 2011 (refer to Appendix I for an earthquake location map). These contributed to further building damage.

Amongst the many issues faced by building owners and investors subsequent to the earthquake events, as outlined by Bond, Moricz and Wong (2012), are that the banks and other lenders are now requiring a number of reports from professionals such as structural engineers, geotechnical engineers and valuers, before any new lending will be approved, adding to the cost of investing. Further, for commercial buildings situated in the Red Zone, uncertainties have emerged over the legal rights and responsibility of tenants. To address these uncertainties the NZ Property Council Office Lease has been revised (2013) to clearly set out the responsibilities of both landlords and tenants for "un-tenantable" buildings, and includes updated information on how to deal with insurance issues, damage and destruction clauses, and earthquake prone buildings.

The Christchurch Central Recovery Plan

Following the $7.1~M_W$ earthquake on 4 September 2010, the Canterbury Earthquake Recovery Commission was created under the Canterbury Earthquake Response and Recovery Act 2010. The 2010 Act was controversial and said to be "potentially at odds with maintenance of the principles of the rule of law", so was repealed and replaced with the Canterbury Earthquake Recovery Act 2011. Under the 2011 Act, The Canterbury Earthquake Recovery Authority (CERA) was established on 29 March 2011, to lead the recovery effort (CERA, n.d., b).

CERA gave the Christchurch City Council the responsibility of developing a Recovery Plan for the Christchurch CBD. As part of this process the Council asked the community to "Share an Idea" about the central city recovery and received more than 100,000 suggestions. Advice also came from professional institutes, interest groups and community organisations. According to the Christchurch Central Development Unit (2012), five key changes that the community wanted helped form the basis of the draft Central City Plan:

- 1. Green city
- 2. Stronger built identity
- 3. Compact CBD
- 4. Live, work, play, learn and visit
- 5. Accessible city

The community desired changes, listed above, are reflected in the Christchurch Central Recovery Plan. It incorporates a spatial Blueprint Plan developed over a 103 day period and released to the public on 30 July 2012. The goal of the plan is to develop a city that will be *low-rise*, *resilient*, *safe* & *sustainable*. It will be easy to get around, with a business-friendly compact central area, a variety of green spaces and activities to draw people into the Central City. Some of the key projects that will be given priority, include:

- The Frame: The central city will be reduced in size and will be "framed" by green space. The goal is to produce a compact vibrant green city centre;
- The Avon River Precinct: the banks of the Avon River will be widened and celebrated as Christchurch's new riverfront park with boardwalks & spaces;
- Health Precinct: redevelopment of Christchurch Hospital to act as a catalyst to attract a range of health and medical businesses and research and training institutes;
- The Square: the greening of the civic and cultural heart of Christchurch;
- The Convention Precinct: a world class convention centre will be developed to attract new events which will support a thriving hospitality and tourism sector.
- The Sports Precinct: a metro sports facility will be developed to strengthen the city's reputation as a premier international sporting destination.

LITERATURE REVIEW

Introduction

There are few papers available on the impacts of earthquakes on property values, those that were identified were based in the US and cover impacts other from natural disasters other than just earthquakes and outlined by Bond, Moricz and Wong (2012). After significant natural disasters where there has been significant building loss, a reduction in supply and associated increased demand, it is hard to determine if the higher prices paid for property represent market value and whether the parties are typically motivated. There is a great deal of uncertainty in the market post-disaster such as environmental concerns, likelihood of anther event, the degree to which structures can be replaced, etc. These uncertainties are difficult to measure. What this research aims to do is to assess the likely demand for a yet to be rebuilt CBD.

New Zealand Studies

Earthquake standards

Seismic hazard studies consider the expected earthquake ground motions at the earth's surface, and its likely effects on existing natural conditions and man-made structures. Probabilistic seismic hazard maps are developed from these studies (in NZ, by GNS Science) that identify the relative motion of different locations so the associated risks can be assessed and are used for engineering design, land use planning, determining insurance rates and disaster mitigation.

According to Stirling (2011), the New Zealand National Seismic Hazard Model was updated in 2011 and now includes fault sources. It is held on computer by GNS and scientists can query the NSHM to produce a range of earthquake hazard estimates for NZ. The most common queries are for ground motion estimates with a 10% probability of being exceeded in 50 years, or ground motions expected with a 500-year "return period". The NZ Loading Standards uses these estimates in Building Standards. According to McVerry (2003), a minimum allowable value of Z = 0.13 has been set in NZ to ensure compliance in low seismicity areas with the performance objective to withstand the most severe shaking that the structure is likely to be subjected to with a small margin against collapse. The maximum Z-value of 0.6 required for NZ corresponds to the 50-percentile near-source spectrum for a magnitude 8.1 earthquake.

Under Section 122 of the NZ Building Act 2004, a building is *earthquake prone* if, having regard to its condition and to the ground on which it is built, and because of its construction, the building—

- (a) will have its ultimate capacity exceeded in a moderate earthquake (as defined in the regulations); and
- (b) would be likely to collapse causing—
 - (i) injury or death to persons in the building or to persons on any other property; or
 - (ii) damage to any other property.

Sections 131 and 132 of the NZ Building Act 2004 require Territorial Authorities (TAs) to establish Earthquake-prone Building policies. The legislation does not prescribe any particular policy form or approach but rather leaves it to TAs and their communities to develop a policy approach appropriate to their district depending on the level of earthquake risk within a TA's boundaries.

Generally speaking the risk can be measured by comparing the assessed performance of each building to the performance required of a new building. The current performance requirements for new buildings are set out in NZS 4203: 1992. In Christchurch, for example, due to the heightened risk of seismic activity over the next few decades as a result of the 2010/2011 earthquakes the council resolved to adopt a policy whereby earthquake-prone buildings would have to aim for a goal of 67% of building code levels rather than the existing 33%. Such earthquake strengthening will be required from 1 July 2012. The new standard would bring older buildings up from about 10% of the strength of a brand new building to about 50%. The seismic hazard factor Z (defined in NZS 1170 Part 5, Table 3.3) has been raised for the Canterbury earthquake region to a minimum of Z=0.3 (from 0.22 for Christchurch and 0.16 in Akaroa), and the Rs factor has been increased to a minimum of Rs=0.33 (Department of Building and housing, 2011).

¹ The return period is the reciprocal of annual frequency of exceedance (Cheng, et al., 2007).

The New Zealand Earthquake-prone building policy established under the Building Act 2004 Code is being reviewed in light of the learning's from the Canterbury earthquakes. According to the Ministry of Business, Innovation and Employment (MBIE, formerly the Department of Building and Housing), the proposals would require all non-residential and multi-unit, multi-storey residential buildings to have a seismic capacity assessment done within five years. Owners of buildings identified as earthquake-prone would then have up to 10 years to strengthen or demolish these buildings (MBIE, 2012).

Demand for Christchurch CBD office space

While Bond, Moricz and Wong (2012) reported that in January 2012 the number of businesses wanting to return to Christchurch's central business district had dropped by a quarter since August 2011, a recent report by McDonald (2013a) states that Government has committed to returning to the CBD with plans to relocate public servants in the CBD. It has called for developers' proposals to permanently house 2500 staff due to return to the CBD. They have been asked to respond by May 28. Up to 25,000 square metres of office space will be needed over several buildings, which could be new, refurbished or existing and preferably near the planned Justice Precinct. Work on new offices will start in 2014 at the earliest.

According to Steeman (2012), the Government offices have to be good quality but have an emphasis on functionality and modesty in aesthetics. Christchurch will be used as a demonstration project of the Government's leaner property strategies for wider application to government accommodation that includes reducing the floor area per worker from on average 21.5sqm, to only 13sqm. Concern has been voiced, however, over the short leases that the Government is wanting: only six to eight-year leases with a right of renewal, when most developers would want a much longer commitment to make an investment feasible.

However, in the private sector, escalating construction costs are making it hard to attract prospective tenants at the expected new rents of up to \$450 a square metre (pre-earthquakes few exceeded \$350/sq. m.). Landlord, Nick Hunt, is having little success securing office tenants because of the rents needed to fund construction. A report from construction analyst Rider Levett Bucknall say that building costs are at between \$3500 and \$4500 a square metre for a premium building in Christchurch, the highest in the country (McDonald, 2013b).

According to Jonathan Lyttle, general manager of Colliers International, rent is not a big overhead for most office businesses. A survey by Colliers found three-quarters of A-grade office building tenants, were keen to return to the CBD, most within three years. Some of the reasons Lttyle outlines for this, are dissatisfaction with suburban premises caused by lack of amenities, overcrowding and driving distances as problems in suburban premises, as well as concern about worker attrition and the ability to recruit young professionals (McDonald, 2013c).

Another issue putting the CBD rebuild at risk, according to Tony Sewell, chief executive of Ngai Tahu Property and president of the NZ Property Council is the number of new developments being constructed outside the core business zone that are signing up quality tenants, the very tenants that were expected to return to the CBD. Some landowners within the rebuild area are selling up due to frustrations with delays on essential decisions needed to permit rebuilding (McDonald, 2013d).

RESEARCH

Introduction

In the absence of sales data to assess the impact of the earthquakes on sales price of central city commercial property, two surveys were conducted in August 2011 and January 2012, to investigate market impacts. A survey approach was adopted, as suggested by Sanders (1996), Epley (2006) and Seefeldt (2006), to determine the attitudes and perceptions of the owners and occupiers of commercial office space.

Subsequently, due to the release of the 103 day Christchurch Central Recovery Plan on Monday 30th July 2012, a follow-up survey was conducted to assess current views of office occupiers, now that the future of the rebuild of the Christchurch CBD is more certain. This helped enhance the analysis of the initial two

surveys.

Survey Samples

The sample of respondents was obtained from two sources. Firstly, 275 suburban office occupier contact details were obtained from a physical survey of office occupiers as of August 2011. Secondly, 368 contacts were obtained from a business database held by CBRE of CBD businesses from mid-2010. As this contained both office-based businesses and retailers, those contacts that came under the following office related industry classifications were selected:

- Information Media and Telecommunications
- Financial and Insurance Services
- Rental, Hiring and Real Estate Services
- Professional, Scientific and Technical Services
- Administrative and Support Services
- Public Administration and Safety
- Education and Training
- Health Care and Social Assistance

Data collection method

A survey of around 20 questions was developed. As this was an online questionnaire, only those contacts with an email address were selected for the survey, and duplicate contacts were removed if they appeared in both sources. Details about the study and a link to a Qualtrics online survey were distributed to respondents by email. The email was sent on the 27th of September 2012 and recipients were given nine days to respond to the survey. A reminder was sent out to recipients two days prior to the survey closing date. The survey recorded a response rate of 15.4% (97), a decrease from the previous two surveys when response rates were 22% (139) and 21.8% (140) respectively. This lower response rate may be due to survey fatigue.

SUMMARY RESULTS - AUGUST 2011 & January 2012 SURVEYS

This section briefly outlines the survey responses from the first two surveys. From survey one, 42% of respondents relocated due to the earthquakes, with around a quarter (27%) of them having signed up for a lease term of one year, or less. However, an equal number have relocated to residential premises where a commercial lease does not apply. Over a third (38%) of the relocated respondents would like to move back into the CBD to a different building in the future, indicating an initial level of potential demand for CBD office space. A lack of amenities (banks, shops, cafes and restaurants) was the largest drawback of their new suburban location.

For those respondents that do intend to move back to the CBD, they have indicated a strong preference towards low-rise buildings that meet or exceed the current earthquake code (3 floors or lower). Location was seen as the most important building feature, followed by plentiful parking. Proximity to public transport networks came out as the most important location factor followed closely by the proximity to amenities.

The follow up January survey highlighted some topical issues facing Christchurch office occupiers. Demand for the CBD has fallen since the initial survey with some occupiers expressing frustration over the delays and disruption of moving back into the CBD. There is a concern that demand for the CBD may weaken over time as initial short term leases will be expiring and although many have indicated they will keep waiting until the CBD is ready, some will commit to long term leases in the suburbs.

In terms of building preferences, the response from occupiers is that although higher quality buildings are nice to have, taking into account price, occupiers prefer lower quality existing buildings or lower quality new buildings. The concern with new builds is that rentals are likely to be too high for tenants to afford which has been illustrated by the gap analysis of respondent expectations of rents and the indicative market rentals that will need to be achieved to make the rebuild feasible. As preference for buildings which

sustained little or no damage appear to be nearly as strong as new buildings, demand for the existing buildings is likely to be strong but will be compounded by the fact that many buildings across the CBD will, or have been, demolished leading to supply constraints.

RESULTS – SEPTEMBER 2012 SURVEY

In September 2012, Lincoln University and CBRE carried out a follow-up survey to help understand some of the more recent issues facing office occupiers in Christchurch, particularly subsequent to the release of the 103 day Christchurch Central Recovery Plan on Monday 30th July 2012. Using the same methodology as the two previous surveys, the survey was sent out to 631 contacts (slightly less than the previous survey where it was sent to 641 contacts, as some had asked to be removed from the database due to having moved, or for other reasons). Over a period of 9 days 97 responses were received which is a response rate of 15.4%. The figures, below, illustrating the results typically display results as a percentage of respondents on the Y-axis with the number written above each bar representing the number of responses.

Respondent profile

Two-thirds (67%) of the respondents were male. The age of respondents was older than previous surveys: 33% were aged over 60 years, 26% were aged 50-59, and 40-49 respectively. More business owners responded compared to the previous surveys, with 43% owning their own business, 19% were managers, 19% were director's and 10% employees. The standard industrial classification (ANZSIC) that best described respondents' business was similar to the previous surveys: "Professional, scientific and technical services", representing 51% of all respondents. The next largest group (19%) was those in the Finance and Insurance sector.²

Intention of business to relocate within the rebuild zone of the CBD

Respondents were asked, now that the Christchurch Central Recovery Plan had been released, what were their intentions to relocate to the CBD. This question considers the relocation plans of all respondents regardless of whether or not they had relocated due to the earthquake. As both groups of respondents were considered (companies that were suburban occupiers at the time of the February earthquake and former CBD occupiers that relocated after the earthquake) it gives an indication of demand potential for the CBD. Only 27% (26) of the occupiers surveyed responded that they have an intention to move into CBD, while the majority (73%) wish to remain outside of the CBD. Figure 1, below, shows their change in intention from the previous survey to now and indicated that fewer respondents intend to relocate to the CBD.

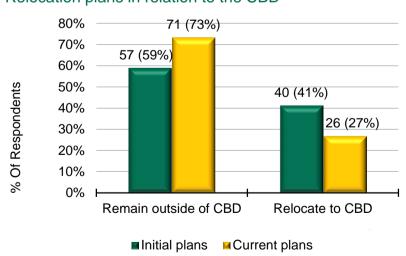


Figure 1: Relocation Plans Relocation plans in relation to the CBD

Next, those that were intending to relocate to the CBD were asked for their reasons for considering doing so rather than remaining in your current location. Of the 41% (40) of respondents that indicated they

² For more information about ANZSIC classifications please visit www.stats.govt.nz.

initially planned to relocate to the CBD, around half (17) have indicated they have since changed their minds and will remain in the suburbs. These 17 respondents are only slightly offset by three respondents who originally planned to remain outside the CBD now plan to move into the CBD after the rebuild. Just over a quarter (26; 27%) of respondents currently plan to relocate to the CBD and some of the reasons they gave for this, include:

- Preferred CBD location over the suburban area. The centrality (heart of the city / hub of activity) offers business and staff operational benefits.
- Business related reasons main clients, networking and business partnership.
- Office building in CBD is still standing / repairable.
- Temporary office is either too small or of poor quality.
- Current location is only a temporary location.
- Wish to support the rebuild and help create a vibrant CBD.
- Temporary premises are located on the CBD fringe and have elected to remain permanently.
- Changing focus and aiming for a much more tourist orientated so would like to be very central.
- Require suitable professional offices in a good location, contingent on the price.
- Want to be in main financial area.

For the 18% that no longer intend to move to the CBD some of the reasons they gave, include:

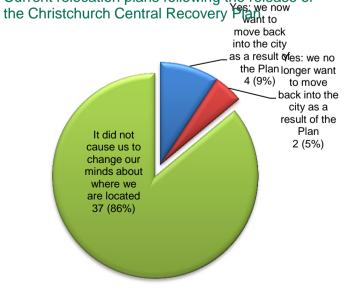
- Delays and uncertainty means it is better to commit to a suburban location for the long term.
- Rents are likely to be too high and not sustainable for most businesses.
- There is ample parking in the suburbs, compared to the CBD.
- Business is better located and more accessible to customers in the suburbs.
- Business is now well established in the suburban location, so there is no reason to relocate.
- Reasonable rent in the current location.
- The location is close enough to the CBD.
- Employee-related; the staff are happy and contented in the new location (suburban).

Good parking, ease of access, and reasonable rents in the suburbs were common themes for the reasons not to move into the CBD. Much of this feedback mirrors that outlined in the literature review of reasons tenants may not move back and the risk that this places on the success of the rebuild.

Next, questions were asked about the effect of the release of Christchurch Central Recovery Plan on their relocation decision. For the majority (86%) the release of the Recovery Plan did not affect their relocation plan, as outlined in Figure 2, below.

Figure 2: Relocation plans following the release of the Christchurch Central Recovery Plan

Current relocation plans following the release of

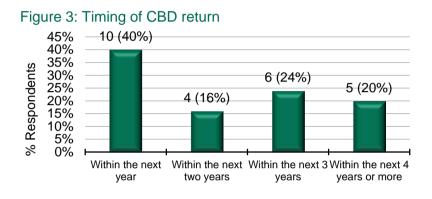


While only 14% of respondents indicated that the release of Christchurch Central Recovery Plan affected their relocation decision, some of the comments for those preferring to stay in the suburbs are related to accessibility: preferring not to have to park and then go on a bus to get around within the CBD and the easy access of clients to respondent's offices in the suburban location. Other reasons given included that the Christchurch Central Development Unit approached them to relocate; the slow rebuild, and that the suburbs are dull.

Questions answered by those who intend to move into the CBD

The earlier section determined that 27% (26) of respondents intend to move into the CBD. The following questions were answered by these respondents only.

A question was asked to find out how soon respondents could relocate. Responses indicated that 40% (10) are able to return to the CBD within the next year. The remaining 60% of respondents could only return after at least a year, as indicated in Figure 3, below:



Almost half of the respondents (48%, n=12) indicated that the above responses are dependent on when the rebuild commences or the proposed space in the CBD is ready. Nearly a quarter (24%, n=6) said it was determined by their current lease term, 28% provided an alternative reason. These reasons included: they are already in the CBD; depends on the suitability and availability of office space near the CBD; when something suitable is found, and when own new building is ready. No respondents indicated they were influenced by the nature of their business. Figure 4 illustrates these results

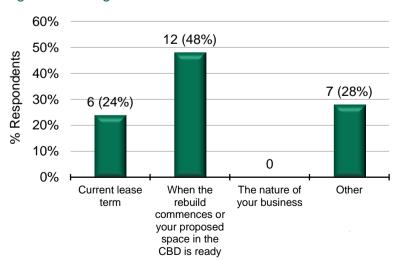


Figure 4: Timing of CBD return- influential factor

Respondents planning to relocate to the CBD were asked to rank their location preference, from 1, least preferred, to 8 most preferred, from a list of precincts indicated in the City Plan. The rankings were averaged for each of the building features. An average score above 4.5 indicates it is somewhat preferred,

however a score below 4.5 indicates it is not preferred. As indicated below in Figure 5, near the Retail Precinct was seen as the most preferred location, followed by the location of, and rebuild of their previous CBD buildings, and near the Convention Centre and Health Precincts. The Justice and Emergency Services Precinct was the least preferred location.

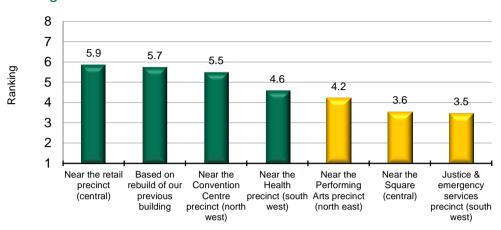


Figure 5: Location Preference

The response to the "Other" option included the following:

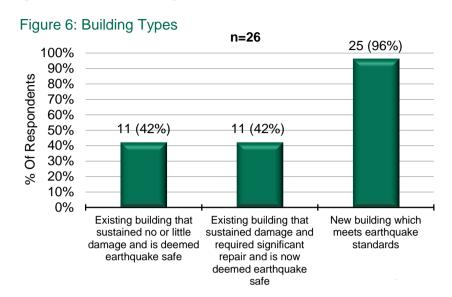
- In the "EPIC Sanctuary" (in the Innovation Precinct) (2)
- Entrance gateway (Victoria St)
- Wait and see where offices end up
- Southern frame (2)
- City Council Building
- Central location in prominent/visible and attractive building
- Cultural precinct west of the river near the City Council Building
- Financial district

The final response indicates that not all respondents were familiar with the plan (there is not a defined "financial district" in the plan).

Respondents provided reasons for wanting to locate to the preferred location. The reasons were varied depending on the nature of their business, their experiences in premises located in the suburbs, or their perceptions of the future access and other difficulties expected with the rebuild. The responses given included:

- Want to be near tourist area or near the main attractions where people will be, close to shops, social aspects of city life (cafes and bars).
- Not too central to avoid access issues and future disruption.
- Speed of rebuild of the new building.
- Proximity to location of courts and other law firms (was the first area to be going ahead and not willing to wait for the rebuild plan to be released, to begin the process
- Want to be part of the Innovation Precinct (one respondent was one of the key organisers of "EPIC Sanctuary").
- Want to be close to the professional sector
- Work in the Health precinct which has easy access from North Canterbury
- Our reason for staying put is that we are as close to the CBD as we were before the earthquake (used to be near Convention Centre). The building and location suits our business and the projected rents for new buildings in the CBD are too high for our business

Respondents were asked to indicate the type of building they would consider locating to the CBD from three options and were directed to indicate all that apply. Almost all respondents (96%) indicated a preference for a new building which meets earthquake standards versus their existing building that is deemed earthquake safe. Note that the responses in Figure 6 below equate to more than 100% as respondents were requested to indicate all options considered.



To get an indication of what quality of space that respondents may be interested, they were asked, taking rent into account, what the quality of building they would want to relocate to. They were given three options, based on the NZ Property Council's CBD Office Grading Matrix (nd.), as follows:

Premium Grade – total occupancy cost (rent plus outgoings).in the region of \$425-500 per sq. m.

Grade A – total occupancy cost of \$350-424 per sq. m. (rent plus outgoings).

Grade B – total occupancy cost \$250-349 per sq. m. (rent plus outgoings).

Grade C – total occupancy cost could be anything below \$250 per sq. m. (rent plus outgoings).

Respondents indicated a preference for Grade A (new build) and Grade B (existing) buildings. Top quality Premium Grade and Grade C buildings were least preferred. Compared to the previous survey, the preference for Grade A and Grade B buildings have increased from 43% to 59%, and from 27% to 34% respectively, while in contrast, the preference for the least preferred grades are lower: from 8% to 3% for Premium Grade, and from 22% to 3% for Grade C. The results are included in Figure 7, below.

To determine respondents price sensitivity, they were asked, what quality of office space they would prefer to locate into if they did not have to consider the rent. Respondents indicated a preference for higher quality space if they did not have to consider price as shown in Figure 7. The preference for Premium Grade building increased from 3% to 23%.

70% 19 (59%) 18 (58%) 60% 50% % Of Respondents 40% 11 (34%) 30% 7 (23%) 20% 5 (16%) 10% 1 (3%) 1 (3%) 1 (3%) 0% Premium Grade Grade A Grade B Grade C ■Preference considering price ■Preference not considering price

Figure 7: Building quality preference: including & excluding price considerations

Respondents were also asked how much they were prepared to pay for each quality grade and Figure 8 illustrates the difference between tenants' willingness to pay and the indicative rents that are likely to be required for such buildings from landlords. This is based on likely development costs/economic rents derived from conventional feasibility models which may or not apply to the Christchurch rebuild due to the complexities with insurance payouts. We have taken an average of the occupier price expectations.

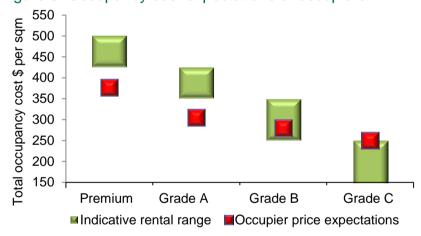


Figure 8: Occupancy cost expectations of occupiers

Figure 8, above, illustrates that for existing buildings (Grade B and C) tenants are willing to pay prevailing market rates. However, for new Premium Grade and Grade A buildings, there is a gap between expectations. For Premium Grade, occupiers' price expectation are \$376 which is some 12% below the lower end of the likely indicative rental range based on development costs while for Grade A, the gap between price expectations and the indicative rent range is 13%. This rental gap may negatively impact on the demand for new built space when the rebuild gets under way although the gap is smaller compared to the results from the previous survey when the gaps were 28% and 19% respectively. This indicates that respondents' expectations of a rent increase are becoming more realistic. They are now expecting to pay higher rents for new built high quality space compared to their previous expectations.

In the case that office space cannot be rented for the levels respondents are willing to pay, they were asked what they would do from a range of given options, indicated in Figure 9, below. More than half of the respondents (58%) indicated they would locate outside of the CBD where it is more affordable. As with the previous survey results, no respondents indicated they would relocate to another city or close the business altogether. The options to occupy lower quality CBD space which is affordable, to downsize space requirements and to accept the higher rental were not so popular. Other respondents stated they would either build their own building, or reconsider their decision.

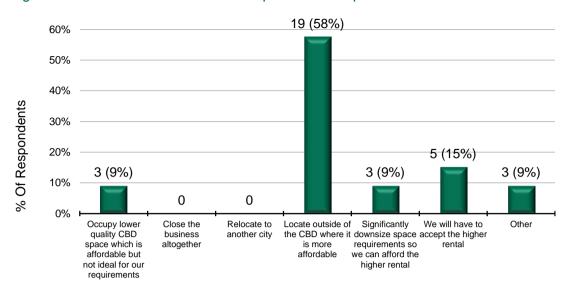


Figure 9: Alternatives if desired office space is too expensive

Questions in relation to the Christchurch Central Recovery Plan

As the Christchurch Central Recovery Plan forms the blueprint for the rebuild and is important to the future of Christchurch's CBD and environment, respondents were asked how familiar they were with the plan. Almost all respondents (93%) were familiar with the Central City Plan, with one third being familiar with the Plan in detail. Those familiar with the Plan were further encouraged to state their opinion either from the point of view as an office occupant or as a resident in Christchurch, on the four areas that have been listed as priorities for the rebuild. Responses were mixed with some respondents very positive about these precincts and proposed plans, while others were distinctly negative or questioned their merit. These responses are summarised below:

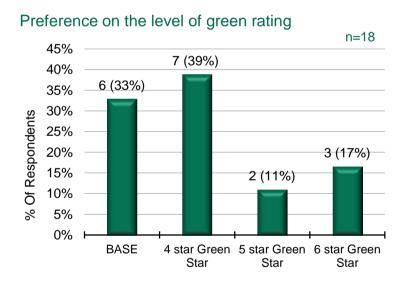
- 1. The Avon (river) precinct
- Need to have facilities such as cafes to draw public attention.
- It will bring people into the city as it can be done quickly compared to building new buildings.
- It should be the cornerstone of the rebuild.
- 2. The Convention Centre
- Great plan and it is in a better position than the previous building.
- It needs to be an outstanding facility.
- The convention centre is essential to generate income to progress the rebuilding of other facilities.
- It could help bring people into the CBD after work hours.
- Will there be sufficient car parking?
- Are the benefits to the city known and widely understood?
- It could become a "dead spot" if not extensively utilised.
- The building is too big; unclear whether a financial feasibility was conducted which is necessary as it will be a cost to the city or ratepayers for years to come. The value is debatable.
- 3. The eastern "Frame"
- Green areas are a must! They will bring apartments and community into the area.
- Atmospheric and will hopefully create a sense of boundary between the city and residential areas.
- Will attract people and enable them to experience the central city without being concerned about building safety, etc.
- Concerned that the land area is excessive.
- Not convinced how it will work (e.g. large spaces between buildings).
- Not sure who will be attracted into this area.

- 4. The Metro Sports Centre
- Well located and could bring people into the CBD on weekends. It's a much needed facility (high priority) and will be better once bars and other facilities are up and running.
- Low priority and expensive. Sport will survive and there are other bigger priorities to focus on.
- Concerned that it is too close to the city centre.
- Concern about the availability of car parking.
- Concern that it will cause the loss of facilities within the suburbs.

Questions in relation to sustainable city development

The NZ Green Building Council in conjunction with Christchurch City Council and property industry experts has developed a Christchurch specific green rating tool, BASE. BASE (Building a Sustainable Environment) is a simple, introductory-level green building assessment for new office, retail and mixed use buildings. To determine if there is a demand for this type of building, or one with a higher Green Star rating, respondents were asked, when choosing a building to locate to, if the green rating of the building important to them. Generally, responses were split, with 42% (18) saying "yes" and 44% (19) responding "no", with 14% unsure.

For those respondents that said "yes" to the importance of the green rating of the building, they were asked what level of green rating they would prefer, given that the higher the level the more rent is likely to be charged for the space. The largest group (39%) preferred the lower 4 star Green star, while a third of the respondents preferred the new "Base" rating. The remaining 28% respondents preferred the higher rating, 5 and 6-star Green Stars.



Other comments

Survey respondents were asked to state any additional comments about issues affecting office occupiers in Christchurch after the earthquakes. The speed of rebuild was a concern for many (and this is reflected in the media reports outlined in the Literature Review). They emphasised that a delay might cause people to leave the city, and that a clear plan must be in place so investors know where they stand. The delay also caused one respondent to express his disappointment with Council, Government and CERA. The following is a summary of the varying further comments provided:

- There was opposition to the light rail idea, suggesting it should be "dumped altogether" and that instead the existing rail should be used for access from the south and north.
- Encouraging cyclists is considered an absolute priority with bike paths (not just bike lanes), bike parking, etc.
- It was felt that every building designed should be green. "If it is not, it is simply not a good design".
- The Town Hall should be saved, emphasising its iconic nature.
- It was pointed out that there has been a marked lack of small to medium size business consultation relative to their needs and expectations for the future of the CBD. Short term needs and not just long

term business strategies should be developed in conjunction with small to medium size business entities to ensure a vibrant, diverse CBD for the future.

- There is a perceived need for the construction sector to focus on innovative design to provide beautiful buildings and landscapes that use sustainable materials such as Cross Laminated Timber (CLT) and other timber based methods. There is a concern that without direct government incentive there will be a prominence of slab and ugly low cost buildings. It was emphasised that "the future is in our hands the design decisions made today affect the next 100 years of the city's life".
- Concern was expressed at the current lack of suitable office space options with nothing really available.
 A respondent highlighted that when options become available, they would prefer to be on the "fringe" of the CBD in affordable, quality offices.

SUMMARY

This follow up survey has highlighted some topical issues facing Christchurch office occupiers and the success of the rebuild. Demand for locating within the CBD has fallen since our initial survey, with some occupiers still expressing frustration over the delays and disruption of moving back into the CBD. Only 27% of the respondents have an intention to move into CBD, which decreased from the January 2012 and August 2011 surveys, recorded at 32% and 38% respectively. These companies include those that relocated from the CBD following the February earthquake, as well as companies that were existing suburban occupiers at the time of the earthquake.

The majority (86%) of respondents stated that the recent release of the Christchurch Central Recovery Plan in July 2012 did not affect their relocation plans. Of the 27% of respondents who plan to return to the CBD, almost two thirds (60%) of the respondents could only return to CBD after a year. This is the reverse of what was reported in the previous survey, where more than half were able to return to the CBD immediately or within the next year. The current response may be due to the respondents extending their leases as the rebuild has been slower than expected.

Respondents indicated a preference for a business location near the Retail Precinct (central), with the location of, and rebuild of their previous buildings being their second greatest preference. Other preferred locations include near the Convention Centre (North West), and Health Precincts (South West). The quality of building preferred, taking indicated rents into account, is for Grade A (new build) and Grade B (existing buildings) buildings. Top quality Premium Grade and Grade C buildings were least preferred. However, respondents indicated a preference for higher quality space if they did not have to consider price. This is similar to the finding in the previous survey. Results suggest that tenants are only willing to pay the indicative asking rentals for existing buildings (Grade B and C). However, the gap that does exists between what respondents are willing to pay and the likely market rental levels that landlords will require for both new Premium Grade and Grade A buildings is now smaller than that found in the previous survey.

If occupiers could not rent their preferred quality of space in the CBD due to higher rent, more than half of the respondents (58%) indicated they would locate outside of the CBD where it is more affordable. This figure increased from 40% as recorded in the January 2012 survey. No respondents indicated that

CONCLUSIONS:

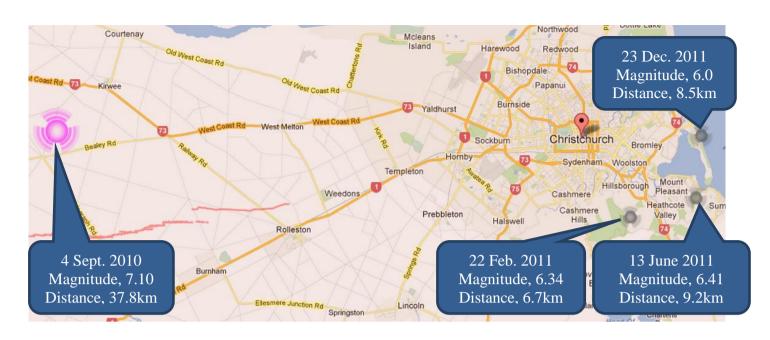
Although a decreasing minority have indicated they will keep waiting until the CBD is ready, an increasing majority indicate they will commit to leases in the suburbs. Our original analysis indicated a possible CBD office demand base for the rebuild of approximately 180,000 sq. m., compared to the original CBD size of 390,000 sq. m. Respondents' views in this survey indicate that the demand may be even lower now. Fortunately, the release of the Christchurch Recovery Plan shows that the new CBD will be much smaller in terms of building size and area coverage than the previous one, but it may still prove challenging to attract a sufficient volume of office occupiers, other than Government employees, especially as delays in the rebuild continue to frustrate both landlords and tenants. Tenants whose leases are coming up for renewal that may have wanted to relocate to the CBD cannot find available space there to meet their needs

and so are opting to stay where they are. Further, new developments being constructed outside the core business zone are signing up quality tenants.

Those respondents that indicated a desire to relocate to the CBD still consider that higher quality buildings are preferred, but when taking into account the indicative market rental price, they lower their quality expectations. Even though there is much enthusiasm for architectural, environmental and wider planning ideas for the CBD, rental concerns appear to override these. However, a more positive sign for the rebuild is that the rental gap analysis of respondent expectations and indicative market rentals shows that expectations are becoming more realistic with the gap narrowing.

This research shows there will be issues for landlords of CBD buildings to attract tenants back into the central city to make investment financially feasible. Whilst Government at least is supporting the rebuild by committing to around 25,000 sq. m. of space, private investment will also be needed to ensure the vision of the Christchurch Recovery Plan can be realised. However, with on-going delays and uncertainties there is growing frustration from investors. A report by City Owners Rebuild Entity (CORE, 2013) has estimated at least \$125 million of investment has left the city for other centres and overseas. Further, the report claims that with increases in land prices, operating costs and construction costs making development challenging and pushing up rentals for business, the peripheral areas of the city are becoming more sought after and that will challenge the importance of the CBD moving forward.

Appendix I – Quake Locations





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