

# Central City Plan

*Draft Central City Recovery Plan  
For Ministerial Approval  
December 2011*



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# Share An Idea Summary

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*During the informal phase of the Central City Plan development – Share an Idea – a wide range of public engagement activities was undertaken including:*

- A Community Expo held over the weekend of 14 to 15 May, with nearly 10,000 attendees
- A series of facilitated public workshops:
  - Saturday 28 May, 2.30pm – New Brighton
  - Sunday 29 May, 2pm – Central Christchurch
  - Wednesday 1 June, 6pm – Central Christchurch
  - Saturday 4 June, 2.30pm – Wigram
  - Sunday 5 June, 2pm – Central Christchurch
  - Tuesday 7 June, 6pm – Central Christchurch
  - Wednesday 8 June, 6pm – Cashmere
  - Saturday 11 June, 2.30pm – Linwood/Wainoni/Aranui
  - Sunday 12 June, 2.30pm – Russley
  - Wednesday 15 June, 6.30pm – Sumner (scheduled but cancelled due to 13 June aftershocks)
- The Share an idea website [shareanidea.org.nz](http://shareanidea.org.nz) including an online survey
- Community Forum kits available online and in print; suitable for discussions run by community boards, resident groups and other interest groups
- Christchurch Chats self-help kits to capture unfacilitated discussions among family, friends, colleagues
- Social media – Twitter, Facebook and YouTube

Almost 106,000 ideas were put forward by local residents and interested parties from countries across the world including Australia, the UK, USA and Canada, Ireland, Hong Kong, Sweden, Italy, Netherlands, Berlin and Qatar.

These ideas were coded into one or more of 130 topics by a team of specialist data analysts, with every idea being read and coded. The overarching ideas within the topics, as well as the connections and conflicts with other topics, were summarised. The most common themes were then fed through to help develop the draft Plan.

Meanwhile, the Central City Plan team also consulted with partners, professionals and representatives from relevant community, business and interest groups – see Appendix B. *Key Stakeholder Consultation Summaries*.

## Introduction

*This document informs those involved in developing the Central City Plan of the public's feedback and views on what they wanted for the Central City, gathered through the Share an Idea campaign. The close off date for public ideas was 20 June 2011, with 83,000 ideas coded by that date. By the end of the analysis process, 105,991 ideas had been coded. The analysis is based on public ideas from the following sources:*

- Expo Post-it notes/laptop self entry (wants and don't wants); graffiti wall ideas; kid's activity sheets; kid's art; and videos.
- Share an Idea website general ideas and specific questions and questions for youth, promoted by The Edge and The Rock radio stations.
- Let's Hear It survey questions and flyer/postcards (vision for Central City).
- Voicemail messages; letters from the public; and miscellaneous submissions.
- Community workshops.

Below is a table showing the number and percentage of ideas coded for analysis by source:

Source	Source Type	Ideas Coded for Analysis	Total Ideas by Source Type	Ideas as a % of Source Type
Share an Idea – web entries (140 text limit). (includes Let's Hear It survey submitted via Share an Idea website)	Website	20,418		
Share an Idea – follow-up questions	Website	18,556		
Other data submitted via Share an Idea website (group ideas, ideas longer than 140 text limit, emails)	Website	6172		
<b>Share an Idea website total</b>			<b>45,146</b>	<b>43%</b>
Post-It notes	Expo	25,908		
Laptop idea entries	Expo	6238		
Let's Hear It survey (completed at Expo)	Expo	13,997		
Children's art	Expo	359		
Kid's activity sheet	Expo	337		
Lego model	Expo	183		
Other Expo data (longer ideas, graffiti wall)	Expo	4019		
<b>Expo total</b>			<b>51,041</b>	<b>48%</b>
Let's Hear It survey (submitted in hard copy form to Council post-Expo)	Council	1468		
Voicemail messages to Council	Council	192		
Radio questions (The Edge and The Rock stations)	Council	1966		
<b>Council total</b>			<b>3625</b>	<b>3%</b>
Letters from public (email and hard copy)	Independent	603		
Miscellaneous submissions (email and hard copy)	Independent	1809		
Other data (includes other ideas, postcards)	Independent	1901		
<b>Independent total</b>			<b>4,314</b>	<b>4%</b>
Workshop group comments	Workshop	1273		
Workshop individual comments	Workshop	592		
<b>Workshop total</b>			<b>1865</b>	<b>2%</b>
<b>Total ideas coded</b>			<b>105,991</b>	<b>100%</b>

The process below describes how the public ideas were analysed. Ideas were coded using a software package called NVivo which is used to categorise qualitative information. Ideas were coded into NVivo under the four main Share an Idea headings (Space, Life, Move and Market) and within these four areas, ideas were split into the Central City Plan workstreams, with key topic areas under each work stream. Some ideas were coded to more than one topic area.

A team of Council researchers identified the common themes from the public ideas under each workstream and grouped these into topic summaries. They extracted a range of public quotes to represent each common theme. Peer reviewers from the Central City Plan team worked with researchers to identify issues requiring further inquiry from the public using the Share an Idea website and community workshops. All planners and analysts developing the Central City Plan had access to the emerging common themes as the analysis progressed. They ensured these themes were fed into their initial drafting of the Plan.

Researchers prepared topic summaries of the main points and grouped these under the five core Central City Plan chapter headings. They also created linking statements that are the high level principles, drawing together or connecting the common themes identified through public consultation on the Central City.

**NB:** When reading this document, please refer to the actual number of comments made by the public in each topic area to provide an indication of how much feedback there was on a particular topic. As the number of comments varies considerably depending on the topic being discussed, please be aware that not all common themes are discussed in equal degrees by the public, nor are they

## Share An Idea Summary

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listed in order of importance. This document identifies the wide range of public ideas across many different aspects of Central City redevelopment. The topic summaries suggest the strongest ideas at a topic level. The linking statements and summary of common themes below provide an indication of the most pertinent themes coming through from public feedback.

### *Linking Statements*

*The linking statements below are the high-level principles that draw together or connect the common themes identified through public consultation on the Central City. They represent linking ideas that are consistent across the common themes.*

- People must be placed at the centre of the redevelopment of the Central City. This desire weaves across all components of Central City planning.
- A destination to live, work or play. The Central City as a place to enjoy unique specialist shopping, indoor and outdoor venues for performing arts and cinemas, public art, water features, children's playgrounds and youth spaces, socialising, community facilities and free WiFi.
- Greening the Central City is an overarching theme for the redevelopment. An abundance of green space is essential to create people-friendly places and a Central City that is aesthetically appealing. Greening must be incorporated into the transport networks, especially walkways and cycleways, connecting key parts of the Central City, and in the general streetscape and squares, as well as in building design and layout.
- Interconnectivity made easy and enjoyable between activities, such as shopping and socialising and the streetscape, and between different locations across the Central City. Integrated affordable transport networks with pedestrians as the priority and including a range of options such as walkways, cycleways and public transport that moves people easily into and around the Central City.
- Vibrancy in the Central City by preserving the ground floor and streetscape for things that attract people such as cafes, restaurants and retail (including day and night-time markets). Create precincts that attract people for a range of activities. Extend the life of the Central City into the evening to make it a place where everyone can safely have enjoyable experiences. Develop the Avon as a key asset in the Central City. Increase the number of people living in the Central City.
- High-quality, well-designed, low-rise buildings that are safe, sustainable, look good and function well. Restore iconic heritage such as the Christ Church Cathedral, the Catholic Basilica, the Arts Centre and the Provincial Chambers and earthquake proof remaining heritage buildings and facades. Create a legacy for Christchurch by providing a well thought out city centre. A high quality Central City will attract both locals and tourists.
- An inclusive and accessible Central City for all ages, ethnic groups, people with disabilities by providing an appropriate range of environments, activities, buildings, services and facilities.
- A business friendly environment that attracts businesses back and makes it easy for new starts and builds on the collaborative environment that has developed as an outcome of the earthquakes.

### *Summary of Common Themes*

*People must be placed at the centre of the redevelopment of the Central City. This desire weaves through the public's ideas across all components of Central City planning.*

#### *Green City*

- Major focus on green open space for socialising, leisure, recreation, entertainment and aesthetic appeal.
- Small intimate pocket parks through to bigger spaces with lots of seating, picnic tables, playgrounds, sculptures, street/public art and amphitheatres. Native and English plantings.
- Incorporate open space into building design with buildings set back from streets, courtyards and rooftop gardens.
- People-centred areas, with European-style squares and piazzas with seating areas, fountains, cafés and restaurants.
- Avon River as key asset for locals and tourists with continuous wide walkway, cycleway, footbridges, cafés, restaurants and vendors selling coffees and crafts along river and lots of lighting. Riverside as part of green space network.

- Cathedral Square as a focal point of the Central City, with plenty of green space, ground floor cafés, restaurants and retail, but no banks or commerce on ground floor. Include seating, water features and playground.
- Stormwater treatment that reduces pollution, especially in rivers.
- Eco-friendly approach to water and electricity supply and sewerage treatment.

## ***Distinctive City***

- Rebuild as a proud legacy for the city.
- Well-designed, eco-friendly, sustainable low-rise buildings of two to six storeys that meet earthquake building codes. Less concrete tilt slab design.
- Earthquake proof remaining heritage buildings, including facades. Restore iconic heritage such as ChristChurch Cathedral, the Catholic Basilica, the Arts Centre and the Provincial Chambers.

## ***Urban Life***

- Increase the number of people using the Central City for added vibrancy.
- Safe, healthy, accessible environments, buildings, services and facilities for families, children, youth, older people, different ethnic groups and for people with disabilities.
- Incorporate a local Maori identity.
- Plenty of cafes and restaurants spilling into streetscape to encourage vibrancy for locals and tourists.
- Reduce on street parking to make more room for cafes, cycle lanes and appealing streetscapes including wider footpaths and more green space.
- Central City as a vibrant night-time destination with shops, cafes and restaurants open later and lots of lighting for aesthetic appeal and safety.
- Improve perceptions of safety in the Central City at night by incorporating better lighting, more CCTV cameras, a more visible police presence and efforts to reduce the negative impacts of alcohol.
- More services and community facilities to attract Central City residential living. Central City living for vibrancy.
- Incorporate youth recreation opportunities, e.g. skate parks, places to hang out, live entertainment.
- Central City as a hub for performing arts: outdoor amphitheatres and affordable live music venues, buskers and theatre.

## ***Market City***

- Boutique, unique, specialist and higher quality retail (a vibrant shopping experience) as a point of difference to suburban malls.
- Limited or no suburban style shopping malls in the Central City.
- Create entertainment/hospitality, ethnic, retail, arts/culture precincts well served by connecting networks of walkways, cycleways, lanes, shuttles and trams.
- Incorporate mixed use residential, retail and commercial for added vibrancy.
- Open Central City icons, such as key retail and restaurants.
- Activities, attractions and retail that appeal to locals and tourists alike; limit number of souvenir shops, especially in Cathedral Square.
- Attract tourists with range of accommodation options and activities including trams, cycles for hire, Maori culture, festivals, free WiFi, markets and high-end fashion. Avon River as key tourism asset.
- Day/night, indoor/outdoor markets, especially produce/food.
- Business restart assistance such as grants, tax incentives, low-interest loans, lower rates and reduced regulation to encourage businesses to return to the Central City.

## Share An Idea Summary

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- Collaborative small business working environments, e.g. shared work centres.
- Green space and low-rise buildings to encourage businesses and workers back into the Central City.
- Affordable retail space for small and new businesses.
- Free WiFi in the Central City.
- Limit commercial, office, administration services in heart of the Central City, especially on ground floor.
- Limit industrial activities in the Central City to reduce noise, air and visual pollution.

### ***Transport Choice***

- Pedestrian-focused Central City, making walking an enjoyable experience through integrated green walkway networks with wider footpaths, good lighting, street crossings, footbridges and covered walkways.
- Integrated and separated off-road cycle lane network with safety a major focus.
- Cycle network connecting the Central City to the suburbs.
- Good facilities for cyclists with safe and plentiful cycle parking and cycle hire for locals.
- Car-free Central City or restricted access and slow-speed zones. Must consider accessibility for people with mobility issues.
- Tram (or light rail) extended as part of public transport network to suburbs. Not just a tourist tram. Must be affordable.
- Central City free of big buses. Smaller shuttles that are less polluting, quieter and take up less space.
- Integrated, affordable public transport network with central hub for buses and trams/light rail (such as Moorhouse Ave railway station).
- Rethink location of bus exchange.
- One-way versus two-way roading network in the Central City.
- Free or affordable park and ride system on periphery of the Central City.
- No parking buildings in heart of the Central City.
- Different parking options depending on day/night, week day/weekends.
- Central City parking options must be competitive with free parking options at suburban shopping malls.

### ***Remembering the Earthquakes***

- Earthquake memorial for those who died and for lost heritage, incorporating green space, seating and reflection areas. Photos and plaques at lost heritage sites. Earthquake museum or permanent display.

## Space Theme

### Activities and Land Use

#### Housing Density

##### Topic summary

There are a mix of opinions on the levels of housing density and building heights wanted in the Central City, with most recognising that Central City living will need to be higher density than suburban living. Density and building height issues are closely related to urban sprawl, with medium to higher density living (and buildings with more levels) less likely to result in sprawl.

##### Number of comments: 131

- Some people say high-rise residential dwellings are the only way to ensure adequate density and reduce sprawl; all high-rise buildings must be built to appropriate building code standards.
  - “Thousands living in the Central City in a wide range of housing. Especially high-rise. LA, Taipei, Kobe – they’re not afraid of tall buildings.”
  - “High-rise buildings to allow reasonable population density.”
  - “Be realistic about needing high rises to have enough density for vibrant city.”
  - “Stop urban sprawl by moving to a medium density city model.”
  - “I believe that the city centre (CBD) should be of high density with medium rise building of 7, 8 and 9 stories high.”
  - “Keep the city compact. The more compact it is, the more vibrant it will be – don’t fear hi-density, but demand high quality.”
- Areas of medium to higher density apartments and terraced housing for residential living are essential for the economic viability of the Central City.
  - “Inner city vibrancy – this means inner city living and socialising. Higher density housing than what we had pre-quakes. It gives Chch soul.”
  - “New buildings of 3 to 4 floors will help keep people in the centre. High pop. Density brings life to cities and creates economic viability.”
  - “Want high-density housing, with low footprint technologies surrounded by green/social/community space and linked to local business.”
  - “Lots of high density residential in the inner city so there are always enough people around to sustain the cafes, etc, that people want to see.”
  - “Social sustainability of Christchurch must take into account addressing the need for high urban density in an attractive site that will attract residents and businesses.”
  - “A medium-density thriving creative centre attracting talent and new residents from around the country and the world.”
  - “Large amounts of medium-density housing.”
  - “Encourage more high density Central City residential living.”
  - “High population density.”
- Others say Christchurch should have lower-rise buildings but these should be of reasonably high density.
  - “Take note of places like central Barcelona; low-rise high density living with inviting social/commercial spaces at ground level.”
  - “High-density, low-rise living with integrated community retail, cafes, pubs.”
  - “Low-rise building, medium density, markets.”
  - “Minimum of two-storey buildings to promote higher-density living in the CBD.”



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- “Parisian/London style high-density, low-rise buildings with integrated retail, restaurants, pubs, offices.”
- “I want small compact CBD, higher-density, low-rise quarters.”
- There are also people who do not want to see high-rise, high-density apartments in the Central City.
  - “I would not want to see a high-density population in Christchurch, e.g. like apartment blocks/high density villages with ‘village greens’.”
  - “I don’t want lots of apartments cheaply built and crammed in with no trees or open space around them. We don’t want any more wall-to-wall concrete. We don’t want cheap and nasty infill anywhere which will become ghettos in the future.”
  - “I do not want to see multi-storey housing. Research has identified people living on top of each other causes conflict amongst neighbours.”
  - “Safe (low-rise, low-density).”
  - “Great Central City apartment living. Low-rise, shared courtyards, no ugly battery hen developments. Quality and affordability.”
  - “I want family and small-child friendly spaces. Maybe high-density living with purpose-built childcare facilities for working families, safe walkways to and fro. Somehow incentivise large companies to be based in the same areas to increase workers potential for work-life balance with their families.”

## *Mixed Use of Land*

### *Topic summary*

Mixed residential, retail and commercial land use contributes to the vibrancy of the Central City, attracting people and encouraging activity throughout the day and night. Two main themes around mixed use: first, general calls for a good mix of land uses in the Central City overall (not just within one location/building) and second, building design must cater for mixed use, with ground floor spaces preserved for people-focused activities that can spill out onto surrounding streetscapes.

### *Number of comments: 877*

- Mixed use residential, retail and commercial land uses, e.g. combining residential, retail, cafes, etc.
  - “More mixed use – retail/commercial/residential with some cultural facilities nearby. To bring vibrant mix into rundown/empty areas of CBD.”
  - “Mixed use spaces, dispersed with green spaces and the arts & creativity sectors at the heart of the city - not just a precinct, but throughout the city!”
  - “All blocks/neighbourhoods should contain a vibrant mix of residential, retail, commercial, cultural, entertainment & hospitality spaces.”
  - “All great cities have a mix of residential and commercial in at their heart.”
  - “Mixed use with residential, entertainment, retail + services, green spaces + seating.”
  - “Open with a mix of retail areas, commercial, business & public parks.”
  - “Low-rise, mixed use office/residential/retail/movie theatres/cafes.”
  - “Agree specialist boutique type shops scattered amongst cafes, restaurants and bars.”
  - “Mixed spaces – office, shopping and living in one area...”
  - “Mixed use inner city development mixing residences with businesses and other facilities/amenities. An inner city to live in and not just to visit.”
  - “A good mix of leisure, learning, living & commerce.”
  - “Mix of business, lots of diversity, assimilated rather than ‘Lawyer Lane, Café Boulevard’....”
  - “I want to see a mix of quiet spaces, memorial parks, etc, grass spaces to sit and ponder and faster pace areas with night markets, late coffee shops, market space that would take up a whole block and be open everyday - including flower market, fruit and veggies, crafts, old bookshops, shops to wander in and practical shops. Low-level buildings with a mix retail, office and living to gather. School and preschools close by.”

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- “Food/culture/art in among businesses.”
  - “Multi-use buildings – retail, restaurants etc at ground level - residential, office space and niche stores above.”
  - People see mixed use as creating a vibrant atmosphere in the Central City. Mixed use will encourage activity throughout the day and evening across all areas of the Central City so there aren’t abandoned areas at different times of day and night (as could happen with separate precincts).
    - “More residential apartments interspersed with business, culture, and entertainment - Keep the centre alive 24/7.”
    - “Mixed use buildings! Retail, offices and apartments so the space is activated 24/7 leading to a safe and vibrant city.”
    - “All shops together, makes it ‘dead’ at night. All restaurants and bars together makes it ‘dead’ in the morning.”
    - “A mixture of living, shopping and entertainment – make the Central City vibrant and alive 24 hours a day – must be safe.”
    - “Truly vibrant cities have a great mix of high end of funky retail cafes apartments, night life mix it up!”
    - “Mix of homes business and entertainment. Open air entertainment area, so that people are more likely to live there and the place isn’t an after dark ghetto.”
    - “I want mixed use spaces, weekday weekend & night use safe & well lit.”
    - “Mixed use development is KEY. Shops, cafes, etc on the ground floor, nice flats above. Once people live in the city, it will become better.”
    - “Apartments above shopping areas to encourage people into the city.”
    - “Vibrant city combining housing, tourism, entertainment, commerce with retail markets and green spaces.”
    - “I want a mix of retail office and living space, apartment inner-city living so the city is vibrant at all hours. A safe environment.”
  - General comments on wanting a mix of different types of land uses throughout the Central City (and not just in the same location or building).
    - “A vibrant business area with supporting restaurants and cafes, a variety of shops...”
    - “I would like the Central City to be a mixture of green spaces (where buildings have come down or been demolished) shops, providing essential goods and services (but no cluster of take away/fast food outlets) and apartment buildings.”
    - “To be a hub for culture, shopping, eating/socialising with good inner city living apartments. Business, e.g., lawyers, accountants, etc.”
    - “We will know we have made the Central City a great place because people will be back in it working, shopping, dining, enjoying a night out, etc.”
    - “Mix of business and residential to bring back heart and soul to the CBD.”
    - “A good mix of retail, business, culture and entertainment to encourage people of all ages or interests to participate and have a sense of belonging there.”
    - “Mixed use – business, retail, hospitality, entertainment plus low-rise residential – to achieve vibrant, safe spaces that people want to be in.”
    - “A mixture of retail, residential, arts, and commercial, lots of green space, green cycle belts connecting east west and north south.”
    - “Mix of businesses, residences, small parks, shops, cafes, gardens.”
    - “A good mix of business and nature and leisure and entertainment. Not so many businesses but more variety.”
    - “It should be strikingly different to the existing suburban shopping malls – an interesting mix of residential, commercial, business & cultural.”
    - “... control development within heart to maintain a mix of residential, offices, retail, galleries, cafes, entertainment, cultural facilities & tourist accommodation, etc...”
    - “Encourage a mix of education, business, residential and green spaces.”
    - “Music, Culture, Business, Art and Chinatown.”

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- “I want diverse business – IT, finance, retail, hospitality – creating a diverse workforce. This diversity creates vibrancy and a sense of inclusiveness for visitors.”
- “A greater mix of uses, e.g. buildings with retail, offices and living together.”
- Must ensure buildings are designed to cater for mixed use, with people-focused land uses, such as cafes, restaurants and retail on the ground floor and commercial/residential above.
  - “Mixed commercial, residential and retail buildings.”
  - “Think retail ground floor, office space 1st floor and living space 2nd floor, with a garden roof!”
  - “Apartments above shops and restaurants, with roof-top gardens and courtyards.”
  - “City squares similar to European cities with shops, cafes, etc. Second and third floors of these buildings could be used for offices or apartments.”
  - “The European style of retail underneath two or three floors of apartment accommodation surrounding central and grassed squares.”
  - “Mixed use buildings, residential, retail, commercial like Europe.”
  - “... where whole blocks are cleared, consider creating three-storey blocks with an inner square, as in Barcelona, Spain. The buildings are used for shops on the outer street level and restaurants/bars in the inner sheltered square, which is paved, treed, artworks/sculptures, etc. On the second /third levels are business and accommodation.”
  - “Build rest homes on the upper levels like Europe so the elderly can enjoy & be part of the city.”
  - “Cafes shops, on bottom level, apartment living on level two up, or commercial space.”
  - “Businesses downstairs, offices above, residential above that. Density but lower rise.”
- Light and airy retail spaces – also associated with building height and design.
  - “Light and airy spaces around shops and buildings.”
  - “Eco friendly/sustainable buildings of imaginative design, plenty of light/space and greenery.”

## Retail

### Topic summary

A quality retail shopping experience is critical to the vibrancy of the Central City, attracting both locals and tourists. The main point of difference between Central City retail and suburban shopping malls is the predominance of boutique, unique and specialist retail in the Central City versus bigger, easily replicated chain stores in suburban malls. To attract boutique retail to the Central City, affordable spaces and incentives must be provided, particularly for small businesses and/or new starts. People using the Central City want cost effective, small scale, supermarket facilities. Later opening hours for Central City retailers will encourage trade after 5pm which will encourage people to come into the city centre and/or to stay later.

### Number of comments: 6362

- Desire to see boutique/unique/specialist/iconic/quirky/creative retail in the Central City rather than just chain stores – this will create a point of difference between the Central City and suburban malls/centres.
  - “I want boutique shopping precincts to make for a distinctive shopping and living experience rather than the kind of experience that is a replica of any other shopping centre.”
  - “Central City can’t compete with malls so shouldn’t try (stick to things that malls can’t do – street markets, events, green spaces, entertainment and eateries).”
  - “No franchise shops in the retail spaces in the city, keep them in the malls.”
  - “Specialist shops – the type that there were only a few of in the whole of Christchurch, e.g. Knitworld, Scorpio, Fazazz and Longhorn leather.”
  - “We miss being able to walk around the streets and walk into shops that have individuality and not the same old same.”
  - “Specialist shops that only had one store that was/is inside the cordon.”

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- “More boutique stores for individual orders.”
  - “... boutique shops, no malls or chain shops.”
  - “Access to specialist shops such as shoe repairer, outdoor clothing specialist.”
  - “Small low-rise, walker-friendly Central City with special boutique shops.”
  - “Shops need to be predominantly boutique, unique upmarket fashion, speciality arts, etc.”
  - “Boutique shops not large retail chains/malls.”
  - “Focus on cafes and bars in the rebuild as a point of difference from the suburban malls.”
  - “Less souvenir shops and more High Street and one-off businesses to show NZ and locally made products to New Zealanders and tourists.”
  - Many people want a range of pedestrian-only retail areas.
    - “Want pedestrian malls with a wide variety of shopping and cultural activities.”
    - “... car-free shopping streets.”
    - “Retail space needs to be pedestrianised.”
    - “Open pedestrian malls (like New Regent Street).”
    - “Pedestrians mall with seating.”
    - “I would like to maintain a pedestrian-only City Mall.”
    - “I would love to see a pedestrian mall with lots of shops and cafes...”
    - “Lots of pedestrian-only mall areas paved with recycled bricks.”
    - “Possibly Colombo Street could be a pedestrian mall from Lichfield Street through to Gloucester or Armagh Street.”
    - “Less traffic, more pedestrian mall type areas.”
    - “No traffic, pedestrian mall in core of CBD.”
    - “I want pedestrian mall areas, like Cashel or New Regent streets.”
    - “Lots of pedestrian mall areas, few cars, a variety of cafes, bookstores, and lots of green spaces...”
    - “Make the CBD a pedestrian mall only, open areas, trams and no cars.”
    - “Shared use space – like Cashel Mall was – pedestrians.”
    - “More pedestrian only shopping streets and street markets would be great.”
  - Some want covered walkways between shopping areas.
    - “More covered ways between malls (Cashel, High St, etc).”
    - “Covered shopping zones.”
    - “Covered outdoor areas.”
    - “Covered walkways for rainy days.”
    - “... covered lanes linking retail shopping areas to create a village atmosphere...”
    - “Cashel Mall & adjoining areas with retractable roof that covers the whole St for bad weather.”
    - “... use walkways that are covered (and strong!)...”
    - “... covered walkways for pedestrians...”
    - “Cheap covered walkway to the central retail area.”
    - “Covered walkways for shelter.”
    - “... covered walkways link shops/offices...”

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- “Enclose Cashel Mall with a glass roof/canopy (like Fremont Street in Las Vegas). Have the entrance and exit open allowing air to flow through. A clear roof allows sunshine through on a sunny day and keeps the rain out on a winter’s day.”
- “Covering in Cashel Mall with clear roofing so light can will come in – gives the city a covered shopping area but different from mall.”
- “... a covered area that can be used for a market or meeting place, good access and pedestrian friendly.”
- “... covered ways with disability scooter access...”
- Time spent in the Central City should be an ‘experience’ to be savoured with attractions that entice people to stay.
  - “Is ‘an experience’ and should be considered a something that would involve four hours at least not one hour mad dash in and out.”
  - “I want reasons to spend time in the city – farmers markets, the arts, clubs and bars, buskers – street life, restaurants, organised open entry concerts, museums - heritage, boutique shopping.”
- People want quality retail rather than cheaper, low-quality shops in the Central City.
  - “I don’t want rubbish shops on the High Street selling stuff that won’t last a week.”
  - “I don’t want shops that you can find everywhere else.”
  - “I don’t want stupid pointless shops like two dollar stores and “value mart”.”
  - “There should be none of the scummy sex shops, \$2 shops, tacky touristy shops.”
  - “...don’t want Timezone arcades, \$2 shops (not a positive image for a new vibrant CBD, malls are a better place for them).”
  - “I don’t want Porn shops and crappy cheap traders a la lower Colombo & Tuam.”
  - “I don’t want cheap \$2 type junk shops.”
- People are really missing their old stamping grounds and favourite shops, cafes and restaurants – the Dux de Lux and Ballantynes are the two most commonly mentioned.
  - “I want my old places back! Dux De Lux, arts and crafts, concert venues, Smiths bookshop.”
  - “I’ve missed the Arts Centre weekend market. Great eateries like the Dux de Lux, the restaurants along the strip, etc. And the nightlife, clubbing and bars are important for young people as we need to have a way to relax after studying and celebrate events. SOL Square was one of the best places in Christchurch.”
  - “The cafes, also especially Dux De Lux – it wont be the same if it has to go somewhere else.”
  - “The Arts Centre was a regular haunt – I miss that – and especially the Dux.”
  - “... the Dux de Lux atmosphere.”
  - “Cafes/restaurants. Markets with artisan products. Unique shops that were at the Arts Centre. Brew pubs – Twisted Hop/Dux de Lux, small speciality shops, Toi Toi for example. City library. Events – Lantern Festival.”
  - “I have missed shopping at Ballantynes and a small craft shop under the car park.”
  - “I have missed running/walking along the river through town, missed going to the central library, sitting in Cathedral Square, wandering around the shops and sitting at a café for lunch/coffee.”
  - “Local specialty shopping – Ballantynes, McKenzie and Willis, De Spa chocolate shop!”
  - “Cultural activities; shopping in town – Ballantynes...”
  - “Boutique shops, Ballantynes, art gallery, New Regent Street, cafes and restaurants, movie theatres.”
  - “I’ve missed going to Ballantynes and other shops that you can’t get anywhere else. I’ve missed all my favourite cafes and restaurants.”
  - “Ballantynes, Dux, the lanes, cafes, arts centre, galleries, library. I used to have language school students I would bring in to the city. Miss having a day out, meeting friends, browsing, eating, ending up choosing an armload of books and music, or taking home goodies from the market.”

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- “The shuttle taking people around through town; the Central library; access to independent theatres – Metro, Academy; Arts Centre and the market; Christchurch Art Gallery exhibitors and talks; Dux de Lux; Museums; Robert McDougall Gallery; shopping at Ballantynes; inner city restaurants. The freedom to walk around the inner city.”
  - Affordable retail space for small businesses as this type of retail adds vibrancy to the Central City; incorporate retail with small floor areas that are affordable for smaller, unique and ‘different’/quirky businesses – act as business incubators.
    - “Ensure that redevelopment doesn’t exclude or make unaffordable space for small business that bring vibrancy, variety & character to the city.”
    - “Small shop spaces for small start-up shops to trial their concept. Use some of the Council-owned land. Incremental increase in rent until able to move to a private commercial space.”
    - “Create more retail space – lower average rent means higher number of boutique stores and coffee shops all equals a more interesting inner city.”
    - “Affordable rent for the little guys so we keep the quirky shops alive. Not just the big franchises...”
    - “Work with building owners so that rents are not too high for the kind of boutique shops we need in town.”
    - “New retail shops need to be modest with rents and rates to match.”
    - “I want small business spaces at affordable rental.”
    - “Small businesses – interesting, lively. Need a decent percentage of lower rentals to be talked about now that the bad old cheap buildings are gone.”
    - “Places for small businesses where rent is not too high.”
    - “I want cheap rental properties to encourage people with talents, i.e. artists/potters/boutiques.”
  - Subsidised rents for business start ups.
    - “Rent needs to be subsidised in some areas to attract up-and-coming designers and entrepreneurs who need cheap rent to get started.”
    - “Subsidise rent for small unique food shops to encourage variety.”
    - “Keep rates/rentals low, encourage boutique, specialist, hobby, start-up businesses.”
  - Malls – mix of views on whether or not these should be in the Central City. Many do not want suburban-style shopping malls in the Central City (especially the big box retail, chain store variety that are replicated across the suburbs). Some do want malls in the Central City, such as covered over Central City pedestrian malls (e.g. glassed-over streets – glass Cashel Mall); others want a higher end mall containing boutique retail only (similar to the Queen Victoria Building in Sydney).
    - “Ask ourselves why are the malls full of people. Don’t replicate them but follow their principles of free parking, convenience, ability to go to no matter what the weather.”
    - “Before the earthquakes the Central City was looking very run down, somewhat like a third-world town, and was not well patronised. It had lost its role as the heart of the city. By contrast the suburban malls were always buzzing, so one wonders what the difference was. The malls attracted people because they were clean, it was easy to park, you were sheltered from the elements, you could do most of your shopping there, they had good coffee shops and good food was available. This has led some people to say we should have a suburban-type mall in the CBD. This would, however, make the CBD just another suburb and the city would then have no heart. However, if we could make some use of the things that make malls attractive, without building a mall, people would come back.”

#### ***Against malls***

- “Don’t want no big shopping centres in centre town, go to suburbs for that kind of experience.”
- “No big malls.”
- “Malls are cathedrals of consumption.”
- “I don’t want big malls...”
- “I don’t want big malls. I’m not a big fan of them and I much rather stroll along boutiques than get horded around a big mall. They all appear the same.”



## Share An Idea Summary

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- “I don’t want big mega stores. Keep these to the suburbs and specially designated zones.”
- “Malls are horrible places....”
- “Shops and buildings with their own style and character (unlike the malls).”
- “I don’t want big multi-national owned mall that gives the city a bland as per all the other malls feel need eclectic, creative small enterprise in the Central City.”
- “I don’t think we should have any big shopping malls in the CBD. Shopping malls in other cities usually strip the streets of shops.”
- “Small boutique businesses are better than big malls.”
- “No ‘mall type’ developments....”
- “I don’t want Westfield!!!...and its ilk.”
- “Don’t allow the spread of any more malls.”
- “No big malls but streets interlinked with boutique stores as well as some of the bigger stores.”
- “Cafés and eateries interspersed with shops and businesses. In essence the antithesis of a suburban mall – I dislike those rat mazes.”
- For malls.
- “Big flash mall with all the top shops of the world.” “Create one big shopping mall in Central City around Ballantynes with good parking and fantastic cafes and eateries.”
- “Sheltered outdoor malls, strategic parking areas/buildings so people travel on foot/bike.”
- “Massive shopping mall in CBD – like Eaton Centre in Toronto or MBK in Bangkok - people love malls – let them have one downtown, they draw people in.”
- “We have noticed that there is a trend towards building large indoor shopping centres in city centres... and these centres form the nucleus of the city’s retail shopping. The reasons are obvious and, in our experience, are hugely successful... I am not talking about centres like Christchurch’s South City or Auckland’s Westfield, but something larger and more up-market. These centres are always anchored by one or two major department stores and contain numerous up-market speciality stores... They always have a large food court and sometimes cinemas. I think that Christchurch’s need for such a centre is great... We lived in Toronto... While we were there they demolished an entire city block and built the Eaton Centre, which is a wonderful concept and is now the retail heart of the city. When we visited Toronto again last year, we found that the Eaton Centre was absolutely packed with shoppers all the time.... The centre is entirely enclosed and has a huge arched glass roof that lets in plenty of natural light.”
- “CHC people shop at malls. San Diego and Honolulu have revitalised CBD with ‘outdoor’ malls...”
- “People go to malls – have biggest and best mall close to the CBD with ice skating, movies, etc, then lead off to the nice boutique shops, cafes , Ballantynes, green spaces ...”
- “There should be a big mall in the CBD so everyone from around the world will want to come shop in Christchurch and have all the big brands and names in this but make it only 2 or 3 storeys high. it should a couple of blocks wide though.”
- “Shopping mall in inner city – people like malls. Get over that you CCC planners!”
- Later closing hours (and perhaps later opening hours) to encourage people to remain in the Central City after 5pm.
  - “Have shops open later, e.g. 10am to 10pm.”
  - “Cohesive opening hours for CBD businesses. Actual late-night shopping on Thurs/Fri instead of a hodgepodge of open places.”
  - “We should encourage the CBD to open later and stay open later as most European cities do. I believe our CBD should open at 10.00 or 11.00 am and stay open till 8.00 pm. Our CBD needs to set itself up as something different from the suburban offering. Office and other workers in the suburbs who finish work at 5.30pm or 6.00 pm have little chance of any CBD retail experience. If the city opened later and stayed open till 8.00pm then we would find workers come to town in the evening as a family to do retail shopping and then stay on for a meal or to catch up with friends in the evening. The city would create its own evening character and life like we see overseas.”

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- “Longer retail hours up to 10pm.”
  - “A city centre that doesn’t close at 5.30pm.”
  - “A CBD retail area that is under management to regulate shopping hours.”
  - “Huge central market place (24 hours) where people meet and shop, etc.”
  - People want Central City supermarkets (including ‘micro’ supermarkets such as New World’s Metro) rather than smaller convenience stores which are seen as expensive; good Central City supermarkets will be an important service if more people are to be attracted to living downtown.
    - “Would love a small supermarket (similar to UK’s Tesco Metro/Sainsbury’s), not the overpriced convenience stores that we’ve had in the past.”
    - “Wellington has incredible New World “Metro” supermarkets... which offer significantly better food options for office workers and city residents than anything I’ve seen elsewhere. Attract one of these to the CBD along with plenty of office space and you’re on to something!”
    - “Auckland & Wellington already have ‘metro’ version supermarkets. Encourage the big two supermarket owners to bring them to Chch.”
    - “Micro Supermarkets, like Woolworths Metro or Coles Express, which sell fresh food and all products, not the overpriced 7/11 etc.”
    - “A compact ‘metro’ version of supermarket.”
    - “24/7 mini-supermarket.”
    - “Inner city supermarkets with good food.”
    - “I want one supermarket, convenient to do shopping while having a good time in the inner city.”

**Community Workshops:**  
**point of difference between Central City retail and suburban shopping malls**

**Group comments**

- Central City retail – boutique, niche, specialist (e.g. designer goods), both high-end and lower-cost retail, diversity of retail; precinct shopping; markets; lanes; incubator options for new businesses; character and heritage; diversity of buildings; combined with entertainment, recreation and art.
- Suburban malls – big box retailers; sameness.

**Business Services**

**Topic summary**

People want a quality retail experience and businesses (especially small businesses) in the Central City. This includes limiting the number of \$2-style shops, souvenir or tourist only shops and adult services such as strip clubs, street prostitution, massage parlours and party pill shops.

**Number of comments: 278**

- Quality retail and businesses in the Central City, such as boutique retail.
  - “Regular access to favourite businesses and services.”
  - “Businesses, professions, retail, creative ventures, spaces for markets and arts and crafts, not sanitised and all the same, create variation.”
  - “Access to small businesses – dentist, photo lab, optometrist, bike shops. These businesses need Central City premises. Big business is often duplicated throughout the city in suburban offices and malls.”
  - “Character shops...”
  - “... look after small businesses.”
  - “Space for diversity of small businesses.”



## Share An Idea Summary

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- “I don’t want sleazy down-market shops and activities.”
- “Our city was in some ways ‘broken’ before the earthquakes, too fragmented, grey and whole pockets of dilapidated structures housing dubious operations that were an embarrassment really. Not sad to see them go actually.”
- Sex shops/massage parlours/strip clubs/party pill shops – people say they do not want these in the Central City.
  - “No adult shops.”
  - “Get rid of the massage parlours.”
  - “Get rid of the sex shops in main street...”
  - “No “Manchester Street” or shifty brothels.”
  - “No XXXX stores. No “legal high” shops.”
  - “I don’t want adult/sex shops on Colombo St!!!!!!”
  - “Ditch the massage parlours, brothels, etc!”
  - “Get rid of the party pill shops!”
- Fewer souvenir and tourist only shops in the Central City.
  - “Don’t want the Central City dominated by souvenir shops for tourists.”
  - “A centre that has 10 gift/New Zealand shops as a weird hub!”
  - “No large, mass-produced souvenir shops round the Square.”
  - “Replace the souvenir shops around the Square with buildings of cultural interest (galleries, museums, etc) and cafes.”
  - “I want less souvenir shops and more high street and one-off businesses to show NZ and locally made products to New Zealanders and tourists.”
  - “... In the past few years, its (the Central City) been full of tacky market-type stalls, souvenir shops...”
  - “Also less souvenir shops they’re ugly and silly.”
- Fewer \$2 style shops – people see these as cheap and tacky.
  - “No \$2 shops, no sex shops.”
  - “I don’t want tattoo parlours, party pill shops, \$2 shops, adult shops, stand-alone liquor shops.”
  - “I don’t want low-level shops such as two dollar shops, sex shops and other shops that are not of value.”
  - “There should be none of the scummy sex shops, \$2 shops, tacky touristy shops.”

## ***Entertainment and Hospitality***

### ***Topic summary***

People want quality entertainment experiences that attract people to the Central City and keep them downtown longer. They want a large number of cafes and restaurants (which are equated with the presence of people and an associated vibrancy), spread throughout the Central City and spilling onto the streetscape and other public spaces. This vibrancy must continue after dark to ensure the Central City is a viable destination in the evening. Management of alcohol abuse, bar closing times and presence of lighting were common themes in relation to evening activities in the Central City.

Cathedral Square was singled out for a lot of attention, with people wanting a proliferation of cafes, restaurants and retail on the ground floor all around The Square.

### ***Number of comments: 5481***

- A proliferation of cafes and restaurants is a common theme, especially at building ground level with residential and offices on levels above.
  - “Concentrate on low-rise buildings with retail/cafe space on the ground floor and office/living space above.”
  - “Low-rise in CBD, cafes and retail on ground, residential and office above...”

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- “Cafes, bars, shopping markets, entertainment – to create a buzzing environment...”
  - “Lots of small eateries or cafes to service inner city hotels and shoppers.”
  - “... lots of cafes...”
  - “I don’t want banks, insurance, etc, taking up street-level shopping space...”
  - “Ground floor business in the Square should engage people like cafes & restaurants rather than shut off ones, like banks that make it look dead.”
  - “... architecturally designed buildings, retail and cafes on the ground floor with apartment-style living above. Internal courtyards for sheltered inner city living with spaces that many residents can share.”
  - “Stop banks and other ‘dead’ institutions from hogging key public areas, e.g. the south side of The Square. Have cafes and restaurants instead.”
  - “... the utilisation of ground floor space within buildings fronting the Square is where bars and cafes should be. Encourage the ANZ and BNZ to vacate their ground floor tenancies. They are the wrong occupiers of ground floor retail space in the Square....”
  - “The ANZ and BNZ banks occupying the two northern sunny street corners in Cathedral Square with their painted out windows or fully drawn blinds need to be a non-complying activity or presence in such important spaces.”
  - “Occupy every ground floor in The Square with bars, cafes and restaurants. Intermingle the odd owner-occupied boutique shop.”
  - “... ground floor activities in CBD should be retail and service, not blank commercial facades that became the norm in Cathedral Square....”
  - “I want Cathedral Square that feels safe at any time of the day or night – cafes, restaurants, concert areas, less business offices on the ground floor – vibrancy.”
  - “A place to be entertained with a vibrant feel-hotels, bars, cafes, restaurants, theatre, movies, green spaces-like Leicester Square, London”
  - Cafes that flow out onto streetscape – both open air, alfresco dining/outdoor cafes and indoor cafes.
    - “Need a centre that is packed with people day and night. Bring outdoor cafe spaces to The Square and very close residential development.”
    - “... wider pavements to allow cafes to seat outside.”
    - “Specialist boutique-type shops scattered amongst cafes, restaurants and bars with lots of casual seating amongst plants gardens lawns.”
    - “I would love to see more apartment living, green public spaces and to retain our ‘cafe culture’ with cafes spilling out onto squares and courtyards, like in European cities.”
    - “... cafes and bars with outside spaces...”
    - “... outside cafes, beautiful sculptures, outside music and dancing areas, bands...”
    - “... more indoor/outdoor cafes...”
    - “Provide space and encourage cafes and restaurants to sprawl outdoors in summer.”
    - “... wider pedestrian paths with native plantings and outdoor vista for cafes...”
    - “... outside cafes...”
    - “More green grass, cafes that spill out onto the footpath. More pedestrian-only roads.”
    - “... open-air cafes...”
    - “Restaurants and cafes with open-air courtyards for alfresco dining...”
    - “... many cafes with outdoor terraces in the central hub of the city.”
  - Cafes and eateries should be located on the sunny sides of streets and should be protected from the prevailing easterly wind.
    - “Cafes, etc, on the north-south streets for shelter and sun.”

## Share An Idea Summary

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- “Lots of sheltered sunny outdoor areas outside cafes and shops protected from the easterly wind where people can meet and sit.”
- “Cafes should be located on the south (sunny) sides of spaces and the CBD needs plenty of trees to mitigate against the killer easterly wind.”
- Many comments relating to the closing times of bars, with the majority of people wanting earlier closing times in order to curb drunken behaviour, while a minority see later closing hours as adding to a vibrant Central City nightlife, like that found in overseas cities.
  - “I want a sensible closing time for bars and clubs (not 5am).”
  - “Close bars before midnight, people will not live in CBD if it is full of drunks and noise at night.”
  - “Don’t have bars in the centre of the city that are open to 5am. Either limit the opening hours or put them somewhere else.”
  - “Keep bars and clubs open but monitor alcohol abuse.”
  - “Revision of liquor licensing regulations to extend closed door policies to all licensed premises within the CBD and reduce drinking hours, ideally having all premises closed at 2am and at minimum, with no new customers entering after 2am.”
  - “I want lots of bars and pubs. Night life. Something to do for 24 hours a day!”
  - “I think the clubs should be more classy and that lock down should be well and truly after 3am. I don’t think there should be a lock down. Overseas they don’t have lock downs like we do here.”
- Less focus on larger scale ‘booze bars’ which people associate with alcohol problems in the Central City. More focus should be on smaller scale, boutique bars/eateries/cafes.
  - “... emphasise a diversity of smaller cafes/wine bars/eateries. Create a pro-social environment – get rid of booze barns.”
  - “I personally in favour of more bars and restaurants in the Central City and fine dining places in the CBD. But, rather than giving permits/consents for bars & restaurants like issuing raffle tickets, the Council should come up with a programme for theme bars & restaurants.”
- More cinemas/movie theatres, especially in heart of Central City, e.g. Cathedral Square (independent cinemas like those that proliferated in decades gone by).
  - “Create an amphitheatre for the community – outdoor cinema, plays and theatricals!”
  - “Have a real city mall – free parking, good shops, art cinemas, food courts, mall-wide vouchers, warm enclosed space...”
  - “Create an area for cinemas...”
  - “... a multiplex of cinema complete in the Square.”
  - “I want small cinemas...”
  - “...drive-in cinema.”
  - “Art house cinema – really missing the Arts Centre, Academy and Cloisters movie theatres.”
  - “Gardens, cinemas, restaurants, beer-gardens, music venues and galleries.”
  - “The smaller cinemas outside the major movie chains.”
  - “Bring cinemas back to the Square and create a venue there for the Court Theatre.”
  - “... small independent cinemas...”
  - “Art house movie theatres.”
  - “I remember as a child how I used to love going to The Square. All the movie theatres were around it, you could go for a late supper, there were lunch-time concerts, it was a dynamic, exciting place to be...”
  - “I want movie theatres to bring more people in to the inner city who can combine other entertainment with a night at the movies - dinner, shopping, etc.”
  - “Central City alternative movie theatres showing something other than Hollywood tripe.”

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- Find ways to ensure the Central City has a vibrant night life; focus on developing the Central City as an after-dark destination, as well as day time destination, e.g. well-lit night garden with cafes and bars around it to extend the green space concept into the evening. Important for success of the Central City.
    - “Nightlife! Performing arts, plays, theatre, spaces for quirky ‘arty’ cafes where conversations can be had over world-class coffee & candles.”
    - “Restrict shops that close at 5, so that the city remains vibrant throughout the evenings.”
    - “Allow for a vibrant & safe night life.”
    - “... night life with safe places to wander...”
    - “We need to have a bright night life without dark areas where low life can congregate.”
    - “I also think having an area in which nightlife can be available for the people who want it, such as clubs and bars, but isn’t in such a place that affects the people who are in the city for meals or shows ... Then a nightlife zone with the clubs and bars.”
    - “I also think that the city nightlife needs to be improved. I think the clubs should be more classy... I think there should be nice pretty lights on the streets and when you’re walking through town, there should be no streets that are pitch black and make you feel unsafe. I think there should be more security cameras around for people’s safety.”
    - “A better nightlife – decent restaurants, bars and night-time shopping, e.g. night markets with NZ handicrafts. This will attract tourists because there’s not many exciting things to do at night if you are visiting Christchurch.”
  - Cathedral Square – restaurants/cafes, some retail on ground floor; commercial above; green space in Cathedral Square including playground and interactive water feature for children to play in; lots of seating areas in The Square; when talking about what they want for Cathedral Square, people have provided examples of European-style squares with a cathedral at the centre and cafes/restaurants around edges.
    - “Revitalise The Square to have more of a European flair – engineer space to deal with the wind then have stalls, coffee places, art, cafes...”
    - “Surround The Square with cafes and restaurants...”
    - “... cafes around the Cathedral, retail & offices on 2nd floor with apartment living above. Green up the Square.”
    - “Grass & gardens in The Square with cafes around the perimeter...The Square should be a beautiful hub of activity.”
    - “Bring green areas back to The Square and have cafes, etc around it not banks.”
    - “Make the Square the heart/soul of the city by zoning out banks/offices on ground floors and encouraging more cafes and cultural events.”
  - Cashel Mall – mix of retail, residential and cafes.
    - “Develop a boutique shopping hub in Cashel Mall. No big mall-style shops (e.g. Glassons). Great opportunity to have a buzzy, vibrant hub!”
    - “Upper High Street stores need to be brought closer to Cashel Mall.”
    - “Cover Cashel Mall to allow all-year-round entertainment.”
    - “Enliven Cashel Mall. Ballantynes, plus a 3? storey comprehensive shopping area as in many cities, plus outdoor cafes, etc.”
  - Dux de Lux – many comments around people wanting the Dux open ASAP – seen as vibrant, iconic and an important social venue in the Central City. People say they miss the Dux!
    - “Re-open the Dux De Lux.”
    - “I want my old places back! Dux De Lux, arts and crafts, concert venues, Smiths bookshop.”
    - “I want the Dux de Lux back.”
    - “Please open the Dux de Lux now...”
    - “The Dux De Lux reinstated.”
    - “Dux de Lux – facilitate speedy repair...”

## Share An Idea Summary

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- Cafes, restaurants and retail in network of lanes and alleys.
  - “Small busy back alleys, like SOL Square and Poplar Lane.”
  - “Wide streets and footpaths and alleyways full of interesting businesses.”
  - “Integrate some vehicle free, meandering cobbled laneways with boutique shops and cafes, like the lanes near Flinders Station, Melbourne.”
  - “Make more of the lane idea, and mix in the feel of grand arcades, with smaller retail, cafe, and bars.”
  - “Keep the quirky feel to the city, keep the lanes that have vibrant shops that stock one off items, so we can support locals.”
  - “Combination of alleyways (e.g. Poplar Lane) of bars/restaurants, with open green spaces. Street dining.”
  - “... well thought out areas. like SOL Square and The Lanes.”
- Courtyards, as part of building developments.
  - “Lots of courtyards...”
  - “... inner courtyards bounded by buildings – think Berlin’s hofs & contemporary versions of the Arts Centre’s inner courtyards...”
  - “Low-rise, shared courtyards...”
  - “I like the courtyard philosophy.”
  - “Green apartments with rooftop gardens and lush courtyards...”
  - “I would like to see more intimate courtyards with cafes and water features.”
  - “... to facilitate the required fluid connectivity between the indoor and outdoor spaces, courtyards, covered terraces, cloisters and meandering pathways linking sprawling gardens, both functional and decorative, to built up areas, would be widely used....”
  - “The Integration of courtyards & gardens In & around buildings.”
  - “Rebuild without high-rise buildings around an inner courtyard for a mix of retail, residential, and commercial tenants.”
  - “Maybe courtyard style like the Arts Centre.”
  - “Would like to see buildings with green space, say a central courtyard for staff facilities – atrium style.”
  - “Increase communal green space in the inner city with a range of courtyard parks and gardens.”
  - “High-density developments could cluster buildings around pedestrian green space forming the core of a block, with ground floor retail activity facing the courtyard and the street, and apartments and offices above.”
  - “Low-rise buildings surrounding a courtyard...”
- Many people want to limit or ban fast-food type outlets in the Central City due to health and litter concerns. Some are saying that clusters of outlets, such as KFC and McDonalds, result in antisocial and intimidating behaviours. Others simply don’t want them because they are multi-national chains.
  - “I don’t want fast food outlets close together – causes teenagers to hang around and creates problems, e.g. graffiti, fighting.”
  - “...don’t want fast food outlets that neighbour each other, e.g. KFC on one side and McDonalds directly opposite. Young people congregate there and their presence intimidates others.”
  - “Don’t want...groups of fast food restaurants which attract litter and loitering.”
  - “Not a single chain store for unhealthy food.”
  - “I don’t want KFC, McDonalds and Burger King, etc”
  - “Eating places, not fast food outlets please!!”
  - “There should be no fast food outlets...”

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- “Please don’t have all the fast-food places altogether. Colombo St was noisy, dirty and felt unsafe late at night. The centre is for everyone, not just the teenagers (who used to hang outside these places!).”
  - “I don’t want fast food outlets they make a lot of mess and attract groups of people who have not a lot of consideration for other people – i.e. leave their mess on the roads, footpaths, etc, also group together taking up the whole pavement so people have to wind there way through and feel quite intimidated.”
  - “I don’t want fast food franchises.”
  - Many want an increase in the number of ethnic eateries and some suggest a Chinatown-style precinct, while others suggest an ethnic-focused market area.
    - “An area of the inner city rebuilt or designated as a “China Town”, with yummy restaurants, shops, celebrating Chch’s ethnic diversity.”
    - “Ethnic enclaves, e.g. Chinatown, Little India, Italian quarter for eating and entertainment.”
    - “A multi-ethnic area modelled on a Chinatown.”
    - “Make a market/Chinatown area.”
    - “I want Chinatown. Every great city has one.”
    - “Would like to see a Chinatown concept developed for Asian restaurants.”
    - “Ethnic themed areas.”
    - “... ethnic districts...”
    - “An ethnic food court place.”
    - “More outdoor eating ethnic areas grouped.”
    - “Encourage ethnic areas – they add so much life to cities.”
    - “... outdoor eating ethnic areas grouped...”
    - “... ethnic market spaces...”
    - “I want ethnic food restaurants in the city.”
    - “More ethnic food places from all round the world.”

## ***Commercial/office/public administration***

### ***Topic summary***

There were mixed views on whether big businesses should be located in the Central City, but most were in agreement that commercial and administrative activities should not be located on the ground floor of key parts of the Central City, as these activities discourage the presence of people and their building design can detract from public space. Cafes, restaurants and retail on the ground floor will encourage people and therefore vibrancy, with commercial and administrative services located above or in separate parts of the Central City.

### ***Number of comments: 484***

- Many people say commerce, offices and administration should not be on ground floor levels of buildings (and some say they should not be anywhere) in the heart of the Central City. Instead the focus should be more on retail, cafes and restaurants on the ground floor.
  - “Banks, etc, at street level kill the Central City, put them up on a floor.”
  - “Don’t allow banks to occupy large ground level space.”
  - “Buildings where cafes and restaurants are ground level and businesses on the second level.”
  - “Avoid big bank and insurance outlets at ground level in the prime retail areas, especially The Square.”
  - “Banks, insurance companies, etc, should have minimal street frontage - keep the street alive by having varied businesses that add vitality.”
  - “I don’t want buildings that become deserted in the evening, e.g. admin buildings ONLY (banks, insurance).”

## Share An Idea Summary

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- “Don’t want a dominance of commercial and retail businesses that excludes or marginalises normal living and social interaction.”
- “There’s less need these days for offices and the like to be in the centre.”
- “Significantly reduce the number of professional offices and relocate in nearby suburbs – Sydenham, Addington.”
- A number of people want government buildings to return to the Central City, while others would prefer to have them located outside the Central City.
  - “In order to encourage businesses back, Government Departments, ECan and CCC offices should all be returned as quickly as possible.”
  - “I’d like to see the government make a bold first step – The IRD building has survived well. I’d like to see other government departments located near it, a sort of government hub.”
  - “Huge head offices of insurance companies, insurance companies, etc – why do government departments have to be in the Central City ## the same amount of inaccessibility as before the EQ, especially to govt departments, etc.”
  - “Head offices don’t have to be in the Central City, e.g. insurance companies, solicitors, government.”
  - “Have other government departments located in a government hub around the IRD building, i.e. have the government lead the charge of investing in the city.”
  - “Government centred on Wellington puts the whole country at risk economically as if Wellington CBD was shut down like Christchurch is for the best part of a year, New Zealand would have substantial governance problems. We need to lobby government to get some of its departments to relocate to Christchurch into new earthquake-proof buildings that would provide a spread of risk for government and help Christchurch’s rebuild. The Christchurch City Council also has offices and services spread all over the city. Our Council ,as a major employer, should be looking to move as much as is sensible back into the CBD to assist with its rebirth.”
  - “I want services such as banks and government departments, clusters of dentists and lawyers.”
- Some people want larger businesses to remain outside the Central City and smaller businesses to come back in.
  - “I want life and that means activities that bring it such as arts and concerts, students, e.g. music and commerce students. Professional life such as lawyers and accountants and engineers need to be congregated there as well.”
  - “A mix of office/shops/urban apartments.”
  - “Keep insurance companies, banks and large corporations out of the Central City and allow small businesses in.”
  - “I want diverse businesses instead of just banking institutions or lawyers.”
  - “No large franchises keeping the large businesses slightly separated to the boutique area, such as seen in Sydney.”
  - “Premises of a scale and diversity that allow a variety of small businesses to thrive.”
  - “Places for small businesses where rent is not too high.”
- Some want the Central City as a hub mainly for commerce, while others would prefer more mixed land use.
  - “The point of a city is a business centre.”
  - “Strong commercial hub must be the core of any future CBD – by definition.”
  - “I don’t want to see a city based just on business and economics as this will not be a step forward for the future.”
  - “Less commercial inside the CBD or more apartments.”
  - “Mixed retail, residential cultural and commercial.”
  - “Residential and commercial activities need to be accommodated in the same building, shops and commercial on ground floor with floors of apartments living above.”
  - “Low-rise wooden buildings that have a WOW factor and are sustainable. Less business orientated and more a part of the university, local community and local shops. A place to meet people.”
  - “Create the future: quake-safe, max 3-storey, energy efficient, colourful places to live, work and play, that sit well on the Pacific’s edge.”
  - “I want a mix of business and homes.”



- “Have schools and beautiful residential areas within the city, a stronger community feel across all ages, not just for businesses.”
- Some think having a variety of entertainment, retail and accommodation in the Central City will entice both tourists and locals.
  - “The CBD as a hub for bars, business, restaurants, accom & entertainment. If CHCH activity is less sprawled growth will come naturally.”
  - “A Central City is too important, to live only at designated hours; it must have offers at every hour of the day. It must have more than retail area. It must serve its citizens better.”

## ***Community facilities and services***

### ***Topic summary***

Community facilities have the potential to add to the appeal and vibrancy of Central City living and enhance the experience of those coming into the Central City. Schools and tertiary facilities will bring young people into the Central City. Mixed views on bringing the entire university into the Central City given the existing investment at Ilam, but there is some support for individual departments (especially arts-related) coming downtown. There are calls for a bigger and enhanced central library as a vibrant location for people to spend time.

#### ***Number of comments: 1601***

- Competing opinions on whether the university should move back into the Central City or stay at Ilam and some say individual departments should be located downtown.

#### ***For move to Central City***

- “I would like to see part of Canterbury University come in town. Maybe the Arts and Film dept. Having once been in Central City at the Arts Centre. It would bring people (students) into the Central City making it more vibrant and also good for biz.”
- “Parts of the university campus come to the city – how about the arts people – get it buzzing with energetic young arty people.”
- “Bring back the university – this will bring vibrancy and people back.”
- “Bring the university back! Lots of vibrant young people.”
- “I want the university, or as a minimum try to encourage some departments back into the Central City. You talk about key tenants, well this is the biggest and the best key tenant to have in the city.”
- “Move Canterbury University back into town, a steady, large population of students and staff to support CBD business”
- “... bringing part of the university back into town (the arts) this will bring young people into the centre of the city which is needed to be a interesting and vibrant place getting people back to live in town...”
- “University and polytechnic brought into the city, it would bring more life to the city centre.”
- “The university would be in the centre city to add to the vibrancy.”
- “Bring as many campus institutes back to the CBD as you can... having students studying in the city gives it life.”
- “We really have to be positive about bringing the whole university back into town. The benefits far outweigh the effort involved to shift.”

#### ***Against move to Central City.***

- “No university in the city, it is nice where it is.”
- “The university should not be moved to the city centre for financial and logistical reasons (plus they don’t want to move!).”
- “Keep university at Ilam – do not attempt to fix what isn’t broken!”
- “Don’t transfer the university back into Central City.”
- “UC has a billion invested in infrastructure at Ilam. It would have to have a spectacular financial inducement to shift into the city.”
- “Leave the university at Ilam, it caters for a select group of people who may also come to the city centre for relaxing without the campus dominating the CBD.”



## Share An Idea Summary

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- “Bringing the university to town? NO! The area would be a ghost town in summer and during winter breaks and students would not have the disposable income to support businesses there.”
- “I want I personally think having parts of the university in town is a waste of learning time through travel. I’ve spent four years at university and you don’t want to be travelling to different campuses.”
- “The university should not be in the city. What a waste of the Ilam campus. Bring it into the city with displays, events, presentations, one-off occasions.”
- The majority of people want schools located in the Central City as children and young people add vibrancy and community facilities, such as schools, will encourage families to see Central City living as a viable option. A small minority do not want schools downtown.
  - “Schools because we have to cater for future generations.”
  - “More educational activities in the centre of the city – young people add vibrancy.”
  - “Our Central City will be school friendly. Kids in the city now will bring adults in future.”
  - “More schools.”
  - “Bring back schools like Unlimited and Discovery – innovative education.”
  - “Good primary, secondary and tertiary schools.”
  - “High-quality primary and secondary schools in the inner city would attract families to live there.”
  - “Fantastic schools at all levels to attract families and young people.”
  - “Have schools and beautiful residential areas within the city, a stronger community feel across all ages, not just for businesses.”
  - “I don’t want schools – my experience of these is that the students take up public spaces as their own making the public feel unwelcome and intimidated.”
  - “I don’t want schools as these encourage large groups of kids to hang about the city. Were quite intimidating.”
  - “I don’t want schools, as this encouraged groups of kids to hang around areas in large groups.”
  - “No schools in Central City – causes traffic problems.”
  - “No schools – kids need space to run around not city shops.”
- Enhance the central library – refresh its image; make it bigger; make it a vibrant place for people to spend time (e.g. include a café); link it to public transport networks.
  - “21st century library spaces. Quiet wireless internet working space.”
  - “Please make the Central City library as vibrant as the community libraries.”
  - “The central library – an excellent place to relax, read and use the computers.”
  - “Public library incorporate a café.”
  - “More accessible and attractive central library. Old one was difficult to park at and looked scruffy.”
  - “Large public library...”
  - “... a big library...”
  - “... enlarge library, music centre in Farmers buildings...”
  - “... I... liked the idea of linking the new university with a tram/town link.”
  - “The central public library in Gloucester Street needs to be transformed into the 21st century with a café and still strengthened against future earthquakes.”
  - “Rebuild a light, airy central library with both quiet, secluded places and social areas, indoors and outdoors.”
  - “The power of a central library to bring people into the Central City should not be underestimated.”
  - “How about a central library for kids connected to the main library by a great cafe and play/reading area!”
  - “Having a separate children’s library with a cafe and playground.”

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- Develop a multi-denominational church/worship facilities in the Central City.
    - “A multi-denominational church in Cathedral Square rather than just Anglican – so many faiths have lost their city base.”
    - “A large church or cathedral for large worship gatherings and as central focus, doesn’t have to be Anglican but should be Christian.”
    - “The BIG question is what could best represent the spiritual heart of a cosmopolitan and secular city. Rather than rebuilding the many denominational churches that have been destroyed, including the Anglican Cathedral, we need to envision a beautiful facility that is not just inter-denominational but inter-faith – a place where people of many different faiths, or no faith at all, can gather to reflect on the mystery of life and reconnect with whatever it is that gives meaning to their lives. The reality is that we are living in a secular, post-Christian age. To have an Anglican Cathedral at the heart of the city may have made sense when the city was originally designed in the mid-19th century – but it most assuredly does not make sense today. As we move more and more to become a global community, let’s dare to dream of what is relevant for our own time.”
    - “Perhaps an ecumenical church or sacred space where all denominations or spiritual practitioners could meet.”
  - Recreation/sports centre, swimming pool located in the Central City.
    - “A large scale rec centre for a large CBD residential population where we can do classes as well as swim and go to the gym.”
    - “I want more swimming pools because more kids can get interested and learn how to swim.”
    - “I want more 50-metre swimming pools, because there are no pools at the moment.”
    - “A number of the other sports grounds or venues are damaged in Christchurch. We should be looking to bring these into the Central City, close to AMI Stadium. A task force of sports bodies should be set up to investigate this for the long term of these sports and the city. A look at Melbourne shows what having sports grounds and venues in the heart of the city has done for Melbourne.”
  - Facilities that are family and older people friendly, e.g. public toilets, playgrounds, seating and open spaces.
    - “I have only been into town a few times since we moved back two years ago. The main reason being I have small children and town is no longer easy or safe for young children. I have to keep hold of the children on the footpath, there are no public toilets and no playground for when they get bored of shops, these things are what makes the malls attractive. If you want the Central City to become a vibrant healthy place then you need to provide facilities for all, including families and old people. To me this means safe walkways linking shops, open spaces, play areas and public facilities like parking and toilets.”
    - “Make the CBD an easy place for all to access for shopping and recreation – effective public transport, accessible linkages between spaces and places.”

***Community Workshops: new and improved community facilities that should be established in the Central City***

***Group comments***

- Public transport to Central City, e.g. park and ride, trams.
- Recreation and sport facilities, e.g. high-performance sport, swimming, gymnasium, cycling, paved outdoor areas for public recreation, e.g. tai chi; bring new QEII into Central City.
- Art and cultural facilities, e.g. amphitheatres for public lectures, big screen, theatres, galleries and interactive art.
- Expanded library containing café and great views; library as a meeting place; drive in/drop off area.
- WiFi hotspots throughout the Central City.
- Indoor and outdoor cafes and restaurants selling food/drinks at varying price points.
- Central City shopping mall containing speciality shops.
- Improved café at Botanic Gardens.
- Improved public toilet facilities.
- Child oriented facilities, e.g. playgrounds.
- Youth facilities – more than just a skate park, e.g. youth-focused cafes.

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- Cycle parks and cycle rental.
- Interactive information signage and facilities for tourists.
- Facilities for people with disabilities and older people.
- Easily accessible health services.
- Community gardens.
- Marae.
- Community halls and meeting rooms for clubs to use.

### ***Visitors accommodation***

#### ***Topic summary***

Tourists of all types make an important contribution to Central City’s vibrancy. A range of visitor accommodation options are required, from five-star hotels through to backpackers to cater for tourists. Thought must be given to limiting some of the negative impacts of tourism, including the height of hotels and tour buses congesting the area around hotels.

#### ***Number of comments: 236***

- Limit the number of floors in motels/hotels for safety; make these low-rise.
  - “Low rise for safety. Accommodation (of good-quality, well-insulated, double-glazed) – to give city life, will assist with safety and security. Incentives for this.”
  - “It is important for the future of Christchurch that tourism should continue to be encouraged. Therefore, we need low-rise hotels, restaurants, cafes and bars and good shopping opportunities, particularly of New Zealand products. Entertainment is also important and I would love to see new theatres, artist studios and such like being a part of the new concept.”
  - “Hotels (2-3 storey, low-rise) along the riverside with balcony restaurants for tourists. Punters & kayakers can stop in too for a lunch meal.”
  - “Lots of green spaces and restaurants/bars and low level hotels. Close some streets but make town accessible.”
- Green space incorporated into hotel developments and tourist spaces.
  - “More green spaces intermixed with hotel & backpacker rooms.”
  - “Rebuild hotels in form like Chateau on Park with green spaces - not high rise.”
  - “Upmarket, luxury hotels. Upmarket golf courses, including a links course by the coast. Green spaces. Tree-lined avenues. Tasteful places with good food where you can sit & eat/drink inside and out. People – in the winter as well as the summer!....”
  - “Hotels no more than 4 floors set in nice grounds with trees and gardens – a park-like setting.”
- Hotels, backpackers and the tourists they attract make an important contribution to Central City vibrancy, particularly at night.
  - “The many hotels and backpackers are great for encouraging a vibrant night scene, any night of the week.”
  - “I want a variety of more modern buildings and interesting tourist attractions for exciting nights out with fine dining and luxury hotels.”
  - “I have been involved in a managerial role for 38 years. In provincial and international cricket and it is often commented by not only local cricketers, but by players from all over the world, how much they like being in the inner city hotels enjoying the various city nightlife. (P.S. think of Paris when deciding on the height of new build).”
- Need to design a city that will encourage visitors to come to Christchurch.
  - “Give tourists a reason to come and see us.”
  - “A vibrant city where people want to live is one which attracts tourists. A town designed for tourists make residents go to malls.”

- 
- “... create tourism by creating a fabulous advanced city for tourists to view. Hotels around Avon river precinct. Extensive use of weatherboards in rebuild like Whistler in Canada. Gardens everywhere like Victoria Square. Less concrete paving in the Square.”
  - “It is important for Christchurch’s future that tourism should be encouraged – therefore we need low-rise hotels, restaurants, cafés, bars and good shopping opportunities, particularly of art galleries and theatres. A wide range of businesses must be encouraged established with ‘cheap’ shops – these are readily accessed in most shopping malls. New Regent Street was part of our heritage with its great atmosphere and range of shops and it would be great to see it rebuilt.”
  - Range of visitor accommodation required in the Central City, from five-star hotels through to backpackers.
    - “Accommodation from backpackers to more affluent.”
    - “Accommodation – all levels, backpackers to luxury.”
    - “It will be appropriate for the centre to have a fairly generous amount and variety of tourist accommodation – hotels, bed & breakfasts, and youth hostels.”
    - “Visitor accommodation. Five-star, three and four-star, bed and breakfasts, backpacker hostels.”
  - Tour buses – need to think more about where these park as in past they have cluttered the streetscape in front of hotels.
    - “Tour buses parked under hotels, keep off the streets for drop off and load up.”
    - “Hotels could be higher rise than other general buildings in Central City.”

## ***Industrial business***

### ***Topic summary***

There is some debate about whether industrial businesses should be located in the Central City. Some suggest industrial activity should be kept out altogether as they are not people-friendly environments and due to the noise, air and visual pollution they generate, plus potential safety issues at abandoned sites at night and in weekends. Others say industry should be in a separate zone (or industrial parks) or on the edge of the Central City, while others say certain types of light industry (especially high-tech) have a place in the Central City.

### ***Number of comments: 231***

- Industrial businesses are not people-friendly environments that add to vibrancy in the Central City throughout the day/night and in weekends.
  - “Industrial business don’t belong in the Central City because they lack interaction with the public and with their environment.”
  - “Awful use of city space – one-story, dreary buildings with no character that are unwelcome to public.”
  - “Industry tends to be 8 to 4.30 5 or 5.5 days a week. Need 24 hour/7day life in CBD.”
- Keep industrial businesses out of the Central City – these should be in their own separate zone on edge of Central City or in industrial parks due to pollution (noise, air and visual) and to ensure land is available for other uses (e.g. residential).
  - “I don’t want factories and manufacturing businesses, these can be moved to industrial areas.”
  - “Relocate the industrial businesses near Fitzgerald Ave and replace with a new inner city suburb for people living in quake-damaged areas.”
  - “Factories [which use smoke], stinky smells.”
  - “I also think industry should be removed from the CBD to make way for more residential land and to eliminate unsafe or ‘scary’ areas in the city.”
  - “Industrial businesses distract from a vibrant city culture. Build industrial business parks out of the CBD and away from residential housing.”
  - “Central City should be for people and entertainment businesses. Heavy trucks, machinery, plain buildings can be grouped in industrial parks.”
  - “The visual aspect. Mostly the premises occupied by these businesses are not visually appealing.”

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- “Often the outward appearance of the buildings and outside space is ugly.”
- “Industrial business generates heavy traffic, noise and pollution which should be kept to the CBD periphery. Only office-based business in CBD.”
- “Industrial firms are often noisy, smelly and hazardous, plus high heavy traffic count for delivery on and off-site. Keep them out.”
- “Would prefer more industrial parks located in appropriate areas than in the city centre.”
- Industrial business generates heavy traffic.
  - “Don’t like the look of them, or the heavy traffic they generate.”
  - “The Central City is no place for industrial businesses. Car dealers, panel beaters, warehouses, etc, require heavy transport to operate.”
- Industrial areas as potentially unsafe, particularly at night.
  - “I don’t want secluded areas for industry. This leads to block off areas that have potential for wrongful activity during the night.”
  - “Move the more industrial uses to dedicated areas outside the CBD. Or severely limit their dispersal in the CBD.”
  - “Industrial areas are dead zones @ night & therefore inefficient use of space in the inner city.”
  - “Are usually ugly looking buildings that you don’t feel safe around at night.”
  - “Not active areas 24/7, 365 – dark and scary at night, dead during weekends.”
  - “Don’t like big buildings – not safe for people to be around at night – better in industrial parks.”
  - “Not good as empty at night so magnet for taggers, drinkers, etc, making unsafe feeling area. Unsightly.”
- Some forms of light industry have a place in the Central City (e.g. high tech).
  - “High tech, high-value light manufacturing should definitely have a place within a wider Central City.”
  - “Architecture, footprint, landscaping are crucial for SMALL scale non polluting industries in CBD.”
  - “Light industrial (e.g. electronics, software) can get people into the city without adding noise or pollution.”

### ***Community Workshops: industrial businesses located in Central City***

#### ***Group comments***

Industrial businesses create air, noise and visual pollution and generate heavy traffic and therefore don’t belong in the Central City; ruin streetscapes as no ‘active’ (people) frontages and ugly; take up high-value space; and unsafe at night.

Right industry in Central City – light industry that supports people and vibrancy (e.g. IT firms, boutique micro breweries, artisan workshops, bakeries, jewellers); smaller businesses; needs a lot of landscaping with well-designed buildings to disguise utilitarian nature of premises; location of some industrial services in the Central City can be convenient for those who work downtown; provides employment in Central City.

## ***Precincts***

### ***Topic summary***

Precincts are a popular concept, including retail, entertainment/hospitality, business, heritage and arts/culture precincts. Precincts must be well served by a series of transport networks (lanes, walkways, cycleways, public transport, etc) that show a logical connection between the precincts and that incorporate green space.

#### ***Number of comments: 1433***

- People want a range of precincts in the Central City: boutique retail precinct, ethnic precincts (e.g. Chinatown, Little India and Italian Quarter), business precinct, entertainment/theatre precinct, education precinct, heritage precinct, tourist precinct (souvenirs, etc); sports precinct, commercial precinct; and arts/culture precinct around the Arts Centre.
  - “We need ethnic areas. Most major cities around the world have a Chinatown or a Little Italy. With food choices within

these areas. Would be fun to shop in!”

- “Melbourne-style restaurant district.”
- “Arts, cultural centres with dedicated theatre, e.g. Court, boutique speciality shopping, dining, inviting place for locals and tourists.”
- “I want different zones for different activities, e.g. cultural things centred around the Arts Centre, business around Hereford St/Colombo St and university in the old Turners & Growers site.”
- “Firstly, a substantial arts hub based around the Town Hall Auditorium, the Art Gallery and the Arts Centre. This area could be developed with cafes, and arts studios.”
- “Create precincts of similar activity, e.g. Victoria St – Specialist Gifts & Artisan Foods, High Street – Fashion.”
- “Having a clearly defined shopping quarter – with beautifully presented shops, and the same again for restaurants and eateries.”
- “Create unique cultural/ethnic precincts within the CBD that provide unique shopping and eating experiences for locals and tourists alike.”
- “Precincts! I’d love to see more of the areas that have already been special to Chch - Arts Centre, High Street - within our four avenues.”
- “Different precincts within CBD, e.g. Asian or Chinatown, shopping area, café and dining area, outdoor and events space, nightlife area, arts, museum, garden – all serviced by bikes and trams, all focused on sustainable practices.”
- “Bar and restaurant precincts similar to SOL Square, Poplar Lane and the Strip.”
- “Chinatown. Every great city has one, the city centre is big enough and needs different district. Another SOL Square and Poplar Lane, with a Chinatown feel would be brilliant.”
- “Ethnic restaurants grouped in an area...”
- “An entertainment “precinct” with Luna Park, ice rink, bowls, video computer games, theatres and various small performance venues, separate from bars and alcohol venues.”
- “Recreate historical precinct, i.e. colonial style, safe wooden cottages near river for couples or retired people.”
- “A substantial area must be set aside to establish a precinct dedicated to the reintroduction of this iconic Christchurch building design.”
- Precinct locations: a number of people cited examples of existing precincts that worked: High Street (boutique fashion precinct); Worcester Boulevard/Arts Centre (arts and culture precinct); and SOL Square and Poplar Lane (entertainment and hospitality precinct). They also proposed locations for new precincts: entertainment and hospitality precinct along Avon River; sports precinct near AMI stadium or former Turners and Growers site.
  - “Use the Turners and Growers site for a multi-purpose stadium, pool, car park and shopping precinct to attract people into the centre and support city centre users.”
  - “Precincts like SOL Square, Poplar Lane and High Street.”
  - “Boutique shopping avenues, like High St, was as they provide a certain flavour to the city.”
  - “High St and SOL were very special.”
  - “A retail hub like High St again....”
  - “... fashion shops à la High St...”
  - “Keep the ‘precincts of CHCH alive’ – they really add variety to the city and make it feel like it’s grown up enough to have it’s own character, e.g. High St fashion, Lichfield Lanes, the Strip and the Arts Centre.”
  - “I want more areas like High St, and the lanes like SOL.”
  - “Precincts with different atmospheres or themes, e.g. New Regent Street with the eateries and SOL Square with bars.”
  - “Sometimes enclosed space is fun, e.g. Poplar Lane – gives a more intimate feel. It’s interesting to explore alleyways, etc, especially if there are interesting shops.”
  - “Poplar Lane, SOL Square and The Strip were the most innovative ideas, they drew people into those areas even



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though they were tucked away.”

- Precincts must be well served by networks that logically connect the precincts and with green space incorporated (lanes, pedestrian walkways, cycleways, buses/shuttles, trams/light rail).
  - “Better flow between shops, eateries, Town Hall, libraries, theatres and galleries. LINK IT TOGETHER.”
  - “So what do I want to see in my new Central City? I want to know which car park or bus hub to use as my base if I want to buy a man’s suit, or a lounge suite, or a diamond ring, or a book or whatever. Once there, I expect to find all the best and most interesting specialist purveyors of such merchandise, all close by for easy comparison and consideration and competing to outdo one another.”
  - “Better pedestrian connectivity between areas. Wide pedestrian walkways connecting, river, parks and shops, etc.”
  - “Utilise tram tracks to connect precincts together – make them suitable for all to use – not just tourists. Include them in metro card system and extend tracks to suburbs, e.g. Addington and Riccarton.”
  - “Cohesive public transport and cycle lanes...that work in harmony with pedestrian walkways, safe for all.”
  - “Green space in Cathedral Square, open walking and cycling routes through city joining business and leisure precincts.”
  - “Free trams or mini buses for moving around central precincts.”
  - “Linking lanes between precincts to encourage movement which means healthier residents also.”
  - “When rebuilding CBD, have green areas, connecting precincts together, offering light and space, as you walk from area to area.”
  - “Free public transport amongst precincts once in CBD, e.g. trams, monorail.”
  - “Remove some of the streets to enable better linking of ‘precincts’.”
  - “A series of canals (we have a high water table). Linking commercial/retail precincts and connected to the Avon River and its punting tourist attraction. Pathways and cycle ways would add to this attraction.”
  - “Precincts with different atmospheres or themes, e.g. New Regent Street with the eateries and SOL Square with bars.”
- Separate red light district away from other areas (perhaps in an industrial location).
  - “Confine adult shops to a small precinct – a red light district, not throughout the city.”
  - “No adult shops anywhere near family areas. Knocking shops, etc, should have their own precinct, not be sprinkled everywhere. No explicit advertising billboards either.”
  - “Shift the red light area from Manchester Street and contain it within a smaller, safe precinct. Prohibit sex industry outside that area.”
  - “Keep to area zones, e.g. boutique shops in one area market in another and sex shops brothels, etc, in there own designated zone.”

## ***Point of difference***

### ***Topic summary***

Christchurch can create a point of difference for itself in the rebuild, with the Garden City theme a unique selling point locally, nationally and internationally.

### ***Number of comments: 669***

- Many people would like to retain Christchurch’s Garden City theme and use this as a point of difference to attract tourists and boost our economy. Christchurch should be made the first city in the world to be totally green/garden themed.
  - “Take the Garden City to another level so that it’s beautiful and that is exactly what Christchurch is known for.”
  - “We already have been awarded the Garden City let’s build on that. It is aesthetically pleasing. Great for health; citizens and for tourists. Every building to have a garden maybe small but easy on the eye and breaks up the concrete appearance. October in Christchurch is wonderful with the blossoms, etc, maybe a future tourist opportunity, i.e. visit now.”
  - “REMEMBER our name...THE GARDEN CITY.”

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- “Make Christchurch more of the Garden City.”
  - “I would like to see Christchurch following its Garden City tag and become a showcase of low impact living, roof top gardens etc.”
  - “As a Garden City, we need to walk the walk of providing community garden spaces, allotments for various housing developments, and even educational working gardens for kids and adults to be taught gardening skills.”
  - “Enhance the clean, green, garden city image...”
  - “Continue with our Garden City image.”
  - “Christchurch is the Garden City let it be a 21st century version relevant to global pressures.”
  - “Empty spaces between buildings filled with trees. This will make Christchurch more of the Garden City. I want Christchurch to be seen as a leading city in terms of its emphasis on sustainability and communities.”
  - Another suggestion to differentiate Christchurch from other cities around the world is to make the city a leader in eco-friendly technology and sustainability.
    - “World leading green spaces – from a technology point of view and also literally – trees and plants.”
    - “I want green spaces and the most made out of the river – boardwalks, etc. Something unique that you can’t find anywhere else in the world – something that we can be proud of and that people will want to come and see. A local economy that needs to be in the centre – businesses that bring people to the city.”
    - “I want office space built to green sustainable codes of practice. All new buildings to have high green specifications. Be a world leader in green, sustainable commercial buildings.”
    - “I want public space for all ages to enjoy. Entertainment centres within the city to encourage a more community based culture. Keep it green and sustainable. We call ourselves a clean green nation but we are behind much of the world in this. A place that creates international interest for innovation and sustainability.”

## Quick wins

### Topic summary

There are a limited number of comments on quick wins. Again, the green space theme comes through as a possibility for a quick win, especially on sites of demolished buildings. People want the Central City repaired as soon as possible to allow the city to return to ‘normal’.

#### Number of comments: 79

- Limited number of comments.
- Landscape sites left empty by demolished buildings.
  - “I would like the empty sites left from demolished buildings to be made use of in the short term, as it may be many years before building starts on them again. These empty spaces can be utilised as mini parks where upon grows grass, flowers & small trees.”
  - “Support the innovative and inspiring Greening the Rubble and Gap Filler projects. The Asko site sets a great example.”
  - “Landscape all demolition sites immediately so that they look like a dressed wound rather than an open sore.”
  - “No turning empty lots into car parks for years. Either rebuild or green up. Pop up gardens.”
- There are several ideas to make the Central City more attractive visually and to entice people into the city.
  - “I want plenty of park space. Places for kids, teens, mums and dads. Where things aren’t anymore we could have wonderful art painted walls surrounding small parks – a preschool play area, another – for musicians to come and play and other for mime artists, etc, etc. Lots of little event centres in our new spaces. This may not be a long term thing but a great way of making our new spaces fun and friendly until they get refilled with buildings. Maybe we will decide not to refill them all.”
  - “Landscape all demolition sites immediately so that they look like a dressed wound rather than an open sore.”
  - “Welcome people back to the city with a Sunday Parkway: a street circuit closed to motor traffic for walk/bike, etc &



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markets, festival, fun!”

- “There needs to be a blend of business and recreational opportunities. Bringing sports facilities into the Central City will not only support those who live and work there but also ensure that people will come into the city perhaps long before the commercial activity returns fully.”
- “I would like the empty sites left from demolished buildings to be made use of in the short term, as it may be many years before building starts on them again. These empty spaces can be utilised as mini parks where upon grows grass, flowers & small trees.”
- “Support the innovative and inspiring Greening the Rubble and Gap Filler projects. The Asko site sets a great example.”
- “I propose the use of shipping container architecture, for fast, strong, light, modular rebuilding, with maximum room for creative design to meet community requirements. As shipping containers are weather proof by nature, buildings can be occupied and used as soon as interior fit out is completed, hastening a return to business as usual in the CBD, even whilst the exterior is unfinished.”
- “Indoor markets are located in various overseas cities and would form an attraction/destination for both locals and tourists.”
- “Create inner city open markets to draw the local community back in the short term.”
- Some people want the process of rebuilding to be made easier, with a concept called tactical urbanism mentioned by some.
  - “The period of rebuilding should have a fun component to look back on, e.g. temporary artworks, giant Ludo boards, labyrinths; not ‘bomb sites’.”
  - “Quirky installations while we wait for the rebuild, to make us smile again.”
  - “Tactical Urbanism Strategies; Pop up shops and cafes in vacant sites.”
  - “Tactical urbanism – initiated as soon as possible, with no red tape (play streets, pop up shops, pop up cafes, chair bombing – new tactical urbanism Sarah Goodyear [www.grist.org/urbanism/tactical](http://www.grist.org/urbanism/tactical) , mobile vendors, temporary pop up experiments).”

## Other

### Topic summary

Again, the green space theme comes through as important to people. Sites where buildings once stood should not remain empty.

*Number of comments: 207*

- Broad consensus that there are two main demands for the use of land in the Central City: first, people want the Garden City to be green and second, any space that is available should be used (i.e. buildings to be rebuilt or replaced rather than left as empty plots).

## Built form and public space

### Parks

#### Topic summary

Presence of green open space is one of the most common themes in public feedback on the Central City. People want a lot of green space in the Central City, of varying sizes to meet a range of needs, including people friendly places for socialising, attending performances, such as buskers and incorporating playgrounds for children. Parks and open space are also important for their aesthetic value. Greening goes beyond parks, to include trees and other plantings throughout the streetscape, including the transport network and in building design and layout. Open spaces must also include high-quality street furniture, such as seating, public art and sculptures.

*Number of comments: 1220*

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- Outdoor amphitheatres/spaces for buskers, entertainers and performance art – incorporating green space.
    - “A free amphitheatre for shows for children and the Buskers Festival – surround it with retail and apartments and GARDEN!”
    - “Public stages.”
    - “Need an outside amphitheatre for carols by candlelight, etc.”
    - “An amphitheatre to display music, buskers, etc.”
    - “Outdoor amphitheatre spaces and venues of live music and other performance.”
    - “An amphitheatre feel for concerts.”
    - “Small outdoor amphitheatre, street theatre/musicians.”
    - “A mini amphitheatre for live performers.”
    - “An amphitheatre where there could be different entertainment and displays can be seen on a regular basis.”
    - “Outdoor amphitheatre for theatre, speakers, entertainers...”
  - Open/green space in the Central City should incorporate more sculptures (including interactive sculptures) – sculptures in parks, between buildings, spread throughout open space in the Central City.
    - “... sculpture gardens...”
    - “Park areas, sculptures...”
    - “More sculptures around city.”
    - “I want loads of sculptures – because they are nice.”
    - “Large areas with funky sculptures...”
    - “Lots of greenscape, especially trees and gardens, sitting corners... sculptures...”
    - “More outdoor sculptures.”
    - “Sculpture garden places to escape to.”
    - “Interactive sculptures.”
    - “Kinetic sculptures.”
    - “Artistic sculptures that move in the wind.”
    - “Mechanical sculptures powered by wind turbines...”
    - “More public art work and sculpture in the inner city.”
    - “... sculptures & cool things like that.”
    - “Love to see art and sculptures around the city, more culture.”
    - “More art and sculpture in amongst buildings.”
  - Green spaces and seating for people to eat lunch, socialise, rest, etc. Sheltered seating options to protect people from bad weather or sun. Plenty of strategically located seating will be very important as the city’s population ages – will make the Central City more welcoming and a viable option for older people to visit and spend time in.
    - “We need spaces to picnic in lunch hours and on weekends.”
    - “Social ports – seating...”
    - “Outdoor seating for having lunch, etc.”
    - “Plenty of seating...”
    - “Green spaces for people to sit, gather, eat lunch.”
    - “More green places within the city for people to sit down to lunch...”
    - “Green spaces that offer some shelter and seating for office workers in the city to enable them to enjoy their lunch

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- breaks outside their buildings.”
- “Weather-proof outdoor lunch areas.”
- “Lots of green spaces, with trees and seating – like Europe.”
- “Green areas and plenty of seating for the elderly and easy access for wheelchairs and the disabled.”
- A popular concept is the presence of many parks of varying sizes throughout the Central City, from small pocket parks and mini green spaces through to larger parks.
  - “Have lots of parks/recreation areas for families, children. Encouraging use of native planting and sustainable planting.”
  - “Small ‘secret’ hidden pocket gardens. Relaxing areas to eat, read, relax within the hum of the city. Good for elderly out for the day, workers having lunch and a break from work, young parents to take children to eat, youth to gather and talk.”
  - “The CBD needs more ‘pocket parks’ that encourage people to linger and give kids a place to play. Shopping and touring are more fun when there are lots of places to take a break.”
  - “Buy some empty sections for pocket park every few hundred meters.”
  - “Some of the newly vacant land should be acquired to form a network of pocket parks.”
  - “... small park like areas...”
  - “Small lanes with small park spaces.”
  - “Give up rebuild on some CBD sections for small park (parklets) to break up the buildings.”
  - “Plenty of varied-size parks with loads of flora/fauna.”
  - “... a big park containing a few fountains, benches, seats, and of course a Cathedral.”
  - “A big park because it’s a way to be away from all the noise and pollution and just relax. Add gardens and stuff.”
  - “I want a big park instead of one of the squares for children to play and have fun, e.g. playground, hopscotch, outdoor pool.”
  - “I want a new big park somewhere on Colombo (Street) with a big children play area, including a water playground (like in Lego land, Germany) because children love water and it’s real fun and refreshing.”
- People see open/green space of varying sizes as important for leisure, recreation, as potential locations for entertainment and for their aesthetic value in the built environment. People want to see integration of sport and recreation activities into green spaces.
  - “Outdoor spaces for relaxation, entertainment.”
  - “A people-orientated space for recreation...”
  - “Lots of recreational spaces-open green parks.”
  - “... get some of the Central City parks loaded with play areas for the kids.”
  - “I would also like a theme park full of trees you can climb with flying foxes...”
  - “There should be playgrounds and free spaces and more green grass, and flowers and a picnic area...”
  - “More green spaces, gardens, trees and safe places for children to play ... because these things make a city beautiful and inclusive.”
  - “An attractive area with green spaces, trees, flowers, colour...”
  - “... river parkland environs, these are aesthetic heart of the city...”
  - “... aesthetic, green and park areas – attractive.”
  - “Attractive green areas...”
  - “... great public spaces to walk through or sit in, pleasing aesthetic surroundings...”
- Playgrounds throughout the Central City for children and parents to have time out.
  - “Central children’s playground – will bring young families in if they know a playground is nearby for children to

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- release energy during visits to town.”
  - “A sturdy wooden playground for the kids in the Central City with green Astroturf floor, trees, cafes around for Mums & Dads to connect & have coffee while the kids enjoy playing with each other.”
  - “ A children’s playground for young children should be included and some outdoor facility for older children close by.”
  - “Somewhere in the centre also to have a covered-in playground, where parents can take their children all year regardless of weather, where a roof would protect them from rain, and coffee kiosks and park benches for the parents.”
  - “Also have a place for children, a playground.”
  - “... a big playground with a climbing wall. The climbing wall needs to start off easy and get harder.”
  - Mix of views on importance of retaining the English feel of plantings versus the need for native plantings.
    - “Green spaces celebrating native and introduced flora.”
    - “Green space areas reflecting native flora and European influences...”
    - “Open spaces with native greenery.”
    - “More native plantings in green areas.”
    - “Emphasis on New Zealand culture rather than English – more native trees and cultural attractions.”
    - “Christchurch’s heritage includes exotic plantings.”
    - “English-style trees to reflect our English heritage and native trees as well to help encourage birds to return.”
    - “More New Zealand native trees rather than English.”
    - “Keep lots of open areas and parks ensuring it keeps the English feel about it.”
    - “Remember this is an English city, so don’t get carried away with things Maori – most the population have British roots, including the majority of Maori. So please replant with exotic trees and don’t do the ugly PC thing of only planting natives – you can have that in all the rest of NZ, but Chch is known for its Englishness – and remember the hard-working founders who came with ideals they tried to honour.”
  - Incorporation of rooftop gardens in building design to create another green space option.
    - “Offer low-rise living with roof gardens and underground parking.”
    - “... at lunch breaks etc. those that worked in the city could make their way out into the roof top gardens kick back and relax away from the busy noisy environment of day to day life at the street level.”
    - “... rooftop green living space...”
    - “The most remarkable thing about an aerial shot of any city is what a great wasteland the rooftops really are... all being perfectly good real estate, but virtually unusable because they are isolated from, and at a different height to, their neighbours. But there is no real reason why “roofs” can not be connected at a higher level, and used to form a more or less level virtual ground plane....”
    - “Car parking below at ground and underground level, and plaza or rooftop garden above. Gives both parking and greenspace in same footprint.”
    - “Roof top gardens and green walls. A living eco system of a city abounding with bellbirds and wood pigeons. Flow the Botanic Gardens into city.”
    - “Roof top gardens on as many new buildings as possible.”
    - “Low-rise buildings with rooftop gardens, trees & gardens in Central City...”
    - “Low rise replacement buildings, e.g. 3 storey max; ground retail; offices 2nd floor; living 3rd with rooftop [garden]...”
    - “Roof top gardens for all new buildings within the CBD.”
    - “Public access rooftop gardens on low-rise buildings...”
    - “Reclaim the Garden City brand – rooftop gardens, tree-lined streets, more parks....”
    - “More open green spaces and rooftop gardens....”

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- “Green and modern and pedestrian-friendly, with rooftop gardens on low-rise linked to shops at the same level: a 3-dimensional city.”
- “I want all new buildings to have rooftop gardens, this would be good for city environment...”
- “I want low buildings interconnected by bridges and rooftop gardens.”
- “I want social spaces and seating so people can interact. Parks, rooftop gardens and lower buildings to stop the wind tunnelling.”
- “I want loads of roof top gardens!”
- Separate parks for exercising dogs.
  - “I want a dog park so people can go into Hagley without being bothered by dogs.”
  - “I’d like to see more apartment-style living, but personally would like there to be facilities to enable dog ownership in such places. So, a number of dog exercise areas/dog parks spread around the city would be important.”
  - “Currently there are 3 dedicated fenced dog parks in the whole city but none close to the CBD. Because you live in the CBD does not mean you do not have a dog !!!!!”
  - “Also a dog park or two would be great, one with obstacles and jumps, etc.”
  - “... a dog park or a place where you can go with your dog.”
  - “Have a dog park or 2 (other side of the road to the people/cyclists).”
  - “I want central dog park.”
  - “I want dog park where they can run free.”

## Squares

### Topic summary

People want European-style squares which are people-centred places that add to the vibrancy of the Central City and that incorporate green space, water features, plenty of seating and cafes/restaurants. Squares must interact well with the surrounding environment. Cathedral Square again comes in for particular mention, with people wanting to rid The Square of its current dull grey look through significant greening, including a playground for children, an amphitheatre and interactive water features. People don’t want commercial and administrative activities on the ground floor of such a key square, as Cathedral Square, as these do not encourage the presence of people and vibrancy. Victoria Square is held up as an example of a square that works well, with plenty of green space, different types of places to sit and spend time and that interacts well with surrounding buildings, such as the Town Hall. People want Latimer and Cranmer squares to be better used and to be more vibrant but there are not many ideas on what should be done with them.

### Number of comments: 2088

- Calls for European style small squares/piazzas, incorporating cafes, restaurants, fountains/water features, seating areas; people-centred environments.
  - “City squares similar to European cities with shops, cafes, etc.”
  - “Create intimate squares with shops, gathering spots and water.”
  - “Fountains. Small green squares for sitting.”
  - “I want interactive water fountains.”
  - “Fountains, etc, make the square beautiful.”
  - “More car free squares like in European cities, these are great for gathering and relaxing.”
  - “The Square actually becomes the centre point of the city in a similar way to a European piazza – lined with cafes, bars and restaurants.”
  - “The square to be modelled more on a European city with cafes, pubs, art and cultural themes, hanging baskets, trees, fountains, etc, make the Square beautiful accessible and our own!”

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- “Make Cathedral Square into a grand piazza with limited vehicle intrusion, allow cafes around the edges and replace the ugly police kiosk with one that is user friendly.”
  - “Restaurants around the outside of Cathedral Square that have outdoor seating, like European cities, to bring diners in and create atmosphere.”
  - “I like the idea of mosaics and piazzas (like in Italy/Spain), a pleasant way to eat lunch and beautiful space to be in....”
  - More green space/inclusion of playground in Cathedral Square; get rid of the ‘grey’ look and feel created by current tiling.
    - “I think that there should be more attractions in Cathedral Square and there should be more grass and gardens.”
    - “Make square more colourful. Grey paving is lifeless and colourless.”
    - “Repave and redevelop the whole area over a period of time (10-15 years) using terracotta paving stones (or similar colour tones) or brick to enhance the general appearance and to make the Square look less sombre, especially during the winter months.”
    - “Replace the hard, grey Square with lawns and gardens (like Victoria Square), with plenty of perimeter seating and open space for public gatherings.”
    - “A green Cathedral Square – grass, trees, gardens – outdoor cafes sheltered from the wind. A place where people want to linger.”
    - “All my life the Square has been a cold depressing grey place. Please make it more welcoming when you redesign it.”
    - “Square around the Cathedral needs to have lots of greenery, trees, seating to make it into a much more user friendly for people. Those ugly tiles should go!”
    - “The square needs to be a vibrant place, full of restaurants and cafes, and why not have a big play area for kids somewhere in the centre for kids to play while you have a cuppa....”
    - “Cafes around the square. More people the safer the square becomes...”
    - “Before the earthquake the square was dull, cold, uninviting.”
    - “A green Cathedral Square with plants and trees and Cathedral will be so much better.”
    - “Put a kids playground just like the Botanic Gardens one (near the café) in the middle of Cathedral Square - get grass, kids, and a paddling pool into the heart of the city.”
    - “A state-of-the-art playground in the Square.”
    - “A children’ s playground in the Square...”
  - Strong theme: people do not want banks, commerce, souvenir shops on ground floor in Cathedral Square (want cafes, restaurants and retail instead, i.e. people-focused activities).
    - “No blank banks or offices fronting onto Cathedral Square at ground level.”
    - “Replace the BNZ/ANZ from The Square.”
    - “Less tourist shops in Cathedral Square.”
    - “The ANZ and BNZ banks occupying the two northern sunny street corners in Cathedral Square with their painted out windows or fully drawn blinds need to be a non-complying activity or presence in such important spaces.”
    - “Keep the square for bigger gatherings, but also with more shops and cafe/bars.”
    - “The utilisation of ground floor space within buildings fronting the Square is where bars and cafes should be. Encourage the ANZ and BNZ to vacant their ground floor tenancies. They are the wrong occupiers of ground floor retail space in the Square.”
    - “Avoid big bank and insurance outlets at ground level in the prime retail areas, especially the Square.”
    - “Square to be redeveloped devoid of commercial businesses, banks and the like to be a colourful space with optimum use made of sun-drenched areas for cafes & such like, some greenery incorporated and the oppressive colour grey not featuring.”
  - Cathedral Square as the hub/focal point of the Central City.
    - “Make Square more lively with theatres, restaurants and cafes to make it the hub again.”

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- “Lack of heart to Christchurch – the Square as a focal point.”
- “The Square being the central focus.”
- “Make The Square a true centre like Federation Square, Times Square – so will need more than the Cathedral, maybe one or two other iconic buildings or a large statue or fountain.”
- “Cathedral Square must be the axis of Christchurch and as so many people also feel needs to be the attraction and accommodation area for visitors.”
- Keep cars/traffic away from Cathedral Square.
  - “No cars in the Square; Cathedral Square should have attractive lighting.”
  - “Make the Square, people friendly with lots of grass walking areas and beautiful lights.”
  - “The road restored right around the Square as before but not in front of the Cathedral.”
  - “No traffic around the Square.”
  - “Two blocks in each direction of Cathedral Square as pedestrian only.”
- Low-rise buildings in Cathedral Square to ensure light gets through and to avoid wind tunnelling effects.
  - “I would like hotels/accommodation to surround the square (not high-rise buildings) there needs to be light.”
  - “No high-rise buildings to shadow.”
  - “WANT Pedestrian-only market squares composed of low-rise, stepped height, mixed use buildings. Let the sunlight in and control the wind with natural wind breaks.”
  - “No high rises to the north which block half the Square’s sunshine.”
  - “Prevent wind tunnels.”
  - “No wind tunnels – we do not want streets with high-rise buildings either side.”
  - “Use of squares with central shared space, designed to minimise impact of colder winds.”
- Some want a (quality) market in Cathedral Square; others don’t want any market regardless of what is sold.
  - “Markets that focus more on food and produce rather than tourist/imported goods.”
  - “No more tatty cheap depressing markets in Cathedral Square.”
  - “No Cathedral Square market – it was ugly.”
  - “We should not have a market in Cathedral Square that sells foreign goods – the Square should be about Christchurch, New Zealand and its people.”
  - “No market stalls in square selling ‘made in China’ goods. Something far more classy!”
  - “Get rid of cheap food stalls, they do nothing for atmosphere, replace with cafes, cinemas and theatres, maybe occasional skilled busker.”
- Reclaim Cathedral Square as a safe, people-focused destination – old Square didn’t feel safe, particularly at night.
  - “The Square not just full of top notch businesses or tourist area business. Somewhere everyone feels safe, especially night-time.”
  - “Make the Square safe, welcoming and people-friendly.”
  - “Cathedral Square needs – mixed purpose buildings with cafes, nightlife, apartments. Should be somewhere people want to be at night.”
  - “A substantial area must be set aside to establish a precinct dedicated to the reintroduction of this iconic Christchurch building design.”
- A number of comments asking for an ice skating rink in Cathedral Square (or in some other Central City location as a winter activity to encourage people into the Central City for recreation and leisure).
  - “Ice skating rink in winter in the Square.”
  - “Bring in an outdoor ice skating rink for the winter time in main square (like Quebec) to attract families in.”



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- “I love the ice rink in the Square in winter idea.”
  - “Cathedral Square – market, ice skating.”
  - “Activities to encourage people in, e.g. Ice skating rink.”
  - “Ice skating in the winter.”
  - “Permanent winter ice skating rink.”
  - A number of comments suggesting the chalice should not be located in Cathedral Square – relocate to Hagley Park, the Botanic Gardens, etc.
    - “Chalice should be moved to Cranmer Square.”
    - “Move the chalice out of The Square.”
    - “Move the chalice from its present site in The Square to somewhere more appropriate with it’s artistic merit – Arts Centre precinct.”
    - “A sculpture to put in place of chalice. Please choose an indigenous Canterbury one from, e.g. the Waipara Iron Mongery forge, e.g. “norwester” - a matagown bush made out of iron. Very contemporary.”
  - Keep SOL Square and Poplar Lane – quoted as examples of effective entertainment precincts.
    - “More spaces like SOL Square with cool bars and shops.”
    - “I loved SOL Square and its quiriness. We need some more fun places for our young people!”
    - “SOL Square was something people talked about...”
    - “Well thought-out areas like SOL Square and The Lanes.”
    - “Lanes and spaces to explore (like Poplar Lane and SOL Square) with appropriate shop/cafes/bars...and little green areas...yeah...something like that :)”
    - “Another SOL Square and Poplar Lane...”
    - “... encourage establishing boutique shops/cafes/bars with the type of character that existed in Poplar Lane and SOL Square.”
    - “Pockets of small intimate spaces and lanes (like SOL Square and Poplar Lane) for meeting, eating and entertainment.”
  - Victoria Square held up as an example of a good square – green, plenty of places to sit and relax, good size – not too big and not too small.
    - “More places like Victoria Square, more gardens....”
    - “More garden and green space like Victoria Square.”
    - “More green areas like Victoria Square, more trees, grass, etc...”
    - “We think that Victoria Sq has a lovely feel about it.”
    - “Gardens – i.e. lawns, trees, flowers. Compare Victoria Square with Cathedral Square. One is pleasant, vibrant but Cathedral Square is open space, paved and dead.”
    - “... open squares, lots of trees and plantings. The Victoria Square is a great example. Please totally change Cathedral Square.”
    - “Make the Square user-friendly like Victoria Square. And have plants and more plants!”
    - “I also loved Victoria Square with its fountains.”
    - “Plenty of planters with flowers (more like Victoria Square).”
    - “Use Victoria Square as a model for the size and scale of public areas and connect these green areas together using the river as a corridor.”
    - “A Square needs to be developed to match Cranmer, Victoria and Latimer squares just south of the central square.”
    - “I reckon we should have squares that are similar to Victoria Square because I’d like Christchurch to look a bit old English or medieval.”



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- “More spaces like Victoria Square.”
- Latimer/Cranmer squares – currently under-utilised and under-valued – we need to do something with these squares but few comments on what to do – some suggest them as locations for markets, e.g. farmer’s market; incorporation of playgrounds, art, sculptures.
  - “Cranmer and Latimer squares are superb areas that could be better used. More public art.”
  - “Cranmer and Latimer Squares a much under-utilised in this respect – because nowhere to sit and eat/drink.”
  - “I believe the Central City should utilise its green spaces better – the appeal of Latimer Square and Cranmer Square are greatly reduced by the one-way system. I’m not advocating for the removal of it but perhaps it could be altered to reduce the effect it has on pedestrian use in the city.”
  - “Hold some open spaces, squares like Latimer and Cranmer are the making of the city.”
  - “Make more of our parks – Latimer Sq and Cranmer Sq were wasted as open bits of green. Playgrounds, open air cafes, sculpture/water and flowers.”
  - “Our green spaces – Latimer Square and Cranmer Square perhaps linked with a tree lined green Boulevard, with seats...”
  - “Latimer and Cranmer Squares redesign with flowers, shrubs, etc, for relaxing, area for ex-Arts Centre stalls. Outdoor entertainment areas.”
  - “A big call but perhaps relocating and part-funding a bigger better music centre for everyone in one of the soon to be empty blocks around Cranmer Square?”
  - “Use Cranmer and Latimer squares for markets...”
  - “Use large spaces like Latimer Square for markets.”
  - “Create interesting spaces for people (Cranmer Sq, Latimer Sq, Victoria Sq).”
  - “Cranmer and Latimer Squares superb lets have more tree-lined squares with residential facing onto them.”
  - “Build homeless shelters, get them out of Latimer.”
  - “Renovate Latimer Square too many... prostitute customers are squandering there.”

## Markets

### Topic summary

Markets add to the vibrancy of cities. People especially want fresh food and produce markets. Craft markets are also popular. A range of market options are mentioned including having one central market (such as Melbourne’s Queen Victoria Market), smaller permanent markets, day/night markets and indoor/outdoor markets.

### Number of comments: 2763

- Markets add to the vibrancy of a Central City.
  - “More markets, they are so lively, colourful and inviting. They instantly make the city a better place to be.”
  - “Market atmosphere makes a city.”
  - “In Asia, it is often the street stalls/markets that bring a city to life after dark.”
  - “Do what other cities do. Have a large night market with produce and goods from shops and private sellers and stay open on market night till late. Have it in the Square on in Cranmer/Latimer Sq with buses and trams that can enable tourists and Christchurch folks to get there easily.”
- Local themed markets – produce/farmers/crafts markets, etc (Melbourne’s Queen Victoria Market was the most commonly cited example of what we should be aspiring to in Christchurch).
  - “Central market like Melbourne...”
  - “Something like Queen Victoria Markets in Melbourne....”
  - “Markets much more fun than shops, including a covered market.”

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- “Fruit & vege markets in CBD and inner suburbs. Lots of fresh produce (like Melbourne markets, Vic market & south Melbourne market).”
  - “A covered market area with delicatessens, fruit/meat, produce, clothing area, etc. Similar to Melbourne market. Tourist attraction and will bring locals into the Central City...”
  - “Combining farmers and craft/tourist markets together to truly show off the regions artisans as well as having space for some of the larger companies to showcase products.”
  - “Farmers Market: a large two-level indoor market selling produce, (cheeses, chocolates, fruit and vegetables, etc) and high quality takeaway foods (cakes, meals, etc) with café, etc. Along the lines of Adelaide Market.”
  - “A large undercover market like La Bouqueria in Barcelona. It has fish, meat, fruit and vegetables, cafes, bars and every colour and noise possible.”
  - Farmers/food/produce markets are the most mentioned market type people want in the Central City.
    - “Farmer’s market: – have bi-weekly or at least once a month a large, true farmer’s market in or near the Central City.”
    - “Farmers markets to increase the availability of quality fresh produce.”
    - “I want farmers market large enough to bring down prices of vegetables governed by supermarkets.”
    - “Think Victoria Park Market. A fresh/organic market – vegetables, flowers, fish, cheeses, NZ wines and other produce.”
    - “Have a large permanent Central City food market like other great cities and have a separate market for no- food products that opens early 6 to 7am so supplier can come in and sell their fresh local produce.”
    - “Canterbury produces some of the best food in New Zealand (I just helped judge the farmers markets NZ awards, it’s totally true!), and this reputation should be nurtured. Making it easier for anyone to set up a stall, either once-off or on a semi-regular basis, gives the city a more diverse food culture.”
    - “A quality undercover food market with different experience wings, e.g. south wing fresh local meat, fish, fruit and veg.”
  - Chinatown or Asian market area another common theme (a general ethnic market was also cited).
    - “I want a permanent ethnic market – a la Chinatown.”
    - “With such a multicultural population and strong Asian community a Chinatown could work well here and bring people into the city.”
    - “Ethnic market spaces.”
    - “I want ethnic markets like a Chinatown type thing which shows and includes Christchurch’s diverse population.”
    - “I like ideas such as: Samoan Quarter, Chinatown, Asian town, Indian food quarters; Pasifika markets.”
  - Some say the Central City should only have one dedicated market area.
    - “A Central City Marketplace would attract a diverse profile of people.”
    - “A dedicated market space that is purpose-built for all types of produce, drink suppliers, niche producers, etc. It should be a space for both public and commercial buyers during all days of the week. Look at examples in Melbourne/ San Francisco/New York. There should be space for brew pubs as we have one of the largest and most active Microbrewery regions in Canterbury and we should promote this responsibly.”
    - “A fantastic Central Market that is open all the time, not just weekends, drawing people into the city. Focus on food and eating, but also selling art/craft, other. With spaces for entertainment, buskers, music, performances, circus, drama, etc. A place for people to gather and eat and enjoy the talents Christchurch has to offer.”
    - “It will have a central market place.”
    - “Why not incorporate a huge indoor market into the Central City Rebuild, it could be architecturally designed and be in a permanent attractive form to include a variety of outlets in various specialised sections, e.g. fresh food, fish, meat, farmers/organic market, clothing, toys and souvenirs, etc.”
  - Others say the Central City should have multiple markets.
    - “I want lots of markets, food markets, clothes, markets, etc...”
    - “I want markets! night markets, theme markets, boutique-style shops.”

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- “Specialist markets.”
- “Cool market zones, like flower market, art market, antiques markets in different areas around the CBD to encourage walking to each zone.”
- Most comments about markets are not location specific. However, some suggested Cathedral Square as a suitable venue for a market. If there is to be a market in Cathedral Square it should sell quality products. Comments about poor-quality products on sale in old Cathedral Square market. Some say they do not want a market in The Square at all. Desire for the Arts Centre market to be re-established in its old location. Others mention Latimer or Cranmer squares as a potential locations for markets.
  - “Saturday and Sunday markets in the Square.”
  - “I am thinking of an outdoor food market, with tables and chairs in Cathedral Square.”
  - “A re-make of lower High Street, the environment that people were attracted to visiting there. Not the traditional buildings but buildings with charm and atmosphere. Plenty of cafes, designer boutiques and markets, something like the early Arts Centre markets.”
  - “Lets reclaim Latimer and Cranmer squares for the public with cafes and outdoor stalls etc.”
  - “... corners of these parks could allow markets to be set up, other sites could be used by social agencies, community groups sharing and educating the public on their commitment to the people.”
- Comments on both outdoor and indoor/covered market for all weather conditions.
  - “Covered market would bring life to city.”
  - “I want market that be indoor or outdoor depending on weather.”
  - “More open air markets such as food markets/farmers market and other goods.”
- Support for both permanent and weekly markets.
  - “Permanent produce market (covered) using natural lighting once or twice a week.”
- Night market.
  - “Night markets, stalls, music and food.”
  - “Love the idea of night markets.”
  - “Less alcohol, more lights, late-night markets.”
  - “Events in the evenings, especially during winter. Snow and light festivals, mulled wine and delicious hot food markets with safe entertainment.”
  - “Summer time night market/street performance zone.”
- One-off themed markets open for a short time in different seasons, e.g. mid-winter evening Christmas market with mulled wine, craft and food stalls; Chinese New Year market.
- Markets that are for local people not just markets selling items that only appeal to tourists.
  - “I agree with the suggestion that we should develop an inner city (food) market, group the current specialist food shops –Verkerks, Vino Fino, the Cheese shop, etc, around the currently empty land Madras/Lichfield and invite stallholders to set-up there too. Halfway between town workers and polytech students and close to residential areas.”

## ***Street use and priorities***

### ***Topic summary***

People want the Central City to be a cycle-friendly environment, with safe, separate off-road cycle lanes to encourage people to cycle. They also want a Central City free of cars, with pedestrians and other forms of active transport dominating the streetscape. Disability access and the needs of delivery/service vehicles must be considered when looking at restriction of vehicle access in the Central City.

### ***Number of comments: 2364***

- Pedestrians as the main focus of the Central City, even in regard to street use and priorities

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- “A pedestrian-friendly Central City. As fewer cars as possible.”
  - “Pedestrian-friendly areas – cars not so dominant in the future city centre.”
  - “Pedestrians, cyclists and a small amount of public transport (trams or electric shuttles). No cars/trucks except on delivery lanes.”
  - “Attractive spaces that are friendly to pedestrians...”
  - “Some CBD streets pedestrian only with beautification added in.”
  - “I want to see safe places for pedestrians. This means places where there are NO cars. I want to be able walk safely without worrying that a car will run me over. I want to be able to amble. I don’t want to be controlled by traffic lights that appear to be there only to control me and to allow cars to dominate.”
  - “Full Pedestrian areas extended for a more liveable centre.”
  - “Pedestrian zones.”
  - “Pedestrian friendly/priority – great pedestrian spaces, interesting paving made footpaths.”
  - “Plenty of pedestrian only streets.”
  - “... people space, pedestrian activity, people meeting, lots of people cycling around.”
  - “People-friendly, catering for people from all walks of life. Less traffic. More pedestrian only areas. A vibrant fun city.”
  - “... people engaged in diverse activities. It will be a great place to walk e.g. pedestrian walkways...”
  - Many comments about creating a cycle-friendly city, especially in reference to separate cycle lanes to make cycling safer.
    - “I’d like Christchurch to be seen as the best city on the planet to be a cyclist. From recreational cycling to cycling to work, the streets layout should be totally accessible for bikes, rickshaws or any other non-car/truck transport.”
    - “Cycling: – create separate cycle lanes, NOT one that is shared with cars. Why: safer cycling for all age groups, especially children and the elderly – create cycling areas in the outskirts of the city specifically for those cyclists training for competitions, or just exercising. Why: reduces accident rates between cyclists/motorists by having them NOT using busy city routes for this.”
    - “Lots of green spaces and cycleways, creating a network separate from the car/vehicle network.”
  - Some specific recommendations include a system of linked cycleways and bicycle storage sheds.
    - “The cycle lanes should be interlinked and should include the airport. Secure cycle storage would be an excellent idea, ideally lock-up sheds with card access. These sheds should be distributed around the city, including the airport and the bus interchange. I would pay for this facility – say \$1 a time for using the sheds?”
    - “Plenty of covered cycle stands, especially outside the gyms (not just rings which hold only two cycles like there were in the city.”
    - “... lanes well away from parked cars (too many car doors knock cyclists off their bikes) and that cars cannot drive in (e.g. berm to separate).”
    - “Cycle-friendly roads. Areas even where cars don’t go. Even more than we had before.”
    - “Be able to cycle safely in separate cycleways. Encourage others to bike by having drop off-pickup easily identifiable city bikes that can be left anywhere within the CBD area. Lots of bike stands. We need to be planning for oil crisis and less reliance on cars. IF it were safe to cycle in Central City I would come to the CBD far more often.”
    - “... if cyclists and pedestrians are to share space it will require the enforcement of the fitting and use of warning bells on cycles. Like many older people I can not hear a cycle (or a child’s scooter or mobility scooter) coming up behind me on the footpath.”
  - Although a clear majority favour separate cycle lanes, some disagreed.
    - “Christchurch is NOT Amsterdam. Don’t make it into a pedestrian/cycle only city.”
  - Widen roads and footpaths, using land from demolished properties, to make way for separate cycle lanes and for seating, trees and cafés/restaurants spilling into streetscape.
    - “Purchase land rights of demolished empty spaces to allow claiming of space to allow widening of roads, tree

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- planting, cycle ways, etc.”
- “More space, wider roads, more access for cycles (separate two-way cycle lanes).”
- “More pedestrian-friendly streets. Restricted areas cars can go down, wider streets for walking with friends and more cafes, etc.”
- “People-only streets, where it’s like a giant footpath with cafes and little shops on either side. No cars disturbing!”
- “Closed off streets with cycleways with shops and cafes.”
- “Wide footpaths with trees and other plants.”
- Restrict vehicle use in the Central City to make streets more pedestrian/cycle friendly and to reduce congestion in the Central City.
  - “Pedestrian-friendly streets, use of motor vehicles within CBD restricted to commercial and public transport.”
  - “I would also like to see streets that have no cars and are only accessible to delivery truck before and after shop hours, these streets could also allow two-wheeled vehicles down them, this including scooter and motorbikes.”
  - “Keep cars and buses out of CBD, apart from one-way system.”
  - “Pedestrianise Colombo St – Lichfield to Gloucester.”
  - “Car-free inner city is a must, not just one little pedestrian area.”
  - “No car parks in the inner city on the street except disabled and drop-off parking.”
  - “Banning cars from the CBD (or any other large area of Christchurch) is a non-starter. People value their mobility too much. What is needed is the separation of pedestrians, cyclists and motor vehicles. Separating cars and buses from pedestrians and cyclists is most easily achieved by dividing the CBD (and other parts of Christchurch) into precincts.”
  - “A car-free centre and slowed traffic outside that core (30 km/h) supports walking and cycling and offers an inviting pace benefiting shops, restaurants and residents.”
- Create a cycling and walking path that links the city with the sea.
  - “Truly make it the Garden City, create a linked corridor from Hagley Park to the sea with walkways/cycleways along rivers and streams.”

## ***Landscape and streetscape***

### ***Topic summary***

The Central City streetscape must facilitate people-friendly activities and be aesthetically appealing. Buildings should be set back from the streets with green space in front and alongside them. Street and building layout should be designed to avoid wind tunnels. Less on street car parking will allow footpaths to be widened for cafes and outdoor seating to spill onto the streets and for separate cycle lanes. Seating must be incorporated throughout the Central City’s green spaces and is especially important as the city’s population ages. The Central City must also include more playgrounds for children. Public art and sculptures are an important part of the streetscape, as are water features (especially fountains) and incorporation of things to do such as chess and petanque. Lighting is also critical, particularly for making the Central City a safe place to be after dark.

### ***Number of comments: 6527***

- People placed at the centre of the streetscape.
  - “Emphasis on people scale and active frontages.”
  - “Following the guidelines Jan Gehl made for Christchurch in 2009 we want a more people-friendly city centre, reducing the through traffic.”
  - “People first...”
  - “Lots of people, trees, green spaces...”
  - “... will be people friendly...”
  - “Large people only areas.”

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- “Centre point for people to gather...”
  - “Make the centre a people place...”
  - “Lots of people, vibrant, interesting, varied, small scale.”
  - “... people meeting, lots of people cycling...”
  - “... people-focused areas...”
  - “... for a great Central City? People – bringing community together...”
  - “Busy with people living, working, playing.”
  - “A people-sized city.”
  - “Spaces to meet and greet people.”
  - “I would like to see a ‘people friendly’ CBD where people come first...”
  - “People/people/people.”
  - Seating and picnic tables (all good quality design and construction) in open spaces for people to eat lunch, for socialising and for relaxation.
    - “More places to sit outdoors =).”
    - “Picnic tables and recycling bins beside the river – most people in the city eat lunch there in summer if they can.”
    - “Public areas for seating near the river...”
    - “Green spaces for people to sit, gather, eat lunch.”
    - “More green areas with seating and some areas with shelter.”
    - “Plenty of green spaces and seating for people...”
    - “More attractive seating...”
    - “Trees, plenty of seats and flower plots.”
    - “... lots of places to sit and reflect...”
    - “Cafes and seats around the perimeter...”
    - “Landscaped, attractive areas with seating and cafes...”
    - “Seating for office workers.”
    - “Lots of curved spaces, colourful curved seating (a la Barcelona – Gaudi).”
    - “A green, attractive place to meet friends, socialise and shop. More street seating, public art, areas sheltered from the wind.”
    - “Creation of public space to encourage real, face-to-face communication.”
  - Seating is particularly important as city’s population ages – plenty of seating so the Central City is welcoming and user friendly for older people and for others with mobility issues. Green spaces and seating areas need to be easily accessible for older people, people with disabilities, people with young children. Intimate/smaller spaces rather than larger open spaces.
    - “Walking with stopping points of interest, seats at regular intervals.”
    - “The elderly – needs plenty of seating.”
  - Wider streets and footpaths, especially on sunny side for better pedestrian access and to allow cafes to spill out onto streets.
    - “Wide footpaths, separate cycleways, lots of street trees and funky street furniture. Lots of native plantings.”
    - “Wider footpaths for pedestrians.”
    - “Little alleyways and wide boulevards.”
    - “Wide footpaths, making it more pedestrian friendly and at the same time allowing more light into dark winter streets.”
    - “Wider pavements to allow cafes to seat outside.”

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- “Wide streets or boulevards with carriage for people bikes and cars.”
- Green space and plantings (trees, flowers and shrubs, including natives and English) to cover ‘concrete’ look; tree-lined streets.
  - “I’d like to see more green spaces and tree-lined streets, more places to relax and avoid traffic noise.”
  - “Connect... areas with green walks for people only and trams...”
  - “More greenery less concrete, make the city look beautiful.”
  - “Places to sit not surrounded by concrete!”
  - “More native plantings in green areas – lower maintenance and higher natural biodiversity than exotic species.”
  - “More green spaces/water features. Get rid of the trees and replace with evergreens.”
  - “A mixture of European and native plants.”
- Creative green space concepts (e.g. planter boxes on buildings for flowers, hanging gardens, etc); playgrounds incorporated into green space in Central City.
  - “Hanging baskets on custom-made bollards.”
  - “Hanging indigenous gardens.”
  - “The streets look attractive planter boxes, etc.”
  - “I want more modern playgrounds for the kids to roam around in...”
  - “I want more family areas playgrounds.”
  - “I want more playgrounds because there has to be more in the centre.”
- Outdoor spaces to undertake leisure and recreational activities such as chess, petanque, Frisbee, etc.
  - “Centre point for people to gather, recreation markets, e.g. large games in square to get people to interact, talk, build, community.”
  - “Games like the chess set – able to play friendly, casual, e.g. soccer/hockey.”
  - “More big games, e.g. chess, pedestrian areas, labyrinth in a green space.”
- Buildings set back from streets and pavements incorporating green space.
  - “New buildings set back from sidewalks to allow space for gardens and trees – softens hard lines.”
  - “Any building on demolished sites to be set back from footpath boundary allowing for a sense of space.”
  - “I would like to see buildings set back from streets to let light in at ground level.”
  - “Have building frontages that interact with the street life, i.e. not faceless, glass walls or enclosed shopping malls.”
  - “Wide streets and boulevards, a café culture a place where people gather for business or pleasure.”
  - “Shops would all be set back from the road.”
  - “Upper storeys of buildings set back – for safety and sun.”
  - “Low rise eco-friendly buildings – set well back from the existing course of the Avon river.”
- Incorporate sculptures and art works into green spaces and buildings.
  - “Sculptures that are a part of the buildings and social areas, rather than alone and free standing. Cohesion between all elements, with a common green and cultural theme.”
  - “Green spaces, fountains and statues.”
  - “Making our gardens even better and including more art.”
  - “Lots of street art and spaces for the temporary!”
- Sculpture gardens, incorporating more than one sculpture at a time (e.g. Rodin sculptures in Paris).
- Streetscape accessible for all users, including people with disabilities, e.g. wide and unobstructed footpaths for wheelchairs and mobility scooters.



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- “Carrying out regular footpath/street checks on new/existing paving tiles/cobbled areas, e.g. Cathedral Square when re-opens, to ensure these areas are in good condition and clear of obstructions, e.g. broken glass for all foot traffic to utilise, e.g. able-bodied, people with disabilities, e.g. wheelchair users... Similar to the kerb cut downs that there are on footpaths/streets throughout the city. The same [could] be applied to the raised kerb pieces in order to access the lawn areas in the Botanic Gardens. Kerb cuts could be made in various places along the raised kerb pieces that there are currently in order to access grassy areas throughout the Botanic Gardens, that people with disabilities, e.g. wheelchair users to be able to get themselves up onto lawn areas, without having to wait until they came across a flat piece with NO raised lip in order to be able to access the grassy areas within the Botanic Gardens... From the perspective of a wheelchair user I think consulting, with various groups of people/organisations who experience certain difficulties within their daily life, perhaps due to having a disability, will be important in order for the new Christchurch to be as accessible and user-friendly as it can be to everyone.”
  - “I plead for the rebuild of Christchurch to ensure that it is a truly wheelchair-friendly city. This includes the need for well-maintained, level paths, the access to street crossings to be very smooth, and not have bumps (which currently regularly damage my wheelchair). Please understand that saying somewhere is wheelchair-accessible, then facing the user with heavy doors to open, makes a lie of the first statement! Please install automatic doors.”
  - Streetscape designed to reflect climatic conditions to encourage outdoor use even in poor weather (e.g. prevailing easterly winds and rain); covered over areas to protect from bad weather, wind tunnelling and sun; features that create windbreaks.
    - “Shaded and rain-protected walkways – dismantle heavy walkway overhands: dangerous, not pleasant looking – replace with lightweight tensile structures (sail shades).”
    - “Streetscape and building design to also reflect and protect from our often abysmal climate...”
    - “Places to sit outside and be with people. Protection against the elements.”
    - “CBD needs plenty of trees to mitigate against the killer easterly wind.”
    - “No streets are easterly wind tunnels.”
    - “Weather conscious community spaces. Our easterly winds are so miserable even when they have sunlight – Christchurch winters have been grey concrete cold. Windy – people suffer. We need visual treats so form and colour that is uplifting to move through in all seasons.”
    - “Lots of cover in outside space to allow for Christchurch’s weather so you can be outside.”
  - Consider lightweight canopies outside buildings instead of heavy verandas (which fell and killed or injured people in earthquake). Canopies or awnings can be bright and colourful. Shelter of some sort (including covered walkways) seen as important to protect people from sun/rain as they walk through the Central City.
    - “Shaded covered areas, not the old heavy verandas but colourful awnings...”
    - “Canopies like they have outside Britomart...”
    - “High level canopies providing both shelter from rain and cross-bracing between buildings.”
    - “Use lightweight materials for canopies”
    - “... canopies to protect us from the sun....”
    - “... all pedestrian ways to have covered awnings.”
    - “... cover large areas with a plastic light weight canopy for all weather protection.”
  - Covered over pedestrian malls, green spaces and walkways – glass as a potential material for coverings.
    - “We could have glass domes over the areas for the winter and this would mean you could grow native palms.”
    - “You could put a roof over the main areas – Cashel, High, parts of Colombo (between Lichfield and Hereford) and make it a mall area.”
    - “Meeting places that are sheltered. There is not a pleasant place to walk or meet up that has a roof so its protected from weather rain and hot sun.”
    - “Allow for Canterbury weather include glass-type verandas and shelter.”
    - “Covered walkways so rain wont be an issue.”
    - “Green spaces, places to sit in and out of the sun or even if it’s raining.”

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- Paving should incorporate an element of colour rather than current ‘grey’ look/too dull; Get rid of grey/white granite pavers in Cathedral Square and other locations – too dull in colour; create glare issues; need more vibrancy.
  - “Paving is boring, and lacks character.”
  - “Gone is the dull grey look replaced with garden and green lawns.”
  - “Horrible dull grey square replaced with more green.”
- Incorporate courtyards into streetscape and building design.
  - ”Integrate buildings and open spaces. I like the courtyard philosophy.”
  - “More courtyards, fountains and sculptures.”
  - “Internal courtyards inside blocks.”
- Water features, especially fountains.
  - “I want more fountains that I can play in...”
  - “A playground & interactive water feature that is irresistible to kids.”
  - “Heaps more lighting, water features...”
  - “Water play area for families – a smaller version of Brisbane’s Southbank.”
- Good lighting for safety (especially in key pedestrian areas).
  - “... brilliant lighting to attract people at all times of night and day.”
  - “Good lighting for walking at night.”
  - “We need to have a bright night life without dark areas where low life can congregate.”
  - “Lots of wide open streets that are well lit...”
  - “Walkways that are well lit and safe to use at night.”
  - “Lighting enhanced everywhere.”
- Lighting for aesthetic value and to highlight key features and in different seasons (e.g. bridges, trees or buildings, Christmas, Chinese New Year).
  - “Please also have lots of lighting. I loved the way the bridges and trees along the Avon River were lit up.”
  - “Keep lights on trees and light displays on bridges, buildings etc it gives our city a magical effect, place you want to be at night.”
  - “Fairy lights! There must be fairy lights.”
  - “More/better lighting than before, I lived in London for my OE and felt safer there than I did in Christchurch partly because it was so well lit.”
  - “Lots of lighting - create funky street lamps unique to Chch.”
  - “Well-lit spaces encouraging people to come to the central city-day and night.”
- Boulevards are a popular theme.
  - “Wider streets, tree lined.”
  - “A beautiful wide boulevard with dedicated cycle ways, trees...”
  - “Boulevards like Worcester.”
  - ”Focus on boulevarding the Central City – wide streets, lots of trees, street dining, fewer cars.”
  - “Colombo Street Boulevard – tram in the middle – great walking areas.”
  - “I’d like to be able to walk from the museum to High Street (Alice’s and polytech) along a bustling, vibrant boulevard of niche shops, cafes, green spaces and markets.”
  - “Restoration of Catholic Basilica and its environs to be linked to main centre by a boulevard and trees – make it stunning. Tree-lined streets...”

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- “These inner city built environments and their surroundings would be connected to the main boulevard transportation network by walkways-cycle lanes.”
  - “Worcester Street should be widened to provide a wider and complete boulevard, properly lined with trees from the Square to the museum.”
  - Cycleways and walkways.
    - “Pedestrianised streets and green corridor linking ‘piazzas’ green squares.”
    - “More cycle lanes, more pedestrian areas.”
    - “More pedestrian areas, cycle lanes.”
    - “Pedestrian and cycle friendly.”
    - “Well defined cycle lanes well away from parked cars.”
    - “Spaces linked via pedestrian and cycle ways.”
  - Cycle parking areas; free bikes (similar to Paris Velib but free)
    - “Lots of cycle parks dotted around the city.”
    - “The bus stops could have free bike parking facilities.”
    - “Bike rental/free bike systems are a good idea.”
    - “Free bike usage as overseas.”
    - “I want free bike usage for Central City transport.”
    - “Free (or almost free) bike system like Paris.”
    - “Velib system in Paris is perfect.”
    - “Bike system like the Velib in Paris. People FRIENDLY!!”
  - CCTV cameras for public safety.
    - “I want CCTV cameras operating 24 hours for public safety and peace of mind.”
    - “There should be no streets that are pitch black and make you feel unsafe. I think there should be more security cameras around for peoples safety....”
    - “Well lit streets and security cameras.”
    - “More CCTV cameras operating 24/7 to stamp out crime in the city.”
    - “Well lit, CCTV, to increase safety in the city, especially walking at night.”
    - “More CCTV, to feel safe walking at night.”
    - “Safe place to leave bikes (CCTV).”
  - Use rubble, stone, etc, from destroyed buildings in streetscape, e.g. cobbled streets, walls, new buildings, seating areas, etc.
    - “Using the earthquake rubble, e.g. red bricks, wood and broken plates etc for mosaics.”
    - “Using as much of the rubble as possible to create a space for remembrance, somewhere people can gather as a community in the future.”
    - “Pave courtyards with heritage bricks from the buildings we’ve lost.”
    - “I would like to use some of the bricks and material from buildings lost in the quake in new building so we can still have our heritage and remember.”
    - “Road built out of recycled bricks from buildings.”

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## **River**

### **Topic summary**

The Avon River is a key asset to Christchurch, contributing significantly to the Central City’s uniqueness. More should be made of the river through key parts of the Central City, including creating a wide walkway and cycleway with plenty of seating, green space, lighting and cafes. The Avon River, if developed well, is an asset that has the potential to attract locals and tourists to the Central City.

### **Number of comments: 2059**

- More incorporation of key parts of the Avon river into the green space/open space network.
  - “Have buildings open onto green spaces beside river.”
  - “I believe the Avon river is an absolute asset to our city and needs to be deeply integrated with all the other ideas for recreating our city.”
  - “Green, unobstructed riverside walks, both sides of the river.”
  - “Integrate the River Avon into the Central City, as an attraction and a green corridor.”
  - “Central City to use the Avon river more.”
  - “Make the Avon river a really lovely river to be round.”
  - “I would like to see some development around the Avon river so that we can buy our coffee and sit by the river.”
  - “We need to celebrate the Avon river...”
  - “Making the most of the Avon river.”
  - “The Avon river is focal point.”
- Make more use of river as a key asset in the Central City; use river as pedestrian corridor/ walkway/board walk.
  - “Highlight the River Avon, making it a pedestrian corridor, with a market area close by.”
  - “The Avon is a treasure – continuous bike, pedestrian ribbon without interruption by cars.”
  - “We need to be a lot more relaxed about using and beautifying this water way through the Central City. Currently there is a no go attitude when looking at river bank enhancements that involve any sort of structure for public use. We need to be much more flexible and open minded with regard to better unitising the Avon river banks.... That we should aim to have a walk way the full length of both sides of the Avon river from the Hospital to Barbadoes Street. The Avon river is our prize jewel and we do not allow people to wander along it easily.”
  - “Expand the lawn/garden area alongside the Avon, to include a walkway along the length of the river in the CBD & seats & areas for relaxation.”
  - “Boulevards along the river, wide pavements for walking, i.e. Melbourne.”
  - “Use the river as a green corridor to move thru the city. Remove the roads beside it (like Melbourne or London South Bank).”
  - “Riverside Parks & cafes & bars. Canoeing down the river and order a cake or beer.”
  - “Mixture of activities based around: adjacent to Avon River vibrant tourism focused (cafes, etc).”
  - “River and stream banks becoming walking/biking/park areas enabling people to move about the city with ease and not needing to compete with cars.”
  - “Much wider riverbanks, incorporating cycleways and walkways right thru Central City and beyond.”
  - “A green passage way all the way down the Avon river with walking/cycling access.”
  - “Green space around Avon river with cycleway.”
  - “Make the Avon river more of an integral part of the CBD rather than just happening to meander through. Board walks.”
- Cycle path along Avon river.
  - “Cycle paths along river and in main CBD streets.”

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- “I want green spaces and beautifully colourful gardens. And a wide cycle path that follows the Avon out to the sea.”
  - “I want cycle ways along the river, to encourage cyclists and not cars.”
  - “A quiet green space following both banks of the Avon perhaps a cycle way along as well eventually all the way to the estuary.”
  - “Parkland and cycle ways along both sides of the Avon.”
  - “Maximise the beauty of the Avon river with walkways and cycle ways.”
  - “An Avon river cycle way...”
  - “The Avon river will be maximised, with cycle and walk ways.”
  - Close key streets to traffic to accommodate Avon river walkway and limit car parking along key parts of the river.
    - “Accentuate and connect our Avon river asset to the rest of the city. Close Oxford Street to traffic and make it green.”
    - “Create a ‘green zone’ along the banks of the Avon river by changing the designation of Cambridge and Oxford terraces from open road to walkway/cycleway with vehicle access for service vehicles, electric shuttle buses or trams, and taxis at designated points along the route.”
    - “Get rid of the road next to the strip and allow use of whole area of river.”
    - “No roads alongside river banks.”
    - “Replace riverside two-lane roads with walkways, cycle-ways and slow one-way roads.”
    - “Use the river as an outlook for cafes & restaurants with paved areas close off the road by the strip and extend the eating/dining area towards the river.”
    - “No roads or buildings parallel to or within 100m either side of the Avon river.”
  - Ensure Avon River walkway is older people/disability friendly.
    - “I want cycle lanes, pedestrian, car parking, public transport, cycle parking, safe sustainable energy efficient, elderly friendly river crossing, shelter.”
    - “I want open spaces with seats for elderly, mothers, disabled to enjoy parks, and river vistas and entertainment ones – as in Paris.”
  - Mixed opinions on using native plantings (natural state) versus English plantings (more manicured) along river.
    - “Native plantings on waterways to enhance and retain banks; also to help keep river waters clean.”
    - “More native plantings along the Avon river.”
    - “I want more open and green spaces with seating make use of the Avon river with seating. Don’t plant any natives but have flower beds, hanging baskets for flowers.”
    - “I want use the river well, widen the green next to the river where possible, mix planting some native some English traditional.”
    - “The Avon river is much more attractive when the banks are mown (no tussocks, therefore no rats) European trees and bushes so that the river is visible again.”
  - Plenty of seating/places to sit and reflect along Avon river.
    - “Benches, tables along the Avon to sit at.”
    - “Small areas just to sit inside and outside along river. Wider bridges over the river, including seats.”
    - “Use the Avon river all the way out to Brighton. Needs seating and even cafes and walking and cycle paths.”
    - “Make the river the focal point with lots of seating, tables and greenery either side of it, as well as play areas for children.”
    - “I want seating near the river for quiet, reflective times.”
  - Restaurants and cafes at riverside; create spaces for cafes and restaurants to open along the river.
    - “Have restaurants and cafes next to the riverside, to create a safe but lovely area in the summer months.”

## Share An Idea Summary

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- “... cafes right beside river...”
- “Make better use of the river for leisure and entertainment.”
- “Make the Avon river a really lovely river to be round with restaurant beside the river with lots of lights.”
- “Pubs/restaurants on the river – pleasant relaxation environment.”
- “Dining experiences, especially evening on/by the Avon River, Oxford Terrace, The Arts Centre and culture.”
- The Avon river/walkway as a tourist attraction.
  - “Develop and market Christchurch’s point of difference – the river and gardens.”
  - “Maximise the physical beauty, e.g. the Avon.”
  - “Enhance-promote the Avon river as a feature of Christchurch as part of its character with walkways park benches, etc.”
- Plenty of lighting along riverside walkway to ensure it is a welcoming, safe place to walk and for aesthetic value.
  - “Make the Avon river a really lovely river to be round with restaurant beside the river with lots of lights.”
  - “I want wheelchair access to all areas, place to buy organic food, markets, free limited time parking, cheap quality outdoor dining, boating on Avon, lighting bridges and vibrant nightlife.”
  - “I want lighting, music, live entertainment around the river. Make it our heart like Melbourne/London.”
- Open up waterways/tributaries of Avon River (Di Lucas map) – don’t build over these.
  - “Open up original waterways - many little streams are boxed up under buildings and roads - bring them back and make them green spaces.”
  - “Open up covered waterways. Make green walks beside them.”
  - “Enhance our little Avon – can we uncover a few of the tributaries?”
  - “I think Di Lucas idea of re-finding the old waterways through central Christchurch, landscaping them into a feature of the council city, is a good one.”
  - “Uncover the buried river tributaries and make them pretty. Do not rebuild on them, not safe.”
  - “If appropriate some of the former surface waterways that have long been piped should be daylighted and restored to a more natural state.”
- Rowing, kayaking, canoeing, punting along the Avon river.
  - “Punting/kayaking along the Avon river with options to stop for a sandwich and beverage along the way.”
  - “Walk along/canoe/or sit on a punt – the Avon. There is a focus along the river.”
  - “Boating on the river, displays against the river backdrop, displays on the river, flowers.”
- More bridges (particularly foot bridges) over Avon river in Central City.
  - “I don’t want motor vehicles screening the Avon from the public. We need to embrace the river more. Maybe an area between Gloucester St and Cashel St on both sides of the river with cafes, restaurants, some housing, small picture theatres and 4 or 5 foot bridges.”
  - “Make the Avon a focal point. Clear land on both sides of the Avon river. Have footpaths and cycle ways on both sides and foot bridges every so often. Have buskers, ice cream vendors, hot dog vendors, etc.”
- Ensure river remains clean from pollution – critical if it is to be a key asset to the Central City.
  - “Rebuild the 19th century foul and storm sewers to modern standards to keep pollution out of our rivers and clean up the Avon and Heathcote.”
  - “Take better care of our Avon river – reduce pollution and bring back bird life.”
- Call for transport link using Avon river all the way to the coast.
  - “Would really love to see Avon river being used as transport, maybe out to Brighton with park stops on the way, or market stops.”
  - “Create a green highway around the Avon river all the way to the estuary.”

- “Use the Avon river all the way out to Brighton. Needs seating and even cafes and walking and cycle paths.”

***Share an Idea website: things people would like to see along key parts of the Avon river***

- Lighting along river, especially bridges and trees for aesthetic value and lighting for safety.
  - “The river highlighted with pretty fairy lights or similar....”
  - “Clever use of lighting showcasing parts of the river and trees.”
  - “Bridge lighting.”
- Plenty of cafes and restaurants and street vendors along edge of river (including on a wide walkway).
  - “Cafes with seating close to the river.”
  - “Social Ports – seating and info, Gelato and coffee!”
  - “Plenty of open space along river edge.”
  - “Clean, green, sheltered, sunny, wide area to walk and bike, Tai Chi, small performance areas, cafes but also picnic lunch areas.”
- Wide walkway and cycleway for leisure and recreation – promenade/boardwalk concept (some would like to see this extended from the Central City to the coast); incorporation of outdoor exercise/training equipment.
  - “A really wide river walk/cycle/roller blade way from the city centre through to Hagley Park with eateries alongside.”
  - “A walkway/cycleway with cafes that would encourage families to use it by day & awesome lighting, restaurants and footbridges for nightlife.”
  - “Uninterrupted cycleways with separate walking paths. With spaces for artwork, ideally temporary art.”
  - “A walkway and cycleway from the city to the sea along the riverside.”
  - “Accessible walkways, trees, gardens, cafes – a relaxing space.”
  - “Model on treatment of Seine: art, cafes, gardens all the way: The Avon walk!”
  - “Strength training exercise spots.”
  - “Wide river banks + nice paths. My wife and I walked city to sea down the Avon the first weekend after we moved to CHC. Market this walk/ride.”
- Riverside walkways must connect to other walkways and transport links in the Central City.
  - “... walkways into other parts of the Central City.”
- Plenty of seating along river, including open space areas with picnic tables and seating where people can have their lunch; incorporate shelter from easterly wind and rain.
  - “Have open spaces on every city block for people to have lunch, meet and hang out. Water features, cafe-style tables and some greenery.”
  - “Sheltered seating with a view for rainy, soggy or chilly days.”
  - “Gardens, seats and picnic areas.”
  - “Plenty of lunching spots are needed.”
  - “Shelter zones with plantings and creative barriers to stop the easterly wind.”
  - “Great seating made with recycled material from the buildings, plaques could be placed in them with info about which building they came from.”
  - “More places to take families too, e.g. parks, playgrounds.”
- Public art and sculptures along key sections of river, especially if develop a walkway/cycleway.
  - “A continuous promenade with lots of interesting cafes, art studios and public art.”
  - “Outdoor art. Inspiring poetry engraved in stone.”
- Close roads along river edge.



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- “Move roads away from river edge.”
- Mixed views on native plantings versus English themed.
  - “Allow some parts to revert to clumps of harakeke.”
  - “Lots of native flora, minimising introduced greens.”
  - “Plants: some areas might have native focus; but others should be predominantly European/English. Many deciduous trees for autumn colour.”
- Some suggest a memorial walk in remembrance of earthquake victims.
  - “Create a walk of remembrance.”
- Jetties.
  - “Little jetties to feed the ducks off.”
  - “Boat ramps where families can put in their kayaks/canoes/pedal boats/kids can feed eels and ducks.”
  - “Docks for kayaks and canoes.”

### ***Community Workshops: things people would like to see along key parts of the Avon River***

#### ***Group comments***

- Continuous wide walkways/boardwalk along river that link river to other parts of the Central City – emphasis on pedestrians and cyclists with separate walkways and cycleways.
- Open green spaces with plenty of seating for multiple uses: entertainment, recreation and leisure and that are accessible by a wide range of communities and age groups. Safety factors are an important consideration in development – lighting, sheltered picnic areas to protect from wind.
- Footbridges.
- Restriction of traffic movement along river’s edge – pedestrianise roads along key parts of river.
- Residential development overlooking river.
- Open up Avon river tributaries that are currently covered over.
- Plenty of cafes.
- Sculptures.
- On-river recreation – kayaks, canoes, rowing, punting.
- Acknowledge river heritage; Maori involvement.

## ***Signage***

### ***Topic summary***

Attention must be paid to signage to ensure it does not add to visual pollution in the Central City. Signs must be clear and easy to understand and not add clutter in the Central City.

#### ***Number of comments: 229***

- Several comments about restricting visual pollution or mandating the quality of signage in the Central City.
  - “Policy for good tasteful signage not the visual pollution we have now. No billboards.”
  - “I don’t want billboards. Truly beautiful cities around the world don’t accost you with advertising everywhere you look.”
  - “Avoid visual pollution created by cheap loud signage.”
  - “Better typography in the CBD! Have all store signs pass a design quality check.”
  - “I don’t want cluttered and loud and bright signage.”

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- “Great opportunity to restrict garish signage and create new regulations encouraging well designed and minimal signs.”
  - Some want street signage to be clearer.
    - “Need better street signage. More obvious when a street is one way or not. Street signs and road work signs need to be bigger, or visually easier for all ages.”
    - “More high-quality pedestrian (and cycle) navigation signage around town.”
    - “I want colour coded signs for direction.”
    - “Signs: street names stylish and visible. House numbers large and placed so easy to spot. Business names discreet and tasteful.”
    - “It is an easy city to navigate and get around.”
    - “Signposts above intersections (same as America) so street name can be seen clearly.”
  - Some want bilingual street signs.
    - “Bilingual signs teach our people our national language and visitors to the city.”
    - “I want more bi-cultural activities, e.g. street signs in Te Reo and English.”
    - “It would be great to see more bilingual signage around the city, reflecting our connections to Ngai Tahu/takata whenua.”
    - “All signage in Maori and English.”
    - “Kia ora, this is a great opportunity for CHCH to overcome its conservative image and acknowledge the cultural heritage of Maori in Christchurch as tangata whenua. I strongly recommend signage in Te Reo Maori – bilingual signage that shows how we honour past and present in CHCH....”
    - “Kia ora, I would be very keen to have bilingual signage as part of the new and revitalised Christchurch.”
    - “What’s the obsession with Maori signage? Include it, yes, but what about Asian languages for all our visitors too? Makes them more welcome.”
    - “We could be the first city in NZ to have bilingual signage in English and Maori! Wouldn’t take much to do, but the impact would be awesome!”
  - Visual signage for deaf community.
    - “... loudspeakers, bus/train announcements, museum/public places – any talks/microphone – ensure there’s NZSL translation as well so it’s fully accessible. Signage is important too. VISUAL would be great for ChCh...”
  - Limit advertising signage.
    - “Get rid of billboards.”
    - “Visually creative space, not commercially dominated by billboards. A limit on advertising visual space.”
    - “Please put a break on those monstrous billboards.”
    - “I don’t want no ugly large broken billboards please. They make the city look tired and shabby.”
    - “I want control of advertising signs and neon lights on buildings so that they harmonise with the buildings.”
  - Signs should point visitors to the river, making it more of a focal point of the Central City; signs pointing out things to do in the Central City.
    - “Signs point you to the river, (like the Thames in London) which is a cycleway, with sculptures, pubs, etc.”
    - “I want self help ‘What to do in Christchurch’ information terminals.”
    - “Signage in Hagley Park. Indicate where each path leads. I frequently meet confused tourists.”
  - Name quarters or precincts in the Central City.
    - “As a long term resident of the Central City, I found it was frustrating to live in an area without a name. I propose that names are given to areas of the city encompassing 5 to 10 blocks, such as “Victoria” for the areas of one or two blocks adjacent to that street, “The Bricks” for the area around the present fire station, “Boat Sheds” or “Museum” for that area. Further suggestions for other areas are St Michaels, Latimer, St Marys, and Courts. SOL was already a welcome start. Giving titles will help define a neighbourhood and foster a sense of community.”

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## **Public toilets**

### **Topic summary**

People want more clean and accessible public toilets that are integrated into the overall design of the Central City. There are calls for toilets to be eco-friendly in their design.

### **Number of comments: 256**

- The three words most commonly used when people discussed public toilets are clean, more and accessible.
  - “Better toilets, especially in the Square – hard to get to for women, needs to be easier to access.”
  - “Toilets around the centre of the city.”
  - “More well signed toilets”; “Toilets around the centre of the city.”
  - “Safe, well tended public toilets.”
- Toilets to be accessible at night as well as during the day.
  - “Lots of public toilets – accessible at night as well.”
  - “Toilets open longer, useable in the evening.”
  - “More public toilets available across the CBD instead of just one at the Square... [this will make the city] safe after dark.”
- People want toilets to be more accessible for children and also to have facilities for baby changing, etc.
  - “Easier access to public toilets, currently puts me off coming in with the kids.”
  - “Clean accessible public toilets and change tables (places like parent rooms).”
  - “Good restrooms – more consideration for women with babies.”
- Integrate public toilet facilities into the overall design of the city.
  - “I want toilets at regular intervals, clean ones, safe ones, not automated singing ones.”
- Suggestions for a more eco-friendly toilet system in the Central City, e.g. composting.
  - “Composting public toilets with tiger worms – its not as messy as one would think nor as smelly because we can use the by-product to feed our Garden City.”
  - “Collect rain water for toilet use.”
- Some people have suggested being more imaginative with public toilet design in the Central City.
  - “Some funky toilets, like hundertwasser at Kawakawa would be great too.”
  - “More public toilets: try Geraldine or Kawakawa for examples.”
- Better public toilet facilities will increase foot traffic and attract more people into the Central City (or keep them in there longer).
  - “High quality public rest rooms in prominent places are essential if you want people to be comfortable spending time in the Central City.”
  - “Plenty of public toilets on ground floor [will bring] more people.”

## **Parking**

### **Topic summary**

People want a car free Central City, with a focus instead on a pedestrian-centred environment. This extends to views on car parking. A park and ride system with cars parked on the perimeter of the Central City is the preferred parking option, although a range of options are needed depending on time of day/night and weekdays/weekends and for people with mobility issues. People don't want parking buildings located in the heart of the Central City as they tend to be ugly and sterilise spaces that should instead be people focused. Secure cycle parking is needed to encourage people to see cycling as a viable transport alternative to cars.

**Number of comments: 2886**

- Parking on the perimeter of the Central City (outside four avenues), with public transport into and around the city centre (trams/light rail and shuttle buses); park and ride concept/hub concept (must be safe or people won't use them). Some people commented on these transport options being free or affordable to use.
  - “We need to have park-and-ride systems on the fringe of the city with free shuttles into the Central City.”
  - “No through-traffic (cars and buses) but have adequate safe/convenient and cheap parking areas surrounding city (e.g. 4 avenues) and good connection to CBD internal transport system (trams, cycleway, mini-metro e.g. Perugia, walkways. Would need to keep some routes open for delivery, etc, for commercial activities.”
  - “Car parking outside four avenues. Rapid transit into centre (no tourist trams) and within centre. Residents' parking only in city centre.”
  - “Less cars with adequate car parking on the periphery of the Central City.”
  - “Plenty of parking spaces on the periphery...”
  - “Car parks, these should be on the outskirts of the CBD.”
  - “No more car parks near the centre of the city.”
  - “Cheap parking on outskirts so it's affordable to come to CHCH more often.”
  - “Park and ride, patrolled safe parking areas on edge of city, cheap mini buses taking commuters in/out of city.”
  - “Small accessible parking hubs are the way to go.”
  - “Free car parking – with free shuttle, tram or monorail into the city.”
  - “More first hour free in multi-story car parks. More free shuttle buses around Central Business District.”
  - “Do not want to see cars and buses in the Central City. Provide ample and easy parking around, good public transport to fringes of CBD, but reserve CBD for pedestrians, cafes and restaurants (with outside space) parks and boutique shopping.”
  - “Attractive Park 'n Rides at key points in suburbs. For this to encourage use of public transport, parking must be free and well lit, policed area – works overseas!”
- Free parking in the Central City to attract shoppers and other visitors back into the Central City.
  - “Keep the free 2 hour parking in the city to encourage people to come back.”
  - “Free parking – will make people want to spend more time and money in our city.”
  - “Free parking.”
  - “Abundant parking, free for the first 3 hours, with easy access to shops.”
  - “Free parking in the CC parking buildings after 6pm.”
- Central City is competing with suburban malls where car parking is free – free parking at malls draws shoppers away from the Central City.
  - “Free Parking! Free for the first 2 hours. That's the only way to compete with suburban malls.”
  - “Car park buildings open till late but lots of them free too or people will go to the malls.”
  - “Free too (or people will go to malls).”
  - “More car parking, that doesn't cost so much – very off-putting when mall parking is free.”
  - “Get rid of parking metres (why go to centre when malls free?).”
  - “Parking, parking, parking. Its the one thing suburban malls have over the Central City (and its free).”
  - “Unfortunately, without adequate parking, I would shop elsewhere. Need to be realistic. Without parking CBD will never compete with the malls.”
  - “Parking is very limited in town and traffic congestion makes roads difficult and dangerous to cross when shopping. Malls are better for both.”
- Eliminate or reduce on-street parking from certain areas or have parking only on one side of the street to encourage more

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appealing streetscape and frontages and to avoid congestion and safety issues (on-street parking as a risk to cyclists). Reduced on-street parking will also make more room in the streetscape for people-focused activities, such as wider footpaths, cafes and separate cycle lanes.

- “Within the four Avenues, we could make all the two-way streets (and those few one-way side streets) into 30 km/h zones and eliminate all on-street parking. This cuts out the traffic within the city that just drives around looking for a park, it provides additional lanes on the one-way streets to carry the extra traffic diverted from the two-way streets, and it provides space for dozens of ‘living streets’ within the city. Of course, this will require a significant increase in off-street parking. Fortunately we have the empty sections, some of which can be asphalted over and start earning money for the landowner right now, while parking buildings are constructed in others.”
- “No parking on the streets for off main road routes.”
- “Less on-street parking.”
- “Vehicle parking only on one side of the street.”
- “Have car parks located close to each of the four one-way streets. Have lots of public cycle stations on each of the four one-way streets. Inside the four one-way streets make car parking really expensive.”
- “A lot less car parking on inner city streets. It deters footpath life, such as cafés spilling out onto footpaths.”
- “I don’t want heavy bus traffic and street side car parking – earthquake demolitions provide opportunities to promote street side dining and pleasant pedestrian friendly streets by shifting car parking and buses to the edges of the CBD.”
- “I don’t want streets taken up with parked cars, large buses blocking streets and carrying only a few people.”
- “I don’t want streets with cars parked all along the sides....”
- “Create car parking opportunities off-street – integrated into the rebuild so that wide footpaths and attractive space can be created outside retail and create active frontages.”
- “Fewer car parking spaces on roadside.”
- “No street parking in main CBD. Causes accidents to cyclists and increased congestion.”
- Car parking buildings should not be right in the heart of the Central City where the focus should be on retail and cafes/ restaurants and open space. Any car parking buildings in the Central City should be discrete and architecturally pleasing.
  - “Don’t want... car parks taking potential green spaces.”
  - “Free hidden parking buildings. We won’t all bike! Be realistic.”
  - “A parking building at the old sale yards with a flyover and if needed a shuttle bus to the CBD.”
- Some suggest that parking buildings would be a good way to use existing high-rise buildings.
  - “Build high-rise parking buildings! Nobody will want to work in a high-rise. So fill them with cars. You really do need to supply abundant parking. A lot of people like me are never going to bike or bus into the city.”
  - “Locate car parking buildings on the one-way system rather than within the CBD, to encourage cars to stay outside the central area.”
- Many car parking buildings didn’t perform well in the earthquakes so any new buildings must be designed to meet building codes or people won’t feel safe using them.
  - “Safe parking building...”
- People do not want car parks (e.g. Wilson parking) on lots left empty by demolished buildings.
  - “On empty sites there should be no temporary car parks but compulsory green space until consent for new buildings is granted.”
  - “I hope the empty lots in the Central City aren’t turned into car parks.”
- Parking for older people, people with disabilities and others with mobility issues in the Central City needs to be factored into decision-making.
  - “Malls, shops disabled accessed. Disabled car parks.”
- A few people commented that car parking regulations should be relaxed.

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- “We need to encourage living in the CBD. This means relaxing rules for minimum and maximum car parking per residential unit.”
  - A number of comments on possibility of using underground car parking rather than on street or above ground parking buildings, while other people do not want underground parking due to perceived earthquake risk.
    - “Plenty of underground parking.”
    - “Is underground car parking possible to avoid ugly car parks?”
    - “Parking buildings underground. High-rise parking buildings will be an eyesore in a low-rise city, and unpopular with earthquake-wary users.”
  - Different parking options for different times of day/night and different times of week (weekday versus weekend) – where cars should be allowed at different times; cost of parking at different times.
    - “Parking on Sundays should always be free.”
    - “We need car parking buildings which have free access at weekends like the Manchester St car park had.”
    - “No charges for parking in the weekend to encourage people to attend community markets and activities.”
    - “Social hubs well lit at night, close to parking for night time safety.”
    - “Access by car only before 8am.”
    - “Affordable parking during the week and free parking on public holidays and weekends.”
    - “Free parking first hour, free parking all weekend.”
    - “Longer parking limits in CBD, 1-2 hours is not long enough for dinner or catching up with friends over wine! Having to move your car sucks!”
  - Safe parking options at night.
    - “Night life, well lit and safe parking – especially being female – so can go to restaurant safely.”
    - “Smart access for cars – face it, we all drive, we need to get through and around the city and better parking at night for access to restaurants and entertainment.”
  - Motorbikes and scooters able to park on footpaths, along with plenty of dedicated free motorcycle parking spaces.
    - “... allow motorbikes to share footpath parking as is in Melbourne.”
    - “More motor scooter friendly, e.g. parking on footpaths as in Bangkok, Hanoi, Saigon, Delhi ,etc.”
    - “Dedicated motorcycle parking spaces.”
    - “Promote motor scooter use, Christchurch is ideally suited to this mode of transport.”
    - “This is already increasing so I would like to see more parks for motorbikes and scooters.”
  - Plenty of secure bike parks.
    - “Cycle parking, that is burglar proof.”
    - “Currently the only lockup public bicycle spaces I know of were down Kivers Lane in an area that was not well supervised and made people feel their often very valuable bike was at risk of being vandalised or stolen. If we want to encourage more use of bicycles then we need to provide lock-up spaces that are not hidden away.”
    - “More cycle parking. City bikes.”
    - “Bicycle parking – hubs where bicycles can be securely stored for the day like in Europe.”
    - “Lots of bicycle parking and ‘free’ bikes to encourage people.”
    - “Convenient and secure cycle lockup would be great – I would be prepared to pay a small parking fee for this.”
    - “Put in lots of decent bike stands – not just hoops!”
    - “Covered cycle parks with good security for leaving your bike while shopping or at work.”
    - “Safe, dry bike storage for CBD visitors and workers (day and night). Bike theft put me off cycling before.”
    - “Work places to encourage cycling by providing bike storage and showers.”

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## **Recreation**

### **Topic summary**

People want a range of recreation activities, services and facilities to keep them occupied while in the Central City and to attract people into the Central City.

**Number of comments: 2433**

- People want a wide range of recreation opportunities provided so they have things to do in the Central City, including active pursuits such as sports centres, rock climbing walls and a water sports course, and more passive pursuits such as petting zoos and theme parks.
  - “Perhaps the Square could transformed into one such area as for sport, may be a place for watching sport on big screens, a tennis centre...”
  - “I want a go kart track and a massive steel climbing frame plus a heated pool...”
  - “I want a lake, surrounding the Cathedral, flowing in and out from the river Avon. Make is big enough for recreational activity, like rowing, canoeing, wind surfing, etc, and with lots of space around for walking and cycleway around it.”
  - “I would also like a theme park full of trees you can climb with flying foxes between them!”
  - “World-class water sport area.”
  - “An amazing sports facility that will include a rowing venue, able to be used by many other sports, e.g. triathlon, kayaking, athletics and so on.”
  - “A people-orientated space for recreation... welcome for all ages and a huge variety of activities.”
  - “I want a zoo because I think kids like me would like it.”
  - “Zoo in the city so we can see more animals.”
  - “A zoo where you can go and pick up the animals...”
  - “I think in our new Central City we should have a farm, a bit like a zoo, but with only farm animals. And you can hold piglets and baby animals. You can also feed them. Firstly, it would be fun for lots of people, secondly, it would probably attract lots of people to Christchurch.”
  - “Council-run swimming and gym facilities, e.g. Centennial Pool complex.”
  - “Rebuild QEII swimming complex in the inner city to draw people in.”
  - “... playground/interactive areas...”
  - “Covered areas to practice Tai Chi, yoga, and any other form of meditative awareness body practice.”
  - “Bring in some sports facilities, swimming pools, and even a cricket green... The cricket green would be a pleasant green space for residents to enjoy and provide an open space.”
  - “Open water sports canal running parallel with Moorhouse Avenue.”
  - “Theme park.”
  - “Create big theme parks, e.g. Legoland.”
  - “I think the new Central City should have more public theme parks, like Rainbows End.”
  - “Re-build QEII within the Central City environment to encourage the sport fraternity into and as a part of inner city activity. Not isolated as QEII was pre-earthquake.”
  - “Install a free public ‘rock’ climbing wall in a central, sunny location with easy, medium & difficult sections...”
- Playgrounds in the Central City; children say they want playgrounds that are interactive and that encourage activity, e.g. slides, flying foxes, swings, seesaws, rock climbing wall, etc.
  - “Allow room for more playground areas with lots of trees and flowers to create a nice atmosphere for Christchurch replacing old buildings.”
  - “Have a lot more playgrounds and spaces to relax instead of industrial buildings.”



- “A big playground with a climbing wall. The climbing wall needs to start of easy and get harder.”
- “There should be more areas for children to play in the CBD.”
- “Adventure ones, creative ones and exciting ones.”
- “Big ones with lots of slides and swings.”
- “Theme park, box forts, metal bars stood up and you could get inside them.”
- “Water parks – roof top overlooking city, adventure playgrounds.”
- “Adventure playground. Ones that can be used by all ages and have more than just swings and a slide.”
- “Adventure playgrounds, flying fox, jungle gym.”
- “Cool adventure playground.”
- “Climbing things.”
- “Wet and really fun places. Flying fox – really tall one.”
- “A playground filled with tunnels.”
- “Fun, lots of spinney things, lots to do.”
- Areas for youth recreation such as skate parks, places for live entertainment, places to hang out.
  - “Skate parks, BMX tracks, swings, band stands, etc – areas for people to play in the city.”
  - “I think we should get a massive skate park in the centre of the city.”
  - “I want a skate park because there will be a lot of spare space and the skate parks are all really busy so we could use with another one also if you do build one you could build a youth cafe, to hang out and also a mini skate shop in case something breaks while your there.”
  - “Plenty of activities for teenage children to enjoy like skate parks.”
  - “More places for youth people to visit or hang out.”
  - “More space to kinda just hang out and chill.”
  - “More places that younger people can hang out. Doesn’t seem like Central City has many places that lots of people can hang out.”
  - “Dedicated place for teens, indoor café and pool tables, dartboards, hoops, etc. We wonder why 14-17 year-old boys hang around looking bored and get in trouble. We have to value and provide for our youth.”
  - “Teenagers will feel welcome there and will have things to do there and places to hang out with their friends and be themselves.”
  - “More youth run activities to keep youth interactive in CHCH.”
- A Central City ice skating rink is a popular concept.
  - “Cathedral Square would be a wonderful place for an outdoor ice skating rink in winter – replaced by tables and colourful umbrellas in summer with café food. Consider the rink in New York – Rockefeller Centre – as a model. This is set under ground level as can be observed from the public and out of the wind. Fantastic.”
  - “Activities to encourage people in e.g. ice skating rink...”
  - “... ice rink in winter...”
  - “I want lots of fun activities for families, like ice skating in winter and big playgrounds...”

# Share An Idea Summary

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## *Built form/character*

### **Size**

#### **Topic summary**

Most people want low to medium-rise building development only. Buildings must be designed to a safe earthquake building code, otherwise people will feel unsafe being in the Central City for work or for visiting. Calls for low building heights, while an immediate response to the trauma of the February earthquake, have the added advantage of allowing more light into the streetscape and potentially allowing views of the surrounding environment. The potential for urban sprawl in the Central City must be considered when regulating building heights as the lower the height limits the more the potential for sprawl.

#### **Number of comments: 2700**

- People want low-rise (2-6 storeys common), safer, stronger buildings that are earthquake proof. Low-rise developments that incorporate courtyards and that allow light down to street level and that don't block views to key features such as the Port Hills and other buildings.
  - “Low-rise, shared courtyards, no ugly battery hen developments. Quality and affordability.”
  - “Low-rise buildings surrounding a courtyard with common use buildings surrounding a courtyard with common use buildings, e.g. pool complex, gym...”
  - “Building height limited to 5 storeys max...”
  - “Four storey building limit, retail or hospitality ground floor, the rest residential or commercial, all maximising the sun.”
  - “Three level building...”
  - “Having only 2 storey buildings, where there is shops on the bottom and business on top.”
  - “A vibrant inner city with approx 3 storey buildings residential over office over shops and cafes...”
  - “Buildings at a maximum height of 4 -6 stories.”
  - “3-5 storey buildings made of wood or sustainable materials - like the Meridian building in Wellington.”
  - “I want 5 storey building height limit: had one for many years: generally worked very well and acceptable to many. Gives good views across city.”
  - “Limit height of buildings to stop wind tunnels and allow sunlight and sky views in.”
  - “... feel it is important to let more light in at street level by... controlling the heights of them.”
  - “Low-rise buildings to provide vistas to the Port Hills, Alps, Cathedral and other heritage buildings.”
- High-rise buildings are seen by many people as a perception of safety risk that will put people off coming into the Central City in future.
  - “Make lower buildings that are twice as strong as before the earthquake so people aren't so anxious to come into the Central City.”
  - “I want to have all buildings under two storeys high so that from the centre of town you can see the hills!!!! And the great view.”
  - “To make more earthquake-proof buildings so people wont get scared to go back to work and will feel much safer around the central city.”
- Some people say the city needs high rises but the important issue is to ensure they are built to modern building codes that can withstand earthquakes. High rises are a part of modern city life and will help ensure the Central City remains compact.
  - “Keep the city compact. The more compact it is the more vibrant it will be – don't fear hi-density, but demand high quality.”
  - “Unless the CBD has mid-rise (10 story) buildings, we will end up with a sprawl of 2 story buildings that go on forever, like Auckland has. A high density centre is necessary to make public transport work and to provide enough customers for cafes and shops.”

- “Matters, such as building heights, should be driven by market forces. If the owner builds to new code requirements, and tenants are willing to occupy the space, then that should be the determining factor. Taller buildings give a city credibility. We will not attract big business, and importantly, investment, to Christchurch, if it looks like a large scale Ashburton...”
- “It is possible to build safe tall buildings in an earthquake prone location very successfully. HSB building on Worcester Street is a classic case of a modern, well-built building that has stood up well to our recent earthquakes. Japan also gets substantial earthquakes and builds to handle these. People will initially be very nervous going back into taller buildings but that will be temporary and we should leave height restrictions where they are.”
- “Obviously our buildings need to be designed for earthquakes and the land checked properly. I don’t want a height restriction, places like in London where height restrictions were imposed have become uniform and boring. It is better to have a mixture. I would like to see 2 level shopping, with offices above up to 3 or 4 storeys with the odd 10-15 storey high building.”

## ***Design and appearance***

### ***Topic summary***

People want high-quality, attractive building designs that leave a proud legacy for the city. They don’t want cheap tilt slab construction or soulless multi-storey glass buildings. Building design must focus on creating environments that are people friendly and that incorporate open space. New buildings should be set back from the streetscape to allow for green space in front and alongside other buildings. Buildings must interact well with their surrounding environments. Buildings must be built to earthquake building codes to ensure they don’t collapse in big earthquakes and so people feel safe in and around them.

### ***Number of comments: 2969***

- Many comments around the need for modern, attractive and creative building design; possibly some common styles to ensure consistency/avoiding rag tag look of different buildings; quality design, not cheaply constructed buildings. Buildings that will create a legacy and something the city can be proud of.
  - “Some new architecturally designed buildings would be nice to give some uniqueness to the Central City with interconnecting malls and market streets. Some roof top green areas would be nice too. More plazas with nice water fountains and features would be good, with feature lighting to brighten up the city.”
  - “Classic style of buildings, continuity of style, not hodgepodge.”
  - “Attractive buildings that craftsmen had toiled over.”
  - “I want attractive buildings - buildings that future generations will want to survive.”
  - “I want attractive buildings, no matter their purpose.”
  - “Attractive buildings to make a pleasing environment.”
  - “Attractive buildings with style and some class about them.”
  - “No to tilt slab buildings – yes to well designed, attractive buildings allowing the maximum of sun and minimum wind tunnels.”
  - “Our legacy for future generations. A golden opportunity to get it right.”
  - “The originality, good looks, and practical functioning of the city centre will also be what will attract tourists.”
  - “I want rebuild with a focus on having an attractive look of buildings that will last into the future and not cheap and nasty looking.”
  - “An attractive place we will be very proud of again.”
  - “An attractive city is a must.”
- Build on the good aspects of our built heritage and incorporate this into modern design.
  - “Please, please, can buildings have some interesting features and ornamentation? We don’t have to go Gothic – I love the HSBC building on Cambridge Terrace that uses colour and curves for interest. I just visited the University of Texas where even the newest buildings have pleasing design features that help them blend with the Spanish/American features of the old ones. One of the lovely features of the Arts Centre is its movement between spaces, and the colonnades and changes in height – why not more modern buildings using this approach, not cubes and rectangles?”

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- “Architecture that pays homage to the city’s heritage, but isn’t shackled by it.”
- “Interesting buildings that pay homage to the beautiful architectural heritage we have/had.”
- “Buildings that complement each other. Heritage to remain but modern to blend.”
- “Buildings that are a mix of the past and present – a modern take on the heritage buildings that we lost...”
- “It would be nice if they even had that fake heritage look.”
- “I would really like most of the old heritage buildings to be rebuilt...”
- “... the buildings need to be in keeping with our historical heritage.”
- “... retain and rebuild (or replicate) a lot of our heritage.”
- Buildings set back from street frontage with green space in front; green space between buildings.
  - “Keep the buildings low rise & lets lots more natural light in to the city perhaps set back from the street frontage a little with green areas.”
  - “Low rise with courtyards & greenspaces.”
  - “Buildings stepped back from footpaths with green space/gardens and seating. No car parking in front of shops.”
  - “Heaps of space and greenery between buildings.”
- Use some of the materials from destroyed buildings in the rebuild.
  - “I would like to use some of the bricks and material from buildings lost in the quake in new building so we can still have our heritage and remember.”
  - “Using as much of the rubble as possible...”
  - “Some interesting pieces of rubble such as Victorian facades could to be placed in key positions.”
- Build in wood/timber.
  - “Wood doesn’t burn, but chars, and holds it’s structural strength so people get out without it collapsing. So very safe!”
  - “Inspiring architecture in wood. Something people would travel to see.”
  - “5 storey buildings made of wood or sustainable materials...”
  - “I want buildings made of timber...”
  - “The building code should allow timber framed to 6 storeys...”
- Some want glass as a prominent feature of the rebuild, with a number mentioning the good performance of the Art Gallery in the earthquakes. Others say glass is dangerous in an earthquake-prone environment; people also don’t want multi-storey glass/concrete tilt slab monoliths.
  - “Design inspiring modern buildings with curves and glass – Garden City.”
  - “Less old buildings, more modern glass buildings, with interlinked rooftop gardens.”
  - “Less brutalist block structures – more glass...”
  - “Modern, 21st century buildings with glass frontages (like the Art Gallery).”
  - “...The curved glass front face of our new ChCh Art Gallery is stunning.”
  - “VICKI BUCK CALLED THIS ‘THE CITY THAT SHINES’, and it never has... NOW IS IT’S CHANCE, I propose several buildings built in a similar vein as the stylish CHRISTCHURCH ART GALLERY. It’s a beautiful and very safe building as has been seen in our recent quake. I see blocks of stylish buildings made in glass of two or three stories in height.”
  - “The Cathedral rebuilt with a glass roof?”
  - “Glass structures like the Louvre for shelter especially in winter.”
  - “I don’t want concrete/glass skyscrapers or many levelled buildings.”
  - “Lots of ghashtly buildings of concrete and steel and glass with no imagination, no popular aesthetic appeal.”
  - “Lots of concrete slab buildings with acres of glass.. no thanks.”

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- “... not horrid bland concrete glass monstrosities like we have had.”
  - “Multi-storey glass and concrete buildings with no character.”
  - “I don’t want a sea of soulless glass and steel structures.”
  - Less concrete and tilt slab construction.
    - “I don’t want rows of tilt-slab shops.”
    - “Don’t want to see ugly concrete high story buildings.”
    - “I don’t want Calder Stewart-style prefab concrete shopping buildings – these are simply ugly and have no place in a public space. Leave them for the industrial estates!!”
  - Buildings must be earthquake proofed to an acceptable building code so that people feel safe using them and that can be occupied after an earthquake without requiring significant repairs (Japan cited as an example of a country that has stringent building codes and where buildings survive big quakes).
    - “Low-rise, open spaces that can cope with future earthquakes.”
    - “Safe buildings not more than 3 to 4 storeys max. Really safe design to withstand 8.5 earthquake to ensure large EQ in future does not cause significant damage and the city can keep running. More stringent designs will cost more but in the long term is more cost effective and sustainable.”
    - “Follow Japan with quake safe technologies in buildings in the inner city because this will continue and have to learn to live around it. Incentives for builders, tenants in the centre city especially in green, quake safe technology.”
    - “Safe buildings built to high standards like Tokyo (architects from and know how from Japan).”
    - “To make more earthquake-proof buildings so people won’t get scared to go back to work and will feel much safer around the Central City.”
    - “Make lower buildings that are twice as strong as before the earthquake so people aren’t so anxious to come into the Central City.”
    - “Use base isolation on big buildings.”
    - “Earthquake safe buildings, like in Japan, where their skyscrapers just sway in an earthquake...”
    - “Earthquake proofing, because safety is key.”
    - “Ensure that buildings can withstand earthquakes we experience.”
    - “That the buildings would be earthquake proof so if we do have another earthquake it won’t fall down. And for every building to be safe because I don’t want anymore deaths of friends and family caused by earthquakes and them getting stuck in rubble.”
    - “Parking buildings that are earthquake safe.”
    - “Strong, flexible, light, carbon neutral materials that people feel safe in and around.”
    - “What we need to be addressing is the need to build buildings that not only allow people to get out safely after an earthquake but that also allow the building to be reoccupied afterwards without having to do a total rebuild. I know it is also all to do with the strength of the earthquake but we must never let Christchurch, or any other city in New Zealand, end up with such a large section of its CBD needing to be rebuilt. This will have long term financial and emotional ramifications on Christchurch for decades to come. We need to learn and move on.”
  - Low-rise or high-rise is not the main issue with earthquake proofing – it is about ensuring buildings are up to code.
    - “Tall high-rise business/hotel buildings that meet a better building standard, like ones in Japan that are prone to earthquakes. I would like this because it would be shame to limit ourselves in technology out of fear.”
    - “Build high rises - people shouldn’t be scared of well engineered buildings...”
    - “I believe we should have a certificate on every commercial building that says what level of earthquake code this building is now at. All buildings with lifts in them have these sorts of certificates in every lift saying how many people it can carry and what its maximum carrying weight is. The same should be for all buildings so people know at what level the building they occupy or go into has been built to. People will be a lot more safety conscious in the future.”

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- Some people raised a concern that developers might have too much power in the redevelopment of the Central City. Some are concerned about insurance companies dictating the style of buildings.
  - “I want the CCC to have the ability to veto architectural plans that have little or no aesthetic value or contribution to the city. It’s too easy to build a boring box.”
  - “I feel concerned that CERA et al may not have a great deal of control over the finished ‘shape’ of the Central City because we have been told 50% of building will remain, and I would think that the demolished buildings will be replaced by landlords who will have their commercial interests as their prime motivation.”
  - “Have an overall plan and don’t get hijacked by developers on other commercial interests.”
  - “Don’t let the round table control the decisions of the city.”
  - “Stop companies like Fletchers over charging and grafting for the new building of Christchurch.”
  - “Resist the urge to let developers wag the tail of the dog.”
- There is a need to ensure a cohesive building plan in the Central City.
  - “I’d like to see something in place to prevent the rebuild being a bits’a, where the buildings complement each other and are energy smart.”
  - “Comprehensive, rather than piecemeal, redevelopment.”
  - “Accept central control that stipulates cohesion with the overall plan.”
  - “I want consistent planning so we create a beautiful space combining life, business, the arts and which attracts visitors from the suburbs.”

### ***Role of Council in managing building design and style***

- Regulate and control building design and layout, including height, construction type, general design in relation to streetscape and usage (e.g. retail, commercial, residential mix).
  - “Planning and creating restrictions.”
  - “Buildings lowered to about 6-8 stories but make sure the rules are held – significant town planning rule.”
  - “What kind of controls are there going to be to make sure that we don’t end up with a really ugly, cheap and crass rebuild using tilt-slab or some similar construction with a bit of ‘bling’ stuck on the outside to give it character?”
  - “A simple combination of retiring a portion of the section to green space and controlling building volume, would create a mix of building shapes, height and styles, intermixed with green.”
  - “I want resource consents, etc, to include aesthetics.”
  - “Council must impose a 4-storey maximum height restriction – urgently for inner precincts; Council must rapidly bring together a new design guide which every new design must refer to, issued urgently in draft as a signal of intent and expectation for new designs; Council must immediately signal that designs that do not contribute positively to their environment – e.g. ugly tilt slab –will not get rapid planning approval, whereas designs that make our city liveable and something to be proud of will advance through planning quickly.”

## ***Green buildings***

### ***Topic Summary***

*This node has moved to the green technology section. Green technology must be incorporated into new building design.*

- Green technology seen as important in building design.
- “Energy efficient, eco-friendly low-rise buildings with interesting design....”

## Iconic buildings

### Topic summary

People want iconic heritage buildings such the Arts Centre, the cathedrals and the Provincial Chambers rebuilt to preserve Christchurch's history and to attract tourism. However, there is an opportunity in the rebuild to create new iconic buildings.

#### Number of comments: 143

- Focus on restoring or rebuilding iconic heritage buildings such as the Arts Centre and the cathedrals. Age alone should not be a determinant of heritage value.
  - “Rescue/repair only iconic buildings that contribute to the vision of Christchurch (being old is not enough). For example keep Arts Centre because it provides quality spaces for people to recreate in.”
  - “Rebuild some of the iconic heritage buildings, like the Arts Centre. Learn from what Dresden did after WWII. Don't run away from the past.”
  - “Key buildings (Cathedral, Arts Centre, museum etc) restored and future quake proofed.”
  - “The Square and Roman Catholic Basilica and Provincial Chambers...”
  - “Main heritage buildings restored – Cathedral, Basilica, Provincial Chambers and Arts Centre.”
  - “Keep the Cathedral, the Basilica...”
  - “Keep iconic building – Cathedral, Ballantynes /Basilica and Town Hall.”
  - “Most important thing is rebuilding the Cathedral because that is an important building with lots of history and it's a main icon for Christchurch.”
- Allow the Dux de Lux to reopen.
  - “Please save the Dux de Lux – it is a symbolic icon in CHCH.”
  - “The Dux De Lux on the corner of Montréal and Hereford Street. It is a vital part of attracting locals and tourists back into the Central City, and is a cultural hub for all generations in this city. Don't let Ken Franklin throw the Dux out from their internationally recognised iconic site.”
  - “The Arts Centre complex first and foremost, I feel it is the cultural heart of our city. Spent plenty of time there and miss it greatly. The cafes also, especially Dux De Lux – it wont be the same if it has to go somewhere else.”
  - “Keep the Dux de Lux! Too good to lose.”
  - “Save the Dux!”
  - “Make Arts Centre Trust Board allow Richard to reopen Dux de Lux. The city needs it now.”
- People say heritage buildings preserve our history and contribute to tourism.
  - “Iconic buildings – to maintain links with past and support tourism.”
  - “For tourism, keep some iconic buildings in a damaged state, reinforced like ruins in Athens.”
- Others think we will need to create new iconic buildings – new heritage for future generations.
  - “Demo all CBD buildings and start again 3 levels same as Art Gallery make new heritage with a few old, e.g. Cathedral, Arts Centre, museum.”
  - “Have one or two iconic buildings, perhaps resulting from an international design competition.”
  - “I want Modern Arts centre to compliment the existing Art Gallery. We can not afford the money to restore the former.”



# Share An Idea Summary

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## ***Housing types and styles***

### ***Topic summary***

A range of housing options are needed in the Central City to bring people downtown and thus increase vibrancy. Affordable housing options should be included to attract a range of people. All housing developments, regardless of price, must be well designed and incorporate open space, such as courtyards. Central City housing will need to be higher density than that found in the suburbs and could be part of mixed use developments with cafes and retail on the ground floor and apartments and commercial premises on upper floors.

### ***Number of comments: 597***

- Quality, well-designed, higher-density apartment and terraced house living incorporating open spaces to increase the number of people living in the Central City and thus improve the vibrancy of the Central City. Range of sizes from small apartments to bigger apartments and town/terraced houses, appealing to a range of household types.
  - “Apartments to house the people – we need people living in the Central City to help create the vibrancy.”
  - “CBD needs to have enough accommodation to sustain a vibrant city. The right balance of low-rise apartments and cafes and bars.”
  - “... provide apartment living for those who want to live within a vibrant culturally significant city.”
  - “I would also like more buildings converted to apartments... so its not cupboard like, and so the centre city is vibrant & full of people.”
  - “I don’t want lots of apartments cheaply built and crammed in with no trees or open space around them.”
  - “I don’t want slum-type housing areas.”
  - “Low-rise buildings with more residential apartments – no more than four stories high and with open green spaces that are shared.”
  - “Apartment blocks are needed, but done with care and sustainability in mind. Low-rise, maybe two or three storeys, with courtyards and green areas.”
  - “High-density housing built around squares/green courtyards.”
  - “Affordable inner-city apartments with adjoining parks and gardens.”
  - “Allow 35-40m 2 1-2 person apartments to be built in blocks of 4 on L1 land in place of 1 large house.”
  - “Good housing would need close by key things such as footpaths, Schools, libraries and good entertainment all communities should also have low middle and high grade housing side-by-side so there are mixes of age and wealth.”
  - “We need much more people living in the CBD. This will both humanise the city and make it much more exciting and vibrant, and increase the patronage for businesses.”
- More people living in the Central City will mean people are around at all times of the day and night which will improve Central City safety and add to vibrancy.
  - “I want a mix of retail office and living space, apartment inner city living so the city is vibrant at all hours. A safe environment.”
  - “Permanent population city based, that way the city will stay safe at night.”
  - “... lots of low rise inner city living so people always around.”
  - “Stimulate residency (populate or perish!).”
- Low-cost student accommodation to attract young people into the Central City. Would rely on good public transport, such as a tram to take students out to the university.
  - “Student cheap accommodation in the city area to encourage students to live there.”
  - “ Architecturally designed student accommodation with water features, grassed areas and granite sets used for paving and pathways... design a city that our uni graduates will be proud to work and live in and one which will encourage them to return after their OE ... bring our young people into the Central City.”
  - “Bring youth to the city by having students move into it.”

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- “Look at encouraging youth students accommodation around the polytechnic and housing for university students and a tram to access the university, Riccarton through Hagley Park.”
  - “Would love UC there but its not going to happen. Close second? Halls of Residence with light rail taking students up Ric Rd to uni.”
  - Mixed use buildings with cafes, restaurants and retail on the ground floor and residential apartments and commercial activities on upper floors.
    - “Second and third floors of these buildings could be used for offices or apartments.”
    - “Loads of residential options, loft living – apartments, business and residential mix.”
    - “Mixed in with living/office/shops.”
    - “4 to 6 story high, mixed use built space.”
    - “Low-rise, mixed-use buildings.”
    - “These spaces are edged by low-scale, mixed-use buildings at ground level galleries/retail/restaurants and cafes. Above ground level work offices/studios (live/work units) and residential/hotel accommodation.”
  - Housing options must be affordable to attract a range of people and households to Central City living, including families with children, couples, singles, students, people with pets, etc.
    - “... we would if the housing was affordable and there was space around.”
    - “... more inner city apartments and housing but affordable cost.”
    - “There is demand for moderately priced apartments in the CBD but development levies, car parking, reserve contributions and setbacks often make this uneconomic. We need to make it easier and cheaper to do infill housing inside the four avenues than building on green field sites on the edges of the city.”
    - “Affordable apartment living. More and young people living inside the 4 avenues.”
    - “Housing – not all at the top end of the price range.”
    - “... through a variety of housing types not just high end apartments. We need a cross section of our society living inside the CBD.”
    - “Include more low-cost residential for all age groups, families, students, youth and pensioners, individuals, and groups.”
    - “Apartment complexes that are affordable and bring in young, vibrant people.”
    - “I lived in an apartment in Switzerland for three years and would do so again. On return I wanted to buy a nice apartment in Christchurch but nice apartments are rare and expensive.”
    - “Attract families to city with flats and two storied townhouses.”
    - “... low-rise, family-size apartments round edges.”
    - “Mixing up social types of housing is also a good idea. Fundamental flaws are the lack of education and other facilities for families. Increase number of Central City services, e.g. schools, public spaces, “family/pet-friendly” areas, medical (people/life, etc).”

## **Bridges**

### **Topic summary**

There are a limited number of comments on bridges. People want more footbridges over the Avon river to facilitate pedestrian and cycle movement.

#### **Number of comments: 87**

- Limited number of comments.
- Air bridges linking buildings in the Central City.
  - “How about roof top gardens, themed (e.g. edible, cottage, native etc) linked from building to building with air bridges.”

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- “Low-rise buildings with garden spaces linked by bridges & air bridges.”
- “How about roof top gardens, themed (e.g. edible, cottage, native etc) linked from building to building with air bridges.”
- “Colonnades on pillars on all road frontages in the centre, all at same height, with footbridges across streets at first floor level.”
- Remove some of the overbridges which can act as barriers between destinations.
  - “Get rid of the ugly overbridges at the end of Colombo and Moorhouse Ave.”
  - “Remove Colombo/Moorhouse over bridges.”
  - “... you must connect Sydenham to the city (at the moment the overbridge is a barrier)...”
- Build footbridges over the Avon river so as not to interrupt the flow of cyclists and pedestrians.
  - “Avon River? – better walkways with interesting features, maybe even footbridges across.”
  - “I don’t want roads cutting across safe cycling and walking routes. Bridges could be built for roads to cross over the river, without disturbing the movement along the riverside.”
  - “More bridges over the Avon river for better access within tow/central suburbs.”
  - “Design raised bridges and/or reduce car crossings so we can walk and cycle longer stretches of the Avon without having to cross roads.”
- A bridge over the Avon river as a tourist attraction.
  - “I think the new Central City should have a swing bridge across the Avon river and in the middle of it there should be a flying fox for which you can jump onto and drop and go all the way to the end and pull the rope back up.”
  - “Glassed floor bridges and spaces over the river.”

## Regulations and guidelines

### Topic summary

People also want more guidelines and control over the type of development and building design allowed in the Central City. Greater regulation of alcohol consumption in the Central City wanted to curb bad behaviour that discourages residents visiting the Central City at night. A common call was for earlier bar closing times and more active enforcement of alcohol bans.

### Number of comments: 1019

- Create guidelines with regard to types of development and building design in the Central City, e.g. impose strict building regulations in terms of height and style of buildings.
  - “In order for the look of the city to be an expression of the vision of the people, the Council needs to take control of the style of design & build process on our behalf. If the developers are not given guidelines to follow in building styles they will invariably default to the cheapest & easiest option.”
  - “Tight planning rules the restrict cheap, ugly developments.”
  - “We need more planning and restrictions on what people can build – they manage to do this in Queenstown.”
  - “Buildings lowered to about 6-8 stories but make sure the rules are held – significant town planning rule.”
  - “My second major concern regarding the CBD is the architectural quality of the rebuild. What kind of controls are there going to be to make sure that we don’t end up with a really ugly, cheap and crass rebuild using tilt-slab or some similar construction with a bit of ‘bling’ stuck on the outside to give it character? I have heard no-one talking about design criteria and controls. There should be close links between the Architectural Design Committee, engineers and the Council in establishing some kind of control process/by-law over building design.”
  - “Very simple set of planning rules that still allows lots of room for creativity but ties the city together in a distinctive iconic way.”
  - “Many cities worldwide have compulsory design rules & so should we. ALL plans must get approval from urban design panel.”

- 
- “I don’t want boy racers, fast cars, noise, high rise buildings, slums, main stream retail, franchise types, want the quirky specialist retails only.”
  - “City should be kept clean and bright. Leases should require painting or external redecorating on a regular basis.”
  - “I don’t want cheap, high-rise buildings that will just collapse under another earthquake.”
  - “Don’t want tilt slab poorly designed buildings with limited architectural merit. Put covenants on rebuilds as to requirements.”
  - Streamline building consent process in Central City to make it a more appealing option for developers compared to suburban developments.
    - “Currently, it is quicker and easier to get a green field building consent than it is to do an inner city development. We need a special department within Council whose job it is to spearhead and ensure building consents within the four avenues are given top priority, are faster than suburban developments and become the preferred option for developers.”
  - Comments about enforcing and/or enhancing alcohol bylaws in the Central City.
    - “I don’t want drunken louts – we need to manage the youth drinking culture in a creative way to make the streets safer at night.”
    - “Ban liquor and smoking, have fines for people who break the law – make the CBD less dodgy.”
    - “Enforce the alcohol by-laws. No drinking in the streets or shouting or breaking glass or defecating or defacing property.”
    - “Limit the number of liquor licenses.”
  - Consider altering the closing times and numbers of licensed premises.
    - “I want cut out half the bars, make closing time 2am.”
    - “I don’t want bars open all hours as they encourage drunks and thugs, discourage ordinary people from visiting CBD in the evenings.”
    - “A sensible closing time for bars and clubs (not 5am).”
    - “Pubs and bars having a closing time at midnight!”
  - Restrict the activities of boy racers.
    - “No boy racers.”
    - “Zero tolerance for boy racers.”
  - Tighten regulations regarding smoking
    - “A totally smoke-free Central City. If we’re not brave enough to try that, how about smoke-free zones around restaurants, cafes and bars?”
    - “No smoking zones around cafes and restaurants.”

## ***Impacting land use***

### ***Topic summary***

There are a limited number of comments on impacting land use. The Central City should have a concentration of unique, boutique and specialist retail rather than the larger chain store retailers prevalent in suburban shopping malls. Big warehouses should also be discouraged in the Central City.

#### ***Number of comments: 32***

- Limited number of comments.
- Keep large retailers and shopping malls out of the Central City.
  - “I don’t want big mega stores. Keep these to the suburbs and specially designated zones. They depend on cars. Inner city needs smaller more boutique type retail outlets.”

## Share An Idea Summary

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- “I don’t want no bland ugly chain store buildings, like Tower Junction.”
- Encourage independent, boutique retail.
  - “Have unique owner operated businesses (shops, cafes) to make the CBD different from the suburbs.”
  - “Need eclectic, creative small enterprise in the Central City.”
- Discourage large, bland concrete buildings.
  - “No concrete monuments such as Rebel building Colombo Street/Moorhouse Avenue.”
  - “No more eyesores, such as the Farmers car park in Vic square or the Rebel sports monstrosity.”
  - “DON’T WANT big corporate buildings.”
- Don’t locate large warehouses in the Central City.
  - “No distribution warehouses in the Central City (you listening Canterbury Brewery). Use compulsory purchase orders to deliver a vision”
  - “Within the four avenues should be things that service the public directly.....a brewery warehouse so close to the park, river, and hospital does not.”

## Other

### Topic summary

A range of comments are included in this node, such as people missing social gathering places in the central city and a desire for the rebuild to incorporate things that protect people from inclement weather when in the Central City.

### Number of comments: 365

- People miss social gathering places where they could meet friends.
  - “I miss the ease of ‘catching’ up with friends and colleagues somewhere central and where to go and how long will it take?”
  - “I want town to be the same as it was; vibrant shopping, places for socialising, central meeting points.”
  - “More places for youth to gather in a safe environment.”
  - “Community areas to gather and meet, hireable spaces – community support to answer queries, security concerns, e.g. city hosts; identifiable coats to ask.”
  - “Bookable meeting spaces.”
- Provide protection from inclement weather around the city, particularly Cashel Street Mall
  - “Cashel Mall – have a glass or other translucent material roof over the mall to provide protection from the weather.”
  - “Cashel Mall & adjoining areas with a retractable roof that covers the whole street for bad weather.”
  - “Lots of shelter so its not cold to walk around the middle of town.”
- Some would like Christchurch to have a “village” feel.
  - “I would like to see a more ‘village’ style city rather than high-rise buildings and fancy, new infrastructure.”
  - “Have a more village feel for the city.”
  - “I like the concept of several villages almost self sufficient.”
  - “... more of a village concept...”
  - “seating covered lanes linking retail shopping areas to create a village atmosphere...”
- People want to get on with the rebuild.
  - “Why can’t we be a 24/7 city. We need to have roads/construction working more than five days a week. The Japanese are ahead of us with their recovery as their culture gets on with it. We need staggered shifts to have work going every day.”
- Places are needed for youth to gather in a safe and non-threatening manner.

- 
- “I want places for kids that are from 10-15 to socialise and meet new friends.”
  - “A place for teenagers to congregate that will be attractive to them. Older people who often feel intimidated by large groups of young people.”
  - “I think that there should be a place in which younger people (13-16) can meet up, have a chat and have some thing to eat. This could be like a cafe or something else. Just somewhere for people like me and my friends to meet up in the weekend and have fun :)”
  - “Places for young adults to meet and have fun without ‘intimidating’ other users of the city.”
  - CCTV to increase safety in the city at night.
    - “Well lit, CCTV, to increase safety in the city, especially walking at night.”
    - “I want CCTV cameras operating 24 hours for public safety and peace of mind.”
    - “More CCTV cameras operating 24.7 to stamp out crime in the city.”
    - “... better lighting, CCTV camera network to make everyone feel safer.”
  - A small number of people say the city needs a new convention centre.
    - “A bigger and better convention centre – this is a great opportunity for Christchurch to increase revenue from conferences and corporate events.”
    - “An international quality convention centre with conference facilities to attract worldwide meetings to Christchurch.”

## ***Green building technologies***

### ***Topic summary***

The rebuild must incorporate eco-friendly, sustainable design principles in building design, including solar and wind power and green roofs/walls.

#### ***Number of Comments: 852***

- People want the rebuild to incorporate eco-friendly, sustainable design principles, solar and wind generation common themes.
  - “More wind power would be a good way go. You could put turbines on top of power poles.”
  - “Buildings in CBD to have compulsory “green technology”, i.e. renewable energy to offset carbon emission & reduce reliance/pressure on the Grid.”
  - “Masses more green technology .... Christchurch could be leading the world in this field with compost toilets, solar power, energy-efficient buildings and grey-water recycling.”
  - “I want something cohesive and visionary – a unique, forward-thinking city to be proud of. Eco-architecture, completely out-of-the-box building designs. More use of wood as a building material.”
  - “A resilient city. Less dependence on networks - electricity (solar panels), water (buildings have own water tanks), sewage (compost toilets).”
  - “Appropriate technology – solar power, composting toilets, water harvest and recycling, sustainable buildings.”
- Encouraging solar power is a very common green technology theme, also water tanks enabling rainwater collection.
  - “Buildings in CBD to have compulsory “green technology”, i.e. renewable energy to offset carbon emission & reduce reliance/pressure on the Grid.”
  - “INSIST that all buildings be environmentally state-of-the-art, i.e. water collection and re-cycling, solar power and sustainable materials.”
  - “A rates rebate for each ‘green’ feature of new buildings, to encourage building owners to embrace sustainable practices.”
  - “All existing & new houses should have rainwater tanks! Optional – permeable driveways, green roofs etc, to reduce flooding and any effects.”

## Share An Idea Summary

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- “Incentives for builders, tenants in the centre city, especially in green, quake safe technology.”
- “Ensure some areas out of the cold wind and design for passive solar heat retention!!”
- Green roofs, green walls and rooftop hydroponic gardens are a popular idea, with some people suggesting public access by paths and bridges from rooftop to rooftop.
  - “Make ChCh a real ‘Garden City’- buildings with ‘living’ roofs and walls covered with plants.”
  - “The opportunity should be taken to build at least some ‘green’ buildings with green roofs and highly energy-efficient designs.”
  - “Every building must be super eco-friendly. The whole city needs to be a world leader in green/self sustainable building. Green roofs, love green roofs!”
  - “Place buildings with 5 star certified green buildings – all low with lots of natural light and green roofs.”
  - “Rebuild businesses with green roofs, to further garden city image & lower the temperature in the CBD (and the building) in the warm months.”
- Low rise buildings, incorporating green technologies.
  - “Low-rise replacement buildings, e.g. 3 storey max; ground retail; offices 2nd floor; living 3rd with rooftop solar power/water.”
  - “I want low rise ecologically sound structures. Prevent dark canyons of buildings.”
  - “Low-rise apartments with solar heating, really well insulated shared communal play areas, walkways linking them to parks and other family amenities.”
  - “Low-rise, architecturally interesting buildings with solar power and recycled grey waste.”
  - “Buildings that are low-rise, pleasant to look at and self sufficient in energy and waste processing.”
- Create regulations that require developers to adhere to sustainability principles in building design.
  - “Building regulation to increase solar power use and generation in new buildings and infrastructure.”
  - “Have a rule – every new building must utilise sun to heat water.”
  - “Enforced solar requirements for new developments.”
  - “All buildings to be green compliant, solar powered, double or triple glazed, power efficient buildings at a reasonable cost.”
  - “Attractive energy-efficient buildings – solar panels, rain water collection, waste water recycling. Impose a building code that requires this of developers. Bring in an urban design panel that all building consents have to pass through (as happens in other NZ cities).”
  - “Make Green Star guidelines mandatory.”
  - “Enforce practice with respect eco-building.”
  - “Should require all new buildings to have full insulation and solar electricity and water heating etc.”

## ***Stormwater management***

### ***Topic summary***

There are a limited number of comments on stormwater management. A common theme is rainwater collection on rooftops of new buildings.

### ***Number of Comments: 47***

- Limited number of comments.
- Rainwater collection on rooftops is a common theme.
  - “Eco-city – water from roofs used for watering green areas and gardens.”
  - “I want all rain water re-used for irrigating green spaces.”



- “Water and rain overflow captured and recycled to garden. Maybe dual walk/cycle way on top of city would give city a unique advantage, be eco-friendly and continue ‘Garden City’ concept.”
- “Storm water capture (e.g. for toilets) and solar water heating.”
- “More green space integrated with stormwater treatment systems (the Avon river currently receives vast amounts of untreated stormwater filled with various contaminants).”
- “All rain water re-used for irrigating green spaces.”

## ***Renewable energy***

### ***Topic summary***

Common themes include solar and wind power in new buildings and for powering infrastructure, such as street lights and public buildings. The rebuild is a huge renewable energy opportunity for Christchurch.

***Number of Comments: 517***

- Solar and wind power should be incorporated into new building design and be used to power key infrastructure such as street lighting and public buildings; rebuild as a huge renewable energy opportunity,
  - “All new buildings to be solar powered and that ‘down the track’ all CBD buildings will switch over to solar power.”
  - “An eco-friendly city using solar power.”
  - “Solar panels on buildings for electricity to make Christchurch a greener city.”
  - “... solar-powered street lights and stuff...”
  - “Solar-powered lighting in the inner city (businesses receive tax or rate rebates) for contributing to lighting public space.”
  - “Solar water heating and solar electricity encouraged.”
  - “Try to incorporate min wind turbines and solar to power new buildings.”
  - “When building again make sure solar power is used in the buildings.”
  - “Well lit – by the sun/natural daylight and by artificial lights at night – solar powered? Low energy.”
  - “A resilient city. Less dependence on networks – electricity (solar panels), water (buildings have own water tanks), sewage (compost toilets).”
  - “Make buildings as eco and self sufficient as possible. Naturally lit, mixture of rooftop gardens, solar panels, wind turbines.”
  - “Vertical axis wind turbines on the corners of buildings... wind turbines will help with power demands...”
  - “Small wind turbines designed by Christchurch company Electec can provide the technology to link these power sources into the buildings electrical infrastructure.”
  - “An inspirational city with wave power, wind power, and solar power.”
  - “Wind farms, so that we have an alternative source of power in the event of another natural disaster.”

## ***Sustainability***

### ***Topic summary***

New builds must incorporate sustainable design principles. Government agencies based in the Central City should use hybrid or electric cars.

***Number of Comments: 389***

- Rebuild with sustainable design principles in all buildings.
  - “Instead of ‘Art Deco’ like Napier, ‘Art Eco’. Solar panels, gardens on roofs, efficient heating – let’s lead the world in sustainability!”

## Share An Idea Summary

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- “INSIST that all buildings be environmentally state-of-the-art, i.e. water collection and re-cycling, solar power, sustainable materials.”
- “Fantastic new architecture – modern but sustainable and with soul. Like some of the best new European architecture. With a mark of its own.”
- “It dares to be adventurous with design in a way that reflects climate change and sustainability. The Art Gallery design in my mind is superb.”
- “Sustainable focus – all new buildings to incorporate green features.”
- Make government vehicles hybrid or electric.
  - “Most CCC, govt & emergency vehicles, and all buses, should be plug-in hybrids (or PEV), able to continue in an oil shortage.”
  - “Rebuild the city based on the principle of sustainability.”
  - “Building in a environmentally sustainable manner is a no brainer, the only way forward.”
  - “Green, beautiful, people friendly. a world leader in sustainability.”
  - “We need electric car charging stations. Electric cars are really starting to catch on, especially as we approach peak oil.”

## Water

### Topic Summary

There are a limited number of comments on water. Grey water and stormwater collection systems and re-use should be incorporated into new building design.

#### Number of Comments: 60

- Limited number of comments.
- Make use of grey water.
  - “Grey-water functions as compulsory for all new high-density buildings in the CBD.”
  - “Think more than Central City. All new houses should have solar water heating; & rainwater and/or greywater tanks for toilet and garden use.”
  - “Grey-water can be used and black water further broken down.”
  - “Spacious with balcony and roof garden everywhere using recycle waste water.”
  - “I want each house to have a minimum of a 1000-litre drinking water tank, a 30,000-litre tank for garden use, shared between 2 or 3 houses.”
- Make use of stormwater and rainwater.
  - “Small rain-gardens behind the kerb to capture some stormwater and provide ‘green pockets’.”
  - “Should also contain gardens of some sort so that when it rains then excess water would drain through the garden and can be stored to irrigate those gardens when needed, but to also be used to fill toilets cisterns, etc...”
  - “Allow people to store rainwater – this will reduce the peaks of flooding and droughts.”
  - “Water collected from roofs for garden watering and green lawns.”

## ***Air quality***

### ***Topic summary***

There are a limited number of comments on air quality. Encouraging cycling and other forms of active transport will reduce emissions from cars and other vehicles such as buses.

#### ***Number of Comments: 45***

- Limited number of comments.
- Encourage cycling as a means of reducing emissions from cars and buses.
  - “Off road cycle lanes all over the city so we can all leave our cars at home, save petrol, keep fit, clean air and safe for children.”
  - “I want more biking because I hate having to breath in petrol fumes every day when I bike.”
  - “For the Central City, reduction in motor traffic will improve the air quality.”
- Reduction of traffic, including big, polluting buses.
  - “I don’t want cars, buses because they cause too much pollution.”
  - “Less pollution due to lessening of traffic.”
  - “I don’t want to choke on the fumes of fossil fuelled vehicles as I walk thru the city.”
  - “Minimal polluting buses...”
  - “Buses can be smaller and quieter.”
  - “Small alternative fuel-driven mini buses and trams and gradually replaced by shuttle buses on the main routes.”
- Use alternative fuels in buses to reduce pollution.
  - “I should be encouraged to change all of these into bio-fuel or electric to reduce pollutants in the air.”
  - “The buses worked very well before the earthquake and would become part of this hub; also it should be encourage to change all of these into bio-fuel or electric to reduce pollutants in the air.”
  - “Short run vehicle such as buses are powered by compress air stored in on-board tanks and refilled at depot and run end points.”
  - “Inner city electric buses to transport people...”
  - “Good efficient low carbon buses.”
- Restrict smoking in the streets.
  - “Smoke-free city! It will only be time so Christchurch let’s lead the way with clean air for our children.”

## ***Clean green***

### ***Topic summary***

Christchurch has the opportunity to become a world leader in sustainable building design, creating a green Central City that locals and tourists will want to visit.

#### ***Number of Comments: 292***

- People want Christchurch to be a world leader in the use of clean, green, sustainable development.
  - “Aim high. Develop a world-class, sustainable, modern green city. The next Vancouver or Reykjavik. Establish a new global benchmark!”
  - “Make the city more environmentally friendly; more public transport, public gardens/parks, more bike lanes, use eco-friendly materials, etc.”
  - “A sustainable and green city, which makes a showcase for a modern and climate neutral city in the southern hemisphere.”

## Share An Idea Summary

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- “We have to be sustainable and lead the way so people from around the world and NZ will want to come here to see how it is done.”
- “Green in every sense of the word .... leading the way with eco-planning, buildings and planting.”
- People want to create a clean, green Central City that locals and tourists will want to visit.
  - “Resort like accommodation for the tourists intertwined with the Avon river – to keep us beautiful green & attractive for tourism to prosper.”
  - “Could become a sustainable eco-city which attracts visitors for that reason.”
  - “Encourage educational/green tourism by ensuring that Christchurch emerges as the world leader in sustainable urban development.”
  - “The world views NZ as new, clean/eco/green, forward thinking and tech savvy. We should reflect this vision rather than restoring the past.”
  - “We want it to be a clean, green city which will attract tourists.”
- Use sustainable sources of energy.
  - “Wind and solar generators on ALL CBD buildings – make a statement about how green we can be.”
  - “Promote a clean, green city with all new buildings having a renewable energy source that provides a certain percentage of the building energy use.”
  - “Use renewable energy solutions for every rebuild that takes place – make Christchurch the clean, green paragon of progressive development.”
  - “Promote use of solar heating in new buildings. Promote clean, green and insulation usage in new buildings.”
  - “Christchurch needs to be at the forefront of sustainability – to be truly clean and green. Therefore low energy transport and energy efficient buildings are paramount.”
- Less or no rubbish lying around in the Central City.
  - “No rubbish in our city, keep our green look of New Zealand.”
  - “Clean and green city. When there is no rubbish.”
  - “Another huge issue we believe needs to be addressed is the lack of rubbish bins in the Central City and surrounding suburbs – we realise bins were taken away to encourage people to take their rubbish with them, but from practical experience gained from conducting numerous river/street clean ups, this philosophy is clearly not working. Also the lack of specially designed bins that can take recycling and cigarette butts in the rubbish bins or having separate cigarette bins beside normal bins is another issue we feel should be dealt with. There are so many cigarette butts littered on Christchurch streets; this isn’t aesthetically pleasing and has an environmental impact as the chemicals leach into the waterways and affect the fragile ecosystems. Other cities in Europe have rubbish bins with many different slots for recycling and cigarette butts.”
  - “If Christchurch wants it clean green image we should also add healthy to it. It would also mean less rubbish/junk.”
  - “No cigarette butts, no spitting, a fine for spreading rubbish.”
  - “I want stricter laws on littering.”

## ***Future thinking***

### ***Topic Summary***

The rebuild should be future proofed as much as possible.

#### ***Number of Comments: 264***

- People want consideration to be given to future technologies in the rebuild.
  - “Future-proof infrastructure, like underground ducting for today’s communication systems and future systems we can’t imagine.”
  - “Plan for the future – encourage energy-efficient housing designs and refits, loans for installing solar power and heating.”

- Consider well designed and creative architecture and buildings, not just concrete tilt slab design.
  - “No blank concrete architecture, thrown up in the name of speed and cheapness.”
  - “No cheap tilt slab, no awful steel and glass. It is possible to produce elegant and beautiful modern buildings that follow a theme and create a city for us and future generations to be proud of.”
  - “I don’t want cheap tilt-slab boxes thrown up to fill in the gaps.”
  - “No concrete bland buildings are quick and easy to construct, but look awful.”

## Other

### Topic summary

A range of comments are included in this node, such as enhancing recycling efforts, incorporating elevated gardens in building design and making more use of green transport options, such as electric buses in the Central City.

#### Number of Comments: 870

- Create an eco-friendly Central City, especially in terms of sustainable buildings and green transport.
  - “Make Chch a model eco-city that the world will want to visit. Free public transit, walk/cycle paths, self sufficient buildings, gardens.”
  - “All homes & buildings to have sensors & smart systems to automate lighting/climate control, saving energy & predicting future consumption.”
  - “Anticipate life without fossil fuels and build something for that world.”
- Electric buses in the Central City, with infrastructure for electric cars or incentives for users of hybrid vehicles.
  - “Install all the infrastructure to handle the electric cars of the future.”
  - “We have an opportunity to move out of the old diesel and fumes mentality to something clean, green, and 21st century.”
  - “People feel better when things are Energy efficiency and it is also cheaper to run, so it is a win-win situation.”
  - “Electric recharge points for mobility vehicles.”
- Cars should be kept out of the Central City.
  - “Park and ride – places to park outside the city centre with regular “green” energy efficient buses to take troopers back and forth.”
  - “The city will not be inviting for people if there are too many vehicles.”
  - “Only electric buses & trains in Central City.”
- Enhance recycling efforts in the Central City.
  - “I want more recycle bins because it helps keep ChCh green.”
  - “Recycling bins everywhere.”
  - “Better looking public place, recycling station.”
- Use timber/wood as a source of building material for the rebuild.
  - “I want buildings made of timber (like the new tower block at NMIT) local resources, unique, safe, cost-effective, resilient, attractive, eco-friendly.”
  - “Timber-framed buildings with other local and preferably sustainable materials.”
  - “Timber built, straw or earth built houses and business buildings – sustainable material and eco-friendly.”
- Investigate options for an elevated garden look to the Central City.
  - “As close as possible to this: <http://www.elevatedgardencity.com/> let’s make it green.”
- LED public space lighting is a popular choice for some people.

## Share An Idea Summary

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- “I want LED street lights ( cut down the power bill).”
- “LEDs save electricity.”
- “Now time to save our country some big money on solar LED street lighting.”
- “install solar LED street and business lighting.”

### ***Business incentives***

#### ***Topic summary***

The underlying issue is restarting businesses in the Central City. There is a general desire to give businesses a hand to get them back operating in the city in an environment where a lot of businesses are likely to have a lot of business start-up costs. Low tax and low regulation and a quality environment that is a magnet to businesses is desired. People also want to see innovative and businesses that follow sustainability principles rewarded.

#### ***Number of comments: 291***

- The overwhelming theme is a request for affordable, low-rent commercial spaces to encourage small business back into the Central City. In particular, there is a desire to have incentives targeted to the businesses that are new and establishing and the most desirable in the Central City.
  - “Have low rent commercial/shop spaces so businesses that were lost in the earthquakes are more likely to attempt to open.”
  - “Make sure there are small, low-rent spaces for the quirky micro-businesses that give the city character and are never found in malls.”
  - “I want enough cheap rentals so that local entrepreneurs and creative people can afford to begin new businesses...be they food, clothing, music or art...we have enough big box international chains.”
- There needs to be things that encourage small business to work from the city beyond just money. There needs to be a reason for businesses to want to trade out of the Central City and this may be the environment that is created, including great outdoor/social space and through the fact that there are other similar people/businesses also wanting to be in the centre and the collocation of businesses.
  - “Have a business area where self employed people could rent space and work in a community environment and share resources.”
  - “Encourage new business and existing businesses to stay in Christchurch, encourage people to take the risk and set-up businesses.”
  - “A lot of support for small businesses – both mentoring type & legislative.”
  - “Business returning en masse will be a small miracle, so there will need to be other reasons to congregate. It will be full of people talking and sitting, a place for people to come together, in an unstructured manner, more like a bar or common room than a concert hall or theatre.
  - “I want publicly owned ‘business incubators’ with low rent and leases limited to three years.”
- Grants, tax incentives (including a tax-free zone), low-interest loans and lower rates are also popular suggestions to encourage business back into the CBD and to encourage investment. A low regulation environment is also suggested to get businesses back.
  - “Grants and tax incentives for small business start-ups to set up in the CBD – given to those that are unique and/or will enhance the vibrancy and diversity of the city. Melbourne does this.”
  - “Business grant be made available for very small retail manufacturer & IT business (less than 5 employees) to start up innovative firms in the CBD.”
  - “Lower rates for ‘interesting’ shops (e.g. unique services, wide range, fun to be in) as opposed to ones same as all malls have!”
  - “If want to attract commerce and retail back into the city it is important to cut red tape. Too much planning and regulation in the first years will throttle private initiative.”

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- “Attract business investment by clearly defined incentive such as zero rates inside four avenues. Zero reserve contribution for development reduces tax on company profits prosperity will follow example is zero fee system for Invercargill polytechnic.”
  - “Business grant be made available for very small retail manufac, & IT business (less than 5 employees) to start up inov8v firms in the CBD.”
  - To quickly populate the city, it was suggested that Government Departments, CCC, ECan and other anchor tenants need to be back in as soon as possible.
    - “In order to encourage businesses back Government Departments, ECan and CCC offices should all be returned as quickly as possible.”
    - “A potential conflict in this area is that some want international businesses, some no multinationals. Possibly international business but no multinational retail.”
    - “Have other government departments located in a government hub around the IRD building, i.e. have the government lead the charge of investing in the city.”
  - Creating temporary spaces for business, retail and art venues was suggested, so that before permanent long-term space being built, businesses could begin to operate. Once permanent premises are built then tenants would be transitioned out of temporary spaces.
    - “I think many spaces (and buildings) should be left as long-term spaces for temporary projects. Landowners should be given rates holidays if they give over vacant sites and buildings for temporary creative projects.”
    - “Council flexibility on the rules for a set limited time, say 5 years & allow temporary hut-type buildings in the empty spaces while they are needed. Precincts where like businesses cluster & people also live, giving a more village-type atmosphere. Covered market type spaces for everyday use to make retail business more flexible until the city gets established.”
    - “Rent-free spaces for pop up shops/cafes. Boost the ‘space filler’ initiatives.”
    - “Pop up shops and cafes in vacant sites.”
  - The need for incentives to encourage/enable eco-friendly building was suggested. The point was made that if there is not incentives to allow the initial capital to be invested, then buildings will be built as cheaply as possible out of necessity to get premises built and for landlords to gain quick economic returns.
    - “Financial incentives will be needed to encourage green building. This will pay off in the longer term, both for the city and the individual entrepreneur, as well as encouraging local green industry and providing jobs. If many small businesses are to re-establish themselves in the rebuilt city, they will need financial support to pay the higher rents that will inevitably follow new premises.”
    - “Incentives to invest in green energy-efficient, low-waste building now will provide huge paybacks in the future. What an opportunity!”
    - “Oversee the whole to ensure a cohesive building style. encourage ‘green’ tech with incentives for building owners. Listening to the people.”

## ***Funding the rebuild***

### ***Topic summary***

There are few comments in this area, compared with the large number of ideas that people offer as things they want for their city. The comments that are provided are mainly about how the government can support through issuing bonds and having lower tax rates. There were a few one-off original ideas about how to raise money.

#### ***Number of comments: 47***

- The limited comments that have been provided suggest that government assistance to rebuild the city is necessary with the mention of low-interest rate loans from local/central government and private/public partnerships.
  - “Create a ‘reconstruction bond’ with government guarantee to make this attractive for individuals and corporations nationally and internationally to buy and then re-lend to developers.”
  - “Get the government to cash out.”



## Share An Idea Summary

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- “The government bodies need to take responsibility for helping get it started – building low cost, quality residencies – making affordable land and loans available.”
- Some one-off suggestions were: sell bricks of the Arts Centre; sell the Ellerslie International Flower Show; departure charge from airport; seed bombs for \$2; Christchurch reconstruction bond; TVNZ to sell memorial video; sell deconstruction picture opportunities to film makers.
  - “Seed bombs can be sold for \$2. That means if every Christchurch resident buys one over \$1,000,000 is raised to go towards the Christchurch Earthquake Appeal - sound good?...”
  - “Raise money to help support business by doing community fundraisers/carnivals.”
  - “Funding – why not charge \$5 tax on airport departures, like Palmerston North does - visitors would support this and help raise plenty.”
  - “I would like to propose that NZ govt issues a special “ChCh Reconstruction Bond” to attract investors here to kick-start the reconstruction of ChCh ASAP...”

### ***Encouraging capital investment***

#### ***Topic summary***

Similar to funding the rebuild there is very little comment about encouraging capital investment. The general public may see that this area is outside of the current context of ideas for the Central City, as they tend to concentrate on the tangible outcomes rather than how the city creates those outcomes. The most common ideas were to do with planning rules to encourage investment. There were a small number of comments about encouraging foreign investment, while others wanted investment to come from locals.

#### ***Number of comments: 72***

- It was suggested by some that some planning rules were considered important.
  - “Reduce the number of zoning classifications for Central City and business zones to create fewer city-wide categories. No special status for the Central City and no premiums charged on rates.”
  - “Amalgamate titles of city blocks; clear sites four-storey buildings with space between them.”
  - “Matters such as building heights should be driven by market forces. If the owner builds to new code requirements, and tenants are willing to occupy the space, then that should be the determining factor. Taller buildings give a city credibility. We will not attract big business, and importantly, investment, to Christchurch, if it looks like a large scale Ashburton, or Canberra. Most CBD properties in Christchurch are owned by high net worth individuals. They will invest elsewhere if they cannot make an adequate return on their capital. Without them, the CBD will quickly die.”
  - “Land and buildings in industrial, business, Central City and residential zones to be measured and monitored on a comparable basis by way of a productive land-use monitoring unit i.e. whether vacant or in use, quantity of greenspace or provided on site, how long vacant, potential interim uses after period of disuse. Penalties to be imposed on owners of sites who engage in purely speculative land-banking (and demolition by neglect) where temporary ecological, cultural or social activities of value to the city could be carried out. Financial incentives to site owners who forgo revenue from parking lot development to enable such alternative uses.”
- Some people want an increase in foreign investment, while others want to keep ownership local.
  - “I want more foreign investment – it will make us wealthier and more cosmopolitan.”
  - “Local materials, local tradespeople, local creativity and ingenuity. Owned by locals with local money staying in the local economy.”
- Lowering taxes and resource consent costs and offering subsidies was suggested.
  - “Promote local businesses in CBD – offer tax break incentives, cheaper real estate options for local product options.”
  - “Encourage business and retail downtown with subsidies and tax breaks for a set period. Fight the malls becoming our de facto CBD.”
  - “Do anything possible that could INCENTIVISE developer to create buildings of merit – tax break, rates reduction – area concessions etc!”

## Innovation

### Topic summary

These comments by nature are generally unique and don't fall into particular categories. The most common theme that came through was to do with being innovative, generally in a sustainable way. Encouraging general innovation and being bold was the next most common theme amongst a relatively small number of comments.

#### Number of comments: 84

- Innovation related to green sustainability was suggested in a number of different ways.
  - “Offer a degree at Canterbury University (may already exist) on sustainability/green town planning/architecture. Attract global students to Christchurch to learn about green town planning in a city that can actually achieve it. Students would have the opportunity to have hands-on experience working to rebuild a city based on green concepts.”
  - “Sell Kiwi-made green products and green technology.”
  - “The innovative use of pre-stressed, prefabricated timber construction called Expan was developed by the Uni of Canterbury in collaboration with the Uni of Auckland and several NZ-owned timber companies. It can create buildings up to five storeys high. Each timber-framed building absorbs the equivalent carbon emissions of two steel-framed buildings.”
  - “By 2020, a new or retrofitted building in Cathedral Square will host New Zealand’s first Centre for Urban Ecology which explains how Christchurch has been affected by natural processes and how it has adapted to such events in order to harmonise the needs of people and nature.”
  - “The June 2011 Readers Digest has a very interesting article on page 72 titled The Future of Farming. It is actually about growing food plants in cities by gardening on the outside of high-rise buildings or in environmentally controlled buildings where the crops are rotated on a shifting elevator system. With food grown in the Central City this way, there is little or no cost in transportation. It sounds very futuristic and ‘way out’, but well worth consideration.”
  - “I want buildings built in wood, low-rise, organic and eco systems established at the beginning, building codes that show affordable eco-systems to sustain our world, Christchurch has such exciting opportunities. Let’s be passionate and think outside the square for solutions.”
- Attracting innovators and excellence was also suggested.
  - “Look forward and build a city of the digital age to attract creative types from around the world.”
  - “Science and technology is the future for NZ. CHCH is the S&T capital of NZ and as such should have a science and technology hub in the centre of the city where universities, polytechnics, industry are able to show the amazing work that they do to the public. This hub should be anchored by a new National Science Centre which would provide NZ citizens access to the innovation that is occurring in our city, increasing their scientific understanding, exciting kids about the wonders of science and providing life-long learning opportunities for everyone. It would also be a major tourist attraction for the city with visitor able to see examples of Kiwi ingenuity.”
  - “Create a ‘creative think tank’ to come up with a raft of cool ideas to draw on – these don’t have to be expensive.”
  - “Establish a research park that is adjacent to commercial hub to prosper a collaborative innovation community.”
- Keep things unique and supporting innovators, especially in businesses was suggested.
  - “Lower rates for ‘interesting’ shops (e.g. unique services, wide range, fun to be in) as opposed to ones same as all malls have!”
  - “Prosperous city attracting new business from abroad. Encourages New Zealand’s entrepreneurial spirit.”
  - “...reward people who are willing to take a risk and invest in new and better ways to take a risk and invest in new and better ways to do things that reduce the carbon footprint of the city – in the suburbs as well as the city centre.”
- Combining ownership and combining the sharing of space for small business.
  - “Collective ownership of city blocks. Individual owners of fragmented titles, owning 300 or 600 square metres each. Trying to maximise their individual return – building completely to their title boundaries. Should be ‘encouraged’ toward a shareholding or collective ownership of an entire city block. A collective-owned building – would then not need to build covering an entire block area.”

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- “I would like to see blocks of land with builds big enough to cater for several businesses so resource such as electricity, heating and etc, can be shared/distributed with maybe wind turbines/cell towers on top of buildings to help share resources.”
- There were a lot of one off suggestions for a range of different activities in the Central City that would attract users year-round, such as an orchard that gives away fruit and preserves in autumn, a hobby/craft precinct, themed parks and centres of business excellence.
  - “Dedicated orchard as a park. Give away fruit in autumn. Cider & jam-making classes, and a series of novel retail and brewers alongside.
  - “See if enough hobby/craft-related shops would get together to make a craft precinct; if so encourage with themed-cafes, displays, etc.”
  - “Snow park. Indoor snow park like Auckland has. Will generate money, tourist attraction for skiers and snowboarders during summer (and all-year-round).”
  - “Centres of excellence for service industries.”

### ***Attractive to staff***

#### ***Topic summary***

Give staff a pleasant environment outside of work (including transport and childcare) and provide quality public places and spaces for use before during and after work. Note that there is a need to get a good understanding of what staff need as this can be quite different to what residents need.

#### ***Number of comments: 50***

- Activities to do in the city before, during and after work.
  - “Things to do at lunchtime/after work.”
  - “Entertainment spaces, i.e. buskers/outdoor.”
  - “Access to recreational facilities.”
  - “Activities at lunch time and after work (buskers, speakers corner).”
  - “Stuff to do after work (both to work and around).”
  - “Theatre complex for after work – Cultural Precinct, live theatre.”
- A more accessible and quicker means of getting to and around the Central City would encourage people to work there.
  - “Removal of present bus transport routing (easy access).”
  - “Commuting time (public transport, etc).”
  - “Access – easy access walking, etc, to everywhere in CBD.”
  - “Accessibility – good public transport, park and ride outside four avenues, more cycle ways independent of roads and better bike lock-up racks.”
- A mix of ideas to make the Central City attractive to staff – access to green spaces during breaks, shared work centres giving the ability to work anywhere, child care facilities, green buildings and supermarkets.
  - “Encourage businesses to break free of traditional work spaces, give staff opportunity for access to adjacent green spaces during breaks, rooftop breakout spaces, etc.”
  - “Create clusters of like businesses to encourage interaction and like people working and talking together.”
- A reluctance to work in multi-storeyed buildings.
  - “Workers won’t want to work in high rise.”
  - “No high-rise buildings! I don’t want to work in one so why should anyone else?”
- People would like schools and day-care facilities nearby so it is easier to work in the Central City.

- “More early childhood centres or kindergartens in the CBD, this will allow workers to be closer to their children during the day.”
- “Schools, childcare (5-12 age group) – high-quality day care.”
- “Day care facilities, more schools near workplaces.”
- “If we want high-density living in the city we must have primary schools.”

## Communication technology

### Topic summary

There is one overriding theme here and that is free WiFi everywhere. This idea clearly dominated this section. A few comments state we need to make the most of future proofing for future technology advancement, and in particular, using fibre optic cabling.

*Number of comments: 487*

- An overwhelming call for free WiFi. Some want universal WiFi, whereas others want hotspots.
  - “Increased wireless coverage to allow citizens to spend more time outdoors during working hours.”
  - “Free ultra fast wireless broadband within four avenues. This will attract people, creativity and business to Central City. It would connect Central City to global community. “
  - “Central City should have free WiFi to encourage tourists & travellers to linger but on logging on should show a video promoting Canterbury.”
  - “I want Free to user, public access, broadband WiFi – across the city centre (whatever that may be) ...”
  - “I would like more gardens and public space. Parks and gardens and free WiFi around the city. nice shops and creative workshops and fun things for kids!”
- There are general comments about wanting Christchurch to be generally high technology or use technology. People are aware that technology is a key part of our future and this opportunity should be grasped while the current technology and other infrastructure is being repaired and replaced.
  - “While we are digging up streets, add fibre-optic cable where it is not already installed. For example the Telstra fibre-optic cable around Charleston is fast, reliable and cheap and a real advantage to the local businesses.”
  - “Make the most of current technology to turn Christchurch into the most modern and advanced city in New Zealand/Australasia – from both an environmental and technological perspective.”
  - “Modern technology which attracts individuals and businesses.”
  - “It needs to be an information technology hub – internet companies, offices for major internet sites (Trade Me, Grabone, Facebook, etc). It needs graphic designers, advertisers, journalists. It needs music recording studios, more TV shows to be produced and filmed in Canterbury.”
  - “Offer tourist-friendly things, like phone recharging points, incorporated into public spaces so that backpackers and tourists can tell their friends and the world what a clued up, switched on cool place the new Christchurch is.”
- Fibre optic cabling was also suggested a number of times.
- Put fibre in every CBD street.
  - “Instead of using copper wires for all of our internet connections we could use fibre-optic cables.”
  - “As such I suggest that while we have the opportunity with reconstruction happening and the CBD being closed off we should install a very high bandwidth fibre optic network under the streets of the CBD. To ‘future-proof’ this network we should install something with a traffic speed similar to the fibre backbone along New Zealand.”

# Share An Idea Summary

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## City living

### Topic summary

Making the city desirable for residential living was a strong theme. To do this people want a vibrant city where everything is available. A village feel was described by some. People also want it to be vibrant and full-of-life all day and into the night. The city also needs to be appealing to a broad range of people from families to students. To be attractive to this range of people there needs to be a range of accommodation types in terms of style and price.

### Number of comments: 707

- More people living in the Central City comes through strongly. Some imply that it would be good to create a village-type feel in the city, with many referring to European cities. Affordability, particularly related to young people, was also important for some,
  - “...I like the concept of several villages almost self sufficient. Also the idea of different land use hubs e.g. artisans area, a place where visual artists can live work and sell products. Public transport only to the edge of the CBD suggest three depots then small electric shuttles around the streets...”
  - “Make it a village hub for people living there. the streets come alive after 5 with people shopping, dining and strolling around their homes”.
  - “Affordable apartment living – encourage students into the city!”
  - “More affordable living spaces in the Central City.”
- Some suggest that the four avenues are irrelevant in terms of defining the city and suggest reducing the size of the CBD to make it more compact.
  - “The size of the CBD could be smaller to give it a sense of vitality.”
  - “A far more compact CBD, with precincts for tech, cultural, historic, retail, professional, surrounded by mixed residential & green space.”
  - “Shrink the size of the CBD to be encompassed by the one-way street system.”
  - “The Central City needs to be more confined in space.”
  - “The Central City should be far more compact than it was. Three or four level apartment or 2 storey terrace house type denser residential accommodation in the CBD needs to be encouraged.”
  - “CBD needs to be confined to area bordered by Montreal, Kilmore, Madras and St Asaph – or smaller area.”
  - “Review & reduce the extent of the CBD/Central City zone. It needs to be more compact (to ensure, for example, its walkability).”
  - “I want much the same as what is already there but in a smaller space. Reduce the CBD to within the confines of the one-way street square grid and open the leftover space between the one-way streets and the four avenues for higher-density housing.”
- A lot of comments regarding more vibrant living in the Central City were made. It was thought that this would not only make the city a safer and more pleasurable experience but also a place where people would want to spend more time and to potentially live.
  - “CBD needs to have enough accommodation to sustain a vibrant city. The right balance of low-rise apartments and cafes and bars.”
  - “...open spaces for performance and entertainment. These will encourage people to come and live in the city.”
  - “I want a vibrant city with a mixture of retail, commercial, entertainment & housing. A city market on the lines of Victoria market in Melbourne. This would bring the Central City alive and make it a pleasant place to live work & play.”
  - “Full of people, full of vivacity and people with jobs in the Central City. A beautiful place, where people choose to live and work.”
  - “The Central City needs people, life and activity.”
  - “It is important to have a mix of commerce and residential in the city, as that will help keep it vibrant.”

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- “People working and living in centre. Places for people to chill - restaurants, cafe, NICE library, green spaces, markets... not bars/drunks.”
  - Groups that people thought needed to be specifically catered for in terms of accommodation options were families and students.
    - “A lot of comments regarding more vibrant living in the Central City – generally creating more life.”
    - “People are able to live, visit and walk in the city, it doesn’t favour one at expense of the other, that it caters to diversity, family as well as singles, young as well as old.”
    - “Residential but also to allow access for families to live in – not the quarter acre but somewhere to sit and eat at home with easy access to green space outside.”
    - “A desirable place to live and interact, for young people, families and interested older people.”
    - “Inner city living. Bring back our young from overseas. They bring dollars back home, skills and our future generation.”
    - “Instead of storage spaces, create living quarters above shops and offices. Inner city living is preferred by many young residents and keep the city lively at any day.”
  - Conflicting suggestions as to what type of accommodation Central City residents need, with some people wanting apartments around or above commerce and entertainment. Some feel that mixed use will create noise issues for residents so are happier with separated living and entertainment areas. In general, people want a range of sizes and prices to promote diversity.
    - “Have an apartment above the business.”
    - “Above ground level work offices/studios (live/work units) and residential/hotel accommodation.”
    - “One thing that needs to be considered if people are to live in the city is the problem of noise. Young people in particular tend to stay up later and let their hair down, and part of that is noise, which is no good if others are nearby trying to sleep. Perhaps the use of specific precincts like SOL Square might help with this?”
    - “Work-life units like they do in the UK, where people live above their business or workshop.”
    - “Large choice of apartment living to encourage denser inner city population, and therefore, more likely to cycle shorter distances.”
    - “Mixed use is key - retail, hospitality at ground, commercial office/Tourism accommodation above, with city living above that and lots green space.”
  - Conflicting sentiments again with size of housing – some people wanting to keep apartment blocks small, while others want large apartment blocks to increase the population in the city without using up too much land.
    - “Inner city living in safe, low-rise, character apartments.”
    - “No large apartment complexes, say no more than 10 apartments.”
    - “I don’t want a limit to the amount of stories a building can be, be brave, have multiple storied buildings to bring more business back into Christchurch and provide apartment living for those who want to live within a vibrant culturally significant city. “
    - “Don’t be afraid of larger buildings, as long as those developers building them ensure they are architecturally aesthetic in design.”
    - “The housing should be a variety from studio like New York to units with a number of bedrooms & in places, terrace-type housing.”
  - There is a general consensus there needs to be more services and facilities available for inner city residents, such as supermarket shopping, cafes and gardens, within a small radius of residential living.
    - “Open air cafes on the streets. Late night delis.”
    - “A living space needs smaller scale, affordable options for buying groceries without using a car, for being entertained without travelling half way across the city.”
    - “Rooftop green space.”
    - “Day-to-day shopping readily available in town – small supermarkets and other food shops to encourage inner city living.”



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- “Ensure inner city dwellers can complete their shopping good & reasonable priced butcher/dairy product, fruit and vege, & bakeries available.”
- “Central City living would appeal if I could shop, relax and entertain without having to use the car.”
- “Give families reasons to live in the CBD. Better range of schools, playgrounds, pools, leisure facilities.”
- “There will be plenty of opportunities to work and play in the city centre but previously there were limited opportunities to access supermarkets without a car particularly in the north, east and west. They don’t need to be large format supermarkets, and preferably they would be smaller.”
- Quality transport and greening are seen as ways to make living in the city more attractive. If it is cheap and easy to travel in and out of then people suggest that, particularly young people, will be more likely to want to live there.
  - “...green vibrant place were transport is first by foot, then cycling, public transport, commercial and lastly private. Without people living, working and being able to get to and from the city we will not have a Central City.”
  - “I love the free bus. It would be great if we could find a way for the tram to be either cheaper or free to residents in the city.”
  - “Want places where people can live and work, e.g. small business like an optometrist where there may be only a couple of people working there. Have an apartment above the business. This way you use less petrol, better security, more flexible working hours, more people living in Central City.”
  - “We need to attract young people into the city centre to live. and work. Accommodation and transport must be designed to meet their needs.”

### ***Temporary/short-term rejuvenation of market/business activity within the CBD***

#### ***Topic summary***

There were a few comments made in this area to do with creating temporary markets to stimulate some retail and to get retailers and shoppers back in to the city centre as soon as possible. A few related comments are made in the incentives area (above).

***Number of comments: 37***

- Markets, from the few comments provided is the strongest theme, although no real consensus emerging. Some interesting ideas on using Sydenham as a stop-gap measure for retail and Victoria Square as a farmer’s market. Some made the point that the gaps in the city need to be effectively filled in with things more appealing than car parks.
  - “Use a place like Victoria Square for produce and food market.”
  - “Quickly erect office/retail buildings in a unique style in Sydenham (while waiting for the CBD rebuild).”
  - “We would like to see the Arts Centre market return to the Arts Centre market area or the Arts Centre side pavement of Worcester Boulevard (on a temporary trial basis from August 1st until the completion of the rugby world cup)....”

### ***Tourism***

#### ***Topic summary***

When tourism and local interests are weighed up, people want locals put first. The city and particular activities should appeal to locals first and subsequently, because of their high quality, will attract tourists. A general sentiment was, like other great city tourism destinations of the world, make it great and tourists will come. There were also a few comments that suggested particular attractions that would be attractive as something for tourists to do.

NB: there is an additional discussion of local interests versus tourism needs in the following section.

***Number of comments: 868***

- There was a lot of comment about doing things that will benefit both locals and tourists. Doing things well for locals will make a great place that tourists will want to visit rather than having specific ‘attractions’ geared towards tourists. Some made the point though that we need the money that tourists bring in



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- “A city for the people who live here, not for tourists, tourists will come because its a living city, not a relic.”
  - “Mixed use development – more activity in Central City in the evenings – Cathedral Square designed as people space, more like European and Australian public spaces with cafes/attractions to keep people in the Square past 5 o’clock. Also creates a city that tourists will see as a pleasant and attractive place to stimulating the local business economy.”
  - “People living and working and recreating there. A sense of place derived from small scale features rather than big overpowering structures. Lanes to explore and discover for tourists and locals alike. A sense of discovery for shoppers as well as other city visitors who are simply there to enjoy what it has to offer.”
  - “Cultural – Art Gallery, museum, Court Theatre. Fun – Arts Centre, market, entertainment, buskers. Variety of people – tourists and locals.”
  - “All the small shops and nooks and crannies, the buzz of people walking around, the mix of locals and tourists, the ability to walk around soak up the scenery near the Avon, etc.”
  - “It will have a low-profile, lots of sunshine, a wide array of vegetation, quiet and friendly. Overall it will have been designed for those who live in the Greater Christchurch area. This type of city will be better because locals will use it and tourists will come to enjoy what we have.”
  - “Buildings that are going to bring locals and tourists together.”
  - “Open and welcoming for the tourists BUT practical and useful for locals.”
  - “Central City space for locals, not just tourists.”
  - “Not too many tourist-aimed public places, as the city should be aimed at an enjoyable place for those who live there.”
  - “We need their cash!”
  - Trams are a popular choice for encouraging tourists to the CBD, with some people wanting an extended tram service to take people out to the suburbs as well.
    - “To have a train or tram system branching out through the city. For residents as well as tourists.”
    - “The ability to travel from city to Sumner, city to other chch landmarks, light rail, tram & buses.”
    - “A functional tram network that is not just for tourists would be great. Airport – CBD – Sumner.”
    - “More trams – especially heritage – tourists love them.”
  - The call for a culturally diverse Central City is a common theme, with people wanting Maori culture/activities, themed events and changing festivals/activities depending on the season.
    - “Themed events for bringing tourists to town. Festival of lights in winter so we can see the lights. A bigger Chinese Lantern Festival, it is in a place that is too small.”
    - “By creating the Central City as a creative and cultural centre, this celebrates Christchurch’s unique musical, artistic and cultural talents that we have offered New Zealand and are a big attraction for tourists and top performers, musicians, etc.”
  - Some suggest showcasing the earthquakes in some ways to tourists, for example with an earthquake simulator or keeping some buildings in ruins.
    - “Need to have a mix of things to get people in – apartments, cafes, bars, open areas, entertainments, cafes, bars, open areas, entertainment, fun parks...something dynamic for tourists, e.g. earthquake simulator outdoors, broken crockery mosaic.”
    - “Earthquake tourism? Education centre, displays.”
  - There are several ideas on how to accommodate tourists within the Central City, including youth hostels and vibrant, riverside boutique hotels, bike hire for tourists, use of the river, 2-3 storey hotels along the river, ice and wine, garden tour by providing more great gardens, green spaces, meeting areas, outdoor eating and open markets with cultural and ethnic precincts, bring back the Dux de Lux, and a farmers market in the sales yards.
    - “Create unique cultural/ethnic precincts within the CBD that provide unique shopping and eating experiences for locals and tourists alike.”
    - “Youth hostels that are safe, friendly and foster sharing of experiences for travellers.”

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- “Hotels (2-3 storey low-rise) along the riverside with balcony restaurants for tourists. Punters & kayakers can stop in too for a lunch meal.”
- “Resort like accommodation for the tourists intertwined with the Avon river.”
- “Would love to see bikes for hire – this would work well for tourists especially.”
- “Speciality shops and café/restaurant culture. The Avon river an open ribbon meandering through our city with an uninterrupted pedestrian and cycle track along both sides – extended beyond the Central City the length of the river. Bike hire for tourists?”
- “Bike rentals for tourists.”
- “Having the Dux de Lux back for a start would be huge for not only chch people and tourists as a social hub & bring people to the city now!”
- “Have shearers shearing sheep on stage, let people feel and see wool. Buy food, see cows being milked. Asians love that sort of thing as they come from big cities. Have all woollen clothes/rugs, etc (retail shop).”
- Cultural markets within the Central City and top-end fashion shops were also suggested as things that would appeal to tourists as well as locals.
  - “A large farmers market in The Square to draw locals into the city centre. Everyone including tourists will enjoy the buzz.”
  - “The special fashion shops on Victoria and High streets should be rezoned and in walking distance of the city for tourists.”
- Free WiFi for tourists and locals was suggested as a way to present that Christchurch is a modern city and just to be another incentive for tourists to stay in the city.
  - “Free WiFi! That would be amazing for locals and tourists.”
  - “Central City should have free WiFi to encourage tourists & travellers to linger but on logging on should show a video promoting Canterbury.”
- Safety for tourists, especially relating to alcohol, is considered necessary.
  - “People, including tourists, must be able to access what they want, when they want, safely. Take away the booze outlets.”
  - “I want safe areas for tourists. Controlled – drinking/mixing/socialising.”

### ***Local compatible tourism and tourism spend (specific question discussion)***

#### ***Topic summary***

Respondents suggested developing a quality city that locals will regularly use, rather than specific tourist attractions. The point was made in a number of different ways that tourists come to see the Christchurch that the locals enjoy not an artificial place imported from elsewhere.

#### ***Number of comments: 574***

- Key suggestion, across many ideas, was to make the city great for locals and tourists will choose to come to enjoy those experiences. The areas that were discussed specifically were high-quality niche retail options and quality cafes. Good architecture was also suggested as a way to make the city great.
  - “When I’ve been a tourist overseas I love to go where the locals go! Cater for locals and the tourists will come.”
  - “Get rid of cars in ‘the city centre’ (1 square km). Creating more foot traffic friendly areas. Just look at Welly and how popular Cuba St is.”
  - “Build for locals and tourists will love that – green, alternative travel friendly, boutique shops.”
  - “Culture – & lots of it. Art; music; food; entertainment; history; architecture – people don’t visit to see their home, they visit to see ours.”
  - “Big complex, including cinema, theatre, concert hall and recreation space will be very useful to improve mental health of Christchurch people.”

- 
- Creation and celebration of local art, as a way to attract tourists, was suggested in a number of different ways by respondents.
    - “Rather than the abstract public art we’ve endured so far, introduce art people can play on, sit on, laugh @, scramble over & interact with.”
    - “A huge musical fountain with laser lights will bring people into the city and create an enduring icon of hope.”
    - “Sculptures, seating, grass areas, using recycled stone and timber from the buildings & cloisters of shops, eateries & cafes. Areas for live music.”
    - “Have Council rent assisted spaces for emerging designers to work and sell from – clothing, jewellery, art, weaving, metal, glass, etc.”
  - People also wanted to sharpen up day-to-day movement around the city and experience of the city. The things suggested included improving transport options, making it easy to get around, nice outdoor trees and pavers with less sandwich boards, safe, bilingual signs, improve use of the river, improve the square and provide services that people need such as supermarkets.
    - “If the city draws locals it will draw tourists. Let’s be unique not a theme park. Focus on quality not tat, one-offs not big chains.”
    - “Advertising free zone. No sandwich boards. No big billboards. Reduce visual pollution.”
  - People wanted quality places to go and things to do, like markets, including ethnic ‘towns’, produce and farmers markets in particular, and places for events like a stadium and convention centre.
    - “Put a farmers/food & craft market at the centre of the city, surrounded by specialist food retail and restaurants – a gastrodome!”
    - “A new athletics track should be built so that we can have international athletic competitions that will bring athletes and tourists to Chch.”
  - There were a few suggestions about specific attractions that would bring people to Christchurch. These included an earthquake experience, water park and kids play area.
    - “Build/develop a Central City market, for fresh produce. Examples are Victoria Market in Melbourne and Adelaide Central Market.”
    - “Bilingual signage in our city to reflect our dual heritage and history would show our true colours!”
  - Some suggestions to make technology more available to tourists.
    - “Links to mobile phones android, iPhone to help people navigate.”
    - “Develop a strategy for how technology can be integrated into visitor experience.”

## *Life theme*

### *Art, heritage & culture*

#### **Built heritage**

##### **Topic summary**

People want to hold on to what remains of our heritage. People want iconic buildings restored (such as The Cathedral, Provincial Chambers and Arts Centre) and where possible the preservation of what remains of damaged heritage buildings, such as strengthening heritage facades. The Cathedral in the Square is an important building in terms of heritage and morale for the city.

##### **Number of comments: 1703**

- Earthquake-proofing of remaining heritage buildings is essential.
  - “Make a feature of heritage that left – if it’s safe.”

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- “I agree with San Francisco ex-mayor. Strengthen & save all significant heritage. Our past is part of our future and a part of us all.”
- “Retain heritage (but modernise building techniques for safety).”
- Ensure new builds incorporate heritage principles and design. A desire for beautiful buildings that reflect our past. A lot of opposition to uninspiring, cheap tilt-slab buildings.
  - “Retain the history by ensuring that future new buildings ‘blend’ with the old.”
  - “Preserve more heritage buildings where possible. Rebuilding around these heritage buildings should be sympathetic to the existing saved building.”
  - “I don’t want pre-fabricated concrete buildings or super modern building styles which clash with existing heritage style buildings.”
  - “Modern architects preoccupation with concrete slab. Bauhaus buildings is boring and banal.”
- Reuse some of old heritage fittings in new builds; use strengthened heritage facades where possible.
  - “Creatively reuse some historic facades with contemporary (green) architecture.”
  - “I would like to see as many facades from the old buildings as possible kept, to provide some character.”
  - “Eco-friendly construction...wouldn’t it be great if we could say x% of the city is rebuilt from recycled timber, bricks, etc, salvaged from the EQ damage.”
  - “Recycle salvaged building materials and combine with green eco-friendly architecture to create a CBD which reflects the past and future.”
  - “Rescue the irreplaceable beautiful timbers, interiors and architectural elements from demolished buildings! Reuse as much as possible in new buildings within the city centre, particularly in public buildings. These elements of the past could be re-presented within contemporary architecture to maintain some link with the lost architectural heritage of Christchurch.”
- Restore iconic heritage buildings, such as Cathedral, Provincial Chambers and Arts Centre.
  - “Restore iconic buildings, cathedrals, Provincial Council Chambers, Cashel Mall facades, Arts Centre and Museum.”
  - “Please, please restore key heritage buildings – they are who we are.”
  - “Heritage should also be celebrated but lets pick the most important icons and show them off so they look stunning... we can’t keep everything.”
- ChristChurch Cathedral – some say restore it completely as it was; some say preserve the remaining parts of it in the rebuild; others say build a modern Cathedral that can become a leading modern design.
  - “Rebuild the two cathedrals to look the same as before the February Earthquake. This would be a tribute to the pioneers and those who followed them in the early 20th century.”
  - “Since the Cathedral is iconic, I believe it should be built to look similar to the actual design. Although it would look the same, it should be made out of more earthquake proof materials.”
  - “Rebuild Cathedral as soon as possible since it’s the icon of Christchurch (don’t mind some modern elements in the Cathedral).”
  - “The Cathedral should be rebuilt like Coventry Cathedral was – in modern style that refers to its origins and what we are now experiencing.”
  - “Forget rebuilding the ChristChurch Cathedral in the old style, build a world leading modern design. It will be an icon in the Square.”
  - “A beautiful glass spire as part of the Cathedral rebuild would be in”spire”ing!”
- Mixed opinions about replica heritage buildings.
  - “We should rebuild replica heritage buildings, to modern safety standards.”
  - “...replicating post-colonial architecture will only make Christchurch look like a theme park.”
  - “Keep and rebuild heritage buildings, we are an English city.”

- “I want replicas of our best historic buildings. We don’t want to lose our history.”
- “...do not create fake heritage by copying what’s lost. That’s fake history. It never works.”
- “I don’t believe in building pastiche mockeries of our old buildings. Let’s build something new making the most of what we have available, including the resources we have available (salvaged building materials).”

## ***Maori heritage and archaeology***

### ***Topic summary***

Some people would like an increased acknowledgement of Maori culture and history in the Central City.

#### ***Number of Comments: 114***

- Some would like to see a large Marae or cultural centre in the Central City or a space for expression of and representation of Maori heritage.
  - “Lets see a strong Maori presence, developed under the leadership of Ngāi Tahu. Let it be in the built environment and the regular use of Te Reo Māori as the bilingual (official language) alternative to Te Reo Pakeha. This will futureproof Christchurch culturally, and remediate biases of the past.”
  - “How about a large Marae in the centre of the city plaza in the open (not in a museum)...”
  - “Visitors and residents will recognise our historical journey and why tangata whenua are so important – it will be obvious in the architecture and the layout and the ambience.”
  - “Give Christchurch a sense of culture – should reflect its past, including Māori heritage and its recent earthquakes.”
- Some emphasised the blending of cultures present in modern day Christchurch.
  - “A reflection of our cultural heritage (Māori and European) and diversity - not just a crass commercial centre...”
  - “Buildings that reflect the heritage and the history of Christchurch, including Māori culture and the adopted cultures that we have.”
  - “I would like to preserve the Māori and English inheritance of our city. Tourists and others come to see the English city of the South – let’s rebuild it and incorporate our Māori inheritance.”
- A minority specifically opposed the idea of including Māori heritage in the rebuild.
  - “I don’t want emphasis on Māori culture. I’m sick of having it rammed down my throat.”
  - “I don’t want a Māori cultural centre.”

## ***Natural features/ecological***

### ***Topic summary***

The Avon river is an important ecological feature that people want as a focal point for the city.

#### ***Number of comments: 293***

- Utilise the Avon river as much as possible, making it more of a focal point for the city.
  - “Open up the Avon river. Make it open and accessible . Make it a stand out feature. Let us look and see the Avon. Allow our buildings to face it and not turn away.”
  - “We also need to make more of our lovely Avon river, make it a focus rather than crowd it in with buildings.”
  - “Bring old streams to surface, native plantings, green, incorporated with Avon.”
  - “Making use of our natural environment with Hagley Park and the Avon river being well utilised and respected/protected.”
- Create green areas or walkways along the Avon river.
  - “Enhance and strengthen unique natural features and landscape types along the river...create an interpretive walkway that extends from Hagley Park to the Spit Reserve with historical and ecological information.”

## Share An Idea Summary

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- “By featuring the Avon river (The Ribbon of Life) through our city and that it doesn’t get enclosed by high rises and roads, but will be surrounded by open spaces to make it user friendly.”
- “Extend the green spaces in the CBD, especially around the river.”
- “Green area along Avon, like in Adelaide.”
- Mixed opinions regarding native plants and trees. Many want an increase in natives (especially near the river) for ecological and cultural reasons, but others want to retain the “English” feel of the city.
  - “Trees. Ironically, the Garden City actually lacks trees, especially native trees. Nowhere in the city should you ever be out of sight of a Kahikatea, Matai, Kowhai or Totara – these are the original Cathedrals of our city and should be our defining natural symbols.”
  - “Use more native trees and plants in appropriate sites to attract native birds and provide a greater biodiversity of plant and bird life within the city area.”
  - “I want loads of trees – native trees and signs and information about where they’re from...”
  - “We should celebrate our dual heritage by using both native plantings and exotic.”
  - “...please don’t replace all the deciduous trees with natives. I think we should use a mix of both exotic and native plants to enhance the river and keep views of it.”
  - “Keep English plants not NZ natives in City Centre.”

## Historical development

### Topic summary

People want to incorporate aspects of the city’s heritage into future development.

#### Number of comments: 119

- Most comments revolve around the idea of incorporating the city’s natural, cultural, colonial and built history into any new design.
  - “Buildings that reflect the heritage and the history of Christchurch, including Māori culture and the adopted cultures that we have.”
  - “Make within the inner one-way system retain its Victorian theme by building new with the old look to embrace our city’s heritage.”
  - “A lane that is only rebuilt with old-style villas, and has only native trees as greenery.”
  - “To emphasise our Englishness and to complement the Cathedral, I suggest that a replica of one of the first four ships be erected in the square as a centrepiece. It could double as a visitor centre, restaurant, or both.”
  - “Recreate a 19th C Maori & colonial community for both local & tourist interest within the four avenues. Include working shops & food.”
  - “Landscape that sings Ngāi Tahu and the first four ships.”
  - “I’d like to see our European past incorporated into the buildings and style – after all the 1st 4 ships came here from Europe and the buildings were beautiful and great for studying the techniques/styles – they are unique to Europeans.”
  - “I believe we should celebrate and remember those special Cantabrians that have made a great contribution to New Zealand. I envisage a Central City park to become a ‘Park of Pride’ where statues of these people are placed with plaques telling the story of their special achievements. This will demonstrate those typical kiwi traits that make us unique.”
  - “Another link which would be both interesting and highly educational would be our ancient link to Gondwana. This could be shown as part of a garden/park-type exhibit using trees and plants having close links to their ancient ancestors, and by making permanent exhibits of some of the fossils from that time.”
  - “Farming is key to the Canterbury region...reflect our farming links into the rebuild of the city... farming-related art in the city, something in the EQ memorial to recognise the Farmy Army.”

- Others have given specific examples of historical monuments/infrastructure that should be retained or built.
  - “Keep the trams in our city, they are beautiful, historic, machines and show some of the history that we have now lost.”
  - “A history trail with rotating picture cubes showing views of the city at various stages in our history, great 4 visitors, residents & kids!”
  - “Open up waterways as shown on 1850 map.”
  - “Move the current train station back to the old one. Our one is hidden and you can’t see it...”
  - “The Arts Centre fully restored to be the main example of that era of architecture/history.”

## ***Earthquake memories***

### ***Topic summary***

People want the earthquake and victims of the earthquake acknowledged and remembered via green space, reflection areas, art works and a museum.

#### ***Number of comments: 1202***

- Many comments supporting idea of a memorial for those who died, incorporating green space, seating and areas for reflection.
  - “I want to see memorials to show we have not forgotten those who died. Plaques where people died. Names named. Spiritual cleansings of the sites.”
  - “A memorial for the earthquake victims to honour and treasure our past.”
  - “Definitely a memorial garden somewhere with lots of seating for people to reflect and have a break from their busy day.”
  - “More green spaces and memorial gardens. A place for people to sit and contemplate.”
  - “Build a beautiful memorial building for those killed – with gardens/cafes/maybe displays of the quakes (if not too sensitive) – also with spaces to meditate and be peaceful.”
- People would also like some kind of memorial or tribute to the rescue workers and helpers.
  - “A memorial to those who were involved in the rescue effort after the earthquake.”
  - “...and a memorial wall of all the brave heroic people who did so much for our city, and a remembrance of all the people who died.”
  - “There should be a bronze dog in the city to represent the search and rescue dogs who assisted at the time of the earthquake.”
  - “There could be photographs and information about all the helpers – people who came from overseas, university students, farmers, neighbours, soldiers, policemen, army personnel, ministers, doctors, nurses, including those who helped in many other ways.”
  - “The NAMES of those passed, the names of those that helped; names of individuals and names of the USAR teams, names of the people who died, names of the people remaining, names of the countries who helped, names of the people who came to see us. LEST WE FORGET is no longer about the war, we now have our own set of memories regarding the quake(s).”
- Some highlight the need to also remember people from overseas who died and who helped us.
  - “Memorial sites...input from overseas for foreigners who died.”
  - “Individual memorial gardens for the international victims. Filipino, Japanese, Israel, etc. Somewhere exclusively theirs to tend.”
  - “I want a lasting memorial to all those who died and survived February 22nd, and those who came from around the world to help us.”
  - “How do we thank the world for their generosity? Build a Thank You reserve that’s interactive, vibrant & represents the people who helped us.”
- Location: specific mention of Cathedral Square, CTV and PGC sites; memorial walkway.



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- “Would like to see park setting/memorial in CTV space.”
- “The CTV and PGC sites to become memorial parks with plaques for the deceased and adequate lighting to minimise crime in these areas. Park benches for people to sit and remember loved ones as well as thoughtful plantings.”
- “Reflection area in CBD as a memorial walkway with trees for each of those that died. Maybe an avenue of paving, lawn, seats & small plaques.”
- “Something beautiful but respectful. With lovely native plantings.”
- “Leave the ruined Cathedral spire as an earthquake memorial similar to A-Bomb Dome in Hiroshima.”
- Photos, plaques or other reminders located on former (heritage and non-heritage) building sites.
  - “Put up memorative plaques/lithograph photos in front of where buildings have come down-so we don’t forget what has been there.”
  - “All new buildings to have a cornerstone block or plaque engraved, stating what was ‘lost’ from that site, creates an instant heritage record.”
  - “...I DO NOT want to forget about the buildings that I grew up with. They are my history and they ARE STILL important.”
  - “I am a fan of the heritage of our city but I appreciate that many of those buildings will be lost. I would like them to be remembered with an information board on the footpath in front of where the building was, it should have photos of the building in the earliest photo that can be found, a more modern photo pre-earthquake and then a post earthquake one (if appropriate)... I hope this would enable a walking tour of the historical buildings even in their absence and encourage us to remember the city as it was while not preventing its modernisation.”
- Use rubble/bricks/debris creatively, e.g. public art works, paths, reminders.
  - “Make a memorial walkway – each family who lost loved one to select a mosaic pattern to place in walkway made from broken china and old bricks.”
  - “Collect some glass from the windows of all the broken churches & use them to create a memorial window in the Cathedral.”
  - “Build a feature ceramic wall or sculpture with all the bits of pottery broken in the quakes. Make an artistic memorial.”
  - “Use rubble to create a mound or amphitheatre as a memorial. Provide some shade/shelter and plantings on or around it.”
- Many comments supporting the idea of a specific earthquake museum or a permanent display in the existing museum.
  - “Earthquake memorial museum – create a wonderful building which shows us the old/the broken and the new Christchurch. ‘A slice of time’ including earthquake simulator space to experience the 6.3.”
  - “An earthquake museum and an earthquake simulator would attract visitors, and position Chch as a world leader in seismology and recovery.”
  - “There will be a place where the story of the earthquakes and rebuild will be told – the Canterbury Museum seems the obvious place for that.”
  - “International earthquake research centre/museum/ memorial (to recognise the impact of earthquakes on Christchurch).”

## Art

### Art venues

#### Topic summary

People want outdoor performance venues and performing arts precincts surrounded by other mixed uses. This links with the desire for a wide range and number of green spaces.

#### Number of comments: 1316

- Many comments supporting the idea of outdoor amphitheatres/open air venues for live performances and entertainment.

- 
- “Create an open air theatre space for free public performances.”
  - “More spaces for outdoor entertainment, busking & concerts – versatile areas.”
  - “A 200-seat outdoor amphitheatre would be a great place for concerts, children’s plays during the summer holidays, buskers, or just to hang out during lunch.”
  - I would like to see a sunken amphitheatre developed in front of the Cathedral so we have a specific area for ‘outdoor performers’.”
  - Dedicated music, art and theatre venues.
    - “Some professional spaces for The Court, CSO but others not dominated by the university or other groups but spaces that are changing and provide for all sorts of groups.”
    - “Venues for bands and music needed. Carefully separated from living zones for noise protection.”
    - “At least one awesomely epic theatre. Make places like the Court Theatre larger and more modern...”
    - “It is imperative that large theatres are retained/strengthened/made better so we can continue to host successful theatre, dance and drama...”
    - “A central theatre, tying in the with museum and Art Gallery would be great.”
    - “The School of Art and Design and the National Academy of Singing and Dramatic Art could have a much larger presence with galleries and performance spaces.”
    - “Bands, dance and theatre groups are all starved for rehearsal and performance venues.”
    - “More art galleries please...”
  - Precinct(s) for the performing arts, surrounded by other mix uses (green space, cafes, residential, galleries, museums, boutique shopping).
    - “...theatre precincts supported by restaurants, outdoor amphitheatre spaces and venues of live music and other performance.”
    - “...quality venues for cinema, theatre, arts and music blended with outdoor entrainment areas (Soundshell) set amongst green areas with lots of cafes, bars and restaurants.”
    - “...to the west around the Arts Centre a cultural area should be encouraged, less office space, more residential and entertainment centres. Cafes, restaurants, perhaps new performance spaces built in the now empty areas.”
    - “A stunning Centre for Performing Arts... a cultural hub for all our creative expression.”
    - “Centre of excellence for music, arts, etc – build on the excellent new Art Gallery theme.”

## **Public art**

### **Topic summary**

There is a desire to fill the Central City with vibrant street art, especially near the river. This links with a desire for increased use of the Avon river and a broad range and number of parks.

#### **Number of comments: 748**

- A lot of support for sculptures and other street art dotted around the city and especially near the river.
  - “More street art and sculpture – not necessarily huge expensive iconic works but smaller statues, mosaics in the pavements, small fountains. Make the centre a joy to discover.”
  - “Lots of art/sculptures – use young local designers.”
  - “Art and sculpture everywhere and the city will be full of happy vibrant people. Surprises around every corner.”
  - “Public works of art which surprise with their location.”
  - “Changing street art displays that are interactive, such as fountains.”
  - “I’d like to see some spectacular fountains around the city - in Cathedral Square, other squares and maybe even at some roundabouts.”

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- “More interactive public art, kinetic sculptures.”
- “Art installations similar to that found around the Wellington waterfront.”
- “(AVON RIVER?) a continuous promenade with lots of interesting cafes, art studios and public art . A place for all to enjoy day and night.”
- “Walks along the river with themed plantings, sculpture from local schools and colleges, cafes, art classes, piers for public use.”
- “Rather than the abstract public art we’ve endured so far, introduce art people can play on, sit on, laugh @, scramble over & interact with.”
- Poetry, murals, art and projections on walls.
  - “I want murals. Beautify the ugly bland blank spaces.”
  - “Inspiring poetry engraved in stone.”
  - “Poetry on the walls of some buildings as in the Dutch city of Leiden – gives a human feel and makes an attractive tourist feature.”
  - “I want floral mural on bare walls until rebuilt.”
  - “Spaces on building walls used for public art, i.e. projecting images (is a growing art form).”
  - “Imagine a modern building with its former Victorian frontage projected at night. These projections could also be altered or changed to suit any themes current at the time in the city. Floral projections for the Ellerslie International Flower Show, rugby for the World Cup or Bledisloe.”
  - “...what about some really good street art in an otherwise unattractive area? We could have competitions for the painting of the season (four a year) and a copy of the winner could also be projected from a site in the square.”
- Not conservative art!
  - “Quirky sculptures.”
  - “Funky sculptures.”
  - “Lots of exciting, challenging, public art.”
  - “Different feature art covering all forms of art.”
  - “Not so stiflingly conservative. More culture, e.g. graffiti art.”
  - “Encourage the avant garde, delightful...”
- Opposition to the current location of the Chalice sculpture in Cathedral Square.
  - “Get rid of that bloody chalice (move the chalice to outside the Art Gallery).”
  - “Please keep the Square uncluttered. I still can not find any beauty in the Chalice.”
  - “Remove Chalice to Hagley Park.”
  - “Shift Chalice to the Botanic Gardens or Victoria Square to a site where it will blend in and be more compatible with its surrounds.”
  - “Removal of Chalice Monstrosity...”
  - “Move chalice, to more appropriate place where its beauty will be enhanced.”

## ***Performance art***

### ***Topic summary***

People want the outdoor spaces that are provided to be people-friendly and encouraging of performance art in the form of live music, comedy and theatre.

***Number of comments: 926***

- People really enjoy and value buskers, comedy acts, live musicians, theatre performances and other street performers.

- 
- “I love the buskers festival! The cultural festivals...”
  - “It would be great to have street artists and performers not just at the buskers festival but all year round! That would bring tourists here and give the city an edge other places don’t have.”
  - “Lots of music and visual/performing arts in wee bubbles throughout CBD.”
  - “More clown and acrobats.”
  - “Students busking, artists sketching our lovely city and me.... smiling a big smile!”
  - “Encourage people to linger and enjoy the environment. Musicians, jugglers, actors.”
  - “Most of all I have missed going to orchestral concerts in the Town Hall and the productions at the Court Theatre and the Arts Centre cinema shows.”
  - People want the opportunity to be able to easily access and enjoy performance art, especially at no or low cost.
    - “I want lots of free buskers festival events, firework shows, outdoor cinema!”
    - “I want to see dancers rehearsing/musicians practising.”
    - “Have an outdoor amphitheatre for free busker entertainment by day and an outdoor movie theatre for showing classic movies in the evening...”
    - “Things and places that don’t involve spending large amounts of money – buskers, entertainers, school children busking.”
    - “Open attractive spaces, free live entertainment day and night and a pedestrian-focused environment.”
  - Support and assistance can be given to performers via funding and provision of spaces
    - “I love the festivals we have that bring people in - so we need spaces that allow and stimulate gathering.”
    - “A combined visual and performing arts centre with affordable gallery, studio and performance space for arts organisations in Christchurch.”
    - “Create frequent live free entertainment in Central City. Give musicians a chance to perform freely - bit like busking but more organised.”
    - “...there is huge musical talent in this city, encouraged by the CSM, CPIT, UC, and other informal groups. Why not regular platforms for everything from string quartets to jazz singing?”
    - “We love outdoor theatre and music so plan for open spaces where we can sit and be entertained.”
    - “Funding diverted from big events to lots of small events.”
    - “Theatre and public art spaces, a space where anyone can present art or perform for free.”

## **General arts**

### **Topic summary**

People want local art encouraged through the provision of affordable venues and spaces for artists.

#### **Number of comments: 493**

- Comments relating to wanting a cultural and creative hub, and support and assistance to be provided for local artists and local arts by way of affordable venues and studio spaces.
  - “Cultural hub in the city centre, more theatres and concert spaces.”
  - “I want creative hub – music and arts and culture, particularly more Maori culture.”
  - “A city with open areas for artist spaces to paint, stages to dance, a city that turns heart ache into creative inspiration for others.”
  - “Galleries, studio spaces for our local artists, clubs for musicians to play in.”
  - “Support for the arts in the form of cheap spaces for studios, practice rooms, galleries etc...”
  - “Paint for Christchurch – anyone can make a donation and step into the open air paint room and paint a huge picture while passers by watch!”

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- People supportive of shared venues for organisations and greater collaboration between different sectors.
  - “Performing Arts Centre Proposal... develop as creative, performance and administration space for the arts organisations. Multiple performance spaces. Multiple dance rehearsal/tuition spaces, acting rehearsal/tuition spaces, music rehearsal/tuition spaces. Locate CSO and CSM as anchor music tenants...”
  - “Arts organisations, groups, individual artists and practitioners are working more closely together because of the earthquakes. It is now common to share resources, spaces, and facilities for both arts practice and administration.... encourage and foster initiatives that lead to greater collaboration and community among artists, practitioners, groups, organisations and institutions.... and the different sectors of city life such as heritage, new technologies, education (secondary and tertiary), and business. Business needs to be encouraged and incentivised to partner with the arts.”
  - “A city the size of Christchurch can develop policy and initiatives that support its larger organisations and foster the growth of smaller incubators of innovative and diverse artistic activity. This may include encouraging collaboration between forms, organisations, and artists to develop a new and broader audience for the arts in Christchurch.”
- Many comments highlighting the cultural and personal significance of the Arts Centre site, how much it is missed by the public, and the general desire to have it restored.
  - “The Arts Centre with its activities, cafés, “Dux de Lux”, Court Theatre, movie theatres – the guest space the Arts Centre has had and a place to meet up with visitors and friends.”
  - “The Arts Centre must be at the heart of the city’s cultural hub. A place of inspiration and delight for all visitors.”
  - “The Arts Centre, with artists not commercial users, paying minimal rent and subsidised by the city if necessary.”

## Events

### Topic summary

People want existing organised events to continue, such as the World Buskers Festival and the Ellerslie International Flower Show, but would also like new events and attractions celebrating the arts, different cultures, the different seasons and sport.

### Number of comments: 999

- Existing events are very important to a lot of people and people want them to continue. Commonly cited events include the World Buskers Festival, Ellerslie International Flower Show, Chinese Lantern Festival, and SummerTimes concerts.
  - “Continue with the free events. They’re great.”
  - “Keep the wonderful festivals we have had in the past.”
  - “The Central City should be a magnet for cultural events – during daytime and night-time.”
  - “Continue annual events, such as Buskers Festival, Chinese New Year and other ethnic festivals, etc.”
- Some would like more events and festivals, particularly family, cultural and ethnic ones.
  - “I want more festivals in the Central City to celebrate the diverse makeup of our people and their cultures.”
  - “Also festivals at night like lantern festival, Matariki, etc, where our children learn to be together but with different celebrations that make us all Cantabrians.”
  - “Things like the Teddy Bears Picnic need to be brought back to town and advertised more widely – not languishing in some suburban park and no one knows it’s on. In fact, the SummerTimes festival over recent years has been a shadow of its former self.”
  - “Make the CBD a destination for families and children... perhaps a more central playground and park/picnic area with organised family events.”

### Some suggest events specifically related to the seasons.

- “...better organised festivals through the year, maybe celebrating seasons.”
- “A precinct could be made to be a more or less permanent Ellerslie, that is also a major tourist attraction, an income-generating operation, that has changing features/festivals per season-spring, summer, etc.”
- “Events – mid winter markets – ice rink/mulled wine/hot chocolate.”

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- “Imagine a mid-winter lantern walk along the river, carols by candlelight or the Chinese lantern festival spreading its way along the river leading to Victoria Park.”
  - “Seasonal festivals such as Winter in the City ice focus.”
  - Others would like major sporting events to be held or celebrated in the city.
    - “We need a MAJOR sporting event! Bring in the Grand Prix, a grand slam tennis tournament, world championship golf, the V8s...”
    - “We need more MAJOR events e.g. sports – tennis, cricket, golf, Grand Prix.”
    - “As you rebuild the city could you please consider a street race circuit for V8, motto GP, superbike and even to Formula 1 racing standard...there is nothing else like it in the South Island. Motor racing has a very big following in NZ and in Christchurch itself.”
    - “...huge all weather TV screen where rugby matches, cricket and national sports events such as the ASB classic tennis are shown.”

## Other

### Topic summary

There are other comments that relate to the Central City being a cultural hub and making art accessible to all.

#### Number of comments: 216

- Make the CBD a home to the culture and the arts.
  - “I want large open spaces for community and cultural activity.”
  - “I would love for Christchurch’s CBD to be more of an artistic hub, which is an odd thing considering my artistic illiteracy. The CBD should be the centre for all forms of arts and culture.”
  - “A creative city that draws people into it and is inspiring.”
- A place where arts and culture can be displayed and encouraged.
- Make sure there are venues and opportunities for cultural activities.
  - “Venues for cultural activities, e.g. city hall for CSO concert”.
  - “Vibrant cultural activities for own and visitors enjoyment”
- Cultural centre for different ethnic groups to present their culture.
  - “I want to see a vibrant, culturally rich environment for residents and tourists to delight in!!”
  - “Places for people to eat, share in the arts and culture, socialise, all amongst beautiful spaces and buildings.”
  - “We can make Christchurch a cultural hub, a beautiful town hall for wonderful events.”
  - “Create cultural house where younger ones can sing, dance and do something exciting.”

# Share An Idea Summary

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## *Community and wellbeing*

### **Neighbourhood**

#### **Topic summary**

People want a safe and fun environment for families and friends to meet.

**Number of comments: 289**

- Comments relating to creating a safe and vibrant community for families and people of all ages with communal gardens and gathering spaces.
  - “Having people living close to their workplaces and to the cultural centres with community gardens and green parks close to where they live.”
  - “I believe the key is having affordable apartments for both young and old, creating a safe friendly environment for everyone, the mix makes it so much more interesting and keeps otherwise ‘lonely empty’ spaces safe after hours.”
  - “I want housing that will generate community interactions, mix social groups and generations, and be at a very ‘human’ scale.”
  - “A city where we are known for excellent communities. We’re known by others, we share, we wave to each other. Each suburb has a village hub.”
- Informal spaces for meeting friends, connecting with neighbours, hanging out locally.
  - “I want more of a village feel, small businesses, open malls, parks and community gather spots.”
  - “I want people friendly spaces – markets, outdoor meeting places, parks + green spaces.”
  - “A place where neighbours talk to each other, work together.”
- People want affordable housing and diverse housing options, with good access to amenities, shopping and other facilities.
  - “I believe the key is having affordable apartments for both young and old, creating a safe friendly environment for everyone...”
  - “Attract families to city with flats and 2 storied townhouses; include play areas and communal garden spaces in same traffic-free block.”
  - “If social services, shopping and other residents’ needs are available in short travel distances that don’t require the use of a personal automobile, lower-income families can live in the new central Christchurch in a more sustainable manner.”
  - “I would move to the CBD if I could find a flat with fenced space for the kids to play and room to garden (either private or communal). This flat would need to have a high diversity of shops within an easy walk.”

### **Lifelong learning and education**

#### **Topic summary**

People want more informal learning opportunities in the Central City, particularly from existing providers such as the universities and CPIT. Mixed opinions about Central City schools.

**Number of comments: 238**

- Mix of views on university – some say bring it back into the city centre; others say leave it at Ilam. Some suggest bringing components back into city centre (e.g. music school, artistic displays, law school, study space, accommodation).
  - “We really have to be positive about bringing the whole university back into town. The benefits far out way the effort involved to shift.”
  - “UC has a billion invested in infrastructure at Ilam. It would have to have a spectacular financial inducement to shift into the city.”
  - “Encourage UC city campus, music and theatre schools, and more study space in the central library.”



- 
- “Would love UC there but its not going to happen. Close second? Halls of Residence with light rail taking students up Ric Rd to uni.”
  - “The CBD should be the centre for commerce in Chch, so the Canty Uni law & commerce faculties should be there.”
  - “University faculties to encourage or facilitate more public performances etc (art, music, theatre).”
  - Many believe the CPIT can play a more significant role in the Central City, with an education and/or business precinct developed around it.
    - “Enhance relationship between CPIT & the city.”
    - “Develop the area around the polytech – student village where they can show of art, theatre etc.”
    - “Student villages & creative business studios near CPIT.”
    - “Starting with CPIT, develop an Educational Precinct.”
  - Many comments relating to increased learning opportunities for the wider community, especially from existing education providers and other businesses.
    - “I think the CPIT, UC and Lincoln Uni have a great opportunity to contribute to the lifestyle, business and learning in the Central City.”
    - “Community (post-school) education venues in the Central City, now that high schools have mostly lost their activities.”
    - “Opportunities for people to retrain and be a part of the new Christchurch rebuild.”
    - “I want night classes/speciality classes to draw people in at night.”
    - “Friday night lecture series with UoC. Engage people in thinking, not just drinking.”
  - While people are happy with having pre-schools in the Central City, there are mixed views about having schools located there – some think they are an asset and contribute positively to the Central City; others think the Central City is no place for school children and can create problems.
    - “Schools from pre-school up to tertiary – why make people commute to the suburbs for schooling?”
    - “Don’t understand the opposition some have on here to schools. Cities thrive on being places where all ages co-exist & interact.”
    - “It will be easier for people working or living in the Central City if their kids can be catered for.”
    - “A mix of all: primary, secondary, tertiary, vocational, special.”
    - “No schools – kids need space to run around not city shops.”
    - “Not schools as that will increase pick-up, drop-off traffic.”
  - Many would like increased education opportunities in music, the arts, gardening and other ‘hobby’ areas.
    - “From young children to oldies. Basics to continuing professional and skill acquisition. Hobby classes. Public lectures & demonstrations.”
    - “Art classes. Movie making. Night-time photography. Creative hub of library & art gallery & CPIT.”
    - “...gardens used as more of a teaching facility; community workshops – free or nominal charge for short evening courses –cooking, yoga, herb gardening, French etc.
    - “Japanese language classes. Asian cooking classes.”

## Safety

### Topic summary

Curbing the effects of alcohol is a key safety concern, as is managing criminal and anti-social behaviours.

**Number of comments: 873**

- Control of alcohol consumption key to perceptions of safety in CBD, especially after dark; alcohol ban needs to be actively enforced.

## Share An Idea Summary

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- “A place I can feel safe in – from being hit by fast-moving traffic, from being mugged by drunken individuals. Minimise liquor outlets and pubs.”
- “Less drunk people – we need to address the booze culture in CHCH.”
- “Liquor ban outside of bars and restaurants so people feel safe, streets are clean.”
- More active efforts to curb problems with drunken and anti-social behaviour – police kiosks, community policing, better lighting on streets.
  - “Good lighting, community policing, zero tolerance to binge drinking and boy racers.”
  - “Bars to only be open till twelve or one. Well policed.”
  - “Good lighting, open spaces, police presence with control over bars and drinking.”
- Many want intimidating, anti-social and criminal behaviour to be dealt with and punished more effectively than in the past.
  - “Strong deterrents for anti-social behaviour.”
  - “Older people would walk if criminal elements were eradicated and they felt safe to walk on the streets day or night.”
  - “Get really tough on vandalism, in particular graffiti. Keep pressure on boy and girl racer activity...”
  - “Police must remove the anti-social types.”
- Specific sites associated with unsafe and intimidating behaviours include the bus exchange, the square and the Colombo/High St intersection outside the fast food outlets.
  - “No bus exchange in city where delinquents hang out.”
  - “Don’t have a bus exchange in the centre – always seemed very dodgy area.”
  - “No one feeling afraid or intimidated when walking around the Square.”
  - “PLEASE separate out the fast food outlets, i.e. McDonalds, KFC, etc, into different areas with no public seating nearby to discourage a recurrence of the anti-social behaviours (littering and mass loitering) seen before the quake...”
- People want the Central City to be safe and inviting for families.
  - “The Central City always felt seedy and unsafe. Our family never went there. It should be a place for people to gather and relax.”
  - “Families will feel safe at all times.”
- Elements of CPTED (Crime Prevention Through Environmental Design) to be incorporated in the rebuild.
  - “If Cathedral Square were to imitate many Latin city squares the place would be more attractive to visitors due to its enhanced function and the safety afforded by a large number of ‘decent eyes’ surrounding it.”
  - “Concentrate activity, vibrant city centre, active street frontages, active and passive surveillance, mixed use, encourage more residents.”
  - “Safety is paramount – plenty of lighting, lots of people around, especially at night – no dark alleys/corners.”
  - “All elevations address the street for attractive aesthetics, safety by passive surveillance of street.”
  - “Don’t forget to apply principles of crime prevention through urban design.”

## ***Post-earthquake safety***

### ***Topic summary***

People want a safer built environment to withstand the effects of future earthquakes.

#### ***Number of comments: 261***

- People want reassurances about returning to the Central City and entering buildings.
  - “Make public the geotechnical info about the ground beneath such buildings, and the foundations of the buildings, and the reasons why engineers believe they are safe. Tell us how those buildings coped, why the others fell. Give us the information we need before we can trust the inner-city buildings.”

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- “I would like to know that the ground beneath the city is safe. No-one wants to go back there if it’s not.”
  - “I want publicised earthquake strengthening that has been done for each new building, as if I can’t be sure I’m safe, I won’t come into the city.”
  - Comments relating to earthquake-proofing the city, so that there will be less damage if another one occurs.
    - “There will be more earthquake-safe buildings, allowing for minimal damage for future aftershocks.”
    - “I also think all buildings in the CBD that have survived the earthquake need to be even more strengthened because every aftershock weakens them.”
    - “I want the Central City able to withstand an 8.0 earthquake with little damage.”
    - “The most important vision for the city to me is that the city is earthquake-proof. I would not be happy if everyone enjoyed having the Cathedral Square finished being built and then we have another earthquake that destroys it again, that would be devastating.”
  - People want easy escape routes from buildings and accessible evacuation areas.
    - “All the buildings would have easily visible escape paths even if its on the outside of the building.”
    - “...another idea to enable people to exit the building, if the stairs are not functioning a fireman’s pole to be available to exit in a hurry!”
    - “...safe zones for people to congregate like Victoria Square or large green areas accessible quickly if an earthquake does happen.”
  - Many comments wanting to limit the height of buildings for safety and wellbeing reasons.
    - “Low-rise architecture – creates feeling of quake safety while letting light into the city.”
    - “I want no buildings over 2 stories. People need to feel safe if they are going to return to the Central City.”
    - “Rebuild needs to be lower (four storey max) so all tall towers should go – I won’t go in one anymore!”
  - People want improved facilities and resources for emergency services and civil defence.
    - “If police are shifting to new buildings, the communications centre must be safe. Same with St Johns and Fire Department. Civil Defence to have their own bunker out of the CBD with good road access, good yards for other associated groups, e.g. dog rescue and other similar groups.”
    - “Encourage the rebuild of a dedicated centrally located emergency services combined communications centre in a state of the art building that can continue to function after further earthquakes.”

## ***Safety after dark***

### ***Topic summary***

People want better lighting to reduce the amount of dark, quiet places where criminal and drunken activity can prosper. People also want a visible police presence, with low-tolerance towards anti-social behaviour.

#### ***Number of comments: 396***

- Good lighting (especially solar) and open spaces.
  - “Well-lit pedestrian areas and cycle ways.”
  - “Well-lit streets and open spaces.”
  - “More natural sunlight and solar-powered night lights for evenings and nights that create calmness.”
  - “Develop lighting to create atmosphere and safety...”
  - “Plenty of street lighting, floodlighting of buildings & gardens...”
- Restrictions around the hours which bars/pubs can be open or the way in which alcohol is sold.
  - “Shorten the hours for bars to serve alcohol. 1am is sufficient for a good night out. Opening until 3am only encourages binge drinking.”

## Share An Idea Summary

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- “No alcohol served after 12pm.”
- “Ban drunks from city bars for 14 days or more.”
- Increased police presence and visibility (including surveillance cameras), with low tolerance towards trouble-makers.
  - “Police walking the beat.”
  - “Nil tolerance for crime and hooligans, good lighting, visible policing, other people around.”
  - “...zero tolerance on drunks/noise.”
  - “More lights, video cameras in dark alleyways, & a gr8tr police presence.”
- Many believe that an increase in Central City living and people will equate to a safer night time environment.
  - “Have real people living in the city centre - all ages and stages so everyone has a stake in keeping it safe and making a community.”
  - “More residential development so that ordinary people are coming & going.”
- Safe transport options after dark.
  - “Good transport services to get late-night workers home.”
  - “Ensure night-time waiting areas for public transport are brightly lit, kept clean, & have police or security wardens present at all times.”
- Many comments wanting prostitute and sex businesses clustered in a specific area away from the heart of the city or eradicated altogether.
  - “No seedy sex shops.”
  - “I would like to see the adult sex shops removed from the city centre - they give it a seedy appearance.”
  - “Prostitution, massage/pornography, etc, regulated in a concentrated area.”

## ***How do we get more people to stay in or come in to the central city after 5pm?***

### ***Topic summary***

There is a desire for longer opening hours in the Central City for all types of businesses so that people stay longer.

#### ***Number of comments: 773***

- A strong desire for longer shopping hours and night markets.
  - “Compact Central City with later shopping hours.”
  - “Love the idea of night markets, at least for the weekends.”
  - “...closing the shops at later time, maybe 9pm or 10pm. I notice shops here close extremely early.”
  - “Retailers need to cooperate for a change. Agree to a 7pm closing time (even if it means opening later in the morn.) & combined sale days.”
  - “Longer opening hours for shops, cafes, etc. It’s only natural that people go home when things close.”
- People want cafes and other hospitality businesses to be open for longer, and with special deals.
  - “Cafes and bars that give special deals after 5pm.”
  - “More cafes open past 5 pm! Interesting arty ones, like the Hummingbird in Wellington.”
  - “Have restaurants offer family-friendly meal deals till 7pm.”
- After-hour events, attractions and entertainment.
  - “Good eating, night-market, European shopping hours, late-night coffee, concerts, museum, galleries open late, people just living in there.”

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- “More events, things to do in the city, other than go to the bar/pub. I enjoyed coming in to go to the arthouse theatres or good restaurants.”
  - “Have once a month or fortnight night festivals in the Square – bands, food and crafts stalls and other entertainment (street performers).”
  - “A night time fair with rollercoasters and rides and games.”
  - “You need after-work activities. Cooking schools, Language schools, indoor sports centres, hot pools, civilised bars.”
  - Reliable and safe public transport to get to and from the Central City during the off-peak times.
    - “Good public transport options into the city at night. Bus depot was a bit scary to hang around at night. A good tram/train to the suburbs.”
    - “Cheaper public transport during evening.”
    - “Have better public transport links that run as frequently as during the day so people can get about, 1/2 hour wait is unacceptable.”
  - People want cheap or free car parking after 5pm.
    - “Free parking is a must after 5pm.”
    - “Free parking in the CCC parking buildings after 6pm.”
    - “Easy, safe & cheap transport or parking, if I have to spend 30mins looking for a park or 45mins btw public transport I don’t go to the city.”

## Health

### **Public health and design for health**

#### **Topic summary**

People want environments that are healthy for people. This links to a desire for more green space.

#### **Number of comments: 1266**

- Create healthy environments and accessible facilities for children, disabled and elderly.
  - “Central city public toilets ON GROUND LEVEL with good kids changing facilities and maybe a parents room for feeding like in malls.”
  - “I want buildings that are accessible to all, no more steps and doors that are easier to open for those with a physical disability.”
  - “An accessible Central City, where people of all mobilities, ages, and cultures can move into and within easily, with access to green and accessible transport options. Everyone should be able to access all the new features developed, regardless of disability.”
  - “I am a wheelchair user, who travels alone. I plead for the rebuild of Christchurch to ensure that it is a truly wheelchair-friendly city. This includes the need for well-maintained, level paths, the access to street crossings to be very smooth, and not have bumps (which currently regularly damage my wheelchair).”
- Create and design environments that encourage active lifestyles, e.g. cycle ways and walking paths.
  - “Decrease the obesogenic environment by encouraging people to walk and bike.”
  - “Promote recreation through beautiful cycle and walk ways, let’s be a more active, healthy city.”
  - “Safe bike and walking routes, so I can commute to/from work, etc, safely without using car.”
  - “Activity and sports needs to be a focus – for the health of our population and as a way of bringing people to Christchurch – ‘events’ such as cycling and multisport are huge.”

## Share An Idea Summary

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- “Fit and healthy city. Walk, cycle, jog tracks. Obstacle course lunchtime open dance. Climbing wall. Green space for improvised football/touch.”
- Many want affordable and accessible sporting facilities, such as gyms, swimming pools and running tracks. They want these facilities to be used for both leisure and fitness purposes.
  - “Good swimming pools; easy access for disabled; easy for lunchtime swim by CBD workers.”
  - “Swimming pool/hydroslide/gym complex for training and fun.”
  - “Free outdoor gyms in Hagley for people to use on lunch break.”
  - “A gym/swim complex adjacent to Hagley Park for a one-stop fitness/fun stop suitable for both locals and tourists alike.”
- Some specific comments desiring a smoke-free Central City.
  - “Smoke-free, so no butts all over the ground for toddlers to pick up.”
  - “Family areas, no smoking anywhere outside.”
  - “I love the idea of a Smoke-free city! Or if not possible, at least having smoke-free areas, like by the river and in the busy shopping areas.”
- Community gardens, herb gardens, fruit/nut trees, and public drinking fountains.
  - “Plant lots of fruit trees and herbs so people can help themselves.”
  - “Edible community gardens with fruit trees herbs and veges that families can access include among the areas of relaxation.”
  - “More public drinking fountains - we have the best water, but people buy soft drink (obesity issues) as there is not enough free water!”

## ***Personal health***

### ***Topic summary***

People want health and welfare services for specific sectors of the population, as well as the wider community.

#### ***Number of comments: 22***

- A few comments wanting youth health services and support services for the wider community.
  - “We need the Youth Health Centre back, with a whole bunch of youth services based there.”
  - “Innovative, connected health services and social welfare centres for the primary health care needs and wellness needs of the community.”
  - “Places people and youth could go free/affordable services like health club/counselling-drop in places making it more accessible.”

## ***Mental health***

### ***Topic summary***

People feel a sense of loss after the earthquakes and some would like the opportunity to see the damage. Post-earthquake, some want spaces that enhance mental and emotional wellbeing.

#### ***Number of comments: 63***

- Many comments relating to missing everyday life in the Central City, and the sense of loss of not being able to farewell the city centre and grieve before demolitions take place – some feel like they need to do this as part of the healing process.
  - “I also miss the beautiful buildings and the shops. I miss all of the Central City really and just want it back. I miss just the comfortable feel of it, like it wasn’t too over the top or too old, it was just right.”
  - “I would really like a chance to grieve for what we have lost in Christchurch. I don’t want it all cleaned up and sanitised before I have the chance to grieve for what has gone.”

- Some acknowledge the stress and trauma that Christchurch residents have experienced because of the earthquakes, and suggest this needs to be addressed via support services, facilities and spaces.
  - “The trauma and stress that arises from the rebuild will need to be taken into consideration and services need to be in place.”
  - “The metropolitan sports facility must not be left out of any city rebuild or planning... Research shows that sport and recreation is required to enable affected people to get back to a normal lifestyle.”
  - “Put a one-stop resting place and have snack stalls to let people enjoy because of the stress that they have been put through since Feb 22.”
  - “...empty spaces can be utilised as mini parks... provide places to relax , reflect , contemplate & create . This idea is not for the long term, but... it is important for the emotional wellbeing of Christchurch people to have these areas used as we create & rebuild our city.”

## ***Lifestyles, leisure and recreation***

### ***Topic summary***

People want a range of leisure activities to do in the Central City for all ages and in a broad variety, both day and night. They want indoor and outdoor physical activity and sporting activities.

***Number of comments: 728***

- Free or cheap recreation and cultural activities, e.g. playgrounds, museums, science/learning displays, art works, lake areas, and water features.
  - “A place for civic engagement and covered places to meet that are free.”
  - “Christchurch should be a beautiful safe place with many interesting things to do.”
  - “More activity centres, like Science Alive and the museum.”
  - “Family stuff that families can afford.”
  - “I want free stuff. Outdoor activities, parks, concerts, festivals, that don’t cost. Family stuff that families can afford. Free shuttles around the city. Open air areas and village green areas for picnics, lounging, sport, playgrounds.”
  - “Plus more places to move and play – kick a ball, throw a Frisbee, play with a kid!”
  - “A village green in the Square so people can play social cricket or sit around in sun chairs drinking wine while they have picnics & watch/talk.”
  - “Youthful open spaces that provide for all activities, including skateboarding, art, music and sculpture.”
- Need a range of lifestyle activities during the day and night – cafes, meeting places, shops to browse, entertainment, family-friendly events/activities and spaces.
  - “I want a reason to visit the city anytime of the day, activities that bring people into the city instead of the malls.”
  - “An approachable, people friendly space that caters for a mix of activities – cafes, restaurants, parks, art galleries, bars and clubs, activities for families and the elderly.”
  - “Things to do that don’t all revolve around alcohol.”
  - “Make it more family orientated to encourage people at the weekends, with great spaces for lunches and shoppers with outside cultural events and spaces.”
  - “If the city opened later and stayed open till 8.00 pm then we would find workers come to town in the evening as a family to do retail shopping and then stay on for a meal or to catch up with friends in the evening. The city would create its own evening character and life like we see overseas.”
- Make the most of the river and outdoor recreation opportunities, (e.g. cycling, walking).
  - “A walkway/cycleway with cafes that would encourage families to use it by day & awesome lighting, restaurants and footbridges for nightlife.”
  - “A continuous promenade with lots of interesting cafes, art studios and public art . A place for all to enjoy day and night.”



## Share An Idea Summary

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- “... boat ramps where families can put in their kayaks/canoes/pedal boats/kids can feed eels and ducks.”
- Sporting facilities and infrastructure to accommodate a wide range of activities (soccer, cricket, ice skating).
  - “Encourage families to enjoy new sporting and cultural facilities with ease and leaving the car at home.”
  - “Central community area with large ice skating, gym and swimming complex to get families back into CBD. See how done in New York – magic!!”
  - “Have sports equipment like soccer balls, rugby balls etc, that you can borrow and play with in the parks.”

### ***Encourage people to spend time in the Central City***

#### ***Topic summary***

People want an attractive Central City that is inviting with plenty of things to do, and is not only focused on commercial activities.

#### ***Number of comments: 599***

- People want an attractive Central City that is filled with people and for it to be a destination in its own right.
  - “For the Central City to be a real destination especially at weekends.”
  - “The Central City should be a place that draws people in, with attractive public spaces that... host a wide range of events.”
  - “Participation. Community. Let it be a place people want to be, not one where people hurry into and out of or through.”
  - “It needs to have attractions that create a great atmosphere and buzz.”
  - “...want it to be a place where people would want to go, rather than have to go (e.g. work) It would be nice to have a kind of vibe with street culture and a big assortment of all kinds of shops.”
- Some people want there to be less of a focus on business in the Central City, and more of a focus on creating people-friendly environments and experiences (with some arguing businesses will prosper as a result).
  - “People, people, people! It is so vital that the city is designed around us, not business. We are what keep business alive so treat us well first!”
  - “If areas are set up with cultural and social focus they will draw in people and businesses will follow filling spaces accordingly.”
  - “The people! The people! The people! Remember successful commerce is dependent on social interaction. For social interaction to happen the city centre or CPD (Central People’s District) needs to be an attractive safe and inclusive space.”
- Specific reasons for people wanting to visit Central City include: pleasant gardens and outdoor areas, cafes, great shopping and markets, being able to move around easily and safely, and having plenty of entertainment, activities and facilities to access.
  - “Entertainment, safety, ease of access, easy and cheap parking, traffic-free zones and attractive riverside areas.”
  - “Open green spaces, markets, open air cafes (like Paris), carnival-type atmosphere. Pet friendly too!”
  - “There will be lots of people living, working, shopping and enjoying art and culture.”
  - “Lots of different factors contribute to a vision, namely people, access to the city, public facilities and attractions.”

### ***Family, social attachment and support***

#### ***Topic summary***

Again, people want the city designed around people. They want play equipment for children and more children/youth organised events. They want all to have something interesting to do in the Central City without having to pay for it.

#### ***Number of comments: 443***

- Many comments wanting family-friendly and child-friendly play, shopping, learning, interactive, and living environments, with pleasant conditions for parents too (e.g. cafes/shops).

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- “City was lacking in family-orientated things – get some of the Central City parks loaded with play areas for the kids.”
  - “More play areas for the kids – then the parents will be there as well!!!”
  - “Make it more of a family place – kids as well, because before it was a tad scary.”
  - “Everything young whanau need in ‘pram pushing distance’, i.e. ability to walk to parks, natural areas, doctor, Plunket and libraries.”
  - More organised events for children and families.
    - “Make the CBD a destination for families and children... perhaps a more central playground and park/picnic area with organised family events.”
    - “Create a ‘children’s trail’ around the city stringing attractions, entertainment, history & sights together, then promote it vigorously!”
    - “A central play/family area will bring a lot of families back into city.”
    - “Festivals and events like buskers/winter festival. Good family entertainment. City was being overrun by pub crawlers at night.”
  - Some comments wanting ‘adult’ shops in specific areas away from families.
    - “A place where families feel welcome. Let’s keep the escorts. strip joints. ‘adult’ shops in a confined area.”
    - “I want family-friendly city – therefore very strict criteria on location of brothels/strip clubs. No prostitutes and associates on street corners.”
    - “Keep the city free of sex shops, massage parlours, prostitution, tattooists, excess souvenir shops and give it back to families.”

## *Participation in community and society*

### ***Civic life and decision-making***

#### ***Topic summary***

People want to be included in city decisions and be listened to by decision makers.

#### ***Number of comments: 98***

- Engage everyone, especially younger people.
  - “If we are to create a world leading city then engage gen x & y.”
  - “Listen to the people! Engage (plan and include) all ages (children, youth, adults, elderly).”
  - “Involve the community every step of the way.”
- Council needs to listen to the public and involve communities, although there is some scepticism that the Council will not do this or has already made key decisions.
  - “Embrace bottom up, not just top down, input to decision making.”
  - “Open discussion with community, no closed door decisions.”
  - “That public are heard and listened to as we are members of this great city and want to see it rise again better brighter than before.”
  - “Consult with the people, a lot of us have better ideas than government and Council.”
  - “A collaborative and communicative role that respects what all Chch residents have been through and/or are going through.”
  - “People are considered as important as the rebuild or redesign, listen to what they have to say.”
- A desire for local knowledge and expertise to heard in the city’s rebuild (along with consultants and international experts).

## Share An Idea Summary

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- “Led by Christchurch people rather than imposed by bureaucrats or international experts. However, we can certainly learn from the experience of others so good idea to invite expert option.”
- “Architects to design, then public consultation, then Council oversight to manage design & style are carried out as agreed.”
- “Need to formally engage local experts in this field to ensure we get it right, can’t leave it to chance.”

### **Maori**

#### **Topic summary**

People want increased acknowledgement of Māori culture in the Central City.

#### **Number of comments: 100**

- Some would like Māori culture, language and heritage to be more visible in the Central City (along with other cultures), although a minority are opposed to this.
  - “I want more recognition of Māori culture. We have a massive Christian cathedral in the centre of our town so why not a traditional inspired meeting hall for cultural events.”
  - “I would love to see more Māori cultures and traditions incorporated into the daily routines and events happening around our city.”
  - “I want more visibility of Tangata Whenua.”
  - “Bilingual signs teach our people our national language and visitors to the city.”
  - “It would be absolutely insane to miss out on this opportunity to incorporate Te Reo Māori into the rebuild and highlight our bi-cultural partnership, which gives strength and conviction to all our relationships with other cultures.”
  - “NO Maori entertainment culture demonstrated in public places in the city. We don’t put on demos for European culture, so why should Maori?”
- Some comments in favour of multi-culturalism rather than only bi-culturalism.
  - “I don’t want overly Māori influence. Keep it multi-cultural and retain heritage theme.”
  - “Ethnic diversity not just Māori. I’m tired of hearing we must consult the Maori what about all the other ethnic people living here.”
  - “We need to include Māori ideas to give a good balance and don’t forget our multi-cultural ideas.”
  - “Important to consult with Māori, in particular, and with other cultural groups to ensure Otautahi reflects our cultural diversity.”

### **Other participation issues**

#### **Topic summary**

People want all people to be welcomed into the city by having things that they can do and relate to in terms of age and culture.

#### **Number of comments: 1248**

- Specific youth-friendly areas and activities, e.g. skate areas, BMX, safe, appropriate places for them to hang out (but not be threatening to others).
  - “I want more places for the youth to gather in a safe environment.”
  - “I want a skate park because there will be a lot of spare space and the skate parks are all really busy so we could use another one, also if you do build one you could build a youth cafe, to hang out and also a mini skate shop in case something breaks while your there.”
  - “I Want A Place Where Teens Can Go And Hang Out , Like A Night Club But For Teens With No Alcohol So We Have A Place To Hang Out And So We’re Not Out Causing Trouble Other Places.”
  - “I think that there should be a place in which younger people (13-16) can meet up, have a chat and have some thing to eat. This could be like a cafe or something else.”

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- “I want more youth hang-outs... lots of rooftop gardens, trees, benches, better quality food places that suit the youth (not McDonalds/takeaways), music/art complexes that youth can express their creativity freely.”
  - “I don’t want the young people to feel alienated as had happened.”
  - Comments relating to embracing and celebrating people of all ages and cultures, especially the disabled, elderly, minority groups, and those from other cultures.
    - “All generations, all ethnic groups, the able and disabled need to feel welcome in central Christchurch.”
    - “Where everyone feels welcome in our city and safe regardless of race, culture, religion, mobility whatever.”
    - “Massive cultural diversity in a condensed area, encouraged by the many businesses, shops, educational facilities, cafes and tourist destinations, but above all, being around my fellow Christchurch dwellers, the people.”
    - “It needs to be a ‘people’ place. All generations, all ethnic groups, the able and disabled need to feel welcome in central Christchurch.”
    - “Recognise the gay & minority communities with banners, festivities.”
  - People with disability need to be better catered for in terms of accessible buildings, good walking surfaces, access to public transport.
    - “I want the city to be rebuilt to accommodate special needs of disabled people. That is without barriers and able to include all people regardless of their physical abilities. To enable deaf, blind, those in wheelchairs, babies in prams, the elderly with walking frames – they can go anywhere they need or want to.”
    - “I want elderly and disabled access and disability friendly spaces and transport.”
    - “NZSL (New Zealand Sign Language) is NZ’s 3rd official language... I would like all of you (the planners) to bear in mind when putting ideas onto the map, please make it VISUAL and ACCESSIBLE... For example, loudspeakers, bus/train announcements, museum/public places – any talks/microphone – ensure there’s NZSL translation as well so it’s fully accessible. Signage is important too.”
  - People want spaces that encourage social interaction, pride in the city, and a sense of belonging.
    - “We have a new deep sense of community and it’s important our new inner city encourages that – cafes, squares, places we want to be to be together.”
    - “Just the feel of belonging, life is now more isolating.”
    - “A city to feel proud to belong.”
    - “More public buildings and outdoor spaces for people to enjoy their days.”
    - “It would be a place for everyone, for all ages and ethnicities. It would be busy and vibrant, clean and well maintained... it would be a place people wanted to be and felt proud of.”

## ***Needs of over 65s***

### ***Topic summary***

The key needs of the elderly include accessible transport and facilities, such as toilets; adequate seating and pathways; feeling safe; appropriate housing; and interesting activities.

#### ***Number of comments: 213***

- Ensure older adults have easy access to community facilities and activities, and offer them reasons to visit the Central City.
  - “The city needs a few big screen cinemas where folk, particularly 60 plus, can watch good quality and fun films together.”
  - “Elders love to reminisce. Provide inspiration for them to do so with photographic displays of the city’s past throughout the inner city.”
  - “With the ageing population we need to have community pools around the city for aqua exercise.”
  - “Encourage more entertainment and hospitality businesses that cater for middle-age and older residents and visitors - e.g. movie theatres; performing arts; dine & dance and cabaret restaurants, amphitheatres.”
  - “Shops, like John Darby, that sell clothes older people want to buy and wear.”

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- Comments relating to accessible places and spaces, accessible toilets, accessible pathways and transport (some suggest free transport for the elderly), safe street lighting and environments and places to sit and rest.
  - “Ensure our elder citizens & disabled physical & mental needs are catered for in all new city infrastructure & cultural plans.”
  - “Safe streets that are easy to get around. Wide pedestrian areas that cope with slower walkers & mobility scooters/ wheelchairs.”
  - “Free and accessible transport – bus, light rail/tram.”
  - “Toilets – accessible, well-maintained, safe and well lit.”
  - “Seating – sheltered in a green spaces, quiet places, well scattered so breaks can be taken and enjoyed, wind breaks from east/west winds.”
- Increased housing provision for the elderly, but mixed views about whether to have separate complexes or to take a more integrative approach.
  - “Would love to see more ‘oldies’ living downtown.”
  - “Inner city retirement/over 60’s villages.”
  - “Build rest homes on the upper levels like Europe so the elderly can enjoy & be part of the city.”
  - “A retirement village in the CBD would bring people into the city who would spend money and get visits from their families.”
  - “Quality apartment living for professionals and those who are 60 plus. They will use the city facilities, including cultural ones, and add vibrancy and safety to city.”
  - “Integrative residential areas (not retirement villages.”
  - “Multi-generation living...”

## Other

### Topic summary

A city that is people-friendly, inclusive, and instils a sense of pride.

#### Number of comments: 307

- People essentially want a city for people, that is welcoming and people friendly and puts people first.
  - “Make it people-orientated city.”
  - “We want to make Christchurch central a HUMAN FRIENDLY CITY...”
  - “Start with the idea of a Central People’s District (C.P.D.) - the heart of an environmentally, socially and economically sustainable city.”
  - “Ditch the CBD and build a CPD, a Central People’s District, in which human activity is encouraged. Imagine people-friendly space that is a destination.”
  - “I want make the CBD a Central People’s District (CPD). Put the public transport hub in the centre of the CPD.”
- A few comments relating to having a shared community centre/hub in the Central City.
  - “We need a facility that will create a real focus for the Christchurch community to gather, mingle and enjoy. We need to give our city a heart that people will love and treasure.”
  - “Build a new Community House to provide space for the non-profit organisations. Have Council liaison/Mayor fund on site too.”
  - “I think that there should be a place in which younger people (13-16) can meet up, have a chat and have some thing to eat. This could be like a cafe or something else. Just somewhere for people like me and my friends to meet up in the weekend and have fun.”
- Some comments wanting the Central City to be affordable and to cater for all people, regardless of socio-economic status.

- “Build a city where people can afford to live, this is New Zealand, not New York.”
- “A place for all social-economic people – the people of City Mission and other social agencies, the people of arts and education, the mothers and their special needs of caring for children and elderly.”
- “I would really like it to have affordable prices in shops. Have community events where admission is free and there is a lot you can do.”
- “...not just an elite upmarket space for rich or tourists. Need community oriented places and organisations.”

## *Move theme*

### *Transport & Infrastructure*

#### **Modes**

##### **Topic summary**

High quality, efficient and integrated public transport using a mixture of modes that encourages people to leave their car at home is desired. There were many people who wanted a monorail both within the Central City and as a mode of transport out to the suburbs. A variety of alternative, smaller modes of transport, ranging from skateboards to rickshaws, were also quite popular. Those ideas relating to trams, light rail, rail, cars, cycles and walking have been covered in the individual transport modes.

##### **Number of comments: 2214**

- A preference for a quality, efficient and integrated public transport rather than private vehicles.
  - “I would like to use convenient public transport to the city in after hours and weekends to enjoy the life in the city without using my car.”
  - “Low cost and interconnected transport system – bus, light railway, cycle ways and parking facilities interconnected. One day/week/month pass get you from A to B, affordable and cost effective choice instead of using cars.”
  - “Fully integrated, multi-modal transport system which offers choices of travel mode.”
  - “Easy access by a fully-integrated, multi-mode public transport system that includes: light rail tram/trains, heavy-rail commuter trainsets, buses & cycles, all inter-changing at a “transport hub” at the original Chch Railway Station on Moorhouse Ave, instead of pursuing an underground bus station that caters for only one transport mode!”
  - “..Need an integrated travel model that increases cycling, public transport use and walking while decreasing car use..”
- There are many who want a monorail, both within the Central City and extending out to suburbs.
  - “Light rail instead of buses (unreliable). But a monorail would be more efficient and it could pass by all of the schools.”
  - “A monorail connecting the rebuilt CBD to the outlying suburbs would help bring customers to businesses that relocated in the aftermath.”
  - “Good public transport – monorail with links to railway (this needs to be revived).”
  - “Free, fast and clean inner-city transport, e.g. monorail. We don’t need cars in the Central City if this happens.”
  - “A monorail would be good.”
  - “...an elevated monorail (like in Sydney) would be a fantastic addition to our city.”
- Other alternative smaller personal and public transport options, such as skateboards, Segway hire, rollerblades and rickshaws.
  - “Alternative transport routes and pathways for environmentally friendly cycles and push scooters. Push scooters need to be provided for too because they cannot go on the road.”
  - “Yes - light rail in, then hire - small personal transport Segway/Yike bike/some sort ‘closed in’ bike for ‘rainy’ character.”

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- Good access throughout city for bikes, mobility carts, scooters, rollerblades, Segways, double baby buggies, wheelchairs...”
  - “Longboard/skateboard/roller blade paths around the city, it’s a growing mode of transport among Christchurchians.”
  - “We want the Central City to be skateboard friendly and accessible by skaters (easy routes to town).”
  - “...free rickshaws or electric tuk tuks, reducing traffic congestion.”
- Taxis, particularly for safety reasons after dark.
  - “Ban private cars in CBD, only public transport and taxis (it works overseas); deliveries after hours; people will walk and bike.”
  - “Heaps of people, and safe visible places to catch taxis, buses or park a bike.”
  - “Spend time considering every level of transport from orange taxi cabs, mini buses (approximately half the size), diesel, electric, timetabling, fare structure, etc.”
  - “Lights, no car racing, do not close bars too early, makes people drink more in less time. Make sure everybody gets home safe by taxi or bus.”
  - “Better transport options and remember taxis are also public transport. They should work in partnership and co-operate more. Put taxi stands near bars, cafes and areas where the public congregate, making it a safe and vibrant place for young and old.”
  - “Supplement with a computerised taxi routing system which can multi-hire (so reducing fares), using technology already developed by Canterbury University.”

## Trams

### Topic summary

People want a tram system that is integrated into the public transport system and is an affordable option for locals to use. It would ideally run beyond its current route, extending out to the suburbs, with varying suggestions as to which suburbs. There were many people who wanted a free tram similar to Melbourne’s. There was support for a transport hub located on the periphery of the Central City area, such as at the old train station on Moorhouse, that would link the tram with other modes of transport.

### Number of comments: 2652

- Many people want to see the tram extended and integrated into the public transport system. Melbourne was a popular comparison.
  - “Extend CBD tram coverage and provide integrated step-on, step-off network similar to Melbourne and San Francisco...”
  - “I want tramway extended and running more around the city.”
  - “A ‘smart’ integrated reliable public transport system – trams, light rail, bike-share, buses, car-share, walking.”
  - “The Melbourne free tram concept is to take people (residents and visitors) to places they may not otherwise go to. In particular, it takes people to new retail areas, arts and entertainment and food and beverage locations. It is very well used. A Chch free tram on the extended route would take more people to areas such as High Street while also performing a service for those needing to move around the Central City.”
  - “..An integrated public transport system that leverages existing tram networks and is designed to reduce transport costs and improve the speed of getting from populated areas to the city...”
- Not a tourist tram.
  - “Keep the tram – make it more affordable for local residents, so that it has a practical use rather than a tourist gimmick only.”
  - “Increase tram lines, and use them instead of buses in the CBD, not just a tourist attraction.”
  - “Transport hub at old railway stn, tram for commuting in CBD not just tourists, light rail from satellite towns.”
  - “Make tram system bigger and a reliable transport solution for workers, not just tourists.”
  - “Better use of the tram system as a way for locals, not just tourists, to get easily around the inner city. Again it must be affordable (similar to bus prices).”



- 
- “Integrate rail with a new tram system – not just a tourist tram gimmick.”
  - “Extend the tram and have it as a means of moving people other than tourists – shoppers jump on and go two stops, etc.”
  - Cost is an issue – people don’t want an expensive tourist tram, but an affordable or free one – Melbourne’s free tram is very popular.
    - “Low-cost tram around the Central City.”
    - “Make trams for residents as well as tourists – expand tram lines and make affordable.”
    - “The trams are too expensive for anyone apart from tourists to use. Need a cheaper version for the locals.”
    - “Trams in the CBD that are cheap to use.”
    - “...big discounts on it for multi trip/residents.”
    - “.. please, please continue with the tram project but make it affordable for all to use to bring people into the city, while providing outlying car parking areas and the trams bring people to the new city centre, e.g. if you pay for 2 hours parking that will also include transport by tram to the city. I love the trams back in our city but in past couple of years they have become too expensive to take visitors just for a one-off ride!”
  - Extend it out to the suburbs was a common theme, with various suggestions on how far this would spread. A popular theme was Mark Quigley’s suggestion of extending it from the university to the sea at New Brighton.
    - “Good fast public transport linking areas so that people would use every day not just once a year. With a lot of older buildings down that the tram network was going to show off, redesign the routes and units to allow fast delivery of people to different areas. Set up from the Uni to the coast.”
    - “I would love to see a comprehensive tram system to get us around the Central City, which could connect to commuter rail to the outer suburbs.”
    - “Continue the original tram system and planned extension and take it to Sumner . Keep it affordable so the it can be used by residents not just tourists.”
    - “Expand the existing tram system to act as people movers. Link them to Kiwirail at peripheral ‘interchange points’, e.g. Papanui, Riccarton, etc.”
    - “Utilise tram tracks to connect precincts together – make them suitable for all to use - not just tourists. Include them in metro card system and extend tracks to suburbs, e.g. Addington and Riccarton.”
  - Have an integrated public transport hub – the old rail station on Moorhouse was a popular idea.
    - “Lite rail or modern trams such as in Zurich which take commuters from a central transport hub such as the old Railway station in Moorhouse Ave into the Central City.”
    - “Reopen the old railway station and use it as a rail/bus hub. Use rail to bring people in from Rangiora, Darfield and Pegasus. Extend the inner city tram lines so they run from the hub and throughout the inner city.”
    - “Tram circuit – bus exchange moved to Moorhouse ave railway station – rail link to north and south.”
    - “Transport hub, eclectic trams and rail (trains) for easy access.”
    - “...combine transport hub to include rail/trams/buses...”

***What is it about light rail and trams that you like or dislike?***

*Number of comments: 328*

**Likes**

- Quicker, quieter and more environmentally friendly.
  - “Good for the environment, quiet, smooth ride, potentially faster than buses, fun to ride!”
  - “Less intrusive; modern & chic; less pollution – air, noise & sight; unique to Chch. If could be subsidised in someway I’d use it.”
  - “Like they’re environmentally positive, they provide a smooth ride, they are disabled, elderly & bike friendly, and provide a faster ride.”
- Reduces congestion.

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- “I can’t think of a better investment if done on a large scale. Will remove traffic, bring more people in. And would be a great for tourists.”
- “If it meant less cars in the inner city I am all for it, would free up walking space and make it safer for us all with less cars.”
- “Little pollution, relaxing form of travel, don’t need parking, less traffic in Central City.”
- Good for getting out to the suburbs and beyond.
  - “In other cities, properties in suburbs serviced by light rail increase in value. Can use to revitalise the east.”
  - “Light rail could be the answer for painless long commutes from where people most likely will relocate after nearby suburbs abandoned.”
  - “Melbourne is a great place to look at for ideas. I can picture myself hopping on a tram in the CBD and getting off at Sumner beach...nice!”

### Dislikes

- Expensive and Inflexible.
  - “Expensive rigid infrastructure – buses more flexible. If bus route no longer appropriate or street blocked simple to change. Green the buses.”
  - “Fixed routing – cannot easily follow shifts in usage or locations. Costs - Google “light rail unit costs” and prepare for \$10-100m/km....”
  - “In theory, LRT is wonderful but in reality it is expensive and inflexible... cycle and bus lanes are the way forward!”
- Just a tourist tram.
  - “...tourist tram is a waste of money – trams should be for commuting.”
  - “Currently trams are tourist focused and too expensive for locals to use as public transport. This needs to change.”
  - “Don’t design just for tourists, e.g. current tram loop waste of space. Needs to be part of getting around the city for all users.”
- Alternate views over whether they are compatible with cycling.
  - “Dislike: bike tyre stuck in rails, expense.”
  - “Rest assured cyclists & light rail/tram tracks can co-exist. Separate cycle paths avoid the tracks, & crossings can be designed to be safe.”
  - “LR – fast, frequent, efficient, but very expensive, inflexible routes, and their tracks snare cyclists”.
  - “Like they’re environmentally positive, they provide a smooth ride, they are disabled, elderly & bike friendly, and provide a faster ride.”

## Rail

### Topic summary

There is strong support for a light rail system which links the Central City to the suburbs and beyond to towns on the outskirts of Christchurch. An effective public transport system could be achieved by integrating modes through a central transport hub on the fringes of the Central City. This would include using currently decommissioned rail tracks.

### Number of comments: 1810

- There is a lot of support for a rail system, particularly one that goes beyond the CBD to form a viable form of public transport and using existing rail network.
  - “Light rail is convenient and comfortable. Light rail has an electric engine that is cheaper and more efficient than a diesel engine. It is quiet and moves smoothly. Light rail reduces air pollution and does not cost as much to run as a monorail.”
  - “I want a light rail transport system that goes through the Central City and branches out to each suburb with its own docking station that brings people to the Central City.”

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- “I want a light rail system using a spoke system from the suburbs to a central hub.”
  - “Light rail service to the suburbs based on the present rail network with links to eastern city and through southern suburbs and to Sumner. Centre this on old Railway station with interchange to buses.”
  - “Introduce rail commuting. Use existing trunk line from Rolleston/ Kaiapoi/Rangiora.”
  - “Reinstate the railway station in Moorhouse Avenue and re-open the line to Lyttelton to the public.”
  - Expansion of the tram system to incorporate a light rail system.
    - “I want a tram system linking the new city to the hospital and railway station and workers trains from south to north Canterbury to help solve the traffic problems we have now the rail is there so please use it city tram loop.”
    - “Link Riccarton to the Central City by tram/light rail through Hagley Park.”
    - “Keep the trams but make them cheaper as a way to get around town. Not just as a tourist trap that costs a bomb.”
    - “Light rail and expanded tram service for commuters in and around town – like Melbourne on a smaller scale.”
    - “...use expanded trams to get around - a mixture of modern & old vehicles. Link with light rail from suburbs.”
    - “Get mass traffic off the main thoroughfares.”
  - Integrated bus and train systems with a central hub that caters to both the rail and bus networks.
    - “The bus exchange should be tied in with the train station.”
    - “I want integrated bus, light rail, rail tram and bicycle transport.”
    - “Combine bus exchange with other public transport, such as the train station. Public transport seems disjointed. Have bus exchange somewhere else.”
    - “... also creating a major link at the intersection of Moorhouse and Colombo to link up with trains, trams ,buses and shuttles and parking station.”
    - “Integration between rail/light rail/bus/bicycle. Make commuting by reliable public transport the obvious choice.”
    - “Fully integrated public transport – i.e. buses go to the train station, train station has ‘park and ride’ system, etc.”
  - Return the railway station to Moorhouse Avenue.
    - “Move the train station closer to the city centre, e.g. Moorhouse site (no freight - only light rail and Tranz Scenic and TranzAlpine).”
    - “I want to combine rail, tram and buses. Maybe the Moorhouse Avenue railway station can come back into play.”
    - “Use the rail we have and add light rail from Moorhouse Ave into the CBD. Move the main railway station back to Moorhouse Ave.”
    - “Light rail, connected with the old railway station to access main line services north and south feeding into the work, entertainment and living opportunities in the CBD.”
    - “Lite rail or modern trams such as in Zurich which take commuters from a central transport hub such as the old Railway station in Moorhouse Ave into the Central City.”
  - Create a Park and Ride system for trains and/or buses.
    - “I want: light rail, park and ride either with bus or train.”
    - “I want: park and ride systems, cycleways/parking, light rail and/or monorail.”
    - “I want: park and ride, leave cars at stations outside CBD and ride bus, tram and trains into town.”
    - “Park and go for buses, mono rail and/or build on tram infrastructure for tourism and affordable locals use.”
    - “Get light rail into the suburbs and park and ride to the city centre. Ban cars within the four avenues or impose a drive in charge.”
    - “I want modern light rail system from suburbs hubs with park and ride to and from city - get public transport usable.”
  - There are a few comments which opposed light rail, mainly based on the issue of cost and viability.
    - “I don’t want light rail. We need to recognise that we are a small city of 400,000. We are never going to sustain a light

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rail system.”

- “No light rail – waste of money and space, use buses better, make cycle ways better.”
- “No more tram extensions, monorail or light rail inside four avenues.”
- “I don’t want monorail, tram. Too expensive to construct.”
- “In response to a talk by Ian McCahon, I agree with about 99% of what he was saying except I would question the viability of a rail network to suburbs such as New Brighton due to the cost. A bus service would be a better idea. One different to what it is at present.”
- “Do not develop permanent fixtures such as light rail until we are sure how the land is settling and where the needs are.”

## **Pedestrian**

### **Topic summary**

There is strong support for raising the priority of pedestrians to the top when they are considered with other transport modes, especially vehicles. Pedestrianising areas within the Central City was seen as an important part of making it more pedestrian friendly and there were various suggestions as to how big an area should be made car free. Walking around the Central City should be an enjoyable experience and it should be achieved without being interrupted by vehicles. The Avon was one area that was singled out as a place to develop for pedestrians.

### **Number of comments: 2778**

- Pedestrians to be the priority.
  - “Pedestrians get first priority.”
  - “Give cyclists and pedestrians priority over vehicles in the CBD.”
  - “I want pedestrian-friendly streets – priority over cars when crossing streets – like in New York city.”
  - “Pedestrians should take priority over cars. I want to be able to walk around the city centre.”
  - “I want separate bike lanes with bike and pedestrian priority at lights. Buffer between lanes so cyclists don’t get wiped out by doors. Footpath/cycles/buffer/cars/buffer/cycles/footpath.”
- Pedestrian friendly – where people can walk freely, without interruption. Suggestions for making it more friendly included having footbridges, more pedestrian centric crossings, and wider paths.
  - “A city where you can walk to wherever you need to go.”
  - “Footbridges between main bridges to give more people mobility away from traffic, more walking links.”
  - “I want traffic lights that work well for pedestrians. Why do they look just for cars and then we all ‘run’ for the green man? Our city needs to work well for the foot soldier too!”
  - “I want wider footpaths, separate cycling facilities, keep footpaths of high pedestrian numbers free of obstacles and clutter. No sandwich boards in CBD.”
- Pedestrian friendly – making the walking experience more pleasurable, with covered walkways, greenways, art works, seating and pedestrian linkages between areas.
  - “Covered walk and cycleways – increasing people walking/cycling when weather is bad – raining, etc.”
  - “A restful not frantic space with green places and/or corridors providing a safe environment for pedestrians and cyclists.”
  - “Greenways for walking and cycling through.”
  - “Attractive ‘lanes’ and pedestrian linkages between the different areas.”
- Pedestrian friendly – for everyone – including children, older people, people with mobility issues, people with push chairs, etc.
  - “I don’t want stones or paving which when it gets wet you can slip on. The ones in the square are very bad for this, it affects people who can’t walk easily and old folk.”

- 
- “Accessibility – essential priority this means pedestrian, wheelchair and cycle friendly layout and design.”
  - “Safe cycleways. Disability friendly kerbing. Pedestrian connectivity.”
  - “... the Central City to be so pedestrian focused that my 90-year-old Dad could get around it safely.”
  - “...cycle and pedestrian friendly, short-term mobility scooter hire at a bus stop, all streets and buildings wheelchair and pushchair friendly.”
  - More pedestrian-only streets in the Central City.
    - “Extensive pedestrian-only areas, with trees, shops, restaurants, cosy and intimate spaces to be and spend time.”
    - “Keep cars out! People like malls because parking is easy, and you can walk around shops without traffic. Make the city centre like this. Parking buildings near edge, pedestrian-only around shops and bars. Access by car only before 8am.”
    - “Pedestrian only in inner city for safe wandering around shops, business and being entertained.”
    - “More pedestrian-only shopping streets and street markets would be great and they don’t have to be closed by 5.30pm which is a real pain; 24hr would be fantastic.”
    - “Pedestrianised centre for shops, bars, restaurants, with safe bike routes out into the suburbs, like nice European cities.”
  - Make the Avon river a pedestrian area which is integral to the Central City.
    - “Make the Avon river more of an integral part of the CBD rather than just happening to meander through. Boardwalks, seating - all covered.”
    - “Walking routes around the river – fountains and art in the streets.”
    - “Ability to walk, run or cycle along the whole length of Avon without coming up to street level to cross roads and bridges.”
    - “The Avon is a treasure – continuous bike, pedestrian ribbon without interruption by cars.”
    - “Oxford Terrace, between Bridge of Remembrance to Victoria Square, remove cars and road and replace with sunny sitting and walking spaces overlooking the Avon.”
  - Many people mention the need for safe movement around the Central City.
    - “I want spaces where it is safe to walk and I don’t have to wait to cross roads where cars are dominant.”
    - “Pedestrian only. Safety for all. The current was not safe.”
    - “I don’t want cars – make it safer and more enjoyable for cyclists and pedestrians. To make it less congested and less polluted to make it less noisy.”
    - “Cut back transport in Central City. Make it safe for pedestrians, more walkways.”
    - “I want more public transport. Pedestrians to take predominance over vehicle traffic. A safe environment, more pedestrians.”
    - “A safe pedestrian environment. Prioritise (e.g. at traffic lights) pedestrian crossing.”
  - Many people think the Central City did not feel safe, especially at night. Suggestions for improving safety included more lighting, security cameras and a greater police presence.
    - “I want more police walking around.”
    - “I don’t want to feel unsafe when I walk through the city after dark, e.g. don’t make places where youth want to congregate and cause trouble.”
    - “More green areas, enhance the spaces around the Avon, include some ways of making it safer for pedestrians at night, e.g. well-lit spaces, CCTV. Eco-friendly city, e.g. no cars, public transport-only, bikes and plenty of trees.”
    - “Safe, well-lit, people-friendly, pedestrian areas-only, places to promote ease of getting around for disabled and the less mobile people.”
    - “Make it safe to walk in the city – day and night. Lots of lighting, sense of security. Plus make it beautiful with trees and planting boxes.”
    - “Safety cameras day and night, with well lit areas where pedestrians go.”

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## ***What would make the Central City more pedestrian friendly?***

***Number of comments: 472***

- Less/no cars.
  - “Much fewer cars and more pedestrian road crossings.”
  - “Less cars in town, make it easy to get in and get around the city without cars.”
  - “Moving the cars out of the Central City for a start to encourage walking.”
- Prioritise pedestrians over cars.
  - “Greater restrictions on traffic. More walking and cycling. Let’s make the city centre a place for people, not cars.”
  - “Take footpaths (& cycleways) across side streets in the Central City, so priority is given to pedestrians/cyclists over cars”.
  - “Turn some of the city grid roads into light rail, bike and pedestrian only streets and roads. Wide footpaths, beautiful streetscapes please.”
- Make the walking environment more pleasant, including covered areas, more greenery, seating and less obstacles.
  - “Pleasant walkways connecting destinations with things to see & do along the way; seating, interpretation displays and separate cycleways.”
  - “Living screens to break strong winds. Wider footpaths and/or more pedestrian-only areas. More covered walkways for protection.”
  - “...have covered pedestrian streets, open areas of seating/landscaping.”
- Better public transport.
  - “Eliminate cars in Central City; replace them with cheap/free and efficient public transport, e.g. light rail, monorail.”
  - “Fewer cars - more frequent public transport - electric modern trams. Larger paving not small pavers more like York pavers.”
  - “More public transport that is accessibility friendly. Wide footpaths for wheelchairs and lots of ramps!”
- Changes to buses, such as removing the big buses from the Central City, moving the bus exchange and having smaller eco-buses.
  - “Take the bus depot from the city centre. Colombo St was awful, trying to dodge buses and the hoards of people waiting for their bus.”
  - “No big buses. Small electric buses continuously moving through CBD...”
  - “No buses going down Colombo street. Make pedestrian only from the Square to the bus exchange, so it’s one big space.”

## ***Bus***

### ***Topic summary***

Many don’t want the larger buses coming into the Central City as they are seen as polluting, noisy and pedestrian unfriendly. There is support though for smaller, quieter and less polluting shuttles, which transport people from the edge of the Central City to and around the centre. The current bus exchange location is not popular as it was seen as user/pedestrian unfriendly and increased road congestion. There was strong support for a bus exchange to be located on the edge of the Central City (Moorhouse Avenue) and to be integrated into other forms of public transport such as free shuttles and train/light rail/tram.

***Number of comments: 2927***

- Many people want to have a bus-free Central City and to rely more on trams, cycling or walking to move around.
  - “No cars or buses.”
  - “I don’t want cars and buses, no more dodgy bus exchange.”
  - “More trams, more bikes, car & bus free centre.”

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- “Remove big stinky, noisy buses from the very centre of the city.”
  - “Make pedestrians number one in the CBD transport hierarchy. Walking, cycling, trams, buses, service vehicles and last of all private cars.”
  - “Take a leaf out of Melbourne’s book – tram, bus, train all linked up with Metro card.”
  - People that do want buses in the CBD want more frequent and smaller buses (mini-buses, shuttles) to reduce air and noise pollution.
    - “Limit large smelly buses.”
    - “No smelly, slow diesel buses! Put the bus exchange somewhere else or have lots of small ones.”
    - “Smaller buses, more frequently.”
    - “I don’t want big buses. Have exchange outside CBD and small shuttles into the city.”
    - “More buses to fringe of CBD but keep shuttles through the city and extend shuttle down to Sydenham.”
    - “Inner city could be served with free ‘HOP ABOARD’ small buses powered by clean air.”
  - There should be more electric buses as these are more environment friendly.
    - “I want electric buses, within four avenues to reduce pollution and noise.”
    - “Transport by trams, old and new with electric buses to supplement the trams.”
    - “Practical, affordable, green inner city transport, e.g. trams, electric buses.”
    - “Electric buses and/or trams to be used to access CBD.”
    - “...the electric bus is eco-friendly and does not need petrol or diesel...”
  - Buses need to be accessible for disabled/young/old people.
    - “I want bus exchange outside 4 avenues – even have small free inner city buses. Must maintain access for elderly and disabled.”
    - “Free or very low-cost, mid-sized electric shuttle buses throughout the CBD. Make sure they all kneel to assist disabled elderly and those with push chairs.”
    - “I want free electric buses. Small and frequent. Think of all the people who will need really good facilities and access for our disabled children.”
    - “Keep cars out of the city to a certain extent though consideration must be given to older people, disabled people and young children. Run small buses and trams into the city.”
  - Most people want the bus exchange on Lichfield Street to be moved out of the Central City as it is dangerous and increases congestion on Colombo Street.
    - “Bus exchange (to be) more user-friendly and more inviting – was too dominating where it was. Quite unpleasant walking past outside Ballantynes.”
    - “Move bus exchange from the CBD to the old sale yards site or to (former) Turners and Growers site and provide a tram link to the Square.”
    - “I don’t want bus exchange. Too dangerous and increases congestion.”
    - “I don’t want the unsafe bus exchange.”
    - “Get bus exchange out of city. No school children congregating at 3.30.”
    - “I want bus exchange on outskirts of main CBD and then shuttle to centre.”
  - Conversely, a smaller number of people feel a central bus depot is important for movement around the city and to encourage people to use public transport.
    - “One central exchange. Limited bus numbers.”
    - “Keep the bus exchange in the Central City, it is important that it is sited so that it is equally accessible to everybody.”
    - “I want easy bus access. Central exchange.”



## Share An Idea Summary

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- “Keep central bus exchange in city centre.”
- “Keep our excellent bus service. Very central bus exchange to encourage people to use public transport.”
- A common opinion is to relocate the bus exchange outside the Central City (four Avenues) and link with a tram/shuttle/light rail/monorail loop to transport people to CBD, a ‘park and ride’ system.
  - “Bus exchange on outskirts of main CBD and then shuttle to centre. No motorised vehicles in main CBD area – walking and cycling only – needs to be easy to navigate/move around.”
  - “A public transport system that keeps as many as possible buses out of the heart of the city using very frequent shuttles into the centre and free.”
  - “I want public transport that is more reliable than a bus light rail monorail subway, etc, free car parks in outlying suburbs to allow commuters and workers to drive to these points for easy and fast access to the city centre.”
  - “I want bus exchanges outside city with good shuttle links.”
  - “Bus exchange outside four avenues with free bus or light rail into centre.”
  - “Fully integrated public transport – i.e. buses go to the train station, train station has ‘park and ride’ system, etc.”
- Some people are opposed to an underground bus exchange, others in support of it.
  - “Don’t build an underground bus terminal.”
  - “No underground bus exchange – bring the central Square interchange back.”
  - “I want monorail and underground bus exchange.”
  - “I want put buses and tram station underground in the Square, like it used to be and in the park on top. Cafes, bars and business in around the Square, rebuild Cathedral as multi-use building with cafes, business and church.”
- Improve the efficiency of the buses through better organisation, e.g. routes, timetables and types of buses.
  - “Better bus systems – some buses are late and then 2 come at once.”
  - “The buses need to be more reliable.”
  - “Bus drivers need to adapt on time performance on all routes.”
  - “...buses sized to the number of people using the route and operating so frequently that missing the first one isn’t so critical.”
  - “If the bus system was twice as frequent and half the price, it would have 10 times the demand.”
- Some people want to keep the bus lanes and others want to get rid of them.
  - “No bus lanes.”
  - “Less bus lanes because they always in the way.”
  - “Flexibility is important – if light rail isn’t viable then bus lanes are important.”
  - “Less bus lanes! They are annoying!”
  - “Bus lanes to streamline public transport and make it the best option for city commuter.”
  - “... also, the bus lanes can be ridiculously oversized and take up too much road space. Perhaps put the lanes in the centre of the road so they won’t disrupt arcing on the side of the road.”

### ***What sort of hub (exchange) should be provided for bus transport? Think about indoor or outdoor hubs; one or multiple; possible location(s).***

#### ***Number of comments: 382***

- There is strong support for the bus exchange to be moved from its current location.
  - “Move the bus exchange to a more practical location (near the city but not right in the centre), e.g. Tuam Street/ Barbadoes/Lichfield/Madras block (currently empty).”
  - “Address the bus depot location and move that to a better location so that buses don’t clog the busy streets that pedestrians use often in the very centre of the city.”

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- “The bus exchange has to be moved – idiotic having it blocking a signature area.”
  - There were some who want to retain it in the same location.
    - “I also want the original bus exchange. I want this because I like to travel around the city and cant really do that right now due to the bus exchange being in a different place.”
    - “The bus exchange was good.”
    - “Also bring back one central bus station. It’s a pain having to take shuttles from one station to the other when I get the bus – I do use the buses. I suspect that the people who want two stations don’t actually use them.”
  - There are some who want it centrally located.
    - “The bus hub needs to be fairly central so that people can access the rest of the CBD on foot.”
    - “We still need a central bus exchange – people will not want to catch a bus to an external bus exchange and then another but into the city.”
    - “Keep the bus exchange in the Central City, it is important that it is sited so that it is equally accessible to everybody.”
  - There are some who want it to be located on the periphery, with a mixture of views over whether there should be one or several hubs.
    - “The bus exchange should be on the edge of the 4 avenues – with car parks around it.”
    - “Bus exchange out of 4 Avenues, could have one each side –one in Hagley, Fitzgerald Avenue.”
    - “Depots for the buses, shuttles and taxis should be maintained outside of the CBD with NO ‘exchanges’ such as there was on Lichfield street pre-quake days.”
  - Some think the old bus exchange was not very welcoming.
    - “Finally, the bus exchange has been contentious for many years. We all hate it. Currently there are a couple of temporary exchanges on the edges of the city. This is much nicer. None of us could stand the noise, the pollution, and the proliferation of loitering teenagers around the bus exchange.”
    - “Avoid old bus exchange problems – cold, dark, people smoking – need to be more people friendly, more green space on street stop areas.”
    - “DON’T WANT the bus exchange in the middle of city centre. Create the feeling of being intimidated by a number of young persons in group hanging around the area.”

## Cars

### Topic summary

Many people want a Central City that is less dependent on cars. There was strong support for car-free areas with various suggestions as to the extent of the boundary, ranging from Cathedral Square to the whole of the four avenues. Ways of reducing the amount of cars coming into the Central City included having park and ride options on the periphery and providing an efficient and affordable public transport as an alternative. If cars were given access, there was strong support for restricting the speed limit.

#### Number of comments: 2269

- A city for people, not cars.
  - “I want more cycle ways and walking areas – more prominent than cars so it’s safer and promotes active living and socialising.”
  - “Would prefer to keep private vehicles out of the CBD as much as possible – make the CBD a place for pedestrians, socialising, shopping and eating....”
  - “I want lots of space for kids, safe. Lots of gardens. Public space. Keep cars out.”
  - “Removal of dominance by car will improve ambience of CBD to me more focused on people.”
  - “More people, less cars in the central area, street cafes and green spaces.”
  - “A people oriented city instead of a transport, fossil-fuelled oriented city that has previously existed...”

## Share An Idea Summary

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- Car free Central City/car free areas
  - “I want more car free squares like in European cities, these are great for gathering and relaxing.”
  - “I would like a ‘no cars’ inner city. Walkways and cycle ways. More parks and plants, benches to rest on and enjoy the city’s atmosphere.”
  - “I don’t want cars. The Central City was formerly dominated by cars; busy streets, long wait times for pedestrians and cyclists at traffic lights made getting around annoying at times.”
  - “No cars in area bounded by Lichfield/Gloucester/Manchester/river.”
  - “Pedestrian area from Manchester to Durham and St Asaph to Hereford Streets. Car parks outside these areas.”
- Less cars
  - “Can we have less busy roads in the city?”
  - “I want less cars and more emphasis on walking and cycling and public transport. No need to park car in front of shops.”
  - “I don’t want lots of cars, as then it just feels busy without feeling vibrant. Too many cars also reduce the amenity of the Central City – fumes, noise, clashes with other modes of transport (walking, cycling, buses).”
  - “I don’t want busy traffic because it kills the CBD.”
  - “We are supposed to be a clean, green country, let’s make our city less reliant on cars and more European. Bikes, trams, shuttles, trains, lower carbon footprint.”
- Less pollution
  - “With peak oil here, we can’t afford to have lots of cars coming into the city. So need to make it easy to travel by foot, bike or public transport. Bonus: cleaner air, healthier more pleasant streets.”
  - “No cars/fat smelly buses in centre.”
  - “...aim for no cars in Central City/less pollution, less noise/preserve access for disabled people.”
  - “I don’t want cars – make it safer and more enjoyable for cyclists and pedestrians. To make it less congested and less polluted to make it less noisy.”
  - “I don’t want pollution from cars and motor bikes.”
- Alternatives to cars: trams; public transport; light rail; cycles; shuttles; park and ride; taxi with free options for centre.
  - “I want little mini electric buses for transport around the inner city and remove all cars.”
  - “No cars in the CBD – electric (free) shuttle bus in CBD (more frequent).”
  - “I want monorails and shuttles to replace cars.”
  - “I want easy ways to get around the place as in monorail, a good bus system or trains to cut back traffic and the use of cars.”
  - “Car-free CBD. Park and ride on edges, trams to take people into and around town.”
  - “Trams give cities character, cars do not.”
  - “Use only trams, jump on/ jump off free.”
  - “Extend the tram rails and use the trams as free public transport: unique, lovely and green!”
- Speed restrictions
  - “Reduce car speed in CBD to 30 km/h.”
  - “If cars are allowed in the Central City, they should have to go slow.”
  - “Slow speed traffic with cycling/pedestrian boulevards everywhere and free electric shuttles to move people around. Car parking moved to edge.”
  - “Slow traffic in the centre. Mix of cars, cycles and pedestrians at slow speed.”
  - “Mixed low speed traffic and people zones.”

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- “Unrealistic to ban cars but it can be made unattractive for them to go there, e.g. 20 km/h speed limit, restricted parking. Have to provide excellent, cheap public transport to compensate though.”
  - Parking options: outskirts; outside CBD (somewhere for cars, but not dominating).
    - “Car park away from centre and have mini shuttles to the centre.”
    - “Cars kept out of centre, people only in centre - small buses bring people in from car parking areas.”
    - “Could we park our cars in a flat area, e.g. Addington or Sydenham, etc, and then hop on a shuttle to the CBD – drop workers/shoppers off.”
    - “No car parking buildings in the centre.”
    - “Park and ride keeps cars from Central City. Works well in Oxford, UK.”
  - Car parking and parking buildings, wasted space, underground alternatives
    - “Not to have car park buildings or so much concrete wasted space – think of a transport system without car park buildings.”
    - “Lose the ugly car parking buildings rebuild or build more thoughtfully.”
    - “I don’t want ugly car parks and car parking buildings. Keep them out of sight.”
    - “I want the use of car stackers in buildings instead of car parking buildings. Make good use of space.”
    - “Put car parks underground.”

***Alternative to cars - if there were fewer cars in the Central City, how would you travel around?***

*Number of comments: 497*

- Public transport
  - “Efficient, small public transport vehicles.”
  - “Greater use of the tram as public transport and dedicated cycle ways and a bike sharing programme.”
  - “Happy to use public transport, bikes and walk, but it’s got to be easy, cheap, frequent and safe.”
  - “I commute by bike. I would like to see more public transport and as few cars as possible.”
- Cycling
  - “Cycle or walk. Currently the only thing stopping me is the high number of cars. Please make Christchurch more pedestrian/cycle friendly.”
  - “I’d walk or cycle. If it was designed to go the places I want to go - I’d catch the tram.”
  - “Safe cycleways – not cycle lanes – all over Christchurch. Good for the environment, health and our wallets. Cycle lanes are too dangerous.”
  - “We need cycleways safe from traffic and parallel to vehicular traffic.”
- Walking
  - “Good old-fashioned feet! Especially if there were covered bits and places to escape the rain.”
  - “I would ride my bike and walk on safe, dedicated purpose-built pathways.”
  - “I would walk around the city but there must be suitable parking locations to get there and cheap shuttles for the less able to get around”
  - “I’d walk or cycle. YAAAAAY!!! That would be great”
- Tram (or light rail)
  - “A light rail system into and around the city as they have in Bordeaux.”
  - “Light rail/trams – make these for citizens not tourists and connect to suburban hubs.”
  - “Take a leaf out of Melbourne’s book – tram, bus, train all linked up with Metro card.”
  - “TRAMS, TRAMS, TRAMS, lets become a leader in NZ public transport.”

## Share An Idea Summary

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- Bus, with a preference for smaller electric, shuttle ones
  - “Inner city – foot, cycle, electric shuttle buses. To suburbs – bus/rail from Moorhouse station. Create pick-up centre for bulky shopping.”
  - “Cars need to pass by the CBD edges, but shouldn’t be inside the CBD. Use a cheap, frequent tram/bus within.”
  - “A shuttle type public transport system to get into town in less busy times/areas? Avoid shaking our homes when under-utilised buses pass.”
  - “Free electric shuttle buses and local-friendly trams.”

## Cycle

### Topic summary

There is a desire to have safe and pleasant cycling as a real transport option. People don’t want cycling to be a secondary transport option. Many want more cycleways, with a preference for off-road lanes that are separated from other traffic. There is also a desire for initiatives to encourage cycling, such as secure and covered parking facilities, showers and free or cheap cycles. The idea of the Avon river becoming an off-road cycle route was popular.

### Number of comments: 3833

- More cycle lanes – with a preference for off road and separated lanes.
  - “Please add as many cycle lanes as possible.”
  - “Off-road cycle lanes all over the city so we can all leave our cars at home, save petrol, keep fit, clean air and safe for children.”
  - “Separate areas for cyclists – look at Copenhagen, where the cycle lane is between the footpath and the bus lane.”
  - “Also to include more dedicated cycleways (my Mum won’t let me ride my bike to school (St Michael’s in the Central City) because it’s too dangerous)...”
  - “Easy access for cycles. Off-road cycle lanes, they work well in other cities, like Canberra which has a similar population to Christchurch.”
  - “I want separate cycle roads, so you can cycle in complete safety. Safe places to leave bikes. I would love to cycle again but haven’t for years as it isn’t safe.”
- Safe dedicated cycle lanes – NOT shared with buses or cars. Separation from pedestrians was also mentioned.
  - “I want cycleways purpose-built for safety of cyclists – not shared lanes with major roads.”
  - “Dedicated cycleway (like Bourke St, Sydney) providing safe cycling without traffic and parked cars.”
  - “I would like a city where my children can cycle to all parks and city centre while not sharing the roads with cars...”
  - “More cycle corridors not shared with cars or pedestrians.”
  - “Biking should be safe – I know lots of people who would bike if it were safe, and cycle tracks were separate from roads and footpaths.”
- Integrated cycle ways across the city so that people can cycle to the centre safely and easily.
  - “Bigger and more cycleways from suburbs to city area.”
  - “I want bike lanes from suburbs to city centre – similar to London blue cycle lane and bike hire places for people to use for work or leisure.”
  - “Learn from European cities who have integrated cycling/walking properly into their cities.”
  - “Cycle-friendly Central City, extending to the suburbs.”
  - “We need more cycleways connected to the outskirts for visitors and commuters.”
  - “Cycle tracks where we feel safe to cycle interconnecting with the suburbs, i.e. Brighton and Sumner.”
- Safe and plentiful bicycle parking – undercover in some cases.

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- “Separate cycle paths and plenty of parking for them.”
  - “Mandate that all new development must provide undercover and secure cycle parking and shower facilities.”
  - “Safe secure bicycle parking with public showers and lockers and quick fix cycle repair shops.”
  - “Covered secure bicycle parking linked to dedicated (not traffic) cycle and pedestrian thoroughfares.”
  - “I want bicycle sheds and stands.”
  - “I want bicycle parking racks, e.g. as in Amsterdam.”
  - Ability to hire/borrow a bike.
    - “And a self-service bike system like the Velib in Paris.”
    - “Cycle rental scheme, the same as Brisbane.”
    - “Amsterdam is an example where some central parts are extremely cycle friendly – even down to free cycles to get around.”
    - “Bicycles that are available for hire to use throughout zone 1 and 2 in London.”
    - “I want loan bikes like they have in Copenhagen.”
    - “Free city bikes (waive helmet laws).”
    - “I want bike banks – free. Multi drop/pick up points.”
    - “Communal bikes can be free and kept on buses and central lockers.”
    - “A cycle system in the inner city of borrow ride and park a bike.”
  - Being able to cycle (and walk) along the river.
    - “I want a riverside pathway. Cycleway without one ways blocking natural features – great for tourism.”
    - “I want cycleways and a large walkways to follow route of Avon river.”
    - “Enhanced river banks with walkways cycle ways, cafes and seating areas.”
    - “Love the idea of a cycleway around the river – great tourist potential and lovely for us,”
    - “I want cycleways along the river, to encourage cyclists and not cars,”
    - “Bike tracks along the river Avon, all the way along so we don’t have to bike on the roads.”
    - “I want bike/walk tracks along the Avon river for an activity inn the Central City. Lots of small parks and activities for children, and small shops along streets for some tourist attractions.”
    - “Integrate the river – improve walking and cycle routes. Don’t treat the river as a drain.”
  - Shared [wide] spaces for cycles and pedestrians.
    - “Widening of existing pathways to allow shared pedestrian cycleways.”
    - “I want Shared slow zone roads around the Square. Deliveries 6-9 am. Only electric shuttles, biking, walking, meeting, sitting.”
    - “Spaces with shared pedestrian/cycle liked access ways.”
    - “Shared paths in Cashel Street mall linked to Hagley, linked to railway path see Barcelona.”
    - “I want widened pathways if necessary (like Gold Coast, etc) and have shared cycle/ walking pathways.”
    - “I want shared space; people/walking friendly; accessible spaces for wheelchairs, mobility scooters, prams; dedicated cycle lanes.”
    - “Ideal is for cycle lanes to be dedicated for cyclists but if necessary could be shared with pedestrians - not motorists.”
    - “Slow cycle routes that may share precincts with pedestrians.”

## Share An Idea Summary

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### ***What type of things are needed to encourage people to cycle in the city?***

***Number of comments: 410***

- Cycle lanes that are separated from cars with a preference for off-road or some physical barrier between the cycle lane and the car.
  - “Dedicated cycleways separate from roads, both into the city and within the city. A local carbon tax/congestion tax to fund cycleways.”
  - “Off-road cycle lanes with trees and shrubs to separate cyclists from the noise and dust of the motor vehicle traffic (on high use roads).”
  - “Simple: safe cycle facilities where the cyclist is physically separated from cars. Everyone is happy.”
  - “Safe cycleways – separated by a kerb from traffic, continuous lanes which don’t suddenly disappear, bike signal changes early at lights.”
  - “Where practical, cycleways separate from traffic. Shared pedestrian and cyclist footpaths where space is limited.”
- Well-connected, continuous cycleways around and to the Central City.
  - “Better connecting cycleways from outlying suburbs. Inner city lanes are good but you have to be able to get to the city in the first place!”
  - “Safety! Dedicated and continuous cycle lanes.”
  - “Cycle network in the CBD to connect to cycle-friendly routes between the CBD & the suburbs.”
  - “A safe, connected, well signed & marked cycle network for all the city.”
  - “Cycle lanes to be continuous and separated from traffic on busy roads and intersections. But still need to be direct and not a longer route.”
- Better facilities for cyclists including more bike racks, sheltered, secure bike storage, places to shower.
  - “Central facility for cyclists providing secure storage, showers, towel, locker, etc. Like Brisbane’s Cycle2City, accessed via membership.”
  - “Having more end of trip facilities in office buildings – secure covered parking, lockers to keep work shirts, etc, and showers.”
  - “Secure places to park and lock bicycles with shower facilities. Obviously it would need to be a user-pays arrangement.”
  - “We need bike parks where we can leave bikes parked safely. Cycle lanes are fantastic as well!”
  - “Secure areas to park your bike while you head off to the shops or out for lunch, somewhere in view and with surveillance for security.”
- Safer crossings with priority for cyclists.
  - “Intersections and traffic lights planned so that cyclists turning right don’t have to cross two lanes of traffic.”
  - “Traffic lights synchronised to cyclists travelling at a moderate speed.”
  - “...intersections need to have good visibility/priority for bikes...”
  - “Making the roads and intersections safe for cyclists amongst other vehicles.”
  - “Cycleways separated from the road and dedicated signals at busy intersections, such as the ones at Kilmarnock Street into the park.”
- Slowing down the traffic with low speed limits.
  - “Vehicle-free paths; and where a roadway has to be shared (poor planning) physical separation of modes and 20kmh speed limits.”
  - “Take a direction from cycle successful cities around the world – we need to slow traffic to make it safe for everyone.”
  - “Slower speed limits for all traffic, lots of bike specific parking, less street car parking.”



- “Separation from traffic on commuting routes, and slower traffic speeds in shared roads.”
- Share or hire a bike scheme.
  - “Love the idea of hiring bikes...great for locals and tourists. We have the perfect flat terrain – let’s make the most of it!”
  - “Free ‘city bikes’ and plenty of bike racks.”
  - “Quick bike hire system at every corner, like the Velib’ in Paris!”
  - “Free or hire city bikes, like Berlin, Copenhagen, Toulouse, etc. Let’s plan ahead for the future when petrol is even more expensive!!”
  - “Bikes that people can rent at stations throughout the Central City (like they did for scape but on a larger scale) also great for tourists.”
- Educating car drivers and cyclists.
  - “Driver education (removing the attitude that cars are more important so ‘get out of my way, cyclist’)...”
  - “Make it safe. Education for cyclists and drivers.”
  - “...encourage new cyclists with ads & education for cyclists and motorists.”
  - “...educate and fine drivers.”
  - “Include an education programme for drivers and cyclists – both can be as stupid, arrogant and dangerous as each other.”

## Cost

### Topic summary

People would like a public transport system that is affordable to use. There were many who wanted free car parks on the periphery with free shuttles/trams to take them into the centre and free bicycle hire around the Central City.

#### Number of comments: 661

- Free trams/shuttle buses into the centre
  - “Free, frequent public transport (trams?) around the city centre to avoid congestion, cycle-friendly, vibrant and pedestrian-centric!”
  - “Bus exchanges on edge of city with free electric yellow buses in town.”
  - “Free eco-bus service into CBD.”
- Affordable tram
  - “If the trams are reinstated, I like the idea of an annual low cost pass to move around the city – current pricing is too high for local use.”
  - “Cheaper trams that bring people into the city but leave their cars behind.”
  - “Lower tram prices; not just a tourist attraction.”
  - “Public buses/trams free (how much would this cost?). Does employing people or having machines where you pay actually cost almost as much as providing the service for free?”
- Free car parks on the edge of the centre
  - “A free ‘Park n Ride’ car park out of central CBD with access to free shuttle and tramway.”
  - “Build car parks at corners of 4 avenues with free shuttle buses in to centre – keep Central City free of non-essential traffic- clean/green.”
  - “...a big parking lot just outside of the city centre. Where people can leave their cars for the day and then catch a free tram/shuttle in.”
- Many people like the idea of cheap or free bike hire
  - “Lots of bicycle parking and ‘free’ bikes to encourage people.”

## Share An Idea Summary

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- “Limit cars in the CBD but provide free bikes to be used, GPS tracked to prevent thefts.”
- “Transport terminal for rail/bus/tram with free bike hire from this location.”
- “Free bikes to pick up and drop off anywhere in CBD.”
- “Free bikes in the inner city, to reduce cars and parking in inner city.”
- “Free bikes to pick up and drop off anywhere in CBD.”

### *Ease*

#### **Topic summary**

People want it to be easy to travel around and to the Central City, with everything well linked by public transport, road, cycle and pedestrian networks. Public transport needs to be convenient, frequent and reliable in order to ensure this ease of movement.

#### **Number of comments: 487**

- There are many comments on wanting it to be easy to move around the Central City.
  - “I want more open space, safe buildings, easy transport options.”
  - “It has to be easy to access and move around in on efficient, quiet inner city transport.”
  - “A vibrant interactive place that has interesting spaces, shops and is easy to get around.”
  - “Easy to move around.”
  - “If the ability to move around the city is made easier the people will come and enjoy.”
- It must be easy to get to the Central City as well as getting around it.
  - “Easy transport and access to/from/within the city...”
  - “Easy access to and around the Central City. Integrated transport systems that make it easy to get from the suburbs to the CBD.”
  - “Safe and easy ways to get to town so that we all come and use the new, amazing Central City. I want to feel that the kids are safe cycling in to town.”
  - “A great city centre is a centre that is easy to get to and to get around in.”
  - “An easy transport system. Fast train/tram/monorail something to connect the city centre with the suburbs, the Hospital, the Airport, the sea, university and shopping malls – buses just clog up the already clogged up roads.”
- Everything must be well linked by public transport, road/cycle/pedestrian networks, e.g. precincts.
  - “First rethink and link transport hubs – car parks, bus interchange, trains, airport with trams, malls, walkways, cycleways.”
  - “Make the CBD an easy place for all to access for shopping and recreation – effective public transport, accessible linkages between spaces and places.”
  - “Accessible for different forms of transport. I want it to be easy and inviting to cycle into the city if I choose rather than a ‘dance with danger’. Public transport needs to be inviting and efficient.”
  - “First rethink and link transport hubs – car parks, bus interchange, trains, airport with trams, malls, walkways, cycleways.”
- Convenience and reliability are essential to making it easy to get around by public transport.
  - “I want convenient reliable public transport with affordable options 24 hours a day....”
  - “Transportation that is easy to jump on and jump off at your destination, i.e. tram – cars are a hazard in the city and are a difficult form of transport to navigate your way around the city centre. Being able to get to where you want or jump off when something catches your eye may encourage more to venture into the city – it would me...”
  - “Really easy to get into and around town. A super efficient public transport system that doesn’t strand you miles from anywhere in the rain.”
  - “Public transport designed to suit Christchurch, i.e. light rail, efficient affordable and comfortable.”

## Street function

### Topic summary

Changing the one-way system was a common topic, with a mixture of opinion between those for and against. Those who wanted to retain it thought it provided a quick and easy way to get through the Central City, whereas those against it thought that it didn't encourage people to go or stay in the Central City, just to pass through it. Other ideas relating to the street network, included slowing the traffic down, creating car-free areas, and changing the emphasis of the road flow to give priority to cycling and walking rather than driving.

### Number of comments: 758

- There are those that support the existing one-way system, primarily because it allows people to get through the city centre quickly and easily.
  - “Some form of ‘one-way’ system to be retained. It means for me that is easy to access the CBD. Without a convenient and efficient way to enter and exit the Central City, I am less inclined to go there. Also, if the existing system of getting across town is taken away, there needs to be a alternative put in place otherwise the traffic woes we have put up with after the quake will continue!”
  - “Retain the one-way roading system through out the city as it is an efficient method of moving traffic from A to B.”
  - “There’s talk of taking out the one-way system which worked really well before the earthquake. It has to be included in the new vision of Christchurch as when the system was out of action the roads around the CBD were bumper-to-bumper. With the re-opening of parts of the one-way system the traffic has significantly quietened on the main arterial routes.”
  - “Easy access to work via the one-way system – it works well.”
  - “Keep one-way streets as they enable traffic to get through the city very easily.”
  - “Please retain the one ways as they keep traffic flowing and reduce congestion, even if they are pushed out a little more peripherally.”
  - “One way and transit traffic should go along the ‘avenues’ or other route (outside) around the city not through. More pedestrian freedom across city. More public transport – even free shuttle/tram around and through city.”
- There are those that oppose the existing one-way system as it doesn't encourage people to go to the Central City, just to pass straight through it on their way to somewhere else.
  - “I don’t want lots of traffic. The one-way system doesn’t work as most of the time you go through the CBD while getting from one side of the city to the other, but never stopped in the CBD, just added to the traffic.”
  - “No one-way roads. They don’t allow people to stop and browse, promotes “shortcuts” that people drive through, rather than a destination.”
  - “No one-way streets through the Central City. Our Central City should aim to exist for people, not cars.”
  - “Get rid of the one-way streets. Town shouldn’t be a short cut.”
  - “Remove the one-way system, it makes it easier for business to operate.”
  - “One-way roads. It’s very annoying for new visitors. I’ve been here for 4 years and still not used to them. Christchurch is not a big city and doesn’t have a traffic problem and we don’t need one-way systems.”
- Reduce the speed limit of cars within the CBD to create a safer environment for all traffic.
  - “Slow roads, e.g. maximum of 40 kph. Full grid of cycleways. Keep express ways/one-way systems out of CBD.”
  - “Slow zones for traffic, removal of separation of footpaths from roadways like in some UK towns.”
  - “Cars give way to bikes, turning islands where cars wait, slow cars to 30kmh, no car parks on streets, raised car entrances/exits.”
  - “15 kms per hour speed limit inside 4 avenues in Christchurch. Safer for pedestrians, cyclists, children. Less noise!”
  - “Lower speed limits (and streets to match it) in Central City to give more parity to pedestrians and cyclists.”
- Make the area within a certain perimeter car free.

## Share An Idea Summary

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- “Keep the one-way streets. Make the areas inside the one-way streets pedestrian only. Keep trams running. Block centre median into CBD at 4 avenues except for one-way streets. Allow left-in, left-out from 4 avenues in to CBD for non one-way streets.”
- “Encourage use of walkways and bicycle lanes by getting rid of one-way system. Restrict vehicle access to Central City. Use electric shuttles.”
- “Reduce the one-way system to one circular route, Montreal, Salisbury, Barbadoes and St Asaph streets and make the area inside these car-less.”
- “I would love to see the inner city car-free, with a lot of cycleways, bus lanes and pedestrian only areas.”
- “More green & memorial in Square. Mix entertainment, business, cafes, bars together. No cars within avenues.”
- “City was dying from the inside. Bring people back with no cars inside one-way system, free trams to cafes, low rise shops & loft apartments.”
- Push the traffic out to the periphery, with the four avenues was a popular option.
  - “Vehicular traffic should go to the periphery – rather than through the CBD.”
  - “One-way and transit traffic should go along the ‘avenues’ or other route (outside) around the city not through.”
  - “A central ring road around the CBD with parking building/space off the ring road and direct routes to the ring road.”
  - “...move the through traffic out to the four avenues...”
  - “Move the cross city traffic out to the four avenues. Use the four avenues as the major cross city routes, not the one-way streets.”
  - “Keep the four avenues – all cars to be on the outside of the 4 avenues with a free shuttle service into the city.”
- Alter the road system to prioritise cyclists and pedestrians rather than cars.
  - “Cycleways separated from the road and dedicated signals at busy intersection, such as the ones at Kilmarnock Street into the park.”
  - “Total segregation from motorised traffic where possible. Safe and preferential crossing at major junctions, e.g. more cycle traffic signals.”
  - “Make traffic signals prioritise cyclists and pedestrians ahead of cars.”
  - “Off-road cycle lanes, cyclist friendly intersections, less vehicle traffic. Give priority to cyclists, pedestrians and public transport.”
  - “Improved continuity of cycle lanes through intersections including right turning lanes for cyclists at busy intersections.”
  - “Traffic lights that count down while you’re waiting to cross the road.”

### ***What are your thoughts on the four avenues – Moorhouse, Fitzgerald, Bealey and Deans/Harper – becoming a ring road for the Central City? Even if some roads that intersect these avenues had more restricted access than before?***

#### ***Number of comments: 532***

- There are many who support this idea, particularly if there is ample parking along the route, good cycleways and cheap public transport into the Central City.
  - “Good idea. If it’s easy for people to get into town from there via walking, biking or public transport no problem. Moorhouse needs trees.”
  - “That’s a good idea! Especially when the inner city gets more restricted for cars – more pedestrian only areas!”
  - “A logical choice which must include safe inviting pedestrian and cycling infrastructure.”
  - “Seems OK as long as ‘ring road’ doesn’t mean a motorway-like barrier that cuts off the CBD to pedestrians and cyclists.”
  - “Good idea, with public transport and cycle lanes taking people into centre, good parking options on outside of ring road, etc.”
  - “I think it would work well, especially if inside is mostly pedestrian, cycle and public transport.”

- Many support the idea as long as it is made more attractive.
  - “A tree-lined ring road would be a great idea. Restrict access to CBD and include access off ring road to park & ride facilities into CBD.”
  - “Yes, use Aves as ring road, and enhance/protect tree-lined character.”
  - “As long as it doesn’t impede traffic flow for local businesses, great. Trees needed for Moorhouse Ave pls.”
  - “Good idea, with trees, native shrubs, flowers. Make the avenues attractive. Businesses must have plenty of parking and greenery too.”

## ***Access for all***

### ***Topic summary***

When designing the city, consideration should be given to those with mobility issues, such as people with disabilities, the elderly and people with young children. Moving around the city must be made easy, safe and pleasant for everyone.

#### ***Number of comments: 269***

- Disability friendly – needs to be accessible for people with a range of disabilities, e.g. people with walking frames, wheelchairs, blind people, deaf, etc.
  - “I want safe wheelchairs and motorised special needs access, wider pavements not so close to busy streets as dangerous if they tip over with speeding traffic zooming past.”
  - “Make it easier for disabled to get to/from CBD, they have money to spend too.”
  - “Don’t want to be denied access to anywhere I want to go because I have a pram, or a walking frame, or a wheelchair.”
  - “It is important to provide for all ages and transport needs to be available for older people and disabled.”
  - “A city that is accessible to everyone in the community & takes into account the needs of disabled people, the deaf, and visually impaired!”
  - “Whatever plan is selected the new city MUST be fully accessible to people with all types of impairments, including those with mobility problems, the elderly, the blind and the deaf. This includes buildings, roads & footpaths, transport and parks & recreational facilities.”
- Elderly friendly
  - “You need to consider the elderly. If you have no cars or buses in the CBD, how are they going to get around?”
  - “A city that is adaptable to the ageing population. A city that follows the principles of Lifetime design – for ease of access for ALL!”
  - “We have an ageing population, allow for more disabled/short-term car parking.”
  - “Consider that we will have an increasing elderly population, so please take that into account when planning movement within the city, entertainment, etc.”
- Family friendly
  - “I want a transport network that makes it easy to use public transport to get into the city....with children/pushchair.”
  - “Don’t want to be denied access to anywhere I want to go because I have a pram, or a walking frame, or a wheelchair.”
  - “A transport network that makes it easy to use public transport to get into the city....with children/pushchair.”
  - “A public transport system that would fit a standard sports child buggy, then I would catch the bus with the kids.”
- Access to mobility scooters
  - “Mobility scooter for hire.”
  - “I want mobility scooters available for hire.”
  - “I want cheap wheelchair and mobility scooter hire for the elderly to get around.”
  - “I want continue free mobility scooters in the CBD.”

## Share An Idea Summary

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- “In many towns and cities in England, there is now a ‘shop mobility’ service. This has a small fleet of electric scooters at big car parks that can be hired for a modest charge. The shoppers leave their cars in the car park and tour the shops or visit a restaurant on a hired scooter.”

### **Road safety**

#### **Topic summary**

People want to be safe when they travel around the city. This is particularly true for pedestrians and cyclists who feel the most unsafe, primarily through their relationship with cars and buses. Measures to increase safety levels include separating pedestrians and cyclists from other modes of transport, slowing down other forms of transport and ensuring that pedestrians/cyclists have priority in road crossings.

#### **Number of comments: 325**

- Safer crossings for pedestrians and cyclists
  - “Change traffic lights so pedestrians only walk when all vehicles have stopped. Walking in front of left-hand traffic is very dangerous and not in line with international practice.”
  - “More pedestrian crossings – very dangerous at the moment.”
  - “Pedestrian bridges and safe crossing points where the riverside walk/cycleway crosses the road bridges.”
  - “No more 12-second crossing times. Not everyone can run across the street.”
  - “Make crossing Bealey, Fitzgerald and Moorhouse avenues easy and safe (e.g. separate bike & pedestrian only cross time) so not a dangerous barrier.”
- Slower car speeds
  - “30km speed limit in CBD.”
  - “30km/h speed limit within the central CBD, as was planned by the Council seven years ago but never implemented.”
  - “Enforce slower speed limits around CBD.”
  - “Don’t want anything moving at more than 20 km/h.”
  - “Slow roads, e.g. maximum of 40 kph.”
- Separation of pedestrian/cycles from cars
  - “Please put in completely separate cycleways! I would use them and so would my kids if there were no cars or buses to contend with!”
  - “Cyclist and pedestrians have to feel much safer. No lane sharing, there is plenty of room to separate if thought of carefully.”
  - “A safer bike way is greatly overdue. Biking on the roads around Christchurch is dangerous, but for many people is the only, or best way to travel. It needs to be made safer.”
  - “I would like to see safety of pedestrians and walkers looked at. At times dangerous as cyclists and skateboarders try to use the same space. Maybe leave road space for cars and express bus lanes but divide footpath.”
  - “I want to see more dedicated cycle ways and safer intersections for cyclists. Having a safe roading system means safety for all road users, including cyclists and pedestrians.”
  - “Proper cycle lanes that separate bikes from the other traffic. A painted line dose not make a safe cycle lane.”

### **Reduced or no traffic**

#### **Topic summary**

People feel the Central City would be a more attractive and safer place to be in if there were fewer cars and large buses. In order to achieve this, there must be better provision of pedestrian focused networks, safer cycleways, good alternative public transport options, such as trams/smaller less polluting buses integrated with park and ride options on the periphery of the Central City.

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**Number of comments: 2317**

- Remove cars from specific areas
  - “No cars, no buses in small areas, e.g. the Square, Central Mall.”
  - “Make the Square ‘our piazza’. No cars. A beautiful fountain with quality cafes and shops, and more security.”
  - “Discourage cars from the St Asaph St, Madras St, Rolleston Ave, Salisbury St area. Make this area pedestrian & bike friendly.”
  - “No cars inside Armagh to Lichfield/Manchester to river after 9am to 4pm daily, only bikes mini cabs and mini buses.”
  - “Central streets (Hereford, Manchester, etc) closed at night to cars, to create a better atmosphere and night life for the city.”
  - “More pedestrianised areas through the centre. Colombo Street should have car restrictions at certain times.”
  - “Block off some of the city centre to cars. So tourists can walk around and see Christchurch.”
- Replace cars inside the CBD with specific public transportation options and/or walking areas.
  - “Make the entire centre a pedestrian area. No cars just free trams :)”
  - “A green sustainable city with light rail system within 4 avenues to transport people to and from railway station. No cars in inner city.”
  - “Remove private traffic from the inner city entirely. Trams, cyclists, pedestrians and service vehicles only.”
  - “Light rail to 4 Avenues with trams to move people through CBD. Works in Melbourne and removes congestion. No buses or cars in CBD?”
- Keep buses outside the city centre
  - “We should have 2 bus stations and have trams regularly going between the 2 of them. keep the city traffic down no buses in the city centre.”
  - “Keep big buses out of centre by creating outer boundary transfers with mini buses only entering CBD.”
  - “No buses to be in the Central City. They are dirty and not energy friendly.”
  - “No buses in the city centre. Yes – light trams in regular intervals. Move bus exchange to out of the city centre old Women’s Hospital site?”
  - “Maintain a central bus exchange, but remove inner city services in exchange for tram, walking and bike ways.”
- Build cycleways to reduce car traffic
  - “Dedicated cycleways to encourage people away from cars. Better for health, environment, economy (wouldn’t need helmets, great for the hairdo).”
  - “Off-road cycle lanes all over the city so we can all leave our cars at home, save petrol, keep fit, clean air and safe for children.”
  - “I want more cycle and walkways to make it easier for people who respect the environment to get around. I also want to see no cars or buses in the CBD.”
  - “Dedicated cycle/pedestrian routes through city with lights to stop traffic at each intersection.”
- Establish parking areas around the perimeter of the Central City.
  - “A green pedestrian/cycle only centre with hop-on-off tram transport to perimeter car parking.”
  - “Most buses should terminate and cars should be left in parking areas on outer edge of CBD. Keep the central area for pedestrians.”
  - “Put 24-7 car parks (& good shuttle bus service) at EDGE of CBD near arterial routes, rather than have to drive through congestion to park.”
  - “No street parking in CBD. Parking buildings on perimeter. (Kilmore, Durham, Tuam, Madras).”
  - “Possibly car parking just out of the very centre of the city with shuttles leaving and taking people into the Central City and returning to the car parks so all that traffic is not in the heart of our city.”



## Share An Idea Summary

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- Alter the interplay of traffic lights to take the advantage away from cars to favour cyclists and pedestrians.
  - “Actively disadvantage cars, i.e. slow speed limits, single lanes, limited parking, sequence traffic lights in favour of cyclists & pedestrians.”
  - “Slow traffic zone between the Square and Botanic Gardens without one ways (Montreal and Cambridge Terrace).”
  - “Cyclists and pedestrians should have priority.”
  - “Regulate speed by light system – orange red to slow.”
  - “Dedicated cycle/pedestrian routes through city with lights to stop traffic at each intersection....”
- Some mixed views regarding how the one-way system helps to reduce or increase traffic
  - “No one-way streets slicing through the CBD and killing it. Divert through-traffic on to arterial routes.”
  - “We don’t need the one-way street system. It stifles the city. If need be move them out of the 4 avenues with phased light system. More free turning arrows.”
  - “One-way streets are better for traffic flow around the city.”
  - “Please keep the one-way system – great for getting through town quickly.”
  - “One-way system is great easier to flow traffic through city with traffic light phasing.”
- Establish a light rail or tram system that crosses the CBD.
  - “Free tram system crossing the city grid, minimise cars in CBD.”
  - “Light rail to 4 Avenues with trams to move people through CBD. Works in Melbourne and removes congestion. No buses or cars in CBD?”
  - “Minimise cars, have light rail or trams coming in from the suburbs.”
  - “Like to see buses and cars kept to outer CBD with free trams circulating so people can get around.”
- Keep industry out of the CBD, as it increases traffic.
  - “Industrial business generates heavy traffic, noise and pollution which should be kept to the CBD periphery.”
  - “Industrial firms often noisy, smelly and hazardous plus high heavy traffic count for delivery on and off site. Keep them out.”
  - “Manufacturing industry brings traffic and waste disposal issues. Not appropriate in Central City.”
  - “Keep the city centre free of industrial businesses-reduce heavy vehicles use in the CBD.”

## Infrastructure

### Stormwater

#### Topic summary

Very few comments but there is a preference for a more environmentally thoughtful approach that uses natural methods to reduce the amount of stormwater.

#### Number of comments: 19

- N.B. There are few comments about stormwater.
- Develop environmentally friendly methods of reducing stormwater to prevent pollution of the rivers.
  - “I want more green space integrated with stormwater treatment systems (the Avon river currently receives vast amounts of untreated stormwater filled with various contaminants).”
  - “When re-paving an area, channel stormwater to a ‘rain garden’ or a swale not into a stormwater pipe. This improves water quality in rivers.”

- “...green spaces have long been seen as important in reducing storm water runoff. A combination of more ground-level parks and rooftop gardens can reduce the strain on sewers and reduce the burden placed on water-treatment facilities (Johnston & Newton, 2004), particularly important considering the damage caused by the recent earthquakes. They can also help keep pollutants such as cadmium, copper, lead and nitrates from entering the groundwater...”
- “Surface Water Management WANTED. It is essential that naturalistic methods are utilised to manage the quality and quantity of surface water. That is, porous and vegetated ground surfaces, green roofs, swales and rain gardens, spring flows flowing on a day-lit surface (not piped), wetlands adjoining the river corridor...”
- “Redesigned stormwater systems that don’t run into city rivers. New waste systems with separate grey/brown water allowing grey water reuse.”

## Water supply

### Topic summary

Few comments but there is a preference for a more environmentally thoughtful approach and to ensure that there is good quality water available.

#### Number of comments: 54

- N.B: Few comments.
- A more environmentally thoughtful approach.
  - “Less dependence on networks – electricity (solar panels), water (buildings have own water tanks), sewage (compost toilets).”
  - “Simple. Sustainable. Local materials. Manageable at micro level. Harvesting Water at household level. Community Gardens. Public Transport.”
  - “Double plumb all new buildings. We are all familiar with two sinks in our kitchen, if one of these drains went to a greywater storage, people could run the tap into this while they were rinsing vege, waiting for the hot water to arrive or other. This water could then be re-used for clothes washing, car-washing, irrigation, etc. We could dramatically reduce Christchurch’s water consumption. Especially important considering the enormous recent impact on our city water supply.”
- Maintain the quality of the water supply – no additives.
  - “Look after our water.”
  - “Get the chlorine out of the water.”
  - “Please look after our water, the best in New Zealand. Keep it that way.”
  - “Don’t EVER fluoridate our water. We should not be forced to drink poison. And get rid of the chlorine as soon as possible.”
  - “Clean, pure water is vital for the health of the people and the city. Chemical-free water available for people to drink in their homes.”
- More drinking fountains.
  - “I want more drinking fountains”
  - “I want a community garden, lots of drinking fountains.”
  - “Free drinking water available on every street. Why do you need to buy water? The Romans managed this a long time ago! Perhaps water fountains are the way to go?”
  - “Celebrate the fact we have the world’s best water. More fountains and drinking fountains on streets and in parks and ban bottled water.”

# Share An Idea Summary

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## ***Electricity supply***

### ***Topic summary***

Very few comments but there was preference for underground storing of electrical cables and a slight preference for a more environmentally thoughtful approach using more alternative renewable resources.

#### ***Number of Comments: 19***

- N.B: Very few comments
- A more eco-friendly approach that prepares for the future.
  - “Less dependence on networks – electricity (solar panels).”
  - “Rebuild a city infrastructure for future generations – one that offers alternative fuels, high-speed wireless, solar power, etc.”
  - “Buildings that are low-rise, pleasant to look at and self-sufficient in energy and waste processing so there would be less disruption from future quakes wrecking underground services.”
- There were those that wanted electricity lines to be put overhead but there was a slight preference for those wanting underground.
  - “Electricity lines should remain on poles or other above ground anchors, perhaps camouflaged by running over buildings instead of along streets, again, this facilitates fast installation of new line and repair of damaged line present or future.”
  - “Category: Electrical Reticulation. Underground electrical lines are very nice but not practical in earthquake areas. All lines above ground.”
  - “Underground power lines add immensely to the visual quality of a city. Hard to consider in earthquake territory but very valuable.”
  - “Would be good to see power lines put underground and future-proof with fibre optic cabling while we’re at it.”
  - “Take the opportunity on any road that is dug up to repair services to ensure that all utilities (phone, power, cable TV) are placed underground.”

## ***Sewerage***

### ***Topic summary***

Few comments but preference to adapt more environmentally thoughtful methods which rely less on the sewerage network and to ensure that the sewerage system is more resilient to earthquakes.

#### ***Number of comments: 39***

- N.B: Very few comments.
- A more environmentally thoughtful approach.
  - “On-site sewage treatment: Sun-mar or similar 0.5l flush composting toilets, greywater recycling systems.”
  - “...we should utilise more green alternatives around essential services, e.g. power and sewerage.”
  - “No sewerage system as it is now. It is ludicrous to think that you are repairing a system that will break down again in another earthquake. We need composting toilets in most homes so that sewerage will not be a problem next earthquake. Subsidise these for your ratepayers.”
  - “I want decentralisation of the sewage system. Alternative disposal methods investigated and implemented. Alternate energy systems devised in conjunction with the sewage systems.”
  - “...I want to see composting toilets being the norm in the whole of Christchurch, they need to be subsidised by the CCC so that everyone can afford to put one into their home or business. This reduces the need for a complex and very costly sewerage system...”

- Ensure that the sewerage system is earthquake proof.
  - “I would like to see satellite sewage works around the city rather than all the waste going to Bromley. Why would we continue to send all the waste to an area that has had severe damage and liquefaction problems. Many smaller works would mean less pipes at risk and people would realise it’s their problem. These have been used at many other places around NZ and the world and can be made very environmentally friendly.”
  - “It would be wonderful if sewerage could be carried in some sort of flexible piping so that even if moved it could still carry its load. I am no engineer but I do wonder if rubber piping with a springy wire support could be invented for this fundamental job.”
  - “Not just central but all over – flexible pipes for water/drains/sewers so they won’t break every time there’s a shake.”
  - “Replace the sewer pipes with a flexible plastic pipe which is manufactured here in ChCh.”
  - “Pure waterways, no chlorine or fluoride or any form of mass medication in our water, clean beaches and sewerage outlets robust and earthquake proof.”

## ***Telecommunications***

### ***Topic summary***

Very few comments but there was a preference ultra fast broadband and WiFi, with underground cabling.

#### ***Number of comments: 15***

- N.B: Also refer to 5 Market and Business Folder – 5.7 – COMMUNICATION TECHNOLOGY – many comments in there.
- High speed broadband and free WiFi
  - “Infrastructure! Ultra fast broadband – wireless city.”
  - “High speed fibre network and free WiFi in the CBD to encourage businesses and people to return.”
  - “Rebuild a city infrastructure for future generations – one that offers alternative fuels, high-speed wireless, solar power, etc.”
- Lay new cables underground
  - “Take the opportunity on any road that is dug up to repair services to ensure that all utilities (phone, power, cable TV) are placed underground.”
  - “No overhead power lines/phone lines.”
  - “Most modern cities have service tunnels where they can be accessed in minutes with power and phone cables cradled to greatly remove damage from ground movement.”

## ***Gas supply***

### ***Topic summary***

#### ***Number of Comments: 1***

- “Our basic utilities appear to be largely destroyed, so where they cannot be simply patched up, new water and gas lines should remain buried, but in formed concrete boxes, with removable lids, in relatively short modular sections, facilitating fast installation and repair.”

# Share An Idea Summary

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## ***Rubbish and recycling***

### ***Topic summary***

People want a litter free, clean city with more rubbish bins that are emptied frequently. They would like to see more recycling and organic bins.

### ***Number of comments: 124***

- Less litter with more rubbish bins
  - “I don’t want dark spaces, traffic jams, rubbish pollution, noise and nightclubs.”
  - “Bins on the bus stops are a simple and easy idea to help to keep the city clean...”
  - “Tidy green spaces, more rubbish bins, hire more people to clean up the streets.”
  - “More rubbish bins all over the city.”
  - “More accessible rubbish bins and frequent emptying.”
- More recycling bins
  - “I want recycling bins and more trees.”
  - “Garden City! Plenty of rubbish bins and recycling bins please! It’s important.”
  - “Add more recycling bins in the city, e.g. see Tekapo for various paper, organic, plastic, rubbish bins.”
  - “Install the 3 bin recycle system on the CBD streets in the parks, etc.”
  - “Design areas around buildings to encourage recycling. Discreetly screen rubbish/recycling bins. Use artistic designs for bins. Be bold.”



## Tell Us What You Think Summary

### *Draft Central City Plan - Summary of Submissions Received on Volumes I & II as part of the tell us what you think formal Public consultation*

#### *Purpose of report*

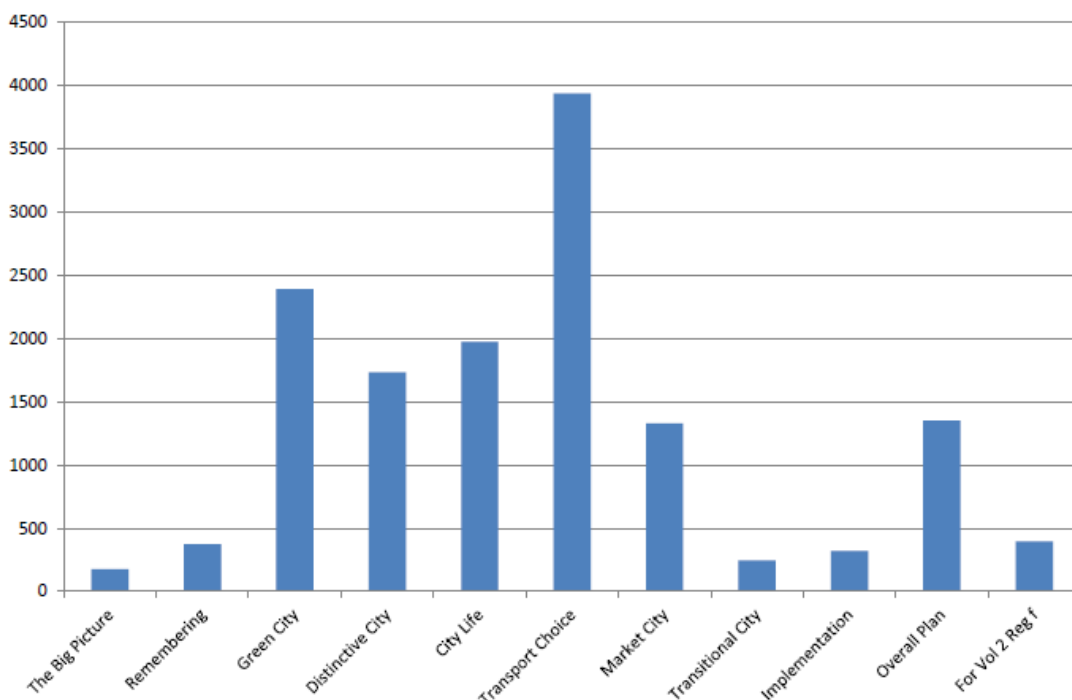
The purpose of this report is to provide a contextual summary of the public’s comments received by the Council on Volumes I and II of the Draft Central City Plan. The report does not provide an analysis of comments but rather summarises the comments into common/key themes per chapter.

#### *Summary*

The Council received 4707 comments on the Draft Central City Plan during the submission period (11 August to 16 September 2011). These comments often contained multiple sub-comments across several aspects of the draft Plan. The comments were received from 2900 submitters (individuals or organisations). Of the 2900 submitters, 427 had their comments heard during public hearings held early October 2011.

Submissions were received in a variety of ways: 23 per cent were received came through from the Council’s website, 47 per cent were emailed and 30 per cent were posted.

Both volumes of the draft Plan received a diverse range of comments, from supportive to negative and there were varying levels of detail and supporting documentation. Similar to Share an Idea, certain common themes emerged during the comment analysis process. These common/key themes are summarised on a per chapter basis. Some comments relate to topics that span several chapters. Comments on the same topic sometimes appear to differ in each chapter’s review, depending on the submitters’ perspective.



**FIGURE 1: SUB-COMMENTS PER CHAPTER – AS OF 27 SEPTEMBER 2011**



## *Tell us what you think consultation*

Following adoption of the draft plan by Council, there was a month's public consultation, followed by hearings and deliberations. The ideas that contributed to the development of the Central City Plan were generated from the Share an Idea Community Expo, the Share an Idea website, public workshops, interest groups, stakeholder meetings, professional bodies and various conversations held within the Greater Christchurch community. The Council gave consideration to the views and preferences of persons likely to be affected by or likely to have an interest in the Plan (section 78 LGA 2002).

Section 17(5) of the CER Act states that the process for the development of the Central City Plan must include one or more public hearings, as determined by the Council, at which members of the public may appear and be heard.

The formal consultation phase on the Draft Central City Plan was from 16 August to 16 September. During this time, Central City Plan team members took the draft Plan out into the community as part of a roadshow, stopping at various locations enabling easy access for residents to learn more about the draft Plan, get an opportunity to discuss it with the planners and most importantly make their views known. A series of eight community roadshows were held, one in each of Council's wards. In addition, staff manned a display at the Events Village in North Hagley Park for seven days from 5 to 11 September.

About 6000 members of the public attended the roadshows. Council also held an International Speakers Series from 27 to 30 August at the University of Canterbury.

During the Tell Us What You Think phase, numerous meetings were also held with a wide variety of stakeholder groups throughout the consultation period. In most instances Council staff arranged these sessions, however in some instances staff attended to present various aspects of the Plan. More than 50 of these sessions were held or attended.

## *Background*

### **Volume 1 – Summary of Submissions**

*Volume 1 of the draft Central City Plan details the components of the recovery plan for the Central City. Submissions have been received and allocated against the chapters of this Volume:*

- General and Big Picture
- Remembering/Maumaharatia
- Green City
- Distinctive City
- City Life
- Transport Choice
- Market City
- Transitional City
- Implementation.

The following sheets provide summaries of the submissions received against each chapter.

# Tell Us What You Think Summary

General and Big Picture		
Comments Received	1350	

TOP COMMENTS OR KEY THEMES		
Item	Chapter Reference	Description of Theme
1	Overall Comments	<p>A high level of support is evident for the draft Plan. About 75 per cent of the comments about the overall plan were positive, with less than 10 per cent of negative comments about the Plan. The balance was comments about other issues, such as process and implementation.</p> <p>Some of the comments indicated that they supported the draft Plan, except for specific issues. The comments on specific issues have been included in the summary in the relevant chapters.</p>
2	Speed of Implementation	A number of mixed comments were related to the speed of implementation. Some expressed a desire to see the plan implemented faster.
3	Cost of Implementation	Some comments were concerned about the cost of implementing the plan and whether the city could afford it.
4	Discouraging Investment	A number of comments suggested that the draft Plan does not support the necessary reinvestment needed to rebuild the Central City. Of particular concern to many of these commentators were the regulatory changes contained in Volume II. A general theme was to reduce the amount of regulation in order to encourage reinvestment.
5	Developer Pressure	Some comments were concerned that business stakeholders would pressure the Council to make changes to the draft Plan which were contrary to public aspirations.
6	Greater Christchurch	<p>A number of the comments pointed out that the Central City could not be considered in isolation from the rest of the city and that any planning exercise needed to take account of what was happening in greater Christchurch.</p> <p>There were also some comments suggesting that they would like to see the principles and initiatives in the draft plan extended to include all of Christchurch.</p>
7	Ngāi Tahu values	<p>There was strong support for a number of comments supporting and commending the inclusion and recognition of Ngāi Tahu values in the draft Plan.</p> <p>There were also a few comments opposing the inclusion of Ngāi Tahu values.</p>
8	Alternative CBD locations	There were a few submissions suggesting that the Central City should be moved to another location (e.g. Riccarton or Hornby).
9	Share an Idea advocacy	There were a number of comments congratulating the Council on both Share an Idea and the Draft Central City Plan.
10	Lack of consultation	There were a few comments suggesting that the Council was not really prepared to listen and would do what it wanted to whatever people said.

REMEMBERING		
Comments Received	373	

TOP COMMENTS OR KEY THEMES		
Item	Chapter Reference	Description of Theme
1	Overall comments	<p>General support of the need to remember, with a wide range of opinions about how this should be done.</p> <p>Overall, a key theme was cost, particularly from those who suggested there are other priorities for the city.</p>
2	Earthquake Memorial	<p>Strong support for an earthquake memorial within the Central City. Where concerns were noted, the two key concerns were over cost and the actual form and location of a memorial.</p> <p>Some suggested the memorial should take on a functional role, for example being combined with EPI-centre, a museum or other public facility.</p> <p>Possible locations included CTV and PGC, as well as Cathedral Square and Our City. The ruins, or the rebuilding, of key sites were also suggested as possible memorials.</p> <p>There was widespread support for a living memorial, i.e. one that is a ‘natural’ site rather than a built memorial.</p> <p>The need to recognise the diversity of victims was voiced, including a range of ethnicities. Consultation with family members and the community was seen as important.</p>
3	EPI Centre (Earthquake Preparedness and Information Centre)	<p>Support for EPI-Centre was expressed, especially in its role supporting the city’s history moving forward. Concern over the cost of the building was for some seen as being excessive when it could be done more cheaply in terms of the other interpretation options (or that the money would be better spent on the rest of the city).</p>
4	Ruins and Fragments	<p>General support with an emphasis on reusing materials, restoration and rebuilding in a range of ways, including polarised positions on whether or not key buildings should be rebuilt or kept as ruins. Caution was voiced over the need to ensure the preservation of ruins as a last choice and that the priority should be repairing or restoring. Comments also mentioned that items they might wish to retain should be selected now to avoid losing these.</p>
5	Remembrance Anniversaries	<p>Strong support for recognising the 22 February anniversary in some way, although other dates were seen as being too variable in terms of how they affected people and of less importance. There were suggestions for free concerts, a public holiday and rituals, such as a human chain along the river. The need to include all faiths in an anniversary event was noted and to be respectful of victims’ families.</p>
6	Interpretation	<p>Strong support for a range of possible ways of interpreting the city, including plaques, historic photographs and guided walks. There was a divided response in terms of the money being better spent elsewhere, as opposed those supporting interpretation and recognising its role in the city’s recovery.</p>

# Tell Us What You Think Summary

GREEN CITY		
Comments Received	2391	

TOP COMMENTS OR KEY THEMES		
Item	Chapter Reference	Description of Theme
1	Overall Comments	<p>The overall comments offer strong support for the Green City chapter projects.</p> <p>Common themes include the desire to uphold the Garden City image through enhancement of existing public spaces, the support for the creation of new parks enabling increased opportunities for activities and recreation and there was a positive response towards green technologies to promote resilience.</p> <p>Numerous comments offered constructive feedback relative to implementation of individual projects, such as the use of native versus non-native plantings. There was support for the build green tool in principle, however; the business community voiced reservation about the complexity and cost and has requested more detailed information on the tool.</p>
2	Avon River Park	<p>Strong support for the Avon River Park project. Positive themes include: improvements to water quality, the cycle route on both sides of river, the increase in activities, building interface with river and activating ground floor with cafes, shops and restaurants. Some of the comments offered constructive feedback, such as continuing the Avon River to the Sea, day lighting adjacent streams, native planting in the riparian zones and exotic planting to provide canopy and shade along the corridor.</p>
3	Greening of Cathedral Square	<p>Strong support for the Greening of Cathedral Square. Positive themes include: colour added, activating the edges and increase in community activities. Some of the comments offered constructive feedback, such as finding an appropriate balance between greening and maintaining a civic functionality of the space, ensuring good lighting, and criticism about the market stalls that occupied the Square.</p>
4	Cranmer & Latimer	<p>Strong support for Cranmer and Latimer squares. Some of the positive themes include, these upgrades are timely and necessary, the Squares need activation and it would be nice to see a range of activities for everyone. Some of the comments noted their opposition towards hard surfaces and built structures, concern about cafes (mess, litter, etc) and the desire to keep the Squares simple and maintain the heritage character.</p>
5	Central City Greenway	<p>Strong support for the Greenway project. Positive themes include: support for an interconnected park system, increase in cycling and recreational opportunities, and a great place for biodiversity and community gardens. Some of the comments noted greater clarity was required to understand how land acquisition would take place (concern over compulsory purchase) and a concern that greenway funding would take away from street enhancement projects.</p>
6	Community Gardens	<p>Strong support for the community gardens project. Positive themes included: it offers food resilience, a benefit for people to reside within the Central City, social and health benefits. Some comments raised the idea of allotments. This seems to be based both on the idea of the European-style of community gardens and also people using the allotment instead of or with community garden.</p>
7	Pocket Parks	<p>Strong support for the development of pocket parks. Positive themes include: will assist in providing a vibrant and green city, helps with the garden in a city concept, and offers a range of activities in the public realm.</p>
8	Family-friendly Parks	<p>Strong support for family-friendly parks. Positive themes include: some comments offered constructive feedback, such as ensuring that there is significant use in these parks and that they are designed for a diversity of users. Some comments were raised relative to dogs and establishing an appropriate location for dog parks.</p>
9	Eco Streets	<p>Strong support for the Eco Streets project. Positive themes include: improvement in stormwater quality, aesthetics, and use of innovative green technologies. Some comments offered constructive feedback which includes: native planting should be used, and considerations should be made for mobility impaired individuals when choosing materials.</p>

## Appendix A. Public Consultation – Tell Us What You Think Summary

10	Greening the Roof	Strong support for the Greening the Roof project. Positive themes include: it will enhance the Garden City image, will improve the aesthetics and will have environmental benefits. Some of the comments voiced concerns over how it would affect the structural soundness of buildings, increase in water use and maintenance concerns.
11	District Heating	Strong support for the District Heating project. Positive themes include: use of renewable energy, global leadership and innovation. Some of the comments offered constructive feedback, such as sequencing to align with the rebuild of roads and buildings. Concerns were raised about the high cost to Council and questioned the quake resilience of the infrastructure.
12	Build it back Green	Strong support from the community for this but mixed support from business community. Positive themes include: logical and exciting that all new buildings are green given the sustainable trend in the global development market, will make Christchurch's rebuild distinctive. Some business and land owners and developers supported the concept, but at least half do not support the added complexity and expense of this. Some query the use of an external organisation (New Zealand Green Building Council). The majority of mixed support comments sought additional information about its application.

# Tell Us What You Think Summary

DISTINCTIVE CITY		
Comments Received	1733	

TOP COMMENTS OR KEY THEMES		
Item	Chapter Reference	Description of Theme
1	Overall comments	<p>Overall comments on the Distinctive City Chapter include the articulation of a clearer identity, including cultural identity, and support for controls over building appearance. Incentives for those that achieve good quality are also noted. There is support for an approach that identifies the safety of buildings and a standardised safety rating system. Also comments relating to geotechnical information and the safety of rebuilding.</p>
2	Height and Human Scale	<p>Whether there should be a height limit is the main division among the comments. What the height limit should be or what and who should determine the building heights create further divisions.</p> <p>Majority of the comments support having height limits although some think they should be lower or higher. Those who reject any height limits suggest it should be determined by developers, engineers, architects or panels of authority on a case-by-case basis.</p> <p>Some comments support more liberal administration of the height limit to allow some buildings to be taller and/or some small defined areas in the core to have taller buildings as well as having more concession for architectural merit.</p> <p>There are a number of comments that the low-rise city concept was a reaction to perceived safety and object to this.</p> <p><b>1. GENERALLY SUPPORTING HEIGHT LIMITS</b> Majority of the comments support having height limits. These are divided into sub groups which suggest height limit should be:</p> <p>1.1 Higher (between 10 and 15 floors) Common reasons given: profitability and a desire for a city image with taller buildings.</p> <p>1.2 Lower (between four to five floors) Common reasons given: anxiety to occupy higher buildings and low-rise perception being no more than five levels.</p> <p>1.3 Strictly enforced at proposed seven levels. Common reasons given: pleasant city environment for pedestrians with less shading, making the most of the Port Hills and the Southern Alps, long-term vision overriding short-term commercial motives and comparison to the desirability of five to seven-level cities, like Paris.</p> <p><b>2. GENERALLY AGAINST HAVING ANY HEIGHT LIMITS</b> These are divided into two main groups which suggest building heights should be determined by:</p> <p>2.1 Developers, owners, architects engineers – the market Common reasons given: avoiding capital flight, associating being a city with having high rises, discarding non-scientific fears from height, showcasing engineering innovation.</p> <p>2.2 Urban Design Panel evaluation on a case-by-case basis Reasons given: post-earthquake context of CBD not yet being apparent and buildings on the south side of streets not affecting sun light on streets or public spaces.</p>

## Appendix A. Public Consultation – Tell Us What You Think Summary

3	Recognition of Character	<p>Almost all comments are around retention of heritage and character suggesting at least some areas and buildings to be retained/conserved. Majority of the comments favoured as much retention as possible with some suggesting there should be more new character than old.</p>
4	Familiar Landmarks	<p>Support for the retention of landmark buildings comes through strongly – buildings repeatedly mentioned include Arts Centre, Provincial Council Buildings, both Cathedrals and the Town Hall.</p> <p>Many comments support heritage retention – acknowledging the need to prioritise retention in relation to cost. Retention of a few key buildings advocated as cost of comprehensive retention seen by many as too high.</p> <p>Issue of safety also addressed by some submitters – concern around safety of heritage buildings.</p>
5	Façade retention	<p>Most comments support façade retention, although many add the proviso that it needs to be safe and economically viable, as well as appropriately done in relation to the form of the heritage building. Less comments against façade retention, those against mainly due to concerns for safety.</p>
6	Good Urban Design	<p>There is wide support for good urban design in the city.</p> <p>Comments are generally concerned about the quality of the rebuild and how this can be achieved with general belief that Council should be more active in achieving good architecture. Some comments are concerned about buildings looking too similar and some are concerned about buildings looking too different from each other. A number of comments support style guidelines or imposition on a street or a precinct basis.</p> <p>In controlling quality, suggestions range from a panel of architects or the Council planners with power to approve building design to style guidelines and highlighted good examples to encourage developers and designers.</p> <p>Specific features that most would like to control are colours and materials. There is a general association of tilt slab with low quality and a general preference for timber and stone.</p> <p>Some comments would like to see less straight lines and more curves and gothic revival features in designs.</p>
7	Strengthening the Grid	<p>Majority of the comments are in favour of keeping the historic grid for heritage or easy access reasons. Some comments suggest the grid was soulless and boring but the lanes and courtyards will help mitigate this. There are a number of comments which suggest breaking up the grid pattern by day lighting historic waterways. There is suggestion of closing off east-west streets to mitigate easterly.</p>
8	City Blocks, Lanes and Courtyards	<p>There is almost unanimous support for encouragement of lanes and courtyards. Comments praise the approach especially based on successful lane developments, with caution suggested around lighting and safety.</p>
9	Precincts and Neighbourhoods	<p>There is almost unanimous support for precincts and neighbourhood approach from those who have commented on the subject. Comments question and seek caution around making rigid boundaries or being too prescriptive, generally supporting overlaps and some mixing of the precincts. There is suggestion that art should be included in all precincts. Some comments are interested in the detail of how and by who these precincts will be determined and enforced or encouraged. Inclusion of residents when defining qualities and boundaries of neighbourhoods is suggested.</p>



# Tell Us What You Think Summary

CITY LIFE	
Comments Received	1976

## TOP COMMENTS OR KEY THEMES

Item	Chapter Reference	Description of Theme
1	Overall Comments	<p>Strong support for the package of projects in the City Life chapter.</p> <p>A common desire for facilities and activities for young people to enjoy, for the role of churches to be noted in the Plan as the Central City focal points/centres of activity, for the provision of early childhood centres and for a barrier-free city in respect of the Central City’s infrastructure.</p> <p>There was particular support for the provision of facilities, spaces and activities for artists, an increased residential population in the Central City, affordable housing, social housing, visitor accommodation and easy accessibility for residents to local amenities/shops.</p> <p>There was a mixed opinion about the night-time economy (i.e. the Central City after 10pm) but a common desire for a safe and vibrant city, 24/7.</p> <p>Comments also wanted art sector representation on the proposed Arts Leadership Forum and commitment to Maori arts, the Cultural Precinct and recognition of the River of Arts concept.</p>
2	Metro Sports Facility	<p>Strong support for project in principle. Main issues/themes noted:</p> <ol style="list-style-type: none"> <li>1. Location in respect to land stability and availability.</li> <li>2. Location in respect to transport issues and its fit with other facilities and activities.</li> <li>3. Desire for urgent rebuild of smaller Centennial Pool-style facility in the Central City.</li> </ol>
3	Community Performance Facility	<p>Strong support for the project, however, a clear indication that the proposed all-in-one facility would not adequately serve all the groups listed in the Plan. As part of this project and budget it is suggested that there should be one facility for movement (dance, gymnastics, circo-arts, physical theatre and professional athletes) and another to cater for community music and performance.</p> <p>Need to ensure the facility is affordable for community groups and to also incorporate recording studios and outdoor performance space.</p> <p>The build date of 2015 does not address the urgent/immediate need in the community.</p>
4	Arts & Crafts Studio Assistance	<p>Support for the project and widespread recognition from comments that the creative sector is a significant driver in the regeneration of urban areas and attracter of private investment.</p> <p>Suggested the Plan provides for an artists’ quarter/precinct that integrates affordable city living and working spaces for artists and their families to revitalise Central City spaces.</p>
5	Professional Theatre	<p>Comments not sure whether this project is specifically for the Court Theatre or for other professional companies as well. Comments support a theatre that would be accessible for a wide range of independent theatre companies.</p> <p>Support for the Court Theatre returning to the Cultural Precinct.</p>
6	Public Art Network	<p>Strong support for this project with requests for greater Maori, Pacific and other ethnicities to be represented in public art. Also more collaboration with art students and community arts.</p> <p>Strong support for the Public Art Adviser role but also suggested a project manager to work with the Public Art Advisory Group as well as identifying lead artists to work on significant capital projects.</p> <p>Strong support for Council to investigate a per cent for art scheme across its own rebuild capital works projects as well as incentives for the private and commercial sector to do the same.</p>

## Appendix A. Public Consultation – Tell Us What You Think Summary

7	Central playground	<p>Strong support for central playground and the network of smaller play spaces.</p> <p>Comments supported the playground as a way to bring families into the Central City but want play spaces to cater for all ages and recommend water play could be used to do that.</p>
8	School Choice	Mixed support for the project. Comments suggest Council acknowledge and facilitate the return of the Central City schools that existed before the quake, such as Discovery 1 and Unlimited Paenga Tawhiti.
9	New Central Library	<p>Strong support for either a rebuilt Central Library or a new building in a more prominent location.</p> <p>There are many comments relating to the implementation phase with views on the types of services, collections and activities that a new Library could house, such as a café and enlarged children’s services.</p>
10	Tertiary Education	<p>Strong support for the intent of this programme and enthusiasm for greater collaboration between providers to relocate some major tertiary education providers’ faculties or schools in the Central City.</p> <p>There is less support, and some opposition, to encouraging students to live in the Central City which is in part linked to the light rail project.</p>
11	Lighting	<p>Strong support for the project and its ability to make the Central City safer.</p> <p>Request for larger budget to be allocated to the project to improve lighting outside the area shown in the Plan and also to have more event and artistic lighting.</p> <p>There are some requests around implementation (particularly limiting light pollution, directing light downwards instead of up to the night sky and ensuring energy efficiency).</p>
12	Safety through Design	<p>Strong support for the project. There is a desire for more resources to be allocated to undertake Crime Prevention through Environmental Design (CPTED) assessments on all public and private developments.</p> <p>Support for staff to investigate potential of making CPTED audits mandatory for private developments under the Regulatory Framework and to incorporate other elements such as fire prevention, civil defence, disaster preparedness and building safety.</p>
13	Christchurch Community House	Strong support for Community House rebuild, including integration with other social services.
14	Residential incentives	Support for the facilitation of Central City living and the Council using incentives to do so. Support for incentives to be linked to certain criteria to ensure good outcomes.
15	Social Housing	<p>Strong support for project. However, a desire for the Council to provide more social housing beyond rebuilding what was lost in the Central City.</p> <p>Comments have suggested a broader scope to look at a range of different tenants and forms of housing, such as emergency housing.</p>
16	Affordable Housing	Strong support for project. Focus on quality design, neighbourhood linkages and catering for different demographic groups.
17	Neighbourhood Initiatives	<p>Support for the project and the importance and benefits of building a sense of neighbourhood in existing and new communities.</p> <p>Desire for the Council to build upon what is already in the community.</p>
18	Housing showcase	Support for the Council and partners leading by example and developing the housing showcase.

# Tell Us What You Think Summary

TRANSPORT CHOICE		
Comments Received	3939	

## TOP COMMENTS OR KEY THEMES

Item	Chapter Reference	Description of Theme
1	Light Rail	<p>Mixed Support on light rail, with some supporting the proposal and others against it. Cost and the size of the city’s population were the main concerns expressed by those against light rail.</p> <p>Many comments suggested alternative routes for light rail, in particular use of the existing rail lines was suggested as a cheaper and more logical alternative to the university route. Others suggested rail straight to the Airport would provide better benefits.</p> <p>Of those that did not support light rail, many suggested that the bus system should be significantly improved instead, by providing more electric buses and more dedicated bus priority measures.</p>
2	Streets for Cycling	<p>Strong support for the cycling proposals in the plan, especially separated cycle lanes.</p> <p>Strong support for even more cycle facilities to be provided across the Central City and city-wide.</p>
3	Buses and Street Stations	<p>Mixed support on Buses and Street Stations</p> <p>Many people provided their own suggestions for a public transport network. These included alternative stop locations and designs, use of alternative vehicles and systems.</p> <p>Stronger support for a single bus interchange than a multiple exchange solution.</p> <p>A number of comments requested the retention and/or extension of free electric shuttle.</p> <p>Several comments requested that smaller buses be used.</p>
4	Slow Core	<p>There was strong support for the introduction of a slow core. Concern was raised about the safety of elderly or mobility impaired in shared spaces. There were comments made that cars be prohibited within the core (Compact CBD) altogether and/or that the core be extended.</p>
5	One-way to two-way	<p>Low support for the change from one-way to two-way streets Congestion and ease of travel was cited as concerns with the proposal. Some suggested compromises, such as slowing the one-way streets and retaining some of them.</p>
6	Parking	<p>Mixed support for the parking proposals.</p> <p>Many respondents requested that more and cheaper parking is needed to support the recovery of the Central City, particularly to support the initial recovery. However, there were also many comments suggesting that parking be discouraged in the central core by providing less parking or raising charges, in order to reduce volumes and car use. Some of these were supportive of a Park ‘n’ Ride concept.</p> <p>A number of comments also requested that Council provide a timetable of when and where public parking buildings would be built.</p> <p>Many people suggested ways to improve the appearance and usability of parking buildings.</p>
7	Main Streets	<p>Strong support for Main Streets, particularly the separated cycle lanes, with a few suggestions to include other streets (such as extending a route through Victoria Square) or widen the corridors.</p>
8	Enhancing the Avenues	<p>Mixed support for the proposals for the Avenues. Segregated cycle lanes and more trees were seen as positives, while those against cited congestion as a negative.</p>
9	Wayfinding	<p>Strong support for the proposals for wayfinding. There were suggestions to use smart technology and multi-lingual signs, as well as options for the deaf or blind.</p>
10	Tram	<p>There was mixed support for keeping the tram, with cost and the danger that tracks pose to cyclists cited as negatives</p>

## Appendix A. Public Consultation – Tell Us What You Think Summary

MARKET CITY		
Comments Received	1331	written submissions

TOP COMMENTS OR KEY THEMES		
Item	Chapter Reference	Description of Theme
1	Overall Comments	Generally strong support for the projects and initiatives proposed in Market City. There is strong concern from the business and property sectors around aspects of the proposed Regulatory Framework that are restrictive and not enabling. Changes to parking provisions are not supported. With additional proposed consent hurdles (Urban Design and Build Green) concerns have been expressed as to Council's ability to efficiently manage the consenting process.
2	Compact CBD	The concept of a compact CBD is strongly supported, although there is some debate about the specific boundaries.
3	Retail strategy	Generally supportive of the concept of a retail precinct, but with mixed support of specific regulations/initiatives. There is low support for regulating retail floorplates because of the concern that this could restrict the ability of the market to attract large anchor retail tenants which would be a catalyst for retail development in surrounding areas. There is also concern that the higher cost of retail space will make it more difficult for some boutique shops to return to the Central City (e.g. pre-earthquake High Street retailers).
4	Convention centre	Generally strong support for the rebuild of the convention centre and maintaining the integration with the Town Hall. Support for a flexible multi-use facility and a larger facility. Mixed views on the location with support for the current location or locations closer to the centre of the city (with a small number supporting suburban locations).
5	EPIC	Very strong support for this project.
6	Covered market	Very strong support for the covered market concept in the Central City.
7	Visitor centre	Small number of comments, but supportive of finding a permanent visitor centre in the Central City/the Square.
8	International quarter	Generally strongly supported.
9	Smart city (free WiFi)	Strong support for free Wi-Fi and fast broadband, although there are a large number of commentators that would be happy with free Wi-Fi 'hotspots' in specific locations rather than a broad roll out throughout the entire four avenues.
10	Hospital redevelopment	Generally positive supportive feedback but some concerns raised about ensuring adequate and appropriate car parking are available for staff and patients.
11	Incentives	There is general support for the concept of incentives, however, there is mixed commentary regarding the specific spatial application of those incentives as well as a lack of clarity around the nature of the incentive application (e.g. who is eligible, conditions, etc.) There is also strong public support for additional incentives for green building, but mixed support from property developers.
12	Maximum height - core	Mixed views. Community feedback supports low rise, property advocacy groups and property owners do not support any height regulations. Concern regarding the ability of CERA to extinguish existing use rights.
13	Minimum height - fringe	A minimum height in the fringe area is not supported because the tenant demand is not projected to exist in the fringe to create demand for even low-rise, multiple-level building density – i.e. real concern that market demand will simply not be evident to support a minimum fringe height.
14	Ground Floor height minimum – 4.5m	Considered additional cost for no benefit. Rationale behind height of ground floor to be made clearer in the Plan.

## Tell Us What You Think Summary

15	Build to street – fringe	Concerns that takes the built form too far. Comments view an 80 per cent build to street as potentially restrictive in the fringe.  Traditional showroom model with car parks out front no longer complies with requirements stipulated in the draft Plan.
16	Motor vehicle dealerships	Comments received that the Plan appears to restrict/discourage, even quality dealership models.
17	Retail floor area maximum 450 m2 - core	Comments received that the maximum 450m2 core eliminates key larger anchor tenants, which are required to anchor retail development. Issue is really about urban design and street frontage not floor plate size.
18	Retail floor area minimum 450 m2 - fringe	Comments received noting that the 450m2 minimum in the fringe is potentially too restrictive. Regulation was proposed to prevent comparison retailing in the fringe impacting the Core retail precinct. Discussions with key retailer stakeholders suggest this risk is not shared by retailer.
19	Parking maximums – core and fringe	Strong concern from the property advocacy and property owner/developer sectors – the view is generally that the restrictions could provide a significant barrier to being able to provide tenants with their desired car parking requirements.
20	Council public parking buildings	Proposed Council parking buildings do not include delivery timeframe to provide the market with certainty. Concern that Council is seeking to control the supply of parking by not allowing private car parking buildings to be built.
21	Lack of public parking buildings in core	Some concern that there should be significant car park building development within the core, as the fringe locations in the draft Plan are seen as too far from retail quarter and the core office locations.
22	Car parks to be 10m from street	Comments received regarding the application of this regulation would create issues for smaller sites. Comments noted that screening requirements for car parking would suffice.
23	Council process capability	Concerns that existing Council process will struggle with additional process burden of urban design and build green requirements.
24	Public amenities	Strong signals that commitments to deliver on key public amenity assets will be critical to drive private sector confidence (tenants and developer capital).
25	Hotel industry	Support for a specific height exemption to allow height to exceed the proposed six levels. Rationale to enable hotels to deliver room capacity of 200-plus, which is a requirement to attract the large international brands, and it is a requirement to provide hotel capacity for conventions.
26	Build Green	Concern that this is a new mandatory requirement with tool detail developed after submissions closed. Concerns that all this does is add to an already difficult consenting process for what is perceived little/ no benefit.

TRANSITIONAL CITY		
Comments Received	245	

TOP COMMENTS OR KEY THEMES		
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Item	Chapter Reference	Description of Theme
1	Overall Comments	A key concern raised is the absence of any certainty around timing of the practical elements of a recovery. Various business and cultural groups are looking for certainty to plan and reposition their businesses. Business tenants are indicating a desire to return to the Central City and discussions with commercial real estate agencies (and some key tenants) confirm that certainty around timing and visualisation of product will be critical to driving tenant commitments.
2	Transitional Transport Choice	Support for transitional transport provisions but multiple comments seeking clarity/certainty in terms of transitional access, parking (car and cycle) and cycle access routes.
3	Transitional City Life	Strong support for ensuring the various arts groups are able to get back into operation quickly. Support for temporary performing arts/theatre/events venues within close proximity to the retail precinct. Little support for a cardboard cathedral (although not clear if submitters are aware this project is not Council funded).
4	Transitional Market City	<p>General support for the need to have a transitional focus on re-establishing market/business activity within the CBD, but very broad ranging feedback on the specifics, ranging from:</p> <p>Support for temporary restrictions on non residential suburban development</p> <p>Concerns that some temporary activity could become permanent</p> <p>Support for government/private sector partnerships to be a catalyst for the transition</p> <p>Generally supportive comments for creating temporary clusters (for example hospitality activities to fill the gap left by the strip and SOL square etc being out of action)</p> <p>Implementing the Covered Market as a catalyst for significant transitional retail activities</p> <p>Support for temporary uses of vacant sites, although some concern about having too many vacant sites used as temporary car parks</p>
5	Transitional Green City	Strong support for greening the rubble and activating vacant sites (e.g. Gap Filler). Careful selection of temporary activity locations to ensure these strategically fit for the three to five-year timeline likely pending permanent rebuilding.
6	Transitional Distinctive City	Support for the use of banners and hoardings. Canterbury Museum and YHA likely to be able to assist with development of transitional parts of the Cultural Precinct.

# Tell Us What You Think Summary

IMPLEMENTATION		
Comments Received	318	

TOP COMMENTS OR KEY THEMES		
Item	Chapter Reference	Description of Theme
1	Overall Chapter Comments	<p>A common theme is that the Plan needs to enable relationships with the wider community and businesses and continued involvement to meet the needs of the these groups as the Plan develops.</p> <p>The setting of priorities and what share of the pie goes to which is important and that management is adaptive.</p> <p>Partnerships with the public and private sector will need to work and is there clear enough leadership.</p>
2	Funding Pages 120 to 123	<p>A high number of comments were concerned with the proposed large capital programme of projects not being affordable and there needing to be caution about incurring more debt for the city.</p> <p>Less comments were that Council needed to be bold and that the costs are spread over a longer time period rather than one generation paying.</p> <p>Attracting business back to the Central City because of the uncertainty of the market was an ongoing theme.</p>
3	Funding Pages 120 to 123	<p>The majority of comments are concerned about the possibility that rates will increase as a result of additional borrowing to support the large capital programme.</p> <p>Opposition to rates increases is uniform throughout the comments and on the basis that it may force people and businesses to leave Christchurch.</p>
4	Incentives Pages 130 to 132	<p>There were many comments that the incentives programme may not be broad enough or attractive enough to build confidence in the market for businesses and residential sustainable development to return to the Central City.</p> <p>One theme was that many of the business and commercial incentives were targeted towards the compact CBD and needed to be broader for the whole Central City.</p> <p>The other theme was that the incentives focussed on attracting business that relocate from Canterbury and internationally to the compact CBD.</p> <p>The comments were what about help for existing businesses. This applied to both working capital loan underwriting and per-employee grants.</p> <p>The other key theme from the comments were providing sufficient incentives for the facilitation of affordable, well designed and energy efficient residential housing.</p>
5	Staging Pages	<p>More detail on the priorities and the costs and the number of proposals may be too high.</p> <p>Priority needs have been expressed where some projects should occur in what order preferences are but no clear pattern.</p> <p>There needs to be clear milestones when the work will be achieved and the infrastructure will be working. Timelines are critical to inform the business community.</p>
6	Monitoring Pages	<p>Less submissions on monitoring and mainly around ensuring that the monitoring covers all groups in the Central City and are diverse in measures.</p>



**Volume II – REGULATORY FRAMEWORK**

*Volume II of the Draft Central City Plan details the regulatory components that need to be altered from the existing regulatory requirements of the Operative City Plan to support the recovery plan for the Central City. Submissions have been received for this volume of the Central City Plan and the following provides summaries of these submissions:*

REGULATORY FRAMEWORK (VOLUME 2)		
Comments Received	395	

TOP COMMENTS OR KEY THEMES		
Item	Chapter Reference	Description of Theme
1	Core and Fringe Zone provisions	<p>Polarised views on the proposed commercial height limits, with some (usually the wider community) seeking retention and others (usually the owners or businesses) seeking higher or no maximums.</p> <p>Polarised views on the proposed discretionary urban design consent. General comments support need for better designed buildings but other specific comments (e.g. land and business owners in the area) challenge the proposed discretion and need for provisions.</p> <p>Low support for a number of the proposed urban design standards (e.g. the 4.5m floor-to-floor minimum, and entrance requirements), some support for others (e.g. active frontages).</p> <p>Low support for the approach of specifying a maximum and minimum floor area and the specific 450m<sup>2</sup> figure</p>
2	Living Zones	<p>Low support from Central City residents and associations over the consequences of the proposed merging of the current L4 A, B and C zones – see it as a loss of individuality.</p> <p>Low support over perceived loss of protection against non-residential activities in parts of the Living Zone (previously zoned L4C).</p> <p>Low support over the proposed increases in maximum building heights across the majority of the Living-zoned land.</p> <p>Mixed support in response to proposed zone changes (to Living Zone) of non-residential brownfield sites (e.g. the demolished former Girls High School site, Wards Brewery and Holiday Inn).</p>
3	Mixed-Use Zones	<p>Mixed support for the proposed restrictions on industrial activities and exclusion of car yards.</p> <p>Mixed support for allowing residential development. Some concern over anticipated reverse sensitivity issues for existing businesses (e.g. from new residential moving in).</p>
4	General comment	Low support for the increased level of regulation and prescription in the draft, leading to increased costs, delays and uncertainty.
5	Maps	Some requests to extend mixed-use zone to additional Central City Living areas.
6	Entertainment	<p>Strong support for the concept of precincts, but different views on the extent of the day-time and night-time areas and different views on the level of noise to provide for in the Oxford Terrace area.</p> <p>Some submitters have sought that the CCP cover hours of operation, as well to help manage the behaviour of drunks.</p>

## Tell Us What You Think Summary

7	Heritage	<p>Regarding the proposed rule for new development on sites adjacent to heritage items, the majority of comments recognise the need for good design on these sites. There are a range of views (from support to opposition) on whether or not this should be regulated. A large number of the comments on this rule seek more certainty on what the Council will consider for consent applications or in the alternative that the rule be deleted.</p> <p>Strong support for the draft heritage policies but some seek amendments to specific policies.</p> <p>A number of comments have also been received relating to the costs of retaining and upgrading heritage buildings, and in order to support retention and ongoing use of these buildings suggest there needs to be greater assistance in the form of a wider range of, and additional quantum of incentives.</p>
8	Avon River	<p>Strong support for this.</p>
9	Green Build	<p>Strong support from the community for this. Mixed support from business and landowners: some business and landowners and developers support the concept, but at least half do not support the added complexity and expense of this. Some query the use of an external organisation (Green Building Council). Many seek additional information about its application.</p>
10	Transport and Parking	<p>Strong support for the removal of minimum parking standards. However mixed response to the proposed maximum parking standards. Businesses, landowners and developers generally do not support the maximum parking standards, however there is strong support from the community for this.</p> <p>Strong support from the community for more stringent cycle parking requirements. However, businesses, landowners and developers generally do not support the cycle parking requirements, preferring to leave it to the market to decide whether cycle parking is provided.</p> <p>Many businesses, landowners and developers, especially those with properties near the Avon River, have expressed concern about the changes to the road hierarchy to make Oxford, Cambridge and Park terraces into slower and more pedestrian-friendly streets. Concern has been expressed that this change will reduce vehicle accessibility to these properties near the river and the ability for emergency services to respond quickly to incidents, especially as the Central Police Station is located on Cambridge Terrace.</p>
11	B1s	<p>Mixed support comments around location of a new supermarket and a desire for additional neighbourhood centres (B1s) in the Living Zones.</p>



## Share An Idea Stakeholder Meetings Summary

Central City Plan Stakeholder Meetings Summary					
Work stream	Topic	Stakeholders	Date		
Community Boards		Shirley/Papanui	1-Jun		
		Burwood/Pegasus	30-May		
		Lyttelton/Mt Herbert	31-May		
		Akaroa/Wairewa	7-Jun		
		Riccarton/Wigram	31-May		
		Hagley/Ferrymead	1-Jun		
		Spreydon/Heathcote	24-May		
		Fendalton/Waimairi	7-June Postponed		
		Joint seminar	All community boards	8-Aug	
	Arts, Culture & Heritage	Arts	Arts Voice	26-May & 16 June	
Arts Voice application to PM Fund		Creative New Zealand	various meetings May - July 2011		
Canterbury Museum's involvement		Canterbury Museum	16 & 26 May 2011		
Archives		Cantage	3-Jun		
Heritage, building design & appearance		Iconic			
Heritage		Publicly Funded Christchurch Heritage Organisations meeting	17-Jun		
Ideas from CPIT and CSO		Jane Gregg and Martin Trustrum CPIT, James Caygill CSO	16-May		
CPIT plans & Central City		Jane Gregg , CPIT	20-Jun		
Stakeholders		Ministry of Culture and Heritage - Wellington and Christchurch staff	Various meetings May - July 2011		
Overview of CCP and how HPT can support plan development and partner in delivery		NZHPT	various meetings May - July 2011		
Earthquake Museum		Don Clark	26-May		
Court Theatre involvement CCP		Court Theatre	22-Jun		
Provide overview of CCP, discuss their involvement, queries		NZHPT	Various dates May - July 2011		
Update on CCP, and Arts Centre objectives and vision	Arts Centre	13-Jul			
Christchurch Cathedral	Christchurch Cathedral - Dean Peter Beck & project managers	Various meetings May - July 2011			

## Appendix B. Share An Idea – Stakeholder Meetings Summary

Built Form / Public Space/ Green Tech	Intro to CCP, updates post earthquake from the represented organisations and considerations re the central	Reps from NZPI, Lincoln Uni and NZILA, CPIT, University of Canterbury, NZGBC, NZIA, Lancare Research, Warren and Mahoney, Urban Design, ADNZ plus CCP staff	30-May	
	Role of the advisory panel and CCP, 48 hour design challenge update, quality in the built environment, and precincts	Reps from NZPI, Lincoln Uni and NZILA, CPIT, University of Canterbury, Lancare research, Warren and Mahoney, Urban Design, ADNZ plus CCP staff	7-Jun	
	Green Building Point Rating Tool/Incentives and Regulation	Mike Doig & Hamish Doig	14-Jul	
	Green Building Point Rating Tool/ Regulation	Glenn Wigley Mgr MfE	14-Jul	
	"48 Hour Challenge event - To engage with the local design and development community in a meaningful way through a timed design challenge that encouraged quick and innovative ideas to inspire the Central City Plan and to enable emerging themes to be tested in real design scenarios."	Members of NZ Registered Institutes	Midday Friday 1 July to midday Sunday 3 July 2011. Site visits into the Red Zone on Friday 1 July	
	Green buildings	Workshop included representatives from the NZ Green Building Council, Warren & Mahoney, Ganellen, Beca, Hawkins, Ngai Tahu Property Holdings Ltd	24-Jun	
Community Wellbeing	Sports facilities	Sports Liasion Leadership Group (CCC, SPARC, Sport Canterbury)	16-May	
	Disability sector needs in relation to community wellbeing	Disability Advisory Group	17-May	
	Sports and recreation planning	Peter Burley, CPIT	18-May	
	Update on forthcoming meeting with residents' groups	Hagley Ferrymead Community Board	18-May	

## Share An Idea Stakeholder Meetings Summary

	Council community facilities	CCC units responsible for management of community facilities	18-May	
	Health and wellbeing assesement of plan	Alison Bourn, CDHB	18-May	
	Information sharing	CCC Community Support Manager and Team Leaders	23-May	
	Sports facilities	Sports Liasion Leadership Group (CCC, SPARC, Sport Canterbury)	24-May	
	Safety, crime prevention	Fire, St Johns, Police, Health, CCC (transport, Safer Christchurch Officers, and enforcement), Hospital's Emergency Department, other work stream members.	24-May	
	Community Support colleagues' feedback	Community Support Advisors working in the Hagley Ferrymead Ward	26-May	
	Inner city living	Inner city residents' associations (Chester Street East, Inner City East, Avon Loop Planning Assn, Englefield Residents Assn, Victoria Neighbourhood Group, MOA Neighbourhood Committee)	1-Jun	
	Housing	Housing Group	1-Jun	
	Central City Govt agencies/ social services	"NGO/ social services sector (Attended by: COSS, Salvation Army, Disabled Persons Assembly, Anglican Care, Te Whare Roimata, City Mission, Volunteer Canterbury, Tenants Protection Assn, Age Concern, Age Concern, Presbyterian Support, Anglican Care.)"	2-Jun	
	Sport & recreation	Sports Steering group	7-Jun	

## Appendix B. Share An Idea – Stakeholder Meetings Summary

	Older adults' needs re Central City	Age Concern, Presbyterian Support, Council of Social Services, ElderCare Canterbury, Alzheimers Canterbury, Te Whare Roimata, MSD Social Services	8-Jun	
	Needs and issues for culturally & linguistically diverse	Culturally & linguistically diverse communities	9-Jun	
	Issues for health services provision in the Central City	Reps from CDHB, specific health sector organisations including primary health care	15-Jun	
	Needs and issues for Culturally & linguistically diverse	Members of Culturally and Linguistically Diverse (CALD) agencies	22-Jun	
	Needs and issues for central city Christian churches	Reps from central city churches who meet regularly at invitation of the Anglican Bishop	24-Jun	
	Needs and issues of Pacific Peoples relating to the Central City	reps from Pacific communities	27-Jun	
	Secondary schools' zoning	Ministry of Education	28-Jun	
	Needs and issues of Maori relating to the Central City	"Bob Tai, Rehua Marae, and Maori members of service and government agencies." "	28-Jun	
	Needs and issues for central city Christian churches	Reps from inner city churches	29-Jun	
	Social Services hub	Community Trust, Community House Trust	30-Jun	
	Housing	CERA	1-Jul	
	Health services	Partnership Health, CDHB	1-Jul	
	Youth interests and issues	Youth forums: UNESCO, Youth Hui, Youth 2050	Various	
	City Mission	Jolyon White	8-Jul	
	Neighbourhood planning initiatives	Di Lucas, Peterborough Neighbourhood Group, Tim Taylot adviser	6-Jul	
	CPIT & the CCP	Kay Giles & Darren Mitchell	11-Jul	
	Lincoln University central City plans	Stefanie Rixecker (for VC Lincoln University), Caroline Saunders	13-Jul	



## Share An Idea Stakeholder Meetings Summary

	Future of residential housing and central city neighbourhoods	Vistoria residents group - Dave Kelly and Louise Edwards	13-Jul	
	Unlimited, Paenga Tawhiti High School	Unlimited, Paenga Tawhiti High School	13-Jul	
Infrastructure	Technology	Enable, Orion, Cisco Systems, CDC, IBM, Jade, CCC, CAENZ	3-Jun	
	Issues related to improving stormwater outcomes within the Central City Plan	ECAN, Ngai Tahu, CERA, Expert Stormwater Consultants Those invited to the workshop included engineers, ecologists, landscape architects and other specialists, professionals and stakeholders working in fields related to stormwater.	7-Jun	
Integration	Central City Plan	TRONT / Ecan	12-May	
	Central City Plan	NZ Institute of Architects	10-May	
	Central City Plan	Sacha Meeking, Ngai Tahu	18-May	
	Central City Plan	NZ Institute of Landscape Architects	19-May	
	Central City Plan	Youthvision 2050 - Louis Brown	20-May	
	Central City Plan	TEDxEQChCh Conference	21-May	
	Central City Plan	Don Miskell	26-May	
	Ngai Tahu input into Central City Plan development	MKT Board	13-Jul	
Land Use & Activities	Hospitality, tourism, visitor accom	HANZ & CCT	30-May	
	Office Space	Colliers International - Hamish Doig and Michael Connelly	7-Jun	
	Seeking feedback from stakeholder on provision of visitor accommodation in the central city	Bruce Garrett, George Hotel	8-Jun	

Appendix B. Share An Idea – Stakeholder Meetings Summary

	To gain understanding of the opinions of stakeholders for 'light industry' category	"Reps from the Lght Industrial Sector including a broad category of uses that do not fall into general retail and office based e.g. <ul style="list-style-type: none"> <li>• Processing, Assembly and Manufacturing.</li> <li>• Motor vehicle service and parts.</li> <li>• Warehousing and Distribution.</li> <li>• Trades Suppliers e.g. for construction industry.</li> </ul> Two of the stakeholders were representing the views of the members of the New Zealand Manufacturing and Exporters Association, while four were managers or CEO's of businesses. "	28-Jun	
	Canterbury District Hospital Board	CDHB reps Carolyn Gullery, Murray Dickson, Judith Sugden, Vince Barry and Stella Ward	21-Jun	
Market & Business	Critical Business	Critical Business	25-May	
	Central City Property Issues	CORE (120 Central City Property Owners)	25-May	
	Lincoln University relocating into Central City	Lincoln University	30-May	
	Property, business		8-Jun	
	Export education group	International Education	31-May	
	Banking Industry - to pulse Check Banking Industry Key Issues and Response to Property Development Rebuild Funding	Bank 1 Commercial Property senior managers.	5-Jul	
	Commercial Property Stakeholders	CORE (120 Central City Property Owners)	25-May	
	Commercial Property Stakeholders	CORE (120 Central City Property Owners)	27-May	
	Quick Wins	Business and Property Stakeholders	8-Jun	
	Incentives ans CERA presentation	Business and Property Stakeholders	15-Jun	
	Banking Industry Engagement	Banks	6-Jul	
	Hotel Industry - building heoght and configuration	Hotel operators	8-Jul	

## Share An Idea Stakeholder Meetings Summary

	Key Issues for CCP Rebuild	Business and Property Stakeholders	25-May	
	Incentives	Business and Property Stakeholders	8-Jun	
	Banking Industry Engagement	Banks	5-Jul	
	Land Amalgamation. Precincts and Clusters	Business and Property Stakeholders	22-Jun	
	CCP Input	Property Institute	25-Jul	
	Banking Industry Engagement	Banks	17-Jun	
Market and Business (combined with Community Wellbeing)	Central City ideas expressed by Ethnic minorities	Office of Ethnic Affairs/ Culturally & linguistically diverse communities	9-Jun	
Transport	Streetscape	"Workshop participants incl. CERA, ECan, RTC, NZTA, Central City Business Association, Christchurch Business Leaders' Group, IPENZ, CILT, Canterbury University, Lincoln University, NZ Fire Service, MoT, CDHB, Community and Public Health, Kiwi Rail, NZ Trucking Association, NZ Planning Institute, Taxi Federation, Red Bus, Leopard Coachlines, Christchurch Tramways, Living Streets, SPOKES, and Christchurch City Councillors. 'Think Pieces' were presented by QTP, Aurecon, Beca infrastructure, MWH, Boffa Miskell, McCormick Rankin Cagney and ViaStrada. "	30-May	
	IPENZ event	Ditto	1-Jun	
	Parking	Ditto	2-Jun	
	Public Transport	Ditto	3-Jun	
	Development and refinement of a recommended transport plan	A smaller group of Council, ECan, consultants, NZTA and other stakeholders.	14-Jun	



## Tell Us What you think – Stakeholder Meetings Summary

Central City Plan consultation phase key stakeholder meetings summary			
Work stream / chapter	Topic	Stakeholders	Date
General CCP		Invitees incl. reps from CERA, NZTA, MfE, Min. Economic Development, Min. of Education, Dept Building & Housing, Min. Culture & Heritage, Dept. Internal Affairs, Treasury, Ministry Social Development,	13 Oct 25 Oct
	Overview of Plan	Cross section key CCP stakeholders	23, 24 & 25 Aug
		Inner City Res Assocs	18-Aug
		DHB	7-Aug
		Joint Community Boards	8-Aug
		Local MPs and Crs	29-Aug
		Central Govt visit	1-Sep
		Professional Instit. Advisory Gp	22-Aug
		Internal CCC staff	19 & 25 Aug
		Gwen Mcintosh, Waterfront Secretariat, City of Toronto	27-Oct
		Trish Keith, General Manager Customer Experience Telecom	3-Oct
		Lauren Semple and Ken Gimblett	27-Sep
		NZIA and NZILA	14-Sep
Market & Business	Banking Industry	BNZ Commercial Property Finance	5-Jul
	Insurance industry	Insurance company senior managers	13-Jul
	Transport	Transport Stakeholders	14-Jul
		Duncan Cotterill, Solicitors, and a small group of their key clients	18-Aug
	Business	Canterbury Business Leaders Group	19-Aug
	Hospitality	Hospitality Assn Exec Committee	22-Aug
	Banking Industry	Banking Industry	24-Aug
		ANZ/Bayleys	1-Sep
		Property Council	6-Sep
		City South Property owners & Mace Engineering	7-Sep
		Cant Property Investor Assoc	20-Sep
	Informal Mayoral Breakfast	Business & property	14-Oct
City Life		Disability Advisory Gp	6-Sep
		DPA (disability sector)	29-Aug
		Safety (Police)	1-Sep
		Regional Sports	1-Sep

## Appendix B. Tell Us What You Think — Stakeholder Meetings Summary

		Avon Loop Community	1-Sep
		Arts Voice	5-Sep
		Arts community	5-Sep
		Inner city churches/Interfaith	6-Sep
		Arts Voice	7-Sep
		Pacific Peoples Community	7-Sep
		Culturally & Linguistically Diverse Peoples	7-Sep
		Arts community	7-Sep
		PPTA	7-Sep
		Housing Forum	7-Sep
		CDHB & Senior Managers	7-Sep
		St John's	12-Sep
		Police	13-Sep
		MSD/NGO sector meeting	28-Oct
		CPIT senior managers, staff & students	8-Sep
Green City			
		NZGBC - Green City Dialogues	25-Aug
		Various sectors	6-Sep
		Cathedral Square landowners	2-Sep
		Carter Holt Harvey	13-Sep
		Stormwater 360	
		EECA & Café	29-Aug
		Dept of Building & Housing	22-Aug
		Sustainable Otautahi Chch	30-Aug
		Community Gardens Assoc	23-Aug
		Greening the Rubble	1-Sep
		COCA	2-Sep
		Robert Gerrie, GM Eco Central	9-Sep
		Bob Frame, Landcare Research	9-Sep
		James McAlister (BioRoof)	21-Sep
		Peterborough Group	21-Sep
		Building designers, engineers, quantity surveyors, developers, consultants (e.g. Colliers, Shepard & Rout, Hawkins, Dalman, Carter Group, Higgs Builders, Lund, AW Group, Cosgroves)	6-Oct
		Cathedral Square landowners	10-Oct
		Andrew Olsen - General Manager Life Mark	10-Oct
		Property Council of NZ, CORE, NZIA and NZLIA	12-Oct

## Tell Us What you think – Stakeholder Meetings Summary

		Steve Crossland Firth, Auckland	13-Oct
		Duncan Joiner (Chief Architect Department of Building and Housing)	13-Oct
		David Evison (UoC Engineering Department)	25-Oct
		John Gardiner (Department of Building and Housing)	25-Oct
		Kevin McCloud (Grand Designs UK), Nick Collins (Beacon Pathway)	25-Oct
		Marcus Westbury (Renew Newcastle), Coralie Winn (Gap Filler)	1-Nov
		Dusty Gedge (European Living Roofs Federation Presedent)	16-Nov
Distinctive City			
		Urban Design Panel	24-Aug
		Peterborough Village	17-Aug
		Iconic	5-Sep
		NZHPT	6-Sep
		Avon Loop Community	1-Sep
		Richard Simmons, former head of CABA	13-Sep
		Chester St Neighbourhood Assoc	7-Sep
		Carter Holt Harvey	13-Sep
		High Street Precinct	
		High Street Precinct, Laurie Rose	15-Jul
		Susannah Pembroke, Arup International Speaker	30-Sep
		Ngāi Tahu & MKT	Various dates
		MKT Board Meeting	10-Aug
		Arts Centre	13-Jul
		HIT Lab and CERA	14-Oct
		Ministry of Culture and Heritage	28-Oct
		Underground Overground Archaeology Ltd. Katharine Watson	14-Sep
Transport Choice			18-Aug
		Ecan	22-Aug
		ChCh Institute of Transport & Logist	23-Aug
		IPENZ Transportation Gp	6-Sep
		Energy Efficiency and Conservation Authority	8-Sep

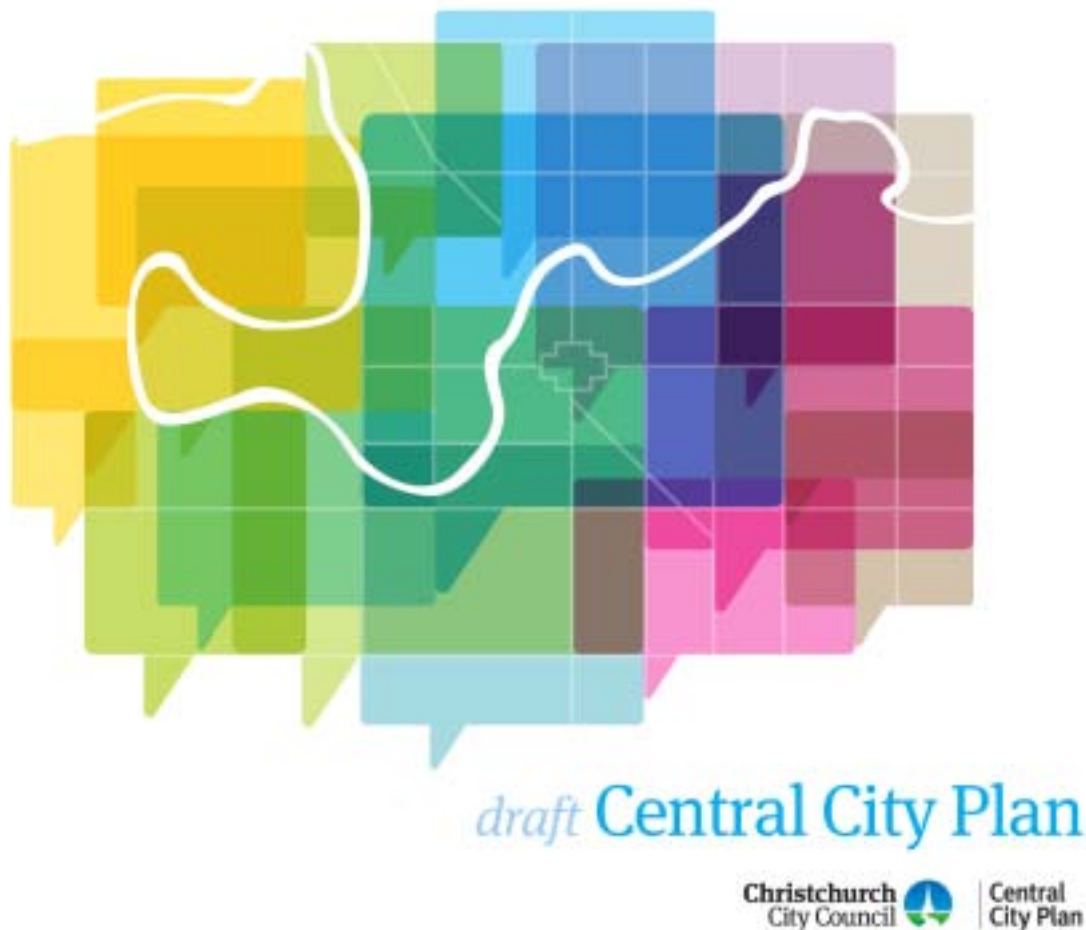


Appendix B. Tell Us What You Think – Stakeholder Meetings Summary

		Simon Sellars, Editor, Architectural review, Aust	9-Sep
		Former CEO of Commission for Architecture & Built Environ in UK	13-Sep
		NZ Transport Agency / CERA / Ministry of Transport / Christchurch City Council / Environment Canterbury	25-Oct
		UDS Transport Group	31-Oct
Regulatory Framework		Christ's College Bursar	25-Aug
		Inner City East residents (Te Whare Roimata)	30-Aug
		Environmental Policy & Approvals Consents Planners	26-Aug
		NZ Planning Institute	5-Sep
		Ngāi Tahu	5-Sep
		Peterborough Village	17-Aug
		Peterborough Village/Di Lucas	22-Aug
		Avon Loop Community	1-Sep
		Housing New Zealand	8-Sep
		Amuri Business Park/ Greg Hedges	13-Sep
		CSERA, ADNZ, VNA and Peterborough Village	26-Sep

# Remembering The Earthquakes

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# Remembering the Earthquakes

Arts, Culture and Heritage Workstream

Principles | Strategies | Issues

# Remembering The Earthquakes

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## Principles

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1. Respect
2. Authenticity
3. Revelation
4. Experience
5. Legibility
6. Many earthquakes, many people, many ways of remembering

## Strategies for Remembrance and Interpretation

## 1 Palimpsest

A Georgian parchment from the 5th/6th century.

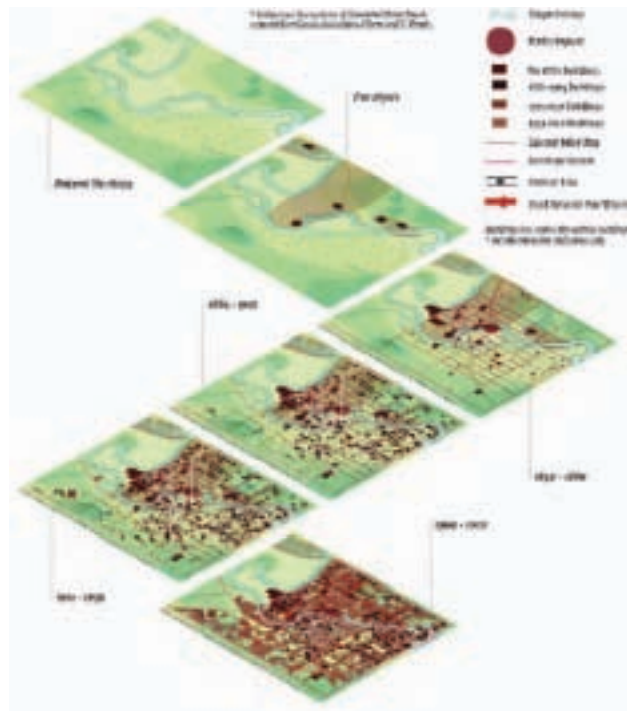


Image in the public domain

A palimpsest was a parchment which was used again and again. The writing and images would be rubbed off each time, and when it was re-used some of the tracings would show through from the previous use. Palimpsest is therefore a potent metaphor that is used to express how landscapes accumulate traces of history – where some aspects from the past show through to the present, and others are obscured. And we don't always know who was responsible for the different 'writing' we find on the landscape, it all simply becomes part of the everyday environment we find ourselves in.

# Remembering The Earthquakes

## Strategies for Remembrance and Interpretation Palimpsest



For Christchurch, the palimpsest has been built up from layers of settlement and the activities of the natural landscape. The earthquake has produced a particularly vivid palimpsest, where there are abrupt discontinuities in the age of adjacent elements

Strategies for Remembrance and Interpretation Palimpsest



The setting for Gustafson Porter's Garden of Forgiveness in Beirut, Lebanon.

Image courtesy of Gustafson Porter Ltd, London

Palimpsest is used a strategy for simultaneously displaying and interpreting layers from the past. The explicit characteristics of each layer can be discerned amongst the melange of ages. Gustafson Porter's Garden of Forgiveness in Beirut, Lebanon, is still under construction, and aims to create a contemplative setting amongst the fragments of centuries of occupation, and decades of violence.



## Remembering The Earthquakes

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**Gustafson Porter, Garden of Forgiveness in Beirut, Lebanon, 2003**

– still under construction. Image courtesy of Gustafson Porter Ltd, London

It includes traces of at many prior civilisations on the site, with the various layers appearing throughout the design. Ruins and remnants from past eras can be seen in the garden.



**Gustafson Porter, Garden of Forgiveness in Beirut, Lebanon.**  
**Left: Plan, Below: Elevation.**

Images courtesy of Gustafson Porter Ltd, London

The combining of the layers of previous eras creates a rich site for remembering. There are archaeological traces that give clues to the past, as well as elements that change with the seasons such as planting and springs that flood in winter.

# Remembering The Earthquakes

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## Strategies for Remembrance and Interpretation

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### 2 Editing

The Swiss Way. Cleaned glacial boulder by Carmen Perrin, 1991



Image courtesy of Princeton Architectural Press

Just as good copyediting can dramatically enhance the readability of a text with very minor alterations, so too can good design help the readability of a city. This can be expressed through interventions such as creating emphasis and amplification, or revealing features through the process of subtraction. Editing needs to be approached extremely sensitively, as it should not further erode the already depleted fabric of the city

One of the best exemplars of an 'edited' landscape is the Swiss Way. Designed to commemorate the 700th year of the confederation of Switzerland, the path is 35kms long and weaves around Lake Uri. A number of artists and landscape architects were involved, including Carmen Perrin's subtle intervention of cleaning one of the erratics – boulders that had been brought there by glaciation. By simply removing the lichens etc the boulder's alien status in that landscape was heightened

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Strategies for Remembrance and Interpretation Editing

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The Swiss Way.  
*Chanzeli* by Georges  
Descombes, 1991.

Image courtesy of Princeton  
Architectural Press

Landscape architect Georges Descombes created a discrete belvedere called the Chanzeli which framed the view – the belvedere was not so much to be looked at, as looked from – and the editing of views is one of the most potent interventions contributing towards effective interpretation and contemplation. The simple decision of where to place a seat can enhance a viewer’s engagement with a meaningful scene in the central city, e.g. a site of devastation, a site of renewal.

# Remembering The Earthquakes

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## Strategies for Remembrance and Interpretation Editing

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The Geological Observatory, Cardada, Switzerland, Paolo Burgi, 1998-2000.

Image appears to be free of copyright.

Another site which ‘edits’ the landscape is Paolo Burgi’s Geological Observatory, high in the mountains of Switzerland. The circular lookout has a red line running across it which shows the boundary between the European and African plates, and the small pieces of rock are extracted from the wider landscape – showing the difference in geology that results from the fault line. The handrail also edits the landscape by drawing attention to things in the distance, as though underlining them.

Strategies for Remembrance and Interpretation

### 3 Footprints & Fragments

Hiroshima Peace Park with ruined building as a memorial.



Image made available for sharing under Creative Commons by Aiden.

The retaining of traces of the past can be the core of a powerful approach to interpretation. Through highlighting these traces in the landscape they become elevated in significance, and act as touchstones for memory. At the Hiroshima Peace Memorial Park the ruins of the only building left standing have been retained as a ruin, and the site is on the UNESCO World Heritage list.



# Remembering The Earthquakes

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## Strategies for Remembrance and Interpretation Footprints & Fragments

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“The Tree that saw everything” – part of the memorial to the victims of the El Al crash, 1992, Bijlmer, Amsterdam.

Image does not appear to be covered by copyright.

The “tree that saw everything” is a central element of the memorial for the El Al flight that crashed into Bijlmer in the Netherlands in 1992 – as a ‘survivor tree’ it is an important symbol and focus for remembering.

Strategies for Remembrance and Interpretation Footprints & Fragments



Damaged landscape from the Great Hanshin Earthquake in Kobe, Japan, 1995, is preserved as a memorial.

Image made available for sharing under Creative Commons by Kenpei.

A fragment of the damaged landscape in Kobe, Japan, was preserved as part of the landscape of remembering.



# Remembering The Earthquakes

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## Strategies for Remembrance and Interpretation Footprints & Fragments

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Medway Street Bridge, Christchurch after September 4<sup>th</sup> earthquake.

Image made available for sharing under Creative Commons by Schwede66.

Remains of structures that reflect the violence of the earthquake are possible elements for a memorial. For example, the twisted footbridge across Medway St, damaged in the 4 September quake, provides a focus for remembering. While such a structure manifests the violence of the event, siting would require careful consideration in order to avoid a conflict with space for contemplation.

Strategies for Remembrance and Interpretation Footprints & Fragments



Muchelney Abbey,  
Somerset, England.

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Footprints of now absent buildings and structures can evoke potent memories. The retention of such elements in a park-like setting allows for the elements to be distinguished from subsequent overlays, and 'read' as part of the pre-quake environment. This strategy is effectively used in the interpretation of medieval ruins in Europe, for example at Muchelney Abbey in England.

# Remembering The Earthquakes

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## Strategies for Remembrance and Interpretation

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### 4 Juxtaposition

Coventry Cathedral, Coventry, England.



Image made available for sharing under Creative Commons by Cinglee.

Exemplars of a strategy of juxtaposition include the well known example of Coventry Cathedral, which suffered bombing damage in World War 2, but rather than being rebuilt was kept in its ruined state and complemented by a modern addition.

Strategies for Remembrance and Interpretation Juxtaposition



Kaiser Wilhelm Memorial Church,  
Additions by Egon Eiermann,  
Berlin, Germany, 1963.

Image released into the public domain by Null8fuffzehn



Kaiser Wilhelm Memorial Church in Berlin also contrasts the ruins of a bombed church tower with a recent addition. The new part of the church was designed by Egon Eiermann and completed in 1963.

# Remembering The Earthquakes

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## Strategies for Remembrance and Interpretation Juxtaposition

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Lisbon S. Jorge Castle Praça Nova, Lisbon, Portugal, JLCG Architects, 2010

Image from Saieh, Nico. "Musealization of the Archaeological Site of Praça Nova of São Jorge Castle / JLCG Arquitectos" 18 Nov 2010. *ArchDaily*. Accessed 17 Oct 2011. <<http://www.archdaily.com/89460>>

The Musealization of the Archaeological Site of Lisbon S. Jorge Castle Praça Nova in Lisbon, Portugal by JLCG Architects, was completed in 2010. The ancient architectural site is juxtaposed with a contemporary building which creates a powerful contrast rather than diluting the site through trying to blend in.

Strategies for Remembrance and Interpretation

## 5 Narrative

Vaeggen – The Wall, Copenhagen, Denmark. Gibson Group.



Images courtesy of the Gibson Group.

The Interactive Media Wall designed by the Gibson Group has created a site where citizens of Copenhagen can upload images, and touch the screen to interact and move around. The Wall can show a range of historic images and provide a constantly changing array of views, rather than a fixed 'lesson' about the past. This is an democratic and participatory history of the city that creates a shared, collective narrative, as people can add their own images to the database.



# Remembering The Earthquakes

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## Strategies for Remembrance and Interpretation Narrative

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Augmented Reality Phone App developed by the HIT Lab, University of Canterbury.

Images courtesy of HIT Lab.



Interpretation can also be via handheld devices such as smartphones. Using techniques such as Augmented Reality, which combines virtual images with real views of the city, narratives of the past as well as visions of the future can be an important part of engaging with the changing city.



Strategies for Remembrance and Interpretation Narrative



Building showing date of construction, Napier.

Image made available for sharing under Creative Commons by James Shook.

Narratives can also be written into the fabric of the city through doing something as simple as encouraging new buildings to show the date of their construction, providing a time stamp for the post-quake era as in Napier.

# Remembering The Earthquakes

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## Strategies for Remembrance and Interpretation

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### 6 Create a Legacy

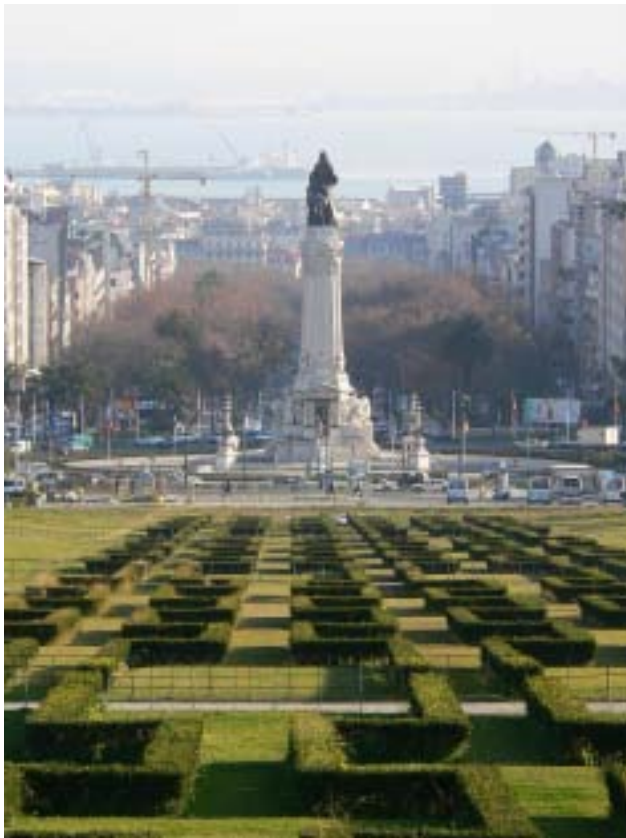
The Art Deco legacy, Napier.



Image made available for sharing under Creative Commons by PhiloVivero

One of the most potent ways of remembering the earthquakes is to create a legacy for the future. As in the example of Napier, where the coherent Art Deco landscape has become the distinctive character of the city, a dramatic change in a city can become a wellspring for future generations.

Strategies for Remembrance and Interpretation Create a Legacy



Looking down Parque Eduardo VII to Praça Marques de Pombal, Lisbon, Portugal.

Image made available for sharing under Creative Commons by Lee Kindness



Another example is Lisbon, where the 1755 earthquake devastated the city, with the loss of 85% of the built form. Rather than rebuild the medieval city, they consciously adopted a very contemporary view of urban form, and this has been a legacy that makes the city one of the most respected in urban design terms.

# Remembering The Earthquakes

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Strategies for Remembrance and Interpretation Create a Legacy

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Toronto Waterfront Park,  
Canada.

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Creative Commons by Risker.

The Toronto Waterfront park includes many areas created after Hurricane Hazel in 1954 and memorialises those who lost their homes and lives, and also interprets the lesson of the hazards of building on a flood plain.

Strategies for Remembrance and Interpretation Create a Legacy



The Disaster Reduction Museum, Kobe, Japan, 2002.

Image made available for sharing under Creative Commons by CTG/SF



The Disaster Reduction Museum, part of the Disaster Reduction and Human Renovation Institution, was opened in 2002 to commemorate the tragic event and to educate visitors about earthquakes and disaster prevention. The museum includes a large screen theater with realistic images of the earthquake's destructiveness, a documentary film about the recovery process, information about the earthquake and various interactive games about disaster prevention.

# Remembering The Earthquakes

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Strategies for Remembrance and Interpretation

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## 7 Dedicated Memorial



### Traditional Memorials

- Figurative
- Objects
- Static
- Visual
- Passive

Washington Monument,  
Washington DC, USA.

Image made available for sharing under  
Creative Commons by David Iliff.

A particular site or cluster of sites could be developed as a memorial, remembering the victims of the 22 February quake and the impact on the city. A number of sites lend themselves to this, including places of strong symbolic importance – Cathedral Square, Latimer Square for its function as the triage centre during the rescue efforts, Hagley Park which became a refuge for those escaping the city. There are also the sacred sites of PGC and CTV which require special consideration in terms of their interpretation and appropriate and sensitive treatment. Further sites have the capacity to offer solace and a contemplative setting, as along the Avon River.

Traditional memorials like the Washington Monument can have limitations in terms of the ways in which they engage visitors, as they tend to be figurative, depicting a recognisable element, meaning they have a narrow interpretation. They are also usually static objects which don't encourage active engagement – they are generally things just for looking at.



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Strategies for Remembrance and Interpretation Dedicated Memorial

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### Contemporary Memorials

- Abstract
- Places
- Dynamic/interactive
- Experiential
- Active

The Memorial to the Martyrs of Deportation, Paris, Georges-Henri Pingusson, 1962.

Image by Daniel Miller

Contemporary memorial design is increasingly tending towards abstraction, rather than figurative statues. The Memorial to the Martyrs of Deportation in Paris, by Georges-Henri is recognised as a turning point towards abstract memorial design, and the focus on experiential and emotional spaces. When you walk down into the memorial space, all of the surroundings of the city of Paris disappear, and the focus is on the individual's contemplation and experience of the site.



# Remembering The Earthquakes

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## Strategies for Remembrance and Interpretation Dedicated Memorial

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Vietnam Veterans Memorial, Maya Lin, Washington DC, USA, 1982.

Image made available for sharing under Creative Commons by Kelvin Kay.

Maya Lin's Vietnam Veteran's Memorial is a well known example of a memorial which focuses strongly on visitor experience, with the memorial being located below ground level so that visitors are conscious of their passage through the site, and can see themselves reflected in the highly polished granite surface which bears the names of the dead.

Strategies for Remembrance and Interpretation Dedicated Memorial



Memorial to the  
Murdered Jews of  
Europe, Peter  
Eisenman, Berlin, 2004

Image made available for sharing under  
Creative Commons by Chaosdna.

The Memorial to the Murdered Jews of Europe in Berlin, designed by Peter Eisenman, is a further example of an experiential memorial. Walking amongst the stelae, or concrete slabs, visitors feel a sense of unease, as the ground plane is not flat. The experience encourages reflection on the Holocaust, rather than simply providing the visitors with information.

# Remembering The Earthquakes

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## Strategies for Remembrance and Interpretation Dedicated Memorial

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Il Cretto Memorial,  
Alberto Burri, Gibellina,  
Italy, 1989

Image courtesy of Rino Palma.

The Memorial to the Murdered Jews of Europe in Berlin, designed by Peter Eisenman, is a further example of an experiential memorial. Walking amongst the stelae, or concrete slabs, visitors feel a sense of unease, as the ground plane is not flat. The experience encourages reflection on the Holocaust, rather than simply providing the visitors with information.

Potential Issues

## 1 Memorial Fails to Realise its Potential

Competition entry for the Pentagon Memorial,  
Room 4.1.3 with Jacky Bowring and Peter England, 2002



As part of the vision for the 21st century city, Christchurch has the potential to make a major contribution to the nature of memorial design. Rather than adopting a conventional, clichéd, or outdated approach, Christchurch can aspire to the creation of a democratic, inclusive and expressive means of remembering. As part of this, a comprehensive process of consultation needs to underpin the careful translation of the community's aspirations into an elegant, memorable, and world class memorial expression. Competitions are an effective way of generating fresh and exciting design ideas, such as the memorial design competitions for the Ground Zero memorial and the Pentagon Memorial.

## Remembering The Earthquakes

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### Potential Issues

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#### 2 Memorial Becomes ‘Frozen’

Monument Against Fascism, War and Violence -- and for Peace and Human Rights, Jochen Gerz and Esther Shalev, Hamburg, Germany, 1986. (On the left the memorial as first built, and on the right once it had disappeared into the ground).



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While in the past memorial design was focussed upon the idea that a memorial was a singular sculptural form, contemporary approaches embrace expressions which are more fluid in time and space. That is to say, the memorial might change over time, as people add to it, it grows vegetation – or even as in the case of one Jochen Gerz and Esther Shalev’s Holocaust memorial, it could sink into the ground and disappear. A memorial could also extend beyond a particular site, so that it becomes a sequential, multi-part memorial, perhaps associated with a walk, the river, or other unifying element.

Potential Issues

### 3 A Hasty Response...

Hurricane Katrina Memorial, 2006. One year after disaster ....



Biloxi, Mississippi.

Image does not appear to be copyrighted.

A quick and hasty response might later be regretted... this memorial was erected only one year after Hurricane Katrina and built over five days by the television programme, Extreme Makeover Home Edition. It exhibits poor design in terms of being an assemblage of simplistic and clichéd elements such as the stylised wave and glass box containing debris.



# Remembering The Earthquakes

## Potential Issues

### A Need to Find the Balance through Ongoing Remembering...

Temporary memorials at Pentagon and Ground Zero; empty plinth of Godley Statue.



Images by Jacky Bowring

There is a need to embrace spontaneous memorialisation – until we have a formal memorial or memorials, the grass-roots temporary memorials are vital as part of remembering. Temporariness is challenging in the context of memory – but there are ways of addressing this phase as well. At Ground Zero the ephemera left on site was collected and catalogued, and will eventually form part of the repository and archive for the event. At the Vietnam Veterans memorial, the tributes that are left are gathered up and archived.

A 'readymade' memorial may form an interim, or even permanent, means of remembering, such as the cross that emerged from the ruins of the World Trade Centre. Elements like the empty plinths where statues have fallen express their own poignancy, as is the case with some of the fallen statues in Christchurch. .



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Potential Issues

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## Good Memorials Take Time

Ground Zero, opened September 11, 2011. Ten years after event



Image by Hallie Madenski, does not appear to be copyrighted

Looking at the time taken to develop some of the best memorials in the world is a good reminder of the need to take a considered approach to developing an earthquake memorial for Christchurch. The memorial at Ground Zero, for example, only recently opened, on the 10th anniversary of the attacks on the Twin Towers. Designed by Michael Arad and Peter Walker, the design was the result of a two stage design competition.

# Remembering The Earthquakes

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## Potential Issues

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### Good Memorials Take Time

Vietnam Veterans Memorial, 1982. Nine years after US withdrawal.



Image available under Creative Commons by Academy of Achievement

Maya Lin's Vietnam Veterans Memorial was also the result of a competition. At the time of the competition Lin was a young architecture student, and produced a fresh and innovative idea for the memorial – a site which has become well-known as one of the most moving and memorable memorials.

Potential Issues

## Good Memorials Take Time

Gibellina Earthquake Memorial, 1981. Thirteen years after earthquake.



Image supplied by Rino Palma

Maya Lin's Vietnam Veterans Memorial was also the result of a competition. At the time of the competition Lin was a young architecture student, and produced a fresh and innovative idea for the memorial – a site which has become well-known as one of the most moving and memorable memorials.

# Remembering The Earthquakes

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## Potential Issues

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### Good Memorials Take Time

Kobe Earthquake Memorial Museum, 2002. Seven years after 1995 quake.



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It took Kobe seven years to develop the Earthquake Memorial Museum and Disaster Reduction and Human Renovation Institution.

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## Potential Issues

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1. Memorial fails to realise its potential
2. Memory becomes frozen
3. A hasty response... A need to find the balance through ongoing remembering...

Good Memorials Take Time

Finally, these are the issues that we need to keep in mind, to ensure that the Earthquake memorial reaches its full potential, engages with the dynamics of time, and avoids the consequences of a hasty response. Good Memorials Take Time.

# Geotechnical Interpretative Report

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## ***Tonkin & Taylor Christchurch Central City Geological Interpretative Report***

### ***Christchurch City Council Report Disclaimer***

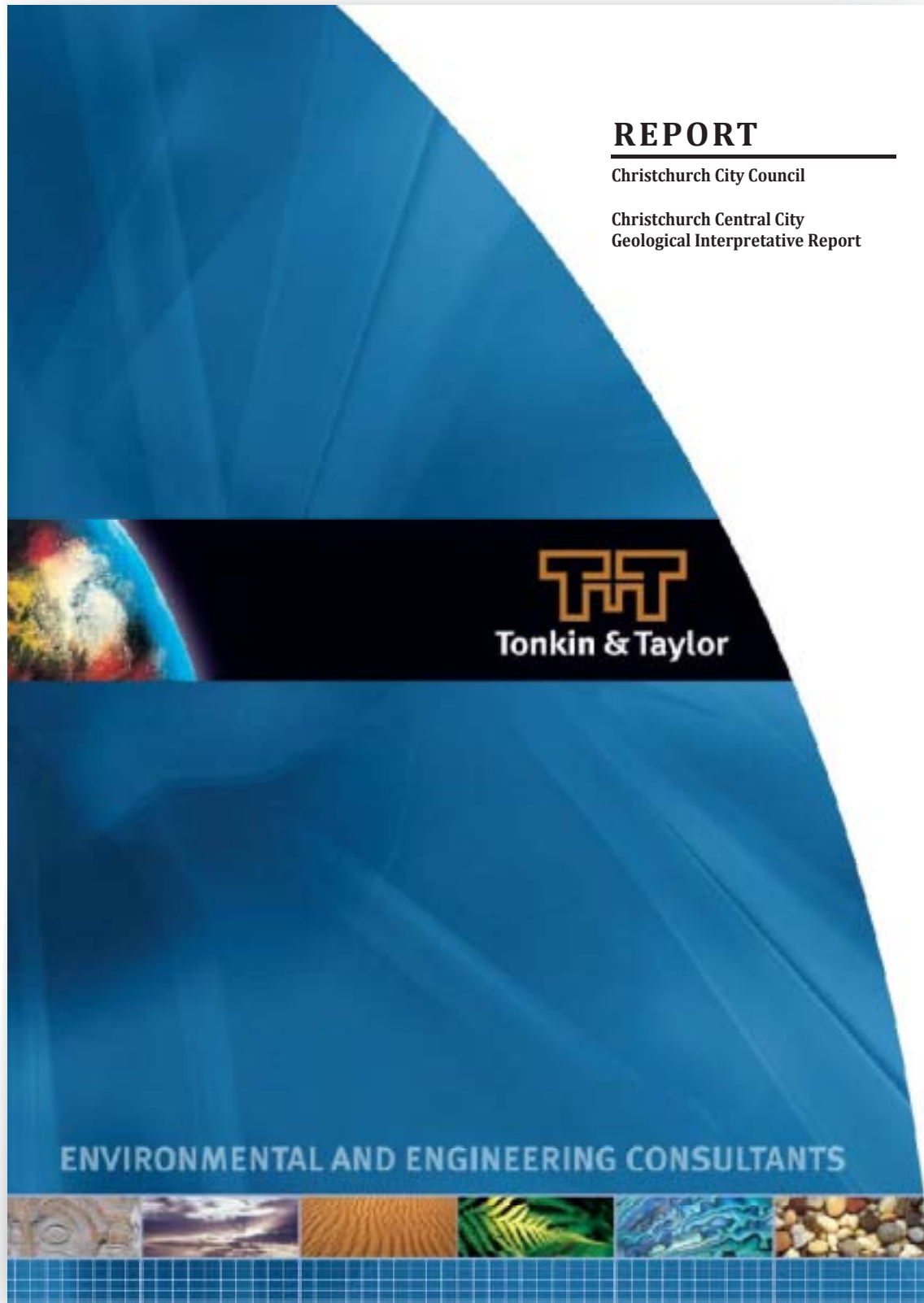
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A copy of Tonkin & Taylor's full Christchurch Central City Geological Interpretative Report can be found at [www.ccc.govt.nz/centralcityplan](http://www.ccc.govt.nz/centralcityplan)





# Geotechnical Interpretative Report

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## **REPORT**

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Christchurch City Council

Christchurch Central City  
Geological Interpretative Report

**Report prepared for:**  
CHRISTCHURCH CITY COUNCIL

**Report prepared by:**  
Tonkin & Taylor Ltd

**Distribution:**  
CHRISTCHURCH CITY COUNCIL 3 copies  
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**December 2011**

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**Volume 1 of 2**

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Christchurch Central City  
Geological Interpretative Report  
Christchurch City Council

REP-CCC-INT  
December 2011

**Christchurch Central City  
Geological Interpretative Report  
Prepared by Tonkin & Taylor Ltd for Christchurch City Council**

**December 2011**

**Applicability**

This report has been prepared by Tonkin & Taylor Ltd on behalf of the Christchurch City Council to assist with future planning and redevelopment of Christchurch Central City following the Canterbury Earthquake Sequence that occurred between 04 September 2010 and 13 June 2011.

The interpretations contained herein may not be used or relied upon in any context or for any purpose other than that for which it was originally intended. It is recognised, however, that this report may assist with the future planning and development within Christchurch Central City.

Tonkin & Taylor Ltd and Christchurch City Council accept no liability to any third party with respect to the contents of this report.

**Limitations**

All of the interpretations, recommendations and opinions that are contained in this report are made based on observations and records made by Tonkin & Taylor Ltd and other parties at discrete locations. The continuity of the ground conditions between observation points cannot be guaranteed. The investigation techniques adopted occasionally provide incomplete or highly disturbed samples. As such the soil descriptions may be inaccurate or incomplete at some locations.

The nature and continuity of stratigraphy away from the investigation locations are inferred and it must be appreciated that the actual ground conditions could vary from the assumed model. Due care and allowance must be made by the reader to account for this. If subsurface conditions encountered during subsequent investigations vary from those described in this report, additional advice should be sought from suitably qualified engineering geologists or geotechnical engineers.

This report comprises a main body and separate appendices which must be read in their entirety and are intended to be used in conjunction with each other.

**The information presented is of a specialist nature and should only be used by suitably qualified and experienced engineering geologists / geotechnical engineers.**

Document approved for issue by:



Grant A. Lovell  
Director, Christchurch Group Manager

# Geotechnical Interpretative Report

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## Executive Summary

*Tonkin & Taylor Ltd (T&T) have been engaged by Christchurch City Council to undertake an extensive ground investigation to evaluate the nature and variability of the geotechnical conditions present within Christchurch Central Business District and the predominantly commercial areas to the south and south-east. This information was used by T&T to develop a database of consistent and high-quality geotechnical information that will be made publicly available to assist with, and expedite, the post-earthquake recovery and rebuilding process.*

*The information herein has been used to evaluate the extent and severity of the observed land damage that occurred as a result of the major seismic events associated with the Canterbury Earthquake Sequence, and, to assess the potential impact of future large earthquakes. This will assist to inform decisions around land-use planning required for development of the Central City Plan.*

*The investigation included 48 machine boreholes, 151 cone penetration tests, approximately 45km of geophysical surveys, groundwater level monitoring and laboratory testing of soil samples to identify the nature of the deposits present to depths of up to 30m below ground level.*

*The investigation confirms the presence of geologically young alluvial deposits that are highly variable both laterally and vertically over short distances. They include soft clays and plastic silts that are sensitive to cyclic softening and loose non-plastic silts, sands and gravels which are susceptible to liquefaction and associated lateral spreading and high groundwater levels. Those deposits identified as susceptible to liquefaction are shown on geological plans and cross sections presented in this report.*

*The presence of liquefiable deposits has been identified in all areas where significant land damage was observed, and also in many parts of the city where surface manifestation of liquefaction has not been reported. This suggests that liquefaction likely occurred in these areas and should be considered a hazard in future earthquakes.*

*Preliminary analyses indicate that the extent and severity of liquefaction that occurred following the 22 February 2011 aftershock was not substantially greater than would have been predicted by applying the peak ground accelerations given in NZS 1170.5 (2004). The assessed level of liquefaction to be designed for using the updated hazard factor ( $Z = 0.30$ ), issued by the Department of Building and Housing (May, 2011), is not significantly greater than the previous requirements for the Ultimate Limit State design case. The mitigation measures designed to address these issues are largely equivalent to designs that would have been adopted for the previous assessed level of liquefaction, when taking into account the inaccuracies inherent in the analytical methods used and inevitable variability of the site characteristics. However, the design of foundation-structure systems will need to take account of the increased risk for the Serviceability Limit State design case.*

*No areas within the CBD or adjacent commercial areas were identified as having ground conditions that would preclude rebuilding on those sites, although more robust foundation design and/or ground improvement may be required. The risks of lateral spreading adjacent to some sections of the Avon River will require detailed geotechnical assessments, however, the adoption of a minimum 30m set-back required for creation of the Avon River Park will likely preclude the worst affected areas from future development.*

*The information presented in this report will enable geotechnical specialists to prepare concept designs for foundations / ground improvement options for future development. However, detailed and comprehensive site specific ground investigations and geotechnical assessments, conducted by suitably qualified and experienced geotechnical specialists, will be required on a site specific basis.*

*Christchurch is not unique in being located on soils susceptible to liquefaction within a seismically active region. There are a number of cities and large urban centres around the world (including Wellington on the North Island), where the level of seismic hazard is similar to or greater than that at Christchurch. Presuming that it is economically feasible to utilise appropriate foundation / ground improvement systems, there are few sites that would be considered unsuitable for development purely on the basis of a liquefaction hazard.*

*A number of projects have been successfully completed in recent years within Christchurch central city, using a combination of detailed geotechnical investigations and appropriate ground improvement and/or foundation and structure design, to mitigate the identified liquefaction hazard.*

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## **1. Introduction**

### **1.1 Project Background**

On 04 September 2010, Christchurch and the wider Canterbury region was rocked by a magnitude 7.1 earthquake, resulting in extensive damage to buildings and infrastructure throughout the region, including severe land damage within the Christchurch eastern suburbs and Kaiapoi. The liquefaction and associated lateral spreading that impacted the eastern suburbs extended along the Avon River into the eastern parts of the central city (within the four avenues) as far west as Manchester Street, although the severity of the land damage west of Fitzgerald Avenue was significantly less than that experienced along the lower reaches of the Avon.

Following the Darfield Earthquake of 04 September 2010, over 7,000 aftershocks have been recorded (known as the Canterbury Earthquake Sequence) associated with the rupture of this previously unknown fault. This has included around 30 events with a magnitude >5, the devastating M6.3 Christchurch Earthquake of 22 February 2011 and the M6.3 aftershock of 13 June 2011.

As well as causing the collapse or partial collapse of a large number of buildings, resulting in 181 fatalities and prolonged closure of much of the central business district (the red zone), the 22 February 2011 aftershock caused further severe land damage in the eastern suburbs and extensive liquefaction and localised lateral spreading throughout the central city and beyond into Merivale, Fendalton, Papanui and the surrounding areas, which was further exacerbated by the 13 June event.

Rebuilding the central city presents significant challenges from a broad spectrum of disciplines. Ensuring the satisfactory performance of land supporting buildings and infrastructure, is but one, albeit very important, consideration.

### **1.2 Terms of Reference**

Tonkin & Taylor Ltd (T&T) have been engaged by Christchurch City Council (CCC) to undertake an extensive ground investigation to reveal the nature and variability of the geotechnical conditions present within Christchurch Central Business District (CBD) and the predominantly commercial areas to the south of Moorhouse Avenue and east of Fitzgerald Avenue, hereafter referred to as the 'central city', and to make this information publicly available to assist with, and expedite, the post-earthquake recovery and rebuilding process.

The extent of the study area is shown on Figure A1 (see Appendix A).

Many areas within the CBD are dominantly residential zones, particularly in the north and north-eastern sections. The investigations completed within the CBD and discussed in this report are concerned primarily with the geotechnical issues that affect the future redevelopment of the business and commercial sectors. Reporting of future development within the residential zones is being completed by the Earthquake Commission. Any decisions on future land use and development control in these areas issued by the Earthquake Commission shall take precedence over the broad advice outlined in this report.

### **1.3 Purpose**

#### **1.3.1 General**

The primary purpose for undertaking the extensive ground investigations, as stated above, is to provide a broad overview of nature and variability of the ground conditions within the central city to aid the post-earthquake recovery and rebuilding process. The principal ways in which the

publicly available database of high-quality and consistent geotechnical information will achieve this objective are outlined below:

1. By revealing the lateral and vertical distribution of the soil deposits and groundwater levels present will aid understanding of the extent and severity of the observed land damage, to assess the likelihood of liquefaction/cyclic softening having occurred in areas where no land damage was observed and therefore better comprehend which areas of the central city are likely to be subject to land damage from future seismic events.
2. To help identify any areas within the central city where the prevailing ground conditions may limit the feasibility of rebuilding on the land and/or to highlight those locations where significant mitigations measures are likely to be required for different types of development. The investigation data has been used alongside a number of further sources of information has enabled T&T to provide advice to CCC to assist with decisions regarding further land-use options adopted in the draft and Final Central City Plan<sup>1</sup>.
3. There currently exists a large body of publicly available data regarding the soil conditions within the central city and beyond (Environment Canterbury well records). This information is however of limited use and applicability for Geotechnical engineering purposes due primarily to a combination of the often limited depths of the investigation holes, the quality of the soil descriptions and/or quantitative or qualitative data regarding the in situ density/stiffness of the materials and definition of the layering present. This value of the information included is however greatly enhanced when set in the context of the investigation data obtained as part of this study.
4. There also exists a significant volume of good quality ground investigation generated from numerous site specific ground investigations for historic developments within the central city, which is not currently publicly accessible due primarily to issues around data ownership and an even greater volume of geotechnical information is being, and will continue to be, generated during the rebuilding process for individual developments and research projects. It is hoped that establishment of a significant database of consistent, high quality geotechnical data will encourage owners of existing and future data will be willing and enthusiastic about adding their own records to the database. In time this would become an invaluable resource to the Christchurch community with substantial economic and hazard reduction benefits.
5. Access to the central city to undertake the scope of the extensive ground investigation works that have been completed, particularly the geophysical surveys (see Section 4), would be largely impractical if large parts of the city were not effectively closed off to traffic and public access, due to disruption and Health and Safety issues. These investigations have therefore been completed in a timely manner to ensure maximum benefit from the current closure of large parts of the central city (particularly the red zone).
6. There are a limited number of contractors with the necessary specialist ground investigation equipment in Christchurch, Canterbury or even the South Island. As a result, a number of contractors have been mobilised to Christchurch to undertake the present investigations, along with even more extensive investigations in the suburbs that are being completed for similar purposes on behalf of the Earthquake Commission (EQC). These operators are also being commissioned to undertake site specific ground investigations for a range of private clients. The high costs associated with mobilising this equipment to Christchurch would be prohibitive for small-scale individual site assessments. There are significant cost savings therefore for undertaking a large number of investigations under a few contracts.

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<sup>1</sup> Christchurch City Council. Draft Central City Plan. August 2011.

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7. Despite the large number of investigations being completed and the appreciable depths achieved, site specific ground investigations/geotechnical assessments will be required for the detailed design of individual developments. It is envisaged however that the information provided by the city-wide investigations, along with any historical data available through desk study, may be sufficient to permit concept designs to be developed for individual sites in lieu of gaining access to those sites (if in the red zone) and/or investigation contractors available to undertake specific investigations – the demand for which is expected to be very high and likely to exceed capacity for some time into the recovery/rebuilding process. The city-wide investigations should also assist in determining the appropriate scope of the investigations required at specific sites.
8. There are a number of additional health and safety issues to be considered when undertaking investigations within the central city in close proximity to unstable buildings during the ongoing period of enhanced seismic activity. Control of access to the red zone and monitoring of health and safety issues can be more effectively implemented under a single contract.
9. It is also hoped that by undertaking a broad review of the ground conditions across the central city, comparing these with the areas of observed land damage and undertaking liquefaction assessments (using state-of-the-practice methods), a better appreciation of the ability of practitioners to accurately predict the location and severity of land damage resulting from seismic events can be assessed. This may help to identify areas where further study or research projects could be of value and to provide context for those research works that are already underway, particularly by the University of Canterbury (UoC).
10. Part of the current ground investigation works includes for the ongoing monitoring of a large number of standpipes that have been installed within the near-surface deposits in each of the machine boreholes. These will be monitored for a period of at least 12 months and provide a detailed record of the seasonal variability of the groundwater levels across the central city. This is a fundamental requirement for liquefaction analyses and will benefit consideration of issues associated with the design of temporary works and constructability. Monitoring of the seasonal variability of groundwater levels is not an activity that can be routinely completed for individual site assessments due to cost and programme implications and therefore conservative assumptions regarding the maximum groundwater levels are usually assumed. This should provide a basis for justifying a more accurate assessment of the groundwater level variability at specific locations within the central city.
11. By identifying the nature and variability of the deposits across the central city and identifying those materials at depth which represent significant geotechnical issues, such as susceptibility to liquefaction, will help consenting authorities to understand the scope of the ground investigations and level of geotechnical assessments required to accompany building applications for specific sites. The information presented should also assist geotechnical specialists in explaining to landowners / developers the issues that need to be addressed.

### **1.3.2 Purpose and Layout of the Interpretative Report**

The primary purpose for completing the city-wide investigations was to make available, in as short a timeframe as possible, high-quality and consistent factual data concerning the ground and groundwater conditions, which can be used by geotechnical specialists to assist with the initial stages of undertaking detailed site specific assessments. It is envisaged that sufficient information will be available from the recent investigations, along with any historic data available, to allow the principal geotechnical issues that are likely to be present at any specific location within the city to be interpreted.

This preliminary assessment can then be conveyed to the landowner / developer and an appropriate scope of the ground investigations and geotechnical assessment required to address those issues developed. Such preliminary assessments are likely to be limited to a review of the investigation data available for the immediate vicinity of any particular site, with reference to a maximum of perhaps four to six investigation holes and two to four geophysical survey lines.

There is merit, however, in undertaking a broad review of the apparent ground response to seismic shaking across a wide area, to gain a better understanding of the likely response of the ground at any particular location. Such a review is very time-consuming and generally incompatible with the programme and budget constraints for individual developments. A brief summary of the findings of such an assessment, including a comparison of the revealed ground conditions in the areas where significant land damage was observed and the results of liquefaction analyses in these areas, are therefore presented in this report to assist in this respect.

Sections 2 and 3 of this report provide a brief description of the area covered and the principal sources of information used in its preparation. An outline of the scope and factual reporting of the physical ground investigations undertaken as part of this assessment are outlined in Section 4 and Section 5 provides a brief description of the regional geological and geomorphological setting. Section introduces briefly the seismicity of the Canterbury region, with specific reference to the recent Canterbury Earthquake Sequence as recorded at the GNS Science strong motion stations located within the central business district and the likely local ground conditions present at each site.

A brief summary of the nature and variability of the materials encountered across the central city and a generalised geological model is presented in Section 7, with reference to a number of detailed geological plans and cross sections.

Section 8 then presents a summary of the observed land damage (liquefaction and associated lateral spreading) reported within the central city following the three major seismic events of 04 September 2010, 22 February 2011 and 13 June 2011, and compares these with the ground conditions encountered and the results of liquefaction analyses completed. This section also identifies areas where liquefaction is considered likely to have occurred but where little or no land damage was observed. Section 8 also presents a brief review of the levels of liquefaction that may have been predicted across the central city using the pre-September 2010 earthquake design requirements and compares those with the anticipated severity of liquefaction adopting the post-22 February 2011 seismic design requirements issued by the Department of Housing and Building (DBH, May 2011).

Section 9 provides a brief overview of the principal geotechnical issues associated with the ground conditions present and Section 10 provides an indication of the likely scope of ground investigations and geotechnical assessments that will be required to define and mitigate the geotechnical issues present at specific sites and the need for good engineering judgement in support of analyses and peer review for difficult sites.

Section 10 provides an outline of the likely scope of the ground investigations and geotechnical assessments that are likely to be required for sites subject to a high liquefaction hazard.

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## **2. Site Location and Description**

### **2.1 Location**

The extent of the area covered by the ground investigations and detailed in this report includes the area bounded by Bealey Avenue to the north, Fitzgerald Avenue to the east, Moorhouse Avenue to the south and Deans Avenue / Harper Avenue to the west. This area of the city is commonly referred to as the 'Four Avenues' and is generally considered to constitute the main Central Business District (CBD). Investigations have not however been completed within Hagley Park, other than around Christchurch Hospital, such that the western limit of the area covered is bounded by Park Terrace, Rolleston Avenue and Harper Avenue.

The extent of the commercial zones covered extends south of Moorhouse Avenue to Harman Street / Disraeli Street at the western end, increasing as far as Brougham Street between Antigua Street / Montreal Street in the west and Wilsons Road to the east, which includes the area surrounding the AMI Stadium. East of Fitzgerald Avenue the commercial area covered extends south from Cashel Street to Moorhouse Avenue and east to Stanmore Road and Nursery Road.

The combined CBD, excluding Hagley Park, and commercial areas to the south and south-east, are herein referred to as the central city.

The approximate boundary of the areas covered is shown on Figure A1 – Site Location Plan, included in Appendix A.

### **2.2 Description**

#### **2.2.1 Area**

The area within the 'Four Avenues' covers a distance of approximately 3km from west to east (Deans Avenue to Fitzgerald Avenue) and 2km north to south (Bealey Avenue to Moorhouse Avenue); encompassing an area of around 6.26km<sup>2</sup>.

Excluding Hagley Park, the CBD is roughly square in shape, extending 2km from Rolleston Avenue to Fitzgerald Avenue and 2.1km from north to south, covering a total area 4.20km<sup>2</sup>. The commercial district to the south and south-east of the CBD covers a total area of 2.32km<sup>2</sup>.

#### **2.2.2 Avon River and Topography**

The dominant features defining the character of the central city include Hagley Park, which occupies the western side of the 'Four Avenues' and the meandering course of the Avon River, which flows initially from north to south along the edge of Park Terrace, turns west and then east in a large meander through Hagley Park before following a dominantly north-east course across the CBD, flanked by Oxford Terrace to the south and Cambridge Terrace to the north, with a further tight meander immediately west of Fitzgerald Avenue in the north-east part of the CBD.

The CBD and adjacent commercial areas are very level, ranging from a maximum typical elevation of around 8 to 9m above Lyttleton Harbour datum (mean sea level) along the western side of Hagley Park, reducing to 3m adjacent to the Avon River at the north-east corner of the CBD and 4m in the south-east around Ferry Road.

Ground elevations are typically flat or slope very gently towards the Avon River. A number of cross sections (see Section 7) indicate the presence of what may be interpreted to be a former river terrace, varying from between approximately 100 and 200m from the existing channel. The 'terrace' is typically around 0.5 to 1.0m high, although its presence cannot be defined in many areas, which may be the result of urbanisation.

Isolated sections of the river banks are at notably greater elevation on one side when compared to the opposite bank, such as is observed along Oxford Terrace immediately east of Antigua Street, which is at an elevation of around 7mRL, approximately 1.5m higher than Cambridge Terrace on the north side.

The reduced ground elevations in the south-east area of the CBD and commercial areas extend beyond the present study area to Ferrymead. This is thought to be related to a former inlet that extended from the coastline beyond the current estuary.

The observed ground elevations and associated deposits encountered in these areas have had a significant impact on the extent and severity of liquefaction in these areas (see Section 7).

### **2.2.3 Land Use**

For the benefit of readers not familiar with the layout of Christchurch central city, a very broad description of the land-use in different areas of the CBD are shown on Figure A1 and described briefly below. Within these generalised zones are areas and individual properties that fall outside of the categories indicated.

The main business district, where the majority of the multi-storey and high-rise buildings are located, is focused predominantly south of the Avon River around Cathedral Square, extending south to Tuam Street and east to Madras Street, with a few tall buildings located west of the Avon River south of Armagh Street.

The area to the north of the Avon River to Salisbury Street and as far east as Manchester Street, is largely occupied by business and commercial low-rise buildings but with occasional multi-storey developments. Similar land use is present either side of Victoria Street leading north-west to Bealey Avenue and on the eastern side of the Avon River south of Armagh Street.

The majority of the area to the north of Moorhouse Avenue is dominated by one- and two-storey commercial buildings, as are the commercial areas to the south and south-east.

The main residential areas within the 'Four Avenues' occupy the north and north-east areas of the CBD either side of the Avon River and along the eastern side of Park Terrace and Rolleston Avenue. The former area is dominated by one- and two-storey dwellings whilst the area opposite Hagley Park includes a number of multi-storey apartment blocks.



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## 3. Sources of Information

### 3.1 Post-Earthquake Land Damage Mapping and Survey

As principal geotechnical advisors to the Earthquake Commission (EQC) and the Canterbury Earthquake Recovery Authority (CERA), T&T have undertaken extensive mapping and preliminary assessments of land damage within the central city and suburbs following the Darfield Earthquake of 04 September 2010, the Christchurch Earthquake of 22 February 2011 and significant aftershocks, including the Magnitude 6.3 event of 13 June 2011. T&T also have access to and have reviewed, further relevant information obtained from a wide range of sources, including, but not limited to:

- Earthquake Commission (EQC)
- Canterbury Earthquake Recovery Authority (CERA)
- Christchurch City Council (CCC)
- Waimakariri District Council (WDC)
- Environment Canterbury (ECAN)
- University of Canterbury (UOC)
- Institute of Geological & Nuclear Sciences (GNS)
- Land Information New Zealand (LINZ)
- New Zealand Aerial Mapping (NZAM)
- AAM New Zealand (AAM)
- Other local engineering consultancies

This data has been collated and a detailed database established for ease of use and restricted access by a wide variety of stakeholders and is continually updated as further information becomes available.

This information has been used alongside the ground investigation data to aid understanding of the nature and severity of the observed land damage and the risks posed to the central city from future seismic events, as discussed in subsequent sections of this report.

## 3.2 Published Information

### 3.2.1 Black Maps

At the time of the initial European settlement of the Canterbury region in the 1850s, a survey of the Christchurch area was undertaken by Captain Joseph Thomas and Thomas Cass (Chief Surveyors). These maps, which are known as the 'Black Maps' which refers to the colour code used by the Department of Survey and Land Information for filing purposes, are still available from Archives New Zealand. These indicate the overall pattern of rivers, streams, creeks, vegetation, sand dunes and swamps present at that time.

This information is invaluable for understanding the nature of the near-surface deposits encountered across the central city and for helping to identify some of the geotechnical issues faced in different areas of the city. For instance, the low-lying swamp areas are characterised by soft, compressible ground that are likely to have undergone settlement resulting from artificial drainage and subsequent placement of fill and there were numerous channels and areas of standing water that must also have been infilled.

An extract of the March 1850 map (Sheet 2) covering the CBD area is shown in Figure 3.1.

**Figure 3.1: Extract of Black Map dating from March 1850 (Sheet 2).**



Further useful information regarding the early history of development within Christchurch, including many descriptions of the 'difficult' ground conditions that had to be overcome, are described in the records of the Christchurch Drainage Board (CDB), including the original drainage scheme report prepared by William Clark in 1878 and a very informative short history of the CDB written by John Wilson (1989).

### **3.2.2 Geological / Geomorphological Studies and Maps**

There have been a number of studies of the geological / geomorphological history of the Christchurch area and wider Canterbury Region and the nature of the deposits present. Most significant of these for the present study are the geological maps and accompanying descriptions for 'Christchurch Urban Area' compiled by Brown & Weeber (1992), produced at a scale of 1:25,000 and for a more regional understanding of the geological setting, 'Geology of the Christchurch Area' by Forsyth et al. (2008). Section 5 and parts of Section 7 of this report draws heavily on the information contained in these documents.

Further informative studies are referenced at the end of this report.

### **3.2.3 Seismicity**

Following the Darfield Earthquake of 04 September 2011 and the subsequent large aftershocks, particularly the Christchurch Earthquake of 22 February 2011, a number of detailed mapping projects, scientific papers and reports have been prepared, particularly by GNS and the UoC.

Following establishment of the Canterbury Earthquakes Royal Commission (CERC) in May 2011, a number of reports have been commissioned concerning the seismicity of the Canterbury Region and ground conditions present within the CBD to assist the inquiry. These reports are published

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on the CERC website and provide invaluable information as to the nature of the earthquakes that have affected Canterbury since 04 September 2010, the ground response of the deep alluvial materials within the CBD and the hazards posed by future seismicity. The relevant documents are included in the references at the end of this report.

### 3.2.4 Standards and Guidelines

The design of structures to resist earthquake motions in New Zealand is set out in New Zealand Standard 1170.5 (2004). This includes details of the elastic site spectra,  $C(T)$ , which are routinely used by geotechnical specialists for input into liquefaction analyses, based on the spectral shape factor ( $C_h(T)$ ), which depends on the site subsoil class assumed, the hazard factor ( $Z$ ), return period factor ( $R$ ) and the near-fault factor ( $N(T,D)$ ). This information would have been used for the design of new structures prior to the Darfield Earthquake of 04 September 2010. A review of the  $Z$  factor was completed by GNS on behalf of the Department of Building & Housing (DBH) and in May 2011, a revised  $Z$  factor was issued for use in the Canterbury Region.

The assumed peak ground accelerations (PGAs) determined from NZS 1170.5 (2004) and the revised  $Z$  factor have been used, along with the PGAs recorded at the strong motion sites within the CBD for the three major seismic events, have been used to complete liquefaction analyses, the results of which have been compared with the observed liquefaction within the CBD and to assess the future design requirements (see Section 8).

## 3.3 Historic Ground Investigation Data

### 3.3.1 Environment Canterbury Well Records

Ever since artesian groundwater was encountered beneath Christchurch in 1858, wells have been sunk, predominantly into the Riccarton Gravel, to tap the abundant supply of potable water. It is estimated that since the early-1860s, more than 10,000 wells have been sunk within the Christchurch Urban Area. Since the 1980s, it has become mandatory for drillers to record details of the wells, including logging of the strata encountered. This information is maintained by ECan and can be accessed via the Council's website.

Within the CBD alone, there are records for no fewer than 450 records and a large number within the surrounding commercial areas and beyond (see Figure A3 – Environment Canterbury Well Locations in Appendix A).

The primary purpose of sinking the wells was to tap into artesian water sources with little or no interest in the materials through which they were drilled. As a result, viewed in isolation, these records are of fairly limited use for geotechnical purposes, for a number of reasons, the most significant of which include:

- The soil descriptions are often incomplete or inaccurate as the materials encountered were of little or no interest to the drillers and were not logged by suitably qualified and experienced engineering geologists or geotechnical engineers to a standard methodology (it is not uncommon for the logs to offer no description at all or to be simplified to, for example, clay and sand from 0 to 25m)
- the drilling equipment used is not designed to retrieve good quality samples suitable for logging and therefore any descriptions that are included are unlikely to be accurate in many cases
- no in situ testing, such as for the determination of relative density, have been undertaken and the descriptions (where included) are often misleading or incompatible with geotechnical practice (i.e. granular materials are often referred to as soft and clays as dense, and there are instances where recent investigation holes located very close to

former well locations (identified by covers) have described the materials as 'loosely-packed', whereas in fact the equivalent layers were assessed to be dense to very dense on the basis of the penetration testing completed)

- Poor or no information regarding the groundwater levels encountered
- Lack of any laboratory test data
- The actual locations of the wells are often uncertain, in some cases several records are given the same coordinates and yet the records report very different soil descriptions, and ground elevations are in most cases estimated from contour data rather than being accurately surveyed
- Whilst there are a large number of well records, these are sporadic in their distribution.

The information presented on the well records therefore needs to be used with caution and should only be used to supplement high-quality investigation data where this can be reliably justified.

One of the most useful applications of the ECan well data, due to the sharp contrast in soil strata from stiff clays and peats to dense to very dense gravels, is for definition of the depth to the Riccarton Gravels beneath the central city. This information has been used to assist with defining the depth to the Riccarton Gravels, as detailed in Section 7 and Figure B16.

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## 4. Recent Ground Investigations

The most significant component of the work that T&T has undertaken on behalf of CCC has involved the design, procurement, supervision and factual reporting of an extensive ground investigation covering the entire central city.

As detailed in Section 1, the primary focus of the investigations was to compile and make publicly available a comprehensive database of high-quality and consistent geotechnical information that can evolve as further data becomes available. In addition to the large number of exploratory holes and geophysical surveys completed, this information also provides a sound reference for maximising the data presented on the 450+ ECan well records.

This section of the report provides a brief overview of the investigations that have been completed and the works that are ongoing, which will be provided as addenda, and how this information is being reported.

### 4.1 Fieldwork

The fieldwork component of the investigation was largely completed between June and October 2011. Further fieldwork, including pre-drilling through shallow gravels to allow cone penetration testing of deeper layers, has been completed through October and November 2011. Groundwater level monitoring is planned to continue for 12 months from the initial reading of the final standpipe installed.

#### 4.1.1 Inspection Pits

Due to the high density of buried services located within the central city, it has been necessary to conduct a thorough review of the known service locations and position the intrusive exploratory holes away from these as far as possible. However, to check for unknown buried apparatus, inspection pits have been excavated at each of the machine borehole and piezocone locations. These were typically completed using sucker-trucks (vacuum excavation) to depths of between 1.0 and 1.5m, depending upon the location and proximity of known services. The holes formed for this purpose were then backfilled with loose sand through which subsequent testing could be completed.

The materials encountered in the upper 1 to 1.5m have not been recorded. The nature of these near-surface deposits is of limited significance for the purposes of this study, which is concerned largely with liquefaction hazard, as the groundwater level will typically be at or below this level in most areas, this upper depth is likely to be highly variable and include fill materials at some locations and the foundations for most existing buildings and future structures within the central city will be close to or below this depth.

Site specific investigations are required to investigate the nature of the near-surface materials, particularly where shallow foundations are being considered, to ensure adequate bearing capacity, check for the presence of loose sands which could undergo dry settlement during seismic shaking and to address temporary works design considerations.

#### 4.1.2 Machine Boreholes

A total of 48 machine boreholes, referenced BH-CBD-01 to BH-CBD-48, have been completed across the central city (see Figure A4, Appendix A). These have been advanced using either top-drive rotary or sonic vibration methods to obtain HQ size (96mm outside diameter) cores.

The boreholes were advanced to prove the depth and nature of the upper zones of the Riccarton Gravels, extending to depths ranging from 23m to 31m (BH-CBD-33 and BH-CBD-21,

respectively)<sup>2</sup>; covering a total length of over 1.3km. A maximum proven thickness of the Riccarton Gravels was recorded in BH-CBD-11 (10.5m).

Standard Penetration Tests (SPTs) were typically undertaken at 1.5m vertical intervals as the holes were advanced. Upon completion of drilling, standpipes with an approximately 6m long slotted screen were installed between upper and lower bentonite seals to around 8m below ground level and fitted with a flush cover set in concrete. The recovered core was photographed and logged by T&T in accordance with the NZGS Guidelines (2005) and selected samples taken for laboratory testing.

A summary of the boreholes completed, including the eastings and northings, ground elevation and final depth, is provided in Table G1 in Appendix G. Detailed engineering logs and core photographs for each borehole are included in the zone factual reports.

#### 4.1.3 Cone Penetration Testing

Cone Penetration Tests (CPTs) with measurement of pore water pressures (piezocones) have been completed at 151 primary locations across the central city area; referenced CPT-CBD-01 to CPT-CBD-151 (see Figure A5, Appendix A and Table G2 in Appendix G).

Of the 151 test sites, 48 were advanced to depths exceeding 20m, with a maximum of 28.6m achieved at CPT-CBD-148. A further 14 extended to between 15 and 20m and 15 reached depths of between 10 and 15m (total of 77 exceeding 10m depth).

At 12 of the sites, the CPTs had to be abandoned at shallow depths for various reasons and therefore alternative nearby locations (typically within 1m or so) were attempted. These are referenced with the original number with an 'a' at the end (i.e. CPT-CBD-029a).

Following completion of the machine boreholes and initial round of CPTs, a broad assessment was made to determine which of the CPTs that had achieved limited depth may be underlain by a significant thickness of materials potentially susceptible to liquefaction that could be reasonably investigated. Pre-drilling using open hole techniques was then completed at 30 locations, the holes formed being backfilled with loose sand through which subsequent testing of the deeper layers could be completed. These are referenced with the original number with a 'P' at the end (i.e. CPT-CBD-26P).

A summary of the locations at which pre-drilling was completed, including the depth of the pre-drill and final depth of the piezocone testing, is provided in Table 4.1.

The decision to complete a relatively large number of piezocones in comparison to the machine boreholes, was based largely on the speed and efficiency of completing each investigation hole, the generally better definition of vertical variability of the stiffness/ density of the interbedded soil layers and the suitability of the data for subsequent use in geotechnical design, particularly liquefaction analyses. To provide a correlation of the 'interpreted' soil types predicted by the empirical formula used in the processing of the CPT data, one CPT was positioned close to each of the 48 machine boreholes.

<sup>2</sup> Excluding BH-CDB-33, which was terminated early at a depth of 15.5m?

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**Table 4.1: Summary of pre-drilled CPTs**

Number	Pre-Drill Depth (m)	Final Depth (m)
CPT-CBD-06P	10.00	22.09
CPT-CBD-08P	12.00	18.01
CPT-CBD-14P	10.50	22.43
CPT-CBD-15P	13.50	22.78
CPT-CBD-24P	6.50	22.98
CPT-CBD-26P	6.00	21.05
CPT-CBD-28P	10.0	10.6
CPT-CBD-33P	4.50	TBC
CPT-CBD-34P	9.00	22.61
CPT-CBD-37P	7.50	8.75
CPT-CBD-40P	9.00	20.78
CPT-CBD-41P	9.00	23.5
CPT-CBD-47P	10.5	22.65
CPT-CBD-48P	9.00	23.2
CPT-CBD-49P	9.00	23.17
CPT-CBD-50P	8.50	23.81
CPT-CBD-56P	6.00	7.43
CPT-CBD-57P	10.50	22.43
CPT-CBD-58P	9.00	22.86
CPT-CBD-66P	7.50	22.01
CPT-CBD-75P	9.00	22.01
CPT-CBD-76P	9.00	17.94
CPT-CBD-77P	10.50	26.08
CPT-CBD-78P	12.00	24.12
CPT-CBD-98P	10.5	11.58
CPT-CBD-100P	7.50	22.16
CPT-CBD-101P	12.00	22.64
CPT-CBD-120P	9.00	10.71
CPT-CBD-121P	12.00	23.89
CPT-CBD-150P	10.50	28.38

TBC – data not yet processed

#### 4.1.3.1 Piezocone Calibration Exercise

In modern practice, the most sophisticated liquefaction analyses procedures generally use the data obtained from piezocones, in combination with boreholes, laboratory testing of selected samples and in some cases, geophysical testing to assess the stiffness of the soil. As discussed in Section 8, however, there are a number of uncertainties involved in liquefaction analyses, including the accuracy of the analytical procedures and inherent variability of the ground conditions at any particular site. It is generally assumed however that the ground conditions revealed at any specific location, as recorded by the piezocone, is consistent.



Whilst the quality and calibration of the equipment used for piezocones is tightly controlled by adherence to ASTM D5778 and calibration of the individual cones is required (copies of which are included in the Factual Report appendices), there is some inevitable variability in the results obtained by different testing equipment.

In order to assess the consistency of the data obtained from the different subcontractors, a small-scale calibration exercise was completed at 234 to 240 Armagh Street, at the junction with Madras Street on site where building had been recently demolished (see Figure A7 in Appendix A).

This involved the two rigs completing three test holes within a small site area, with tests from the two machines located within 1m or so of each other.

The results of the calibration exercise and implications for application of this data are discussed in Section 7.1.2.

#### **4.1.4 Geophysical Surveying**

Despite the large number of machine boreholes and piezocones completed across the central city, the distances between the intrusive investigation points are still quite large given the anticipated lateral and vertical variability of the ground conditions present. In order to provide some 'connectivity' between these isolated investigations, geophysical surveying has been undertaken on a grid pattern along the major roads running east to west and north to south across the central city and along the banks of the Avon River; covering a total distance of approximately 45km.

The overall location of the survey lines in relation to the machine boreholes and piezocones are shown on Figure A6 (Appendix A). Larger scale plans showing the chainage along each survey line, which can be correlated with the velocity versus depth plots provided in the Zone Factual Reports, are shown on Figures A7 to A10. Large scale location maps are also included in each of the Zone Factual Reports, along with the results for each survey line within that area.

Due to access restrictions in and around the 'Red Zone', some areas could not be surveyed, as indicated by the gaps between the survey lines. Further surveys are planned to fill in these gaps when suitable access can be arranged. This information will be presented as addenda to this report and the Zone Factual Reports.

##### **4.1.4.1 Multichannel Analysis of Surface Waves**

The method adopted for completing the geophysical testing comprised Multichannel Analysis of Surface Waves (MASW). The shear wave velocity tests provide a measure of the small-strain shear modulus (stiffness) of the soil, which is a useful engineering property of the soil that can be used if geotechnical design and liquefaction analyses.

As well as providing a quick and non-intrusive method of revealing the nature of the ground conditions along the survey line, the method is also able to penetrate through shallow gravels that are present over extensive areas of the central city, to investigate the nature of the underlying weaker, potentially-liquefiable deposits.

Considerable care is required in interpreting the information and should only be used by specialists familiar with the techniques used. The results provide a measure of the average shear wave velocity with depth and have limited spatial resolution. The information cannot therefore be reliably used to characterise the presence of specific stratigraphical units or the local variability (heterogeneity) of the materials, as discussed further in Section 7.

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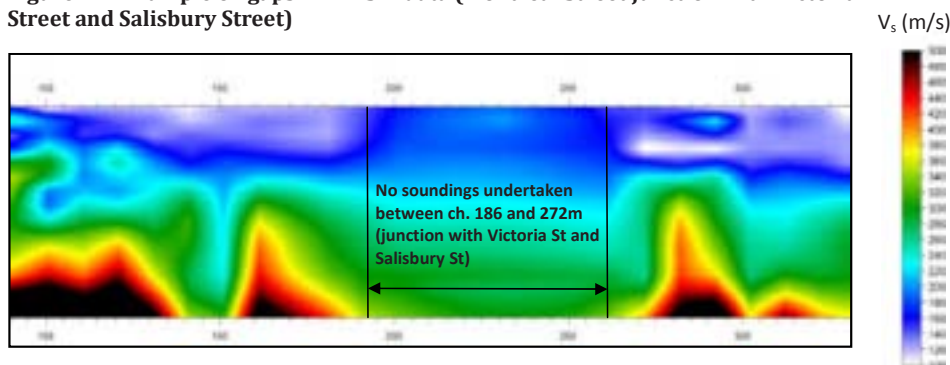
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The plots of shear wave velocity with depth indicate significant variability in stiffness of the ground within the top 30m, which plays a significant role in determining the near-surface ground response. The plots of processed data have generally been terminated at 30m as the quality of the data beyond this level is of variable quality. However, in some areas high quality data is available to depths of up to 42m. Where information to these greater depths is required, the contractor (Southern Geophysical Testing Ltd) should be contacted.

It should be noted that the survey lines are not continuous along the entire length of the road network and typically terminate either side of the major road intersections. The information presented between these survey locations is therefore based on very limited information and should not be relied upon.

An example of where soundings were not conducted across an intersection is shown in Figure 4.1 below. For this survey line soundings were completed at approximate 10m centres along Montreal Street either side of the intersection with Victoria Street and Salisbury Street, but with no soundings completed between chainage 186 and 272m. The loss in detail, particularly in the near surface materials, is apparent. Generally speaking data interpreted between soundings spaced at more than 10 or 15m should not be relied upon. To assist with understanding where these gaps in data occur, the lines shown on Figures A6 to A10 are only continuous where soundings were completed at less than 15m centres.

**Figure 4.1: Example of 'gaps' in MASW data (Montreal Street junction with Victoria Street and Salisbury Street)**



#### 4.1.5 Surveying

Each of the investigation points, including both the boreholes and piezocones, have been surveyed for location and ground level. These are included on the borehole logs and piezocone summary plots prepared by T&T and tabulated in the Zone Factual Reports.

The location of each shot (typically completed at 10m centres) of the MASW has also been surveyed. The extent of the survey lines shown on Figure 6 and the respective location plans included in the Zone Factual Reports is based on the surveyed results.

#### 4.1.6 Groundwater Monitoring

One of the principal input parameters when undertaking liquefaction analyses is the assumed groundwater level. It is well understood that the water table depth within the central city and eastern suburbs is very high (often within 1 to 2m of the ground surface) and that this varies seasonally.

In order to better understand the depth of the water table and the seasonal variability, standpipes were installed in each of the 48 boreholes and will be monitored on a monthly basis

for a period of at least 12 months. It is intended that the results of the ongoing groundwater level monitoring will be issued as addenda to this report at three monthly intervals.

A summary of the groundwater level monitoring results obtained to date is included in Appendix H and discussed in Section 7.

#### **4.2 Laboratory Testing**

In order to aid understanding of the nature of the deposits encountered across the central city, including their susceptibility to liquefaction which is dependent upon gradings and plasticity, laboratory tests have been completed on selected samples taken from each of the boreholes. The testing has included particle size distribution, fines content and water content.

A summary of the type and number of tests completed on samples obtained from the 48 boreholes is summarised in Table I1 in Appendix I.

The individual test results are included in the Zone Factual Reports. An overall assessment of the results in relation to the soil deposits present within the central city is included in Section 7.

#### **4.3 Factual Reports**

In order to make available the factual investigation data as soon as possible and to present this data in manageable quantities, the central city has been divided into thirteen zones; nine within the CBD and four covering the remaining commercial areas to the south and south-east. The extents of the thirteen zones are shown on Figure A7.

Each of the Zone Factual Reports provides a brief description of the area covered, a summary of the intrusive investigations and geophysical surveys completed, groundwater levels monitored to date, the laboratory test results for the relevant boreholes and a summary of the Environment Canterbury well records relating to that zone. The detailed information is presented in a series of appendices, as follows:

- Appendix A: Investigation Location Plans
- Appendix B: Borehole Logs
- Appendix C: Borehole Core Photographs
- Appendix D: Cone Penetration Testing Results
- Appendix E: MASW Investigation Results
- Appendix F: Standpipe Installation Details
- Appendix G: Laboratory test Results
- Appendix H: ECan Database Well Logs

#### **4.4 University of Canterbury Data**

The UoC has undertaken a number of investigations within the CBD. These have been focused on a number of discrete locations or zones, where several intrusive investigations have been completed within a relatively small study area, primarily to reveal the nature of the ground conditions associated with specific sites (see Figure A13).

The investigations have included machine boreholes, in which gel-push sampling has been undertaken to try to retrieve 'undisturbed' samples for sophisticated laboratory cyclic triaxial testing, supplemented by a number of piezocones. To date the borehole records and laboratory test results are not available, however T&T has been provided with copies of the piezocone data.

The data from these investigations has been imported into the standard reporting format presented in the factual reports and is included in Appendix L.

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It is hoped that when all of the UoC data is available, this can be incorporated into the geotechnical database.

The UoC piezocones were completed by a different contractor to those used for the present investigations. To assist with evaluating the consistency of this data with that obtained by the two contractors used for the present investigations, the calibration test holes were specifically located within one of the UoC sites (Zone 4). UoC piezocones completed close to those undertaken for the calibration exercise are therefore included in the results detailed in Section 7.1.2.

## 4.5 Geotechnical Database

As detailed in Section 1, the results of the ground investigations are to be made publicly available to assist the preliminary stages of site specific geotechnical assessments. This is to be achieved initially using of the Canterbury Recovery Project Orbit website ([www.canterburyrecovery.projectorbit.com](http://www.canterburyrecovery.projectorbit.com)).

Each of the Zone Factual Reports and associated appendices can be downloaded, along with the raw data for the piezocones that practitioners may wish to use for geotechnical analyses and design. This report and the associated appendices will also be available for downloading.

It is also intended that the data be made available in a more interactive manner by permitting access to borehole logs, core photographs, piezocone data, geophysical survey plots, geological and liquefaction hazard cross sections and plans and groundwater level monitoring data, by clicking on the relevant icon viewed through a Google Earth platform.

Future management of this database has yet to be determined, but whichever method is adopted, it will be vital for the new data to be included if the database is to achieve maximum benefit to the Christchurch community. It is hoped that the results from site specific ground investigations will be added to the database voluntarily and whoever maintains the database will ensure that the additional data is used to regularly update the geological plans and cross sections and other 'interpretative' materials.

### 4.5.1 Quality

In order to ensure that the high quality and consistency of the database is maintained, it will be important that the information provided is vetted. One of the most significant methods to ensure the quality of the data is maintained is to require all boreholes, trial pits or other investigation methods that rely on the description of materials encountered, are undertaken by suitably qualified engineering geologists, geotechnical engineers or experienced geo-technicians, logged in accordance with the New Zealand Geotechnical Society 'Guideline for the Field Classification and Description of Soil and Rock for Engineering Purposes' (NZGS, 2005). The logs should also be reviewed and signed off by an experienced and suitably qualified practitioner.

In the future it is hoped that this information can be provided in a format as recommended in the NZGS 'Electronic Transfer of Geotechnical and Geoenvironmental Data,' Version 3.2, NZ v1.0 (NZGS, 2007) or equivalent system.

### 4.5.2 Location

Associated with the need for high quality and consistent data, is the need to provide detailed coordinates and ground elevations for the various information provided. This should always be included on the individual logs for boreholes, trial pits and piezocones.

## 5. Regional Setting

In order to provide a context for understanding the composition and distribution of the near-surface deposits that underlie the central city, it is important to first appreciate the broader geological / geomorphological evolution of the Canterbury region. This section provides a brief description of the main geomorphological features and the principal stratigraphic units present.

### 5.1 Geomorphology

Christchurch is located on the eastern edge of an aggrading gravel outwash plain at the southern end of Pegasus Bay. The central city is underlain by low lying Holocene age coastal margins, abandoned overbank flood channels of the Waimakariri River, bordered to the south by the Port Hills.

The coastal margin of Christchurch, which is situated on the eastern side of the city, is made up of estuaries, lagoons and swamps. This forms part of the eastward advancing (aggrading) coastline which has been formed over approximately the past 6,500 years due to sediment input from Waimakariri River floods and coastal storm/current activity in Pegasus Bay.

The overbank flood channels of the Waimakariri River, which mainly consist of sands and gravels, are predominately in the western side of the city and slope gently toward the east. These flood channels connect with the present day Heathcote, Avon and Styx rivers. The Avon, Heathcote and Styx rivers meander through the city in a west to east trending direction. The Avon and Heathcote drain into the Estuary. The Styx River drains into the Brooklands Lagoon to the north.

The Port Hills lie to the southeast of the city. These represent part of the northern rim of the extinct Lyttelton volcano and range in age from 5.8 to 12 million years old.

### 5.2 Geology

The published geology of the Christchurch Urban Area (Brown and Weeber, 1992) indicates Christchurch central city is located on alluvial sand and silt over bank deposits of the Yaldhurst Member of the Springston Formation. These are present overlying fixed and semi-fixed dune and beach deposits of the Christchurch Formation. The Christchurch Formation is in turn underlain by the Riccarton Gravels, which represents the highest of the numerous artesian aquifers present beneath Christchurch.

The Yaldhurst Member sediments represent deposition of fluvial materials, including channel sands and gravels and overbank sand and silts from an ancient braided river system which drained the Christchurch area.

The fixed and semi fixed dune and beach sediments of the Christchurch Formation are inferred to have been deposited by coastal processes. This material is dominated by the sand fraction, but locally includes significant gravel, finer material and shells. Beach sands and gravel deposits are 'semi fixed' due to their proximity to the shoreline and transient depositional process.

The Riccarton Gravels are glacial outwash sediments deposited of Quaternary age. They are present directly below the Christchurch Formation at depths of around 20 to 30m (see Section 7).

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## 6. Seismicity

A number of comprehensive reports have been prepared detailing the historic, recent and potential future seismicity of the Canterbury region. Several reports prepared by GNS Science and the University of Canterbury have been commissioned by the Canterbury Earthquakes Royal Commission (CERC), and are therefore focused on the central city. These are published on the Commission's website (<http://canterbury.royalcommission.govt.nz/>) and available for downloading.

The reports provide a detailed background to the geological structure of the Canterbury region within the context of New Zealand's active tectonics. The reports provide detailed accounts of the four major earthquakes affecting the CBD (04 September 2010, 26 December 2010, 22 February 2010 and 13 June 2010).

These reports should be referenced for detailed information on the seismicity of the Canterbury region and detailed data regarding the ground motions experienced in the CBD during the Canterbury Earthquake Sequence.

### 6.1 Canterbury Earthquake Sequence

Figure 6.1 shows the approximate epicentre locations of aftershocks with a magnitude >4.0 recorded following Darfield Earthquake within the main urban areas surrounding the central city, including the Boxing Day 2010 event which is located directly beneath the CBD.

**Figure 6.1 Aftershocks with magnitude >4.0 after the Darfield Earthquake**



Aerial image sourced from Google (2009). Blue dots indicate aftershocks with magnitude 4.0 to 4.5, green 4.5 to 5.0, yellow 5.0 to 5.5, orange 5.5 to 6.0 and red >6.0 (22 February 2011 and 13 June 2011). Outline of central city is shown.

The following section provides a brief discussion on the nature of the ground conditions thought to be present at each of the strong motion accelerometer stations located within the central city.

### 6.2 Strong Motion Accelerometers

As a result of the historic seismic activity affecting the Canterbury region and the potential hazard of a large magnitude earthquake resulting from a distant fault (particularly the Alpine Fault and Porters Pass Fault), GNS Science has established and maintains a comprehensive network of



strong motion accelerometers in Christchurch. This includes four sites within the central city, as shown in Figure 6.2.

**Figure 6.2: Strong motion sites located in Christchurch CBD**



Aerial image sourced from Google (2009).

Figure 6.3 below illustrates the acceleration response spectra (5% damped elastic response) for the four strong motion stations located within the central city, along with the design acceleration response spectra taken from NZS 1170.5 (2004) and those based on the updated Zone factor ( $Z = 0.30$ ) for Christchurch, as specified by DBH (May, 2011).

It is understood that GNS Science is currently undertaking a review of the peak ground accelerations to be used for future seismic design. This is understood to comprise contours of peak ground acceleration for ULS and SLS events and will replace the use of a Z factor.

This information should be incorporated into a revised version of this report and the accompanying analyses and plans / sections.

These records provide the basis for the assumed ground motions used for liquefaction analyses, as detailed in Section 8, to back-analyse the predicted level of liquefaction so that these can be compared with observations made following each of the major seismic events between 04 September 2010 and 13 June 2011.

The site response varies quite significantly despite the close proximity of the four stations. This difference in response may be partly due to the different buildings in which the stations are



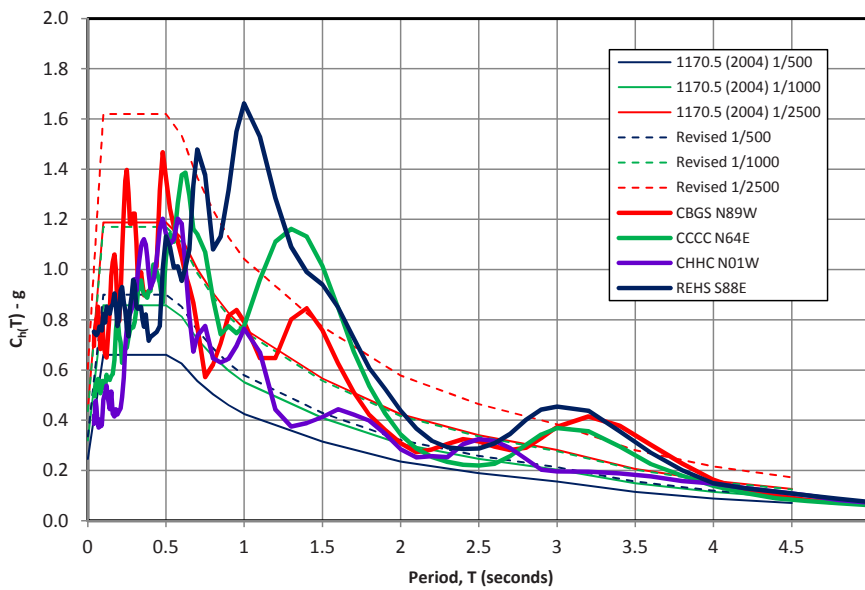
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housed (none of the stations are free-field instruments), but the near-surface ground conditions will also have an important role in determining the nature of the motions.

Limited information is currently available regarding the local ground conditions at each of these stations (except REHS - see Section 6.2.1). Whilst no specific investigations have been completed to reveal the ground conditions at each of the stations as part of this study, the investigations that have been conducted provide useful information on the likely nature of the conditions present.

These are described briefly below. In the absence of any subsequent detailed investigations, it is recommended that when considering the ground response at specific locations across the central city, the site conditions are compared with those for the four stations to determine which represents the most relevant data, rather than using the closest station or some interpolation between two or more stations.

**Figure 6.3: NZS 1170.5 Elastic Site Response Spectra for Christchurch CBD (Class D Site) and results 22 February 2011 Aftershock**

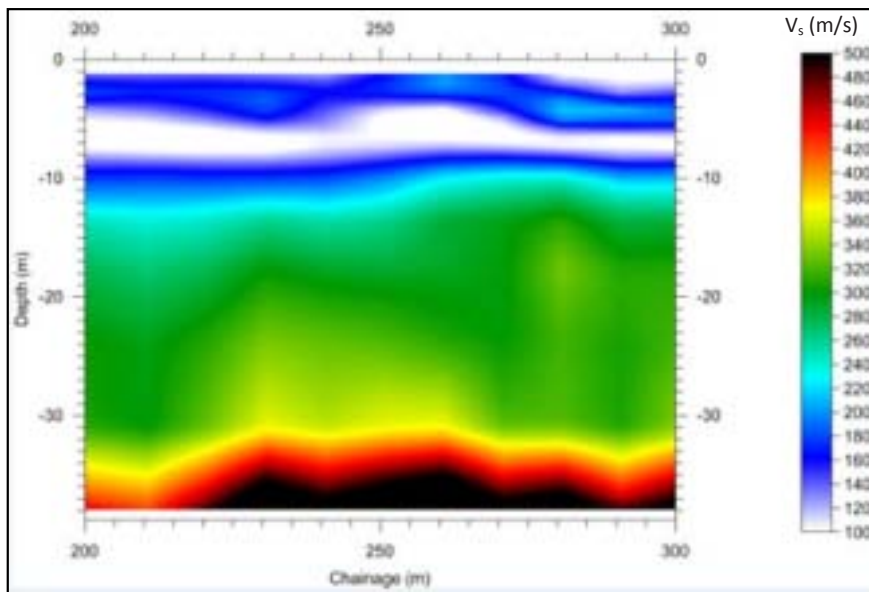


## 6.2.1 Christchurch Resthaven (REHS)

The closest recent investigations undertaken to the REHS site include CPT-CBD-12 and CPT-CBD-13, located to the west and east, respectively, of the approximate location of the accelerometer. These investigation holes encountered relatively consistent materials, comprising soft to firm (occasionally very soft) plastic silts to depths of around 4.5 to 6.0m, underlain by loose silty sands / sandy silts to between 8 and 9m below ground level. CPT-CBD-13 then indicates the presence of dense to very dense sands to at least 18m below ground level. The upper plastic silts are highly organic with peat layers between 2 and 3m depth (CPT-CBD-12) and from 2 to 4m in CPT-CBD-13.

The MASW data obtained along Colombo Street to the east of the site is shown in Figure 6.4.

**Figure 6.4: MASW data for Colombo Street located east of REHS station**



Section of MASW data taken along Colombo Street. See Figure A9 for exact location.

This indicates low shear wave velocities to depths of around 8m below ground level (<100m/s), increasing to around 300m/s to depths in excess of 30m.

It is anticipated that a reasonable depth of liquefaction could occur in this area, extending from depths of around 4.5 to 8m (CPT-CBD-12) or 5.5 to 8m in CPT-CBD-13. Relatively little liquefaction was observed at the ground surface in this area, but it is likely that the non-liquefiable crust may have prevented liquefaction flooding / ejecta (see Sections 8 and 9).

As part of the investigations into the collapse of the Pyne Gould Corporation (PGC) building, a ground investigation, comprising a machine borehole and cone penetration test, was undertaken immediately adjacent to the building housing the accelerometer (referenced BH103 and CPT103)<sup>3</sup>.

The results of BH103 and CPT103 are largely consistent with the recent investigations, but indicate the highly organic silts and peat layers to be present at depths of between 3 and 5m, overlain by loose silty sands to around 1m below ground level. The top 1m comprises rounded gravels which are likely to represent filled ground.

Below the organic silt / peat layers, further soft silts were encountered to around 7.5m, where they grade into loose becoming medium dense sands, with dense to very sands from 9m to the base of the holes at depths of 15m (BH103) and 20m (CPT103).

<sup>3</sup> Investigation into the Collapse of the Pyne Gould Corporation Building on 22<sup>nd</sup> February 2011. Prepared for Department of Building and Housing (DBH). By Beca Carter Hollings & Ferner Ltd. 26 September 2011.

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The ground conditions encountered at this site are relatively typical of the area immediately south of Bealey Avenue.

## 6.2.2 Christchurch Hospital (CHHC)

The CHHC accelerometer is located to the south-east of the main hospital building. Borehole BH-CBD-23 and CPT-CBD-74 are located relatively close to this site. The ground conditions encountered at these two exploratory holes are however somewhat different at depths of between 4 and 8m. Both investigations revealed firm to stiff plastic silts to around 2.5m overlying loose to medium dense sands to around 4m. Below 4m BH-CBD-23 encountered interbedded sandy gravels/gravelly sands and what is interpreted to be relatively loose sands (due to regular core loss). These are present to around 12m below ground level. The piezocone however indicates further loose sands extending to around 8m below ground level underlain by dense gravelly sands to around 12m. Below 12m both investigations revealed dense sands extending to soft to firm silts and peat layers at around 18 to 20m depth with Riccarton Gravels at around 21 to 22m below ground level. There is no nearby MASW data for this site.

A significant thickness of the materials present in the upper 2.5 to 8m are likely to have undergone some degree of liquefaction during the 22 February 2011 aftershock, which is confirmed by observations of liquefaction flooding / ejecta at the ground surface in this area.

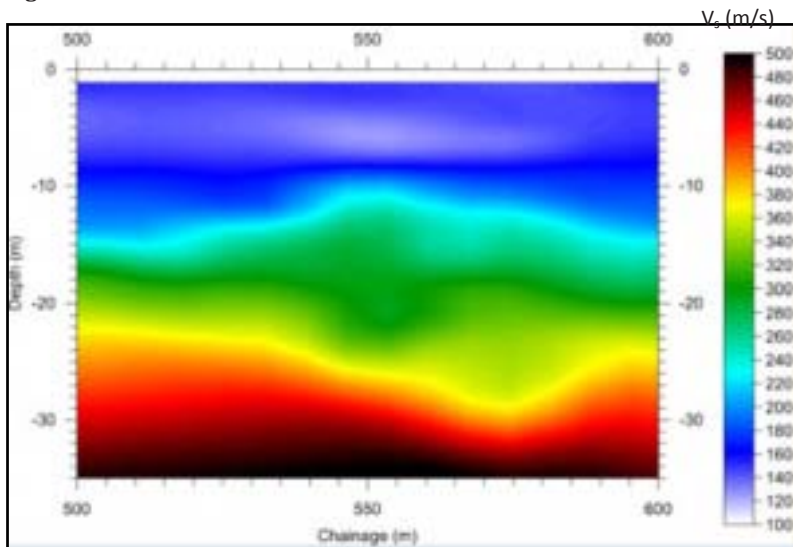
## 6.2.3 Christchurch Cathedral College (CCCC)

The Christchurch Cathedral College station is located in the topographically low south-east area of the central city. Three piezocones were completed in this area (CPT-CBD-91, -92 and -93), which show relatively consistent ground conditions, as follows:

- 1 to 5m, comprising moderately plastic (largely non-liquefiable) silts, with a loose sand layer between 2 to 3m
- 5 to 9 or 10m, loose to medium dense sands
- 10 to 20m, medium dense to dense sands
- 20 to 25m, soft to firm, becoming stiff, clays and organic silt/peat layers
- >25m, Riccarton Gravels

MASW surveys were completed along both Barbadoes Street and Fitzgerald Avenue close to the site. Figure 6.5 shows a section of survey data taken along Barbadoes Street, which is similar to that recorded along Fitzgerald Avenue. This indicates low shear wave velocities (<150m/s) in the top 10 to 15m, increasing to around 400m/s at the approximate depth of the Riccarton Gravels.

**Figure 6.5: MASW data for Barbadoes Street located west of CCC station**



Section of MASW data taken along Colombo Street. See Figure A10 for exact location.

Minor sand boils were observed in the grounds of Christchurch Cathedral College following the 22 February 2011 aftershock, but generally speaking the upper plastic silts appear to have prevented significant liquefaction flooding / ejecta of the loose sand layers within and beneath the silts.

#### 6.2.4 Christchurch Botanical Gardens Station (CBGS)

As shown in Figure 6.1, the CBGS accelerometer is located towards the centre of north Hagley Park. This area was not included within the scope of the central city investigations and we are not aware of any recent detailed investigations having been completed close to this station.

There are however a number of ECan well records in the vicinity of the site, including:

- M35/10619 and M35/1936 located to the east
- M35/7410 (north-west)
- M35/2285 to the south-west

The ground conditions encountered at each of these locations is summarised in Table 6.1.

Excluding M35/2285, each record suggests the site to be underlain by sands to around 2m followed by sandy gravels to depths greater than 10m, with sands to around 20m and a thin cover of clays / silts overlying the Riccarton Gravels at around 20 to 21m.

Only the materials described as loose sand in the upper 2.5m would be considered likely to be highly susceptible to liquefaction (although limited liquefaction within the sandy gravels may be possible). As detailed in Section 7.4, groundwater levels in this area are likely to be below the upper loose sands.

No significant liquefaction was observed in this area following the 04 September 2010, 22 February 2011 or 13 June 2011 events.

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It may be reasonably assumed that little or no liquefaction occurred at this site.

**Table 6.1: Summary of ground conditions encountered in ECan well records located close to CBGS**

Well Record	Dominant Material
M35/10619	Silt/clay to 1.5m Sand and gravel to 11.5m Sands to 16m Soft silty sand to 21m Organic silt/peat to 23.5m Riccarton Gravels below 23.5m
M35/1936	Loose sand to 2.5m Gravel to 14.5m Silty sand to 20m Organic silt/peat to 22m Riccarton Gravels below 22m
M35/7410	Loose sand to 2.5m Gravel to 15m Clay to 21m Riccarton Gravels below 21m
M35/2285	Clay to 4.5m Gravel to 10.5m Silty sand to 23m Riccarton Gravels below 23m

## 6.2.5 Summary

It is apparent from the ground conditions encountered that some degree of liquefaction is likely to have occurred at all strong motion sites within the central city except CBGS. The ground conditions and degree of liquefaction that is likely to have occurred are relatively similar at the CCC and CHHC sites, which appear consistent with the observed levels of surface flooding / ejecta observed following the 22 February 2011 event.

Liquefaction is also likely to have occurred at depth at the REHS site, but this has been prevented from being manifest at the ground surface due to the thick cover of plastic silts. The typically soft silts present in the upper 4.5 to 6m at the REHS site, underlain by potentially liquefied loose sands to around 9m, could account for the observed greater motions at this location.

## **7. Ground and Groundwater Conditions**

### **7.1 Purpose**

The purpose of this section is to provide a broad overview of the of the ground and groundwater conditions encountered within the central city. Brief descriptions of the principal deposits and their lateral and vertical distribution are provided and the geological plans and cross sections included in the appendices are introduced.

A brief discussion is included in Section 7.6 regarding the results of the piezocone calibration exercise.

### **7.2 Geological Plans and Cross Sections**

There have been a number of past studies that have attempted to illustrate the nature and variability of the ground and groundwater conditions within Christchurch, most notably those by Elder et al. (1991) and ECan (2004). These have presented maps representing the geology across the entire city based on historic ground investigation data. The geological plans and sections presented here are focused purely on the central city and are based predominantly on the findings of the recent ground investigations, supplemented by ECan well records (where considered reliable), recent investigations completed by T&T, piezocones completed by the UoC and other recently published information (such as that included in the DBH reports).

As detailed in Section 1.3, one of the primary objectives of the present investigations and reporting is to establish a comprehensive publicly-accessible database of geotechnical information that can be added to as new data becomes available and permissions are obtained to include good quality historic investigation results. It is hoped that, as new data becomes available within the central city, together with the suburbs, this will be used to regularly update the ground conditions as presented in the geological plans and cross sections. The plans and sections presented here should therefore be considered a starting point rather than a definitive record.

A series of geological plans are included in Appendix B, illustrating the typical ground conditions that may be anticipated at different depths across the central city based on the deposits encountered in nearby exploratory holes. These are provided at 1m intervals from depths of 1 to 10m, then at 2m intervals to 20m below ground level and finally from 20 to 25m and 25 to 30m depth (see Figures B1 to B16). The adoption of wider intervals with depth reflects both the greater general consistent nature of the deposits at lower elevations and the decreasing number of exploratory holes reaching those depths to justify the level of materials differentiation.

In addition, Figure B17 provides an indication of the variation in depth / elevation to the top of the Riccarton Gravels (discussed in Section 7.3.1.1). No such plan has been prepared that attempts to define the boundary between the Yaldhurst Member and the Christchurch Formation deposits and this division is not shown on the cross sections for the reasons detailed in Section 7.3.1.3.

Geological cross sections have been prepared along each of the major north to south and east to west roads crossing the central city in a rough grid pattern and a section is provided following the approximate course of the Avon River. The location of the 23 cross sections is shown on Figure C1 and the sections are presented as Figures C2 to C24, most of which include two or three sheets due to their length. These generally follow the same rough alignment as the MASW.

The layers included on the sections to depths of around 15 to 20m are based primarily on a mechanical approach to the interpretation of the CPT data using modified published methods. Due to their overall greater depth, the deeper materials are based largely on the borehole

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records. A legend indicating the colouring of the different materials adopted is provided on Figure C25.

The plans and sections have been developed separately and are able to be used for different purposes. The geological plans are based on the results of the recent investigations (boreholes, piezocones and MASW) supplemented by the ECan well records, UoC piezocones, additional T&T data and other recently published information.

The plans are intended to aid understanding of the geological evolution of the central city and therefore provide an indication of the range of materials that can be reasonably expected to occur at any particular depth at specific locations. The regions are not intended to represent sharp boundaries between material types, but illustrate the 'dominant' deposits encountered at these locations from existing investigations. As further information becomes available, it is expected that these areas will be modified and better defined.

Following completion of these plans we have attempted to 'test' the accuracy and benefit of the information for planning site-specific investigations and comparing the results with the actual ground conditions encountered. The information has proved useful and generally consistent with the materials anticipated, although some notable departures have been identified which serve to highlight the benefit of updating this information as new data becomes available and the need for detailed site-specific assessments.

Definition of material types represents a combination of geological descriptions (in terms of the depositional environment) and engineering properties (particularly density). Generally speaking the loose to medium dense silty sands / sandy silts and interbedded sands and silts, are considered to have a low resistance to liquefaction, whereas materials described as silts/clays are typically of moderate plasticity (based on description, not testing) and therefore are more 'clay-like' and less susceptible to liquefaction.

Where deposits include a reasonable proportion of organics, they have generally been included in the Organic Silts/Peats zones, where low bearing capacity and consolidation settlements under static loading and cyclic softening during earthquakes are likely to be the dominant engineering concerns.

Due to their linear form and reliance on detailed deep investigation holes, the geological cross sections are based almost exclusively on the recent ground investigations with little reference to the ECan boreholes or additional data sources located away from the main north to south and east to west highways. This results in quite long linear interpolations of the data in many places. It is not intended to suggest that the strata will actually be this consistent between the exploratory holes. It is envisaged that future investigations located close to the cross section alignments will allow these to be updated and refined.

Due to the scale of the sections it has not been possible to include on the figures the actual in situ test data, such as the SPT results, groundwater strikes/levels or laboratory test results. It is hoped, however, that this information can be included on electronic versions of the sections as layers that can be turned on/off when viewed at different scales.

## 7.3 Ground Conditions

One of the main purposes of this study was to provide data that will help to better understand the broad geological environment in which the materials present beneath the central city have been deposited and to develop from this a conceptual three dimensional geological model. This depositional evolution is better understood from starting with the oldest (deepest) materials continuing with decreasing age. The following sections therefore describe the Riccarton Gravels



encountered followed by the predominantly marine and estuarine deposits of the Christchurch Formation and finally the more recent predominantly fluvial deposits of the Yaldhurst Member.

### **7.3.1 Materials Encountered and General Distribution**

#### **7.3.1.1 Riccarton Gravels**

The depth to the top of the Riccarton Gravels is of interest for geological, seismic and engineering aspects.

The overall depth/elevation of the Riccarton Gravels within and beyond<sup>4</sup> the central city provides an indication of the geological environment present towards the end of the last glacial maximum before subsequent sea level rise and deposition of the overlying Christchurch Formation materials commenced.

The ground response to seismic shaking is affected significantly by the nature of near-surface materials, particularly the top 30m or so. The Riccarton Gravels forms a relatively convenient boundary for defining the ground response of the materials above and below this level.

From an engineering standpoint, many larger structures, particularly those located in areas likely to be subject to deep liquefaction, may consider piling to the Riccarton Gravels as a foundation option.

##### **7.3.1.1.1 Depth/Elevation**

The depth to the upper surface of the Riccarton Gravels was proven in 47 of the 48 recent machine boreholes (excluding BH-CBD-33) and may be interpreted from around 50 of the 151 piezocone tests (including the pre-drilled holes). These indicate a depth range across the central city varying from 18.6 to 29.0m below ground level (average 23.3m), with equivalent elevations ranging from -11.8 to -24.6mRL (average -17.6mRL).

The depth to the Riccarton Gravels has also been inferred from over 160 of the ECan well records located within the CBD (where this information is considered reliable). These suggest a similar depth range, varying from 19.2 to 30.0m below ground level (average 24.0m), with elevations ranging from -10.9 to -25.2mRL (average 18.0mRL).

The depths/elevations of the Riccarton Gravels at these locations have been plotted onto a plan of the central city. An overall pattern is clear, indicating an increase in depth / decreasing elevation from west to east as would be expected. However, there is a great deal of local variability, such that it is not meaningful to provide a plot of depth or elevation contours across the central city. Because the overall surface gradient of the Riccarton Gravels is very gentle (around 1°), any data points that intercept local braided channels, which may be several metres deep, would make a contour plan look very complicated and unhelpful as it would not accurately depict all local variations present.

In a number of locations, adjacent data points 100 to 200m apart indicate depth variations of 3 or 4m and given the braided nature of the ancient river bed, it is expected that vertical differences of at least 2 to 3m could occur over much shorter distances and feasibly within a single development site.

The data does however indicate a general deepening of the Riccarton Gravels in a zone spreading east and south-east from around Cathedral Square, where the depth typically increases from

<sup>4</sup> Data being obtained from the suburb wide ground investigations being completed on behalf of the EQC can be combined with the central city information to provide a broader picture of the depth/elevation of the Riccarton Gravels across the main Christchurch urban area.

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around 25m to 30m below ground level around Nursery Road / Wilsons Road. This is shown by the very approximate depth / elevation contours provided on Figure B16 and the Geology Plan (Figure B16). These indicate the dominant materials present between 25 and 30m depth, where the Riccarton Gravels are largely absent.

Inspection of the MASW data confirms both the local variability of the approximate depth to the Riccarton Gravels across the central city and the increasing depth from west to east as well as within the area to the east and south-east of Cathedral Square.

The MASW data located towards the western side of the CBD, particularly along Rolleston Avenue and Montreal Street indicates a number of possible over-deepened channels, where the surface of the Riccarton Gravels is encountered at depths in excess of 25m where a depth of around 20m is more typical. These may represent the braided channels of the river that was responding to a new base level during a period of rapid lowering of sea level during the last glacial maximum prior to the marine transgression that resulted in deposition of the Christchurch Formation marine deposits.

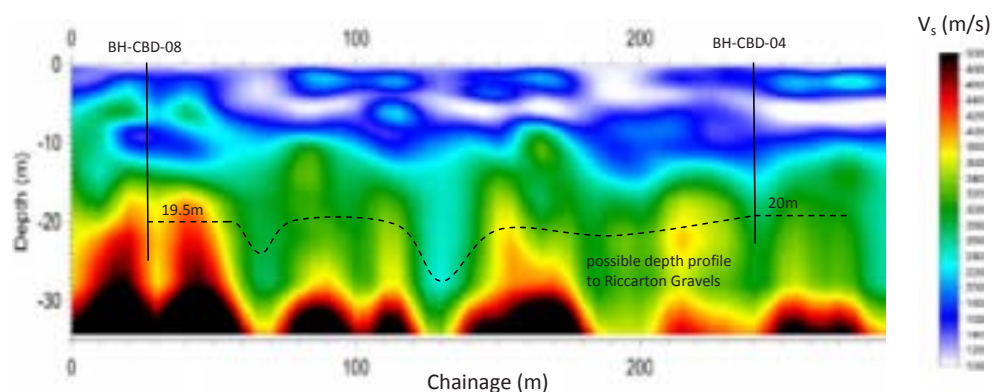
The deepest recorded depth of the Riccarton Gravels (>30m) occurred at ECan well record M35\_2149, located near the junction of Manchester Street and Salisbury Street. This does not fit with the general pattern described above and may also represent a localised buried channel, although we cannot confirm the accuracy of this well record.

It should be noted that there are relatively few data points (either from recent investigations or reliable ECan records) covering the north-east part of the central city. Further information in this area would be beneficial to confirm or otherwise typical depths north of the Avon loop.

The Riccarton Gravels were proven to a maximum thickness of 10.5m in BH-CBD-11 during the recent investigations.

As detailed in Section 4.1.4, the MASW data provides an indication of the shear wave velocity of the materials present and does not indicate different lithologies. Whilst it is apparent that the shear wave velocities associated with the Riccarton Gravels are generally high, these cannot be reliably used to indicate the depth of the upper surface of the Riccarton Gravels. Figure 7.1 below provides a simple illustration of this where the MASW plot obtained for Park Terrace is correlated with the results of two machine boreholes, where the depth to the Riccarton Gravels is known with a high degree of accuracy.

**Figure 7.1: Depth to Riccarton Gravels indicated by machine boreholes and MASW**



The Riccarton Gravels were encountered in BH0CBD-04 at a depth of around 20m which corresponds with a shear wave velocity of around 240m/s, whereas the surface of the Riccarton Gravels encountered in BH-CBD-08 at a very similar depth (19.5m), is associated with Vs of around 400m/s. This is due to the 'averaging' of the MASW data.

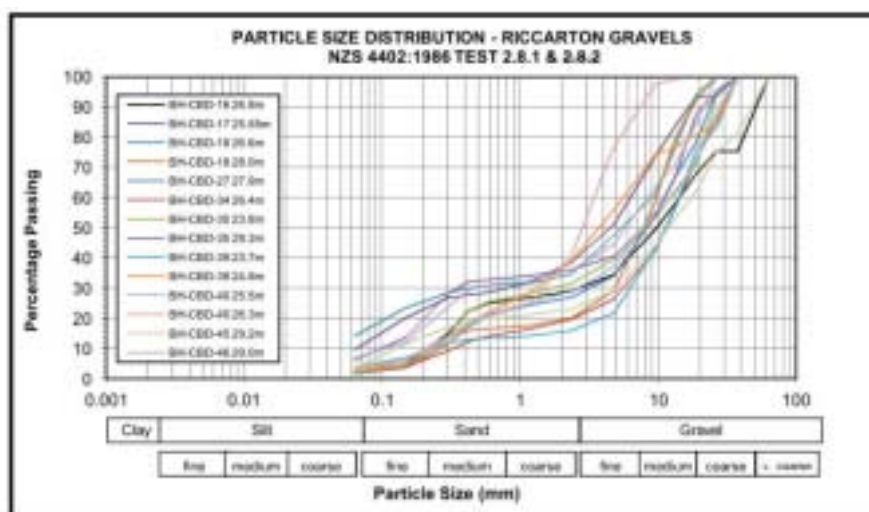
#### 7.3.1.1.2 Density

Upon encountering the Riccarton Gravels, typical SPT N blow counts increased to 30 and above, and often 50 blow counts were recorded for limited penetration. The Riccarton Gravels may therefore generally be considered to be dense to very dense, although the presence of very coarse gravels and cobbles may result in an over-estimate of the actual density of the materials when tested using the SPT.

#### 7.3.1.1.3 Particle Size Distribution

A total of 14 particle size distribution tests (PSDs) have been completed on samples obtained from ten of the machine boreholes spread across the central city. These results are summarised in Figure 7.2, which indicate them to comprise typically sandy to sandy fine- to coarse-grained gravels. They are relatively well-graded with a uniformity coefficient (C) of around 50 to 100, but with somewhat of a gap grading in the coarse sand to fine gravel sizes. This is of limited significance for the present purposes of this report where the sandy gravels of the Yaldhurst Member are typically separated from the underlying Riccarton Gravels by the Christchurch Formation deposits, but may help to define this boundary further to the west beyond the extent of the Christchurch Formation deposits where the Yaldhurst Member grades directly into the Riccarton Gravels.

Figure 7.2: Summary of grading analyses for Christchurch Formation deposits



#### 7.3.1.2 Christchurch Formation

The Christchurch Formation encompasses all materials deposited immediately during the post-glacial marine transgression, which is thought to have advanced as far as the central city around

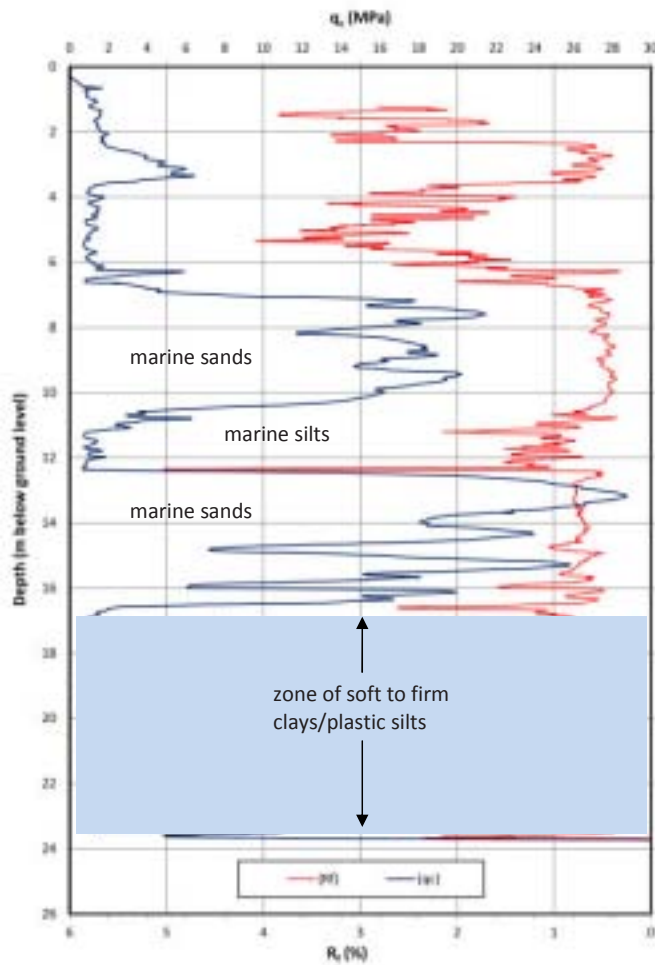
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seven to eight thousand years ago. It includes beach, estuarine, lagoonal, dune and coastal swamp deposits of gravel, sand, silt, clay, shell and peat (Brown & Weeber, 1992).

**7.3.1.2.1 Plastic Clays / Silts (including organic silts and peats)**

As can be seen from Figures B16 to B13, the oldest and deepest Christchurch Formation deposits, directly overlying the Riccarton Gravels, comprise clays and plastic silts, and often include layers of very organic silts and peats, with loose to medium dense non-plastic silts and fine sand layers at the higher elevations (see typical piezocone plot in Figure 7.2). These are often described in the boreholes as being soft to firm (occasionally very soft), and the tip resistance recorded in the piezocones that intercept these deep layers are typically around 1MPa; equivalent to undrained shear strengths predominantly in the soft to firm range.

**Figure 7.2: Piezocone CPT-CBD-113 data**



As shown in Figure B15, these deposits are present to a reasonable thickness (>2.5m) overlying the Riccarton Gravels over the entire south-east portion of the central city – the majority of the area south of the Avon River. Similar deposits are present overlying the Riccarton Gravels at most locations further north and west also, but become thinner north from the river.

A distinct peat layer is often present overlying the Riccarton Gravels. These would likely have formed under the swampy conditions that occurred following commencement of the post-glacial marine transgression, but before the coastline reached the central city. The rise in sea level would have resulted in a waterlogged environment with a relatively rich nutrient supply, conditions suitable for the growth of peat.

As sea levels continued to rise, organic silts and clays eventually interbedded silts and fine sands were deposited over the peats. These would have accumulated in a very low-energy estuarine or lagoonal environment prior to inundation from the sea. The peats and overlying non-marine facies are therefore likely to have been deposited around 10,000 to 7,000 years ago. Radiocarbon dating of the organic materials present within these layers would be beneficial to confirm this timing.

#### **7.3.1.2.2 Marine-Dominated Sands**

As indicated on Figure B14 and B13, at depths of 16 to 20m below ground level, the soft to firm clays and silts are progressively replaced by medium dense to dense sands and these become the dominant materials present across the entire central city to depths of around 9 to 10m below ground level (as depicted on Figures B12 to B9).

These represent the beach and dune deposits of the post-glacial marine transgression that is believed to have reached the central city around 7,000 years ago. They typically comprise fine to medium sands, with occasional silty sand and silt layers (or closely interbedded sands and silts). These finer grained deposits are taken to be representative of periods of high sediment input to the shoreline during periods of flood or potentially short-term deeper water conditions. These layers can be seen in piezocone CPT-CBD-113 in Figure 7.2 extending from around 7 to 18m below ground level.

The marine-dominated sands include occasional shells and rare shell beds. Shells were reported in 32 of the 48 boreholes at depths ranging from around 8m (BH-CBD-12) to 22.5m (BH-CBD-03) below ground level, with equivalent elevations of -3 to -16.9mRL, as summarised in Table 7.1. The absence of reporting of shells in the remaining boreholes should not be taken as indicating that shells are not present at these locations, it may simply be that these were lost in sections of poor-recovery or simply not identified during the logging.

The presence of shells confirms the marine transgression extended across the entire central city. These shells offer a potential to further constrain the age of the Christchurch Formation deposits present beneath the central city through radiocarbon dating and other methods.

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**Table 7.1: Summary of depth / elevation of maximum recorded elevation of shell bands present beneath the central city**

Borehole	Ground Level (mRL)	Depth (m bgl)	Elevation (mRL)	Borehole	Ground Level (mRL)	Depth (m bgl)	Elevation (mRL)
BH-CBD-01	7.65	-	-	BH-CBD-25	5.54	16.8	-11.3
BH-CBD-02	5.91	-	-	BH-CBD-26	4.62	15.5	-10.9
BH-CBD-03	5.62	22.5	-16.9	BH-CBD-27	3.65	15.0	-11.3
BH-CBD-04	6.45	16.6	-10.1	BH-CBD-28	8.51	18.2	-9.7
BH-CBD-05	6.53	21.8	-15.3	BH-CBD-29	6.79	18.1	-11.3
BH-CBD-06	2.94	-	-	BH-CBD-30	6.34	20.5	-14.1
BH-CBD-07	4.21	10.5	-6.3	BH-CBD-31	6.17	17.1	-10.9
BH-CBD-08	6.59	-	-	BH-CBD-32	4.44	12.1	-7.6
BH-CBD-09	6.61	-	-	BH-CBD-33	10.44	-	-
BH-CBD-10	5.28	-	-	BH-CBD-34	9.59	-	-
BH-CBD-11	3.49	14.5	-11.0	BH-CBD-35	8.67	-	-
BH-CBD-12	4.96	8.0	-3.0	BH-CBD-36	7.68	-	-
BH-CBD-13	6.87	19.5	-12.6	BH-CBD-37	4.74	15.0	-10.3
BH-CBD-14	6.60	16.8	-10.2	BH-CBD-38	8.21	-	-
BH-CBD-15	5.16	16.0	-10.8	BH-CBD-39	6.15	15.0	-8.9
BH-CBD-16	5.09	18.8	-13.7	BH-CBD-40	4.76	17.0	-12.2
BH-CBD-17	5.93	-	-	BH-CBD-41	6.66	-	-
BH-CBD-18	5.95	13.1	-7.1	BH-CBD-42	5.58	-	-
BH-CBD-19	5.60	11.6	-6.0	BH-CBD-43	7.21	12.5	-5.2
BH-CBD-20	5.27	11.6	-6.3	BH-CBD-44	3.12	17.0	-13.9
BH-CBD-21	6.36	13.0	-6.6	BH-CBD-45	4.51	17.0	-12.5
BH-CBD-22	5.24	15.9	-10.6	BH-CBD-46	4.39	17.5	-13.1
BH-CBD-23	6.71	17.6	-10.8	BH-CBD-47	7.21	-	-
BH-CBD-24	6.60	-	-	BH-CBD-48	5.21	12.5	-7.3

### 7.3.1.2.3 Density

In situ testing (SPTs and piezocone tip resistances), generally indicate an increase in density with depth, as would be expected, but the presence of silty layers interrupts this overall pattern. Generally speaking the materials encountered at the base (the oldest deposits) are dense to very dense, becoming medium dense to dense at mid-level and are typically medium dense in the higher elevations. It is likely that some of the layers which appear to be loose to medium dense at depth in the piezocone traces and SPT N results are actually very silty sands or sandy silts. Shear wave velocities associated with these materials at depths of around 10 to 20m are typically in the 200 to 400m/s range.

It should be noted however that some areas are dominated throughout the depth range represented by marine sands as being loose to medium dense. This is true of almost the entire depth of the materials encountered in the south-east portion of the central city around Wilsons Road and the AMI Stadium, where some of the most severe surface manifestation of liquefaction was observed. Shear wave velocities associated with these looser deposits at depths from around 10 to 20m are typically in the 180 to 300m/s range.

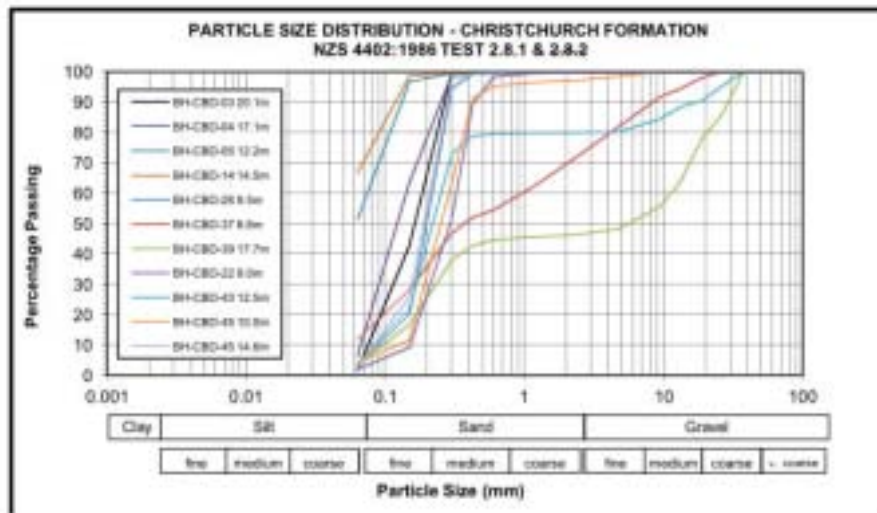
Other significant areas of predominantly loose sands were also encountered north of Ferry Road to the west of Fitzgerald Avenue and around the southern end of Antigua Street / Montreal Street where these cross Moorhouse Avenue; further areas where significant liquefaction occurred.

**7.3.1.2.4 Particle Size Distribution**

A total of 11 PSDs have been completed on samples obtained from ten boreholes spread across the central city. The results are summarised in Figure 7.3. These indicate materials with a wide range of gradings, from the very uniformly graded fine to medium sands ( $C_u < 5$ ) to lower energy deposits with fines contents in excess of 50%, representing some of the silt layers encountered, and occasional very sandy gravels / gravelly sands.

This range in gradings represent the varying depositional environments expected to be found within the Christchurch Formation, ranging from the very fine estuarine / lagoonal deposits (clays and silts), the uniformly graded beach / dune sands that dominated during the main post-glacial marine transgression and more well-graded and gravelly materials which represent significant mixing of fluvial materials into the marine environment, which are transitional with the overlying Yaldhurst Member.

**Figure 7.3: Summary of gradings analyses for Christchurch Formation deposits**





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## 7.3.1.3 Yaldhurst Member (Springston Formation)

### 7.3.1.3.1 Transition from Marine-dominated to Fluvial-dominated Deposition

It is believed that around 6,500 to 6,000 years ago, the post-glacial marine transgression reached its maximum extent and sea levels stabilised at a level similar to the present-day sea level.

Between depths of around 7 to 10m below ground level, the dominant marine sands deposited during the marine transgression are progressively replaced by fluvial deposits as the prograding alluvial fan advanced seawards. Because of this gradual increase in fluvially-derived materials, the depth and distribution of the interface between the top of the Christchurch Formation and base of the Yaldhurst Member is not represented by a distinct change in lithologies, such as boundary between the Christchurch Formation and underlying Riccarton Gravels.

### 7.3.1.3.2 Sandy Gravels

As can be seen from Figures B9 to B2 (covering depths 10m to 2m below ground level), sandy gravels dominate much of the western half of the CBD, and extend locally to the north of the Avon River and south beyond Moorhouse Avenue. These fluvial channel sediments are thought to have been deposited from a subsidiary channel of the Waimakiriri River. The sandy gravels are interbedded with lower energy sand layers, many of which are inferred from the poor recoveries when drilling through the gravel layers.

The 'tongue' of the channel deposits extends most of the way along the course of the existing Avon River, with input appearing to be derived from the west through Hagley Park and south-west from the Heathcote Valley, suggesting at least two former channels (or a main channel and flood channel) existed in this part of the city.

The extent and particle size of the gravels typically increases with elevation, reaching a maximum extent across the central city at depths of around 4 to 6m below ground level (see Figures B4 and B5). The extent of the gravels then reduces to become a relatively narrow 'tongue' of material along the present alignment of the Avon River, extending from Hagley Park to around Barbadoes Street, between depths of 4 to 2m below ground level (see Figures B3 and B2).

These upper river gravels are typically indicated to be medium dense to dense (and very dense), based on the in situ testing. However, the results of the SPTs and particularly the piezocones, may be over-estimating the density of these layers due to the presence of poorly graded medium to coarse gravels, which tend to result in high SPT blow counts and tip piezocone tip resistance. Given the age of these deposits (typically around 6,000 to 3,000 years old) and the presence of relatively loose interbedded sands (many of which could not be successfully sampled), it would be prudent to assume these to be medium dense unless more detailed testing is completed to confirm otherwise. This aspect is particularly important when assessing the liquefaction hazard associated with the gravels, as discussed in Sections 8 and 9.

The presence of the near-surface gravels resulted in a number of the piezocones having to be terminated at shallow depth. To ensure that the underlying predominantly marine sands were investigated using the piezocone equipment, which is generally considered more applicable for liquefaction analyses than SPT results due to the continuous profile achieved, approximately 30 holes were pre-drilled. The pre-drills were typically advanced to around 0.5 to 1.0m below the base of the gravels to ensure that the holes were not terminated within a sand layer with further gravels beneath (although this did occur at CPT-CBD-98P, which was only advanced a short distance before encountering further sandy gravels at a depth of around 10.5m).

**7.3.1.3.3 Clays and Silts and Organic Silts / Peats**

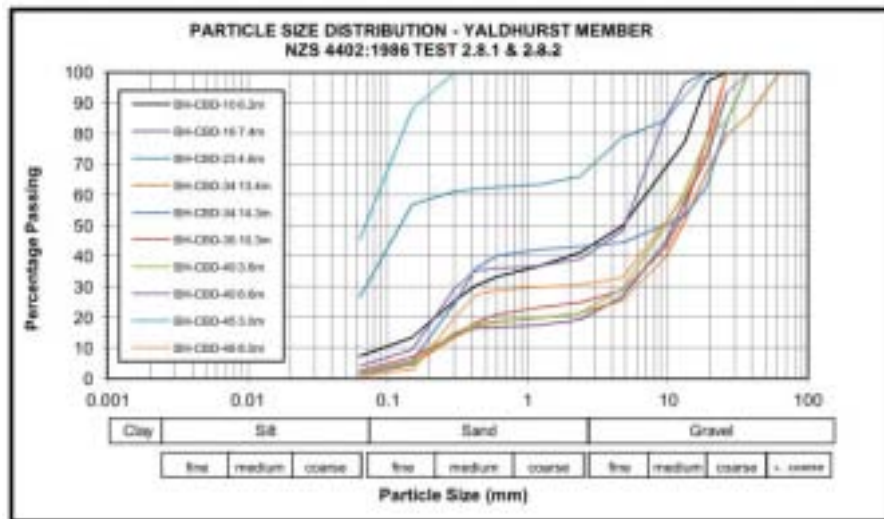
As can be seen from Figures B9 to B2 (covering depths 10m to 2m below ground level), the sandy gravels deposited in the fluvial channel are flanked by overbank deposits including clays / plastic silts and interbedded loose silty sands / sandy silts, with occasional organic silt and peat layers. These are largely confined between the ‘tongues’ of gravels to the south and north of the Avon River, in a zone to the east of Cathedral Square and in the south-east part of the central city, where yet a further ‘tongue’ of gravel is present.

The proportion of organic silt and peat layers is much greater in the area to the north of the Avon River and east of Cathedral Square. These are more representative of a predominantly swampy environment with occasional incursions of flood deposits. Relatively few narrow organic layers occur in the southern half of the central city. Both areas however contain numerous layers/pockets of interbedded non-plastic silts/loose sands, representative of higher energy overbank flood deposits.

**7.3.1.3.4 Particle Size Distribution**

A total of 10 PSDs have been completed on samples obtained from eight of the machine boreholes spread across the central city. These are presented on Figure 7.4. The majority of the samples tested comprise the relatively well-graded sandy to very sandy fine- to coarse-grained gravels. They are relatively well-graded with a uniformity coefficient (C) of around 50 to 100, but with somewhat of a gap grading in the coarse sand to fine gravel sizes. These show a similar grading to the Riccarton Gravels, but many samples include a higher proportion of medium to coarse sand particles.

**Figure 7.4: Summary of gradings analyses for Yaldhurst Member deposits**



**7.3.2 Buried and Infilled Channels**

The MASW data provides a good indication of locations where deep buried and shallow infilled channels may be located across the central.

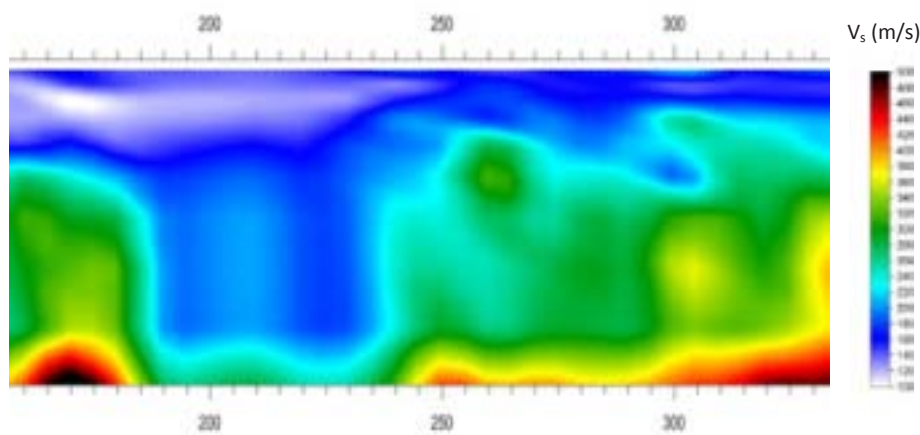
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Figure 7.5 illustrates a probable buried channel extending down to a depth of around 30m, well into the surrounding Riccarton Gravel. This data is taken along Montreal Street between Cashel Street and Moorhouse Avenue. A piezocone was located along Montreal Street adjacent to this feature. The piezocone was however terminated on what appears to be a dense sand or sandy gravel layer, which is not picked up by the shear wave velocities. It is possible therefore that a sandy gravel layer is present overlying the soft/loose materials present in the buried channel.

This finding highlights the need not to limit investigations to depths where it is assumed that dense to very dense sands or gravelly sands have been encountered. There is a risk that these layers could be underlain by weaker materials that may not be suitable for certain foundation / ground treatment options.

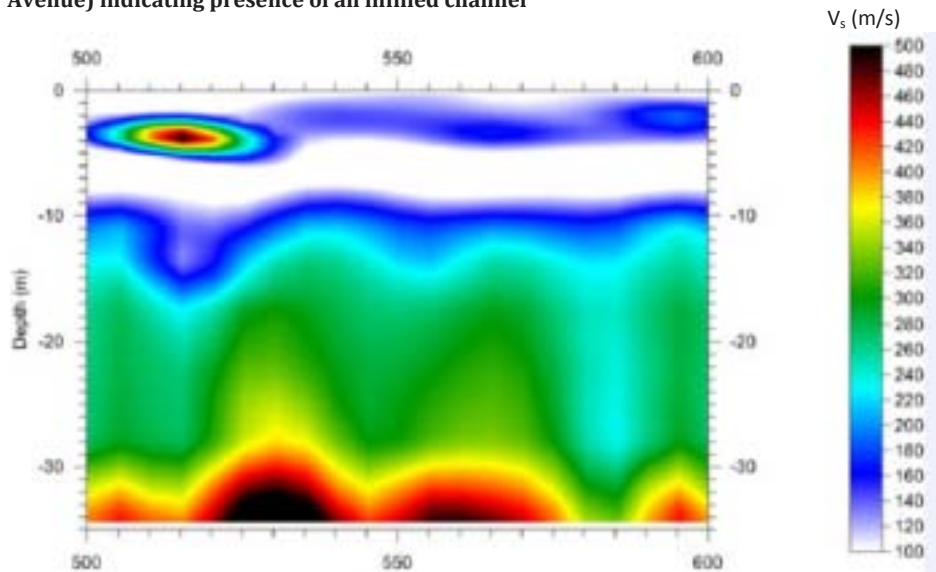
Similar deep buried channels are indicated along many of the MASW sections, particularly in the south-west part of the central city and through the central eastern area. This would suggest that a former large braided channel was present extending from the south-west through the central part of the CBD and out to the east. This would seem consistent with the later deposition of fluvial sandy gravels (Yaldhurst Member) in the top 9 to 10m.

**Figure 7.5: MASW data taken along Montreal Street (between Cashel Street and Moorhouse Avenue) indicating presence of a buried channel**



The MASW data also appears to identify the presence of more recently infilled channels at shallow depth, as shown in Figure 7.6. These may be natural channels infilled with flood gravels or possibly backfilled open channels, as shown on the 'Black Maps'. Care is required during geotechnical investigations not to mistake such features with shallow gravels suitable for founding structures.

**Figure 7.6: MASW data taken along Park Terrace (between Kilmore Street and Bealey Avenue) indicating presence of an infilled channel**



## 7.4 Groundwater Conditions

### 7.4.1 Groundwater Monitoring

Upon completion of drilling at each machine borehole location, a standpipe or level logger was installed to monitor groundwater levels within the near-surface deposits (i.e. top 8 to 10m below ground level)<sup>5</sup>. The standpipes are to be monitored and the level logger data downloaded monthly for at least one year. The results will be presented as addenda to this report at three monthly intervals.

### 7.4.2 Groundwater Levels

To date groundwater levels have been recorded at 40 of the 41 standpipes and several months of data has been retrieved from the four level loggers, the results for which are presented in tabulated and graphical form in Appendix H. A summary of the maximum groundwater levels reported in each standpipe and the maximum level recorded in the level loggers during this period are presented in Table 7.2.

<sup>5</sup> Of the 48 boreholes completed, standpipes were installed at 42 locations, one of which had to be removed and backfilled due to flowing artesian groundwater, and level loggers installed at a further four locations.

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Table 7.2: Summary of Groundwater Monitoring Results

Borehole	Installation Type	Maximum Recorded Groundwater Level		Borehole	Installation Type	Maximum Recorded Groundwater Level	
		Depth (m bgl)	Elevation (mRL)			Depth (m bgl)	Elevation (mRL)
BH-CBD-01	Standpipe	0.5	5.2	BH-CBD-25	Standpipe	3.4	2.2
BH-CBD-02	Standpipe	1.6	4.3	BH-CBD-26	Standpipe	1.6	3.0
BH-CBD-03	Level Logger	0.2	5.4	BH-CBD-27	Standpipe	2.7	1.0
BH-CBD-04	Standpipe	1.7	4.8	BH-CBD-28	Standpipe	1.0	7.5
BH-CBD-05	Standpipe	1.4	5.1	BH-CBD-29	Standpipe	0.4	6.4
BH-CBD-06	Standpipe	1.0	2.0	BH-CBD-30	Level Logger	1.3	5.1
BH-CBD-07	Standpipe	2.6	1.6	BH-CBD-31	Standpipe	0.7	5.5
BH-CBD-08	Standpipe	2.1	4.5	BH-CBD-32	Standpipe1	-	-
BH-CBD-09	Standpipe	1.4	5.3	BH-CBD-33	Standpipe1	-	-
BH-CBD-10	Standpipe	2.0	3.3	BH-CBD-34	Standpipe	1.5	8.1
BH-CBD-11	Standpipe	0.3	3.2	BH-CBD-35	Standpipe1	-	-
BH-CBD-12	Standpipe	0.6	4.4	BH-CBD-36	Standpipe	2.6	5.1
BH-CBD-13	Standpipe	2.5	4.3	BH-CBD-37	Standpipe	0.3	4.5
BH-CBD-14	Standpipe	2.6	4.0	BH-CBD-38	Standpipe	1.1	7.1
BH-CBD-15	Standpipe	2.1	3.1	BH-CBD-39	Standpipe	1.2	5.0
BH-CBD-16	Standpipe	2.6	2.5	BH-CBD-40	Standpipe	1.1	3.7
BH-CBD-17	Standpipe	-	-	BH-CBD-41	Standpipe	1.2	5.5
BH-CBD-18	Standpipe	3.4	2.5	BH-CBD-42	Standpipe	1.7	3.8
BH-CBD-19	Level Logger	0.7	4.9	BH-CBD-43	Standpipe	1.6	2.6
BH-CBD-20	Standpipe	3.2	2.1	BH-CBD-44	Level Logger	0.6	2.5
BH-CBD-21	Standpipe	2.7	3.7	BH-CBD-45	Standpipe	2.7	1.8
BH-CBD-22	Standpipe	-	-	BH-CBD-46	Standpipe	2.9	1.5
BH-CBD-23	Standpipe	3.1	3.6	BH-CBD-47	Standpipe	1.6	5.6
BH-CBD-24	Standpipe	3.4	3.3	BH-CBD-48	Standpipe	1.6	3.6

<sup>1</sup> Standpipes not installed, lost or removed.

### 7.4.2.1 Depth to Groundwater

As can be seen, there is reasonable variability in the depth to groundwater level across the central city, ranging from 0.2m below ground level at BH-CBD-03, located at the junction of Bealey Avenue and Barbadoes Street, to a maximum recorded depth of 3.7m in BH-CBD-25, positioned on St Asaph Street near the junction with Madras Street and Ferry Road; with an average depth across the central city of around 1.9m below ground level.

There are some areas within the central city where relatively elevated groundwater levels occur, such as around the lower Avon River in the north-east part of the CBD (i.e. BH-CBD-06, -11 and -

12 all recorded depths less than 1m), in the south-east (BH-CBD-37, -40, -42 and -44) and along the western half of Moorhouse Avenue (BH-CBD-28, -29 and -31).

Relatively deep groundwater levels (>2.5m below ground level) also occur in a few specific areas, such as along Rolleston Avenue from around Armagh Street to the Christchurch Hospital (BH-CBD-13, -14, -21, -23, -47 and -48), and the central eastern part of the CBD between Armagh Street to the north and St Asaph Street to the south (BH-CBD-18, -20, -24, -25, -27, -45 and -46).

It should be noted however that groundwater levels vary spatially over short distances and therefore site-specific investigations should not rely exclusively on the results of the monitoring that is currently being undertaken. For instance, BH-CBD-18 located at Latimer Square, recorded a maximum groundwater level of 3.4m below ground level. Approximately 300m to the east along Worcester Street, BH-CBD-19 recorded a groundwater depth of 1.2m on the same day, and a further 350m east at the junction of Worcester Street and Fitzgerald Avenue, the groundwater depth was recorded at 3.2m below ground level in BH-CBD-20.

#### 7.4.2.2 Groundwater Elevation

Groundwater elevations typically reduce from a maximum of around 8.0mRL in the more elevated south-west area of the central city (BH-CBD-34), to around 1.5 to 2.0mRL along the eastern side (BH-CBD-07, -20, -44, -45 and -46), with a low point recorded at BH-CBD-27 at the junction of St Asaph Street and Fitzgerald Avenue (1.0mRL), with an average elevation across the central city of 4.0mRL.

Groundwater is also elevated to the north of the Avon River, typically reducing south from Bealey Avenue, as would be expected. Groundwater levels recorded on the north bank of the Avon River (BH-CBD-10, -11, -15) are typically higher than those located to the south of the river. This suggests that the near-surface regional groundwater flow is largely unaffected by the Avon River (which is expected to be effluent through the central city). Flow appears to occur from the east and north-east from the southern side and south-east from the northern area of the central city, with a low spot focused south-east of Cathedral Square along the Ferry Road direction to Waltham / Phillipstown.

#### 7.4.2.3 Groundwater Fluctuations

As indicated, it is planned for the groundwater monitoring to continue for at least 12 months to determine the likely seasonal variability on an annual basis. To date we have too few readings from the standpipes to assist this understanding. The early results obtained for the four level loggers however provide some useful information.

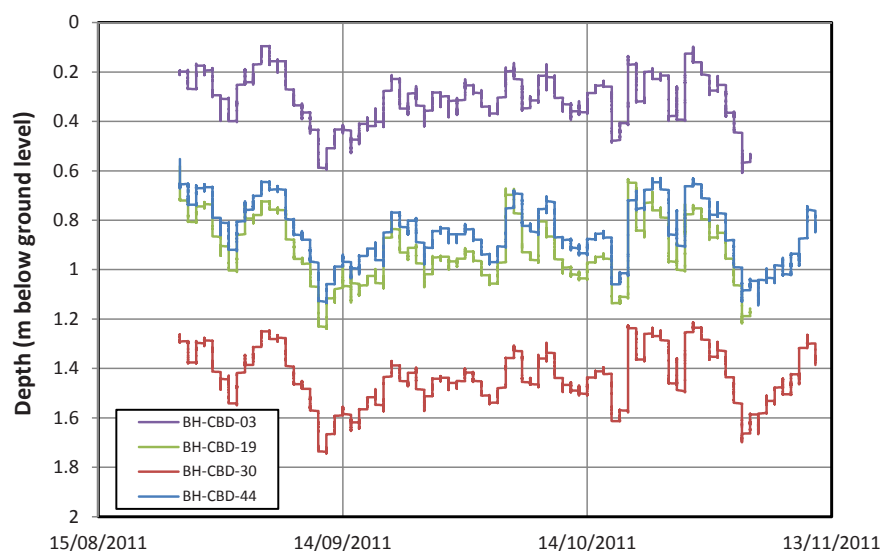
Figure 7.5 shows the variation in depth to groundwater over the August to November 2011 (this is shown in greater detail in Figure H3 in Appendix H).

As can be seen, the magnitude and timing of the fluctuations are very consistent across the four level loggers and show limited variation of the time period covered (<0.25m).

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**Figure 7.6: Groundwater depth variation recorded in four level loggers (August to November 2011)**



### 7.4.3 Artesian Groundwater

The Riccarton Gravels are the highest of several artesian aquifers present beneath the Canterbury Plains. Of the 47 boreholes which terminated within the Riccarton Gravels, the vast majority recorded artesian groundwater flows and the remaining were sub-artesian, but generally within a few metres of the ground surface.

No monitoring of the groundwater pressures within the Riccarton Gravels has been undertaken for this study, but this information will be required where consideration is given to piling into the gravels, as discussed in Sections 9 and 10.

### 7.5 Conceptual Geological Model

Inspection of the geological plans and cross sections presented in Appendices B and C allows a quick, basic understanding to the geological evolution of the central city.

The Riccarton gravels, which are typically encountered at depths of between 18 and 30m below ground level, increasing approximately from west to east, represent glacial outwash sediments deposited during and up until the last glacial maximum.

The Riccarton Gravels were then overlain by swampy materials, including relatively thick peats and organic silts, during the early stages of the current interglacial before sea level rise had resulted in drowning of the central city. As sea levels approached the eastern side of the what is now the central city between approximately 10,000 and 7,000 years ago, lagoonal and estuarine deposition commenced resulting in the accumulation of thick clays and silts with interbedded silty sands / sandy silts, particularly in the lower south and eastern areas, which thin towards the north and are largely absent in the far north and western areas.



Continued post-glacial sea level rise continued with the entire central city becoming drowned around 6,500 to 6,000 years ago, at which time sea level rise abated and has remained at a similar level to the present day. Beach and dune sands were the dominant sediments accumulating at this time, and include silt layers and occasional shelly beds.

Between approximately 6,000 and 3,000 years ago, fluvial channel and overbank deposits have resulted in gradual progradation from west to east across the central city and beyond to the eastern suburbs. River channels deposited sandy gravels during this time, which cover large parts of the western side of the central city and extend along the current alignment of the Avon River and at the same time, clays and plastic silts accumulated, particularly in the southern half of the central city, whilst a combination of swampy materials, including thick peat and organic silts, accumulated in the northern and central areas.

## 7.6 Piezocone Calibration Exercise Results

As detailed in Section 4.1.3.1, in order to assess the consistency of the piezocone data obtained by the two principal testing contractors, a calibration exercise was completed to compare the results of a number of tests completed adjacent to one another. It was further decided that the test would be completed close to one of the UoC test zones so that the results of those piezocones, which were completed by a third contractor, could also be included.

The calibration exercise was completed at 234 to 240 Armagh Street, located at the junction with Madras Street, on a site where the building, which we understand was affected by severe differential settlements following the 22 February 2011 earthquake, had been recently demolished.

Three tests were completed by both Opus International Consultants Ltd (Opus) and Perry Drilling Ltd (Perry Drilling), positioned to within 1m of one another. These are referenced CPT-CBD-OC01 to OC03 and CPT-CBD-PC01 to 03, the positions of which are shown on Figure A8, along with the nearby UoC piezocones. The results of the individual piezocone tests completed by Opus and Perry Drilling are included in Appendix J and the UoC tests are presented in Appendix L.

The results of the calibration exercise demonstrate three interesting aspects. As follows:

1. The data obtained from the different contractors equipment is reasonably consistent
2. The value of the data obtained when testing within the ground conditions present in Christchurch central city is significantly improved by allowing a relatively small increase in the maximum force permitted by the equipment
3. The highly variable nature of the ground conditions even on a local scale

These aspects are discussed further in the following sections with reference to the test results.

### 7.6.1 Consistency of data

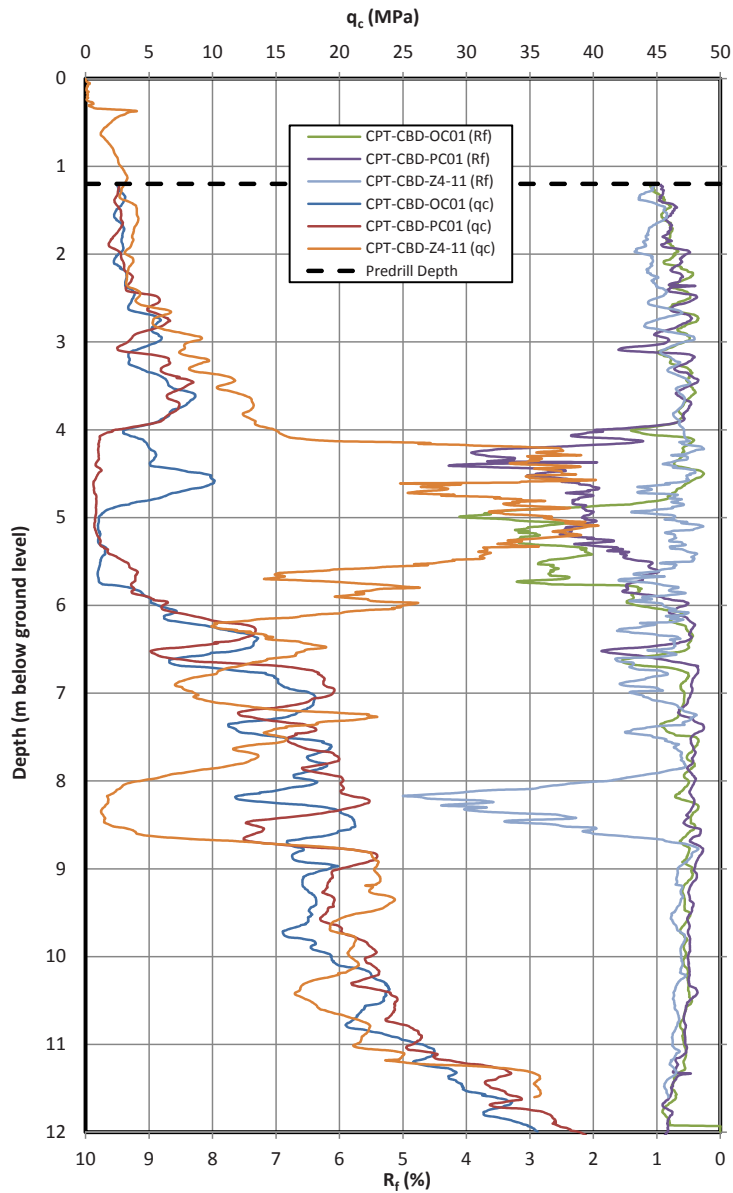
The results of all three tests completed by Opus and Perry Drilling are included in Appendix J. The results for the testing completed at position 1 are shown in Figure 7.5 below.

It can be seen from Figure 7.5 that where the piezocone is intercepting similar materials, such as between 1 and 4m in the case of CPT-CBD-OC01 and CPT-CBD-PC01, the tip resistance recorded by both sets of equipment is relatively consistent and would be interpreted in the same manner for use in geotechnical design.

The friction ratio for the UoC test is however significantly higher than the Opus and Perry Drilling tests in the top 2 to 3m. It is well understood in geotechnical practice that results for sleeve friction are typically much less accurate than tip resistance and are therefore rarely used in design situations.

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**Figure 7.5: Piezocone calibration plots with University of Canterbury data (CPT-CBD-OC01, CPT-CBD-PC01 and UoC Z4-11)**

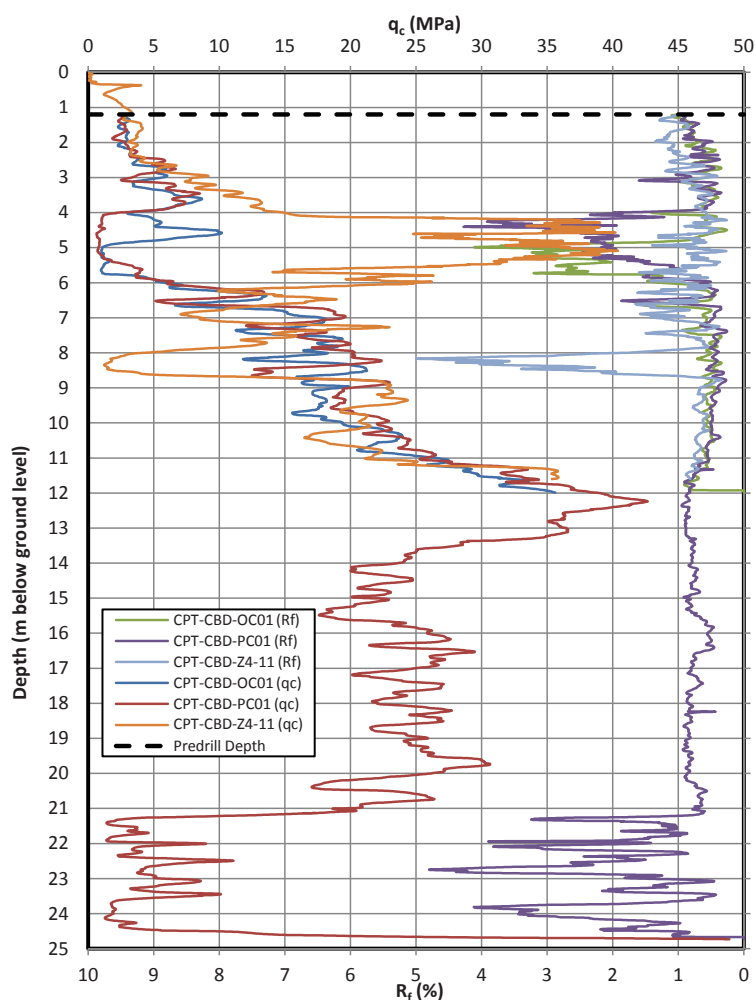


Within the medium dense to dense sands encountered below a depth of approximately 7m, the tip resistance for all three machines are comparable within the required degree of accuracy for geotechnical design.

### 7.6.2 Maximum Permitted Force

Figure 7.6 presents the full set of data obtained by the three sets of testing equipment at position 1. It can be seen that both the Opus and McMillan tests were terminated at a depth of approximately 12m below ground level when tip resistance reached 35MPa. This is routinely done by many CPT contractors to limit the risks of damage to the equipment. However, as can be seen from the Perry Drilling plot, a small additional push permitted the hole to continue down to 25m at which depth the Riccarton Gravels were encountered.

**Figure 7.6: Piezocone calibration plots with University of Canterbury data (CPT-CBD-OC01, CPT-CBD-PC01 and UoC Z4-11)**



The tests completed by Opus and McMillan's would leave a degree of uncertainty as to the nature of the deposits below 12m, particularly with respect to liquefaction hazard where looser sands may be present and indeed the depth of the Riccarton Gravels. Inspection of a number of deep

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piezocone tests completed by Perry Drilling on this project indicates that the dense marine sands rarely offer a resistance significantly above 40MPa. By permitting a small increase in the allowed maximum force used, the quality and usefulness of the piezocone data in the conditions present within the central city will be greatly improved.

### 7.6.3 Local Variability

This plot also serves to provide a very useful indication of the local variability of the ground conditions that may be expected within some areas of the central city. The data from the three plots shown on Figure 7.5 is reasonably consistent to a depth of 4m and below 6m (excluding a narrow clay/silt band encountered in Z4-11 at a depth of 8m).

The materials encountered between 4 and 6m in the three test locations, all of which are within approximately 8m of one another, indicate relatively loose sands which would be expected to liquefy under a significant seismic event (CPT-CBD-OC01), non-liquefiable clayey silts (CPT-CBD-PC01) and medium dense to dense gravelly sands / sandy gravels (UoC Z4-11).

These three materials would be expected to behave very differently during significant seismic shaking and would therefore be considered separately for geotechnical design purposes. A design approach that would seem appropriate for one part of the site may not be suitable given the conditions encountered a short distance away.

This variability serves to highlight two further aspects:

- Detailed site specific investigations are clearly required for sites within the central city and a high density of investigation points is warranted both for design and subsequent construction control and monitoring
- Great care is required when assessing the ground conditions encountered and sound engineering judgement should be applied to any geotechnical analyses as variations to the assumed ground conditions can have very significant impact on unrealistically precise calculations.

## 8. Liquefaction Hazard

### 8.1 Overview

It has long been appreciated by experienced geotechnical engineers and engineering geologists that large areas of Christchurch city are underlain by deposits that are susceptible to liquefaction (Elder et al. 1990, Brown & Weeber, 1992). A number of studies have been completed to assess the likely distribution and severity of liquefaction across the city that may be triggered by various seismic events (ECan, 2004).

These assessments primarily assume a distant seismic source associated with a large magnitude earthquake (i.e. movement of the Alpine Fault or Porters Pass Fault). The presence and potential significance of local blind faults has not been specifically addressed, but the overall impacts on the city are, in general terms, similar to those predicted to result from a larger, more distant source.

In order to undertake liquefaction hazard modelling of large areas, a good understanding of the geological materials present, the depositional environment under which they were laid down and groundwater levels is fundamental to identifying those areas at greatest risk. With the above information, it is possible to broadly map the distribution and likely severity of the liquefaction hazard; such has been undertaken in the State of California<sup>6</sup>.

Detailed ground investigations aimed at identifying the local variability of the soil deposits, their geotechnical properties (i.e. plasticity, grading and density) and the local groundwater regime, help to refine the extent and severity of the liquefaction hazard. With appropriate data regarding the geotechnical properties of the soil and local groundwater conditions, liquefaction analyses can then be completed, taking account of the predicted ground motions, to further define the likelihood and severity of liquefaction that could occur under certain scenarios.

This section of the report presents a summary of the preliminary liquefaction analyses that have been completed by T&T for the central city utilising the recently gathered ground investigation data. The results are briefly described in the context of the ground model outlined in Section 7.3 coupled with liquefaction-induced land damage mapping completed following the major earthquakes of 04 September 2010, 22 February 2011 and 13 June 2011. A summary of this work and the data utilised is presented in Section 8.2.

### 8.2 Land Damage Mapping

Shortly after each of the main earthquake events, detailed mapping of the extent and severity of land damage was completed by T&T for the CBD and adjacent commercial areas. This mapping was based largely on observed surface manifestation of liquefaction and including lateral spreading, the presence of ejected material (groundwater, sand and silt), ground cracking and general deformation of the ground surface. A simplified plan indicating the extent and level of the observed land damage reported following the 22 February 2011 aftershock is presented as Figure D1 in Appendix D.

It is important to appreciate that, whilst the presence of sand boils is a confirmation that liquefaction has occurred, the absence of sand boils or other ground disturbance does not mean that liquefaction has not occurred beneath the surface. The extensive coverage of land within the central city by large footprint buildings and thick pavements may have prevented significant formation of sand boils. Additionally, there are many locations within the central city where a

<sup>6</sup> State of California Department of Conservation Seismic Hazards Zonation Program.

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relatively thick crust of non-liquefiable materials may have prevented surface expression of liquefaction.

The change in ground elevation since 04 September 2010 (inferred from the LiDAR data and taking account of likely regional tectonic uplift/subsidence), suggests that ground deformation has occurred in areas where little or no land damage was observed.

The results of the analyses detailed below also indicate that liquefaction is likely to have occurred in many areas where little or no surface manifestation of liquefaction was observed.

It should also be understood that the mapping of observed liquefaction-induced land damage relates to a specific seismic event. In the case of the 22 February 2011 aftershock, a relatively small magnitude (short duration) earthquake generated high vertical and horizontal ground accelerations in the CBD due to its close proximity. Ground motions generated by other seismic events could result in different patterns and severity of land damage. This is illustrated by the contrasting distribution and severity of liquefaction resulting from the 04 September 2010 earthquake relative to the aftershocks of 22 February and 13 June 2011.

Figure D1 does not therefore provide a definitive plan of the extent and severity of liquefaction and associated lateral spreading that resulted from the 22 February 2011 aftershock or which could result from future earthquakes and should not be used for such purposes. It should be noted, however, that observations made following a number of significant seismic events around the world indicate that those areas that have suffered liquefaction during one event will often liquefy during subsequent earthquakes, even when the source and nature of the resulting ground motions vary. It would be unwise, therefore, not to take proper account of the land damage mapping that has been completed as providing a good guide to identifying those areas which are likely to be affected by future liquefaction events, irrespective of what specific liquefaction assessments may suggest, as discussed further in Section 8.4.

## 8.2.1 Overview of Observed Land Damage

As can be seen from Figure D1, the Darfield Earthquake of 04 September 2010 resulted in little or no observed land damage across much of the central city. Moderate to severe levels of liquefaction were however observed in parts of the north-east area of the CBD. The low-lying area to the north of the Avon River, between Colombo Street and Barbadoes Street, was affected by moderate to severe levels of liquefaction. Similar levels of land damage, but including localised lateral spreading, were observed on the point bar deposits within the Avon River meander immediately west of Fitzgerald Avenue. These affect the low-lying, largely residential area, north of Chester Street.

Mapping conducted following the 22 February 2011 aftershock recorded little or no observable land damage across approximately 40% of the CBD, including the city core around Cathedral Square. Moderate levels of liquefaction were reported across a further 40% of the CBD and the majority of the adjacent commercial areas to the south and south-east. Around 10% of the CBD was affected by severe liquefaction, including the area north-east of the Avon River / Colombo Street intersection; areas north-west of the Moorhouse Avenue / Colombo Street intersection; a section of the CBD located north of Ferry Road between Barbadoes Street and Fitzgerald Avenue and several other more localised pockets. Severe liquefaction was also observed south of Moorhouse Avenue around Montreal Street and in the vicinity of the AMI Stadium.

Severe liquefaction accompanied with localised lateral spreading was observed at discrete locations along the banks of the Avon River through the CBD. This was most severe at the downstream end, affecting the mainly residential areas within the meander immediately west of Fitzgerald Avenue (north of Chester Street) and between Peterborough and Salisbury streets east of Manchester Street. These latter areas correlate strongly with the zones affected by moderate

to severe liquefaction following the Darfield Earthquake. Lateral spreading was also observed either side of the Avon River between Colombo and Manchester streets, on the south side of the river immediately west of Colombo Street and a short section adjacent to Oxford Terrace immediately east of Antigua Street.

To supplement the land damage mapping and better understand the distribution and severity of liquefaction that occurred across the central city, T&T have reviewed the detailed aerial photography that was obtained shortly after the 04 September 2010, 22 February 2011 and 13 June 2011 seismic events. The extent of sediment laden groundwater ejected to the surface can be readily seen on these images and supports the findings of the land damage mapping that was completed by T&T staff.

We have also compared the land damage mapping with the change in ground elevation following the earthquakes. This has been achieved by comparing Digital Elevation Models developed from the LiDAR data sets obtained prior to the Darfield Earthquake (by AAM Brisbane, 2003 and 2005) and following each of the major earthquakes (by New Zealand Aerial Mapping (NZAM), 2010 and 2011).

Whilst the accuracy of the data is not sufficient to determine small changes in ground elevation resulting from minor to moderate liquefaction, there is clear correlation with large changes in elevation within the zones affected by severe liquefaction and lateral spreading, in particular where settlements in excess of 300mm have occurred.

### 8.3 Liquefaction Assessment

The data obtained from the 150+ piezocones spread across the central city has been used to undertake preliminary liquefaction analyses. This has been completed for the following principal purposes:

- to permit a better understanding of the distribution and severity of the observed liquefaction-induced land damage across the CBD and commercial areas
- to assess which areas may have been subject to liquefaction where little or no land damage has been observed
- to provide an indication of the level of ground accelerations required to trigger liquefaction in the susceptible layers to highlight the potential extent of the liquefaction hazard across the central city from future seismic events
- to provide some insights into the applicability of the liquefaction analyses methodology currently adopted as state-of-the-practice for such assessments for the soils encountered in Christchurch central city.

The analyses provide a broad overview of the liquefaction hazard within the central city. The results should be considered as providing a preliminary indication of the liquefaction hazard only and should not be used for detailed design.

Detailed site assessments will be required to estimate the level of liquefaction hazard at specific locations, based on the findings of comprehensive geotechnical investigations. This should include more rigorous liquefaction analyses than has been completed for this report, taking into consideration the particle size distribution<sup>7</sup> and shear wave velocity<sup>8</sup> of the perceived liquefiable

<sup>7</sup> As a result of the significant lateral and vertical variability of the soils encountered across the central city combined with the limited number of borehole investigations and laboratory tests (for the size of the study area), it was not deemed representative to include this information in these preliminary analyses.

<sup>8</sup> This information was not available for all piezocone locations at the time of completing the analyses and therefore a consistent approach was adopted assuming an average shear wave velocity for potentially liquefiable materials of  $V_s = 175\text{m/s}$ .



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materials, and the application of engineering judgement when considering, for example, the 'actual' relative density of non-cohesive layers where these are interbedded with thin clay/plastic silt materials<sup>9</sup>.

### 8.3.1 Methodology

The liquefaction analyses have been carried out by T&T using the simplified method of Seed et al. (2003), with estimates of the potential ground deformations (settlement) based on the procedure presented by Ishihara & Yoshimine (1992). The results of the individual analyses are presented in Appendix G and discussed in the following sections.

As indicated in Section 4, each of the piezocone holes were pre-drilled to a depth of around 1.2m below existing ground level to check for the presence of buried services before being backfilled with loose sand prior to commencing the CPT. Data for the upper 1.2m has therefore not been included in the assessment. This depth would typically be within the unsaturated zone for most locations and therefore would not be expected to liquefy, even if the materials are susceptible to liquefaction.

Of the 151 piezocones completed, approximately 60 were advanced to depths in excess of 15m below ground level. However, a number of the piezocones were terminated at relatively shallow depths where they encountered dense gravelly sand / sandy gravel layers or coarse gravels / cobbles. Where it is considered likely that deeper materials present beneath these near-surface layers may be susceptible to liquefaction, as judged from adjacent borehole investigations and a general understanding of the geology in these areas, pre-drilling was completed to penetrate through the upper dense layers to allow testing of the deeper, looser deposits<sup>10</sup>.

For completeness, liquefaction analyses were completed using the results of all piezocones, even where these terminated at shallow depths. Where tests were terminated at depths less than approximately 15m below ground level, it should not be assumed that no deeper liquefiable materials are present and should be investigated by deep boreholes for site specific assessments.

### 8.3.2 Ground Accelerations

The triggering of liquefaction in susceptible materials is dependent upon the ground motions to which the soil is subjected. For the procedure used in this report, the ground motion is specified in terms of the amplitude (peak ground acceleration – PGA) and duration of the shaking, for which the moment magnitude ( $M_w$ ) is adopted as a proxy.

For the purposes of comparing the results of the analyses with the observed liquefaction-induced land damage resulting from each of the major earthquakes, the analyses have been completed adopting the geometric mean of the of the highest recorded ground accelerations of the four strong motion stations located within the CBD, rather than the closest station to each piezocone location<sup>11</sup>. In the case of the 22 February 2011 event, this corresponds to a PGA of 0.52g recorded at the Resthaven station (Cubrinovski & McCahon, 2011), along with  $M_w = 6.2$  (GNS, 2011).

<sup>9</sup> It is well understood that the results of both SPTs and CPTs are influenced by the presence of softer or less dense zones present in the vicinity of the section being tested. It is clear from the results of the CPT liquefaction analyses that many of the deeper narrow bands of 'liquefiable' materials present within otherwise dense to very dense non-liquefiable layers are due to the presence of thin clay/plastic silt bands or 'pockets' of loose sands/non-plastic silts, which result in lower than expected  $q_c$  values immediately above and below. In reality, these zones are unlikely to liquefy to a significant extent.

<sup>10</sup> This information was not available at the time of preparation of this report and therefore is not included in the results presented below.

<sup>11</sup> Use of the closest seismic station records may not be the most representative data as this is likely to be influenced more by the near-surface ground conditions at the recording station site rather than proximity.

In order to compare the levels of liquefaction assessed for the recent earthquakes with current design code requirements, we have also run the analyses using the serviceability limit state (SLS) and ultimate limit state (ULS) peak ground level horizontal accelerations (PGHAs) recommended in NZS 1170.5 (2004) and the updated Zone factor (Z) issued by the Department of Building & Housing New Zealand (DBH, 19 May 2011). A summary of the six 'scenarios' considered are summarised in Table 8.1.

**Table 8.1: Summary of liquefaction analyses ground motion parameters**

Scenario	Zone Factor (Z)	Return Period Factor ( $R_s / R_u$ )	Moment Magnitude ( $M_w$ )	Peak Ground Acceleration (g)
(1) 1170.5 (2004) - ULS <sup>1</sup>	0.22	1.0 <sup>2</sup>	7.5	0.25
(2) DBH Update – SLS <sup>1</sup>	0.30	0.25 <sup>2</sup>	7.5	0.11
(3) DBH Update – ULS <sup>1</sup>	0.30	1.0 <sup>2</sup>	7.5	0.34
(4) 22 February 2011	-	-	6.2	0.52
(5) 04 September 2010	-	-	7.1	0.25
(6) 13 June 2011	-	-	6.0	0.26

<sup>1</sup> Assumes a Site subsoil class – D (deep or soft soil) for calculation of the spectral shape factor ( $C_h(0)$ ).

<sup>2</sup> Corresponding to an annual probability of exceedance of 1/25 for SLS and 1/500 for ULS.

### 8.3.3 Groundwater Level

For the analyses presented we have assumed a blanket groundwater level of 1.2m below existing ground level, to match the pre-drill depth detailed in Section 8.3.1. This is sufficient for the present purposes but site specific liquefaction analyses should take account of the local groundwater regime through adoption of groundwater level monitoring at the time of investigations, with some allowance for seasonal fluctuations, supported by monitoring data that will be obtained from the current work or other suitable sources (or a conservative assumption made).

## 8.4 Summary of Results

### 8.4.1 Presentation

The results of the individual liquefaction analyses are included in Appendix G. Two sheets are provided for each piezocone test which covers the six levels of seismic shaking that has been analysed. These results have been used in conjunction with the ground model detailed in Section 7.3, to identify the layers that are considered likely to liquefy during ground motions for Scenario 3 (i.e. the ULS for the current design Z factor of 0.30).

These have been simplified to show the main zones of liquefaction on Figures E2 to E24 in Appendix E, ignoring thin layers of non-liquefied material that are present within a thick liquefied layer and vice versa for partially liquefied deposits. Again, this is considered appropriate for the purposes of this report, but detailed site specific assessments would need to consider the impact of marginally liquefied layers for site specific ground response analyses.

This information is also presented in plan form to provide a broad illustration of the distribution of the materials assessed to be at risk of liquefying under Scenario 3 (ULS event for current design factor  $Z = 0.30$ ). Four plans are provided indicating where liquefaction is anticipated to occur at different depth intervals, as follows:

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- 1.2 to 3m
- 3 to 5m
- 5 to 10m
- 10 to 20m

The cross sections and plans are based on a very limited number of investigation locations (for the size of the area covered) and therefore interpolation between the points should not be relied upon for anything other than an initial screening of the potential for liquefaction hazard at any specific site. This information is provided largely to guide the extent and depth of site specific ground investigations and geotechnical assessments that are likely to be required at different locations across the city and to provide a context for interpreting the findings at specific sites.

## 8.4.2 General Observations

The analyses indicate that a liquefaction hazard is present across virtually the whole of the CBD and adjoining commercial areas, and is not limited to those locations where liquefaction-induced land damage has been observed (i.e. suggesting that area wide deep liquefaction is likely to have occurred). This observation is considered generally consistent with the LiDAR data which suggests settlement may have occurred in some areas where no land damage has been mapped at the ground surface.

Of the 150 or so piezocones analysed, approximately 75% indicated what may be considered a reasonable level of liquefaction (taken, arbitrarily, as a minimum of 1m of liquefied thickness), for both the previous and current ULS design cases and each of the recent seismic events (scenarios 4 to 6).

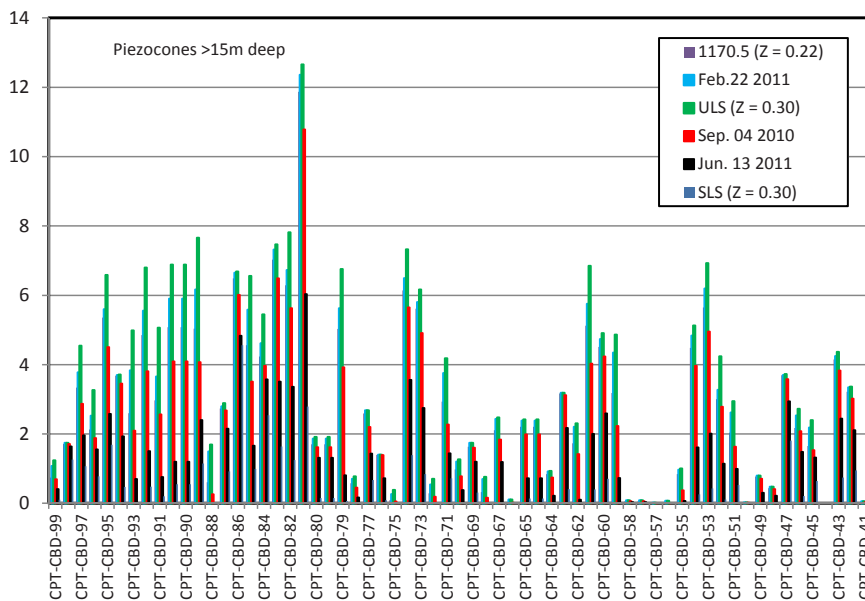
This assessment includes the results from the piezocones that penetrated a depth of less than 5m below ground level before terminating on a dense layer. When excluding these shallow piezocones, which may not have encountered all liquefiable zones at depth, virtually all of the analyses indicate liquefied thicknesses greater than 1m. A similar minimum thickness of liquefied material is estimated in approximately 35% of the piezocones for the current SLS design case (Scenario 1, with  $Z=0.30$  for a 1/25 annual probability of exceedance); the vast majority resulting from liquefaction of layers present at depths ranging from 5 to 10m below ground level.

The maximum liquefiable thickness was recorded for CPT-CBD-32, with 13.1m of liquefied layers in the upper 20m. This was located at the junction of Manchester Street and Kilmore Street in an area affected by severe liquefaction. The ground here comprises loose silty sands to around 3m below ground level, overlying 2 to 3m of medium dense to dense sandy gravels, which in turn overlies loose to medium dense sands to a depth of around 20m. Piezocones undertaken by the University of Canterbury (UoC) a short distance to the west of CPT-CBD-32 (referenced Zone 1), encountered similar materials but without the medium dense to dense gravels between 3 to 5 or 6m below ground level. Analysis of the UoC data indicates a similar thickness of liquefied materials. The level of surface ejecta and settlement (as suggested by the LiDAR data) at the UoC site was significantly greater than at CPT-CBD-32, suggesting that the gravel layer at this location may have reduced the severity of the effects of liquefaction at the ground surface and/or the volume of pressurised groundwater reaching the surface.

One aspect of these analyses which is highly relevant to rebuilding of the CBD and adjacent commercial areas is that, in general terms, the severity of liquefaction assessed for the different scenarios are relatively comparable. The new proposed Z factor of 0.30 paired with a  $M_w = 7.5$ , predicts marginally higher levels of liquefaction than the 22 February 2011 event. The NZS 1170.5 (2004) Z factor of 0.22 gives rise to a marginally lower level of liquefaction than the 22 February event, but significantly higher than both the 04 September 2010 and 13 June 2011 aftershocks.

This variation in liquefied thickness for the various scenarios is illustrated in Figure 8.1 for each piezocone that penetrated a minimum depth of 15m below ground level.

**Figure 8.1: Estimate of liquefied layer thicknesses for different seismic events**



Note: For clarity, only piezocones that penetrated depths >15m are included and only a limited number of piezocones are listed along the bottom axes. Refer to Figure A5 (Appendix A) for locations of piezocones included.

The amount of liquefaction predicted from the Darfield Earthquake is typically higher than that recorded for the 13 June 2011 aftershock, and yet the level of observed liquefaction within the CBD and adjoining areas was generally more widespread and severe than that resulting from the 04 September earthquake. It should be noted however that the liquefaction analyses for the 13 June 2011 event takes no account of the  $M_w$  5.3 aftershock that occurred shortly before the main  $M_w$  6.0 event, which may have resulted in elevated pore water pressures and hence made the impact of the subsequent earthquake  $M_w$  6.0 greater than that suggested by the present analyses.

It is also possible however that the emphasis placed on the duration of shaking, as expressed by the earthquake magnitude in the liquefaction analyses procedure, may result in an over-estimate of the liquefaction severity. If this is the case then the degree of liquefaction predicted using a magnitude weighting approach may result in an over-estimate of the liquefaction hazard from future seismic events.

It is also worth noting that, in the vast majority of the cases analysed, the predicted liquefaction-induced ground settlements are greater than the ground deformations approximated by the LiDAR data within the CBD. This may be accounted for, in part, by the fact that the analyses have adopted the upper limit of PGAs recorded across the entire CBD (from the Resthaven strong motion station), whereas the actual ground accelerations at specific locations may be at lower levels. However, a reduction in the ground acceleration does not account for the total difference in assessed and approximated settlements. More rigorous analyses of the data, taking better

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account of the grain size and shear wave velocity of the liquefiable layers, may reduce the differences observed.

Locations where more precise actual settlement records are available may be useful for comparison with the predicted settlements and allow fine-tuning of the method to suit the Christchurch soils.

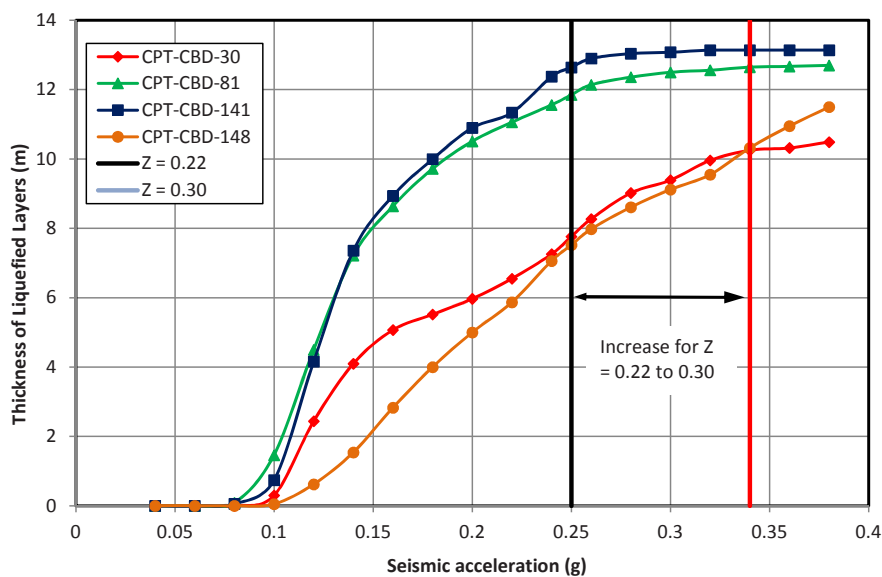
It has been noted that particularly high vertical accelerations were recorded at each of the CBD strong motion recorders during the 22 February 2011 event although the very high vertical accelerations were more significant in the hill sites. It is possible that the high vertical accelerations could have resulted in very rapid build-up of excess pore water pressures due to a slap-down effect.

Further more detailed analyses are required to better understand these observations. The information collated for this study is likely to provide valuable data for future research efforts in this area.

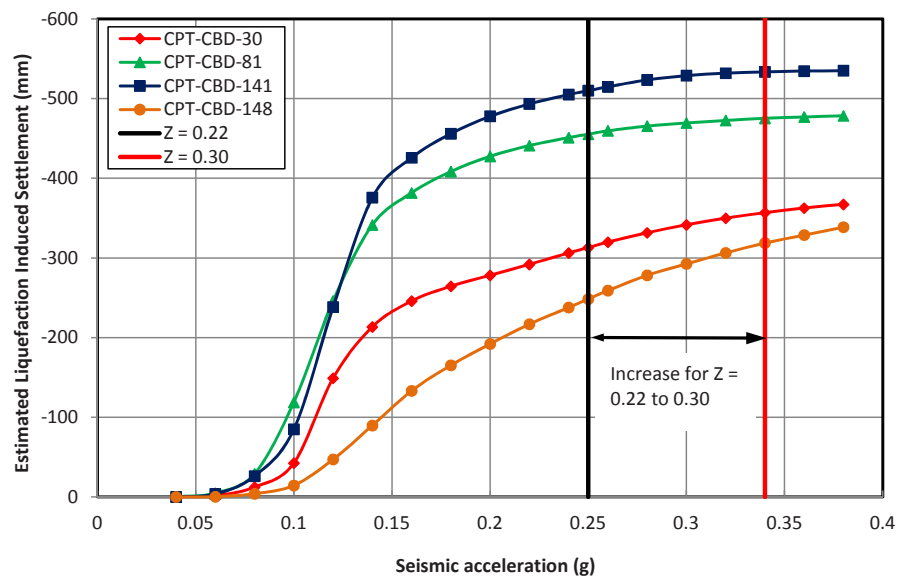
Figures 8.2 and 8.3 below depict the variation in estimated liquefaction for different Z factors for a number of the piezocones where the greatest thickness of liquefied materials was assessed (in most cases extending to depths of 15m or more), with the location of the NZS 1170.5 (2004) and current Z factor highlighted (for a site subsoil class D).

It can be seen from Figure 8.2 that for an increase in the PGA from 0.25 to 0.34 (equivalent to a Z factor of 0.22 and 0.30, respectively), the increased thickness of the liquefiable layers is very limited (<10%) for the records with the greatest thickness of liquefied materials (CPT-CBD-81 and CPT-CBD-141), whilst those with the lower overall liquefied thickness increased by around 35%. As shown in Figure 8.3, the equivalent predicted increase in settlements are however less (<5% and <30%, respectively) than the liquefied thickness, as would be expected.

**Figure 8.2: Change in estimated thickness of liquefiable layers with increase in Z factor from Z = 0.22 to Z = 0.30 for four example piezocones**



**Figure 8.3: Change in estimated liquefaction induced settlements with increase in Z factor from Z = 0.22 to Z = 0.30 for four example piezocones**



It is apparent however from inspection of the individual liquefaction analyses plots included in Appendix K, that the zones affected by liquefaction occur at the same depths, with simple widening of the liquefied bands to include more of the medium dense sand layers.

Given the severity of the liquefaction assessed at these locations and the inevitable variability of the ground conditions present and the inaccuracies involved in the analytical methods used in liquefaction prediction (particularly with respect to differential settlements, where a factor of 2 to computed settlements would typically be applied), it is unlikely that the increase in liquefaction hazard resulting from the updated Z factor would modify significantly the mitigation measures adopted for a development at these sites.

It is worth noting, however, that the predicted level of liquefaction for the SLS using the 1170.5 (0.06g) would increase from virtually no liquefaction to as much as 2m thickness of liquefied material at 0.11g (for the revised Z = 0.30 case).

### 8.4.3 Additional Observations on Specific Ground Conditions

#### 8.4.3.1 Effect of non-liquefied crust

The presence of a thick non-liquefied crust often prevents any surface manifestation of liquefaction. The liquefaction assessments undertaken suggest that some areas of the central city where no liquefaction flooding was reported are likely to have suffered liquefaction of some deep layers. This would appear consistent with the work of Ishihara (1985) and Youd & Garris (1995), which provides a general correlation for predicting whether surface manifestation of liquefaction is likely based on the depth of the non-liquefied crust to the deep liquefied layer thickness.

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Generally speaking the magnitude of total and differential settlements in areas where liquefaction was observed to have reached the ground surface, were considerably worse than those areas where no such flooding occurred.

It is worth noting however, that, the presence of a relatively thick non-liquefied 'crust' overlying a liquefied layer at depth may not always have prevented pressurised groundwater and soil being ejected and/or significant deformations of the ground surface. There are a number of locations within the central city where a non-liquefiable plastic silt/clay layer is present overlying liquefiable sands in which significant volumes of material have been ejected to the ground surface. For instance, CPT-CBD-85 located at the junction of Antigua Street / Balfour Terrace, where large volumes of surface ejecta occurred, shows a 4m thick non-liquefied layer overlying deep liquefiable sands. These may however be associated with penetrations of the non-liquefiable crust by services or other loosely backfilled zones.

#### 8.4.3.2 Shallow gravels

It is also worth noting that many places within the CBD and particularly along the western end of Moorhouse Avenue and the commercial areas to the south, significant surface ejecta was observed despite the presence of a shallow medium dense to dense gravel layer. In many places these gravels are overlain by a relatively shallow depth (1 to 2m) of loose saturated sands and therefore it may be assumed that it is merely the sands that are liquefying.

The large volumes of sediment laden groundwater rising to the surface would suggest, however, that either liquefaction of the surface sands is very severe or indeed some liquefaction of the gravel layers is also occurring. It may also be possible that the large volumes of pressurised water emanating from the gravel layers are rising very rapidly due to the high permeability of these materials resulting in strong seepage forces compared to areas underlain by less permeable fine sands.

As a corollary to this, there are also locations where loose saturated sands are present overlying gravels where little or no surface manifestation of liquefaction is apparent. To add to the complexity, there are areas that are underlain almost directly by what appear to be medium dense to dense gravels (i.e. at depths close to the groundwater level), where relatively large volumes of surface ejecta have been observed. At these locations it may be the presence of coarse gravels /cobbles that prevent penetration by the piezocone tip and result in relatively high SPT N blow counts, where in fact the materials may exist in a relatively loose to medium dense state and therefore susceptible to liquefaction.

#### 8.4.4 Lateral Spreading

As detailed in Section 8.2.1, severe liquefaction accompanied with localised lateral spreading was observed at a number of discrete locations along the banks of the Avon River following the 22 February 2011 significant seismic event. The most extensive spreading was located in the mainly residential areas within the river meander immediately west of Fitzgerald Avenue (north of Chester Street) and around Peterborough and Salisbury streets east of Manchester Street. These areas were also badly affected by liquefaction (but with little or no lateral spreading) following the 2010 Darfield Earthquake. Much of the land within the Avon River meander is currently located within the Orange Zone<sup>12</sup>. The future requirements for land in these areas is currently being assessed and will be reported on by Earthquake Commission and is therefore not considered in further detail here.

<sup>12</sup> The area around Peterborough Street and Manchester Street has recently been re-zoned green.



Further upstream, lateral spreading was observed on either side of the river between Colombo and Manchester streets and on the south side of the river immediately west of Colombo Street. We also understand that localised lateral spreading has been identified on the north side of the River Avon immediately west of Colombo Street, following detailed inspections at a specific site. Lateral spreading was also identified along a short section on the south side of the river immediately east of Antigua Street in the western part of the CBD.

It should be noted that the extent of the lateral spreading observed within the CBD is not comparable to that which has occurred along sections of the lower Avon River in the eastern suburbs and Kaiapoi.

A number of survey transects have been completed through various sections of the Avon River by staff from the University of Canterbury. These have suggested lateral displacements of up to 0.7m at the lower reaches of the river within the CBD, with the majority of the movement being confined to the first 20m or so from the edge of the river, with typically less than 100mm cumulative displacement occurring at greater distances from the river. A lateral movement of approximately 40mm was recorded at a distance of nearly 200m at one location, although this may be related to a more localised feature.

The ground conditions at each of these locations are relatively similar, comprising a few metres depth of relatively loose silty sands overlying typically medium dense to dense sandy gravels, which are in turn underlain by typically medium dense to dense gravelly sands and sands. The majority of the lateral movement is therefore anticipated to be confined to the upper few metres. Engineering works to mitigate this spreading hazard are considered achievable.

Clearly any proposed new developments at sites located close to the Avon River will need to undertake a detailed assessment of lateral spreading hazard. In many cases any identified lateral spreading hazard may be mitigated by the appropriate design of foundation systems, possibly incorporating some form of ground treatment. These works can generally be completed within the individual site boundary. However, where there is considered to be a significant risk of lateral spreading over an extended length of the river, coordinated ground treatment options along the river bank may be considered appropriate. Such works offer many advantages and should be explored where possible.

CCC has proposed in the Draft City Plan to include a 30m set-back from the river to create the Avon River Park. This will ensure that no development can take place within the zone likely to be most severely damaged by any future lateral spreading, but also ensures reserve land is available that could potentially be used for ground improvement works to support adjacent land. Council is encouraged to ensure that this land can be made available to potential developers for such purposes and may wish to consider the joint benefits of providing mitigation measures at critical locations to protect council infrastructure.

#### **8.4.5 Impact on Central City**

It should be recognised that, apart from a few localised areas, the overall impact of liquefaction and lateral spreading on the central city resulting from the recent seismic events, has not been as severe as that which has occurred in many of the eastern suburbs and Kaiapoi. This is considered to be due to a combination of the generally better ground conditions present, greater land coverage from buildings and heavy pavements, lower groundwater levels and more substantial foundations.

### **8.5 Future Design Requirements**

As indicated in Section 6, it is understood that GNS Science are currently developing contours specifying the required design peak ground accelerations to be used in design within

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Christchurch, and this will supersede the updated Z factor detailed in the DBH guidance of May 2011.

This new design requirement could have a significant impact on the extent and distribution of the assumed liquefaction hazard presented in this report and the accompanying plans and sections. Consideration should be given to reviewing the applicability of this report and accompanying plans following release of the GNS Science advice.

## 9. Principal Geotechnical Considerations

### 9.1 Purpose

The purpose of this section is to briefly describe the main geotechnical issues that will need to be addressed for the different ground conditions encountered across the central city. These have been simplified into four basic terrains, as follows:

- Sites underlain by significant depth of soft, potentially compressible soils
- sites underlain by materials susceptible to liquefaction to relatively shallow depths underlain by none liquefiable materials
- shallow gravels which may or may not be underlain by deeper liquefiable materials
- Sites where liquefiable materials extend to considerable depth.

At some sites more than one of these ground conditions may exist.

Section 9.6 discusses the nature of the deposits present across the central city in terms of site subsoil classes<sup>13</sup>.

### 9.2 Soft Ground

As indicated in Section 7 and shown on the geological plans and sections, there are a number of quite extensive areas of the central city that are underlain by soft clays and plastic silts, including some very soft organic silt and peat layers. The geotechnical issues to be considered for building in these areas are largely unrelated to seismic effects, with particular issues around low bearing capacity, high compressibility and are often associated with high groundwater levels.

These deposits do, however, often include layers of loose non-plastic silts and fine sand layers, and occasionally, there is a surface layer of liquefiable materials present. Surface manifestation of liquefaction was observed at several locations in these areas, even where a crust of non-liquefiable materials are present.

In addition to the risks of liquefaction of the interbedded materials, the soft, largely normally-consolidated to slightly over-consolidated saturated clays and plastic silts have high natural water contents and liquidity index. This is likely to make them sensitive to cyclic softening, with the resulting loss of strength and large deformations during application of seismic shaking and post-shaking reconsolidation settlements.

In most cases, these deposits rest on medium dense to dense sands, which are not particularly susceptible to liquefaction (or the resulting settlements would not be expected to be large). However, there are some areas where loose silty sands to medium dense sands were encountered beneath the clays and plastic silts. Where these are susceptible to liquefaction, then the combined thickness could extend beyond 10m. This may dictate that the site is classified as being Class E – Very soft soil site, in accordance with the definition provided in NZS 1170.5 (2004) – see Section 9.6.

Where the soft soils are directly underlain by dense to very dense sands, the rapid change in stiffness can cause issues associated with resonance of the overlying structures, which will need to be considered.

It is understood that many of the buildings in these areas are constructed on piles driven to the dense sand layer. Lateral movements occurring during seismic shaking could result in significant damage to the piles, the pile/building connections and possible creation of a void around the pile

<sup>13</sup> In accordance with 1170.5 (2004).

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shaft due to the differential movement of the pile relative to the surrounding ground. This could result in enhanced shaking of the supported structure during subsequent aftershocks.

As detailed in Section 6, the ground conditions in the vicinity of the Resthaven strong motion accelerometer include soft soils to depths of around 6m below ground level, underlain by potentially liquefiable loose sands to around 9m below ground level. The peak ground accelerations recorded at this site were greater than each of the remaining stations located in the CBD during each of the three major seismic events and the Boxing Day aftershock. This is likely to have been a direct consequence of the deep soft ground conditions present and requires that the assumed future design ground motions take account of these conditions.

### 9.3 Shallow Liquefiable Materials

There are a number of areas within the central city where loose/weak, low-plasticity silts, sands or sandy gravels, which are susceptible to liquefaction, are underlain by a relatively thick layer of non-liquefiable dense to very dense sandy gravels / gravelly sands.

Other areas occur within the city where shallow liquefiable materials are underlain by non-liquefiable clays or plastic silts which in turn rest on relatively dense sands / sandy gravels.

One of the principal geotechnical issues to be considered at these sites will be to limit the impact of any resulting ground deformations, particularly differential settlements that could impact on shallow foundations.

These may be addressed by digging out and replacing the liquefiable materials (may not be feasible in high groundwater areas), constructing a geotextile-reinforced gravel raft with a stiff ground slab, piled foundations or other ground improvement techniques.

Investigations in these areas will need to confirm not only the depth of the near-surface liquefiable layers, but also ensure that the non-liquefiable layer is not underlain by further loose non-plastic silts or sands that could liquefy or soft cohesive materials which could undergo cyclic softening, either of which could result in a punching type failure.

### 9.4 Shallow Gravels

Where gravels are encountered close to the ground surface, as present at several locations within the central city, the geotechnical issues to be considered are generally less complex. These sites are likely to have reasonably high bearing capacity, low compressibility and typically low risk of liquefaction.

Shallow spread foundations will often be suitable in these areas, even for quite large and heavy structures. The most significant issue for some developments will be temporary works design when basements are required to extend below the water table.

However, some areas where these ground conditions have been encountered were affected by large volumes of liquefaction flooding and ejecta following the 22 February and 13 June 2011 aftershocks. In these areas it is likely that the underlying sandy gravels / gravelly sands are not as dense as suggested by the penetration resistance recorded by piezocones and SPTs, resulting from the presence of coarse particles.

Whilst it is generally considered that stiff foundations resting on the sandy gravels would unlikely be severely affected by the near-surface liquefaction and associated land deformation, the impact on site infrastructure, including access roads, car parks and buried services, could cause significant disruption to the operation of these buildings.

Where the sandy gravels are underlain by loose to medium dense sands or silts that could liquefy, there is a high risk of differential settlement of the overlying gravels and supported structures founded within these materials.

In the majority of cases the thickness of the gravels is likely to be sufficient such that a stiff foundation can be designed to accommodate localised differential settlements. There will however be areas towards the edge of the sandy gravel deposits where this is not the case and deeper foundations and/or ground improvement will be required.

Ground investigations in these areas will need to be carefully planned and monitored to ensure that an accurate assessment of the density of the sandy gravels is obtained. This may not be possible using either CPTs or SPTs, particularly if the coarse gravels or cobbles are abundant.

Penetrating through the gravel layer to investigate the materials at depth can only be realistically achieved with boreholes and pre-drilling for CPTs. However, the gravels often contain layers of relatively loose sand which is likely to be susceptible to liquefaction. These sand layers within the coarse gravels can be very difficult to sample, as experienced during these investigations.

Careful monitoring of the drilling is required to identify where the drill bit is encountering weaker materials and undertake SPTs at these locations, rather than maintaining a standard vertical spacing. Where good results cannot be obtained then it may be prudent to assume that zones of core loss are likely to represent loose potentially liquefiable sands.

## 9.5 Deep Liquefiable Materials

There are a few locations within the central city that are underlain by loose silty sands and sands extending to considerable depths, which are particularly susceptible to liquefaction. These areas include the land between Kilmore Street and Peterborough Street and in the south-east area of the central city, where very large volumes of groundwater, sand and silt were released to the surface and accompanied by large ground deformations (settlement).

Significant ground improvement works will be required in these areas or deep piled foundations considered. These will not significantly reduce the amount of liquefaction or resulting settlements, and therefore buildings could be left standing above the settled ground following a large earthquake. Such designs will also need to take account of negative skin friction forces acting on pile shafts.

## 9.6 Site Subsoil Class

The investigations completed, including the borehole SPTs piezocone tip resistance and shear wave velocities from the geophysical surveys, indicate that most sites within the central city are likely to be assigned a site subsoil Class D – Deep or soft soil site, in accordance with the requirements of Section 3 of NZS 1170.5 (2004). This will need to be confirmed by site specific assessments.

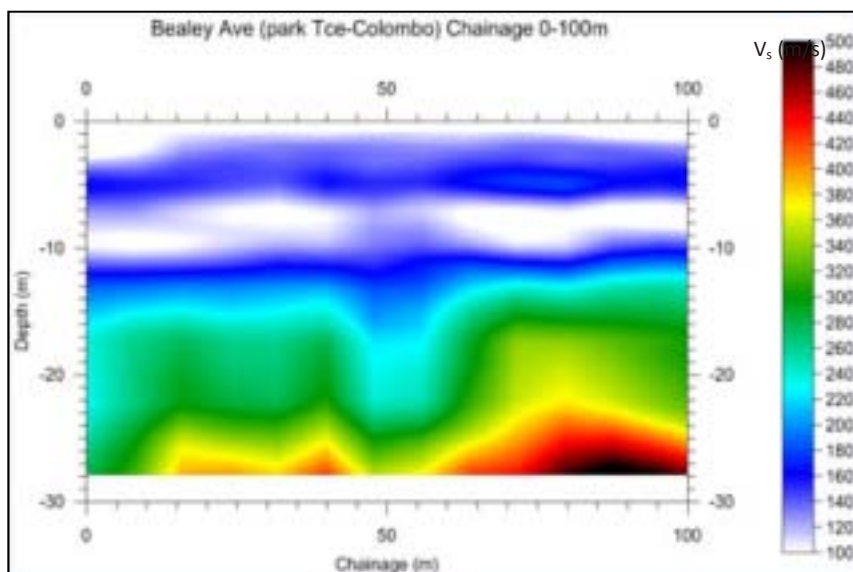
As detailed in Sections 9.2 and 9.5, however, there is a possibility that some sites may be more appropriately assigned as Class E – very soft soil sites. This may be true where the near-surface materials comprise soft clays and high-plasticity silts, and where the depth of liquefaction is significant (>10m), or a combination of the two.

By way of an example, a plot of the shear wave velocity with depth at the junction of Bealey Avenue and Harper Avenue / Park Terrace is shown below (increasing chainage is moving east along Bealey Avenue). This indicates materials to depths in excess of 10m with shear wave velocities less than 150m/s.

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**Figure 9.1: MASW plot east along Bealey Avenue from Park Terrace indicating low shear wave velocities to depths in excess of 10m**



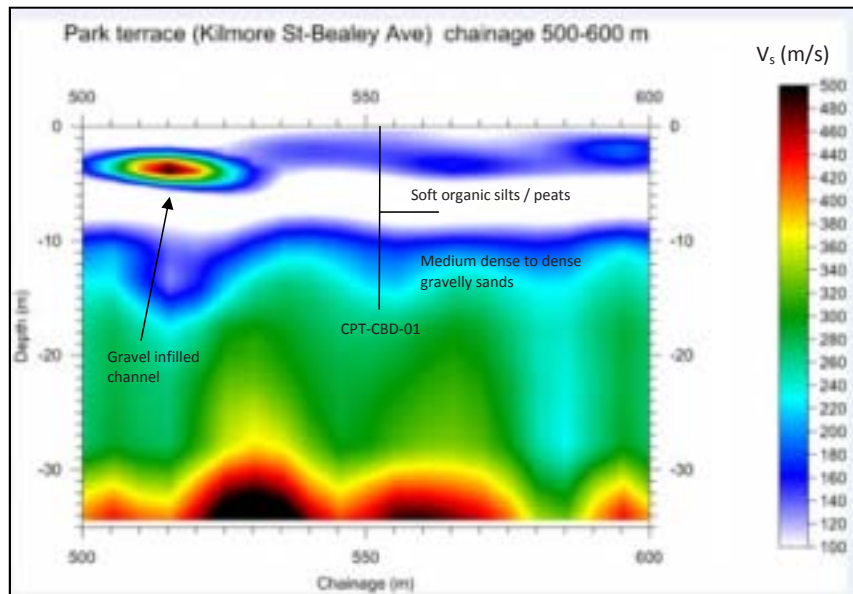
The nearest exploratory holes to this location include BH-CBD-01/CPT-CBD-01, located a short distance along Park Terrace. Both exploratory holes encountered medium dense to dense sands below the organic silt and peat layers at depths of around 7.5m.

Figure 9.2 shows the approximate location of the boreholes relative to the MASW survey and the depths of this interface. Comparison of these records indicates that the change from very low shear wave velocities associated with the soft organic silts and very loose / weak interbedded sands and silts and the higher velocities associated with the underlying medium dense to dense sands is relatively well defined, but the depth of the low shear wave velocities may be slightly over-estimated (by 1 or 2m) as a result of the 'averaging' of the data.

Note that what appears to be a gravel filled channel is also shown in Figure 9.2. Care would be needed to not mistake such a feature for the surface of deep gravels suitable for foundations, which could easily be mis-interpreted from a limited number of shallow investigations.

In these cases, the detrimental effect of the soft soils on the response of structures will need to be considered, but it should be recognised that this is a complex issue to resolve and will require close interaction of geotechnical specialists and structural engineers.

**Figure 9.2: MASW plot north along Park Terrace indicating low shear wave velocities and results for CPT-CBD-01**



## 9.7 Fault Surface Rupture

Information regarding the presence of active faults directly beneath the central city is very limited at this time. We understand that GNS Science may be undertaking further deep seismic surveys to assess this risk in the near future. Clearly the impact of a surface rupture occurring, of a similar extent / magnitude as occurred along sections of the Darfield fault during the 04 September 2010 earthquake could have very severe consequences on structures built in the central city.



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## **10. Requirements for Site Specific Ground Investigations and Geotechnical Assessments**

### **10.1 General**

The factual ground investigation data presented in the zone reports and the interpretative information presented here provides a broad overview of the nature and variability of the ground and groundwater conditions and associated geotechnical hazards present within the central city. This information may be used by geotechnical specialists to assist with the preliminary stages of undertaking site specific assessments for individual developments. This may include developing concept foundation / ground improvement designs and to help determine the appropriate scope of the ground investigations and geotechnical assessment required to advance the development through to detailed design.

It is not intended that this information be used for detailed geotechnical analyses or for justification of proposed foundation / ground improvement designs and should only be referenced in support of site specific ground investigations / geotechnical assessments.

Experienced and suitably qualified engineering geologist and geotechnical engineers are well aware of the benefits of undertaking comprehensive ground investigations and geotechnical assessments. Detailed investigations reduce the risks of unforeseen ground conditions, which are amongst the most common cause for claims during construction. By eliminating some of the uncertainties inherent with limited investigations, significant cost savings may be possible by allowing less conservative design assumptions.

The following sections provide an indication of the scope of ground investigations and geotechnical assessments that are may be required to adequately address the geotechnical issues for sites with a high liquefaction / lateral spreading hazard. This is provided primarily to help inform landowners and other non-geotechnical specialists of what is likely to be an appropriate level of investigation and assessment and to provide guidance to CCC on the scope of the geotechnical information to be submitted in support of building consent applications for difficult sites.

Whilst large areas of the central city are located on deposits susceptible to liquefaction during a ULS event, as shown on the liquefaction hazard sections and plans, the impact of liquefaction occurring within some of these layers, particularly at depth, may be very limited. Careful design of foundations for static conditions alone may be sufficient to provide an adequate level of protection during a ULS event.

For relatively straightforward sites where there is not considered to be a high risk of significant deep liquefaction occurring then a reduced level of investigation than outlined below may be appropriate. This assessment should be based on sound engineering judgement made by a suitably qualified geotechnical specialist.

### **10.2 Scope of the Geotechnical Assessment**

The scope of the ground investigation and geotechnical assessment required for a specific development is a function of both the proposed structure and the anticipated site conditions.

A review of the site conditions at any location within the central city will need to incorporate not only the natural deposits and groundwater conditions, but also take account of the historic uses of the site. Particular reference is required to the potential for existing fill, former building foundations and/or ground treatment, and the level of land damage that occurred during the Canterbury Earthquake Sequence.

The general approach to the geotechnical assessment for high risk sites will therefore include a number of stages, which may include some, or all, of the following:

1. Desk Study - to collate all readily available existing information pertaining to the site, including historic uses (from maps, aerial photographs), ground investigation data / geotechnical reports, foundation plans, observed land damage reported following the various large earthquakes and information regarding the foundation layout and loads for the proposed development.
2. Site Inspection – undertaken by a suitably experienced geotechnical specialist, to assess the general layout of the site and presence of existing structures / hazards, the level of land damage (where still evident), and to identify locations for subsequent ground investigation works.
3. Design, procurement and management of a detailed ground investigation. This will include:
  - a. obtaining of consents to complete the intrusive works
  - b. identification of buried and overhead services
  - c. preparation of traffic management plans (TMPs), where required
  - d. engaging ground investigation contractors
  - e. preparation and review of health & safety plans to undertake the investigations
  - f. site identification of buried services and excavation of inspection pits, where necessary
  - g. site supervision of the physical investigations
  - h. groundwater level monitoring
  - i. logging of borehole cores / trial pits by suitably qualified engineering geologist, geotechnical engineers or experienced geo-technicians
  - j. laboratory testing of selected samples
  - k. factual reporting of the field investigations and laboratory test results
4. Review of the site conditions revealed from the desk study and investigation phases.
5. Geotechnical analyses of the data.
6. Preparation of a Geotechnical Assessment Report.
7. Detailed Design Report.

This level of investigation and assessment would not be necessary for small developments or on sites unlikely to be affected by severe liquefaction.

### 10.2.1 Ground Investigations

The ground conditions within Christchurch central city are known to be highly variable on a local, as well as a regional scale, as a result of the geomorphological / geological environment. There exists a risk that the ground conditions at any specific site may show considerable lateral and/or vertical variability, for all but the smallest of sites.

To limit the number of exploratory holes required to provide a reasonable assessment of the potential variability present within the site, geophysical survey techniques, such as MASW, are likely to prove an efficient technique. There are benefits to completing the geophysical surveys early on in the investigation programme, as these may indicate significant variability or anomalous features. Subsequent exploratory holes can then be positioned to investigate the variable conditions indicated.

Each site will be different and the precise scope of the ground investigation will vary. However, to provide an indication of the quantum of investigation works that would be required, we have assumed two specific scenarios, one comprising a proposed three- to five-storey office building, and a single level tilt slab warehouse. It is assumed that both sites are underlain by a significant depth of potentially liquefiable materials to the Riccarton Gravels.

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The proposed scope of the ground investigations detailed should be sufficient to adequately identify the nature and potential variability of the ground conditions across the site. This level of investigation should be adequate to advance the detailed design of the foundations (and ground treatment, if necessary) for the proposed development with little or no requirement for further investigations, other than that which may be necessary during construction. However, if highly variable conditions are encountered during this phase of investigations, subsequent stages comprising further investigation points and/or other techniques may be deemed necessary or beneficial.

➤ **Five Storey Office Building** (footprint approximately 1,000m<sup>2</sup>)

- 2 or 3 machine boreholes advanced to depths of between 20 and 30m (with SPTs at 1.0m vertical centres reducing to 1.5m below 10m depth)
- 8 to 10 piezocones to depths of up to approximately 20m (pre-drilling to permit testing of the soils beneath an upper dense gravel layer may be required if the boreholes and/or geophysical surveys indicate potentially liquefiable materials at depth)
- 3 to 5 machine excavated trial pits to depths of around 2 to 4m<sup>14</sup>
- Geophysical surveying (such as MASW) to estimate the shear wave velocity to a depth of approximately 20 to 30m, and identify variability between intrusive investigation points
- Inclusion of at least one standpipe installed to a depth of around 10m with a sand backfill and lockable flush cover, with a number of return visits to record the groundwater level variability
- A single standpipe piezometer installed within the artesian / sub-artesian gravel aquifer (Riccarton Gravels). This would only be necessary where it was considered likely that deep piled foundations and/or ground treatment to these depths was envisaged
- Laboratory testing on selected samples collected from the boreholes and/or trial pits, including plasticity limits and gradings. Where shallow foundations are being considered in areas underlain by compressible materials (such as organic silts and peat, which are common in many areas of the central city), natural water content and consolidation testing may also be required.

➤ **Single level tilt slab warehouse** (footprint approximately 5,000m<sup>2</sup>)

- 3 machine boreholes advanced to depths of between 20 and 30m (with SPTs at 1.0m vertical centres reducing to 1.5m below 10m depth)
- 15 to 20 piezocones to depths of up to approximately 20m (pre-drilling to permit testing of the soils beneath an upper dense gravel layer may be required if the boreholes and/or geophysical surveys indicate potentially liquefiable materials at depth)
- 8 to 10 machine excavated trial pits to depths of around 2 to 4m
- Geophysical surveying (such as MASW) to estimate the shear wave velocity to a depth of approximately 20 to 30m, and identify variability between intrusive investigation points

<sup>14</sup> Trial pits are primarily required to provide an indication of the near-surface ground conditions, particularly where fill materials are suspected, to aid the design of ground slabs / shallow foundations and for evaluating potential construction issues and temporary works design requirements. These may not be required at all sites.

- Inclusion of at least one standpipe installed to a depth of around 10m with a sand backfill and lockable flush cover with a number of return visits to record the groundwater level variability
- A single standpipe piezometer installed within the artesian / sub-artesian gravel aquifer (Riccarton Gravels). This would only be necessary where it was considered likely that deep piled foundations and/or ground treatment to these depths was envisaged
- Laboratory testing on selected samples collected from the boreholes and/or trial pits, including plasticity limits and gradings. Where shallow foundations are being considered in areas underlain by compressible materials (such as organic silts and peat, which are common in many areas of the central city), natural water content and consolidation testing may also be required

On sites where there have been a number of previous buildings or structures, buried foundations or poorly backfilled excavations may be present. Backfilled channels may be present (as suggested by the 'Black Maps' or other sources) or buried tree stumps in former swampy areas. Ground penetrating radar may be beneficial on such sites.

## **10.2.2 Analyses and Reporting**

### **10.2.2.1 Desk Study**

Depending upon the size and complexity of the site and the associated ground conditions, preparation of a formal Geotechnical Desk Study Report may be advantageous. For many sites, however, it will be sufficient to utilise the desk study information to design the ground investigation and the present the results in the subsequent Geotechnical Interpretative Report.

### **10.2.2.2 Factual Data**

The results of the ground investigation should ideally be presented in a standalone factual report, or for smaller sites, may be included in the appendices to the Geotechnical Assessment Report. Preparation of a separate factual report will be preferable if the information is to be subsequently included on the geotechnical database discussed in Section 4.5.

### **10.2.2.3 Analyses**

Following the desk study and ground investigation, a conceptual ground model should be developed and geotechnical analyses undertaken, which is likely to include, as a minimum:

- geotechnical material parameters to be adopted for design
- liquefaction and, where necessary, lateral spreading hazard assessments
- assessment of the potential for cyclic softening of 'clay-like' soils and consolidation settlements under static loads, where soft/compressible materials are encountered
- Preliminary foundation and/or ground treatment design options, considering the soil-foundation-structure interaction under static and seismic loading.

### **10.2.2.4 Geotechnical Assessment Report**

This will lead to the preparation of the Geotechnical Assessment Report, presenting a summary of the works undertaken, an interpretation of the site conditions encountered (conceptual geological model). This will include a discussion on the principal geotechnical issues identified, including:

- options/conclusions regarding the future development of the site
- requirements for further investigations/assessment (if necessary)

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- preliminary foundation and/or ground treatment options
- construction issues / temporary works design.

### **10.2.2.5 Design Report**

If the development then proceeds to detailed design stage, a detailed Design Report should be prepared for the preferred design option and this should be submitted, along with the desk study, factual and interpretative reports, in support of a building consent application. The Design Report should reference, and be consistent with, the conclusions of the Geotechnical Assessment Report and Factual Report. This should also provide an outline of the site inspections and testing that will be required during construction to confirm the design assumptions, where applicable.

All reports should be compiled by, reviewed and authorised by suitably qualified geotechnical specialists.

### **10.2.2.6 Peer Review**

The deep alluvial deposits present within Christchurch central city combined with the seismic hazard dictate that the issues surrounding geotechnical design and the combination of ground-foundation-structure interaction are very complex. It is therefore considered prudent for peer reviews to be included for significant or complex sites.

Early involvement of peer reviewers is generally considered more effective and efficient than the peer review being completed once the design and reports have been finalised and submitted for building consent.

Clients and their appointed advisors are therefore to be encouraged to be proactive at identifying where a peer review is beneficial or necessary, and to commence this process at an early stage. This may start as early as agreeing the appropriate scope of the ground investigation works required, as the peer reviewers knowledge of the local site conditions may be of assistance even at this early stage.

CCC are also encouraged to advise landowners / developers as early as possible where they consider that a peer review will be required.

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