The wider hill and estuary suburb of Mt Pleasant (including St Andrews Hill) is located approximately seven kilometres from the central city. It is bounded by Redcliffs to the east, the Summit Road to the south, Heathcote and Ferrymead to the west, and the Estuary of the Avon and Heathcote Rivers / Ihutai to the north.

Generally seen as a higher socio-economic residential suburb, the wider Mt Pleasant area comprises mainly residential properties both on the hillsides and flat. There is a wide mix of housing stock spanning different construction periods, designs and materials. Large scale residential dwellings and gentrification are prominent recent characteristics. Minor commercial areas exist on Solares Avenue and the area is renowned for its tussock grassland and craggy bluffs. The upper regions of the area are well utilised by trampers, botanists, rock climbers and orienteerers.

There is one full primary school, Mt Pleasant School (decile 10) serving the Mt Pleasant community. The nearest secondary school is Linwood College, located in Linwood. The major access roads are Main Road and Summit road.
Key demographics

**Usually resident population count**
Data from Statistics NZ

<table>
<thead>
<tr>
<th>Year</th>
<th>Mt Pleasant</th>
<th>Christchurch City</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>3,200</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>3,400</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>3,600 (est)</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>3,800 (est)</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>4,000 (est)</td>
<td></td>
</tr>
<tr>
<td>2026</td>
<td>4,200 (est)</td>
<td></td>
</tr>
<tr>
<td>2031</td>
<td>4,400 (est)</td>
<td></td>
</tr>
</tbody>
</table>

**Ethnic groups in the area (%)**
Data from 2006 Census, Statistics NZ

- Other: 15.0%
- MELAA: 0.2%
- Asian: 2.1%
- Pacific Peoples': 0.5%
- Māori: 2.6%
- European: 84.1%

**Median personal income compared to Christchurch City**
Data from Statistics NZ

**Employment status (%)**
Data from 2006 Census, Statistics NZ

- Not in the Labour Force: 29.4%
- Unemployed: 1.9%
- Employed Part-time: 17.4%
- Employed Full-time: 49.7%

**Home ownership (%)**
(Data from 2006 Census, Statistics NZ)

**Family type (%)**
(Data from 2006 Census, Statistics NZ)
Within the greater Mt Pleasant area there are 17 organisations consisting of three community organisations, four sports groups, two faith based organisations, one residents' group, and seven community meeting venues.

The greater the size of the circle, the greater the impact and reach the organisation has within the community. Three organisations within the Mt Pleasant community have a great amount of reach and impact, with the greatest proportion being community meeting venues. A number of community groups have medium impact across the sector.
Social capital mapping

Community development organisations
1a number of organisations (3)
1b strength of organisations (4)
1c community development principles (4)

Volunteering
2a investment in volunteers (4)
2b number of volunteer hours from Fundforce (3)
2c number of volunteer hours from Census (3)

Connectedness
3a number of neighbourhood support groups (4)
3b number of residents’ associations (4)
3c access to networking groups/forums (4)

Participation
4a community events (3)
4b Fundforce participation rates (3)
4c Club membership numbers (2)

Resilience
5a preparedness/response plan in place (3)
5b identified groups to lead local response (3)
5c capability of groups to lead local response (3)
Land condition in Mt Pleasant

GNS Science\(^1\) report that the 22 February 2011 earthquake was located as 43.60 S, 172.71 E (within five kilometres of Lyttleton), at a depth of five kilometres. Large rock falls and landslides were reported at Lyttleton and in the eastern suburbs of Sumner and Redcliffs, and along the Summit road east of Dyers Pass, some of which extensively damaged or destroyed houses, and resulted in at least four or possibly five fatalities.

An initial helicopter reconnaissance flight over the landslide damaged area was undertaken in the afternoon of 23 February 2011. Key findings indicated that large tension cracks extending beyond the cliff edge (up to 60 metres) between Monks Bay-Sumner and to a lesser extent on the east side of Scarborough, pose a significant hazard to residents.

Approximately half of Mt Pleasant has now been zoned 'green' with the remaining land zoned 'white' which means further assessment is required.

Following the land announcements on the 28 October 2011, the new Department of Building and Housing technical classifications have classified some residential properties as 'yellow'. The remaining land has the DBH classification of 'brown' which covers non-residential areas and land that still requires further assessment.

**Yellow** - Minor to moderate land damage from liquefaction is possible in future significant earthquakes. Repair / rebuild process can begin.

Pre and post earthquake analysis

<table>
<thead>
<tr>
<th>Social environment</th>
<th>Pre earthquake</th>
<th>Post earthquake</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Community organisations</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>b. Community connectedness</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. Community participation</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Built environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Housing stock</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>e. Roading infrastructure</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>f. Commercial/community infrastructure</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Economic environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Local business/services</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>h. Access to local services</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>j. Local economy</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Natural environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Air quality</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>l. Parks and spaces</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>m. Accessibility to natural environment</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>
Impact of earthquakes
Post 4 September 2010 and 22 February 2011

Natural environment
Located in the Port Hills region of Christchurch, Mt Pleasant has been long renowned for its tussock grassland and craggy bluffs, with the upper regions of the area well utilised by trampers, botanists, rock climbers and orienteers.

The 22 February 2011 earthquake had a devastating effect on the Mt Pleasant area. Situated directly along the fault line, therefore being close to the epicentre caused the extensive damage.

An initial helicopter reconnaissance flight by GNS Science reported that the key findings on earthquake-induced landslide damage in the earthquake-affected area were; (from Jongens et al. 2011):

- Large tension cracks extending beyond the cliff edge (up to 60 metres) between Monks Bay-Sumner and to a lesser extent on the east side of Scarborough, pose a significant hazard to residents.
- Mt Pleasant is one of the areas most affected by landslides (dominantly rock falls, debris falls, debris slides)
- The cliff tops and low ridge crests at Sumner, Redcliffs, and Mount Pleasant appear to have been more strongly shaken, probably due to topographic amplification and focussing effects.

Continuing monitoring of ground cracks and potential rock fall and landslides was undertaken and continues to be a critical area for geotechnical monitoring and remediation work. Dangerous boulders were removed or secured to secure critical transport routes. Containers have been placed along Main Road to provide protection against rock fall, landslide and boulders. Further damaging slope failures could occur in some areas during the ongoing aftershocks. The risk of further rock falls, is highest where there is loose rock on the slopes that failed, especially where there is cracking along the edge of the cliff face.

Geotechnical engineers have been mapping the landslide areas at Maffeys Road and La Costa Lane. This landslide will be monitored for movement.

Changes to the estuary due to liquefaction, pollution and tilting of the seabed have impacted on the natural ecology of the area.

Economic environment
Mt Pleasant has generally been noted as a higher socio-economic area, with 2006 census statistics indicating 36.2% of families had a total family income of over $100,000, which was significantly higher than the Christchurch City figure of 13.8%. The median family income was $85,400, compared to the Christchurch City median of $58,100.

The 22 February 2011 earthquake has had a significant impact on property sales in the area, and Real Estate Institute sales data comparison for the September 2010 – March 2011 periods, compared with the same period in 2009/10, indicates a substantive drop in property sales, and a change in the median property price for those property sales that have been completed in the post earthquake period. Approximately 200 houses in the wider Port Hills area were evacuated for public safety and operational reasons. Displacement of families from their homes may have a significant economic impact on the family unit, and the economic stability of Mt Pleasant.

Discussion with Work and Income indicated that unemployment numbers spiked in the hill suburbs of Christchurch in the months post 22 February 2011 earthquake with a high percentage of self employed and business owners now seeking income support, as well as employees. Pre earthquakes the area was generally well serviced through proximity to the Redcliffs and Ferrymead retail precincts The loss of the Redcliffs and Ferrymead supermarkets has had a significant impact. Generally, most other commercial enterprises have been designated green and are operating in some capacity.

Social environment
With a number of houses yellow and red stickered after the 22 February 2011 earthquake, there was significant move of people within and out of the area. Like in other suburbs, there was increase in community spirit with neighbors’ reaching out to one another to give or ask for support. Much support has been needed especially for accessing services as the supermarkets and malls in surrounding areas accessed by the community were severely damaged and out of use.

The Mt Pleasant Community Centre was significantly damaged after the 22 February 2011 earthquake. This had impact on a number of activities and programs available to the local community. A number of programes have since relocated to other venues. A local Church has been key in accommodating a number of groups which have been displaced, with Mt Pleasant Yacht Club also being used as a venue for some activities, and a Recovery Assistance Centre (RAC) operated from this venue for a number of weeks immediately post 22 February 2011. Since the earthquake, organisations in the area have worked closer together to respond to the needs of the community. This has resulted in greater collaboration and community spirit. A resident’s group has remained active and closely linked.

3 Real Institute of New Zealand; Market Trends www.reinz.co.nz
Damage to all nearby libraries has contributed to reduction in social activities for older adults. The Christchurch City Library in Sumner, and the volunteer libraries in Redcliffs and Heathcote have all been damaged. The closest is the Temporary Linwood Library at Linwood Service Centre.

Built environment

The major access roads are Main Road and Summit road. The wider Mt Pleasant area comprises mainly residential properties both on the hillsides and flat. There is a wide mix of housing stock spanning different construction periods, designs and materials. Large scale residential dwellings and gentrification are prominent recent characteristics. Minor commercial areas exist on Solares Avenue.

The 22 February 2011 earthquake caused significant damage to land, property and utility services such as power, water and wastewater. Liquefaction featured on properties and roads, causing damage and later dust issues. Local residents faced much disruption, hardship and displacement throughout the following weeks and work continues to be undertaken to restore roading and other infrastructure. Civil Defence has evacuated some houses and issued red placards for geotechnical reasons because there is a risk to life, in most cases from rock fall, from occupying the house.

Electricity services were interrupted by the 22 February 2011 earthquake, and these areas were without any electricity for nearly a week post-quake. The main sewer pipe from Sumner, Redcliffs and Mt Pleasant and across the Heathcote River by Ferrymead Bridge was broken in multiple locations by the 22 February 2011 earthquake. Major works were undertaken through April and May to restore this line. Water mains were affected by the February earthquake and most of the Sumner, Redcliffs and Mt Pleasant area lost water services for at least a week. The earthquake caused multiple breaks to the main water line to Sumner, and rock falls impeded progress to repair water services in a number of locations throughout the area.

The 22 February 2011 earthquake impacted the roading network throughout Sumner, Redcliffs and Mt Pleasant substantially, with a large number of roads closed in the first few weeks post-earthquake by rock fall and risk of rock fall. Ferrymead Bridge was initially impassable and retained a weight restriction for some weeks. Other roads were very badly damaged by subsidence and liquefaction. The Ferrymead Bridge was badly damaged and was initially unusable. Although temporary repairs opened the bridge to use by cars and light vehicles, restrictions to bridge use prevented use of buses and trucks and remained in place for several months. Considerable repair work has been undertaken on the roads throughout Sumner, Redcliffs and Mt Pleasant, and work is continuing. Some roads remain closed, while others are reduced to one lane.

The magnitude 6.4 earthquake resulted in the devastation of numerous Mt Pleasant homes and severe damage to many others. Approximately 200 houses in the wider Port Hills area were evacuated for public safety and operational reasons. And many Mt Pleasant residents remain displaced due to the instability of the area. 775 buildings have been assessed as ‘Green’, 151 as ‘Yellow’ and 68 as ‘Red’ in the Mt Pleasant Monks Spur area.

Future opportunities and risks

Opportunities

- Increased community spirit
- Community-led development plan
- Increased volunteerism
- Increased community events and activities
- Locally based programmes for youth
- Improved coastal walk and cycle way
- Relocation and merging of clubs

Risks

- Organisations/groups may be formed to fill perceived need.
- Expectation may be raised on the part of community on what local authorities and other agencies are able to provide/contribute to a community-led development plan.
- Rock-fall threat may cause long-term stress on individuals and families.
- Young people may not be able to take part in recreational and other activities away from home due to anxiety by parents caused by rock-fall threat.
- Social isolation due to accessibility issues
- Limited access to estuary for water sports
- Reduced access to recreational opportunities