

Demand For Cash After A Natural Disaster: Christchurch Earthquakes

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NEW ZEALAND

Population 4.4 million

← Australia
2,250km
(1400 miles)

Chile →
9,700km
(6027 miles)



Christchurch City



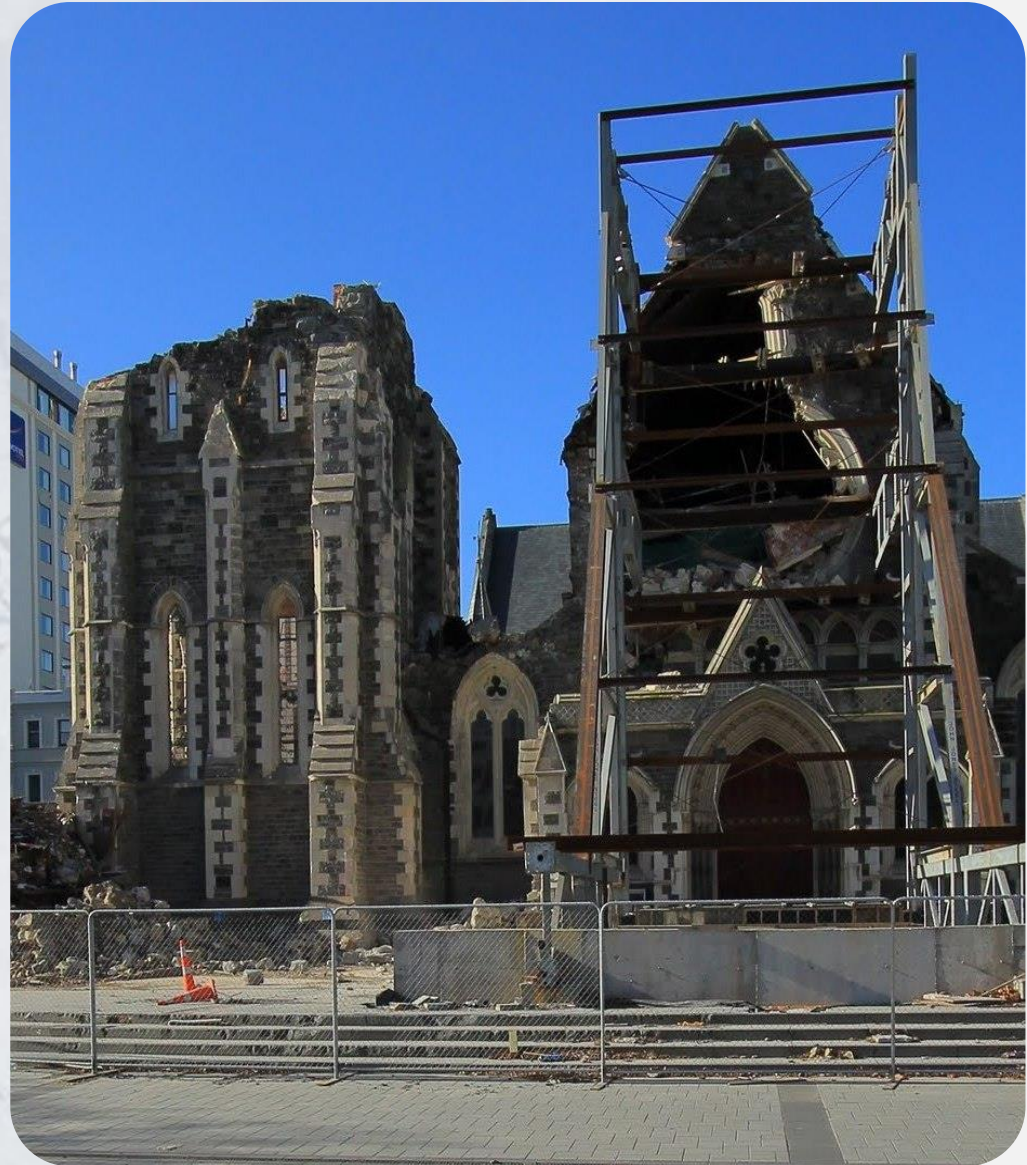
Christchurch Earthquakes

2010 - Saturday, 4th
September, 4:35am

- Magnitude 7.1
Fatalities - 0

2011 - Tuesday, 22nd
February, 12:51pm

- Magnitude 6.3
Fatalities - 181



Christchurch City



Moments after the quake ...



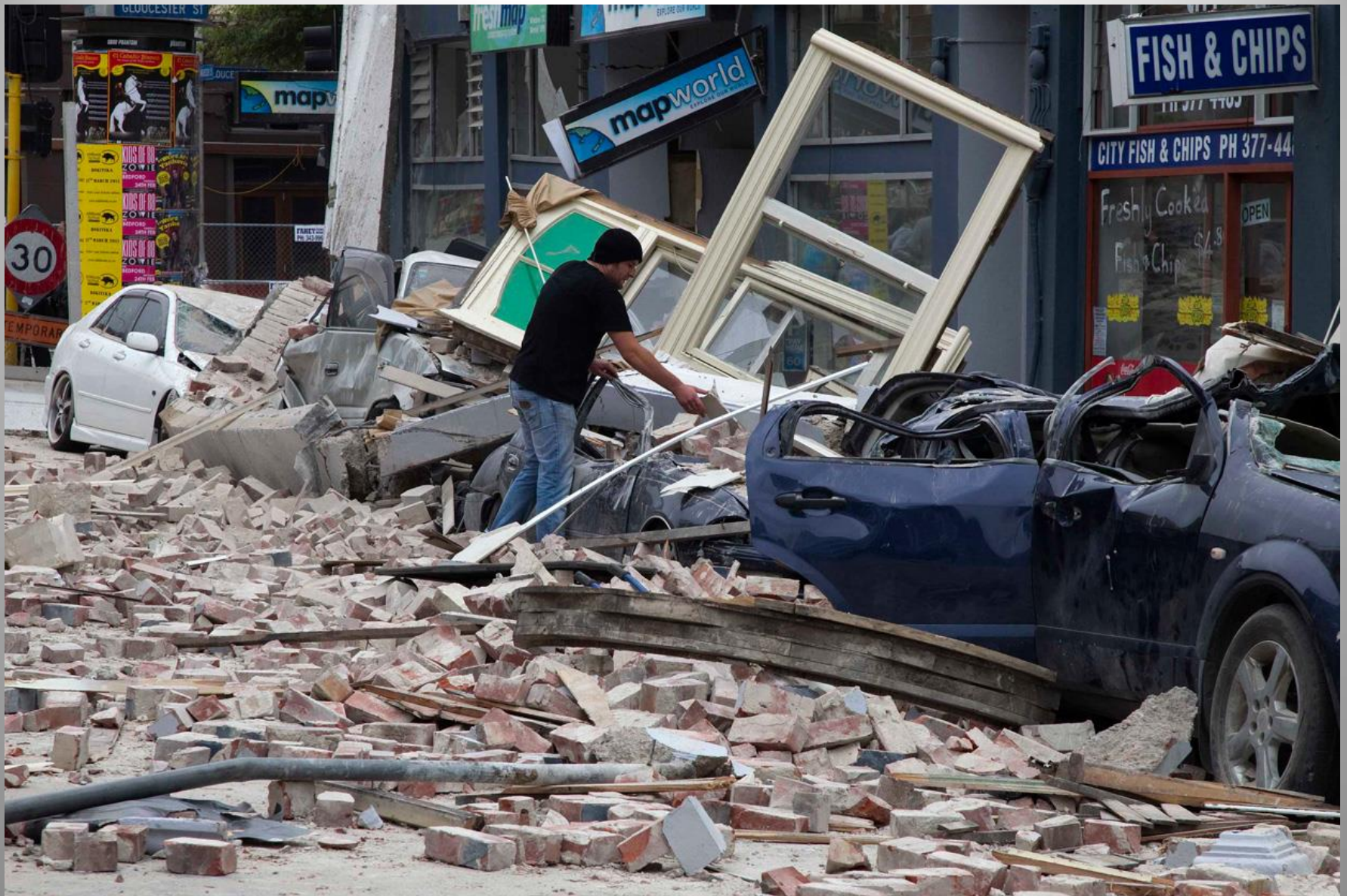
Christchurch Anglican Cathedral





Christchurch Catholic Cathedral

(AP Photo/NZPA, David Wethey)



A man looks for any victims amongst rubble in central Christchurch
(REUTERS/Simon Baker)



Rescue workers climb onto the collapsed Pyne Gould Guinness Building

(AP Photo/New Zealand Herald, Mark Mitchell)



Destruction on the roads

(© Asher Trafford)

Liquefaction





Army officers stationed at the 'Red Zone' cordon
(REUTERS/Simon Baker)

Demand for cash

- Immediate surge in the demand for cash
- Demand for food, petrol, other necessities
- Electronic retail payment systems not operating
- Many bank branches closed and many ATMs inaccessible
- Banks placed orders for cash 2 hours after earthquake

Supply of cash

- First cash delivery 9am next day
- NZ\$145 million (€100m) delivered in 8 days
- NZ\$350 (€240) per person in Christchurch
- Higher cash demand across the country
- Initially \$20, \$50 notes, later \$5 and \$10 notes

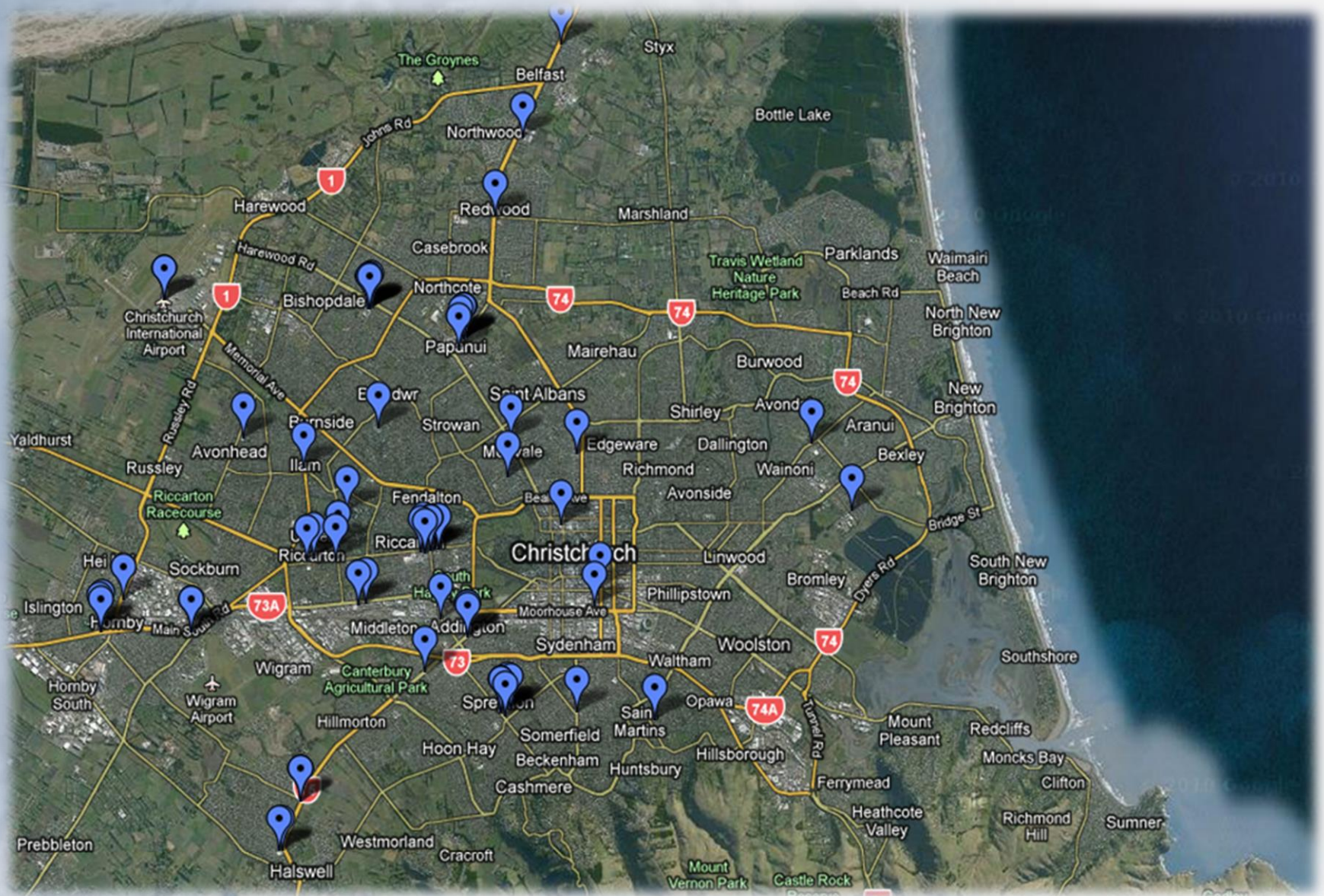
Security Transport Activity

- Both CIT company depots open
- All possible resources were devoted to replenishing ATMs and bank branches that were open
- Journeys took three times as long as normal
- Some ATMs were being re-stocked three times a day

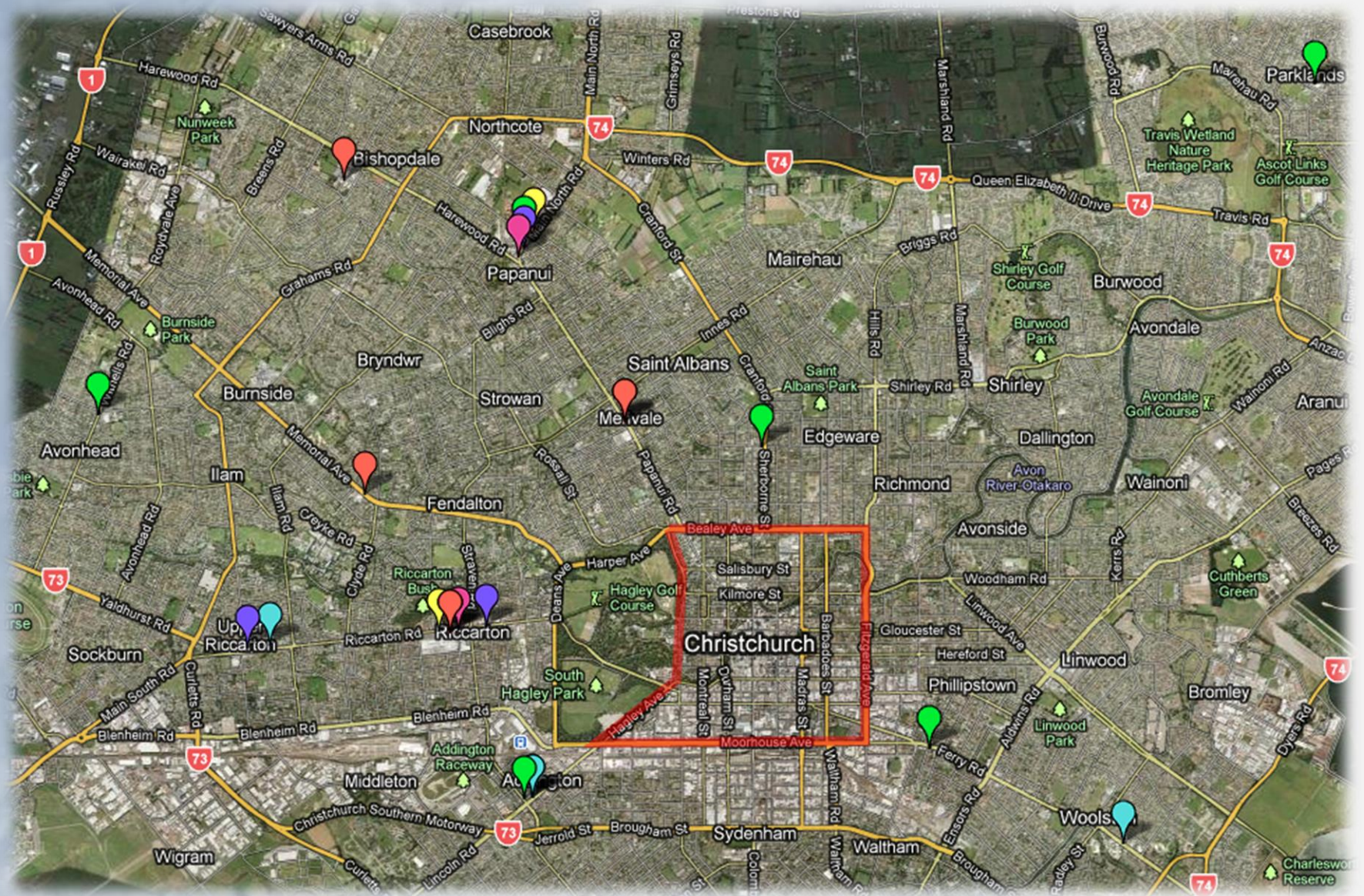
Communications and Public access to cash

- Cash was difficult to find
- Where are ATMs located?
- Are they accessible and replenished?
- What bank branches are open?

Christchurch ATM Map



Christchurch Bank Branch Map



Role for a Regional Office?

- Reserve Bank Christchurch Office was closed in 2000
- Office was in the Red Zone
 - Nearby structure unstable
 - It would have been inaccessible
- Any country may need to transport cash from a distance

Use of cash in New Zealand

- 2010 Survey of 1,000 people
- 25% of transactions are made by cash
- Few transactions over \$20 (€13) are made by cash
- A representative New Zealander has 5 banknotes with a total value of about \$100 (€65)

Key Conclusions

1. The supply of cash is crucial in national emergencies. Otherwise essential commerce cannot take place.
2. Cash is an immediate priority, not one that can wait a few days.
3. About €240 per person may be required very quickly. All note denominations are needed.
4. A high use of electronic retail payment methods may be a vulnerability not a strength.