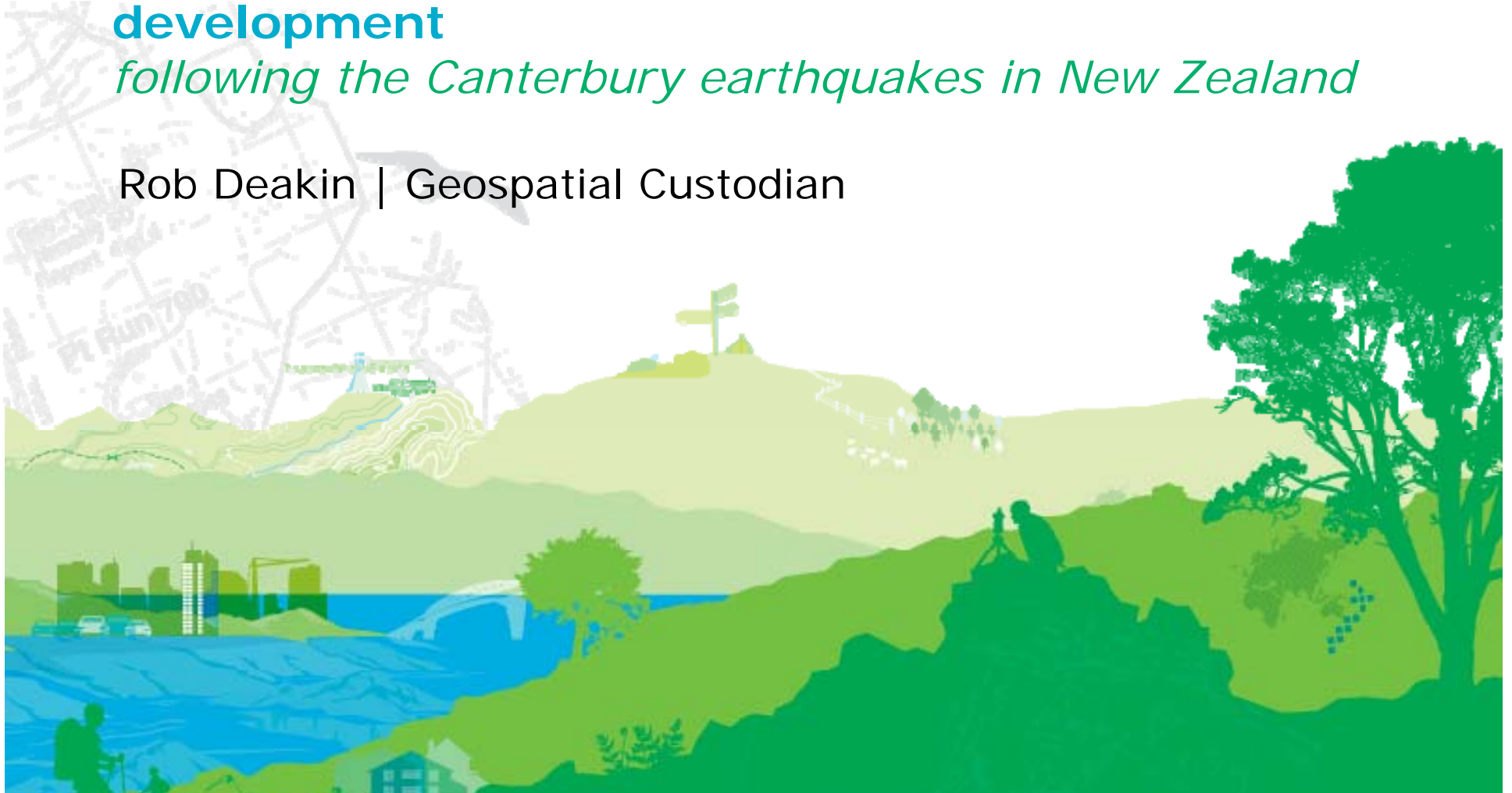


# Responses and opportunities for recovery and SDI development

*following the Canterbury earthquakes in New Zealand*

Rob Deakin | Geospatial Custodian



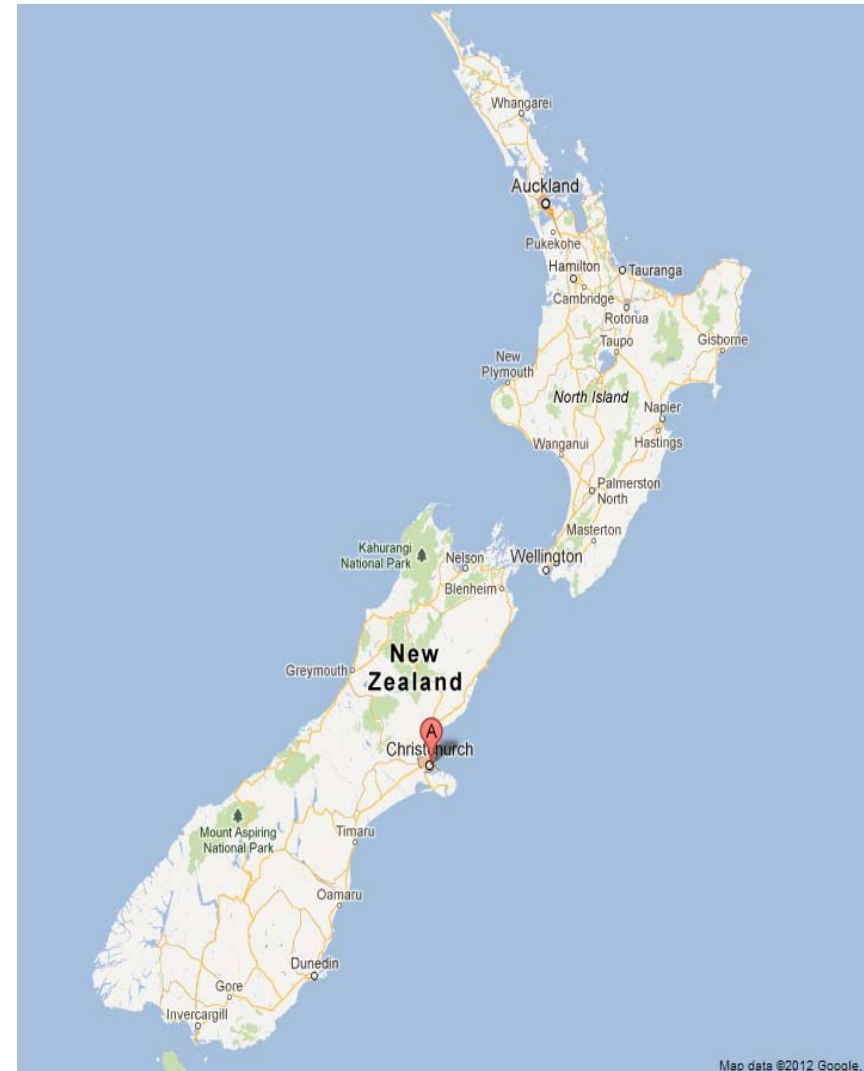
## Enablement & Opportunities:



- Response
- Recovery and rebuild
- Strengthening

# Canterbury earthquakes

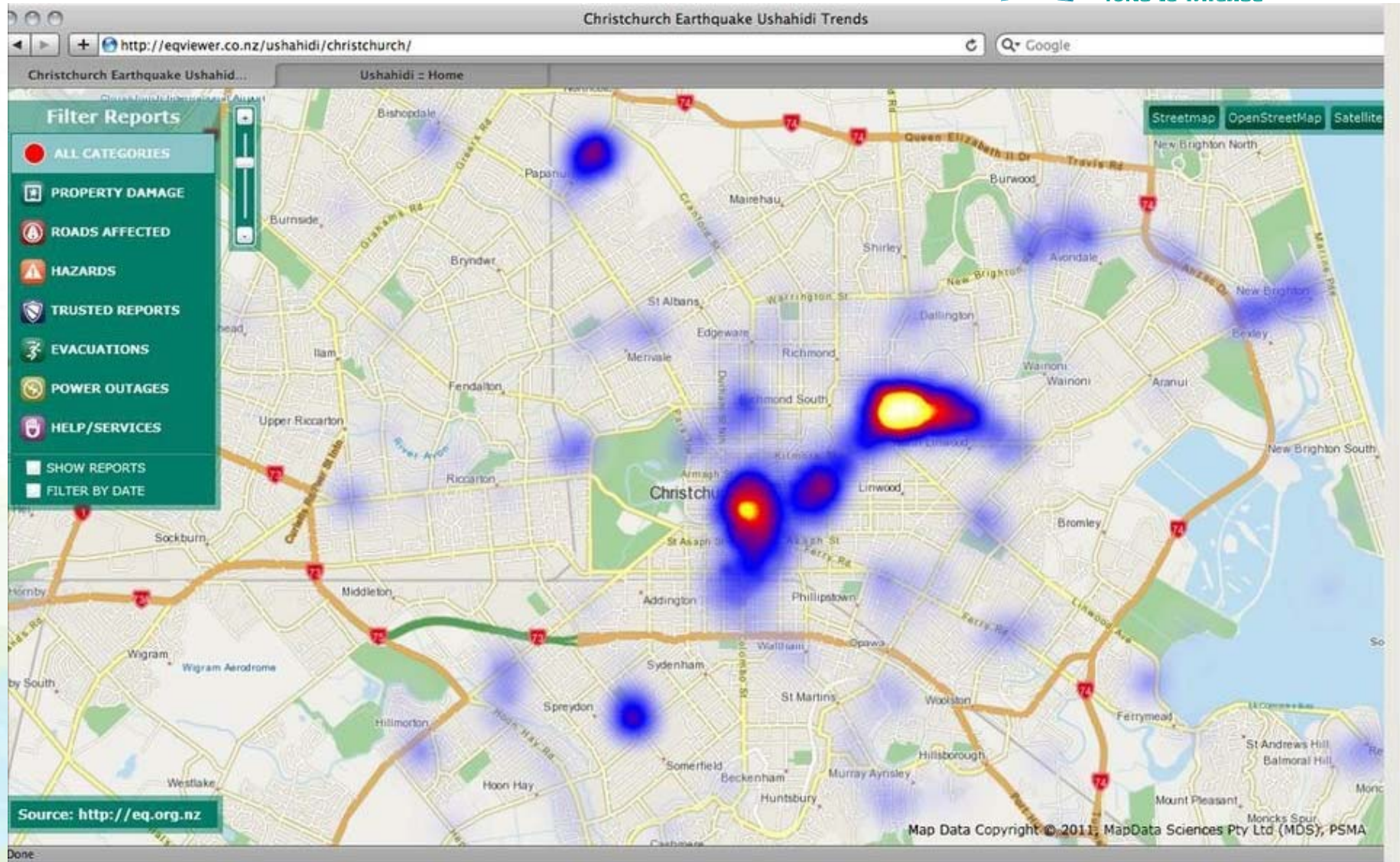
- 4 Sept 2010 – 7.1
- 22 Feb 2011 – 6.1
- 11 June 2011 – 6.4
- 23 Dec 2011 – 5.9 & 6.0
- > 10,000 recorded events
- 185 fatalities
- \$20 bn damage / 9.5% GDP
- 3.2% of the nations capital stock lost
- New Zealand's 2<sup>nd</sup> largest natural disaster







# Initial response



Recovery opportunities:

Work to progress the New Zealand Geospatial Strategy  
focused on key elements:



Standards



Data



Investment



Access



Governance

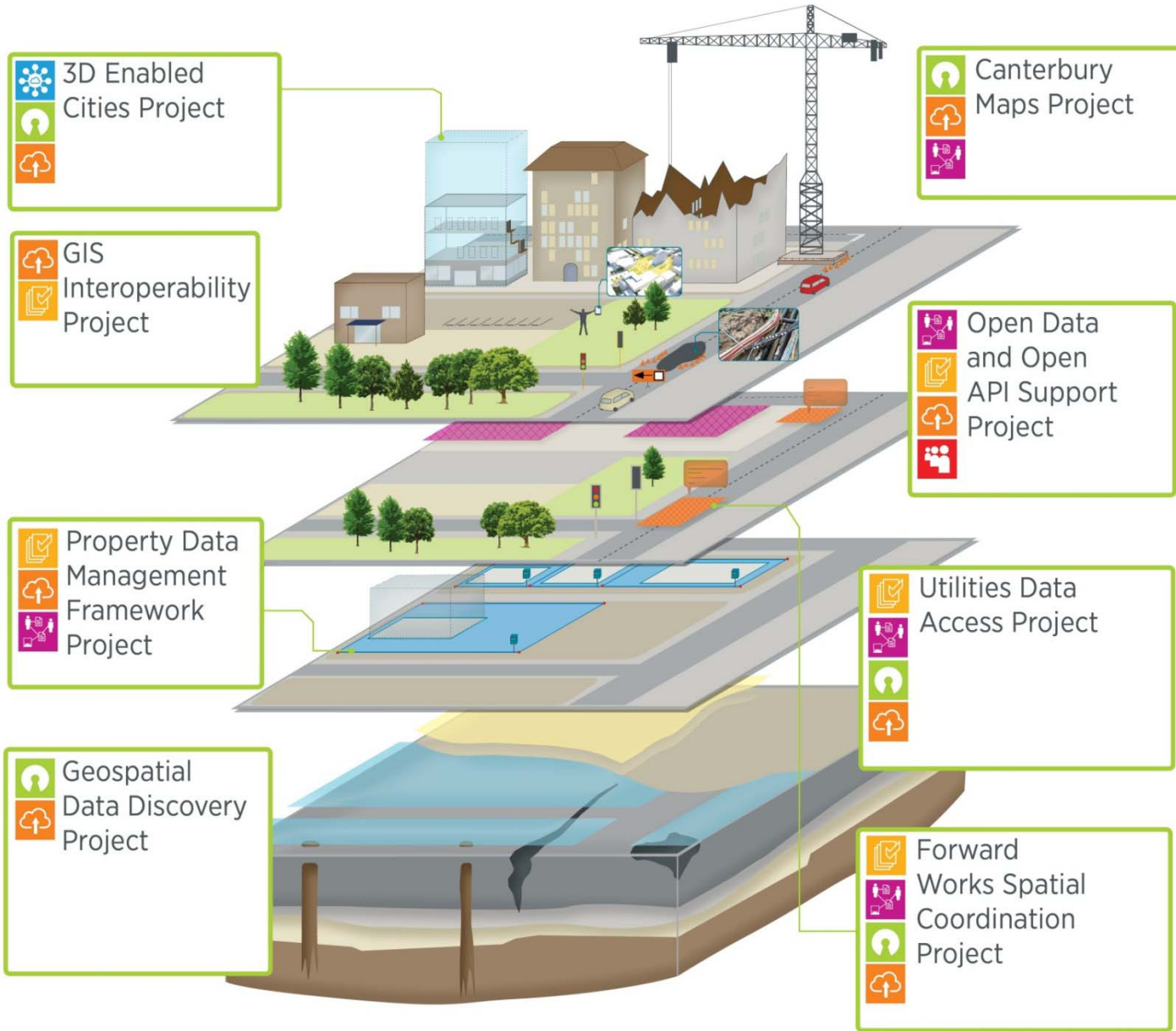


Capability



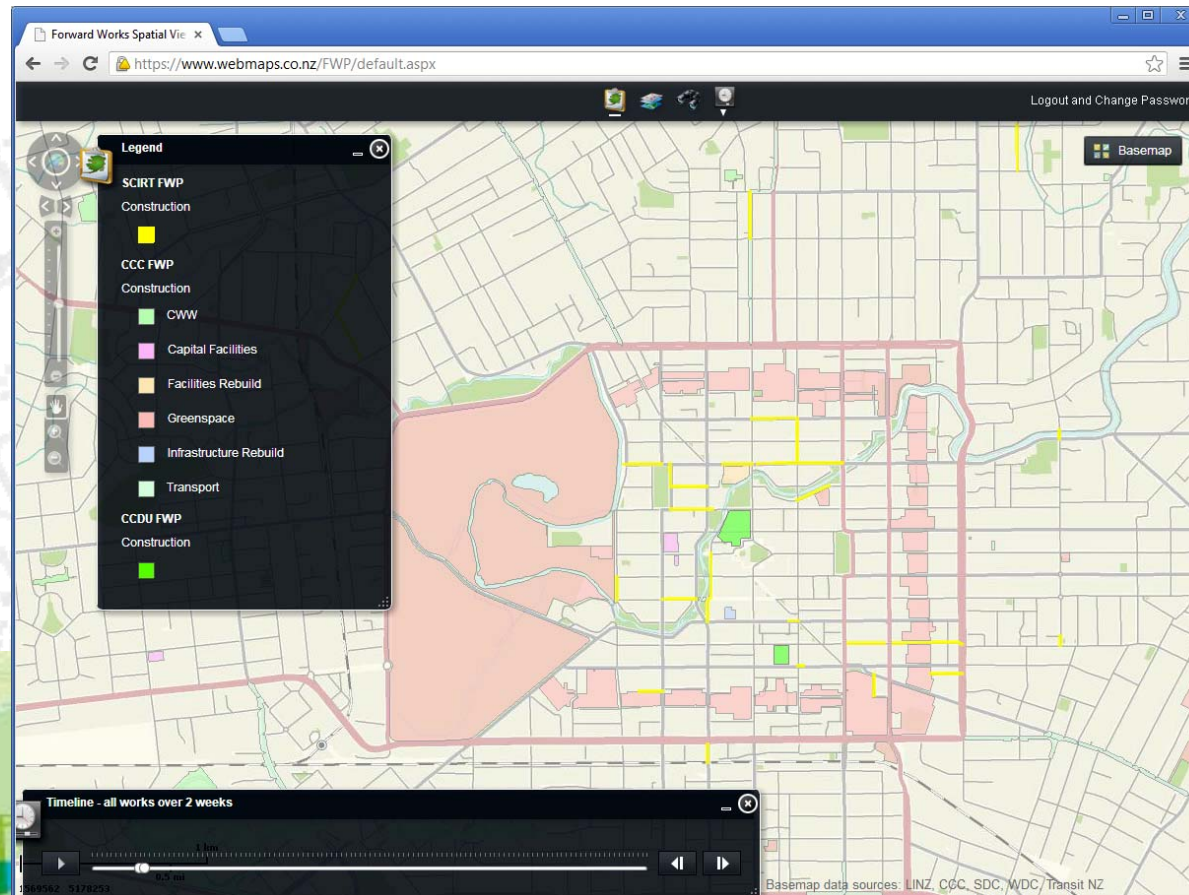
Coordination

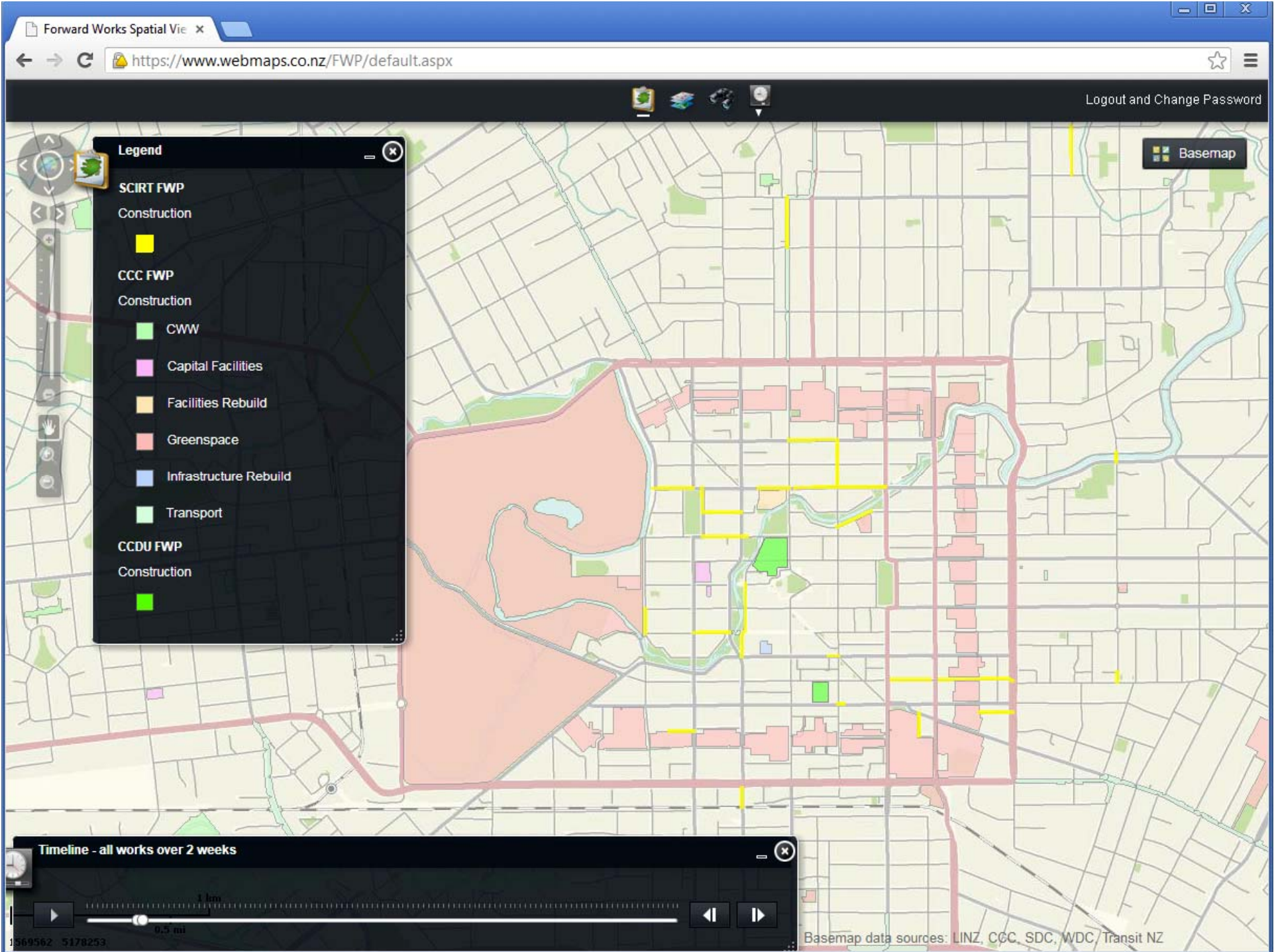
# Canterbury Rebuild – 8 interrelated SDI projects





# Forward Works Spatial Coordination





Forward Works Spatial Vie x

https://www.webmaps.co.nz/FWP/default.aspx

Logout and Change Password

Basemap

**Legend**

- SCIRT FWP
  - Construction
- CCC FWP
  - Construction
    - CWW
    - Capital Facilities
    - Facilities Rebuild
    - Greenspace
    - Infrastructure Rebuild
    - Transport
- CCDU FWP
  - Construction

Timeline - all works over 2 weeks

1 km  
0.5 mi

Basemap data sources: LINZ, CCC, SDC, WDC / Transit NZ

Forward Works Spatial View

https://www.webmaps.co.nz/FWP/default.aspx

Logout and Change Password

Basemap

### Legend

- SCIRT FWP
  - Construction
- CCC FWP
  - Construction
  - CWW
  - Capital Facilities
  - Facilities Rebuild
  - Greenspace
  - Infrastructure Rebuild
  - Transport
- CCDU FWP
  - Construction

### Construction - SCIRT

Link ID	10432_15217
Road Name	MANCHESTER STREET
Asset Type	
SCIRT Project	10986
Start	26 Sep 2013
Finish	23 Jan 2014
Duration	
Level of Repair	
Related Key	

Zoom to

### Timeline - all works over 2 weeks

1 km / 0.5 mi

570884 5180724

Basemap data sources: LINZ, CCC, SDC, WDC, Transit NZ

Forward Works Spatial Vie x

https://www.webmaps.co.nz/FWP/default.aspx

Logout and Change Password

Basemap

**Legend**

**SCIRT FWP**  
Construction

**CCC FWP**  
Construction

- CWW
- Capital Facilities
- Facilities Rebuild
- Greenspace
- Infrastructure Rebuild
- Transport

**CCDU FWP**  
Construction

**Construction - CCDU**

ID	24
CCDU Designation	The Frame
Project	Avon + Frame
Project Component	Avon River Park - Stage 5b - Oxford Terrace
Project Status	Construction
Project Description	Tender, review and award contract
Scheduled Start	

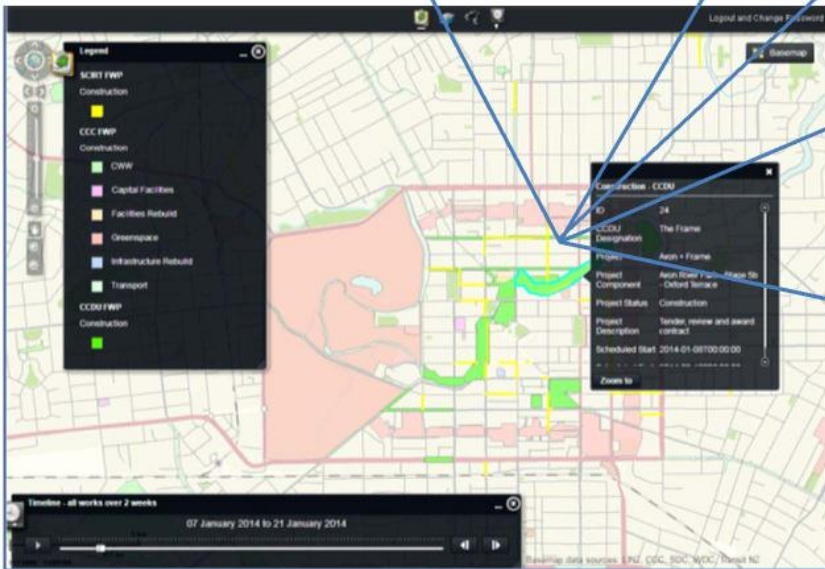
Zoom to

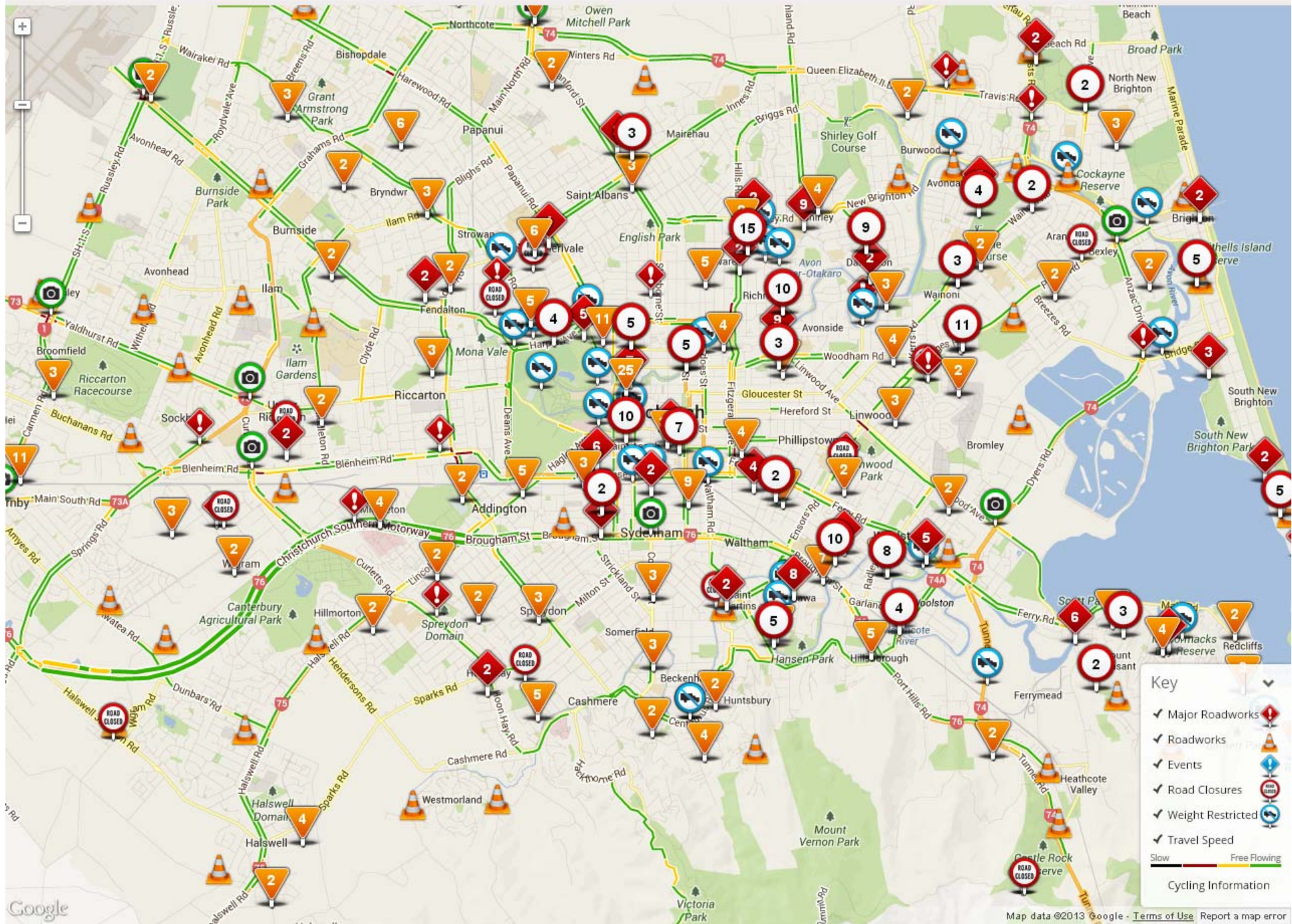
**Timeline - all works over 2 weeks**

1 km  
0.5 mi

Basemap data sources: LINZ, CCC, SDC, WDC, Transit NZ

# Supply chain modeling





en



Welcome to UTURN

Start:

End:

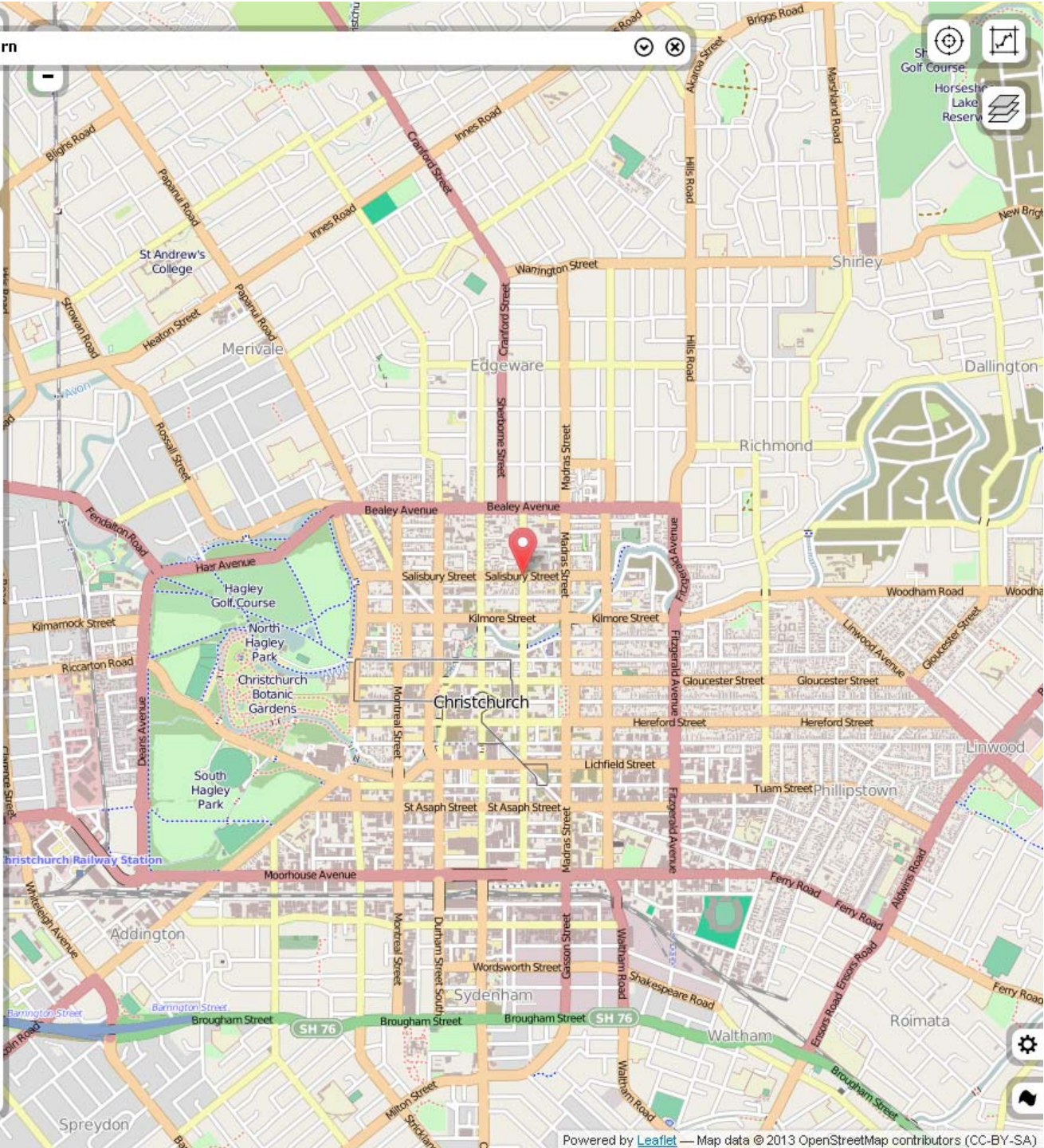
Car (fastest)

### Route Description

A B

Distance: 10.1 km [\[Generate Link\]](#)  
 Duration: 12 min [\[GPX File\]](#)

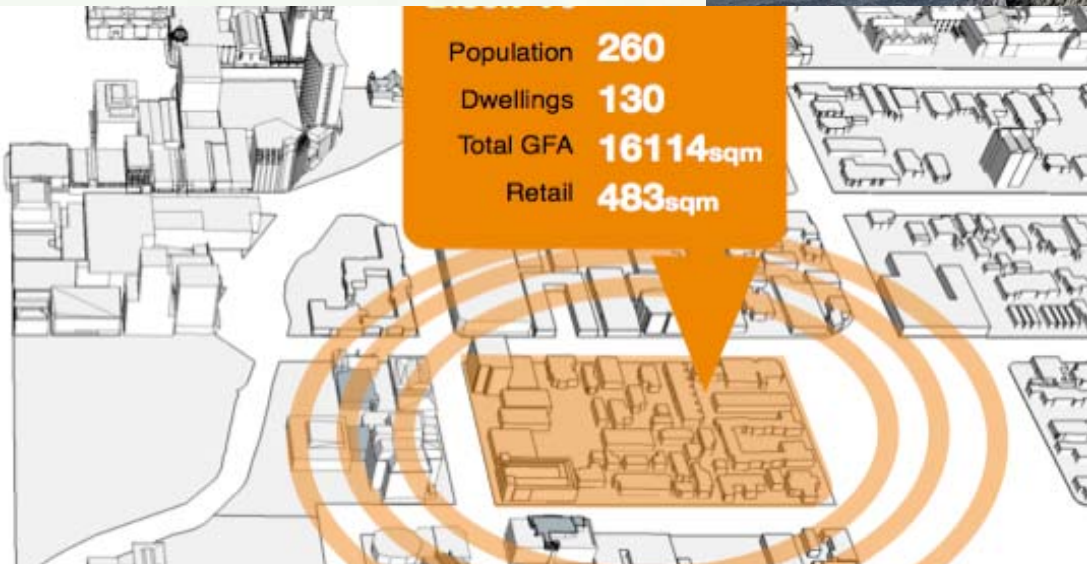
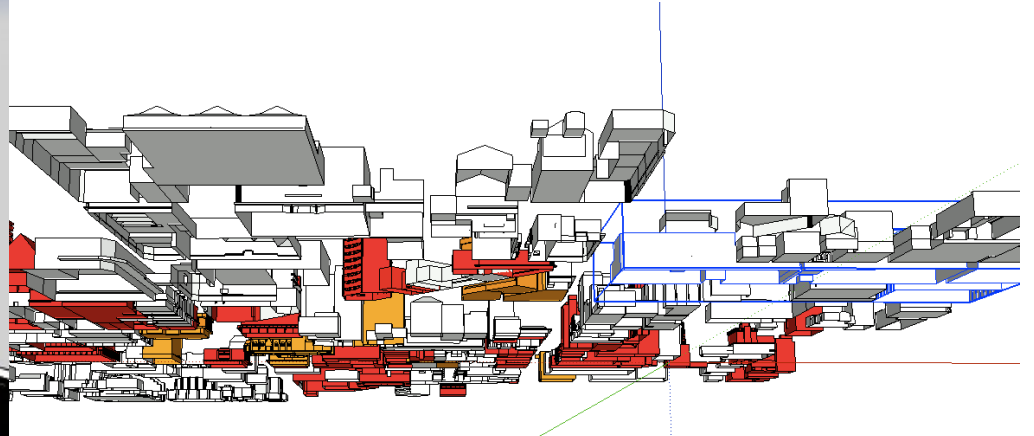
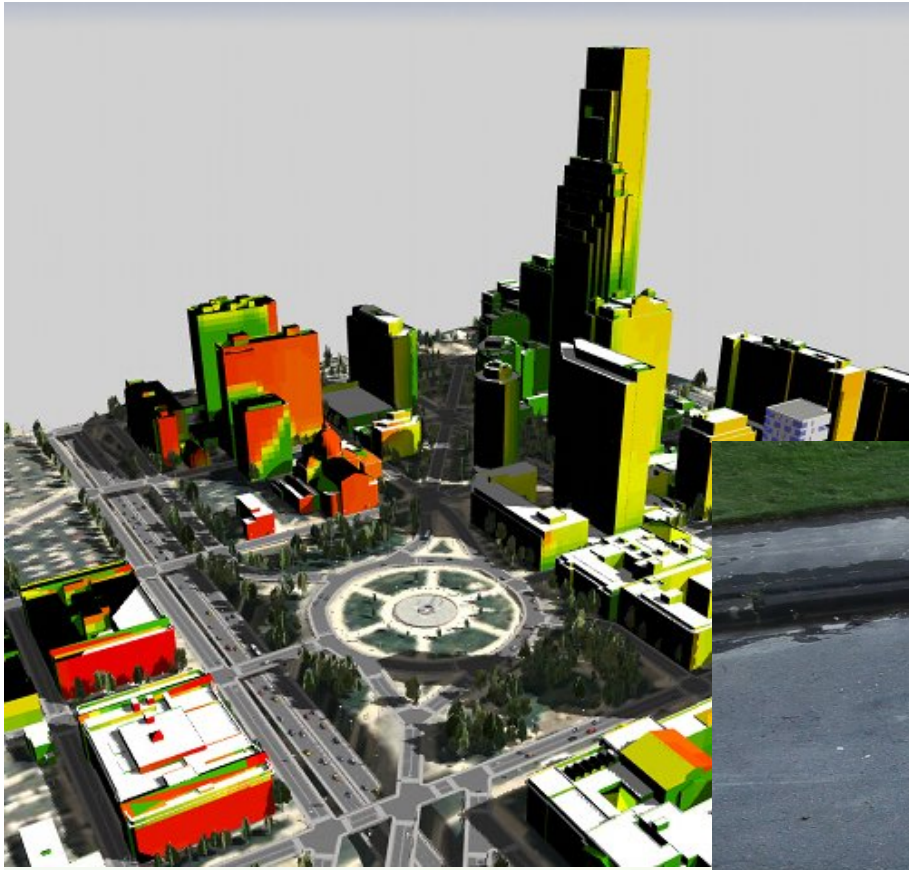
- Head **northwest** onto **Durey Road** 0 m
- Continue 0.55 km
- Turn slight left onto **Dury Road** 25 m
- Enter roundabout and leave at third exit onto **Memorial Avenue** 0.54 km
- Enter roundabout and leave at second exit onto **Memorial Avenue** 4.30 km
- Continue onto **Fendalton Road** 1.68 km
- Turn left onto **Holmwood Road** 0.51 km
- Turn right onto **Rossall Street** 0.47 km
- Continue onto **Carlton Mill Road** 0.51 km
- Continue 91 m
- Continue onto **Bealey Avenue** 0.10 km
- Turn slight right onto **Papanui Road** 24 m
- Continue onto **Victoria Street** 0.43 km
- Turn right onto **Manchester Street** 0 m
- You have reached your destination

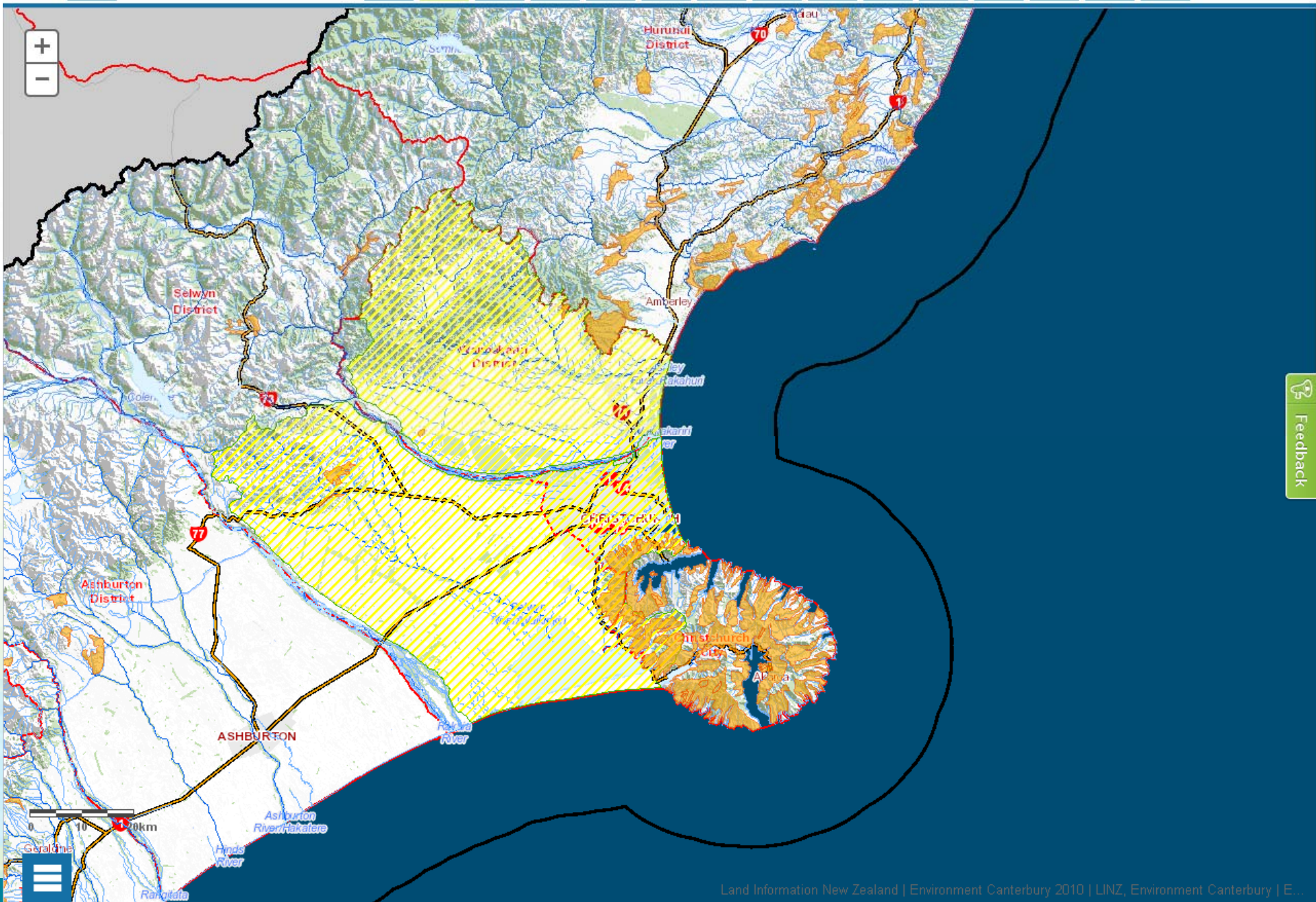


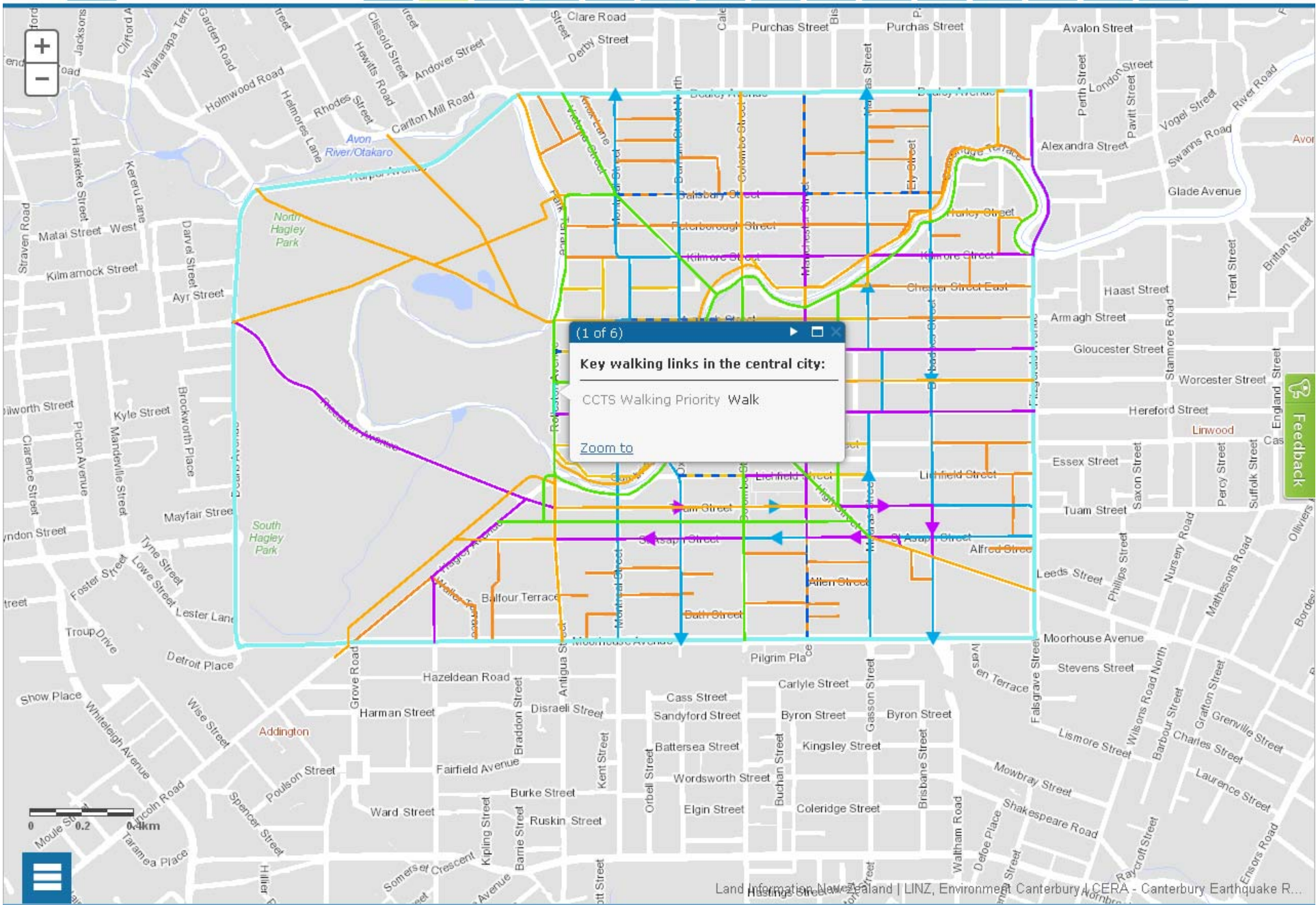
[About](#) [Contact](#)

Antarbury 600 m









(1 of 6)

**Key walking links in the central city:**

CCTS Walking Priority Walk

[Zoom to](#)

Feedback



# Summary:

Investing in an SDI framework that will enable better preparedness and response next time

Response



EVENT

Geospatial data and technology greatly assist in the immediate disaster recovery phase

Prepare

Recover

Providing benefits to the \$40 billion rebuild programme

**Thank you**

**[rdeakin@linz.govt.nz](mailto:rdeakin@linz.govt.nz)**