

Lessons learned from one of New Zealand's most challenging civil engineering projects: rebuilding the earthquake damaged pipes, roads, bridges and retaining walls in the city of Christchurch 2011 - 2016.

LINZ National Forward Works Viewer Presentation

Story: Forward Works Viewer

Theme: Programme Management

A presentation created by LINZ, explaining the application and benefits of the National Forward Works Viewer.

This document has been provided as an example of a tool that might be useful for other organisations undertaking complex disaster recovery or infrastructure rebuild programmes.

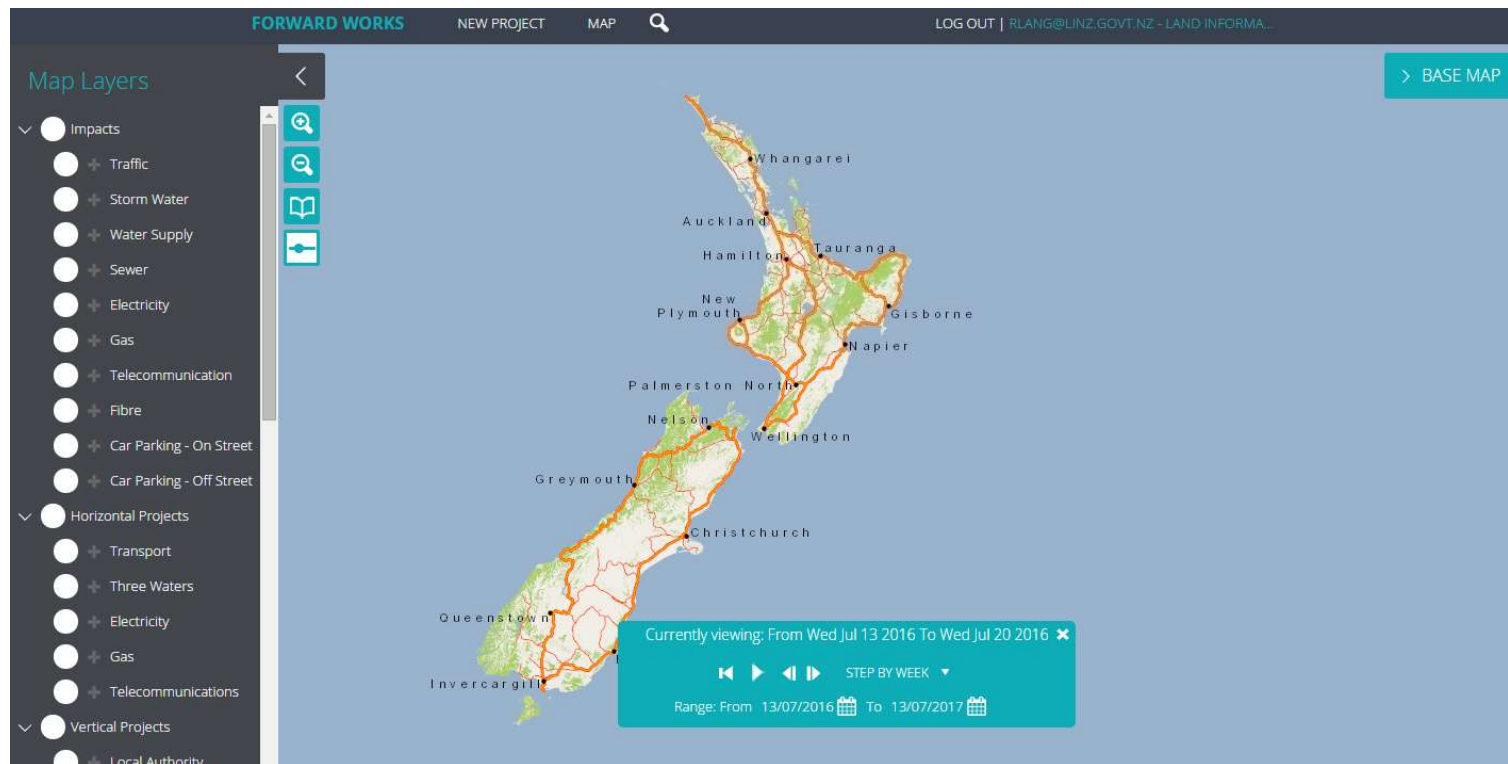
For more information about this document, visit www.scirtlearninglegacy.org.nz



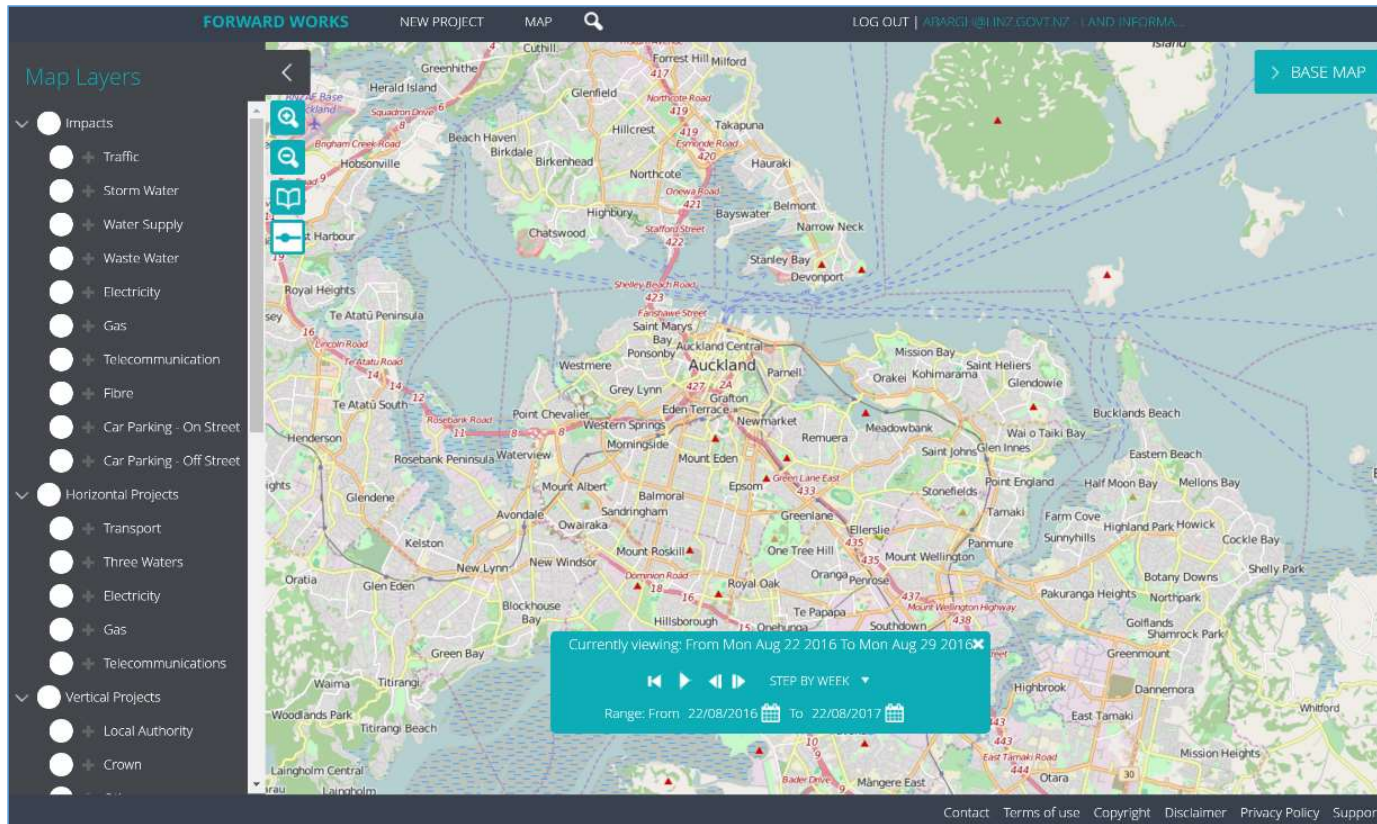
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LINZ National Forward Works Viewer

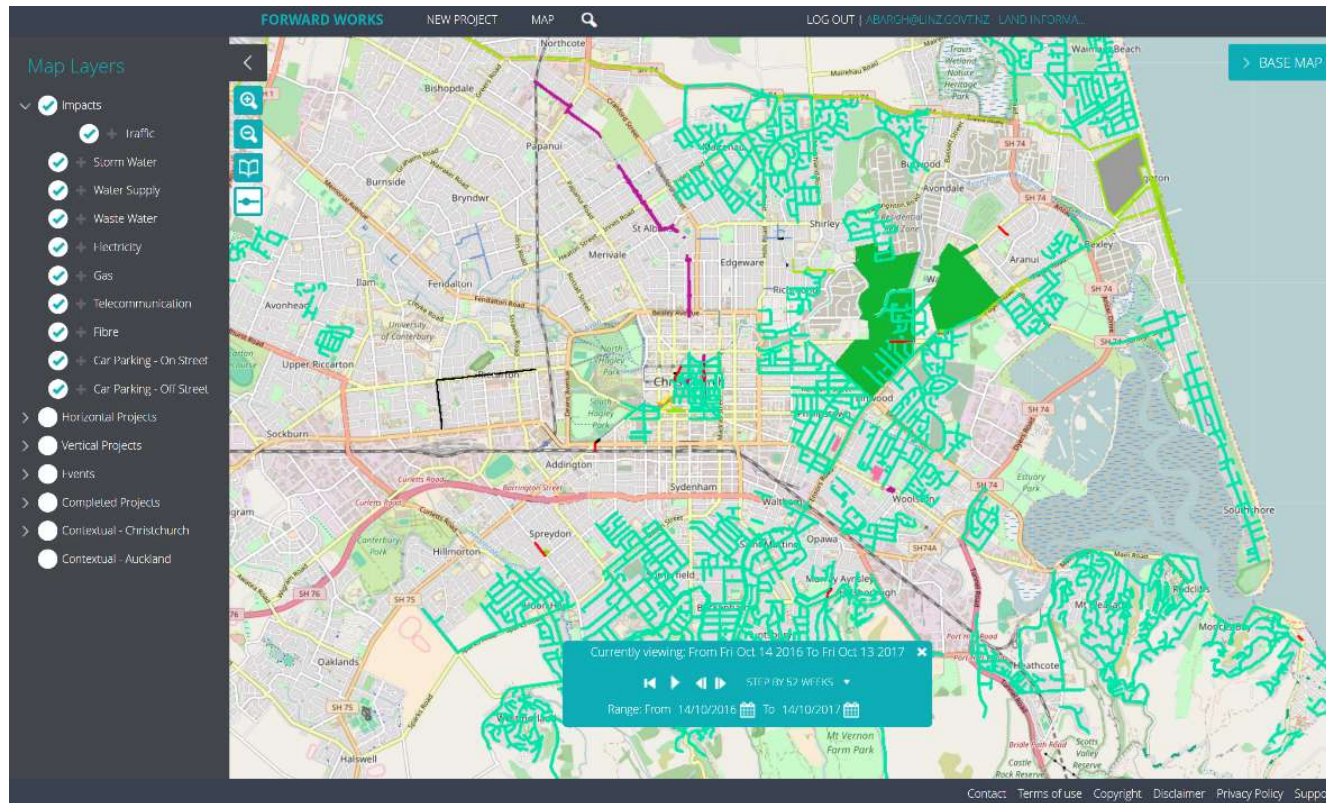


National Forward Works Viewer



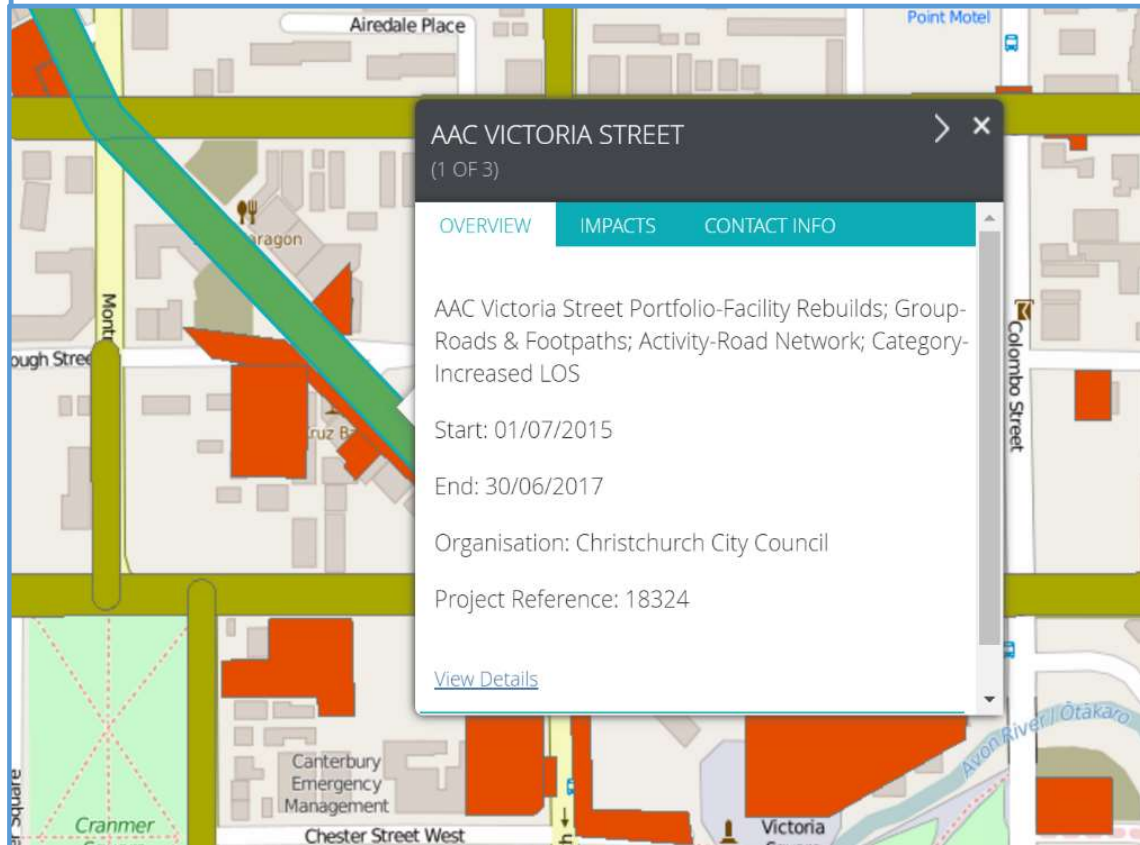
- A platform to coordinate physical work activities
- Supported by a National Governance Model (includes Auckland, LINZ, NZTA, Christchurch, Wellington & National Infrastructure Unit)
- Pooled Govt funding model
- Proven success in Christchurch post-earthquake

What are the benefits?



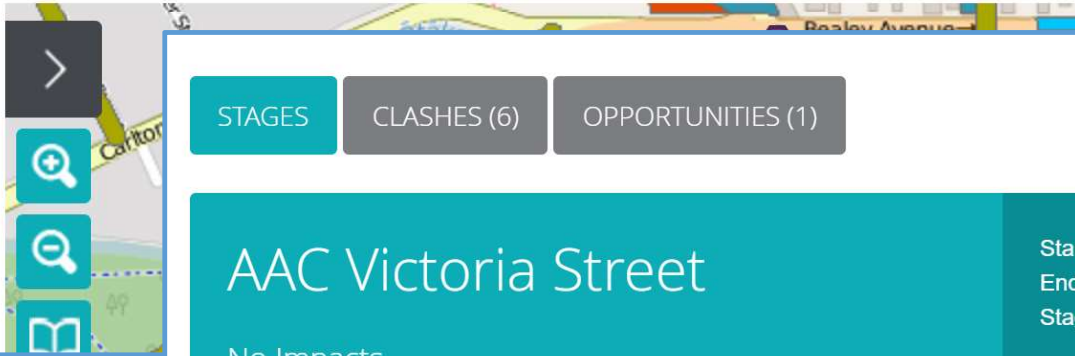
- Encourages collaboration
- Allows for project discovery
- Minimises redundancy (dig once, improved asset protection)
- Minimises disruption to public
- Improved performance of the transport network

Project: AAC Victoria Street #27516



Identify a project

Project: AAC Victoria Street #27516



STAGES

CLASHES (6)

OPPORTUNITIES (1)

AAC Victoria Street

No Impacts

Start: 01/07/2015

End: 30/06/2017

Stage ID: 27603

Review detail

Project: AAC Victoria Street #27516



STAGES

CLASHES (6)

OPPORTUNITIES (1)

AAC Victoria

No Impacts

STAGES

CLASHES (6)

OPPORTUNITIES (1)

The Commons

Start: 01/08/2012

End: 31/12/2016

Gap Filler HQ, Makercrate Fab Lab, Food trucks, the Arcades
<http://www.gapfiller.org.nz/the-commons/> Life in Vacant Spaces (LIVS) manages land on a temporary basis while the landowner works through future plans. The Commons license has a 60 day termination period so that the landowner is able to regain control of the land when it is needed. The end date of these events/projects is TBD as it depends on the landowner's timeframes for development. <http://www.livs.org.nz/>

Fendalton WW 11183

Start: 29/06/2015

End: 27/11/2015

This project consists of the repair and rebuild of the publicly owned wastewater reticulation. The project is bounded by Fendalton Road, Hagley Park (inclusive), Blenheim Road and up to Creyke road. There are 47 wastewater segment repairs to be replaced these repairs include the replacement of 34 junctions. This project includes CIPP patches, full length lining and another of lateral repairs

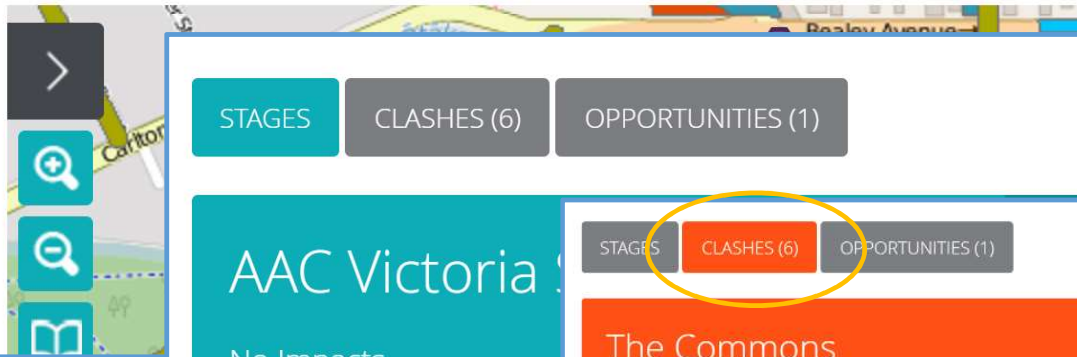
Defferred Work Central City

Start: 14/12/2015

End: 31/05/2016

Review clashes

Project: AAC Victoria Street #27516



STAGES

CLASHES (6)

OPPORTUNITIES (1)

AAC Victoria

No Impacts

STAGES

CLASHES (6)

OPPORTUNITIES (1)

The Commons

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Start: 01/08/2012
End: 31/12/2016

Fendall

This project consists of wastewater reticulation in Hagley Park (including 47 wastewater pipes) and the replacement of length lining and...

Defferre

STAGES

CLASHES (6)

OPPORTUNITIES (1)

AAC Kilmore Street (Fitzgerald - Park) two way conversion

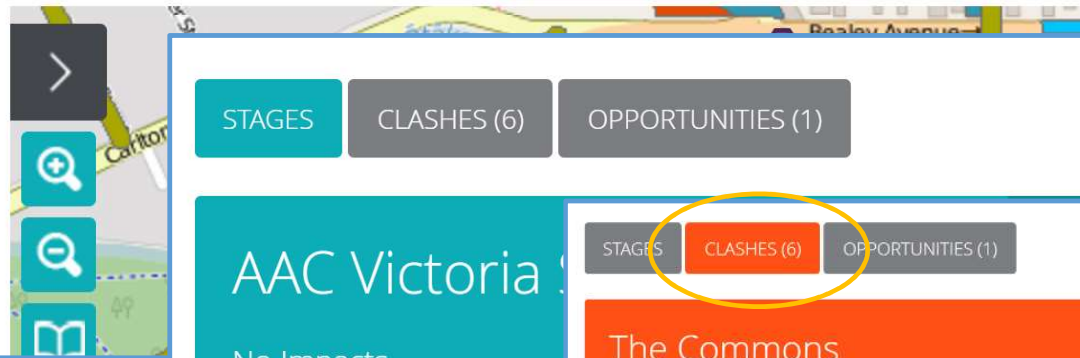
AAC Kilmore Street (Fitzgerald - Park) two way conversion Portfolio-Facility Rebuilds; Group-Roads & Footpaths; Activity-Road Network; Category-Increased LOS

Start: 01/07/2017
End: 30/06/2019

Review opportunities

Project: AAC Victoria Street #27516

Project contact details for collaboration



STAGES

CLASHES (6)

OPPORTUNITIES (1)

AAC Victoria

No Impacts

STAGES

CLASHES (6)

OPPORTUNITIES (1)

The Commons

Start: 01/08/2012
End: 31/12/2016

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<http://www.gapfiller.org.nz/the-commons/> Life in Vacant Spaces (LIVS) manages land on a temporary basis while the landowner works through future plans. The Commons license has a 60 day termination period so that the landowner is able to regain control of the land when it is needed. The end date of these events/projects is TBD as it depends on the landowner's timeframes for development. <http://www.livs.org.nz/>

Fendall

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STAGES

CLASHES (6)

OPPORTUNITIES (1)

AAC Kilmore Street (Fitzgerald - Park) two way conversion

Start: 01/07/2015
End: 30/06/2017

AAC Kilmore Street (Fitzgerald - Park) two way conversion Portfolio-Facility Rebuilds; Group-Roads & Footpaths; Activity-Road Network; Category-Increased LOS

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Project Summary

ID: 27516

Type: Horizontal Construction

Infrastructure: Transport

Status: Construction

State: Proposed

Organisation: Christchurch City Council

Reference: 18324

Start date: 01/07/2015

End date: 30/06/2017

AAC Victoria Street Portfolio-Facility Rebuilds;
Group-Roads & Footpaths; Activity-Road Network;
Category-Increased LOS

Contact Information

Steve McNeill


contact @ccc.govt.nz
03941 0000

Last updated: 02/12/2015 09:58

Everyone can see this project

How do I get access?

www.forwardworks.co.nz

**Land Information
New Zealand**
Toitū te whenua

Please login

Username:

Password:

LOGIN

[Reset password](#)

This Forward Works Viewer is a secure service for authorised users only.
If authorised, you will need to login with a username and password that will have been provided to you.
By logging into this Forward Works Viewer, you are agreeing to be bound by our [Terms of use](#) (last updated: 30 May 2016).

[Request access](#)

www.govt.nz

How do I load project data?

4 Step process through user interface

FORWARD WORKS NEW PROJECT MAP LOG OUT [VIEW YOUR PROJECTS](#) [VIEW MY PROFILE](#)

General project information

Project name Traffic Impact Test	Project type Horizontal Construction
Project reference 77777	Infill nature type Transport
Start date 01/07/2016	Project status Construction
End date 30/11/2016	
Contact first name Kersten	Project summary This project is set up to illustrate the Broad Workis Viewer.
Contact last name Tepp	
Contact phone 0212145424	
Contact email Kersten.Klopp@broad.co.uk	

1st Screen

NEXT

FORWARD WORKS NEW PROJECT MAP

LOG OUT | FORWARD WORKS | [FORWARD WORKS](#)

Project extent

Please use the editing tools provided to define the project extent

Enter an address to zoom the map to:
e.g. 75 columbo st

Map Layers

- Impacts
- Traffic
- Storm Water
- Water Supply
- Sewer
- Electricity
- Gas
- Telecommunication
- Fibre
- Car Parking - On Street
- Car Parking - Off Street
- Horizontal Projects
- Vertical Projects

Map interface showing a purple polygon defining the project extent. A teal overlay displays the current viewing range: "Currently viewing: From Thu, 04 Oct 2016 To Thu, 04 Jan 2017". Below this, it shows "Range from: 07/01/2016 To: 01/01/2017" with navigation icons. A "BASE MAP" button is in the top right. Navigation arrows are at the bottom.

2nd Screen

← PREVIOUS NEXT →

Project stages

Project start date 01/07/2016 Project end date 30/11/2016

Please detail all stages of the project below. Click and drag the green arrows beside a stage to change the order of the stages.

Bridge Start date End date Duration days Selected impact(s) Yes No

This stage will create a Traffic impact

Retaining Wall Start date End date Duration days Selected impact(s) Yes No

This stage will create a Traffic impact

ADD STAGE

3rd Screen

PREVIOUS NEXT

FORWARD WORKS

NEW PROJECT

NEW

LOG OUT

Stage: Retaining Wall

Please create the 1st or 2nd stage for each stage. Select a road segment or junction to create an impact

Retaining Wall:

Impact dates

Time of effect

Configure impact

01/01/2020

30/06/2020

20:00

06:00

Those learn to update manually

[edit one count](#)

A

B

Take count

Enter count

Enter count manually

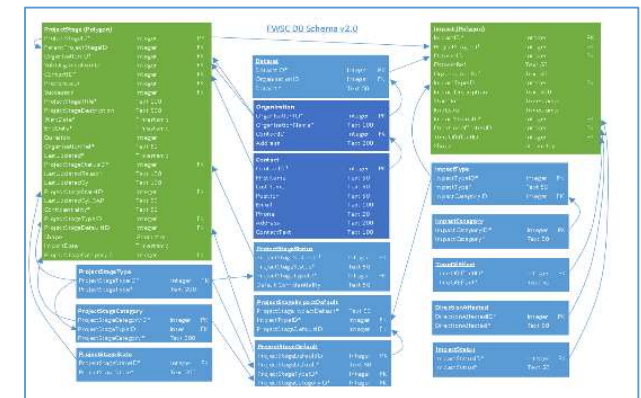
SAVED IMPACT

This is the primary impact with the displayed area below it

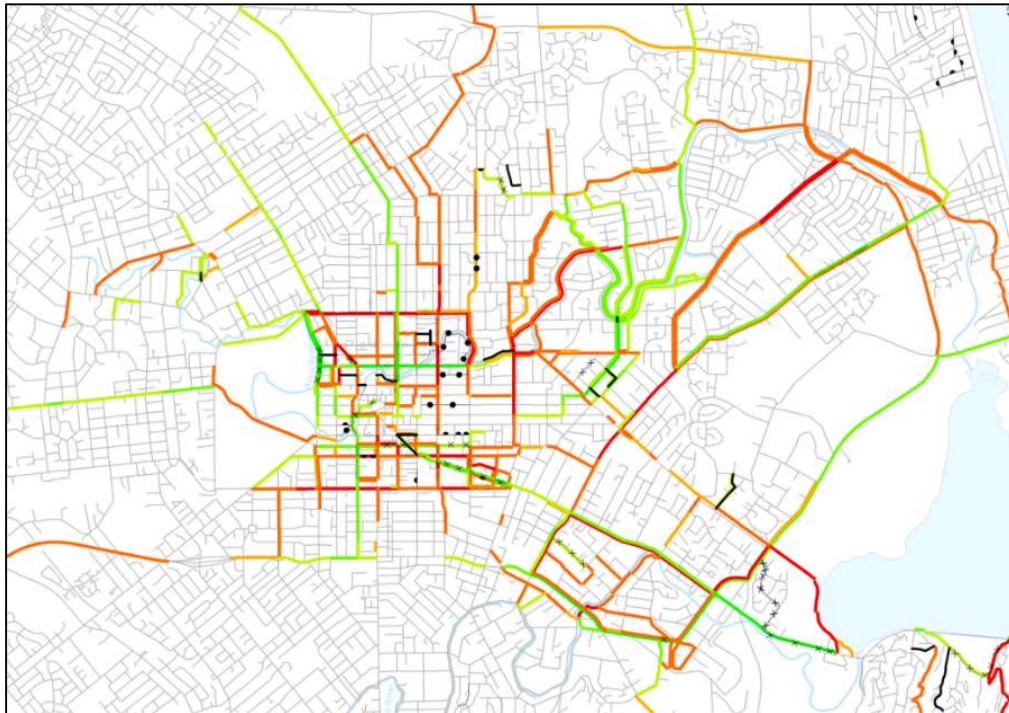
[View Traffic Impacts](#)

4th Screen

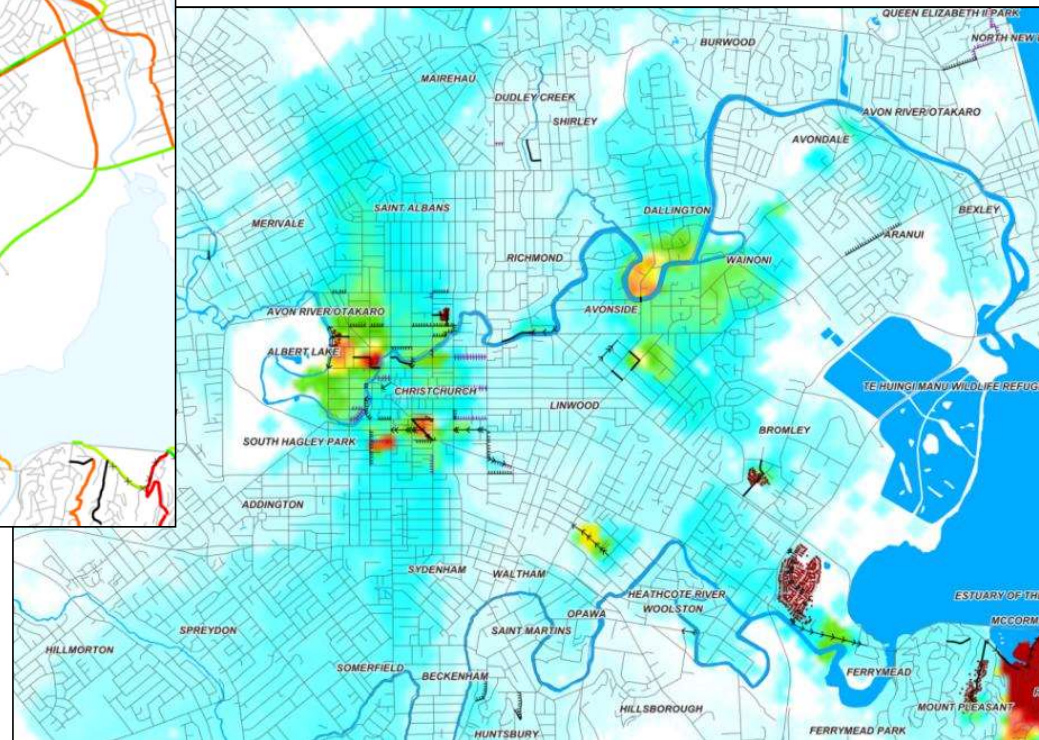
Or, bulk upload process...



Can my organisation extract data?



Data feature service provided to extract data and undertake offline analysis



For more information:

For access:

support@forwardworks.co.nz

Programme enquiries:

abargh@linz.govt.nz

rlang@linz.govt.nz

