The value of open, authoritative, trusted transport data and information

Presentation to the Transport Data Knowledge Hub Open Data event, 26 July 2018, Wellington

by Keitha Booth, Independent Commentator

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Agenda

- Open data benefits
- Where to find transport open data
- Partially open or ajar transport data
- How is NZ's open data being re-used?
- How are people collaborating?
- Lets open up more transport data

Government's expectations from open information release

- Economic, cultural & environmental growth
- Better social outcomes
- Better public services
- A more transparent and democratic government

Benefits expected by NZ publishers of open transport data

- Better evidence base on which investment decisions can be made
- Engaging and collaborating to solve important national and local issues
- Supporting innovation
- Exploring and downloading open data
- Discovering and building apps, online tools and widgets

Who is publishing open transport data?

http://www.linz.govt.nz/data/linz-data-service

LINZ Data Service

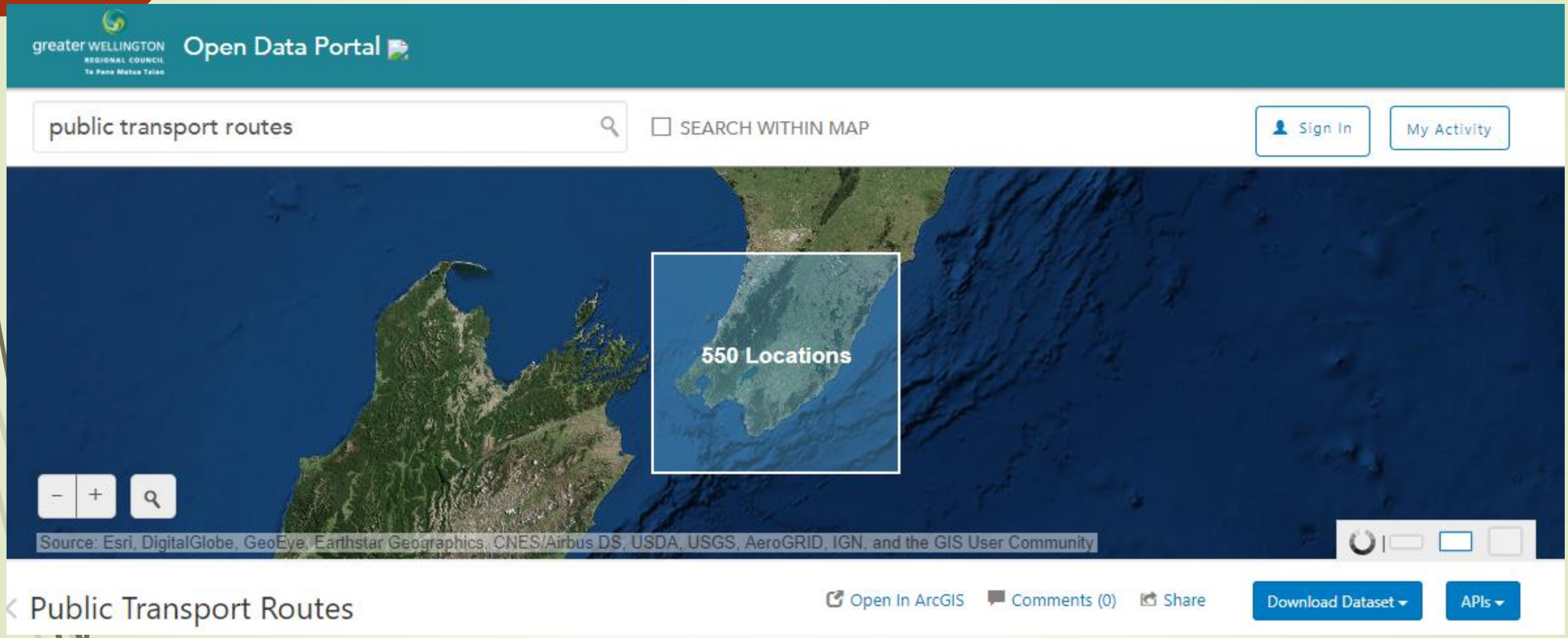
Free online access to New Zealand's most up-to-date land and seabed data.

We provide free online access to New Zealand's most up-to-date land and seabed data.

You can search, browse for and download data online on the LINZ Data Service (LDS). You can add datasets, visualise data in your map, and crop datasets – all without the need for special software. You can also integrate our web services into your own applications.

https://data-atgis.opendata.arcgis.com/

https://data-gwrc.opendata.arcgis.com/



PNCC Cycle Lanes

On-road cycle lanes within the Palmerston North TLA.

HTML Esri REST GeoJSON CSV KML ZIP OGC WFS

PNCC Bus Route

Bus routes for Palmerston North, shared with Horizons Regional Council.

HTML Esri REST GeoJSON CSV KML ZIP OGC WFS

PNCC Roads

Road Center lines for Palmerston North City Council TLA.

HTML Esri REST GeoJSON CSV KML ZIP OGC WFS

PNCC Bus Stops

Bus stops in Palmerston North.Bus routes operated by Horizons regional council.

HTML Esri REST GeoJSON CSV KML ZIP

Car Parks Wellington

On street parking within Wellington, New Zealand Dataset includes: Metered, Purpose, Orientation, Street and Asset Owner Created 17 Sept 2017

HTML Esri REST GeoJSON CSV KML ZIP

WCC Accessible Waterfront Route

This data set represents the accessible route along the Wellington Waterfront for persons with disabilities. The route starts from Queens Wharf and encompasses The Lagoon, Te...

HTML Esri REST GeoJSON CSV KML ZIP

WCC Kerbs

Lines representing kerb lines, edge of seal and traffic islands over urban Wellington including Makara Beach and Makara Village. Captured in 1996 and updated in 1998, 1999,...

HTML Esri REST GeoJSON CSV KML ZIP

Wellington City Mobility Scooter Locations

Mobility scooters are provided by Wellington City Council and TSB Bank to enable people with limited mobility to freely access all that Wellington has to offer. People aged 18+...

HTML Esri REST GeoJSON CSV KML ZIP

Attribution 4.0 International (CC BY 4.0)

This is a human-readable summary of (and not a substitute for) the license. Disclaimer.

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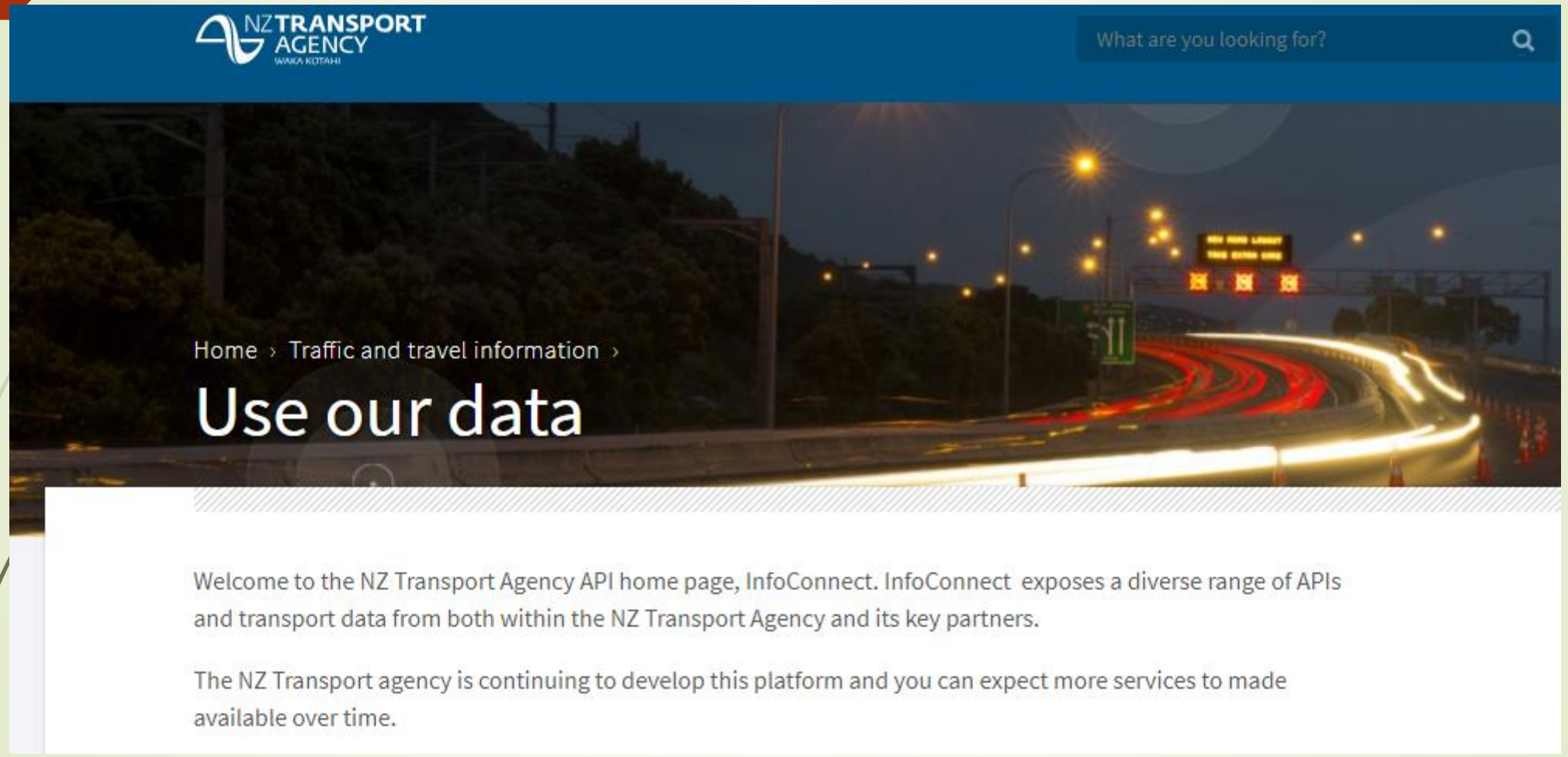
Share — copy and redistribute the material in any medium or format

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

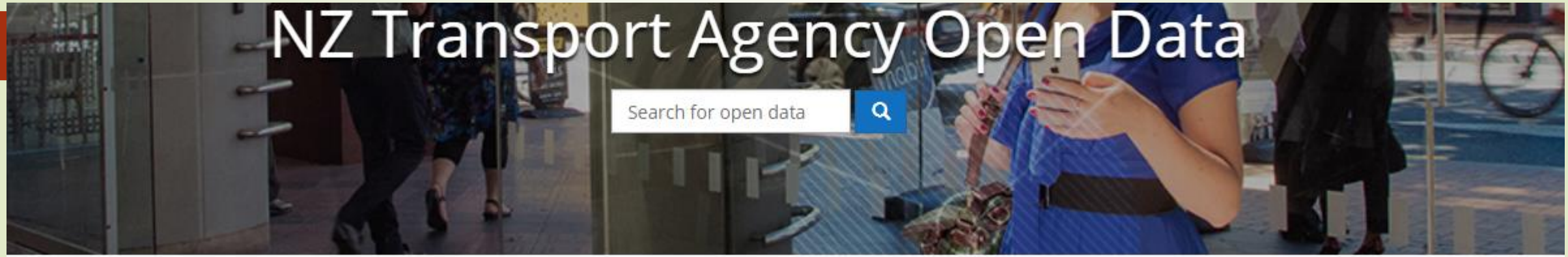
The licensor cannot revoke these freedoms as long as you follow the license terms.

Some is partially open or ajar…

https://www.nzta.govt.nz/traffic-and-travel-information/infoconnect-section-page/



https://opendata-nzta.opendata.arcgis.com/



The Open Data Portal is a public platform where the NZ Transport Agency shares open data. You can explore, analyse, and download data in a range of formats. Open data enables engagement and collaboration to solve important issues. Lets make great journeys to keep New Zealand moving, together!

How to use the Open Data Portal

Search for the data you need using the filters above. You can find out more about how to use the Open Data Portal, or you could choose to see all data.

Roading

Crashes

Vehicles

Driver licences

National Road Centreline

This centreline dataset is a hybrid of both public and private data. The geometry (centreline) has been extracted from CoreLogic and the carriageways and attribution (information behind the centreline) is supplied from individual Road Controlling Authorities (RCA), or councils.

Due to the shared ownership, the centreline dataset has terms of use that need to be agreed to before downloading can occur.

Please note: the March 2018 release holds 72% of RCA attribution as we are still awaiting agreement from some councils to share their data.

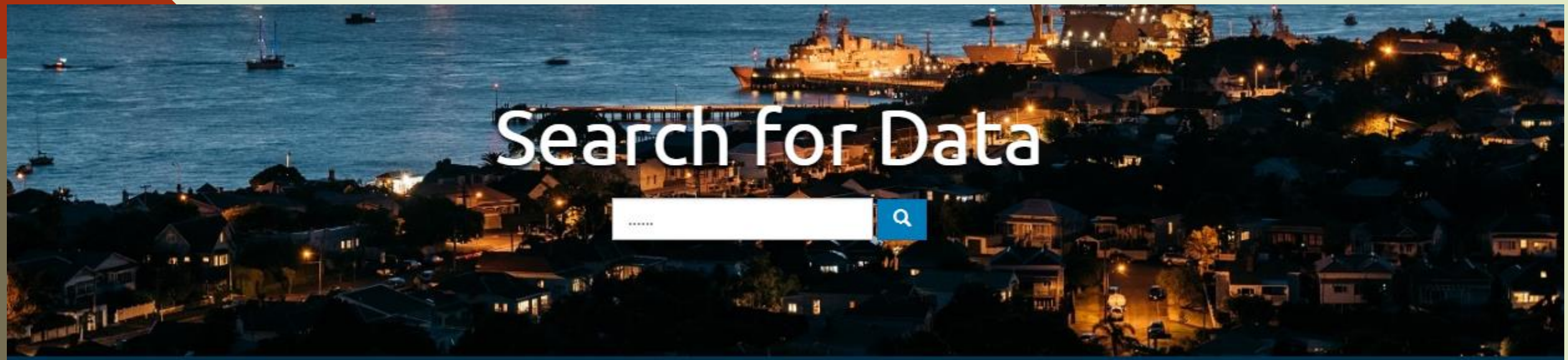
This centreline dataset will be updated monthly.

Terms of use

The National Road Centreline data is made available to you on the following terms:

1. You may use the data, including making derivative works, for non-commercial purposes only.
2. You must not use, or permit any other person to use, the data in vehicle or personal turn-by-turn real time navigation systems.
3. You must not make the data, or any part of the data (excluding derivative works you create), available to any other person.
4. You may make derivative works that you have created using the data available to third parties provided that such derivative works:
   a. shall be used for non-commercial purposes only;

https://data-aucklandcouncil.opendata.arcgis.com/



Auckland Council Open Data is a public platform where council shares data about the city we live, work and play in. Use this site to discover, explore and download council-owned datasets in a range of format.

Most of the datasets are made available to you under the Creative Commons Licence 4.0. If specific restrictions apply to the dataset you are interested in this will be stipulated on the download page.

Explore Our Data Categories

Auckland 0.075m Urban Aerial Photos Index Tiles (2015-2016)

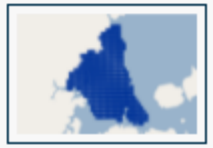
Shared by spencer.han

Index Tiles ONLY, for actual orthophotos see layer Auckland 0.075m Urban Aerial Photos (2015-16) Orthophotography over Auckland City taken in the flying season (summer period) 2015 -16. Imagery was captured for the 'Auckland Council' by AAM NZ Limited, 6 Ossian St, NAPIER, New Zealand. Data has subsequently been

Custom License 7/9/2018 Document

Auckland 0.5m Rural Aerial Photos Index Tiles (2010-2012)

Shared by spencer.han

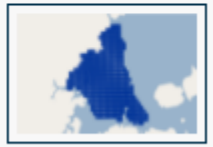


Index Tiles ONLY, for actual orthophotos see layer Auckland 0.5m Rural Aerial Photos (2010-2012). Orthophotography for the Auckland region taken between 2010 and 2012. Coverage encompassed the entire Auckland Council area. Imagery was captured for the Auckland Council by NZ Aerial Mapping Ltd, 208 Warren

Custom License 7/9/2018 Document

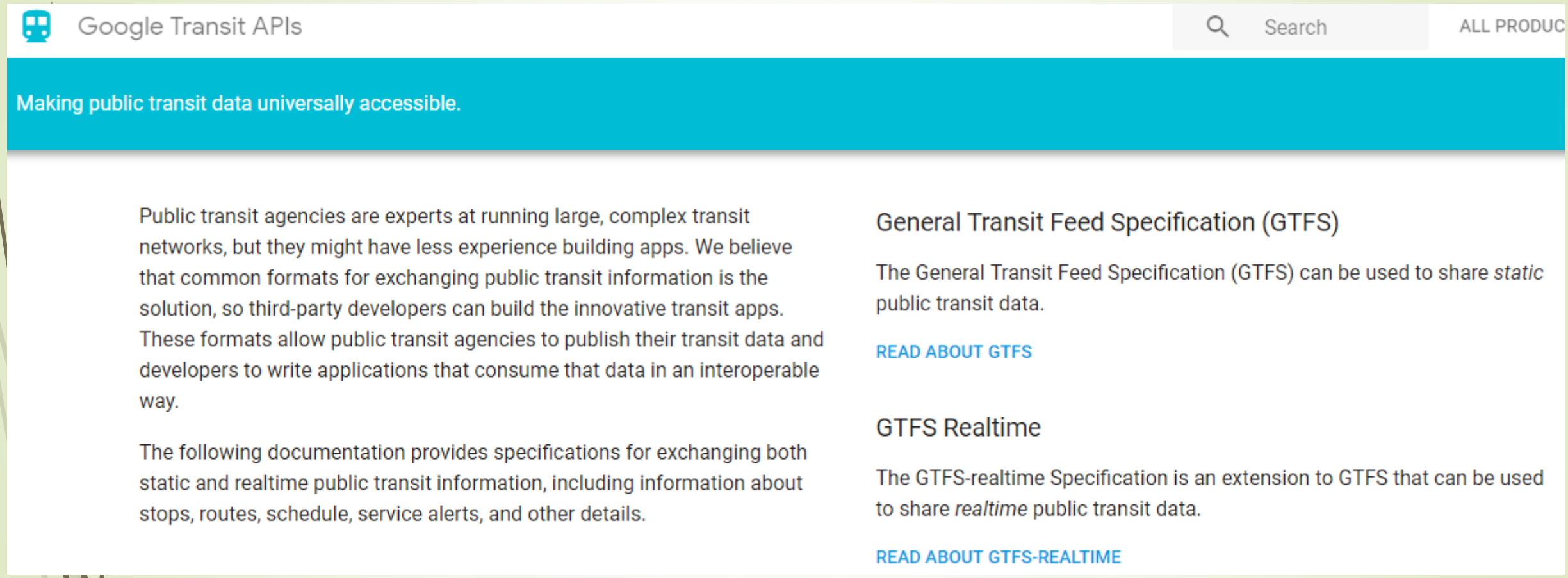
Auckland 0.075m Urban Aerial Photos Index Tiles (2010)

Shared by spencer.han



Index Tiles ONLY, for actual orthophotos see layer Auckland 0.075m Urban Aerial Photos (2010). Orthophotography for the Auckland Council taken during 2010. Coverage encompassed selected urban areas within the Auckland Council area. Imagery was captured for 'Auckland Council' by NZ Aerial Mapping Ltd, 208 Warren Street, PO Box 6,

Custom License 7/9/2018 Document


Google Transit APIs
Search
ALL PRODUC
Making public transit data universally accessible.
Public transit agencies are experts at running large, complex transit networks, but they might have less experience building apps. We believe that common formats for exchanging public transit information is the solution, so third-party developers can build the innovative transit apps. These formats allow public transit agencies to publish their transit data and developers to write applications that consume that data in an interoperable way.
The following documentation provides specifications for exchanging both static and realtime public transit information, including information about stops, routes, schedule, service alerts, and other details.
General Transit Feed Specification (GTFS)
The General Transit Feed Specification (GTFS) can be used to share static public transit data.
READ ABOUT GTFS
GTFS Realtime
The GTFS-realtime Specification is an extension to GTFS that can be used to share realtime public transit data.
READ ABOUT GTFS-REALTIME

Massive Google price rise off the rails, Metlink complains

Tom Pullar-Strecker • 19:37, June 19 2018

Wellington's Metlink is crying foul after Google increased the price the public transport provider will have to pay to use Google Maps from $1000 a month, to $30,000 a month.

Spokesman Clayton Anderson said the massive price hike was not fair and it had been given too little notice of the change, which will take effect from mid-July.

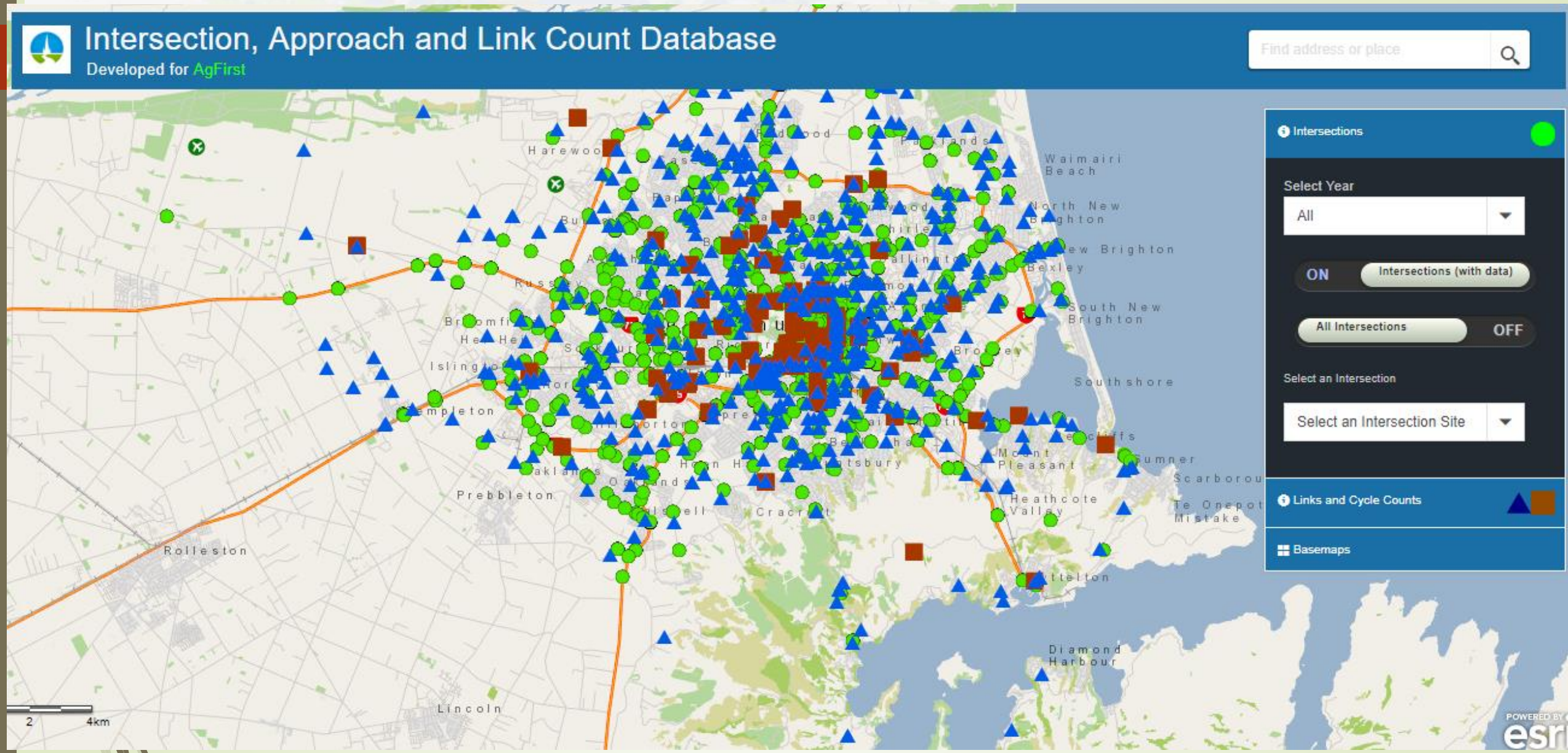
The price change is part of a global reset by Google affecting a wide range of businesses including retail chains and real estate agents.

Auckland Transport spokesman Mark Hannan said it was not impacted as it used an open-source mapping service, ESRI/Open Streetmaps.

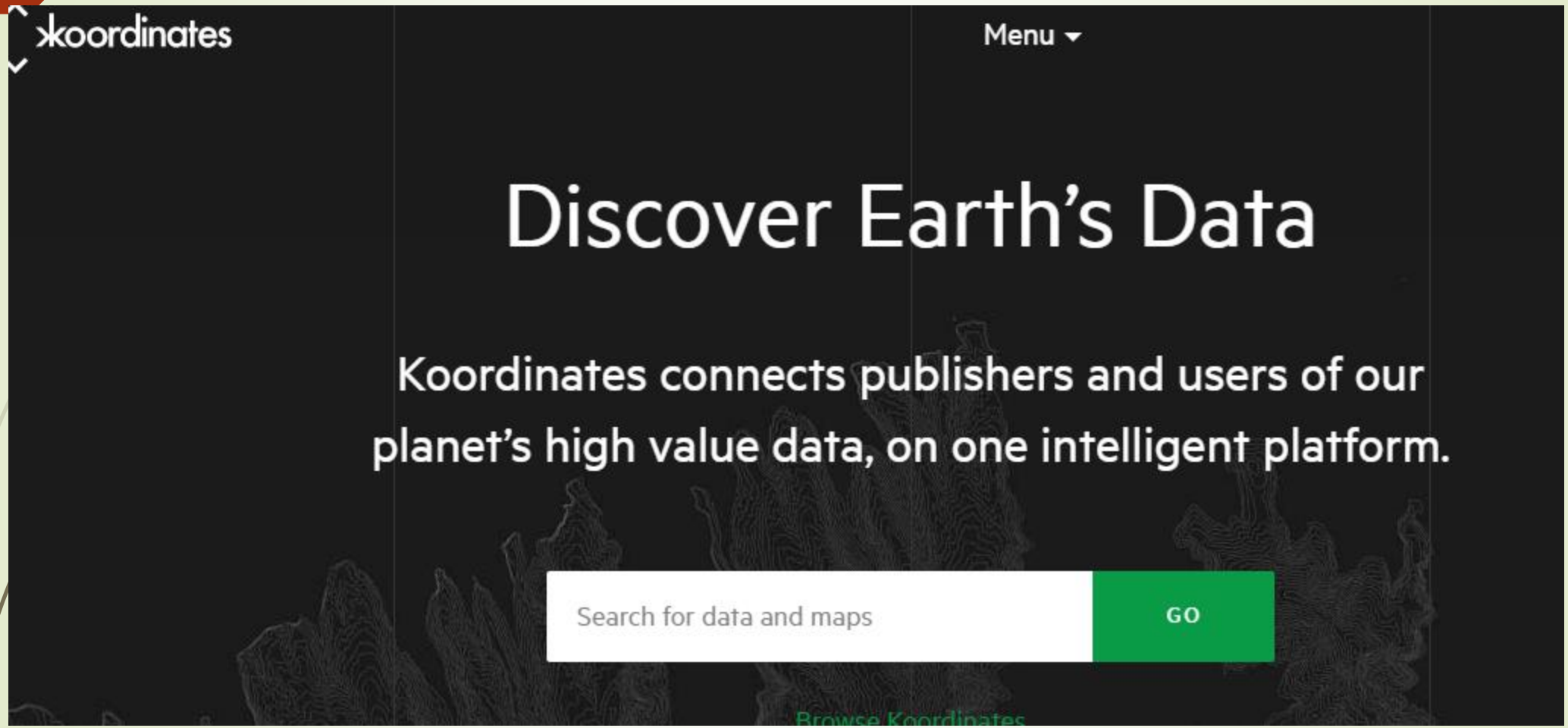
Cost had been one of the drivers in that decision, Hannan said.

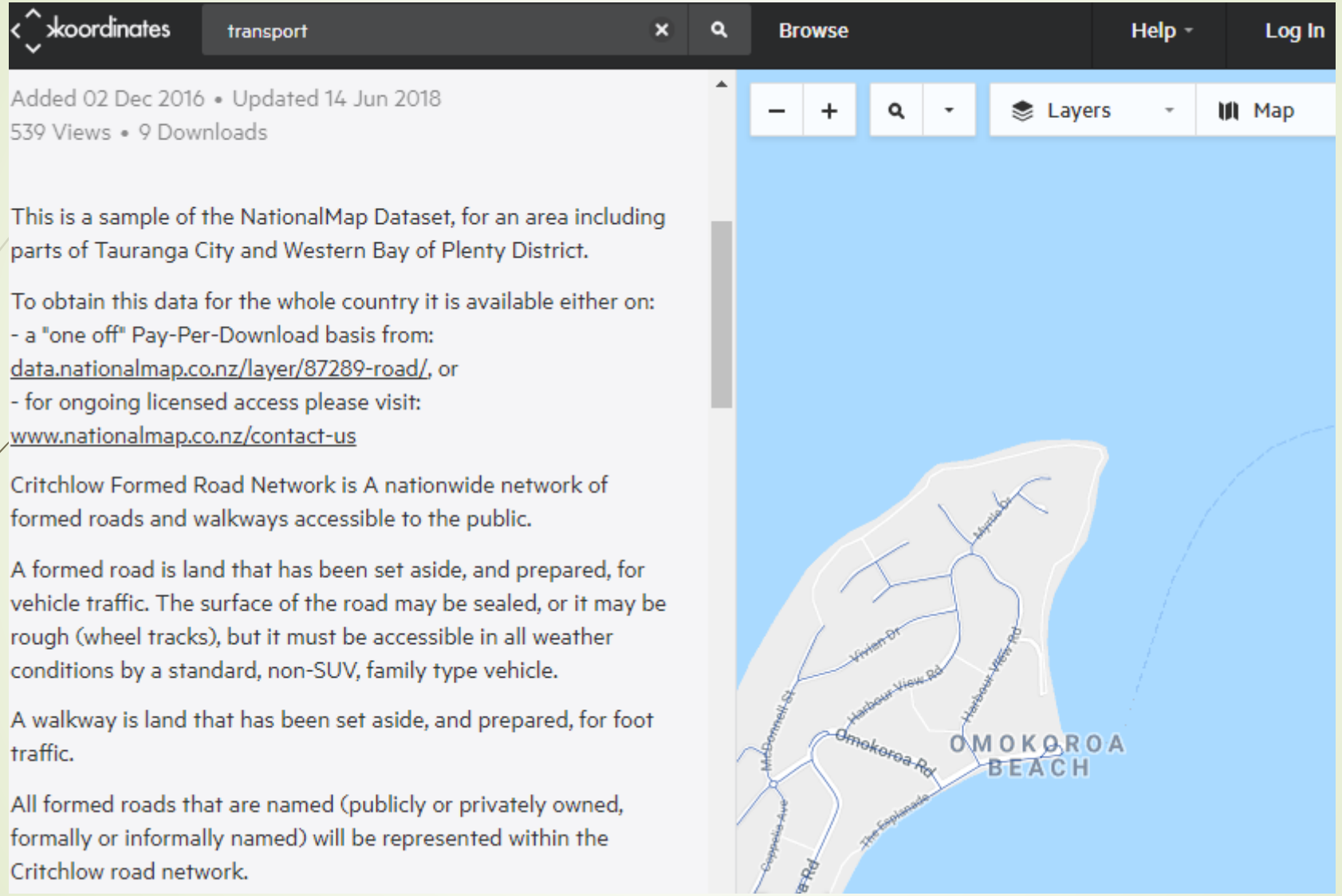
This is a prototype application provided by **Agfirst Consultants Environmental Limited** to facilitate the viewing of **Christchurch City Council** traffic count data.

http://ccc.interpret.co.nz/trafficcount/



https://koordinates.com/




koordinates
transport
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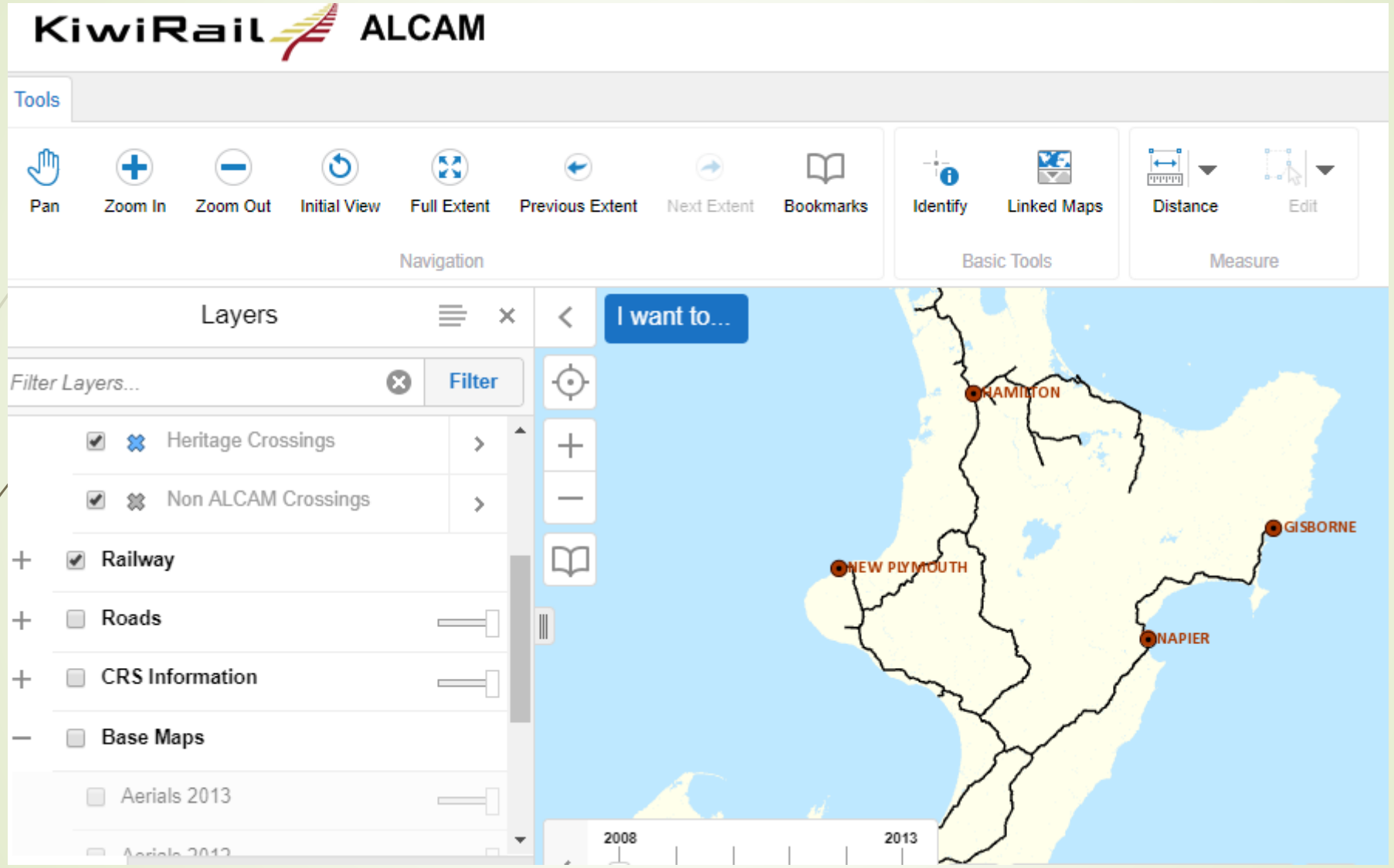
Log In
Added 02 Dec 2016 • Updated 14 Jun 2018
539 Views • 9 Downloads
This is a sample of the NationalMap Dataset, for an area including parts of Tauranga City and Western Bay of Plenty District.
To obtain this data for the whole country it is available either on:
- a "one off" Pay-Per-Download basis from:
data.nationalmap.co.nz/layer/87289-road/, or
- for ongoing licensed access please visit:
www.nationalmap.co.nz/contact-us
Critchlow Formed Road Network is A nationwide network of formed roads and walkways accessible to the public.
A formed road is land that has been set aside, and prepared, for vehicle traffic. The surface of the road may be sealed, or it may be rough (wheel tracks), but it must be accessible in all weather conditions by a standard, non-SUV, family type vehicle.
A walkway is land that has been set aside, and prepared, for foot traffic.
All formed roads that are named (publicly or privately owned, formally or informally named) will be represented within the Critchlow road network.
Layers
Map
Vivien Dr
Harbour View Rd
Omokoroa Rd
The Esplanade
OMOKOROA
BEACH

How is NZ's transport data being re-used?

https://gis.kiwirail.co.nz/maps/?viewer=levelcrossings



http://www.anz.co.nz/about-us/economic-markets-research/truckometer/

What: A monthly economic report available to ANZ customers and the public; based on a Light Traffic index and Heavy Traffic index generated from open data and mapped to Growth Domestic Product (GDP) growth

Where: http://www.anz.co.nz/about-us/economic-markets-research/truckometer/

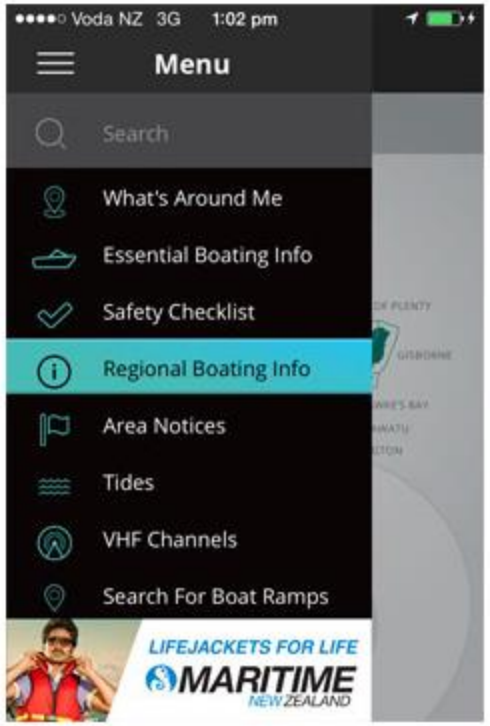
Why: The public release of NZ Transport Agency state highway data allowed ANZ Bank to explore a new, timely source of activity data to aid its understanding of the economy.

When: 2012 –

Campermate

'CamperMate' iPhone/Android Travel App
110,000+ downloads and crowdsourcing GPS locations
Voda NZ
10:15 am
CamperMate
Map
Gulf Harbour

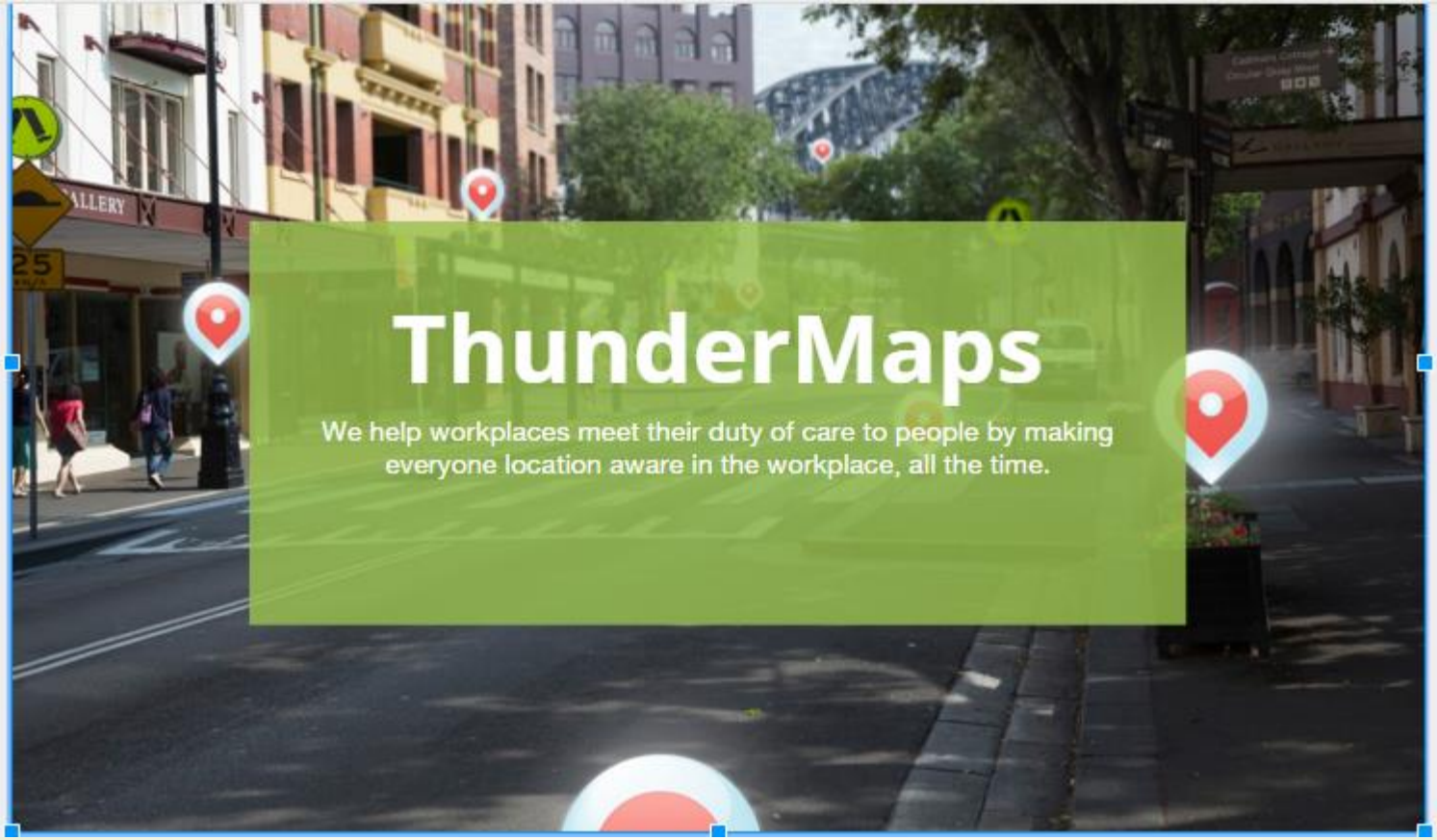
MarineMate


Voda NZ 3G 1:02 pm
Menu
Search
What's Around Me
Essential Boating Info
Safety Checklist
Regional Boating Info
Area Notices
Tides
VHF Channels
Search For Boat Ramps
LIFEJACKETS FOR LIFE
MARITIME
NEW ZEALAND

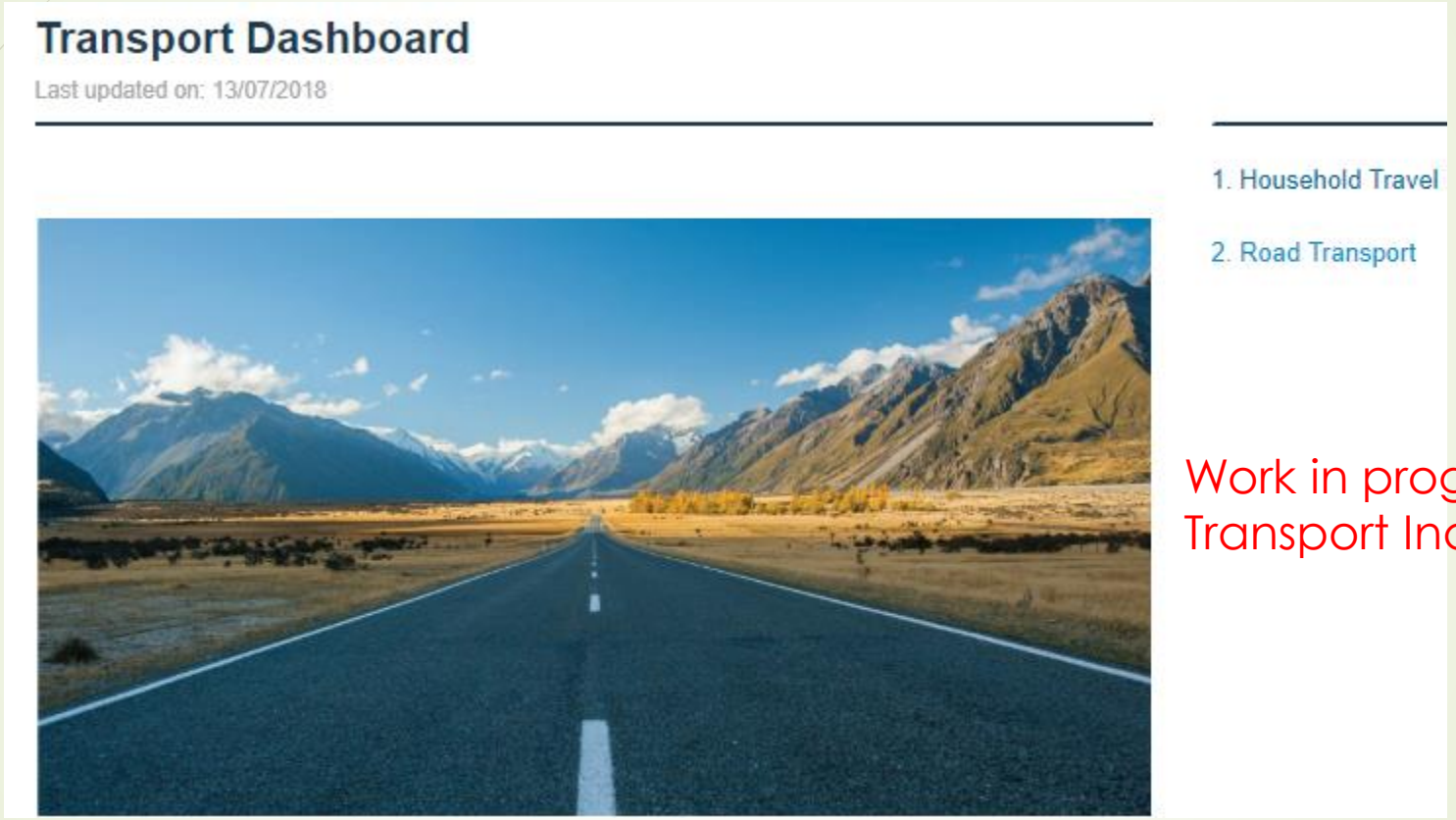
Voda NZ 3G 2:51 pm
What's Around Me
MarineMate
Cable Protection Area
No Fishing - No anchoring
BROWNS BAY
ROSEDALE
GLENFIELD
TAKAPUNA
Auckland
GREYLYNN

Voda NZ 3G 2:48 pm
VHF Channels
LIST
MAP
Taranaki Ch: 61
Tauranga Ch: 62, 66, 83
Thames via Coastguard Radio
Tutukaka Ch: 85
Waihau Bay Ch: 63
Waihi Beach Ch: 68, 71, 85
Wanganui Ch: 85
Wellington Ch: 14, 62
Whakatane Ch: 80, 60, 71

https://www.thundermaps.com/



https://www.transport.govt.nz/resources/transport-dashboard/



Work in progress – will replace Transport Indicators

How are people collaborating?

Land Information New Zealand has worked with other agencies to make New Zealand's most current publicly-owned aerial imagery, covering 95 percent of the country, available under an open licence, through the LINZ Data Service.

NZ Aerial Imagery

LINZ / National Imagery

145585 60

Contents Metadata Services Comments (0)

The NZ Aerial Imagery basemap provides a seamless nationwide imagery layer with the newest and highest resolution data, and covers 95% of New Zealand.

This basemap has been designed to be integrated into GIS, web and mobile applications via our WMTS and XYZ tile services. View the Services tab to access these services.

Attributing aerial imagery

Example of attributing the 'Auckland 0.125m Urban Aerial Photos (2010-2011)' layer:

"Sourced from the the LINZ Data Service and licensed by Auckland Council for re-use under the Creative Commons Attribution 4.0 International licence."

Or alternatively, you can use this shorter version for web applications:

"Sourced from LINZ. CC BY 4.0" - Make sure you link to the attribution page on the LINZ website.

You can use the template below and insert the URL and licensee that apply to you.

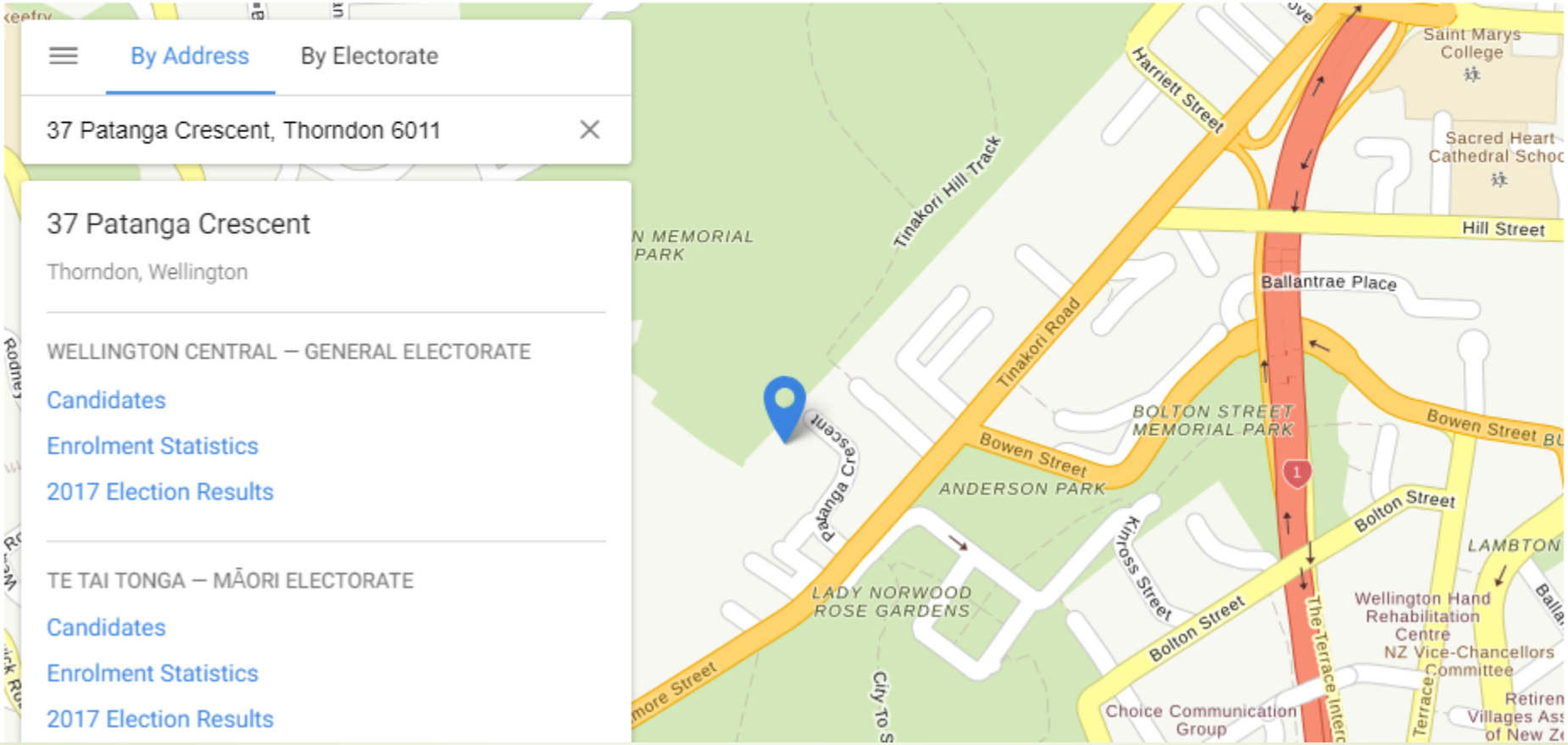
"Sourced from the LINZ Data Service **(insert the URL to the layer)** and licensed by **(insert the licensor)** for re-use under the Creative Commons Attribution 4.0 International."

https://www.elections.org.nz/events/electorate-boundary-review/final-electorate-boundaries/interactive-mapping-2014-boundary

INTERACTIVE MAPPING OF 2014 BOUNDARY CHANGES

The Representation Commission released the electorate boundaries to be used at the next two general elections.

Use the map below to see the 2014 electorate boundaries and how they compare to the 2007 boundaries (used for the 2008 and 2011 general elections).



https://figure.nz/

https://insights.apps.treasury.govt.nz/#

Year range selection

2008 — 2015 — 2016

2008 2010 2012 2014 2016

☐ Display as a percentage?

Level of analysis

- ◉ Total NZ
- ○ Territorial authority

Territorial authority

Auckland

About this tool

1.8%

increase in the population of New Zealand between 2015 and 2016 from 4,618,305 to 4,701,393 (an increase of 83,088). Of the 2015 population 2.0% left the country, while 4.7% moved to another area

56,004

children were born in New Zealand between June 2015 and June 2016 while 30,321 people died. This represents a natural increase of 25,683 or 0.6%. The largest natural increase of 1.1% was in Otorohanga District.

97,905

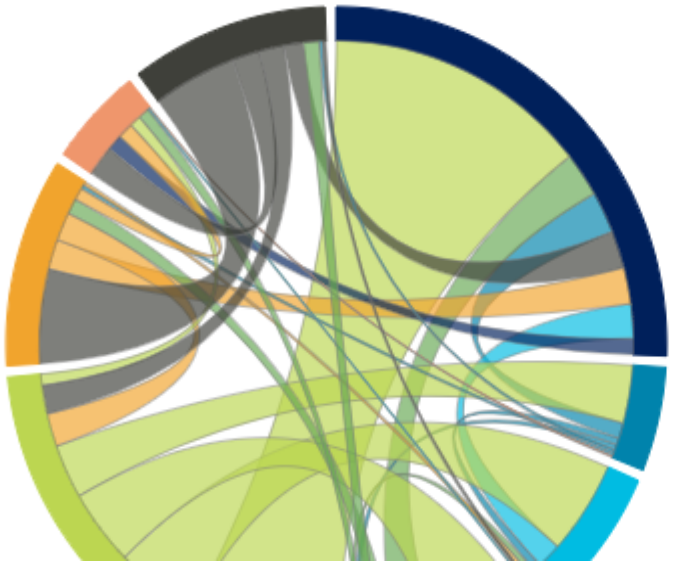
overseas migrants arrived in New Zealand between 2015 and 2016, while 37,092 left. This represents an increase of 60,813 or 1.3% of the NZ population. The largest source of migrants was India with 17,850 arrivals.

52,341

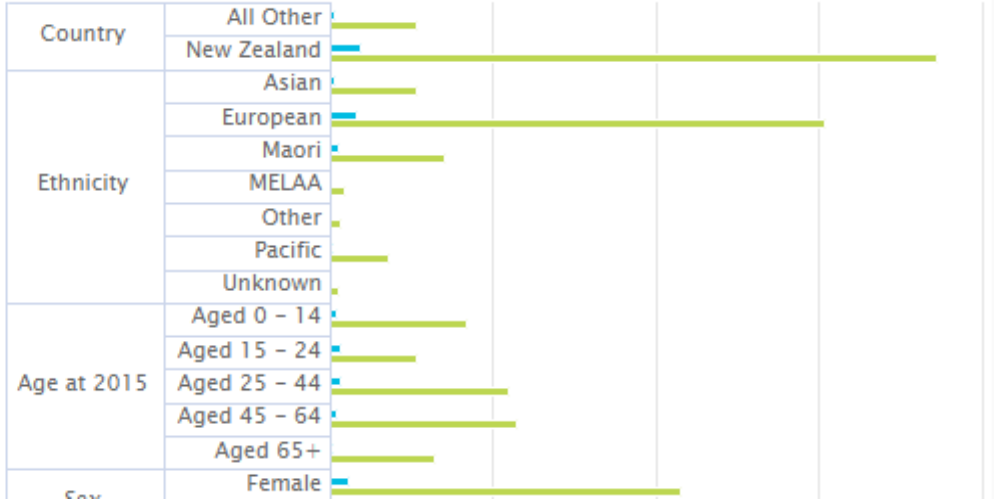
New Zealanders arrived in NZ by 2016 after living overseas in 2015, while 56,832 departed by 2016 after living in NZ in 2015. This represents a decrease of 4,491 or 0.1% of the NZ population.

Migration within NZ | International migration | Age profile | Population change map | Background

Migration within NZ from 2015 to 2016



Characteristics of Total NZ movers/non-movers between TAs from 2015 to 2016



https://nzodn.nz/

December 04, 2017

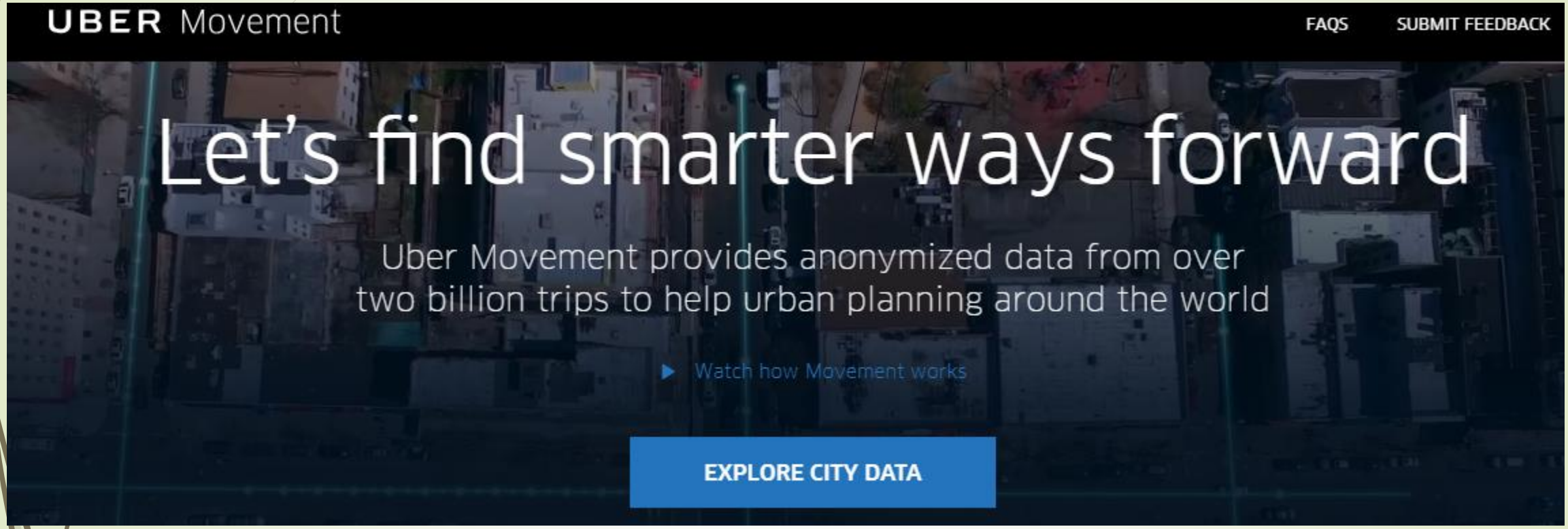
SUPPORT FOR THE NEW ZEALAND OCEAN DATA NETWORK

MetOcean Solutions is delighted to support the New Zealand Ocean Data Network (NZODN), a new initiative coordinated by the National Institute of Water and Atmospheric Research (NIWA) to make New Zealand ocean data discoverable and freely available to all.

The NZODN is a national data platform that supports integrated access to marine and climate science data. NIWA has set up the NZODN as a node of the Australian Ocean Data Network (AODN) fully built on the services stack designed by the Australian Integrated Marine Observing System (IMOS).

The NZODN website has been launched as a public New Zealand resource, a 'sister site' to the AODN portal. This platform will greatly enhance data discovery and provide access to all available marine data collected in the New Zealand ocean domain.

https://movement.uber.com/?lang=en-US



Lets collaborate to open up more transport data

- Open standards will give you lots of options
- Retaining copyright ownership means you own the outputs
- Open licensing allows others to create new products and knowledge
- Allowing commercialisation of your data encourages market growth
- Offering raw data as well as visualisations allows automated re-use
- Pragmatism about open and proprietary products may be necessary
- Financial or project management incentives kickstart collaboration

Talk to the person next to you re how you can work together….