Crash Analysis System

The Landing Page

Welcome to the Crash Analysis System

Help and training

https://nzta.catlearn.nz/

- FAQs, hints and tips
- Quick reference guides
- Step by step videos

Browsers
We recommend you use one of the following browsers to use CAS:

- Microsoft Edge
- Chrome
- Firefox
- Internet Explorer 11

We recommend you don't use Safari.

Technical support
Please contact the NZTA Service Desk if you experience any technical issues:

Non-urgent issues: Email servicedesk@nzta.govt.nz

Urgent issues: Phone 6667 or 0800 80 52 63

Other support
Where the training material does not cover what you need to achieve through the system, please contact CAS.Administrator@nzta.govt.nz

Go to query builder

Learn what's new

Using maps

- See your results change on the map
- Save a site and re-use it in different queries
- View the TCR through a link from the reports or the map summary.

Run a query

- Edit your query to dynamically change your results
- Share your sites and queries with others.

CAS resources

- An extended dataset to query and export.

Links of interest

- Communities at risk register
- Road toll information as at midnight
- Road safety strategy
- Safer journeys
- Data differences between old and new CAS

Crash Analysis System (CAS) processing update

Here are our current processing targets for new TCRs:

| Crash severity	Processing target*	Achieving?
Fatal	One working day	Yes
Injury	4 weeks	Yes
Non-injury	3 months	Yes

For more details read our update.

* from date received from Police.

Different map layers
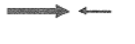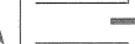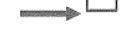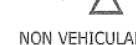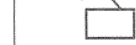
VEHICLE MOVEMENT CODING SHEET

For use with crash data from the crash system Version 3.0

NZ TRANSPORT AGENCY
WAKA KOTAHI

TYPE	A	B	C	D	E	F	G	H	J	O
A OVERTAKING AND LANE CHANGE	PULLING OUT OR CHANGING LANE TO RIGHT	HEAD ON	CUTTING IN OR CHANGING LANE TO LEFT	LOST CONTROL (OVERTAKING VEHICLE)	SIDE ROAD	LOST CONTROL (OVERTAKEN VEHICLE)	WEAVING IN HEAVY TRAFFIC			A OTHER
B HEAD ON	ON STRAIGHT	CUTTING CORNER	SWINGING WIDE	BOTH OR UNKNOWN	LOST CONTROL ON STRAIGHT	LOST CONTROL ON CURVE				B OTHER
C LOST CONTROL OR OFF ROAD (STRAIGHT ROADS)	OUT OF CONTROL ON ROADWAY	OFF ROADWAY TO LEFT	OFF ROADWAY TO RIGHT							C OTHER
D CORNERING	LOST CONTROL TURNING RIGHT REMAINED ON ROADWAY	LOST CONTROL TURNING RIGHT OFF ROADWAY TO LEFT	LOST CONTROL TURNING RIGHT OFF ROADWAY TO RIGHT	LOST CONTROL TURNING LEFT REMAINED ON ROADWAY	LOST CONTROL TURNING LEFT OFF ROADWAY TO LEFT	LOST CONTROL TURNING LEFT OFF ROADWAY TO RIGHT	MISSED INTERSECTION OR END OF ROAD	LOST CONTROL TURNING RIGHT (Old DA Code)	LOST CONTROL TURNING LEFT (Old DB Code)	D OTHER
E COLLISION WITH OBSTRUCTION	PARKED VEHICLE	CRASH OR BROKEN DOWN	NON VEHICULAR OBSTRUCTIONS (INCLUDING ANIMALS)	WORKMANS VEHICLE	OPENING DOOR	OPENING DOOR NON TRAFFIC SIDE				E OTHER

QUERIES

REPORTS

MAPS

COLLISION DIAGRAMS

CAS COURSES

CAS RESOURCES

COURSE CONTENT

Using Maps

Watch this nine minute video demonstration on how to use map tools in CAS.

WATCH MAP DEMO   ⊗

Read a quick reference guide about map tools, symbols and access to the Traffic Crash report.

USING MAPS GUIDE (PDF, 2.6 MB)   ⊗

📄 Transcript Map demo (PDF, 57KB)

Polygons

Watch this nine minute video demonstration about using polygons to create a site of interest in CAS.

WATCH POLYGON DEMO   ⊗

Read a quick reference guide about how to use polygons to create a site of interest in CAS.

USING POLYGONS GUIDE (PDF, 77 KB)   ⊗

📄 Transcript Polygon demo (PDF, 77KB)

Recreate a Site

This guide outlines steps to recreate a site from the existing CAS into new CAS and different ways to check accuracy of the new site.

RECREATE A SITE GUIDE (PDF, 3.7MB)   ⊗

Resources

Read CAS frequently asked questions (FAQ) about maps. Display on your screen or print.

MAP FAQ   ✓

You are not logged in.

NZ **TRANSPORT** AGENCY WAKA KOTAHI | CAS

ɔde=cat&hook=9

BROWSE BY ALPHABET | BROWSE BY CATEGORY | BROWSE BY DATE

ADD A NEW ENTRY

EDIT CATEGORIES

QUERY

QUERY ▼

- All categories
- Not categorised
- DATA
- MAP
- MIGRATION HINTS
- **QUERY**
- REPORTS
- SYSTEM HINTS

Page: **1** 2 (Next)
ALL

Can I create queries from the map?

For standard screens, your query builder and map view are visible on the same screen. Queries are created thro
You can create one or more polygons on the map, save it as a site and add the saved site or a previously saved
When you run the query, the map results will only show crashes within your selected saved site.

Can I search by injury?

Yes, you can search by injury. Under Road users > Injury scale you will find the injury values of fatal, serious, minor and nil (non-injury) that can be added to your query. These values can be added separately.

✕ ⚙

Can I search by road name?

Yes, in the Location category you use the 'Crash road' or 'Side road' attributes to search for a road name.

In a future release you will have the ability to search by spatial road name.

✕ ⚙

NZ **TRANSPO** AGENCY WAKA KOTAHI

ｴent

Creating a polygon

NZ TRANSPORT AGENCY WAKA KOTAHI | **CAS**

Current query | **Map** | **Reports** | **Collision diagram**

Attributes

Q Search

∧ **Crash**

Crash identifier

Exclude crash identifier

| Crash severity

Number of vehicles involved

Police attended

Number of road users outside a
vehicle

Vehicles involved but not impacted

Simple / complex crash

Watch house

∧ **Date/Time**

| Crash year

Crash date

Crash time

Day of the week

Month of year

Untitled query ✎

Query details ▾

Actions | **Save**

| **Crash year** 🗑

2013 — 2014 ✕ ⊕

| **Crash severity** 🗑

Fatal Crash ✕   Serious Crash ✕   Minor Crash ✕ ⊕

| **Saved sites** 🗑

Ashburton polygon ✕ ⊕

Run

Using a Saved polygon

NZ **TRANSPORT** AGENCY WAKA KOTAHI | CAS

Layers

Area | Info

- [ ] KiwiRAPCollectiveRisk
- [ ] KiwiRAPPersonalRisk
- [ ] KiwiRAPStarRating
- [ ] One network road classification
- [ ] Place names
- [ ] Suburbs
- [ ] Centreline

[ ] Group results   [x] Pins   [ ] Heat map

Leaflet | Powered by Esri | LINZ, NZTA, Eagle Technology
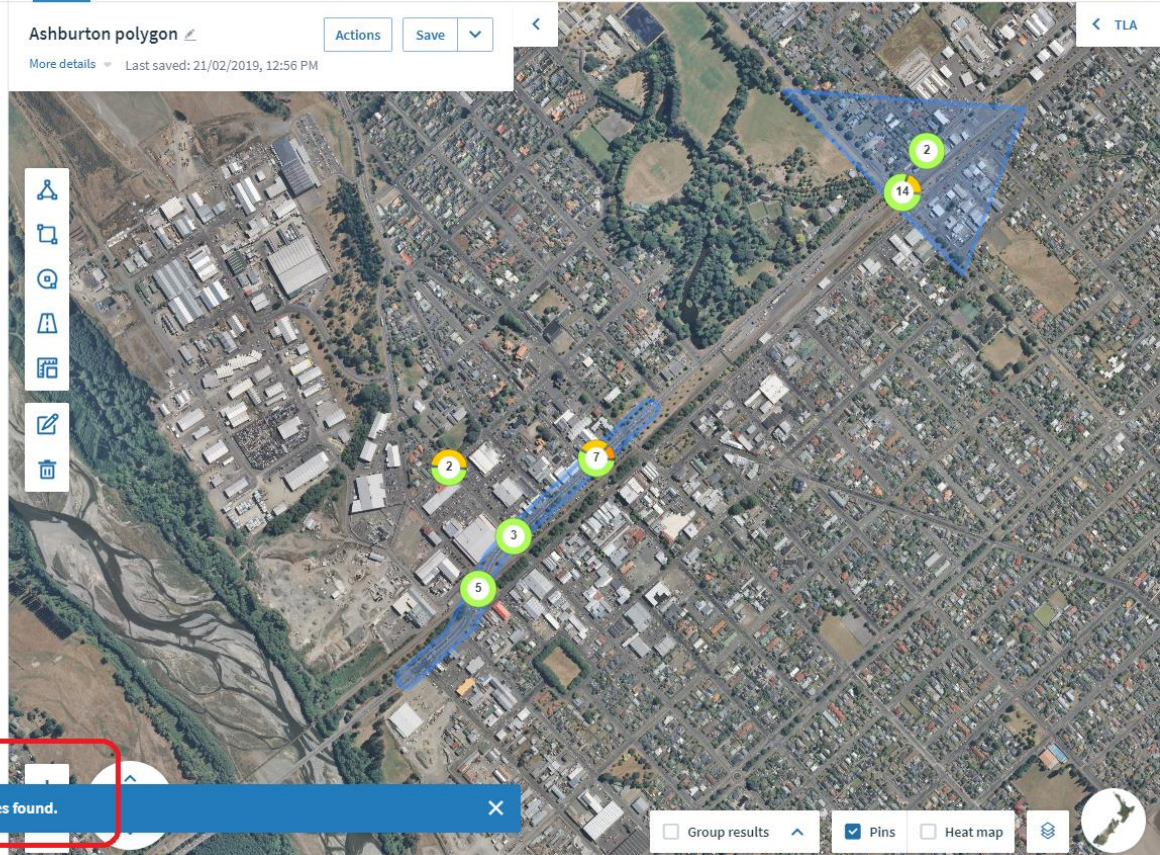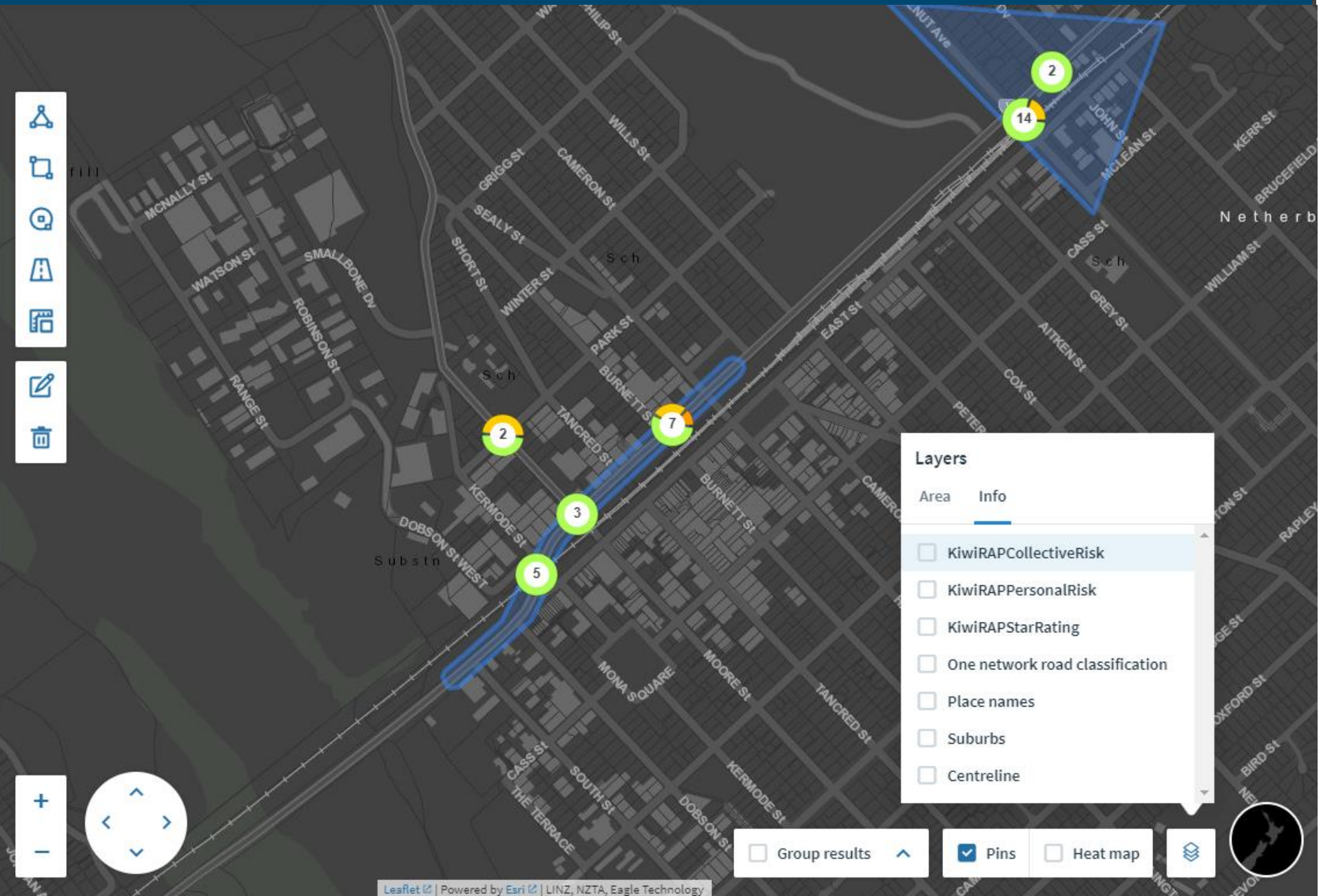
Coded report

📍 Map   📄 **Reports**   🚗 Collision diagram

Export all query data ⌄

Untitled query ✏️ | Actions | Save |

Query details ⌄

Coded report ⌄

| Print this report 🖨 | Export this report as CSV ⬇ |

Crash year 🗑

| 2015 — 2016 ✕ | ⊕ |

ey.

Showing 20 | 100 results at once.

Crash severity 🗑

| Fatal Crash ✕ | Serious Crash ✕ |
| Minor Crash ✕ | Non-Injury Crash ✕ |
⊕

1-33 of 33   Next ❯

Coded report

Plain English report

Site details

Site summary

Tabulation

Saved sites 🗑

| Ashburton polygon ✕ | ⊕ |

Run

#		Road		TLA	Distance	Direction	Side road	ID	Date & time	Mvmt	Vehicle 1	DR V1	ROAD V1	Causes V1
1		D		Ashburton District	120.0	W	PRINCES ST	201513501	18/06/2015 16:00, Thu	GD	V	E	1	331,642
2	N	EAST ST		Ashburton District		I	WALNUT AVENUE	201541347	22/05/2015 05:31, Fri	HA	C	N	1	301,375
3	N	EAST ST		Ashburton District		I	WALNUT AVENUE	201655049	02/12/2016 09:12, Fri	HA	C	E	1	132,301,375
4	M	EAST ST		Ashburton District		I	WALNUT AVENUE	201610234	16/02/2016 19:15, Tue	KB	C	S	1	301,363
5	N	KERMODE ST WEST		Ashburton District		I	DOBSON ST WEST	201539798	02/06/2015 14:00, Tue	JA	V	N	1	
6	N	SH 1S		Ashburton District		I	BURNETT ST	201554057	23/12/2015 13:48, Wed	FA	C	S	1	423
7	S	SH 1S		Ashburton District		I	HAVELOCK ST	201610857	03/02/2016 04:20, Wed	FE	4	E	1	375
8	N	SH 1S		Ashburton District		I	HAVELOCK ST	201544882	31/08/2015 18:43, Mon	HA	C	E	1	322,351
9	M	SH 1S		Ashburton District		I	HAVELOCK ST	201514213	30/06/2015 09:06, Tue	HA	C	S	1	
10	N	SH 1S		Ashburton District		I	HAVELOCK ST	201531377	09/02/2015 13:34, Mon	FE	C	W	1	331

Site details report ⌄

Print this report 🖨

Fatal crashes: 0 | Injury crashes: 7 | Non-injury crashes: 26 | Total crashes: 33

📊 Overall crash statistics

⌃ Crash severity

Crash severity	Number	%	Social cost($m)
Fatal	0	0	TBC
Serious	1	3.03	TBC
Minor-injury	6	18.18	TBC
Non-injury	26	78.79	TBC
TOTAL	33	100	TBC

⌃ Crash numbers

Year	Fatal	Serious	Minor	Non-injury
2015	0	0	5	14
2016	0	1	1	12
TOTAL	0	1	6	26
Percent	0	3.03	18.18	78.78

👤 Overall casualty statistics

⌃ Injury severity

Injury severity	Number	% all casualties
Fatal	0	0.00
Serious Injured	1	14.29
Minor Injured	6	85.71
TOTAL	7	100.00

⌃ Casualty numbers

Year	Fatal	Serious Injured	Minor Injured
2015	0	0	5
2016	0	1	1
TOTAL	0	1	6
Percent	0.00	14.29	85.71

Note: Last 5 years of crashes shown (unless query includes specific date range).

Tabulation

Tabulate Person Data

Please tabulate Person data using the query - **comparison**

Change attributes

Table ▼

Count ▼ ↕ ↔   Injury scale ▼

Road usage type ▼

Road user type ▼

		Injury scale	Fatal	Minor Injured	Nil	Serious Injured	Totals
Road usage type	Road user type						
Bus	Driver			1	4		5
Car/Wagon	Driver		1	41	383	5	430
	Passenger		1	12		5	18
Cycle	Cyclist			7		4	11
Moped	Driver			1			1
Motorcycle	Driver		1	4	2	1	8
	Passenger					1	1
Other	Driver				2		2
Pedestrian	Pedestrian		1	11		7	19
SUV	Driver			71	517	8	596
	Passenger			32		1	33
Skateboard, in-line skate	Skateboard, in-line skate			1			1
Truck	Driver				7		7
Van	Driver			1	38		39
	Totals		4	182	953	32	1,171

Export to csv

Sign out

You are not logged in.

Export all query data ⌄

Crash data 📥
Vehicle data 📥
Person data 📥

	A	B	C	D	E	F	...	K	L	M	N	O	P	Q	R	S	T	U
1	CRASH ID	CRASH ROAD	CRASH	CRASHDIR	INTSN	SIDE ROAD OR FEATURE		UR ROAD WE	LIGHT	WTHR	WTHR A	WTHR B	JUNCTYPE	TRAFCTRL	ROAD MA	SPDLIM	LOCATION GEOMETRY
2	1069214	SH 2		Null	0			Dry	Bright sur	Fine Null	Fine	Null	Nil (Defau	Unknown	Centre lin	100	1977480 5761051
3	1069169	PRESTON ROAD		North	1	ORMISTON ROAD		Wet	Overcast	Heavy rain	Heavy rain	Null	T Junction	Traffic Sig	Centre lin	50	1768148 5907749
4	1072841	SH 57		Null	0	KAHUTERAWA ROAD		Wet	Overcast	Fine Null	Fine	Null	Nil (Defau	Unknown	Centre lin	100	1821611 5523894
5	1068191	SH 2		South	0	TE MAHANGA ROAD		Dry	Bright sur	Fine Null	Fine	Null	Nil (Defau	Nil	Centre lin	100	1921840 5595604
6	1068207	WILLOWFIELD PLACE		South	0	DELAMARE ROAD	2/03/2016 Wed 12:25 Straight	Dry	Bright sur	Fine Null	Fine	Null	Driveway	Nil	Nil	50	1798269 5820370
7	1078121	PATAUA SOUTH ROAD		East	0	ARAHIWI RISE	9/01/2016 Sat 16:56 Curved	Dry	Bright sur	Fine Null	Fine	Null	Nil (Defau	Unknown	Centre lin	100	1738101 6044550
8	1071247	SH 1N		South	0	WAIRAKA ROAD	1/04/2016 Fri 9:27 Straight	Dry	Overcast	Fine Null	Fine	Null	Nil (Defau	Unknown	Centre lin	50	1758715 5455687
9	1069210	PAEKAKARIKI HILL ROAD		Null	0		11/02/2016 Thu 21:55 Curved	Dry	Bright sur	Fine Null	Fine	Null	Nil (Defau	Unknown	Centre lin	60	1762456 5453660
10	1071415	MAIN NORTH ROAD		North	0	CRANFORD ST	13/04/2016 Wed 17:00 Straight	Dry	Bright sur	Fine Null	Fine	Null	Driveway	Nil	Raised isla	50	1568944 5184949
11	1068895	REECES ROAD		North	0	COTSWOLD ROAD	7/02/2016 Sun 17:00 Curved	Dry	Bright sur	Fine Null	Fine	Null	Nil (Defau	Unknown	Nil	100	1595676 5234428
12	1072683	KERWYN AVENUE		Null	0	LORIEN PLACE	1/06/2016 Wed 13:38 Straight	Dry	Bright sur	Fine Null	Fine	Null	T Junction	Give way	Centre lin	50	1767531 5909577
13	1068245	SH 2B		Null	0	PREBENSEN DRIVE	21/04/2016 Thu 9:20 Straight	Dry	Bright sur	Fine Null	Fine	Null	Nil (Defau	Nil	Centre lin	100	1933288 5621622
14	1068982	MCILLWRAITH ROAD		West	1	TERRACE ROAD	20/01/2016 Wed 13:00 Straight	Dry	Bright sur	Fine Null	Fine	Null	T Junction	Give way	Centre lin	100	1278530 4876626
15	1070533	DIANA DRIVE		Null	0	ASHFIELD ROAD	30/03/2016 Wed 11:55 Straight	Dry	Bright sur	Fine Null	Fine	Null	Driveway	Nil	Centre lin	50	1754749 5928761
16	1071018	SH 27		North	0	TOREHAPE ROAD WEST	16/04/2016 Sat 15:20 Straight	Dry	Bright sur	Fine Null	Fine	Null	Nil (Defau	Unknown	Centre lin	100	1813627 5863591
17	1068745	MAYORAL DRIVE		West	1	QUEEN ST	7/02/2016 Sun 19:10 Straight	Dry	Bright sur	Fine Null	Fine	Null	Crossroad	Traffic Sig	Centre lin	50	1757180 5919858
18	1071041	SH 60		North	0		11/05/2016 Wed 19:24 Curved	Wet	Overcast	Heavy rain	Heavy rain	Null	Nil (Defau	Unknown	Centre lin	100	1575990 5486478
19	1069904	ELLICE ROAD		Null	0	TARGET ROAD	23/01/2016 Sat 8:25 Straight	Dry	Bright sur	Fine Null	Fine	Null	Driveway	Nil	Paint islar	50	1754655 5929658
20	1071053	SH 3A		North	0		17/05/2016 Tue 14:05 Straight	Dry	Bright sur	Fine Null	Fine	Null	Nil (Defau	Unknown	No passin	100	1703767 5677909
21	1068161	EDEN ST		Null	0	SH 1S	11/01/2016 Mon 11:30 Straight	Dry	Bright sur	Fine Null	Fine	Null	Crossroad	Traffic Sig	Raised isla	50	1440424 5004307
22	1071903	QUEEN ST		Null	0	TURNER ST	31/05/2016 Tue 9:23 Straight	Wet	Overcast	Light rain	Light rain	Null	Driveway	Traffic Sig	Centre lin	50	1757136 5919742
23	1077704	EAST COAST ROAD		Null	0	SPUR ROAD	27/05/2016 Fri 18:39 Curved	Dry	Dark	Fine Null	Fine	Null	Driveway	Nil	Centre lin	100	1749173 5943268
24	1077704	EAST COAST ROAD		Null	0	SPUR ROAD	27/05/2016 Fri 18:39 Curved	Dry	Dark	Fine Null	Fine	Null	Driveway	Nil	Centre lin	100	1749173 5943268
25	1068728	SH 25		Null	1	DICKSON ST	1/01/2016 Fri 17:19 Curved	Wet	Overcast	Light rain	Light rain	Null	Multileg	Give way	Centre lin	70	1825095 5888017
26	1068177	SH 25		Null	1	TIKI ROAD	23/01/2016 Sat 13:40 Curved	Dry	Bright sur	Fine Null	Fine	Null	Nil (Defau	Nil	Centre lin	100	1825668 5929506
27	1070608	ABBOTSFORD ON EBD		Null	1	ABBOTSFORD ROAD	24/04/2016 Sun 13:24 Straight	Dry	Bright sur	Fine Null	Fine	Null	T Junction	Give way	Centre lin	50	1400185 4913665
28	1068161	EDEN ST		West	0	SH 1S	11/01/2016 Mon 11:30 Straight	Dry	Bright sur	Fine Null	Fine	Null	Crossroad	Traffic Sig	Raised isla	50	1440424 5004307
29	1072762	SH 3		Null	1	RAYNES ROAD	13/04/2016 Wed 17:19 Curved	Dry	Overcast	Fine Null	Fine	Null	T Junction	Stop	Centre lin	100	1802981 5808770
30	1069045	ALDWINS ROAD		Null	0	MARCROFT ST	12/01/2016 Tue 16:10 Straight	Dry	Bright sur	Fine Null	Fine	Null	Nil (Defau	Unknown	Nil	60	1573241 5179353
31	1070632	MANCHESTER ST		North	1	SALISBURY ST	1/05/2016 Sun 12:30 Straight	Dry	Bright sur	Fine Null	Fine	Null	Crossroad	Traffic Sig	Centre lin	50	1570878 5180886
32	1071391	SWANSON ROAD		Null	1	METCALFE ROAD	2/05/2016 Mon 22:55 Straight	Wet	Dark	Mist or Fc	Mist or Fc	Null	Roundabc	Give way	Centre lin	50	1743788 5919228
33	1069830	SH 30		West	0		9/03/2016 Wed 11:40 Straight	Dry	Bright sur	Fine Null	Fine	Null	Nil (Defau	Unknown	Centre lin	70	1933451 5783409
34	1068273	SH 10		South	0	TE AHU AHU ROAD	26/05/2016 Thu 1:05 Curved	Wet	Dark	Light rain	Light rain	Null	Nil (Defau	Unknown	Centre lin	100	1686939 6093497
35	1070069	WESTON-NGAPARA ROAD		East	1	PIG ISLAND ROAD	27/03/2016 Sun 17:50 Straight	Dry	Bright sur	Fine Null	Fine	Null	T Junction	Nil	Centre lin	100	1428628 5013933
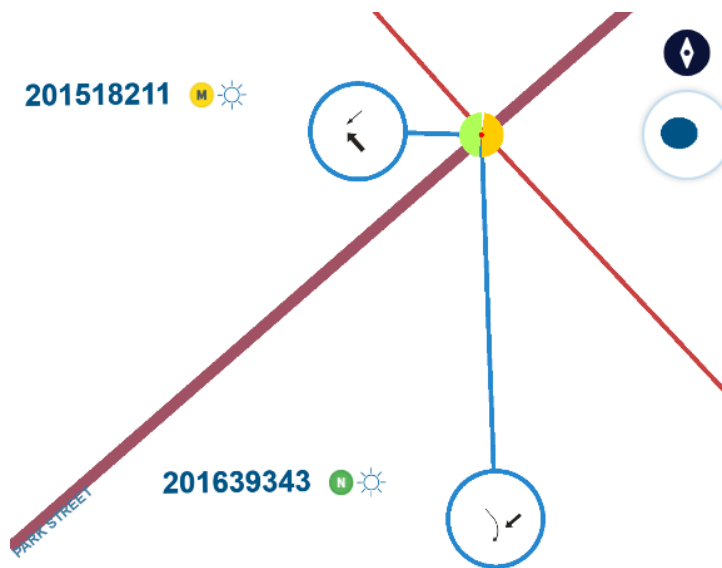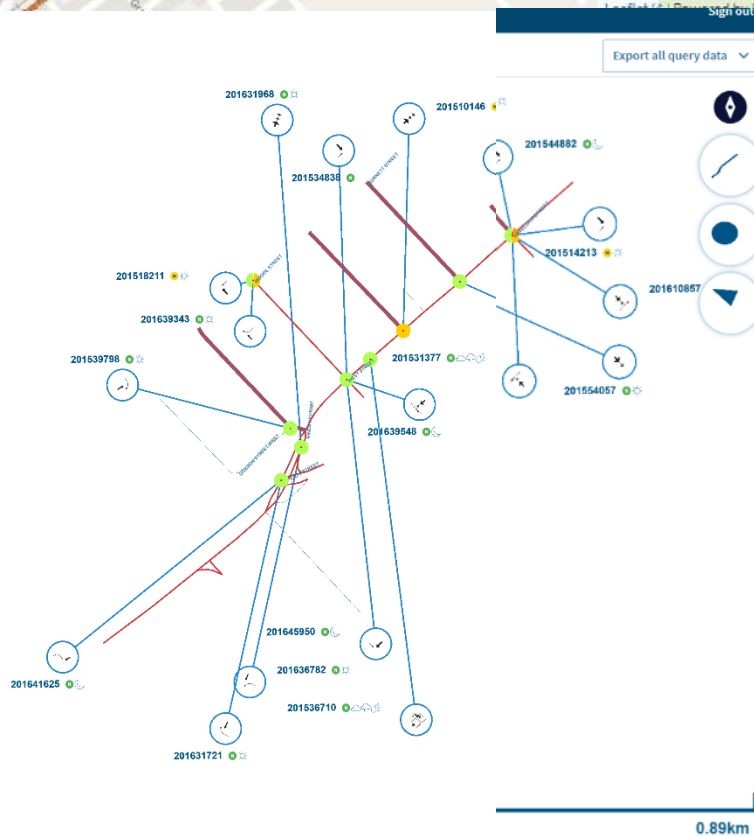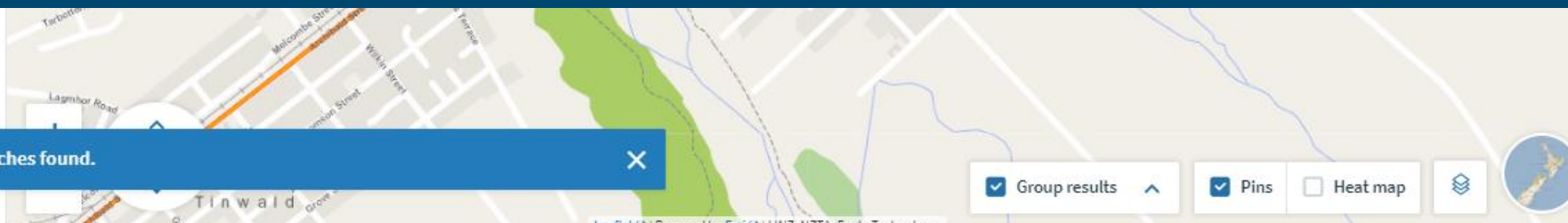
Coded report ∨

33 results from your query.

< Back   1-20 of 33

#	Severity	Location	TLA	Distance	Direction	Side road	ID	Dat
1	M	**EAST ST**	Ashburton District	120.0	W	PRINCES ST	201513501	18/ 16:(

EAST ST, Ashburton

Fri, 02/12/2016   201655049

🚗 2   👤 0

→ ↑   Right angle

Environment

50km/h, Roundabout,
Wet
Give way

Weather

Light rain, Overcast

Crash report

201518211 ⓜ ☼

201639343 ⓝ ☼

Attributes

Q Search

⌃ Recent/Popular

Saved sites

Crash year

Natural Light

Posted speed limit

Crash severity

Themes ‹
- ○ Severity (Default)
- ⦿ Day/Night
- ○ Dry/Wet
- ○ Simple/Complex
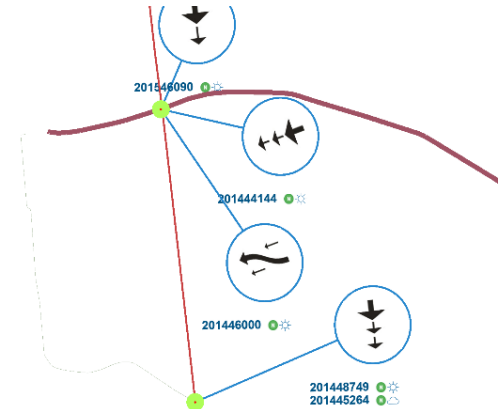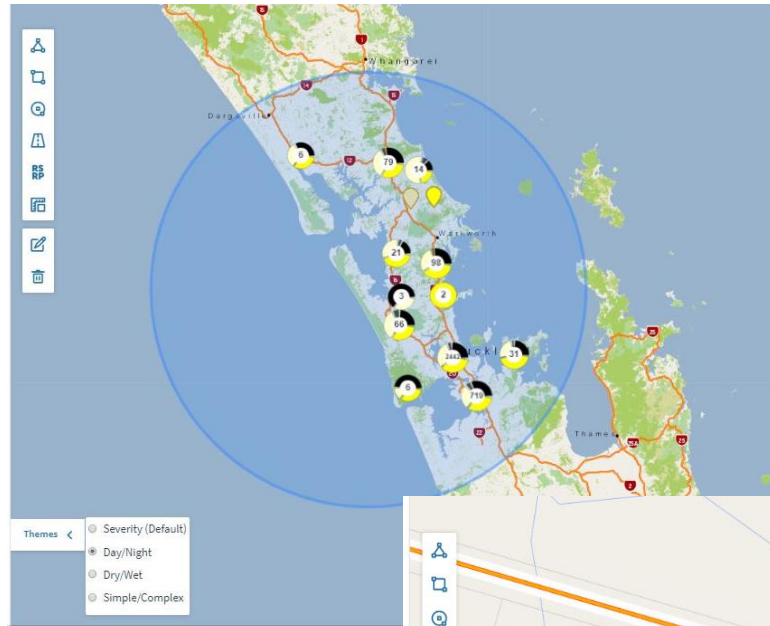
Please choose the aspect to tabulate and then choose the related attribut

| Crash | Vehicle | Person | Contributing factor | Objects hit |
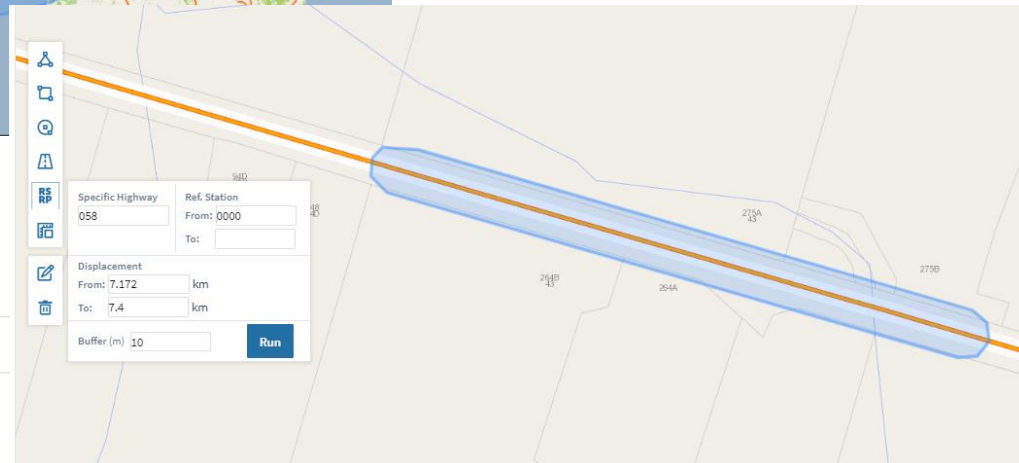
Severity ⇅	Crash road ⇅	⌃	TLA ⇅	Distance ⇅	Direction ⇅	Side road ⇅	ID ⇅	Date & time ⇅	Mvmt ⇅	Vehicle 1 ⇅
N	SH 1N		Porirua City	40.0	N	DOLLY VARDEN CRESCENT N	201550971	13/12/2015 11:25, Sun	FD	C

Specific Highway 058 **Ref. Station** From: 0000 To:
Displacement From: 7.172 km To: 7.4 km
Buffer (m) 10 Run

Road 1	⇅	⇅	Dir. ⇅	Road 2	⇅	2014 ⇅	Total ⇅	Fatal cas ⇅	Ser cas ⇅	Min cas ⇅	Fatal ⇅	Serious ⇅	Minor ⇅	Non Inj ⇅	Wet ⇅	Dark ⇅	Curve ⇅	Junction ⇅	Special purpose lanes ⇅	Ped ⇅	Cycl ⇅
BREENS ROAD			I	ISLEWORTH ROAD		1	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0
CAMPBELL ROAD			I	KAIRANGA BUNNYTHORPE ROAD		1	1	0	2	1	0	1	0	0	0	1	0	0	0	0	0
DUNNS ROAD			I	ORETI ROAD		1	1	0	1	0	0	1	0	0	0	0	0	1	0	0	1
HALSWATER DRIVE			I	CAESARS PLACE		1	1	0	1	0	0	1	0	0	1	0	1	0	0	0	0

• Ability to sort by any column in the Coded Report and most columns in the English Report.
• Provide date of interest to a site.
• Reference Station/Route Position (RS/RP) map search capability
— automatically creates a road-buffer site based on the RS/RP search
— site is then saved and used in queries.
• Query by road name
— query by Police-provided road name on crash record
— query by road name as held on geospatial road network.
• Site Summary Report
— screen display
— export capability.
• 'Most used' attributes feature
— there are many attributes available to users for their queries
— the system maintains count of each user's usage of attributes in their queries
— at top of Attribute list there is a 'favourites' group
— each user's top 5 attributes by count will also be available here.
• Pie-chart themes
— pie chart for all crash counts on the map defaults to crash severity
— 'themes' option lets you change the chart in real-time to instead show: light/dark; wet/dry; simple/complex.
• Additional tabulation option available for 'objects struck'.

Improvements to existing features
• Collision Diagram
— movement codes icons are now much larger
— road name is more visible.
• Tabulation
— binary values now showing as 'Y' and 'N' (not '1' and '0').
• Corrections to some Site Details tables percentage calculations.
• Improved printing options for site details.

Full list of new data in this release
Additional data now available for querying
• Reference Station/Route Position (RS/RP) (through map facility – see above).
• Deprivation index.
• Census Area Unit.
• Auckland Sectors.
• NZTA Network Boundaries – also known as Network Operating Contracts (NOC) and formerly known as Network Management Areas.
• Road Category.
• RSR Peer Groups.
• NZTA Regions.
• Feature.
• 'All road users' cross-tabulation function is now possible, using the 'road usage type' under 'person' in the Tabulation report

Data configured for querying (will be automatically available once in NZTA data vault)
• One Network Road Classification (ONRC).
• Financial year.
• Auckland Local Boards.
• RS roadname with RP (route position) in the Coded report extract.

Request access to CAS:

https://nzta.govt.nz/safety/safety-resources/crash-analysis-system/apply-for-access-to-the-crash-analysis-system/

1. View individual crashes along the whole length of road – Group by 1m
2. Share your queries and sites –all or organisation
3. Copy and paste direct from your reports to excel
4. View only the map: Zoom the application using ctrl +
5. If grouping makes your crashes jump outside your polygon, edit the polygon to make sure those crashes are included in the collision diagram

Queries   New

Mine   My organisation's   Public

Q Search

ratavine 2

ratavine

Driver contribution by vehicle type

Vehicle factors 2011 - 2015

comparison

Thanks for listening.

Cas.administrator@nzta.govt.nz