

FME in Practice: A New Zealand Police Case Study

Locus New Zealand FME User Conference

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New Zealand Police

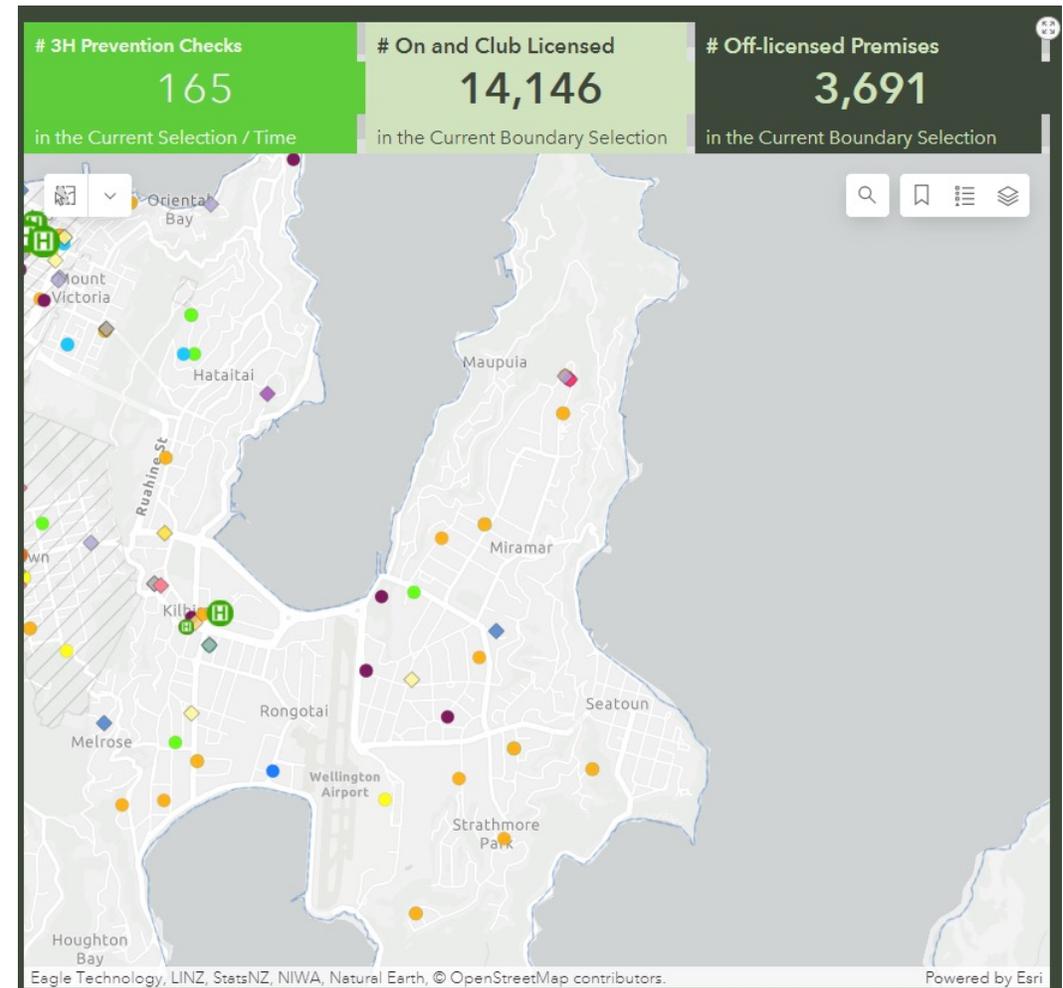
Geospatial Team

- ▶ One of the largest organisations in New Zealand with 15,000 staff stationed in 12 Police Districts
- ▶ Answer more than 925,000 emergency and 743,000 non-emergency calls
- ▶ Geospatial team is relatively small but dispersed throughout the country
- ▶ Manage a range of web applications and dashboards which focus on a range of topics
 - ▶ 111 and 105 Calls for Service
 - ▶ Gangs
 - ▶ Drug Harm
 - ▶ Alcohol Harm
 - ▶ Bail
 - ▶ Imagery
 - ▶ Property



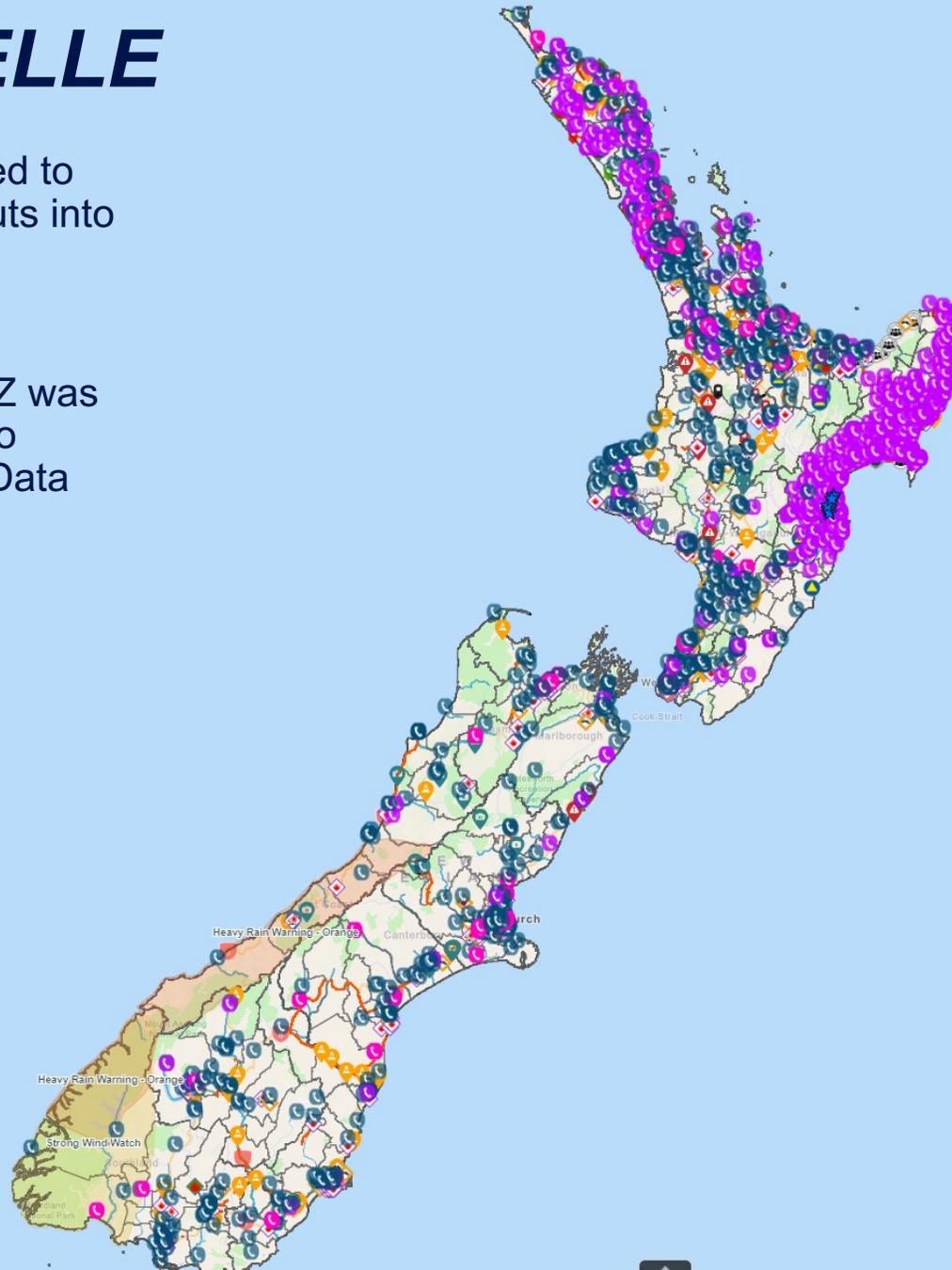
FME in Police Systems

- Creation of point datasets using a standard workspace
 - Used to automate creation of datasets from SAS outputs containing gang members, alcohol and drug harm
 - Automating the creation of a 'Calls for Service' dataset during Cyclone Gabrielle
 - Calls for Service dataset extended countrywide
 - Major Events Support Dashboard
- FME workspaces are used to:
 - Create feature classes with fields in appropriate formats
 - Aggregate values where 1 : many relationships occur
 - Create geometries for points based on Northings/Eastings, including assigning of default values where geometry values are NULL
 - Calculate associated Crime Harm Index for each occurrence
 - Assign a Police Station, Police Area and Police District for each value
 - Create stolen and recovered vehicle links
 - Determine the type of feature class to be written



Op GABRIELLE

- ▶ FME Workspace used to transform SAS outputs into feature classes
- ▶ Data updated hourly
- ▶ Data feed from FENZ was constantly updated to complement Police Data



Legend

Eastern Community Checkpoints

- ★

Police (GABRIELLE) CARD Events

- 🕒 1E
- 🕒 1F
- 🕒 1L
- 🕒 1V
- 🕒 1W
- 🕒 2M
- 🕒 7M
- 🕒 AMB2POL
- 🕒 FIR2POL
- 🕒 NSEC

FENZMissingPersons

Distance

- 75024 - 412847
- 45407 - 75023
- 25869 - 45406
- 17455 - 25868
- 11225 - 17454
- 6868 - 11224
- 4226 - 6867
- 2806 - 4225
- 1728 - 2805
- 1041 - 1727
- 712 - 1040
- 485 - 711
- 326 - 484
- 204 - 325
- 104 - 203
- 1 - 103

FENZ (Gabrielle Response) CAD Events

- 🚑 RESCUE
- 🔍 URBAN SEARCH AND RESCUE
- 🌪️ NATURAL DISASTER (URGENT)
- 🌪️ NATURAL DISASTER (NOT URGENT)
- 🔥 STRUCTURE FIRE
- 🌿 VEGETATION FIRE
- 🚢 SHIP FIRE
- 🔹 MINOR EVENT
- 🔧 SPRINKLER INVESTIGATION
- ⚠️ GAS LEAK
- ☠️ HAZARDOUS SUBSTANCE

Civil Defence Centres (Bay Of Plenty)

- 🏠 Civil Defence Centre
- 🏠 Community Led Centre

Civil Defence Centres (Hawkes Bay)

- 🏠 Civil Defence Centre
- 🏠 Community Led Centre

Op Gabrielle Comms Outages

CARD Events by Priority

Note: this data is currently only updated 4x daily.

Select Status:

Open

Select Time Period

All

Select Station:

ALL

Select Area:

ALL

Select District:

ALL

Alert: Priority 1 Event reported in the last hour

31

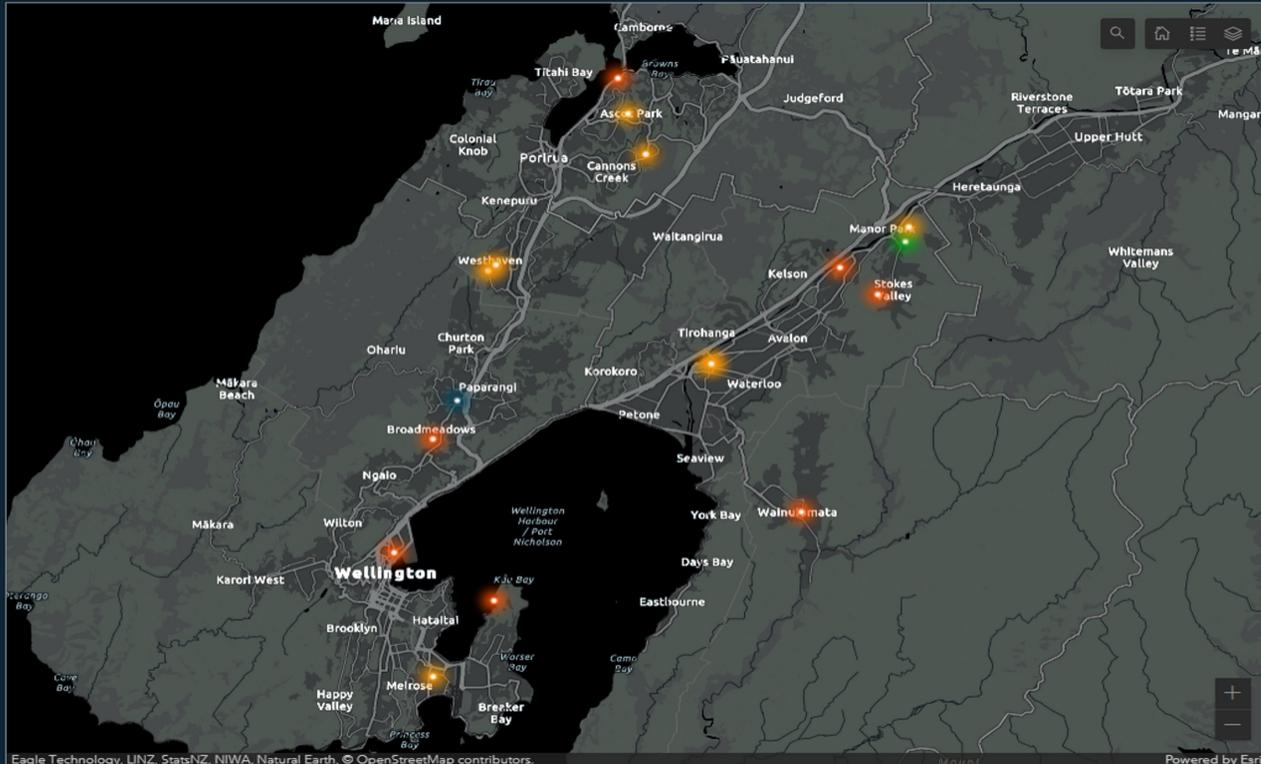
Priority 1 Events

OPEN

Total Number of Reactive Events

632

(Use Status Filter to View Number OPEN or CLOSED)



Data Last Updated: 07/06/2023, 10:45 am

Priority 7
Call received: 07/06/2023, 9:27 am
Acceptance Code: 4Q Enquiry/Investigation
Event Number: P054909328
Address:
Scene Station: CHRIST CHURCH SOUTH
District: CANTERBURY
[Link to CARD Event](#)

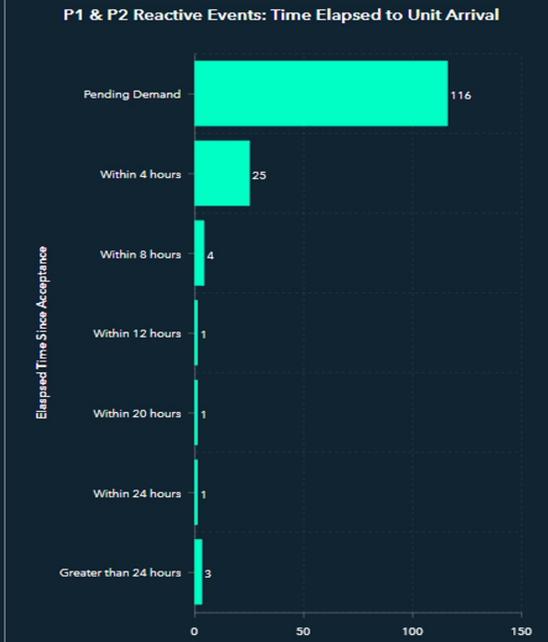
Priority 2
Call received: 07/06/2023, 9:24 am
Acceptance Code: NSEC No Speech Emergency Call
Event Number: P054909282
Address:
Scene Station: PAPAMOIA
District: BAY OF PLENTY
[Link to CARD Event](#)

Priority 4
Call received: 07/06/2023, 9:23 am
Acceptance Code: 4Q Enquiry/Investigation
Event Number: P054909271
Address:
Scene Station: CHRISTCHURCH
District: CANTERBURY
[Link to CARD Event](#)

Priority 7
Call received: 07/06/2023, 9:22 am
Acceptance Code: 2I Information
Event Number: P054909257
Address:
Scene Station: WAIUKU
District: COUNTIES/MANUKAU
[Link to CARD Event](#)

Priority 4
Call received: 07/06/2023, 9:21 am
Acceptance Code: 2P Public Relations
Event Number: P054909251
Address:
Scene Station: PAPAMOIA
District: BAY OF PLENTY
[Link to CARD Event](#)

Priority 2
Call received: 07/06/2023, 9:21 am
Acceptance Code: 1R Breach Of The Peace
Event Number: P054909250
Address:
Scene Station: MANUREWA
District: COUNTIES/MANUKAU
[Link to CARD Event](#)

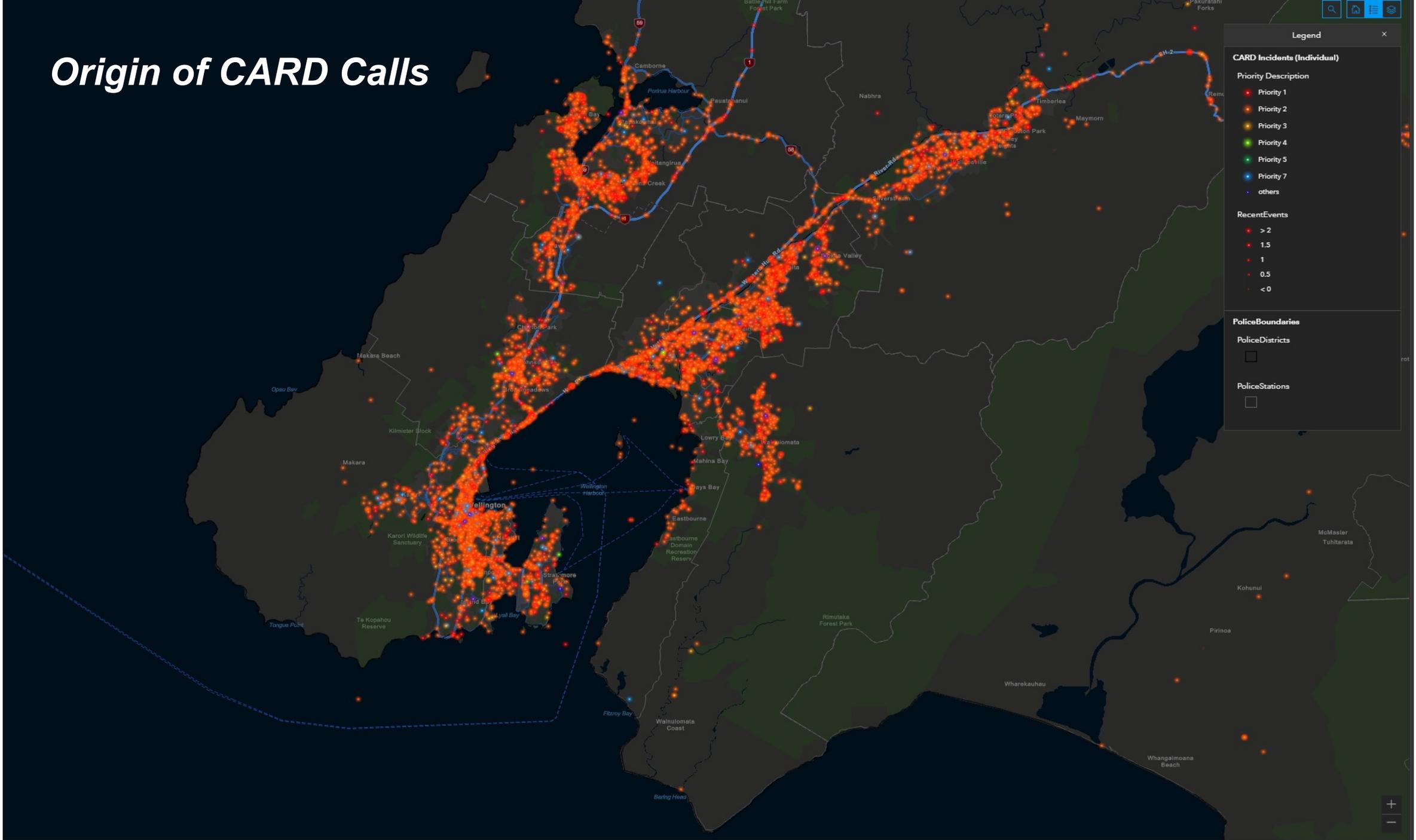


P1 & P2 Reactive Events Pending Demand

18.4%

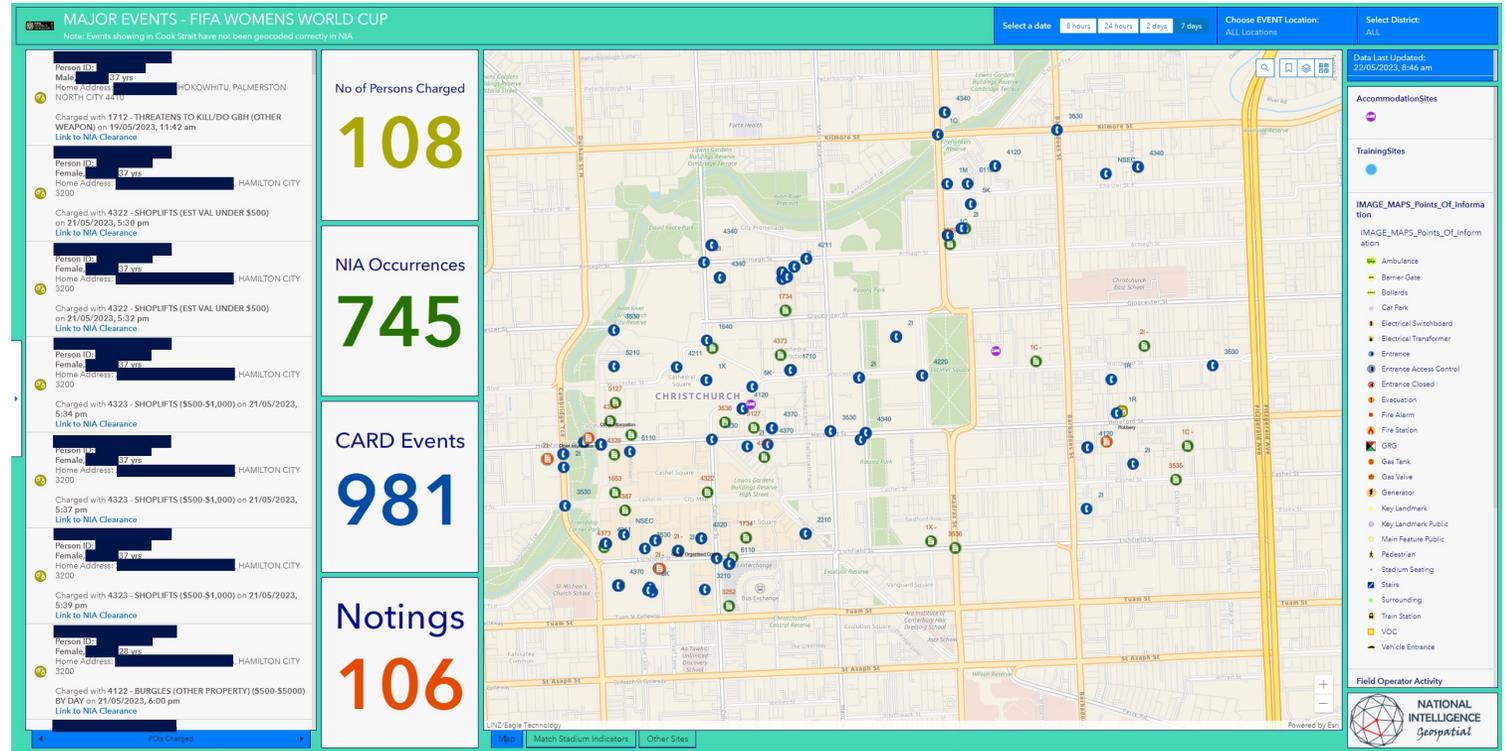
(Period as per Time Filter)

Origin of CARD Calls



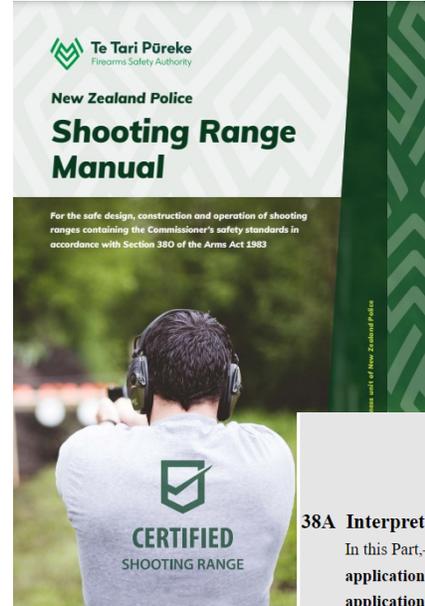
Support to Major Events

- Major Events dashboards provide comprehensive spatial awareness of sites associated with the event, including locations of notings, CARD events, occurrences and persons charged
- Major Events where geospatial support was provided include Op CONVOY, Op WAITANGI, Op COBALT, Op GABRIELLE, FIFA Women's World Cup, Elections 2023 Joint Intelligence Group
- Filters allow users to filter data by event location, district and different time periods



Shooting Clubs and Ranges Viewer Updates

- Amendment to the Arms Act 1983 mandates that shooting clubs need to be approved and certified by Police
- Each shooting venue is to be inspected on a regular basis and venues which fail to meet standards are issued an improvement notice
- FME used to automate daily updates to add new venues to the dataset and add/update each venue's improvement notices
- Enables Compliance Team to assess history of shooting venue and associated ranges



Part 6 Shooting clubs and shooting ranges

38A Interpretation

In this Part,—

application for approval means an application made under section 38D to have a shooting club approved

application for certification means an application made under section 38L to have a shooting range certified

certified shooting range means a shooting range certified under section 38P

shooting activities—

- (a) means activities that are carried out using a firearm or an airgun for the purpose of shooting at inanimate targets (whether fixed or moving); but
- (b) excludes—
 - (i) paintball shooting; and
 - (ii) airsoft shooting

shooting club means a voluntary association of people who—

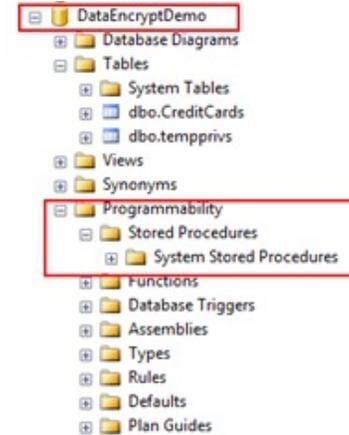
- (a) act in accordance with a set of written rules; and
- (b) participate in, or intend to participate in, shooting activities on a regular basis

shooting range—

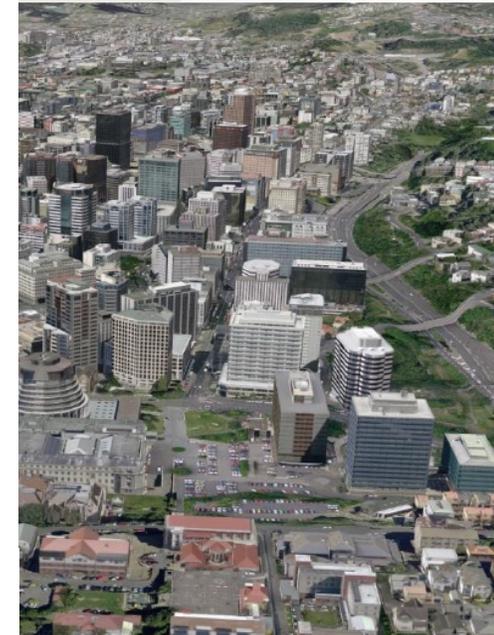
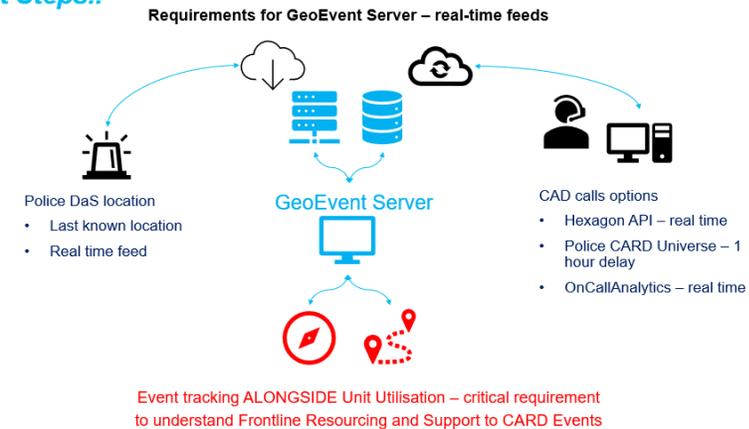
- (a) means a facility (whether indoor or outdoor), or a designated area of land, used by a shooting club or members of the public for the primary purpose of carrying out shooting activities; and
- (b) includes any defence area (as that term is defined in section 2(1) of the Defence Act 1990) used by a shooting club.

The way ahead

- ❖ RODB access so we can query data directly
- ❖ Use of web transformers e.g. Emailer and Geocoder
- ❖ Installation of GeoEvent Server
 - ❖ Better use of real-time data capability
- ❖ Processing of LiDAR and drone imagery data



Next Steps..



Summary

- ▶ FME Form and FME Flow are used extensively for a wide range of data processes
- ▶ Provide support to Operations, Major Events and Investigations including dashboards and image maps
- ▶ Automation of key processes which provide insights to our organisation
- ▶ Support Deployment and Prevention with Crime Harm mapping
- ▶ Provide key datasets which enable Our People to make important decisions
- ▶ Innovating as a team by using the latest technology and tools to support Our Business



OUR VISION

Equipping Police with unified immersive Geospatial technology to achieve Safe Homes, Safe Roads, and Safe Communities.

OUR PURPOSE

Delivering verified geospatial intelligence to Police at speed for targeted, informed decision making.

OUR MISSION

Enhance geospatial intelligence capabilities across Our Business to keep our front line, and those we serve, safer.

Tēnā koutou / Thank you

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POLICE
Ngā Pirihimana o Aotearoa