



ArcGIS Online Applications for Emergency Management

Multi-tenanted approach (Mackenzie,
Hurunui and Kaikoura Districts)



What is it About?

Mackenzie Experience of using *ArcGIS Online* tools and applications for **Emergency Management** – a **Work In Progress**

1. Where we were coming from
2. The turning point
3. What we have done and where we are at
4. What is ahead of us

What is it About?



Web AppBuilder



Survey123



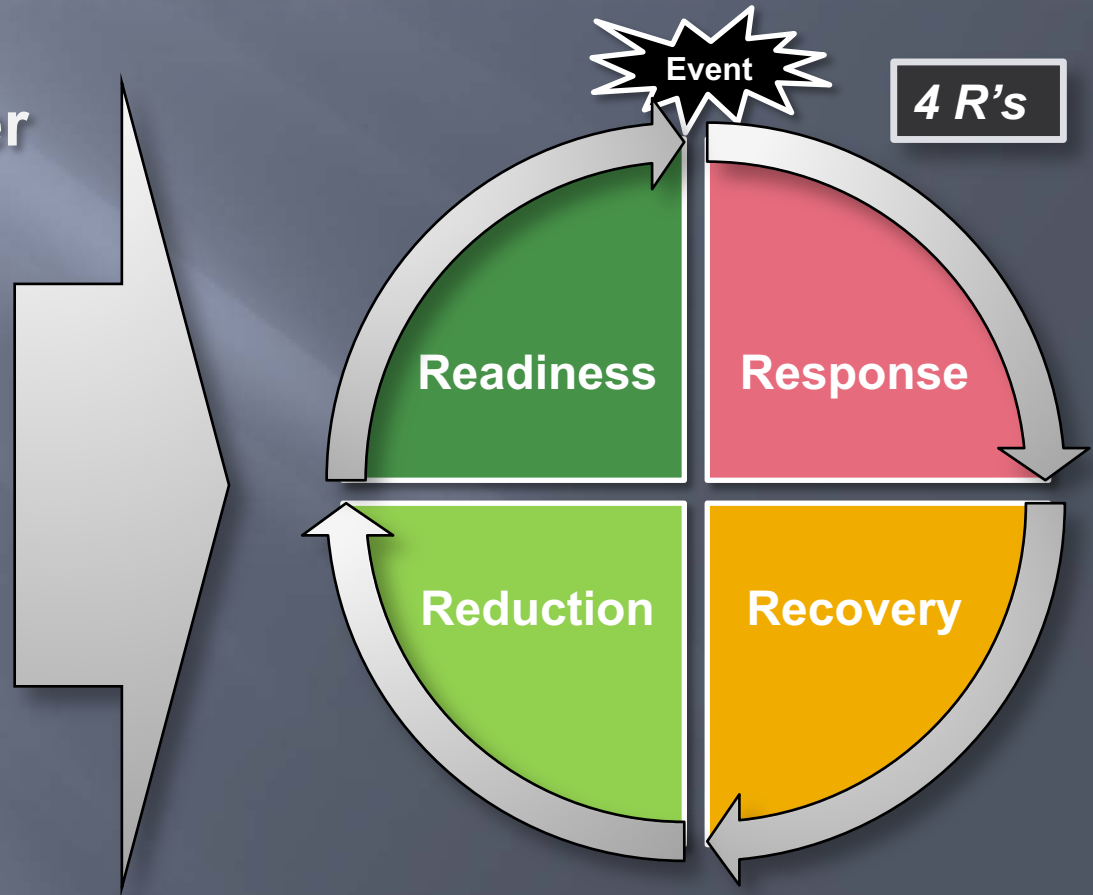
Operations
Dashboard



Workforce



AppStudio



Where we are



Mackenzie

Kaikoura

Hurunui

In the Past...

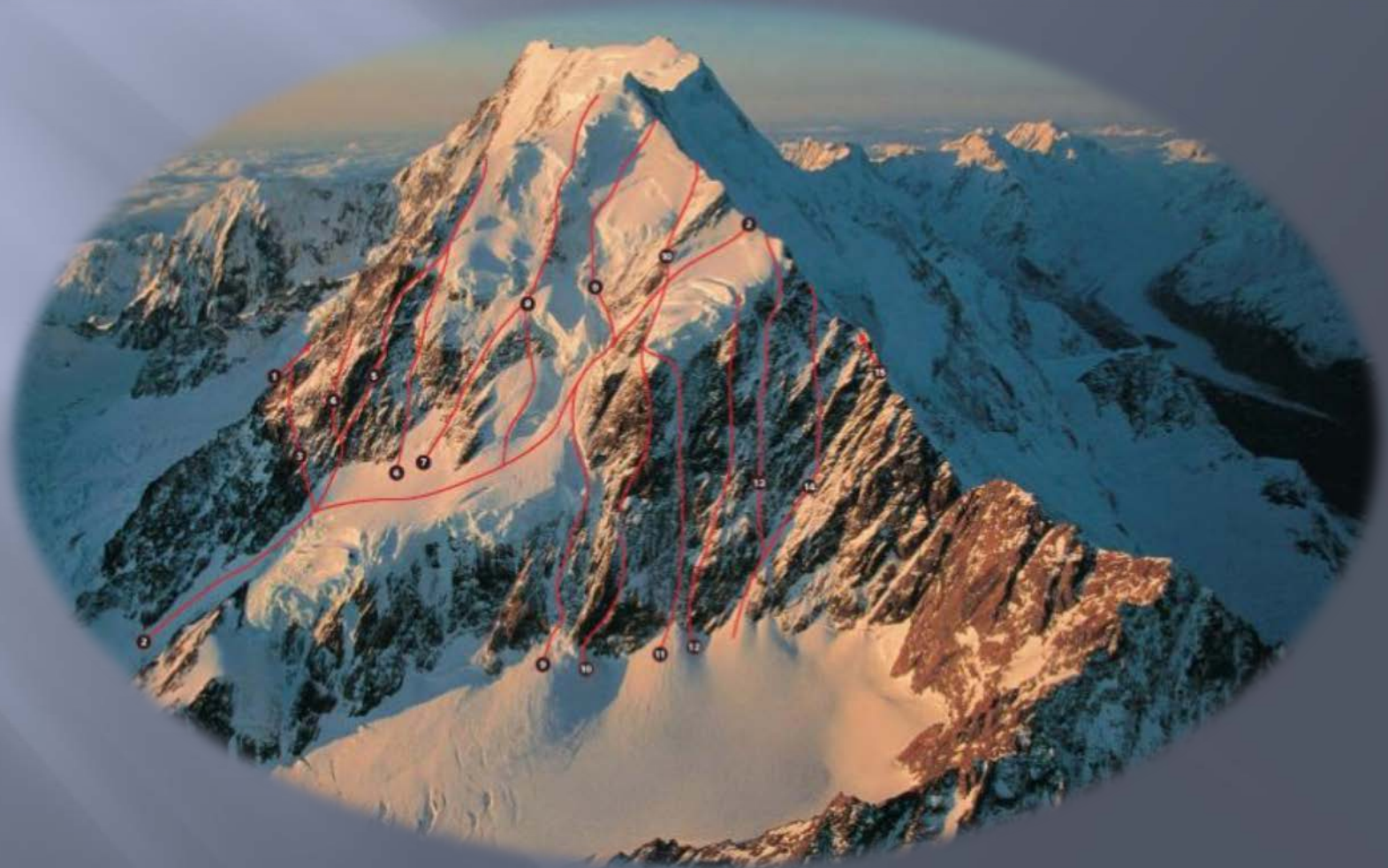


The Turning Point



D
A
Ki
Ke

The Idea



Where to Start



- ▣ Background Information / Knowledge
- ▣ Acquiring technical skill / knowledge
- ▣ Collaboration – what do we want to achieve within which time frame?
- ▣ CIMS context

Where did I start

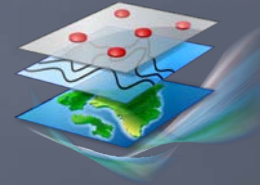
DATA



- ▣ Base Data – Incident Data
- ▣ Search for data on AGOL
- ▣ Create and upload data to AGOL
- ▣ Survey123 Data

Where did I start

Data Catalogue Web Map



- ▣ Bringing it all together
- ▣ Naming
- ▣ Symbology / Appearance
- ▣ Pop-ups
- ▣ Bookmarks
- ▣ Template for all other webmaps

Things coming together...



Weather Forecast

Fire

Phase II

Phase III - Welfare

Public Map

Incident Overview

Daily Imagery

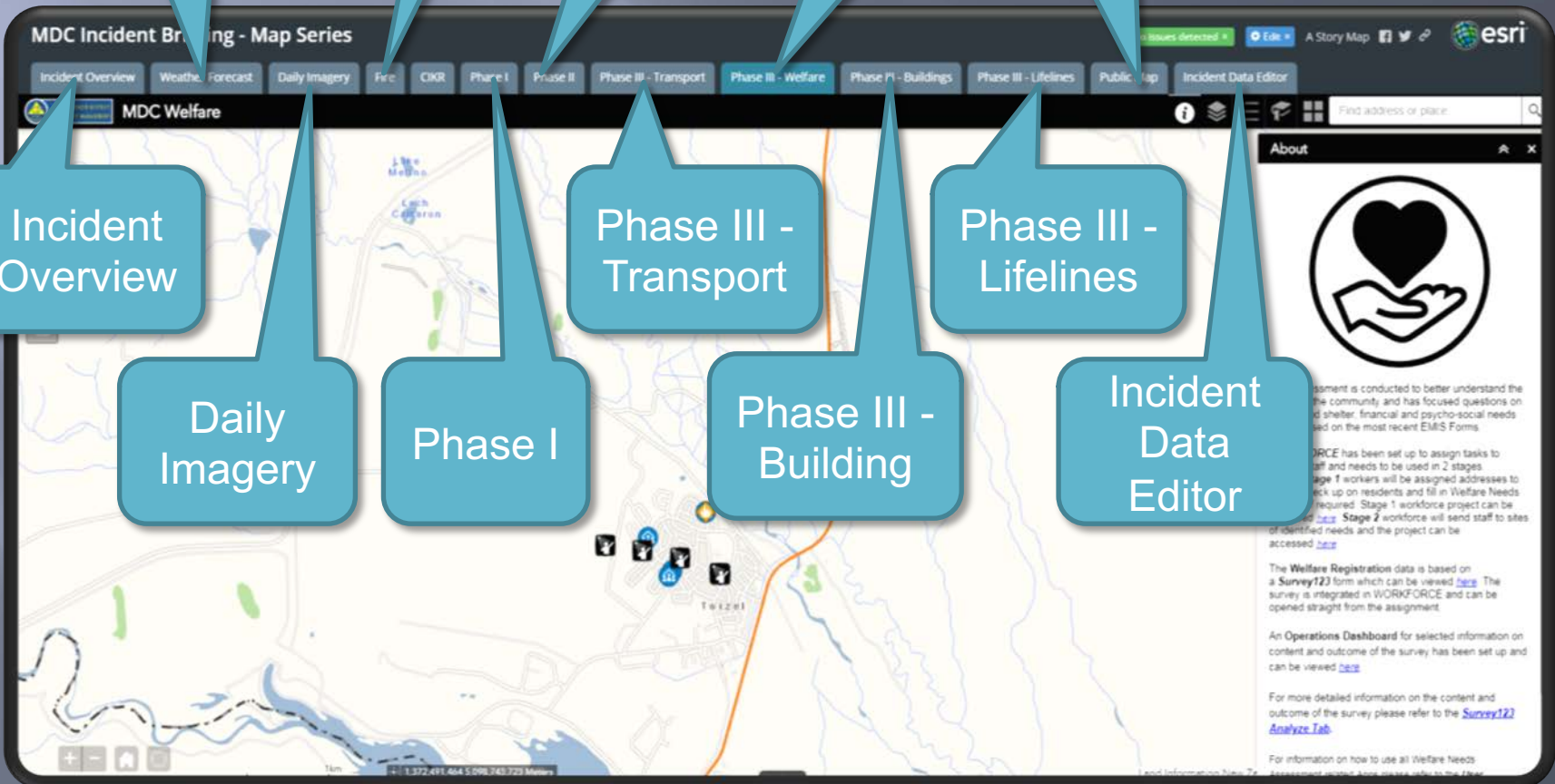
Phase I

Phase III - Transport

Phase III - Building

Phase III - Lifelines

Incident Data Editor



Making Progress...



Scenario

OPIHI RIVER FLOODING

4 R's



Readiness

Response

Reduction

Recovery



EVENT

Phase I

- Crowd sourcing

Phase II

- USAR
- Police

Phase III

- Transport
- Welfare
- Building
- Lifelines

Phase IV

RECOVERY

Phase I - Wide Area Assessment



EVENT

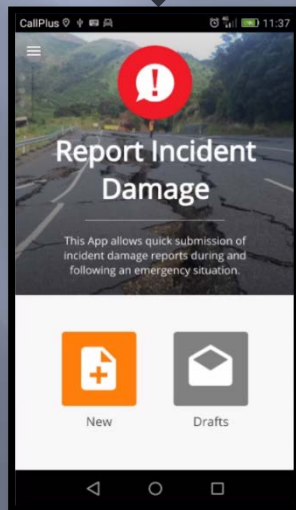
Phase I

(within 24-48h of impact)

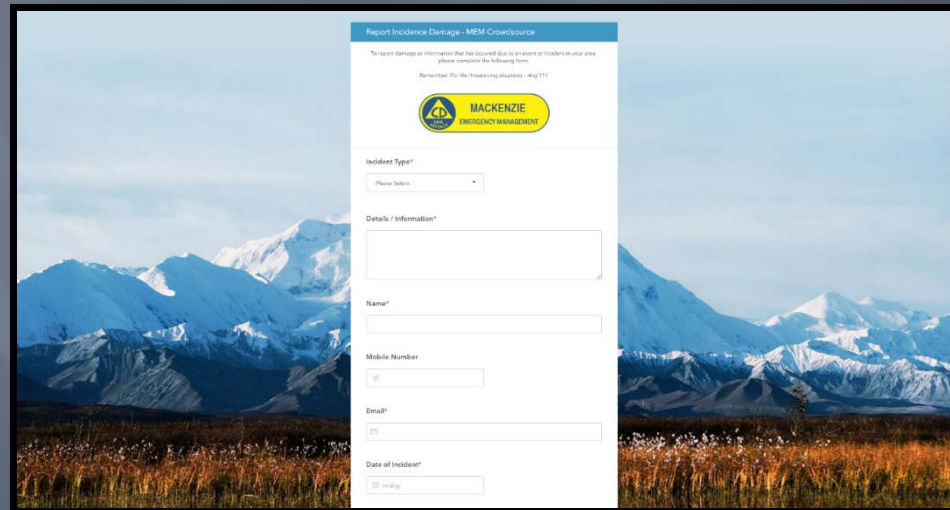


Crowd Sourcing

Phone App



or



Web Survey

Phase I



Survey Outcomes

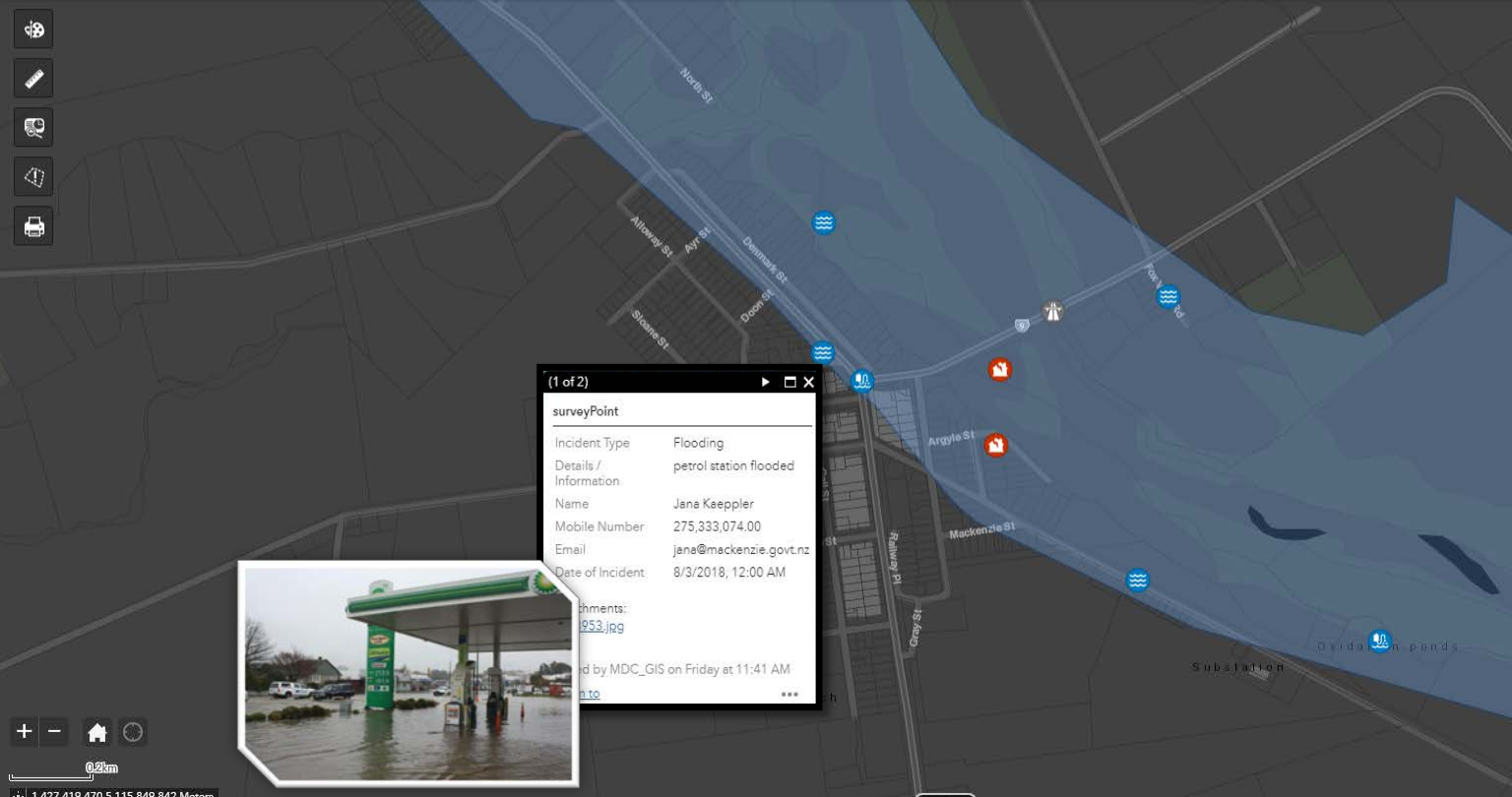
MDC Incident Briefing - Map Series

No issues detected * Edit * A Story Map

- Incident Overview
- Weather Forecast
- Daily Imagery
- Fire
- CIKR
- Phase I
- Phase II
- Phase III - Transport
- Phase III - Welfare
- Phase III - Buildings
- Phase III - Lifelines
- Public Map
- Incident Data Editor

Phase I - Wide Area Assessment

Find address or place



Legend

ID - Damage Report - Crowdsourced

- Fresh Water Pipes Broken
- Sewage Leak
- Power Failure
- Powerlines Down
- Tree Down
- Road / Bridge Damage
- Flooded
- Rockfall / Landslide
- Snow / Avalanche
- Damaged Structure
- Other

ID - Actual Flooding



(1 of 2)

surveyPoint

Incident Type	Flooding
Details / Information	petrol station flooded
Name	Jana Keeplier
Mobile Number	275,333,074.00
Email	jane@mackenzie.govt.nz
Date of Incident	8/3/2018, 12:00 AM
Attachments:	958.jpg
Created by	MDC_GIS on Friday at 11:41 AM
Link	Link to



Phase I



Survey Outcomes

MDC Incident Briefing - Map Series

No issues detected x Edit x A Story Map

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Phase I - Wide Area Assessment

Find address or place



ID - Damage Report - Crowdsourc (Grouped Counts)

COUNT	Damaged Structure	Flooding	Road / Bridge Damage	Sewage Leak
10	3	4	1	2

ID - Damage Report - Crowdsourc **Report**

Incident Type	Details / Information	Name	Mobile Number	Email	Date of Incident
Road / Bridge Damage	Bridge washed out and road blocked off	Jana Kaepler	275333074	jana@mackenzie.govt.nz	8/3/2018, 12:00 AM
Damaged Structure	building flooded and uninhabitable	Jana Kaepler	275333074	jana@mackenzie.govt.nz	8/3/2018, 12:00 AM
Damaged Structure	building flooded / uninhabitable	Jana Kaepler	275333074	jana@mackenzie.govt.nz	8/3/2018, 12:00 AM
Damaged Structure	flooded building / uninhabitable	Jana Kaepler	275333074	jana.kaepler@gmx.de	8/3/2018, 12:00 AM
Sewage Leak	sewage ponds flooded	Jana Kaepler	275333074	jana@mackenzie.govt.nz	8/3/2018, 12:00 AM
Sewage Leak	Sewage water bubbling up mixing with flood waters	Jana Kaepler	275333074	jana@mackenzie.govt.nz	8/3/2018, 12:00 AM
Flooding	petrol station flooded	Jana Kaepler	275333074	jana@mackenzie.govt.nz	8/3/2018, 12:00 AM
Flooding	farm flooded	Jana Kaepler	275333074	jana@mackenzie.govt.nz	8/3/2018, 12:00 AM
Flooding	flooded road	Jana Kaepler	275333074	jana@mackenzie.govt.nz	8/3/2018, 12:00 AM
Flooding	industrial area flooded	Jana Kaepler	275333074	jana@mackenzie.govt.nz	8/3/2018, 12:00 AM

About

Area Damage Assessment and is to be done within the first 24 hours of the incident with photos and a very simple form. This information is data submitted by anyone of the public. Submitting an incident photo can be done through the map. Submitting incident damage can be done through the map. Go to the EDITOR tab of this map series to edit the map once edits have been made.

Incident

- ID - Damage Report - Cr... 10
- Damaged Structure 3
- Flooding 4
- Road / Bridge Damage 1
- Sewage Leak 2

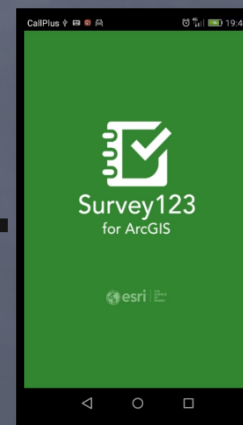
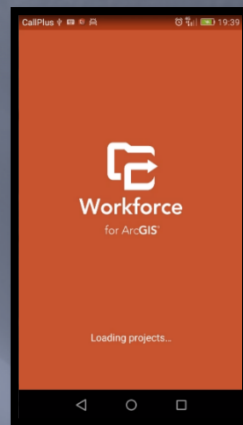
Phase II - Rapid Damage Assessment



EVENT

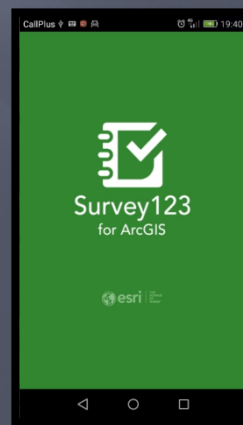
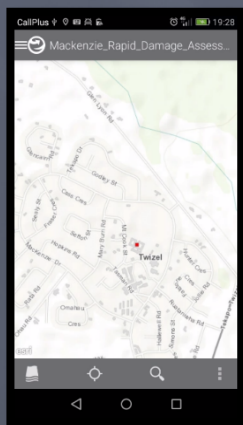
Phase I

Phase II
(within 2 to 3 days of impact)



Workforce Integration

Explorer Integration



Phase II



Rapid Damage Assessment

Fieldworker



My Projects > NZUSAR Rapid Assessment

Create Assignments

Assignment Type *

Pick a type...
Carry out Inspections

Assigned to
Assign

Priority: None | Due Date: | Time: |

ID: |

Description: |

Attachments: |

Create Assignments | Cancel

CallPlus | To do | **Survey at Assignment**

Carry out Inspections
10 Buchanan St, Fairlie, 7925
Critical • 61.2 km • Added 59 mins ago

NZUSAR RDA

Demographic Details

Number of Adult Occupants
leave blank if unknown
2

Number of Child Occupants
leave blank if unknown
3

Number of Vulnerable Individuals
leave blank if unknown
3

Is a Welfare Visit Required?
leave blank if unknown
Yes

Dispatcher



Phase II



Survey Outcomes

MDC Incident Briefing - Map Series

Incident

Displaced People

#	Address	Number of People Displaced	Priority for Assistance	Count
1	10 Buchanan St, Fairlie, 7925	5	No life risk but aid required < 5 days	1

Evacuated People

#	Address	Number of People Evacuated	Priority for Assistance	Count
1	10 Buchanan St, Fairlie, 7925	5	No life risk but aid required < 5 days	1

Animals requiring Attention

#	Address	Animals requiring attention or deceased	Pet Status	Priority for Assistance	Count
1	10 Buchanan St, Fairlie, 7925	Pets	Affected	No life risk but aid required < 5 days	1

Welfare Visit Required

#	Address	Is a Welfare Visit Required?	Priority for Assistance	Count
1	10 Buchanan St, Fairlie, 7925	Yes	No life risk but aid required < 5 days	1

Extent of Damage

#	Address	Extent of Damage	Priority for Assistance	Count
1	10 Buchanan St, Fairlie, 7925	Severe damage	No life risk but aid required < 5 days	1

NZUSAR Damage Classification

#	Address	USAR Damage Classification	Priority for Assistance	Count
1	10 Buchanan St, Fairlie, 7925	Red	No life risk but aid required < 5 days	1

Report

No issues detected * Edit * A Story Map

Welfare Phase III - Buildings Phase III - Lifelines Public Map Incident Data Editor

Find address or place

Legend

- ID - NZUSAR - Displaced People
 - Number of People Displaced
 - > 100
 - 80
 - 50
 - 30
 - < 10
- ID - NZUSAR - People Evacuated
 - Number of People Evacuated
 - > 100
 - 80
 - 50
 - 30
 - < 10
- ID - NZUSAR - Animals requiring attention
 - Animals
- ID - NZUSAR - Welfare Visit Required
 - Welfare Visit
- ID - NZUSAR Damage Classification
 - Red
 - Yellow
 - Green
 - Not applicable

(1 of 7)

Number of Vulnerable Individuals: 3

Is a Welfare Visit Required?: Yes

Welfare Contact Name: Phill Mackay

☎ Phone Number: 021836623

More information on the welfare need: Occupants of this address will need to be assessed for their welfare needs at civil defence center in Fairlie.

Priority for Assistance: No life risk but aid required < 5 days

Number of People Injured:

Zoom to

Phase III - Welfare

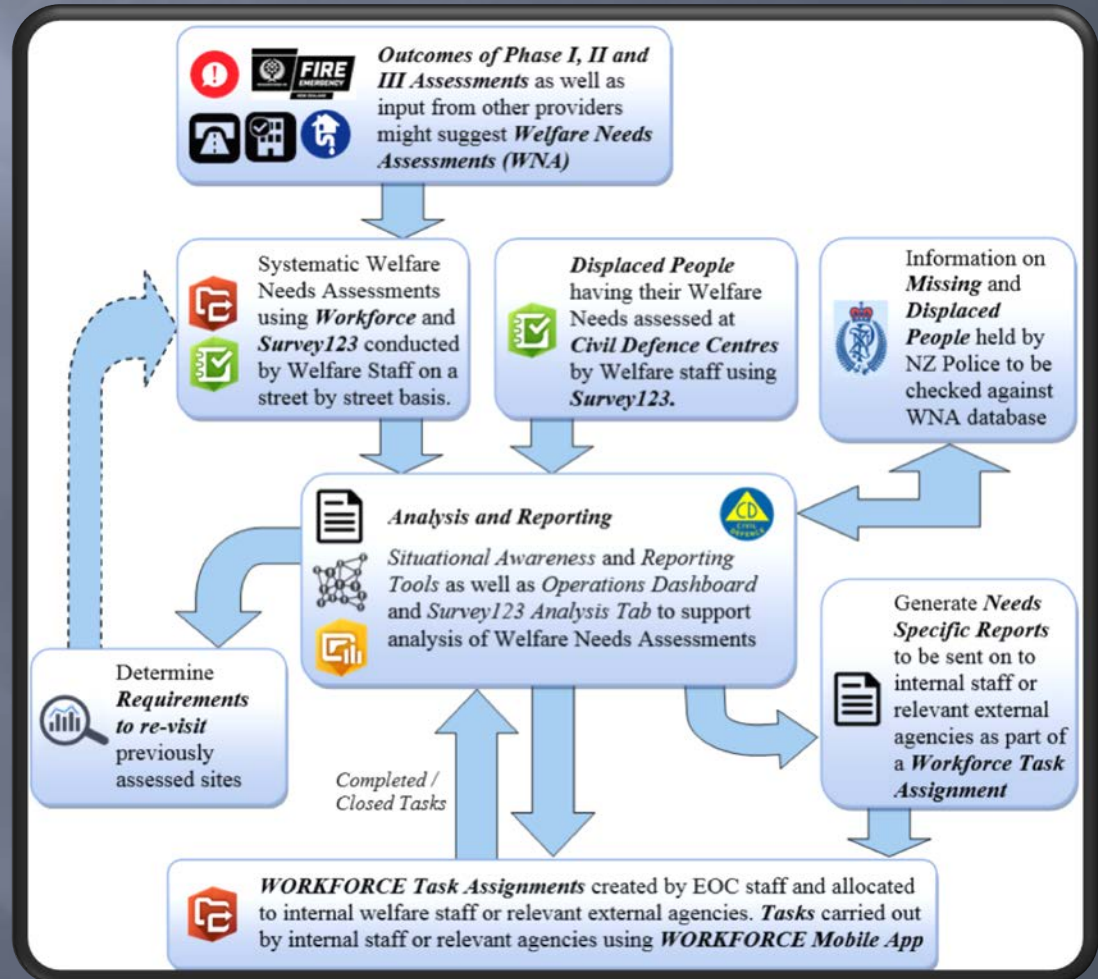
EVENT

Phase I

Phase II

Phase III

(within 3 to 7 days of impact)

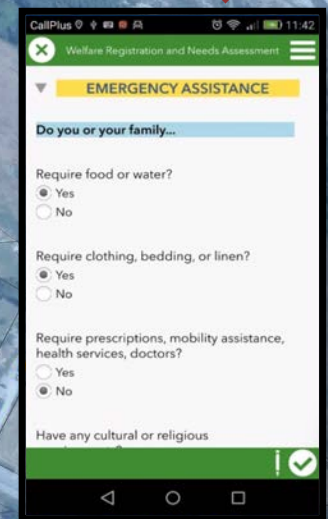
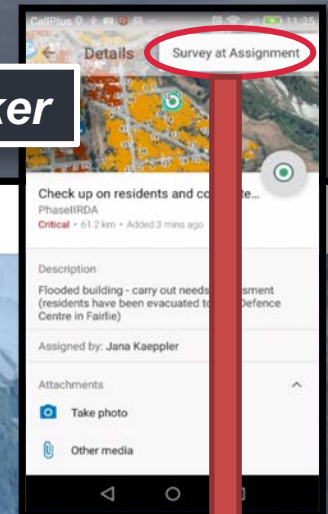


Phase III - Welfare



Welfare Needs Assessment (Workforce Project 1)

Fieldworker



My Projects > Welfare and Needs Assessment (1)

Create Assignments

Assignment Type *
Check up on residents and complete survey (if required)

Location *
Search for an address or click on the map to add new locations.

Assigned to
Assign

Priority: None | Due Date: | Time: |

ID

Description

Attachments
Add an attachment using drag and drop or by selecting a file.

Create Assignments | Cancel

4 Results

NZUSAR - Welfare Visit Required: 1 Result

Building: PhaseIRDA
10 Buchanan St, Fairlie, 7925

Owners: start_time: 8/8/2018, 1:36 PM; end_time: 8/8/2018, 1:40 PM

Ratepayer: username: MDC_GIS; email: jana@mackenzie.govt.nz

+ Create Assignment

Dispatcher



Phase III - Welfare



Survey Outcomes (Welfare 1)

MDC Incident Briefing - Map Series

No issues detected x Edit x A Story Map f t l esri

- Incident Overview
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- Fire
- CIKR
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- Phase III - Buildings
- Phase III - Lifelines
- Public Map
- Incident Data Editor

MDC Welfare

Find address or place

Welfare Needs Near Me

Search for an address or locate on map

10 Buchanan St, Fairlie, 7925

Show results within 5 Meters

0 15

- ID - Welfare Registration - Access Sanitary (1)
- ID - Welfare Registration - Accommodation (1)
- ID - Welfare Registration - Alternative Cooking / Heating (1)
- ID - Welfare Registration - Animal Assistance (1)
- ID - Welfare Registration - Clothing (1)
- ID - Welfare Registration - Concerns Family / Animals (1)
- ID - Welfare Registration - Concerns Youth (1)
- ID - Welfare Registration - Financial Assistance (1)
- ID - Welfare Registration - Food Required (1)
- ID - Welfare Registration - Social Support (1)

Searched Location

10 Buchanan St, Fairlie, 7925

Legend

- ID - Welfare Registration - Access Sanitary
- ID - Welfare Registration - Accommodation
- ID - Welfare Registration - Alternative Cooking / Heating
- ID - Welfare Registration - Animal Assistance
- ID - Welfare Registration - Clothing
- ID - Welfare Registration - Concerns Family / Animals
- ID - Welfare Registration - Concerns Youth
- ID - Welfare Registration - Cultural
- ID - Welfare Registration - Difficulty accessing Support
- ID - Welfare Registration - Financial Assistance

Phase III - Welfare



Survey Outcomes (Welfare 1) – Situational Awareness

MDC Incident Briefing - Map Series

No issues detected × Edit × A Story Map

Incident Overview Weather Forecast Daily Imagery Fire CIKR Phase I Phase II Phase III - Transport **Phase III - Welfare** Phase III - Buildings Phase III - Lifelines Public Map Incident Data Editor

MDC Welfare

Find address or place



Search

Summary

Name	Count	Area(m ²)	Length(m)
Do you require animal assistance?	3	N/A	N/A

Report

#	First name	Surname	Address	Home Phone	Mobile Phone	Email Address	Count
1	Tony allan	troy	No Data	36,458,215	278,765,432	No Data	1
2	Paul	Smith	No Data	124,359	2,747,365	test@mackenzie.govt.nz	1
3	Megan	Carter	10 Buchanan Street, 7925	0	275,333,074	Megan@hotmail.com	1

About

This assessment is conducted to better understand the needs of the community and has focused questions on water, food shelter, financial and psycho-social needs and is based on the most recent EMIS Forms.

WORKFORCE has been set up to assign tasks to welfare staff and needs to be used in 2 stages. During **Stage 1** workers will be assigned addresses to visit to check up on residents and fill in Welfare Needs surveys if required. **Stage 1** workforce project can be accessed [here](#). **Stage 2** workforce will send staff to sites of identified needs and the project can be accessed [here](#).

The **Welfare Registration** data is based on a **Survey123** form which can be viewed [here](#). The survey is integrated in WORKFORCE and can be opened straight from the assignment.

An **Operations Dashboard** for selected information on content and outcome of the survey has been set up and can be viewed [here](#).

Incident Access Sanitary (3) Accommodation (2) Altern. Heating / Cookin... Animal Assistance (3) Child alone (0) Clothing (2) Family / Animal Concern... Youth Concerns (1) Cultural (1) Support access (2)

Female 1 Male 2

Phase III - Welfare



Workforce Task Assignments (Workforce Project 2)

Fieldworker



Dispatcher

The image displays a composite of screenshots from the Workforce Task Assignments application. The main interface is titled "Mv Projects > Welfare and Needs Assessment (2)" and features a "Create Assignment" form. The form includes fields for "Assignment Type" (set to "Food / Water request"), "Location" (Megan Carter), "Assigned to" (Jana Kaepler), "Priority" (Critical), "Due Date", "Time", "ID", and "Description" (Residents of this address are at Civil Defence Centre and require Food and Water.). A "Create Assignment" button is visible at the bottom of the form.

Overlaid on the right is a mobile device screenshot showing a "Details" view for a "Food / Water request" assigned to Megan Carter. The description states: "Residents of this address are at Civil Defence Centre and require Food and Water." The assignment is by Jana Kaepler. A "To do" list on the right shows the assignment status with options: Pause, Finish, Decline, and Reset.

At the bottom center, a search results list for "Food / Water" is shown, listing 10 results. The first result is for Megan Carter at 10 Buchanan St, Fairlie, 7925. A red circle highlights the "+ Create Assignment" button at the bottom of this list.

The background of the interface is an aerial map showing a residential area with streets like Allandale Road, Argyle Street, and Buchanan Street. A red circle on the map indicates the location of the assignment.



Phase III - Buildings

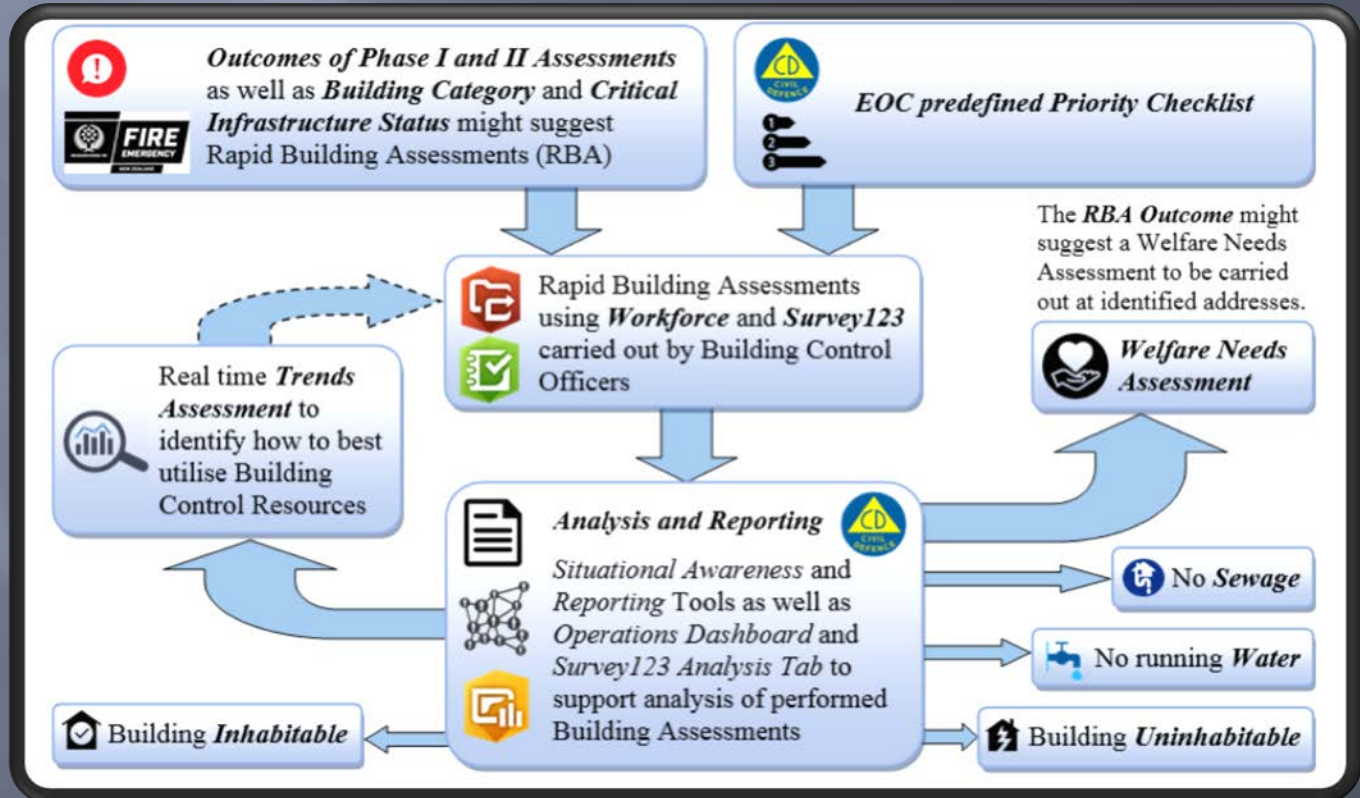
EVENT

Phase I

Phase II

Phase III

(within 3 to 7 days of impact)



Phase III - Buildings



Rapid Building Assessment

Fieldworker

Survey at Assignment

Dispatcher

My Projects > Rapid Building Assessment

Create Assignment

Assignment Type *
Carry out Building Inspections

Location *
Search for an address or click on the map to add new locations.
10 Buchanan St, Fairlie, 7925

Assigned to
JK Jana Kaeppler

Priority
High

Due Date Time

ID

Inspect flood damaged building. Residents have been evacuated and can be reached via cell phone (number provided).

Create Assignment Cancel

Fieldworker

Survey at Assignment

Explore assignment

Carry out Building Inspections
10 Buchanan St, Fairlie, 7925
High priority - 61.2 km

Description
Inspect flood damaged building. Residents have been evacuated and can be reached via cell phone (number provided).

Assigned by: Jana Kaeppler

Attachments
Take photo
Other media

MDC Building Category

Building Category: Residential
10 Buchanan St, Fairlie, 7925

Address:
10 Buchanan Street, Fairlie

Town:
Fairlie

District:
Mackenzie District

Category:
Residential

+ Create Assignment

Earthquake Rapid Assessment Form

Enter the address manually

Site Address
10 Buchanan St, Fairlie, 7925

GPS
44°6'S 170°50'E

Other ID or access

Photo taken?



Phase III - Buildings



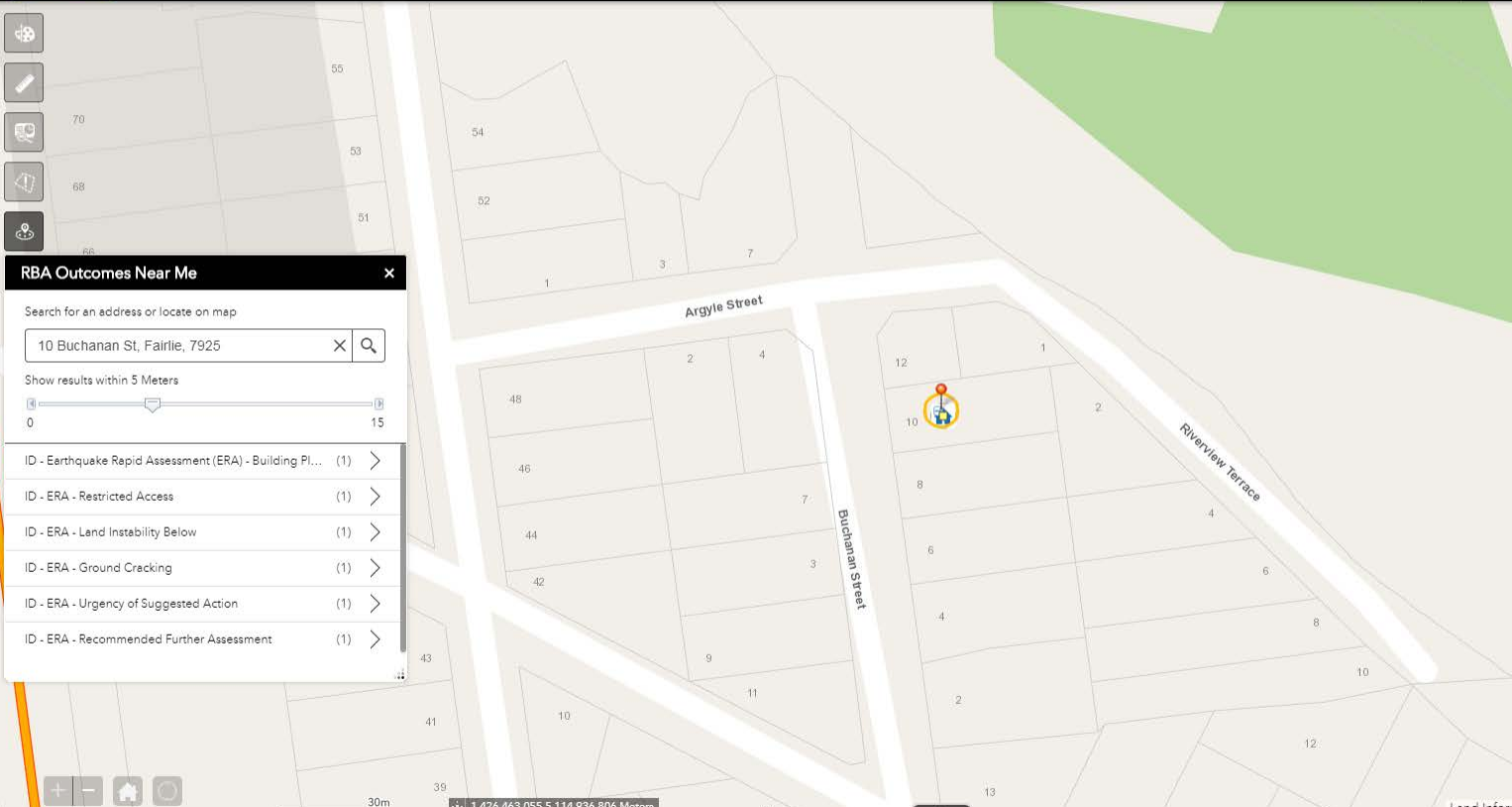
MDC Incident Briefing - Map Series

No issues detected * Edit * A Story Map

- Incident Overview
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- Phase II
- Phase III - Transport
- Phase III - Welfare
- Phase III - Buildings**
- Phase III - Lifelines
- Public Map
- Incident Data Editor

MDC Building Assessments

Find address or place



Legend

- ID - Earthquake Rapid Assessment (ERA) - Building Placards
 - Heavy damage
 - Moderate damage
 - Light or no damage
- ID - ERA - Restricted Access
 - Y1 - Restricted access to part(s) of the building only
 - Y2 - Restricted access - short term entry only
- ID - ERA - Land Instability Below
 - Land Instability Below
- ID - ERA - Ground Cracking
 - Severe
 - Moderate
 - Minor/None
- ID - ERA - Urgency of Suggested Action
 - Immediate action required
 - Standard
- ID - ERA - Recommended Further Assessment
 - Further evaluation to be arrange by building owner
 - Level 2 Rapid Assessment
- BD - MDC Boundary
- BD - TA Boundaries

RBA Outcomes Near Me

Search for an address or locate on map

Show results within 5 Meters

0 15

- ID - Earthquake Rapid Assessment (ERA) - Building Pl... (1) >
- ID - ERA - Restricted Access (1) >
- ID - ERA - Land Instability Below (1) >
- ID - ERA - Ground Cracking (1) >
- ID - ERA - Urgency of Suggested Action (1) >
- ID - ERA - Recommended Further Assessment (1) >

Phase III - Buildings



Survey Outcomes – Situational Awareness / Reporting

MDC Incident Briefing - Map Series

No issues detected x Edit x A Story Map f t p esri

Incident Overview | Report | Phase III - Welfare | **Phase III - Buildings** | Phase III - Lifelines | Public Map | Incident Data Editor

Building Placards

#	Site Address	Contact Name	Type	Specify other.	Phone Number	Building Placards	Count
1	10 Buchanan St, Fairlie, 7925	Megan Carter	owner	No Data	0275333074	Moderate damage	1

Restricted Access

#	Site Address	Contact Name	Type	Specify other.	Phone Number	Restricted access	Count
1	10 Buchanan St, Fairlie, 7925	Megan Carter	owner	No Data	0275333074	Y1	1

Land Instability Below

#	Site Address	Contact Name	Type	Specify other.	Phone Number	Land instability below	Count
1	10 Buchanan St, Fairlie, 7925	Megan Carter	owner	No Data	0275333074	yes	1

Ground Cracking

#	Site Address	Contact Name	Type	Specify other.	Phone Number	Ground slope movement or cracking	Count
1	10 Buchanan St, Fairlie, 7925	Megan Carter	owner	No Data	0275333074	moderate	1

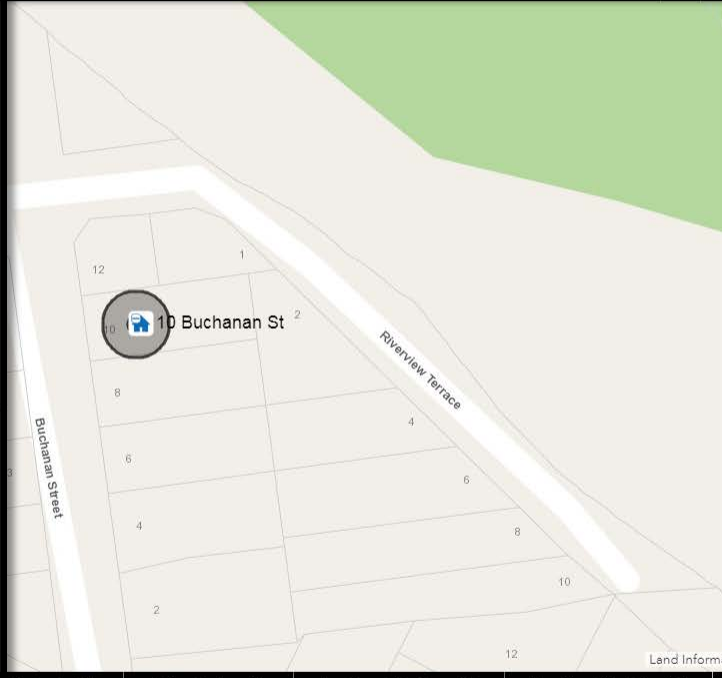
Urgency of Suggested Action

#	Site Address	Contact Name	Type	Specify other.	Phone Number	Urgency of suggested action	Count
1	10 Buchanan St, Fairlie, 7925	Megan Carter	owner	No Data	0275333074	standard	1

Recommended Further Action

#	Site Address	Contact Name	Type	Specify other.	Phone Number	Recommended further Assessment	Count
1	10 Buchanan St, Fairlie, 7925	Megan Carter	owner	No Data	0275333074	building_owner	1

Report



About

This map shows **Building Assessment** data based on the official [Survey123 MBIE-Earthquake-Rapid-Assessment](#) form and **Flood Assessment** data based on the [Survey123 MBIE-Flood-Rapid-Assessment](#) form. The forms can be accessed in field device format by clicking on the above links.

This assessment is to be done during **follow up** (<96 hours) to the on the ground response to give a more detailed consequence analysis. The outcome of this assessment results in **placards** on each building (red, yellow, white). This is based on the [MBIE Standard](#) and is very important to Recovery.

Incident | B | Barricades (0) | Safety Cordons (0) | Land Instability Above (0) | Land Instability Below (1) | Ground Cracking (1)

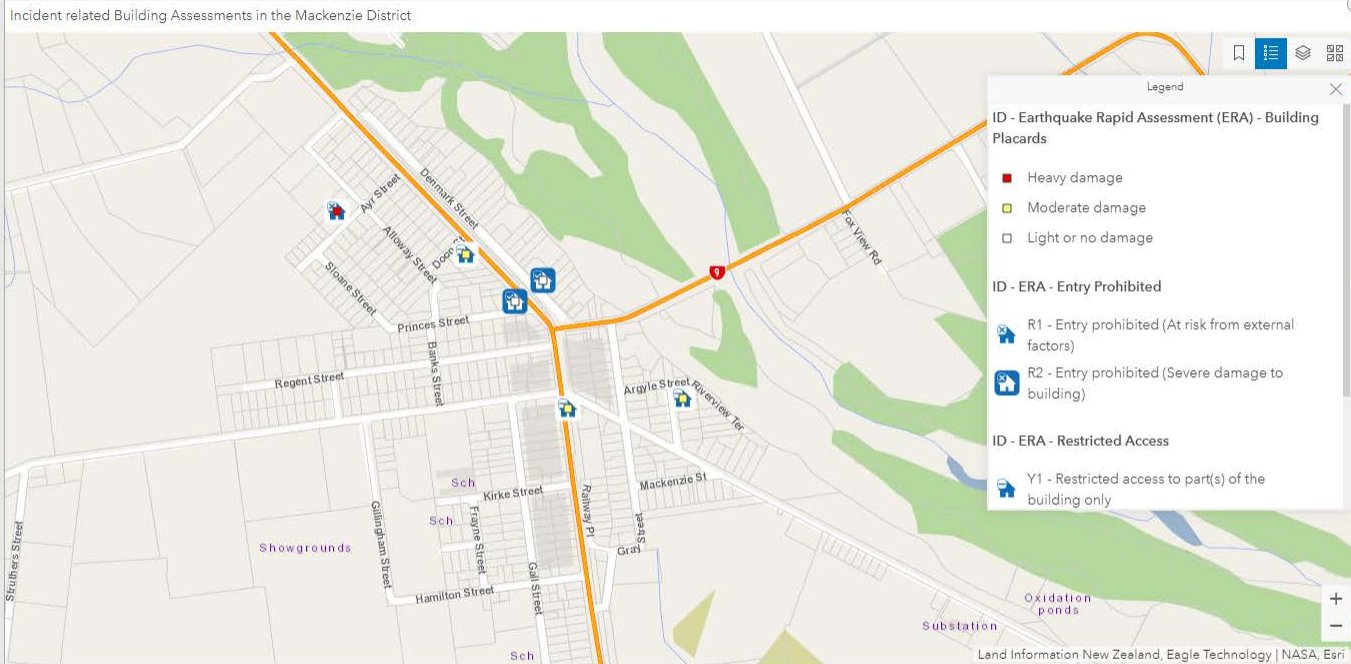
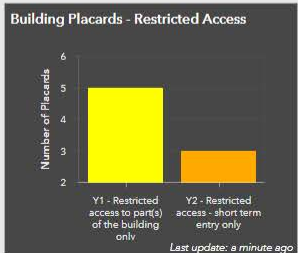
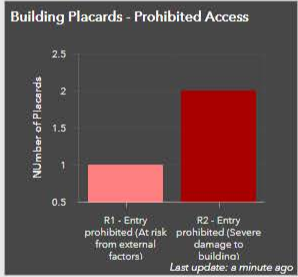
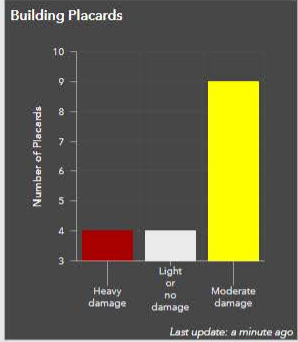
Phase III - Buildings



Rapid Building Assessment Operations Dashboard

MDC Building Assessment Dashboard

Time Period: **None** Today 48 Hours 7 Days 30 Days



This map shows incident related building assessments.



Phase III - Transport

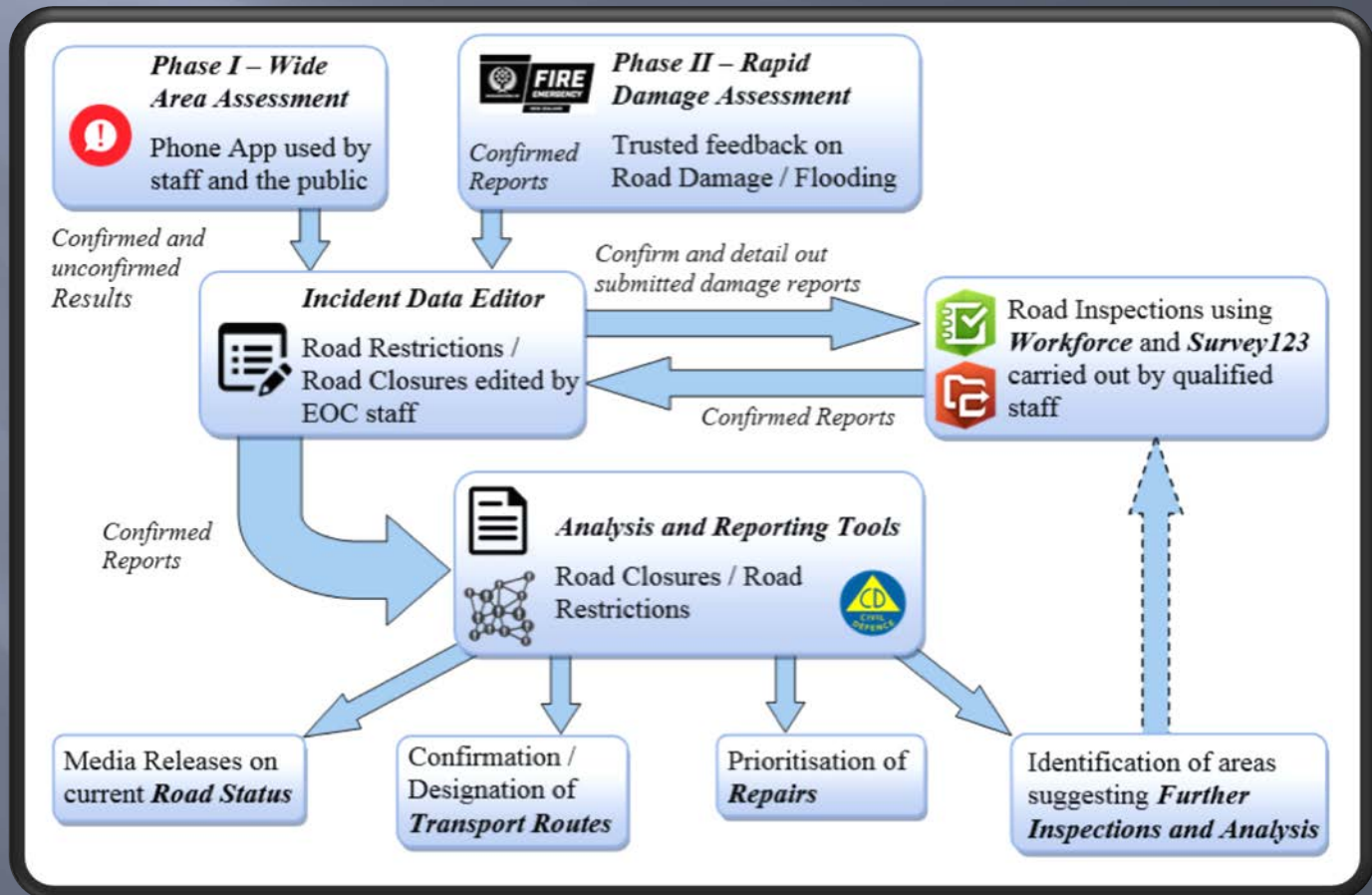
EVENT

Phase I

Phase II

Phase III

(within 3 to 7 days of impact)



Phase III - Transport



Incident Data Editor

MDC Incident Briefing - Map Series

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MDC Incident Data Editor

The screenshot displays the Incident Data Editor interface. The main map shows a flooded area with red lines indicating road closures. A search bar at the top left contains the text "Find address or place". On the left, an "Edit" panel is open, showing "Select a template to create features:" and "Feature layers: All". Below this, there are search templates and a list of "Other" templates including "ID - Road Closures (Local)" and "ID - Actual Flooding". A central pop-up window titled "Road Closures: Clayton Road" provides details: Road Name: Clayton Road, Locality: Fairlie, Road Status: Closed, Start of Closure, End of Closure, and Comments: closed due to flooding until further notice. On the right, a "Legend" panel lists various incident types such as "ID - Damage Report - Crowdsourced" (Fresh Water Pipes Broken, Sewage Leak, Power Failure, Powerlines Down, Tree Down, Road / Bridge Damage, Flooding, Rockfall / Landslide, Snow / Avalanche, Damaged Structure, Other), "ID - Road Closures (Local)" (Closed, Restricted, Detour, Open), "ID - Actual Flooding", "ID - MDC Roading Assets - Bridges (Status)" (Intact, Damaged, Destroyed), and "BD - MDC Boundary". The bottom status bar shows coordinates: 1,430,140,128 5,118,146,848 Meters.

Phase III - Transport

 **Road Bridge Inspections**

Fieldworker

My Projects > Road Inspections

Create Assignments

Assignment Type *

- Inspect Bridge
- Inspect Bridge
- Inspect Cattle Stop
- Inspect Culvert
- Inspect Ford
- Inspect Road
- Inspect Side Drain

ID

Description

Attachments

Create Assignments Cancel

Dispatcher

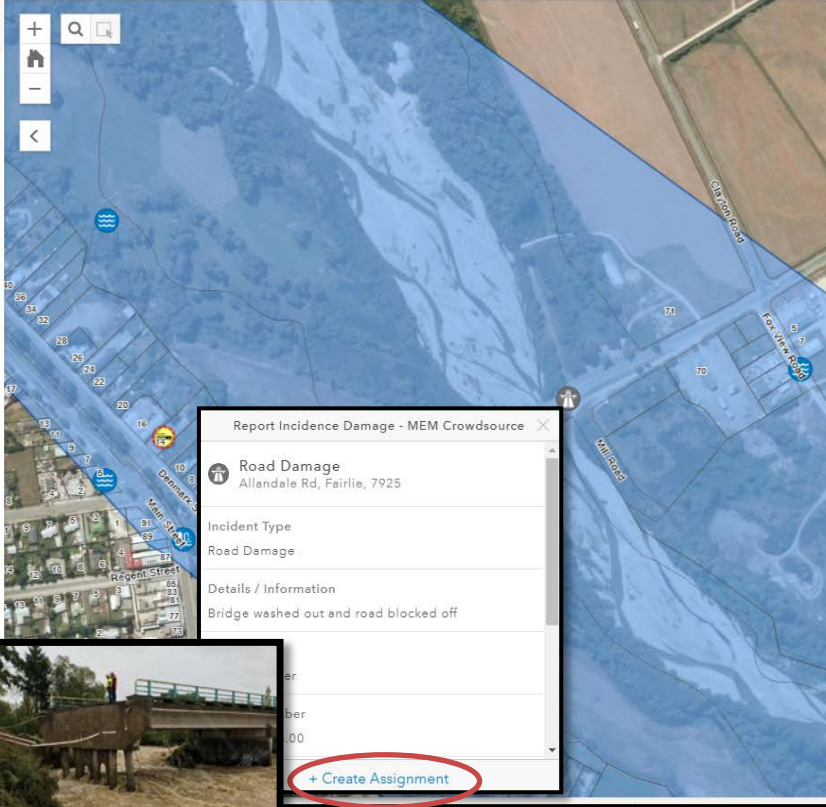
Report Incidence Damage - MEM Crowdsourcing

Road Damage
Allandale Rd, Fairlie, 7925

Incident Type
Road Damage

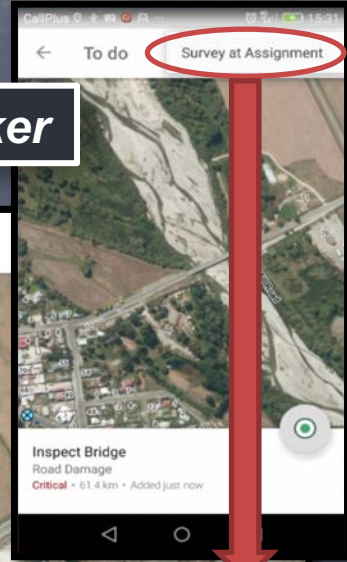
Details / Information
Bridge washed out and road blocked off

+ Create Assignment



To do: Survey at Assignment

Inspect Bridge
Road Damage
Critical • 61.4 km • Added just now



MDC Road Inspections

Number of Animals (approx.)

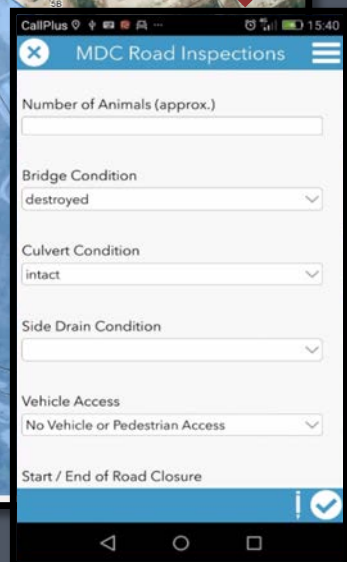
Bridge Condition
destroyed

Culvert Condition
intact

Side Drain Condition

Vehicle Access
No Vehicle or Pedestrian Access

Start / End of Road Closure



Phase III - Transport



Survey Outcomes

- Media Releases on Current **Road Status**
- Confirmation / Designation of **Transport Routes**

- Prioritisation of **Repairs**
- Identification of Areas suggesting **Further Inspections and Analysis**

MDC Incident Briefing - Map Series

No issues detected x Edit x A Story Map

- Incident Overview
- Weather Forecast
- Daily Imagery
- Fire
- CIKR
- Phase I
- Phase II
- Phase III - Transport
- Phase III - Welfare
- Phase III - Buildings
- Phase III - Lifelines
- Public Map
- Incident Data Editor

MDC Transportation



Summary

Name	Count	Area(m ²)	Length(m)
Highways	0	N/A	0
Roads	19	N/A	37,658.17
Rural Bridges	2	N/A	N/A
Inspected Bridges	1	N/A	N/A
Inspected Roads	1	N/A	N/A

Report

Roads

#	Road Name:	Locality:	Status:	Start:	End:	Comments:	Length(m)
1	SHS (Between Kimbell and Fairlie)	Fairlie	Closed	8/8/2018, 1:45 PM	No Data	This segment of State highway will be closed due to widespread flooding until further notice.	11,431.49
2	Hamilton Road	Fairlie-Ashwick Flat	Restricted	No Data	No Data	One lane only	9,946.38
3	Clayton Road	Fairlie	Closed	No Data	No Data	closed due to flooding until further notice	4,585.90
4	Talbot Road	Fairlie	Closed	No Data	No Data	flooding	2,995.73
5	Kerra Road	Fairlie-Ashwick Flat	Closed	No Data	No Data	flooding	1,321.07
6	Arthur Street	Fairlie	Closed	No Data	No Data	flooding	1,080.63
7	North Street	Fairlie	Closed	6/29/2018, 12:30 PM	6/30/2018, 2:00 PM	flooding	951.38
8	Ceraldine - Fairlie Highway	Fairlie	Closed	No Data	No Data	closed until further notice due to flooding	927.62
9	Gray Street	Fairlie	Closed	No Data	No Data	flooding	774.17
10	Denmark Street	Fairlie	Closed	No Data	No Data	flooding	749.73
11	Ophi Street	Fairlie	Closed	No Data	No Data	flooding	682.95
12	Mount Cook Road	Fairlie	Closed	No Data	No Data	No Data	658.68
13	Railway Street	Fairlie	Closed	No Data	No Data	flooding	417.80
14	Railway Street	Fairlie	Closed	6/29/2018, 12:00 AM	6/30/2018, 12:00 AM	Flooding	232.53
15	Buchanan Street	Fairlie	Closed	No Data	No Data	No Data	221.43



Road Closures: Talbot Road

Road Name: Talbot Road
 Locality: Fairlie
 Road Status: Closed
 Start of Closure:
 End of Closure:
 Comments: flooding

Zoom to

About



This map informs you about the current Road Status in the district. The status data is constantly being updated by NZTA and MDC.

Use **WORKFORCE** to carry out Road Inspections.

For detailed information on the inspections survey please refer to the [Survey123 Analyse Tab](#).

To edit data please refer to the **EDITOR** tab of this map series. Changes will show in this map once edits have been completed and saved.

Incident Highways (1)

Street Lights (0)

Cattle Stops (0)

Side Drains (0)

Inspected Roads (1)

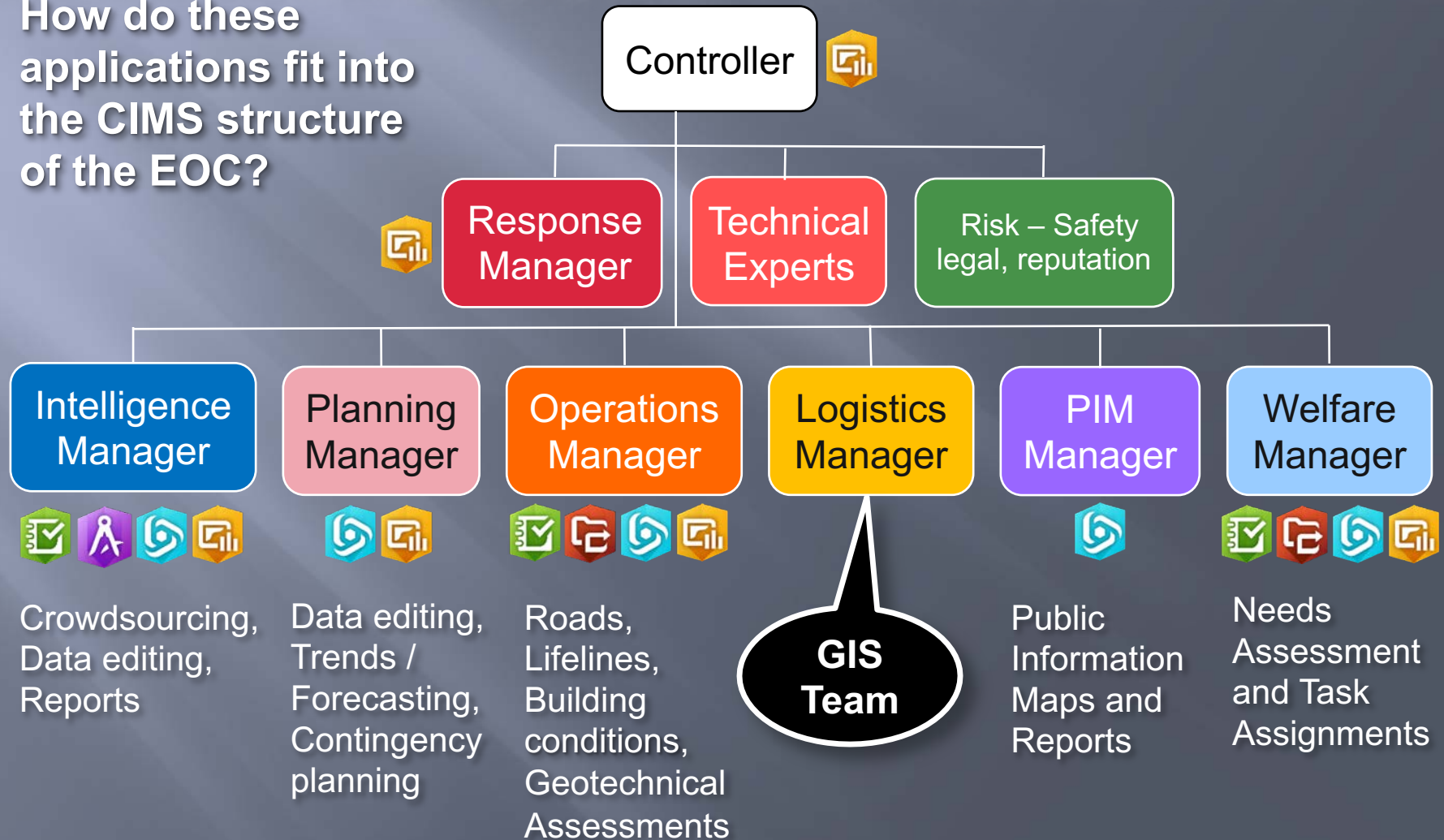
Inspected Bridges (1)

Status: Closed

16

CIMS Context

How do these applications fit into the CIMS structure of the EOC?



Pros / Cons



- ▣ Instant
- ▣ Mobile Technology
- ▣ Ability to share
- ▣ Situational Awareness
- ▣ One Source of Truth
- ▣ Easier Transition into Recovery

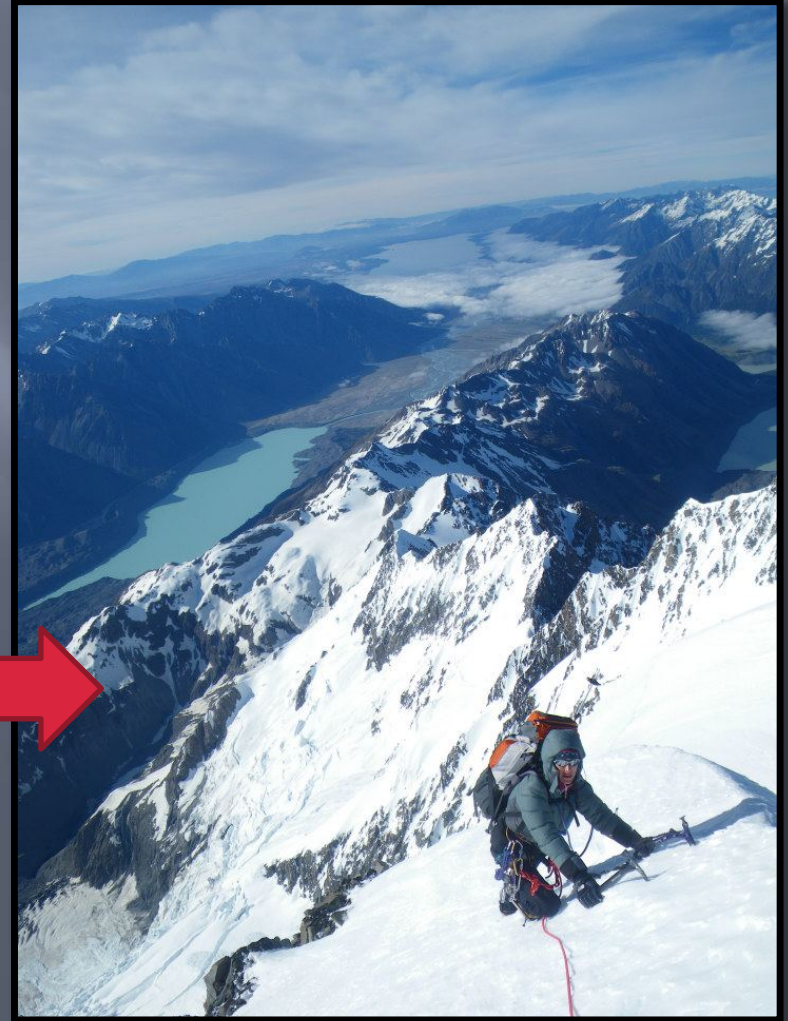


- ▣ Dependant on connectivity
- ▣ Availability of computers / laptops / devices
- ▣ Upskilling / skill maintenance

The Future

- ▣ **Offline Workflows**  
- ▣ **Across Agency *Integration***
- ▣ ***Drone2Map* for ArcGIS?**
- ▣ ***Improvements* / Technology Changes**
- ▣ **Adopting *Standards***
- ▣ ***Lifelines* Workflow**
- ▣ **Expansion of Apps to *HDC* and *KDC***

Final Thoughts



Questions

THANK YOU

