

Data and decisions following the Kaikōura earthquake

Geoff Parr – Ministry of Transport

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Kaikōura earthquake



- 7.8 earthquake on 14 November 2016
- SH1 and Main North Line (rail) damaged and closed
- MoT commissioned research on information sharing and decision-making following Kaikōura
- Research consortium led by University of Auckland
- Stakeholder workshop in 2017, plus in-depth interviews
- Report finalised in July 2018

Transport Outcomes Framework

Inclusive access

Enabling all people to participate in society through access to social and economic opportunities, such as work, education, and healthcare.

Economic prosperity

Supporting economic activity via local, regional, and international connections, with efficient movements of people and products.

Healthy and safe people

Protecting people from transport-related injuries and harmful pollution, and making active travel an attractive option.

Environmental sustainability

Transitioning to net zero carbon emissions, and maintaining or improving biodiversity, water quality, and air quality.

Resilience and security

Minimising and managing the risks from natural and human-made hazards, anticipating and adapting to emerging threats, and recovering effectively from disruptive events.

A transport system that improves wellbeing and liveability

Transport Research Strategy: Knowledge Themes



System planning and management

How do we better plan, manage demands and operate the transport system to achieve desired impacts?

We need to be able to make appropriate decisions given available evidence and uncertainty

Effectiveness and efficiency of interventions

- ▶ Resilience
- ▶ Local, regional and national economy
- ▶ Safety
- ▶ Regulation
- ▶ Technology
- ▶ Multimodal
- ▶ Integrated approaches
- ▶ Monitoring and reporting

Relationship between interventions and impacts

- ▶ Resilience
- ▶ Local, regional and national economy
- ▶ Safety
- ▶ Monitoring and reporting

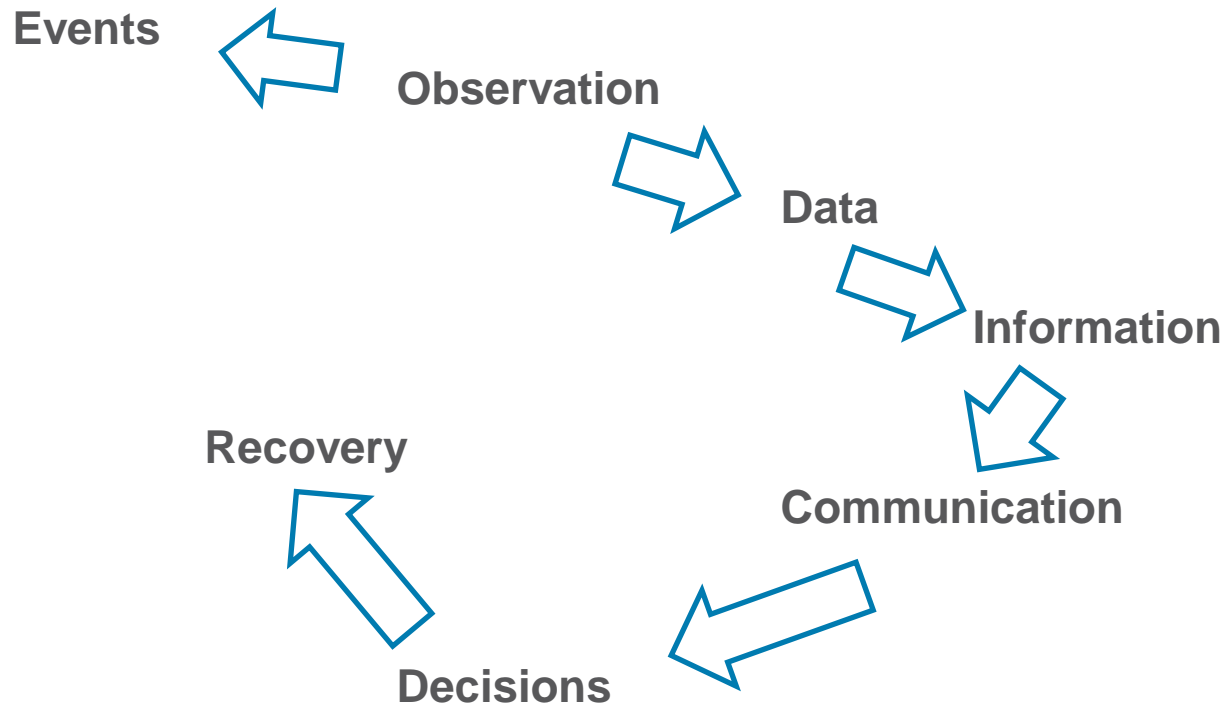








What happened?



Decisions, decisions...



Decisions made by

- Officials
- Businesses

Decisions about

- Closing routes
- Opening alternative routes
- Changing routes
- Changing modes

The good ...



MoT's Tactical Response Team

- Activated quickly
- “Single source of truth”

Private business response

- Commercial and competitive incentives to adapt
- Truckers relayed a lot of useful info

The bad ...



People on the ground:

- Overwhelmed with requests for info
- Held back info for fear it wasn't accurate

Tourists

- Translations were needed
- Relied on mobile data for route status

Freight operators

- Withheld competitively sensitive information
- Would have ordered new trucks had they known the delay

Results & recommendations



- Relationships are important
 - Establish / formalise
- Data accuracy v timeliness
 - Indicative information is important
- Communication
 - Sector & corridor co-ordinators
 - Data requests
 - International markets
 - Tourists
- Competition
 - Prioritise resilience over concerns about sensitive information