Resilience and security: Kaikōura earthquake, March 15, COVID-19 and beyond
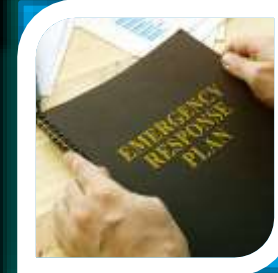
Ministry of **Transport**
TE MANATŪ WAKA

What my friends think I do

What my mother thinks I do

What my colleagues think I do

What the public thinks I do

What I think I do

What I actually do

The Resilience & Security journey

- Team was formed in October 2017, following a Ministry of Transport organisational review.
- Work programme built around a mix of legislative requirements, the Transport Outcomes Framework, and the 4Rs (reduction, readiness, response and recovery).

- This is expressed through the Transport Resilience and Security Strategic Framework *(more to follow)*.
- Seek to change the way we think about transport resilience and security.
  - Move away from predominantly focusing on reactionary responses to natural hazards.

Ministry of **Transport**
TE MANATŪ WAKA
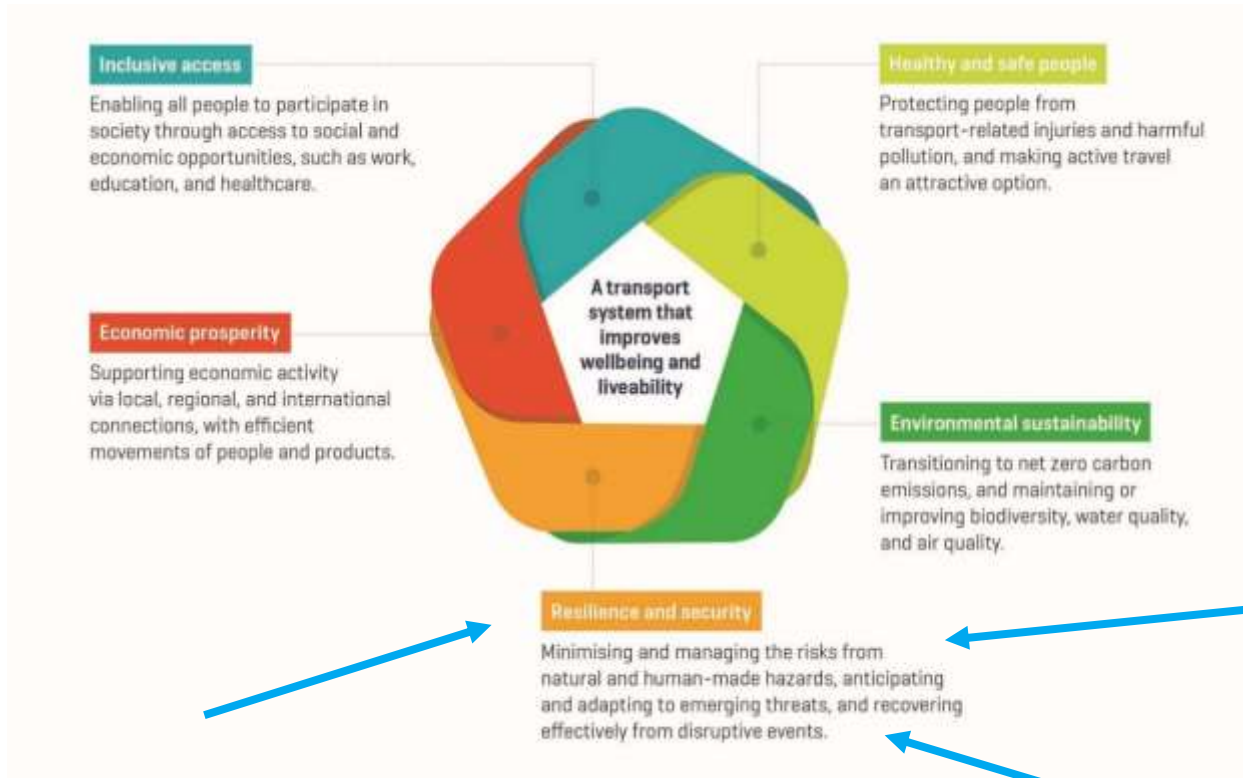
We face a range of evolving challenges

Traditional resilience challenges

- Costs of disruptions are high and growing
- Climate change - increased frequency and severity of extreme weather events
- Impacts on availability of infrastructure insurance and re-insurance
- Sector-level risk management framework (shared understanding of common risks)
- Lack of common data and knowledge across 4Rs in transport
- Clarity of roles and responsibilities across the transport system for resilience and security
- Issues of determining appropriate investment in 4Rs (e.g. major incidents)

Evolving resilience and security challenges

- The Christchurch terrorist attacks have changed how we think about New Zealand's domestic security
- Emerging technologies are introducing new risks (and opportunities) into the transport system
- International experience is changing the way our partners approach transport security (e.g. vehicles as weapons, drones)
- COVID-19
- Increasing risk of concurrent events

Ministry of Transport
TE MANATŪ WAKA

Inclusive access

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

Healthy and safe people

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

Economic prosperity

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

A transport system that improves wellbeing and liveability

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.

Reduction & Readiness

Work we lead (examples)

- Aviation Security Forums (+ developing Aviation Security System Strategy)
- Civil Aviation Bill
- Maritime Transport (Offshore Installations) Amendment Bill and rule amendments
- Unmanned aerial vehicles (drones)
- Development and implementation of the Maritime Security Strategy

Work we support (examples)

- Crowded Places Strategy
- Countering terrorism and violent extremism national strategy
- Major Events (e.g. APEC, America's Cup)

Ministry of **Transport**

MARITIME SECURITY STRATEGY

Guardianship of Aotearoa
New Zealand's Maritime Waters

Te Kaitiakitanga o Tangaroa

2019

Overview of the Maritime Security Strategy

Increasing pressure on New Zealand's maritime security demands a new vision and approach for the maritime security sector
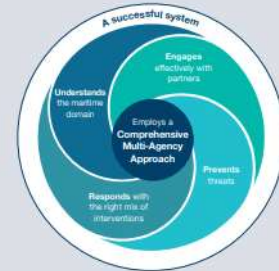
The Vision

A maritime security sector that secures New Zealand's significant maritime economic, cultural and environmental interests, is better able to deter adversaries, reduce harm to New Zealand communities and exert effective Kaitiakitanga (guardianship) of the sea.

The Approach

The maritime security sector's contribution to national security will be guided by four interlocking pillars: Understand, Engage, Prevent, Respond.

These pillars describe how an efficient and effective system goes about achieving maritime security.

The pillars are underpinned by two supporting principles: The comprehensive multi-agency approach and Kaitiakitanga.
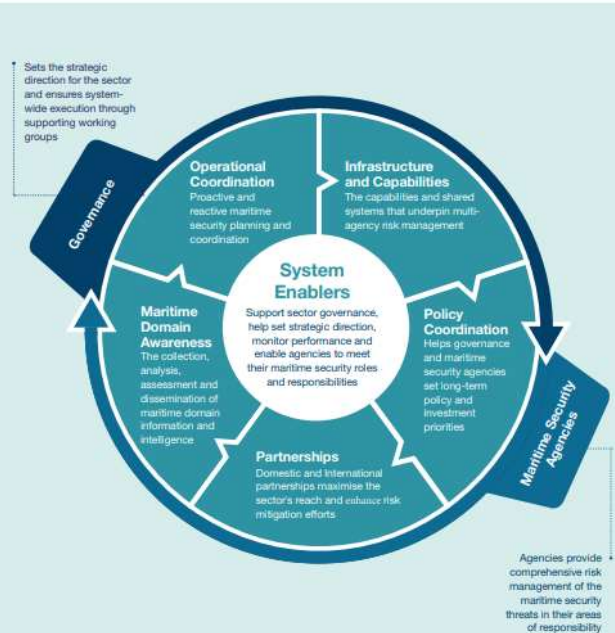
A successful system

Understands the maritime domain

Engages effectively with partners

Employs a Comprehensive Multi-Agency Approach

Prevents threats

Responds with the right mix of interventions

Kaitiakitanga
New Zealand's stewardship and protection of our maritime domain for future generations.

The Future Maritime Security System

Achieved by

Implementation Priorities

Sets the strategic direction for the sector and ensures system-wide execution through supporting working groups

Governance

Operational Coordination
Proactive and reactive maritime security planning and coordination

Infrastructure and Capabilities
The capabilities and shared systems that underpin multi-agency risk management

System Enablers
Support sector governance, help set strategic direction, monitor performance and enable agencies to meet their maritime security roles and responsibilities

Maritime Domain Awareness
The collection, analysis, assessment and dissemination of maritime domain information and intelligence

Policy Coordination
Helps governance and maritime security agencies set long-term policy and investment priorities

Partnerships
Domestic and international partnerships maximise the sector's reach and enhance risk mitigation efforts

Maritime Security Agencies

Agencies provide comprehensive risk management of the maritime security threats in their areas of responsibility

Priority 1

Enable the comprehensive multi-agency response

- Assign a lead maritime security policy agency.
- Establish sufficient policy coordination, assessment, communications and campaign planning capacity and capability.
- Provide funding certainty.

Priority 2

Establish sector planning and assessment expectations

- A Maritime Security Assessment that identifies emerging threats and opportunities.
- A Campaign Plan that sets an integrated approach to the deployment of resources.

Priority 3

Coordinated investment across the sector

- Determine the approach to investing in the right mix of people, systems and tools to achieve best effect.

A layered approach to investment

People
We need people with the skills to understand the maritime environment, engage with domestic and international partners, develop and implement proactive approaches.

Systems
All elements need to work from a single point of truth (a "common operating picture").

This requires networked systems that support collaborative planning based on a shared understanding.

Tools
Investment in fit for the future surveillance and analytical capabilities.

Ensuring New Zealand continues to have suitable and sufficient maritime response capabilities.

Response & Recovery

Work we lead

- Transport Response Team (TRT)
  - Currently activated for COVID-19 response (and recovery)
  - Recently activated for Christchurch terrorist attacks, White Island, and some severe weather events.

Work we support (examples)

- Kaikōura earthquake response
- All of Government COVID-19 recovery

The Transport Response Team (TRT)

- Led and coordinated by the Ministry of Transport.
  - *Depending on the nature of the emergency, will include representation from our transport agency partners.*
- Purpose: to support the lead agency for an event with information, data, and advice about what is happening with the transport network.
- Recent nationally significant events include: severe weather, the Kaikōura earthquake, the Refinery to Auckland pipeline failure, the Christchurch terrorist attacks, the Whakaari/White Island eruption, and COVID-19 (ongoing).
- Evolving landscape: each of these events has slightly changed the way we think about resilience and security of the transport sector, and our role in national security.

We need you!

- **Research** *is an enabler that underpins the Transport Resilience and Security Strategic Framework*

Enablers These tools inform us how and when to best use our levers	Data, analytics/modelling and intelligence	Engagement and collaboration	Research and evaluation	Capability and capacity
	How do we know when and where to invest in resilience outcomes? What information is required to assist decision making? What methods can we use to gather and share useful data and intelligence?	What international and domestic relationships do we need to foster to support resilient and secure objectives? What work are other agencies undertaking? How can different agencies align their use of different levers to support mutual goals? What do the communities and businesses the transport system serve need? How can they participate in resilience?	What lessons can we learn from our own, and other's, past experiences? How can we measure resilience and security? What are the appropriate metrics? What new methods or tools may be effective for achieving our resilience and security objectives?	What training and/or experience is required to utilise our levers? How many people with the above skill/experience are required? What physical resources can improve human capability?

We seek to build greater collaboration with the research sector in areas such as:

- Frameworks for understanding risk as a basis for investment and resourcing
- Value for money in transport security initiatives and policy proposals (measuring "security dividend" and the counterfactual)
- Challenges of qualitative monitoring, and problem definition
- Security implications of emerging technologies and trends for the transport system, including cyber security
- Understanding the role of public perception and social license in creating more secure and resilient transport networks
- Offshore security and New Zealand's role in managing "invisible" transport security threats

Ministry of Transport

Our questions for you

These questions are about how we can interface with the research sector more generally

1. What recent or current research could we engage with you on?

2. How much does transport *security* factor into your/your colleagues' research and concept of resilience within the transport sector?

3. Are there any opportunities coming up that we should be aware of?

4. What challenges do you face when working with teams like ours? How do you engage with other parts of government?

5. How can we support research that will support and strengthen resilience and security policy outcomes?

6. How could we think about our work and engagement with the research sector differently?

7. Where should we go to develop relationships across the sector (e.g. interfacing with longitudinal studies and collaborations)?

Ministry of **Transport**

Thank you