# How NZSAR is using data to reduce harm in the search and rescue sector
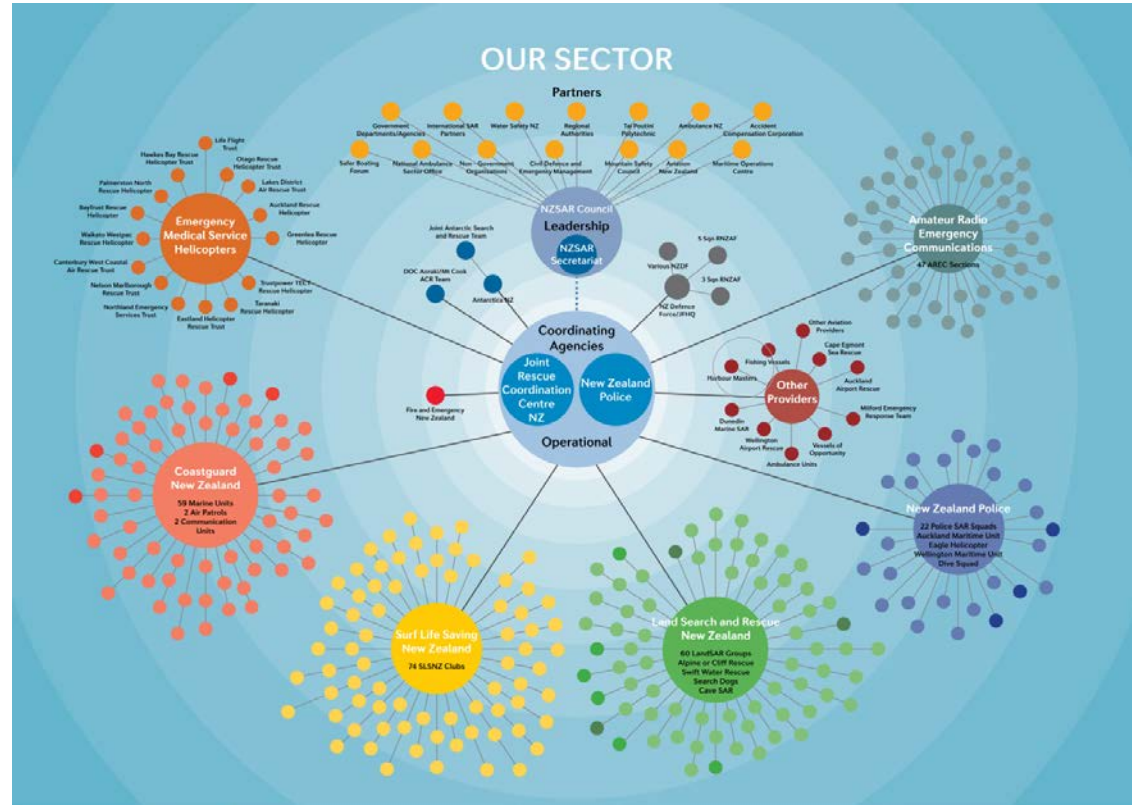
*Jeff Lean, New Zealand Search and Rescue*
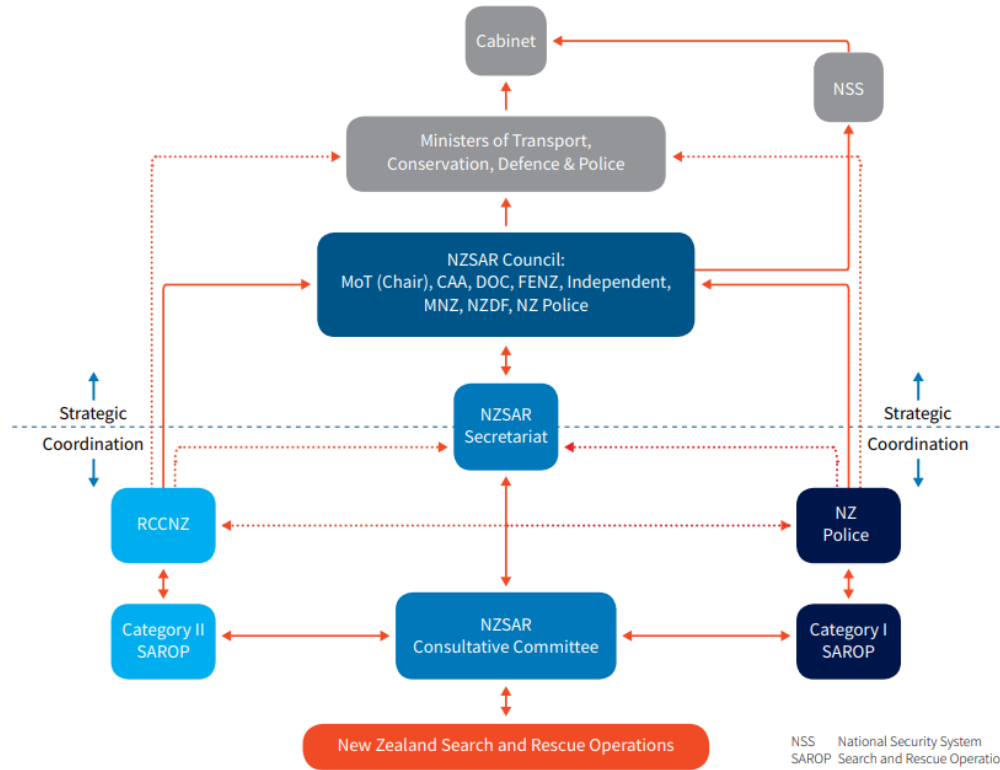
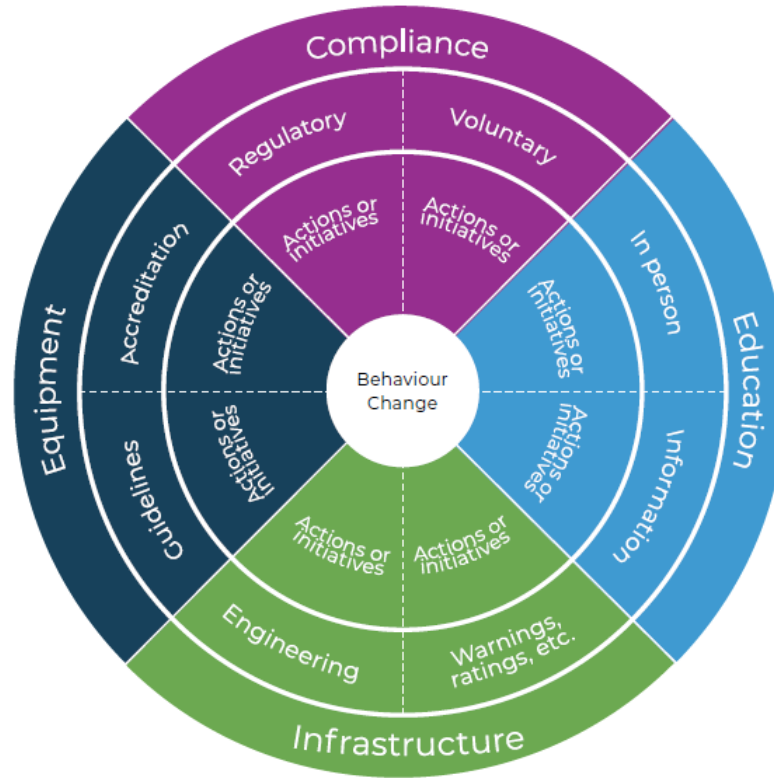# Who is NZSAR?

# Who is NZSAR?

# What are we doing?

- Benchmarking and Prevention Activities (BePA)
- Wanderer Analysis
- Supply and Demand Analysis
- Volunteer Database
- SARdonyx data tool

# Benchmarking and Prevention

- NZSAR funds some prevention and preparedness, and data collection initiatives carried out by other agencies
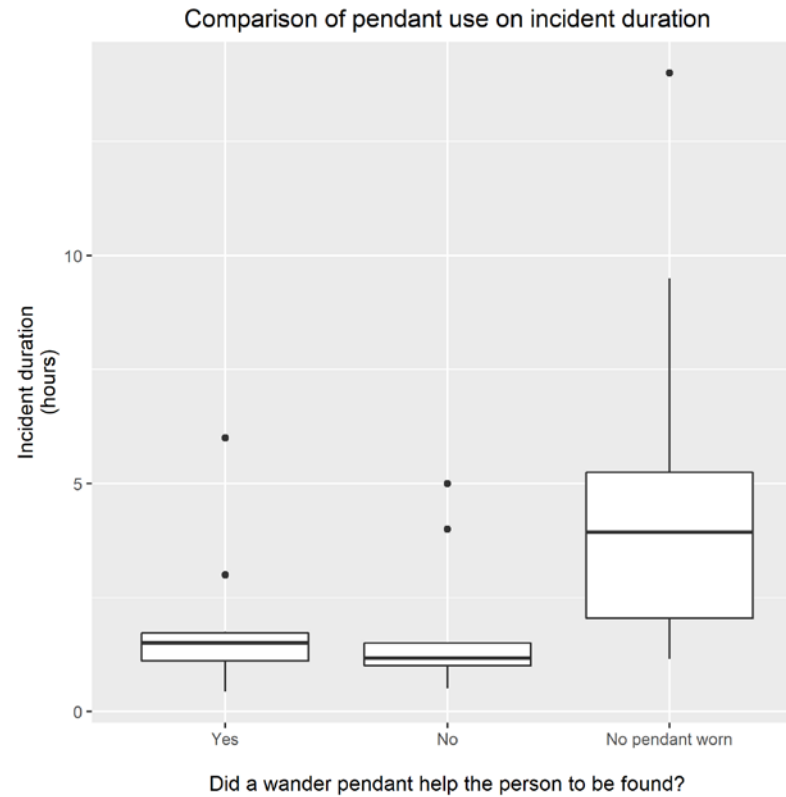  - Water Safety NZ
  - Mountain Safety NZ
  - Maritime NZ
  - DOC

# BePA

# WanderSAR

- Safer Walking Framework
- Not just focused on dementia. Also covers autism, Downs Syndrome, and brain injury
- In 2018, approximately 10% of Land incidents were wanderer related
- Safer Walking Profile form
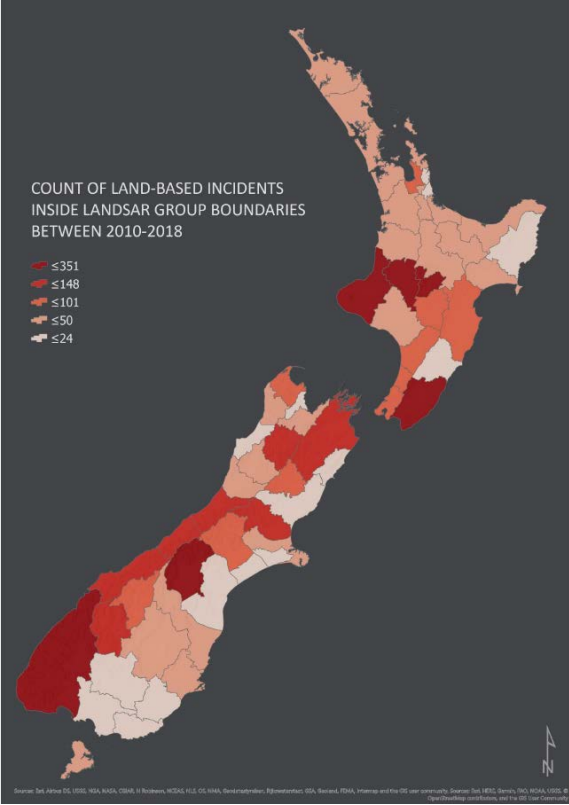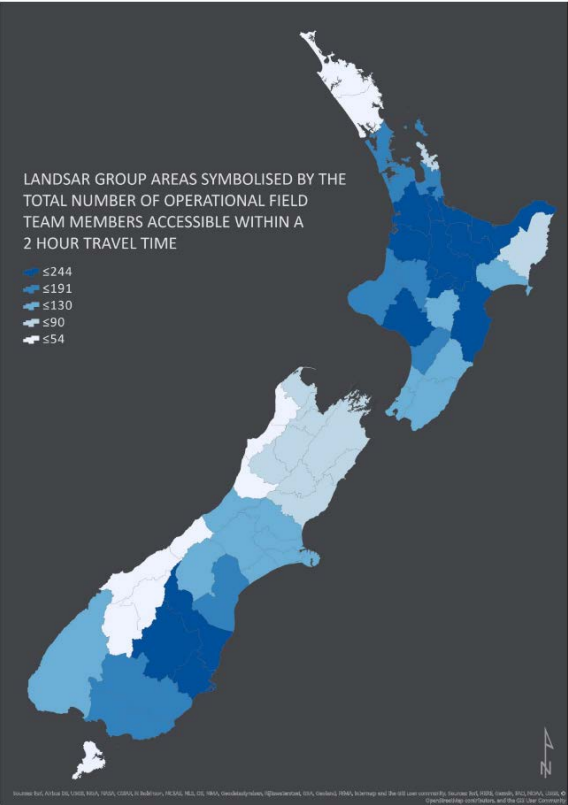- Reduction in duration of incidents through use of Wander Pendants

# WanderSAR



Comparison of pendant use on incident duration

Did a wander pendant help the person to be found?

# Supply and Demand Analysis

- SAR capability needs to be situated close enough to where incidents occur

- The appropriate capabilities need to be accessible in a timely fashion

- There needs to be a balance between maintaining sufficient numbers of personnel, and the cost of keeping those personnel current in the necessary skills

# Supply and Demand

# Volunteer Data

- In order to ensure we have sufficient supply, we need to ensure we have a suitably qualified workforce that is available when and where we need it
- Volunteers form 98.7% of the SAR workforce[1]
- Understanding diversity within SAR can lead to better outcomes
- Case Study: Ngati Porou Surf Lifesaving Club
  - Making use of social media to communicate patrol zones
  - Engaging closely with community

[1] NZSAR Volunteer Study 2019

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# SARdonyx

- SARdonyx built to be the single point of truth for SAR data for NZ

- Launched on 6 May 2019

- Historical data back to 2010 migrated into SARdonyx, but not all dimensions were compatible

- SARdonyx was designed to enable robust statistical analysis

# The future

- Continuing work on prevention strategies
- More detailed work on supply and demand for SAR
- More detailed understanding of the SAR workforce
- Alignment of data across all SAR agencies
- Development of assurance strategies to ensure the health of the sector
- Transparent data dissemination

# Questions