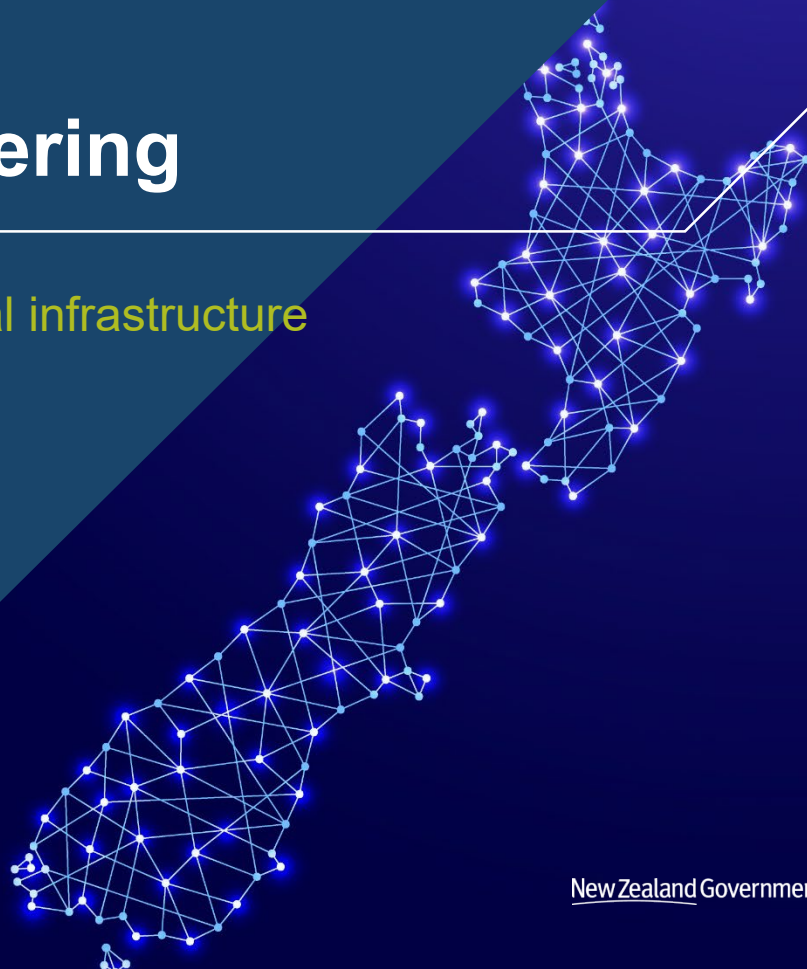


Data and Digital Engineering

Improving asset management for horizontal infrastructure



**We are.
LGNZ.**
Te Kāhui Kaunihera o Aotearoa.



Digital Technology is changing our environment

Over the next 10 years we expect to see... much more data!



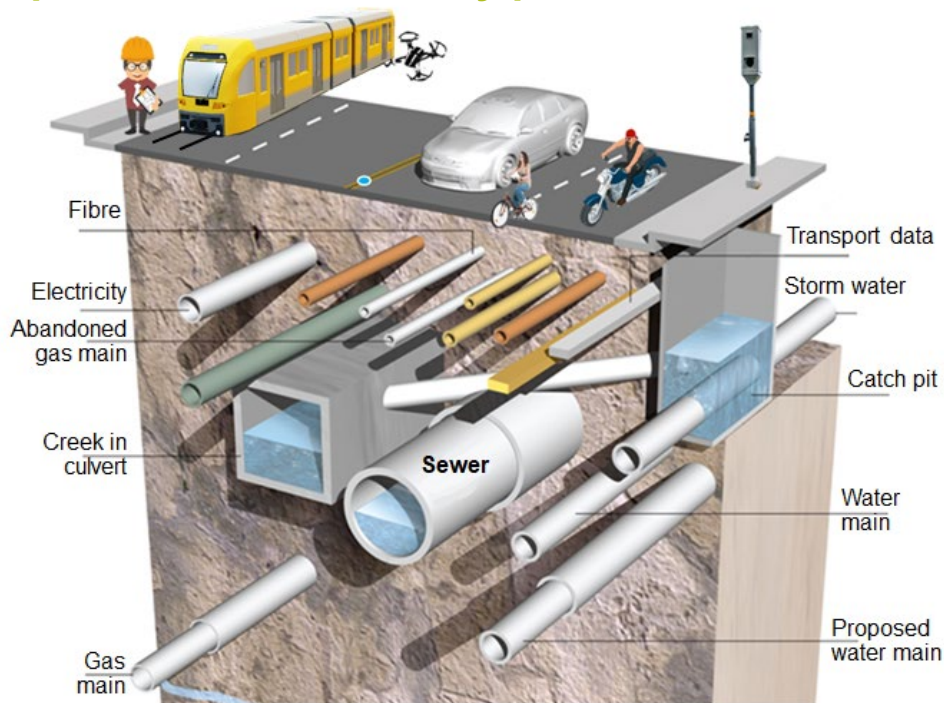
Disruptive digital technologies

- Smart phones and Smart Cities
- Internet-of-things
- 5Gand 6G!!!
- Low-cost sensors
- Big data
- Machine learning
- Artificial Intelligence
- Real-time travel information
- Mobility as a Service
- Electric vehicles etc etc etc



Digital Engineering is more than a software package

Transport corridors are busy places



Digital Engineering can be transformational, if everyone agrees how

We need standardisation

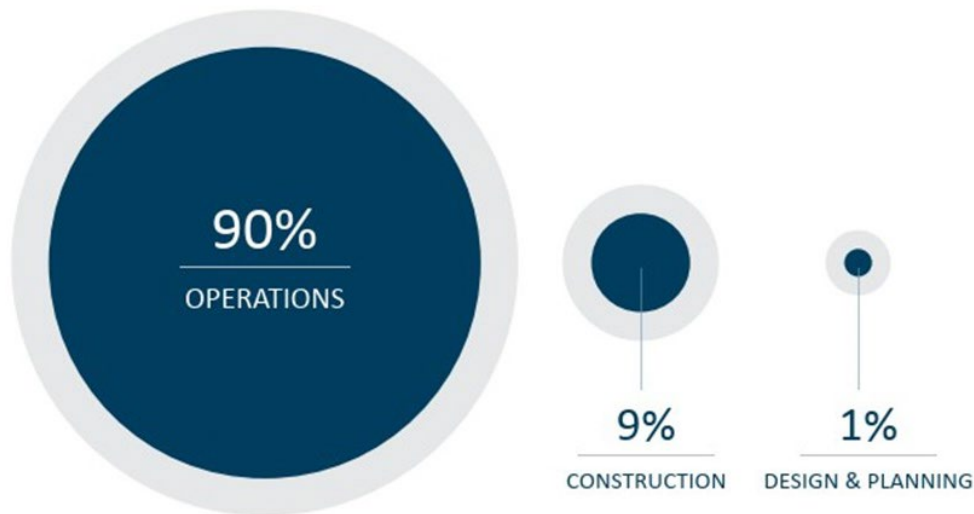
Virtually all modern technology depends on standards



Why do we need an Asset Management Data Standard

A national standard the sector can own and share

PROPORTIONAL SPLIT
OF WHOLE OF LIFE
COSTS OF AN ASSET



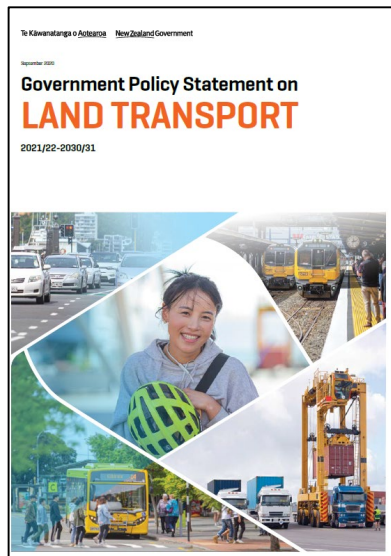
LAND TRANSPORT ASSETS

- 68 road controlling authorities responsible for the management of roads in NZ
- 95k kms of road
- 20,000 bridges
- Significant national value
- **Benefits and savings from AMDS \$70m+ per annum**

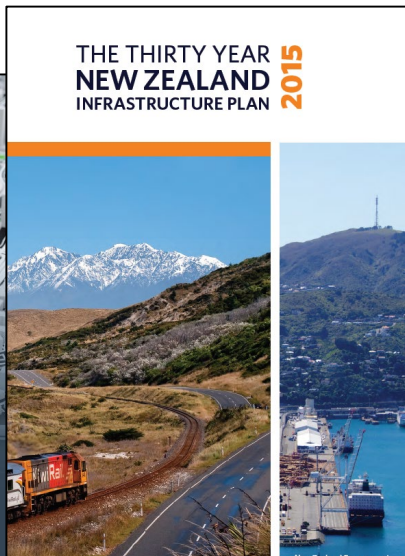


Why now

Collaboration on AMDS supports digital engineering



Unlocking the Value of Data:
Managing New Zealand's Interconnected Infrastructure



Towards a National Digital Twin

Ontological modelling means data can be simpler, less repetitive, more flexible, extendible and more easily harmonised

This is an open standard freeing us from reliance on proprietary commercial standards, models and systems

We can interface with other infrastructure partners to get a New Zealand-wide infrastructure view



We want to talk to you

MILESTONES

Data standard and technical specifications – first release	July 2020
Prototype and testing at three sites	Sep 2020 – May 2021
Consult on support and timing	Aug – Dec 2020
Create detailed implementation plan including timing, training and process change resources, hands-on support packages	Sep 2020 – Feb 2021
Begin roll-out of standard	July 2021
Roll out ends	TBC



FIND OUT MORE

Visit the Waka Kotahi website:
www.nzta.govt.nz/amds

Contact us at:
amds@nzta.govt.nz



[New Zealand Government](http://www.nzta.govt.nz)

This will be successful if it is designed, developed and delivered **collaboratively**.

The Standard will be **owned** by the sector.

Waka Kotahi will retain **stewardship** of the standard on behalf of the sector to adequately resource it; and ensure it remains up to date and relevant.

