Technology and Compliance

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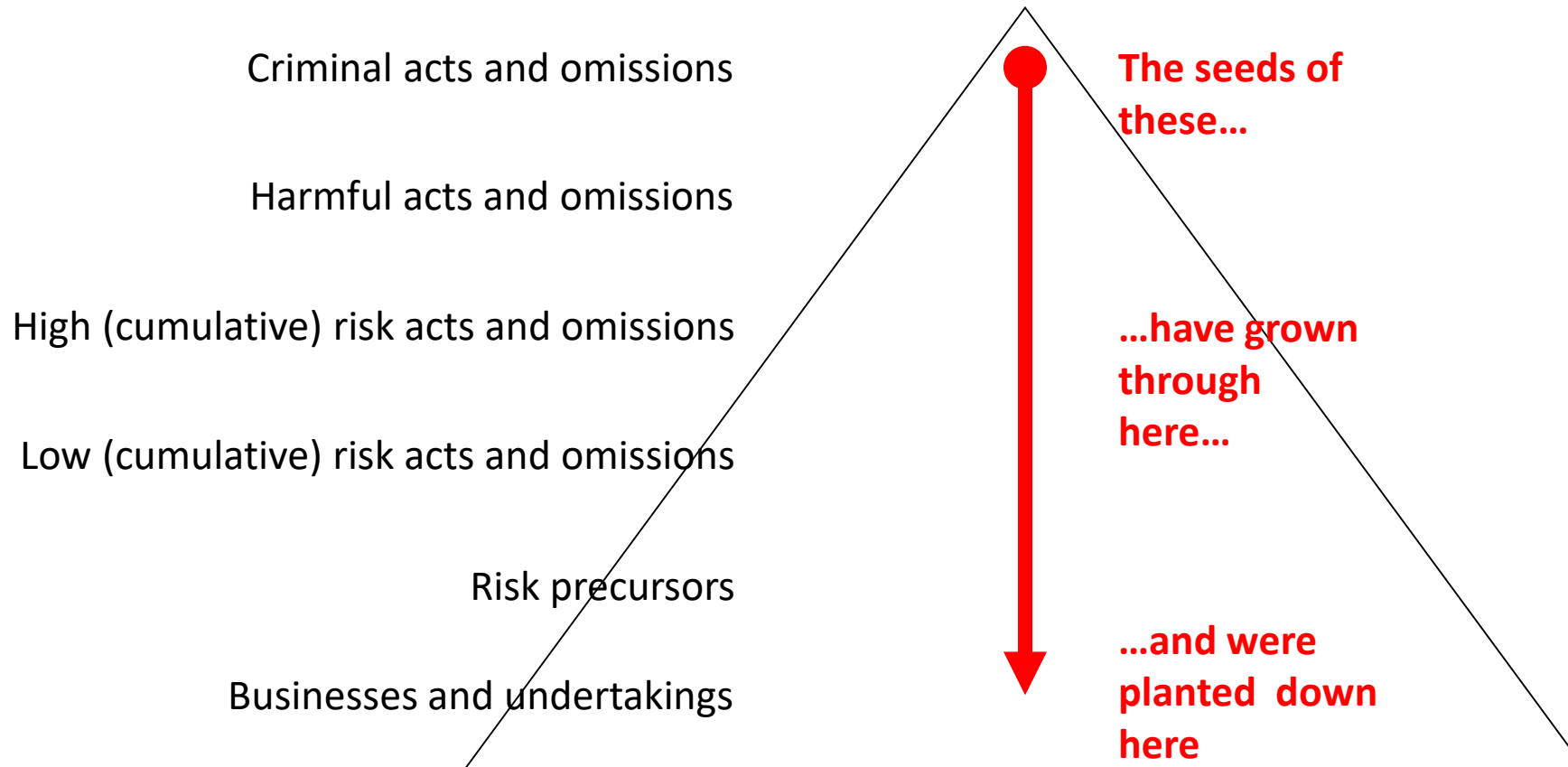
EROAD Ltd

Opening propositions

- Compliance is a behavior created by regulation to achieve a positive outcome

- We need to be clear on the outcomes we want, understand the necessary behaviours, and have regulation that requires and enables those behaviours

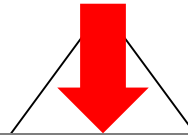- Technology is a tool to enable and enhance compliance

A Model

Criminal acts and omissions

Harmful acts and omissions

High (cumulative) risk acts and omissions

Low (cumulative) risk acts and omissions

Risk precursors

Businesses and undertakings

The seeds of these…

…have grown through here…

…and were planted down here

Reality 1.0 Enforcement alone

Criminal acts and omissions

Reactive enforcement

Veil of Ignorance

Businesses and undertakings
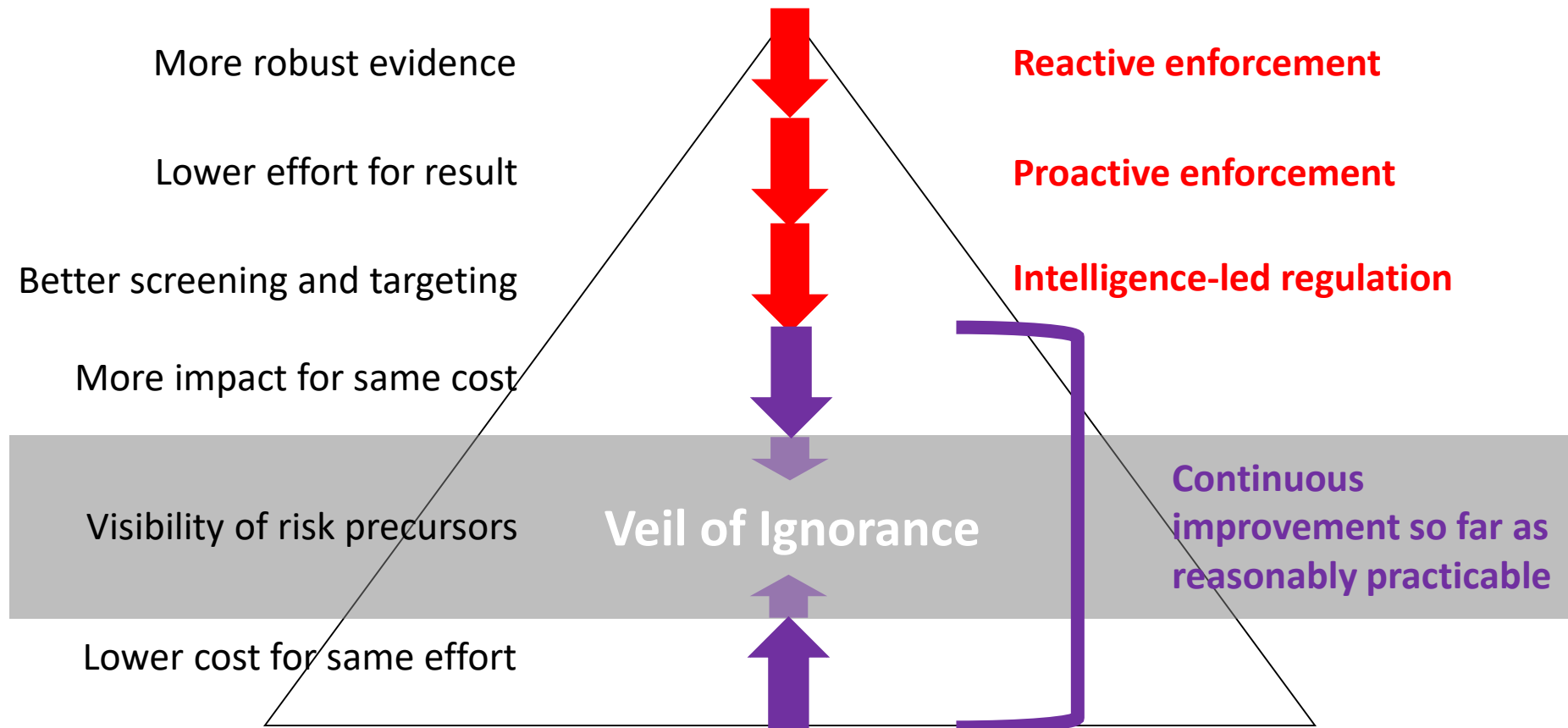
Minimum economic self interest

Reality 2.0 Smart regulation

Criminal acts and omissions — **Reactive enforcement**

Harmful acts and omissions — **Proactive enforcement**

High (cumulative) risk acts and omissions — **Intelligence-led enforcement**

Low (cumulative) risk acts and omissions — **Minimum statutory requirements**

Veil of Ignorance

Businesses and undertakings — **Minimum economic self interest**
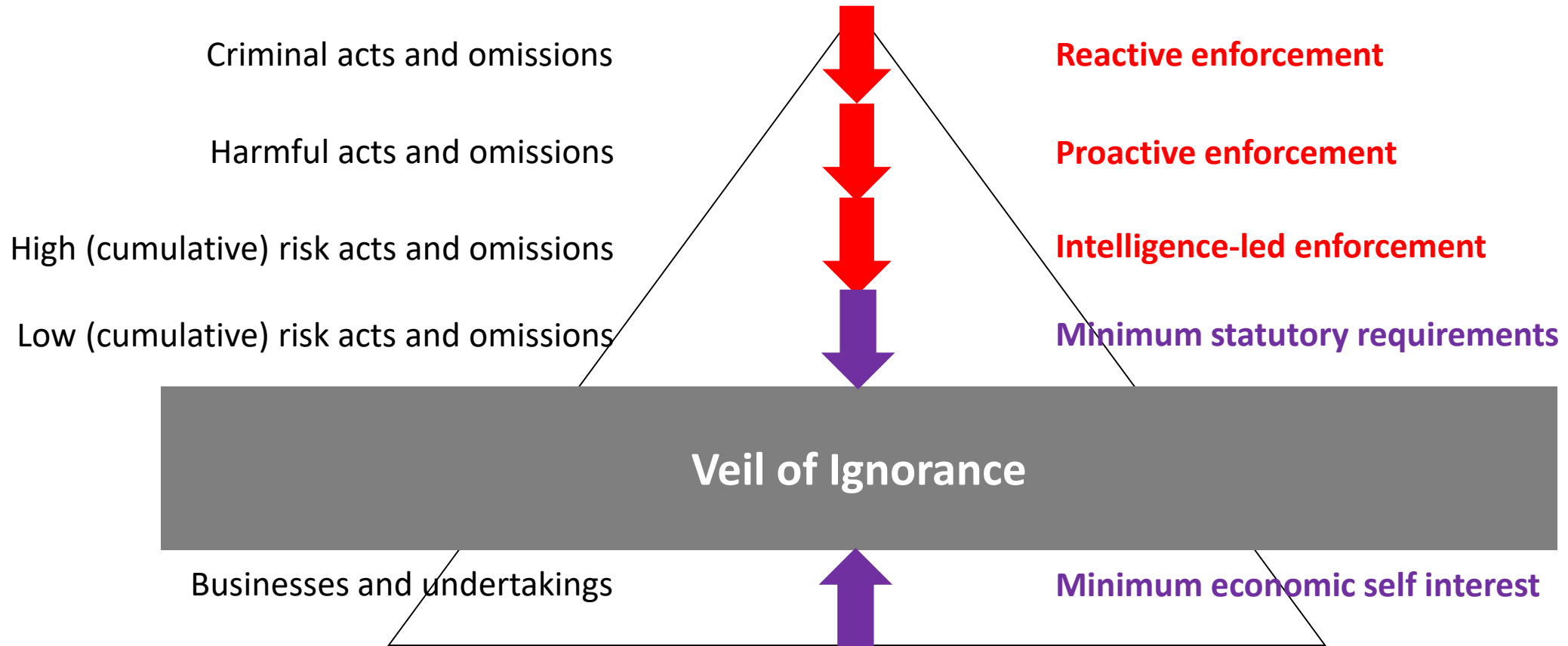
Reality 3.0 ITS (telematics)

More robust evidence

Lower effort for result

Better screening and targeting

More impact for same cost

Visibility of risk precursors

Lower cost for same effort

Veil of Ignorance

Reactive enforcement

Proactive enforcement

Intelligence-led regulation

Continuous improvement so far as reasonably practicable

Example system

GPS Data

Global Cellular Data Network

Gateway

AWS secure cloud hosting and storage

Depot

Compliance	**Health & safety**	**Fleet management**
Electronic FBT Logbook	Drive Buddy	Fleet Tracking
EROAD Inspect	Driver Login	Fuel Management
EROAD Share	Leaderboard	Idle Report
Service Module	Over Speed Dashboard	Messaging
	Seatbelt Monitor	Proof of Service
	Posted Speed	U Book it
	Re-torque Alerts	Utilisation
		Dispatch

User support

Drivers

Enforcement

EROAD customers

Internet

Web portal

Mobile applications

Third party systems

Value-added services

Infrastructure (cloud)

Digital maps

Web services

Communications

Analytics

E.g. Effort

SPEEDING FREQUENCY
EVENTS PER 100 MILES

53.4   33.1

Speeding Frequency
↓ 38%

■ Engaged with Driver Analytics
■ Unengaged with Driver Analytics

New Zealand reduction in speed

SPEED EVENTS

↓**47**%

Driver Leaderboard ™

Driver Login ™

Posted Speed ™

Overspeed Dashboard ™
Drive Buddy ™

Frequency (events per 100km)

25
20
15
10

2015   2016   2017   2018   2019
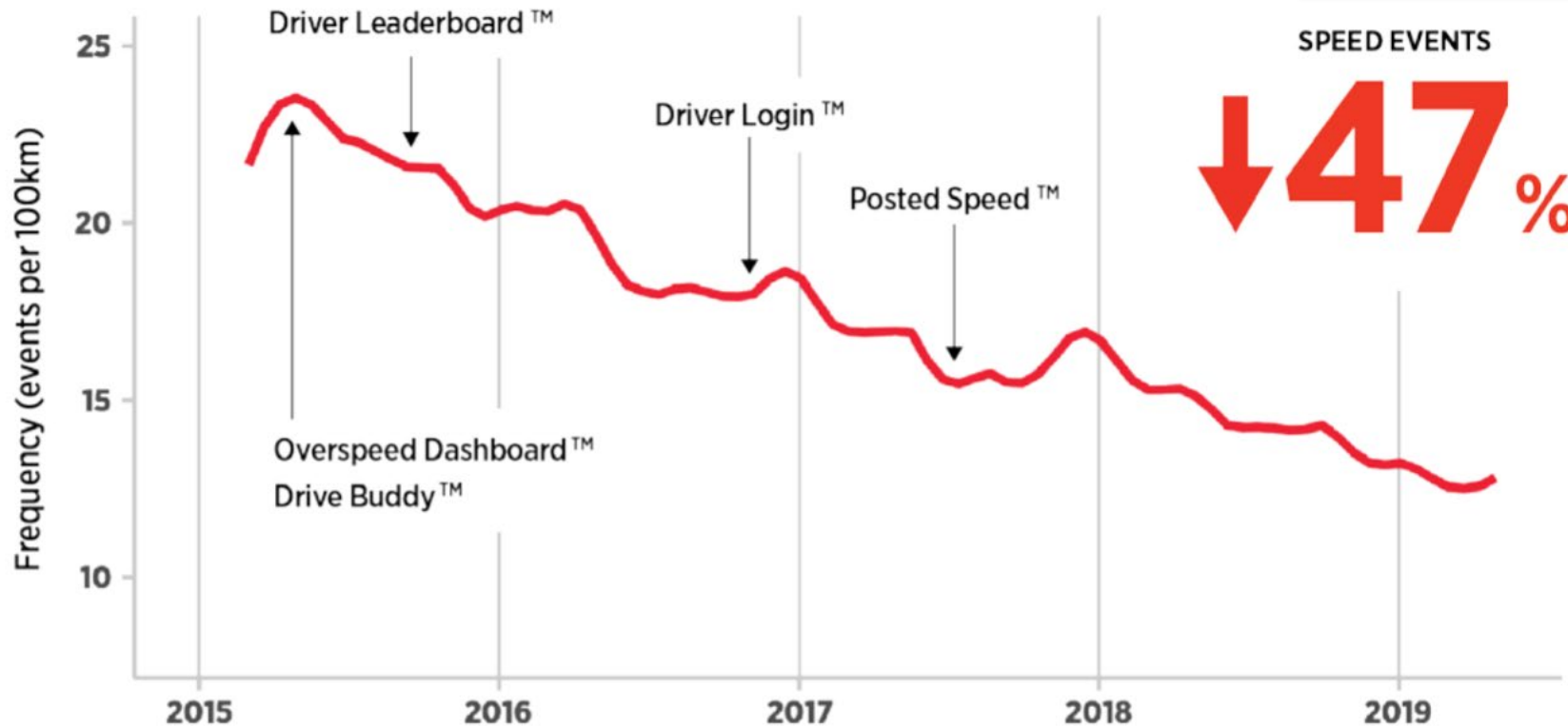
*The above graph shows the reduction in over speed events
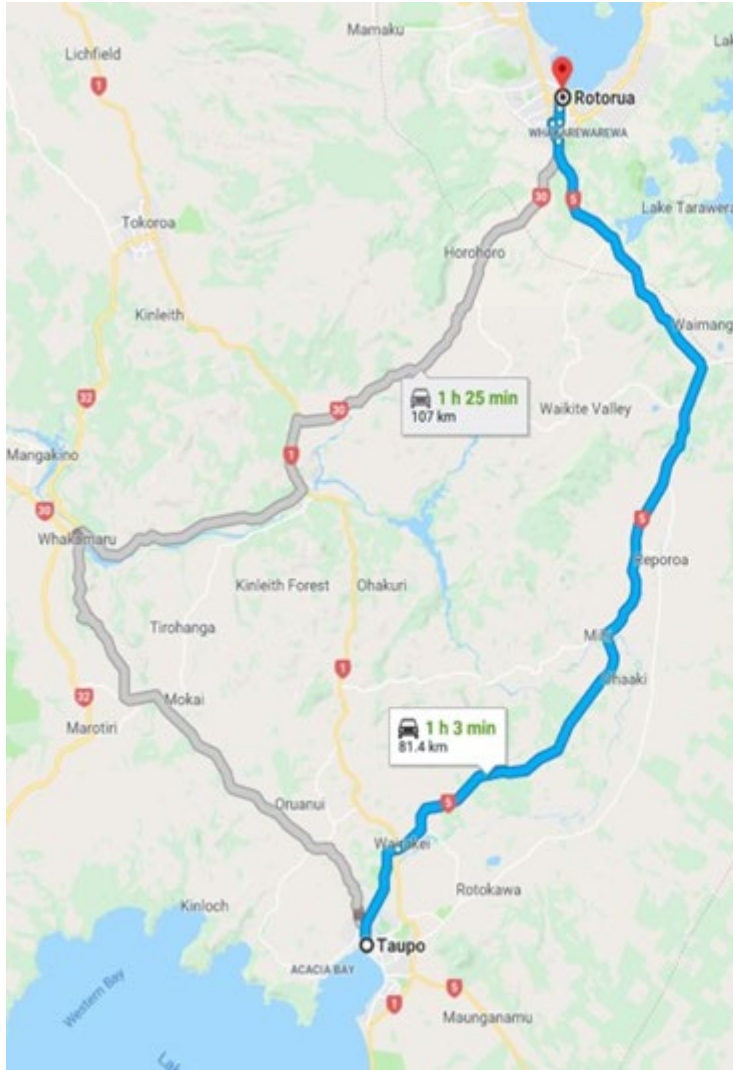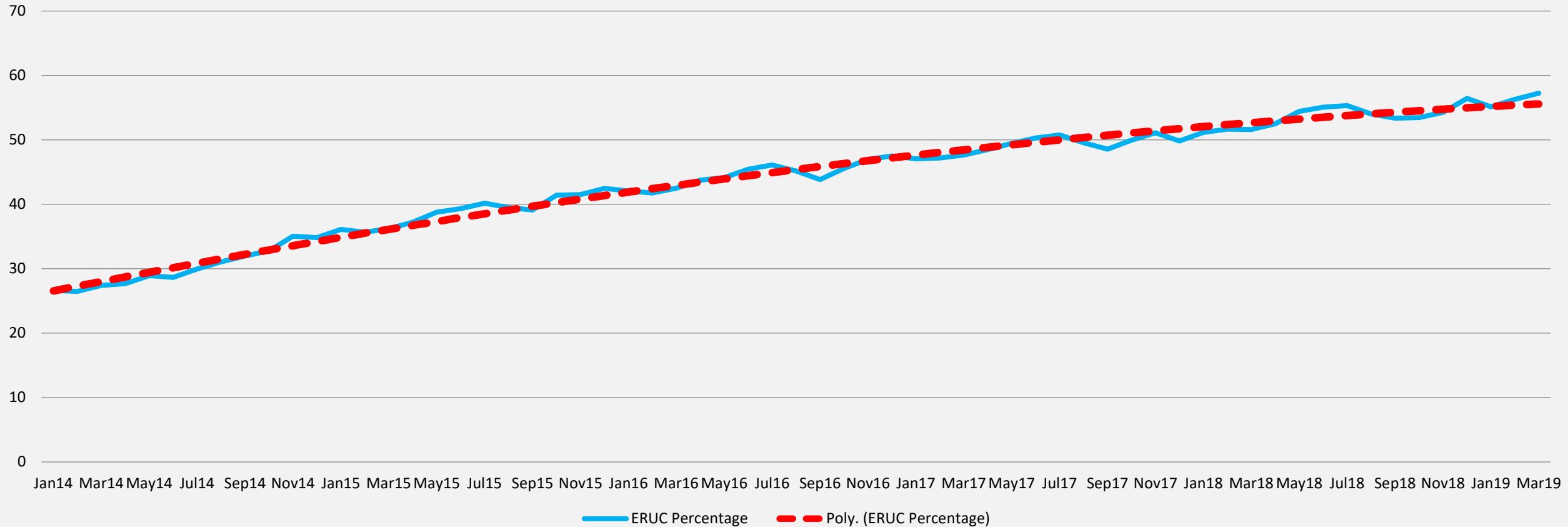over time as product enhancements have been added.*

E.g. Risk precursors
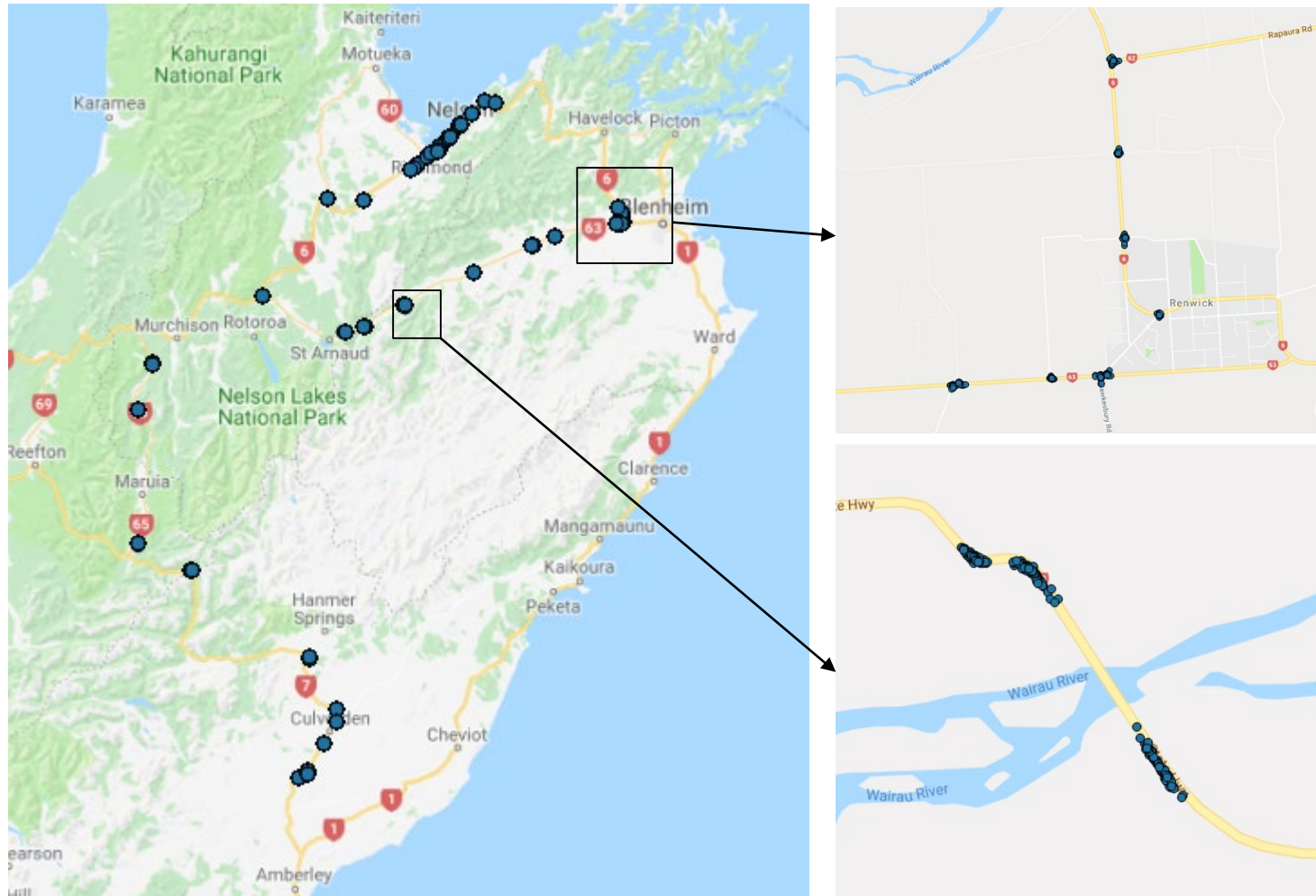
E.g. Cumulative risk
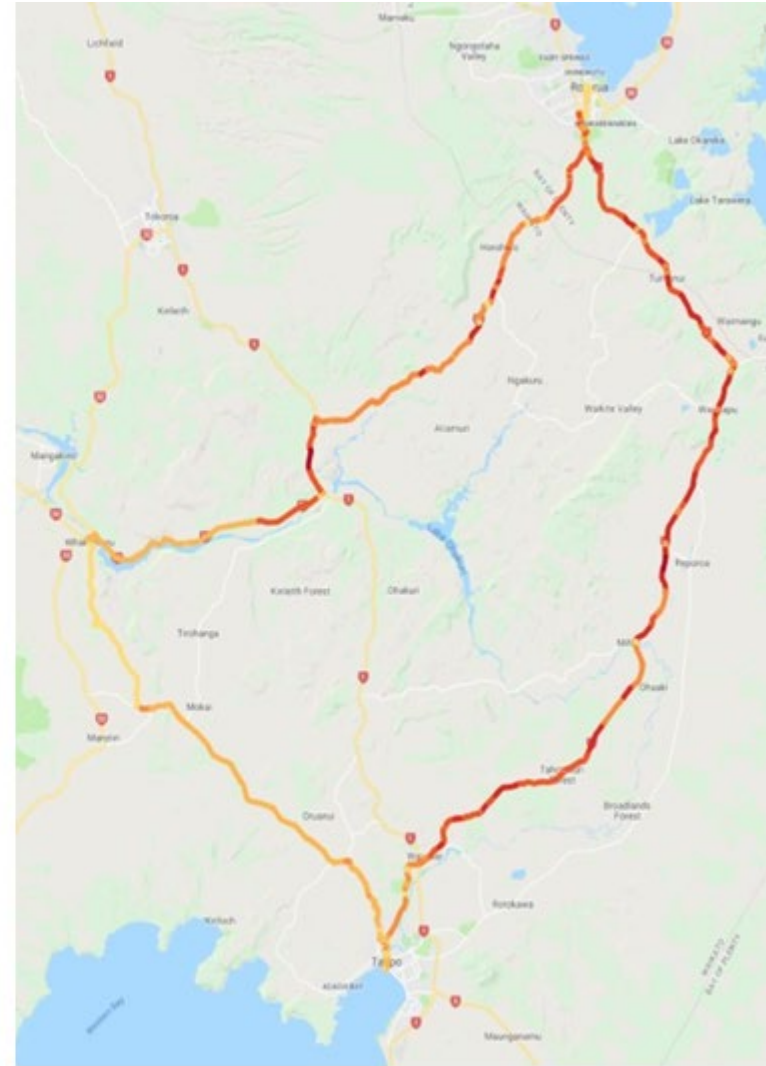
Limits to uptake

Heavy Vehicle RUC Purchases by value - % via ERUC agents

Legend: ERUC Percentage — Poly. (ERUC Percentage)

Source: NZTA 2019

Next 2-5 years

Nothing new in two years, everything different in five

- If you want it for enforcement, then it needs to be mandated

- If you want it for compliance, then it needs incentives

- If you want it to be effective, then investment is required in public infrastructure, back office systems and people

- If you want it to be efficient, then outcome-based regulatory frameworks and partnering with industry are needed

THANK YOU

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