



Austrroads Road Safety Program
National Local Roads & Transport Congress 2017

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What is Austroads?

The peak organisation of Australasian road transport and traffic agencies.

Austroads members comprise **11 road jurisdictions and organisations** from Australia and New Zealand.

Representing **national, state/territory and local** government interests.

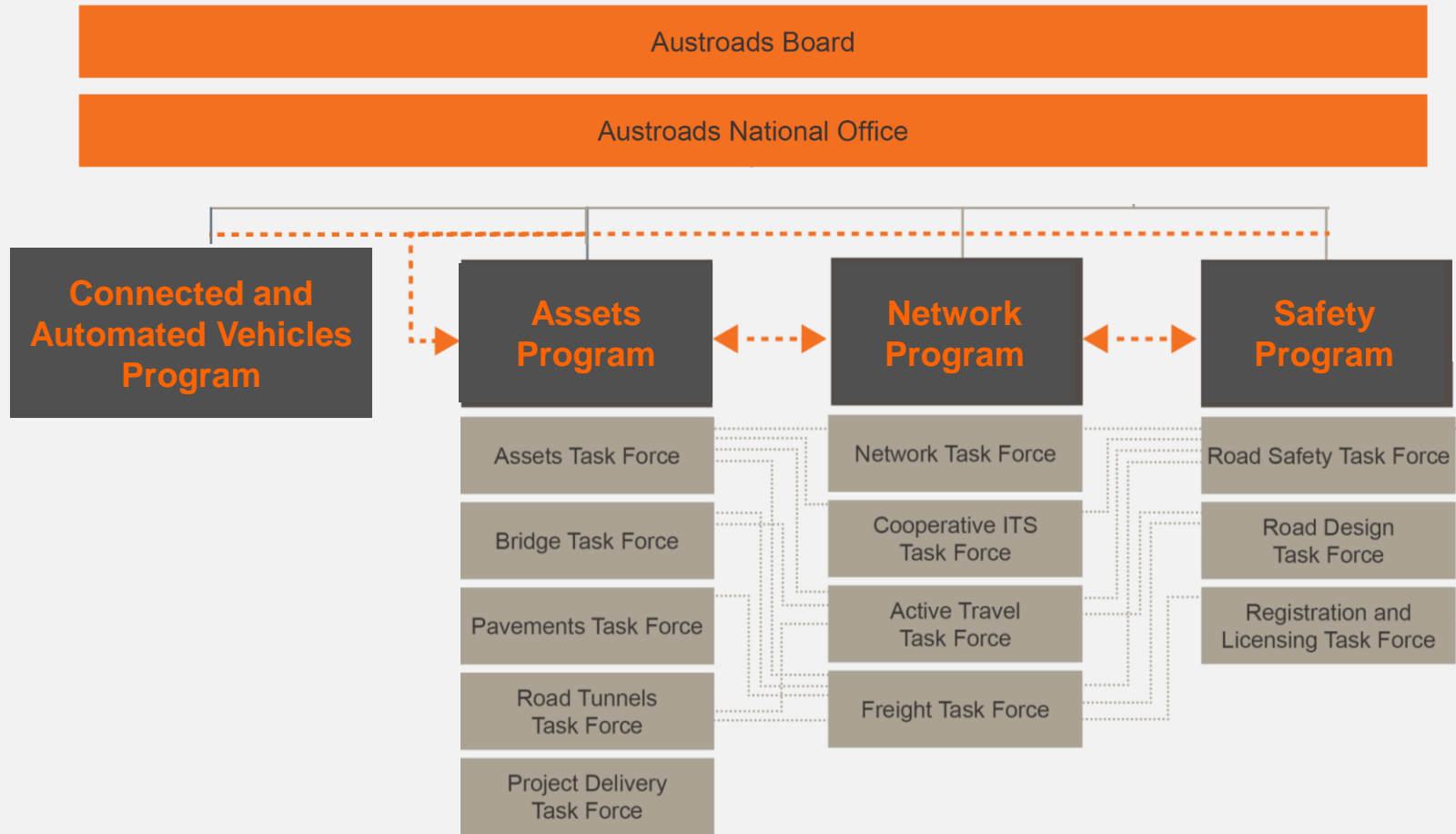
Members collectively manage **900,000km** of roads, worth **\$200b** - the single **largest community asset** in Australia and New Zealand.

Our focus



Improving the safety, productivity and sustainability of Australasia's road networks through research and collaboration.

Austrroads Programs

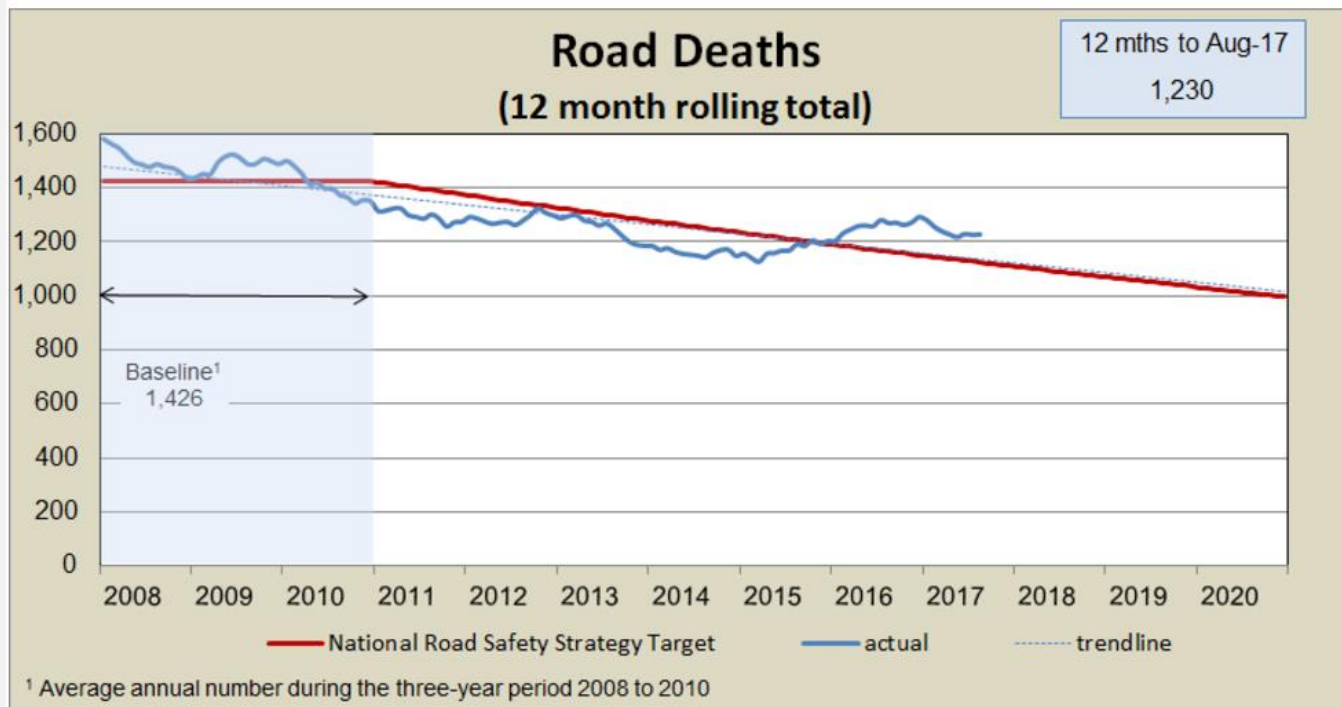


Context - National Road Safety Strategy

(target 30% reduction)

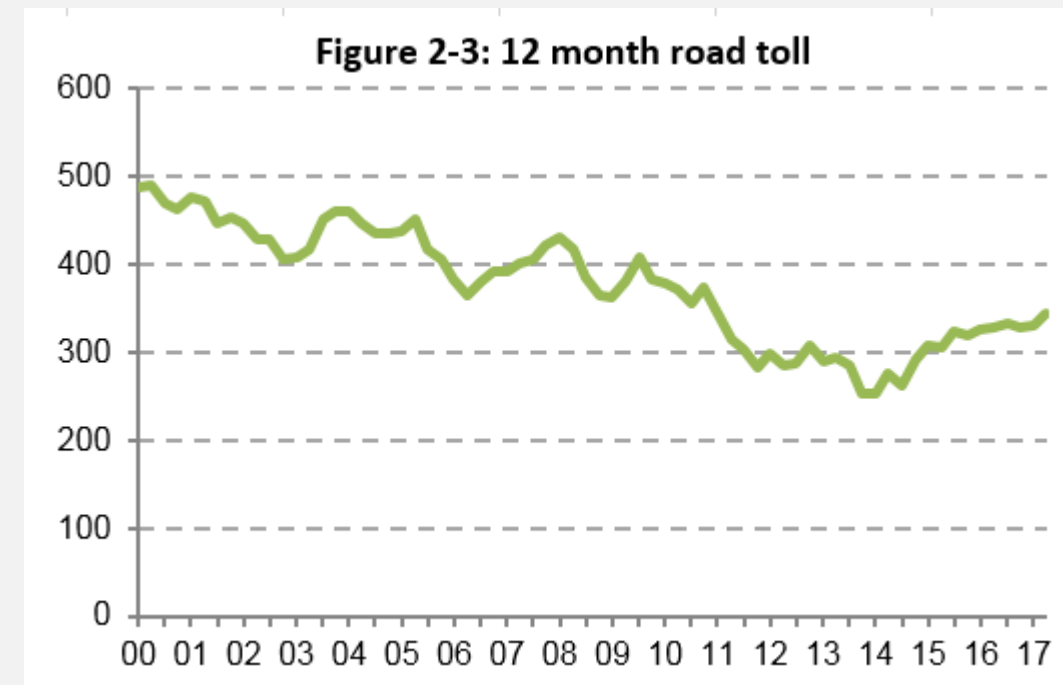


Australia



Source: National Road Safety Strategy Website Sept 2017

New Zealand

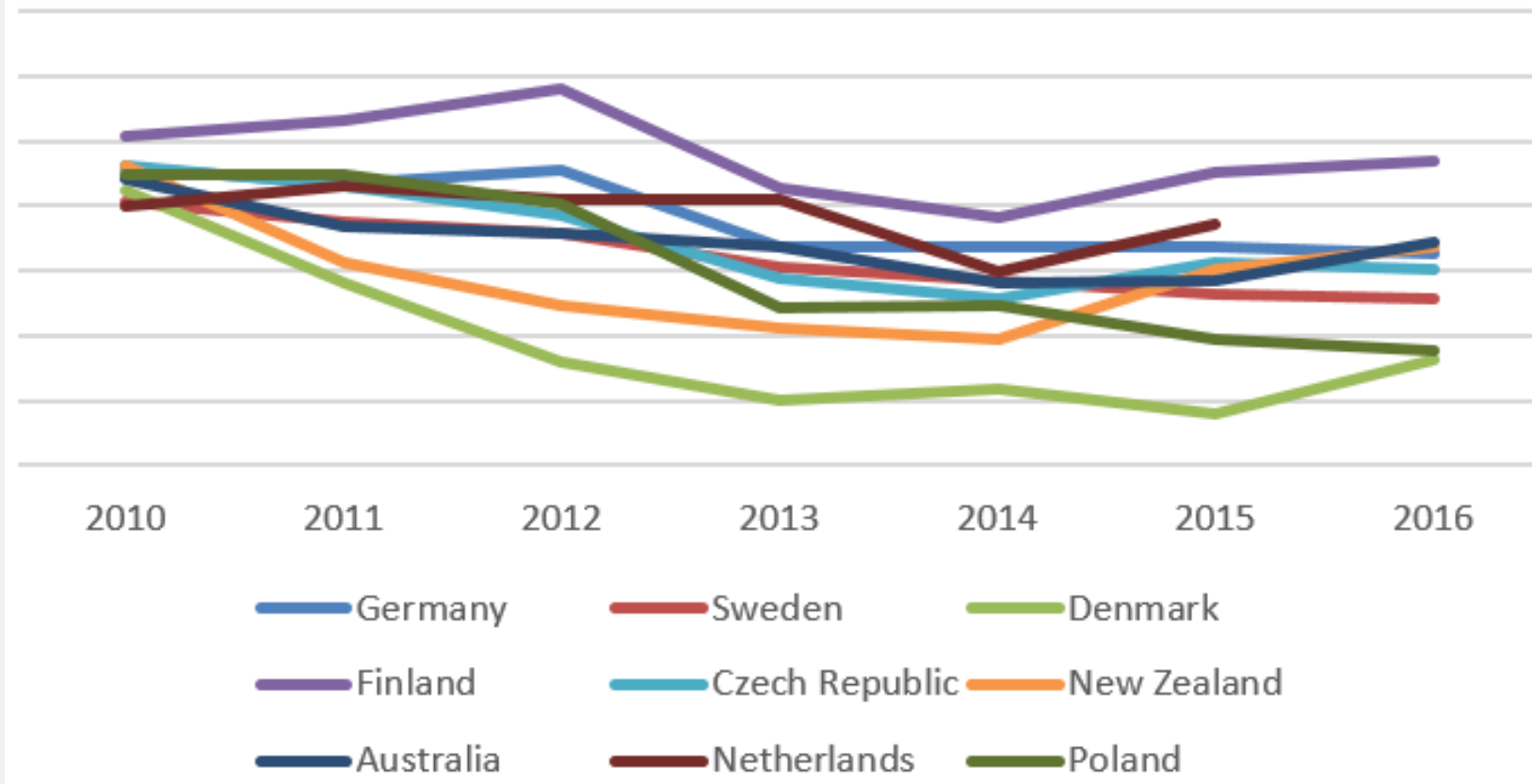


Source: NZT Website Sept 2017

Context – International Road Safety Plateau



International Plateau in Performance



Austrroads focus on step change improvement



What can be done to make a step change improvement?

System Risk Mapping (Leading)



Inputs

16.6 million drivers (+1.3%)
80% passenger drivers
10% motorcycle riders
10% truck drivers
24 million people / pedestrians
17.4% weekly cyclist particip. (-0.8%)
18 million motor vehicles (+2%)
90% cars & light commercial
3% trucks
5% motorcycles

System Management

Planning & Stereotypes
Design & Standards
Program Delivery
Operation & Maintenance
Speed

Driver Licensing & Reg.
Training & Education
Psychology & Behaviour
Enforcement
Speed

Vehicles & Reg.
Technology & Speed
Insurance

Outcomes

↑ Drink/Drug Crashes
↑ Unrestrained Crashes
↑ Speed Crashes
↑ Vulnerable User Crashes
↑ Distracted Driver Crashes
< Cost of Delivery
< Young Driver Crashes
< Older Driver Crashes
< Fatigue Crashes in Urban
< Extreme Behaviour Crashes
< HV Crashes on Highways
< ROR, INT, HO
< Rural / Remote Areas
< Ped Crashes at Night
< Motorcycle in Urban

System-wide

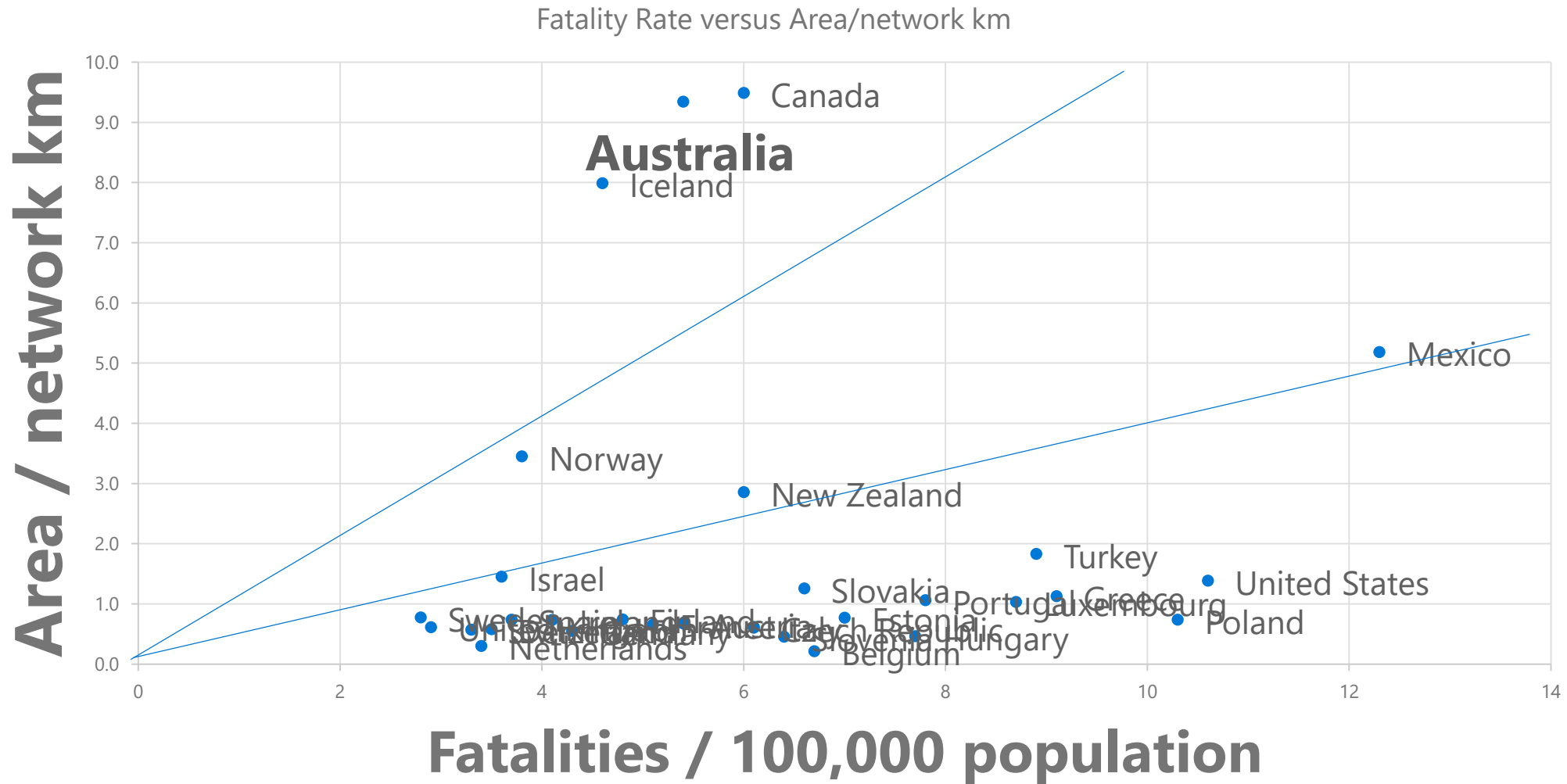
- National Strategy Actions & Modelling
- System & Risk Mapping
- Network Safety Plans
- Program Development / Audit Practice
- Safe System and Speed Integration
- Performance Based Design Standards
- Measuring Crash Outcomes (non-fatal)
- Harmonisation Stocktake (RS and R&L)

Targeted

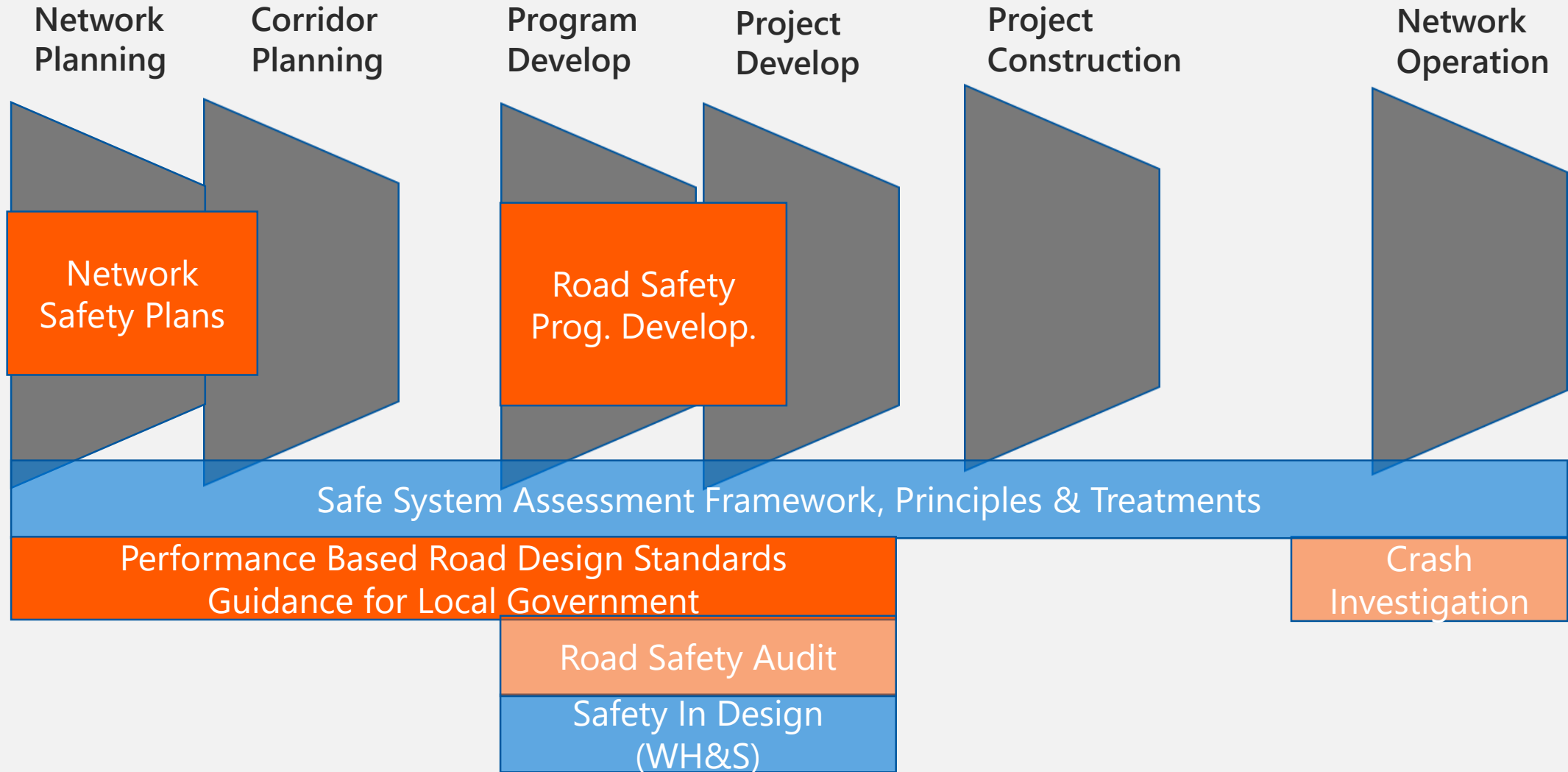
- Drugs and Distraction
- Vehicles as Workplace
- End-of-Life Vehicles
- Mixed Use Arterials
- Roadsides & Intersections
- Rail Crossings and HV
- CITS Infrastructure
- Driver License Harmonisation
- Hazard Perception Test



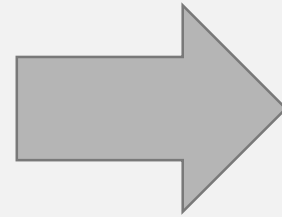
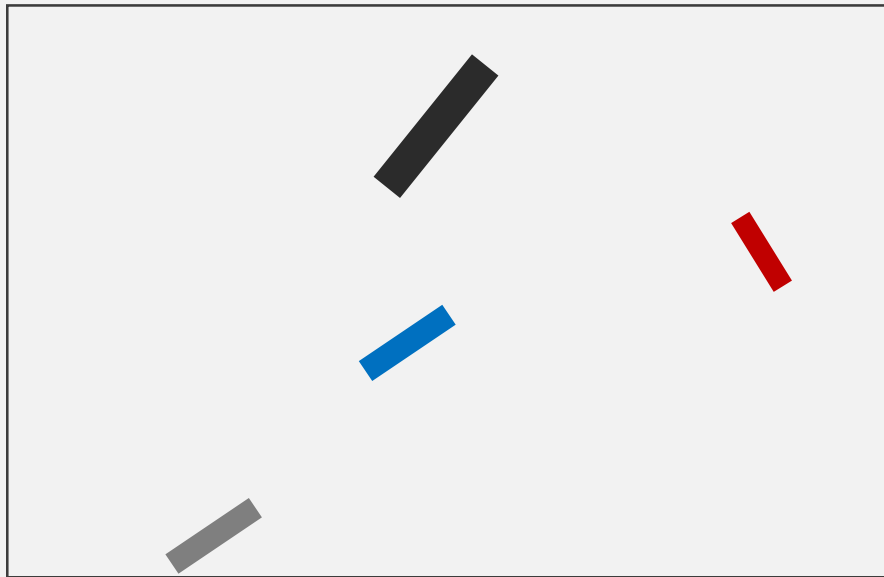
Spatial Challenge - Smart Network Investment



Network Safety Plans & Program Development



Network Safety Plans - Project V Corridor



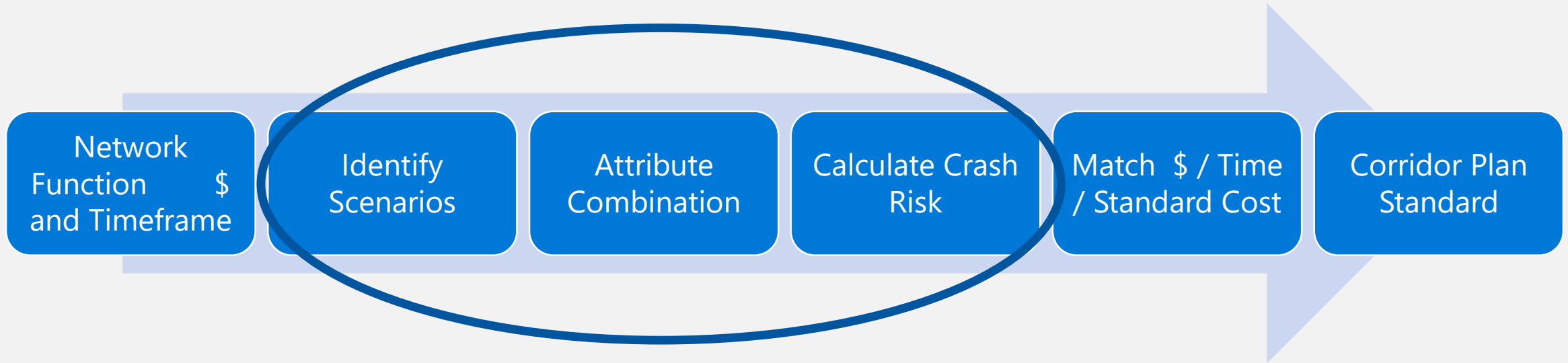
Project Management Plan

- Best outcome for project budget
- Inconsistent for user
- Standard redecided on projects

Network Safety Plan

- Best outcome for the network
- Consistent for user
- Standards set once for function

How could a Network Plan Process be supported?



Network Function \$ and Timeframe

Menu

Match \$ / Time / Standard Cost

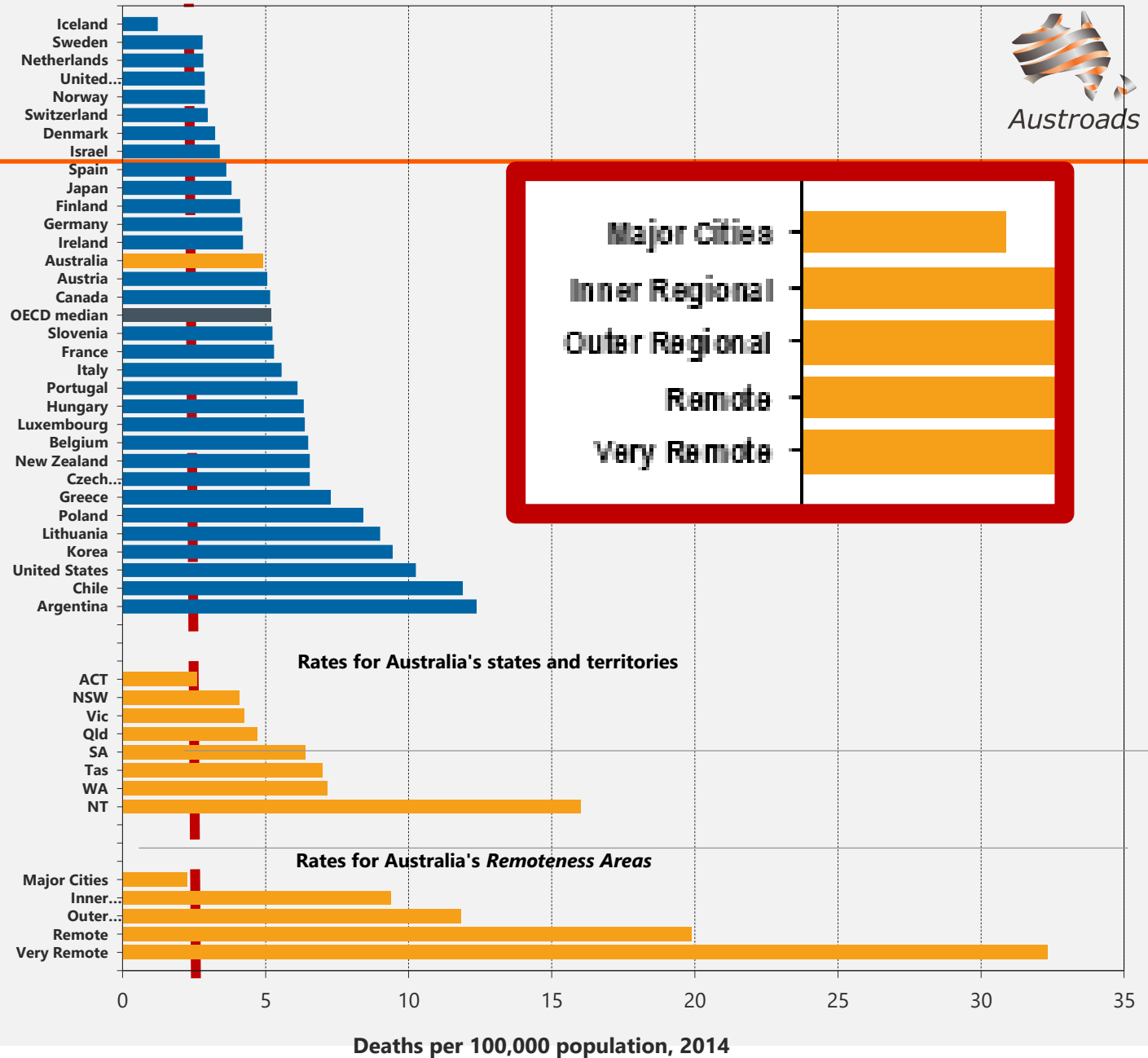
Corridor Plan Standard

Guidance for LG



50% Crashes LG Roads

40% fatalities on LG roads
 > 50% casualties on LG roads
 (source: rep. State data)



Combine Safe System Practices (Leading)



Attribute Combinations

Speed

Geometric Dimensions

Safety Treatments

Crash risk calculation

Reference ID	Star rating	Posted speed (km/h)	Formation width (Carriageway) (m)	Lane width (m)	Shoulder width (Left) (m)	Sealed Shoulder width (Left) (m)	Safety Barrier - roadside	Runout area (Roadside) (m)	Verge (batter) slope (1:x)	Audiotactile edgeline marking (Y/N)	Audiotactile centeline (Y/N)	Centre barrier (Y/N)	Wide centreline width (m)
	5	100	16.0	3.5	3.0	2.6	Y, flexible	-	-	Y	Y	Y, Flexible	3.0
	5	100	14.4	3.5	3.0	2.6	Y, flexible	-	-	Y	N	Y, Flexible	1.4
	4	100	14.4	3.5	3.0	2.6	Y, flexible	-	-	Y	N	N	1.4
	5	100	11.0	3.25	1.75	0.5	Targeted	9.0	6.0	Y	Y	N	1.0
	4	100	11.0	3.5	2.0	2.0	Y, flexible	-	-	N	N	N	-
		100	10.0	3.25	1.25	-	N	-	-	Y	Y	N	1.0
	4	100	10.0	3.5	1.5	1.5	Y, flexible	6.0	-	N	N	N	-
	2	100	9.0	3.25	1.25	0.5	N	4.0	-	Y	Y	N	-
		100	9.0	3.5	1.0	0.5	N	-	2.0	N	N	N	-

Safety Risk

Performance - Based Standards

Summary



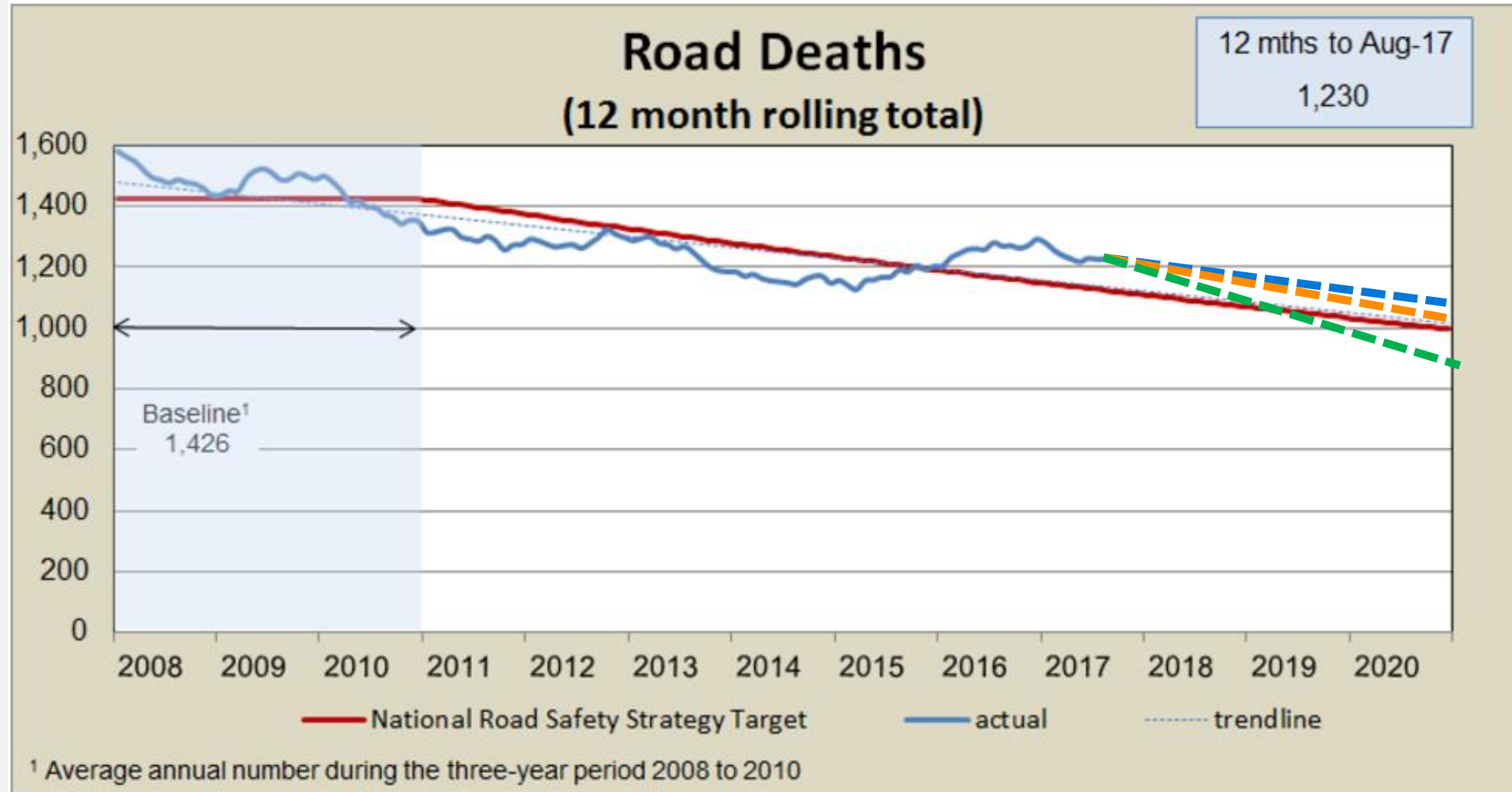
- Smart Investment – Network Safety Plans
- Guidance for Local Government
- Low cost / high influence treatments
- Integrate safe system practices
- Accelerate Vehicle Technology benefits
- Utilise available enforcement technologies
- Safety as a Priority for Driver / Rider Experiences

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Key Interventions – Road Safety Strategy

(target 30% reduction)



30% Target 998

Baseline 1078

Acceptable 1046

Difficult 886

Low Cost High Influence Treatments



- Qld TMR Rapidly Implemented on a network-wide basis
- Completed >500 km within 2 years
- Saving 50⁽²⁰¹⁵⁾ lives
- 50%⁽²⁰¹⁵⁾ reduction in fatalities
- Saving of lives on treated and untreated sections ****
- >\$5b⁽²⁰²⁵⁾ saving in construction costs



NRSS Action Plan 2018-2020 Input



- Comprehensive - Safe System 4+ pillars
- Stakeholder Input
- Quickly into Operation
- Maximise benefits through harmonisation
- Specific initiatives for targeted areas

Key Interventions before 2020



Countermeasure	Acceptable	Difficult
Alcohol Enforcement	+	++
Speed Enforcement	+	++
Infrastructure spending	+	++
Strengthen GLS	+	++
Drug enforcement	-	++
Speed Limits	-	40 / 50 /90

Austroads Programs

