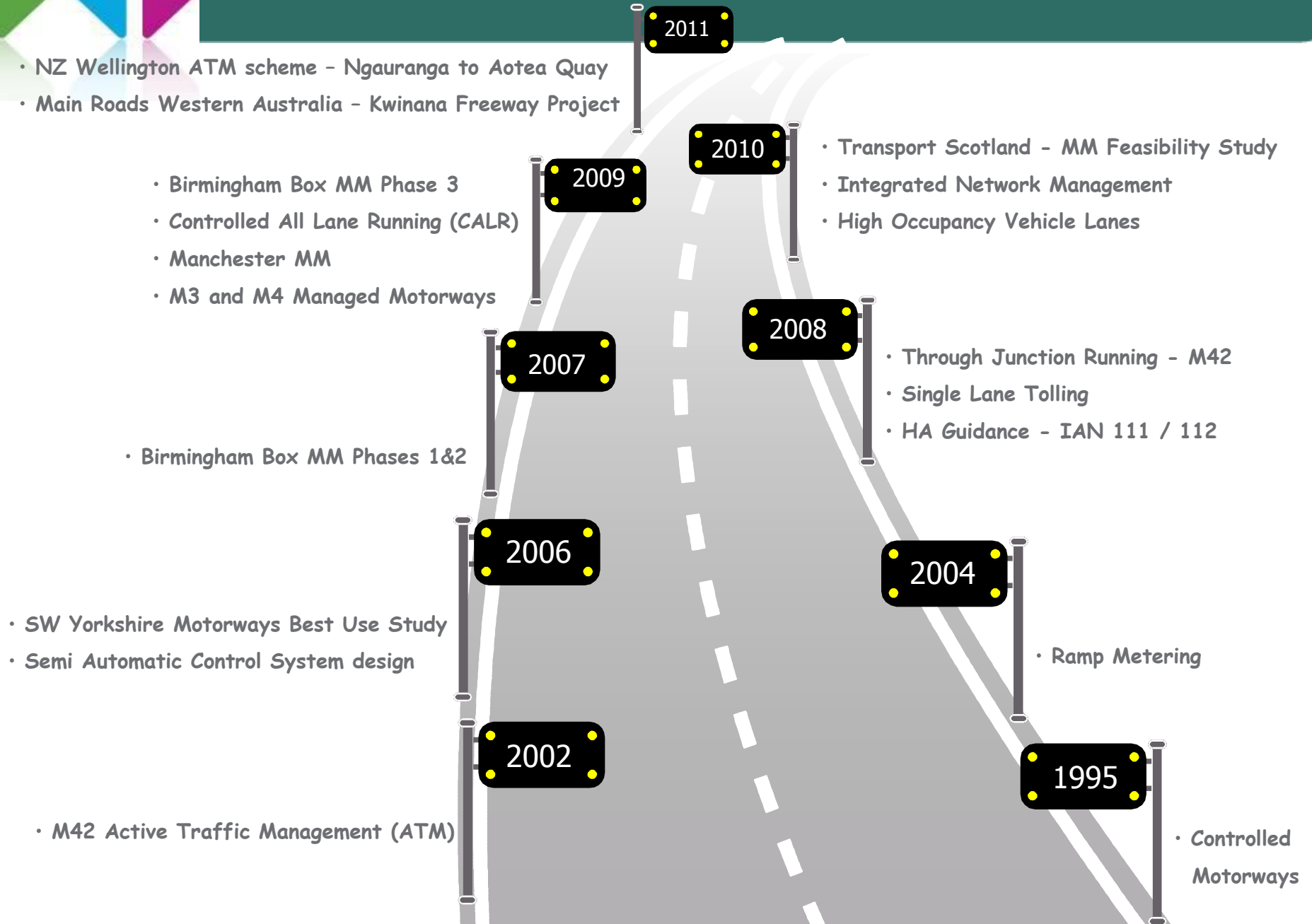




The Compliant Motorway

MOUCHEL - JOURNEY TO MANAGED MOTORWAYS



Start by understanding the problem

Define what success looks like

Managed Motorways Outcomes

Understand how the network will operate

Safety is key and drives the design

Stakeholders can make or break it

Minimise Points of Failure

Whole Life Design

Monitor and review – create the evidence base - inform and shape the future

Start at the end !

Compliant Driver
Behaviour

Journey Time /
Reliability

Safety
Maintained

Political
Acceptability



Managed Motorways Outcomes

AGREEING OPERATIONAL APPROACHES

Agreeing Operational Approaches

Define the Problem and agree what success looks like

Base Data

What are the Project Constraints ?

Operational Approach (Regimes)

Expected Outcomes

Review / Monitor / Audit
- Evidence Success

Behaviours driven by:

- Provision of timely information
- A continuum of information
- Intuitive response from the driver
- Consistency
- The 'self-explaining' highway

Resulting in: A Controlled Environment

The 4 E's

- Education (and Encouragement)
- Engineering
- Enforcement
- Evaluation

- Principle – ‘Best Use’ of existing network
- No need for wide-scale widening or new-build projects
- Operational Regimes
- Influences on Compliant Driver Behaviour

Managed Motorways



M42 ATM Pilot

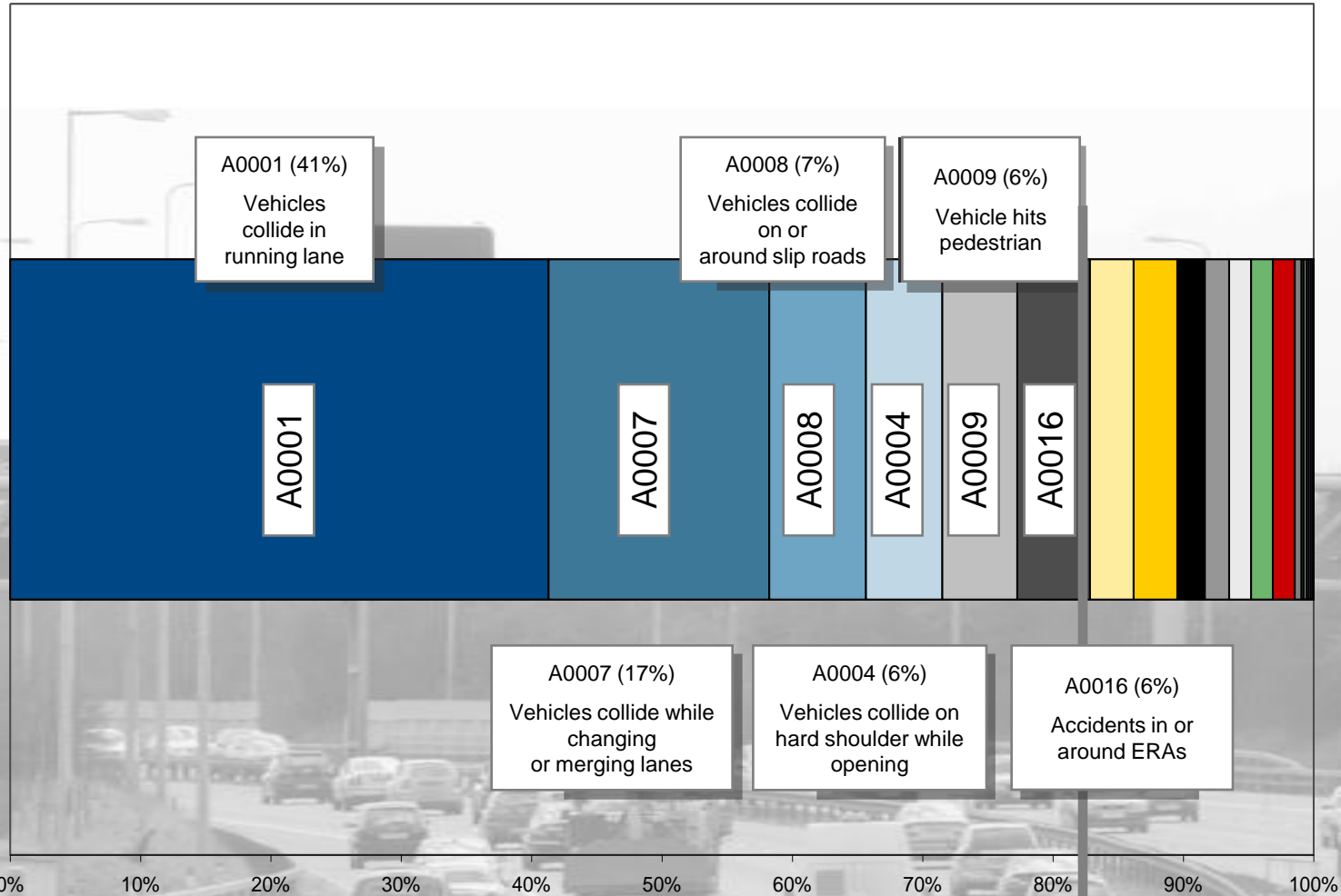
- Reduced Congestion
- Improved Journey Time / Reliability
- A reduction in the number and severity of incidents and accidents
- Improved driver information

Managed Motorways ‘Toolkit’ Measurables

ACCIDENT DISTRIBUTION

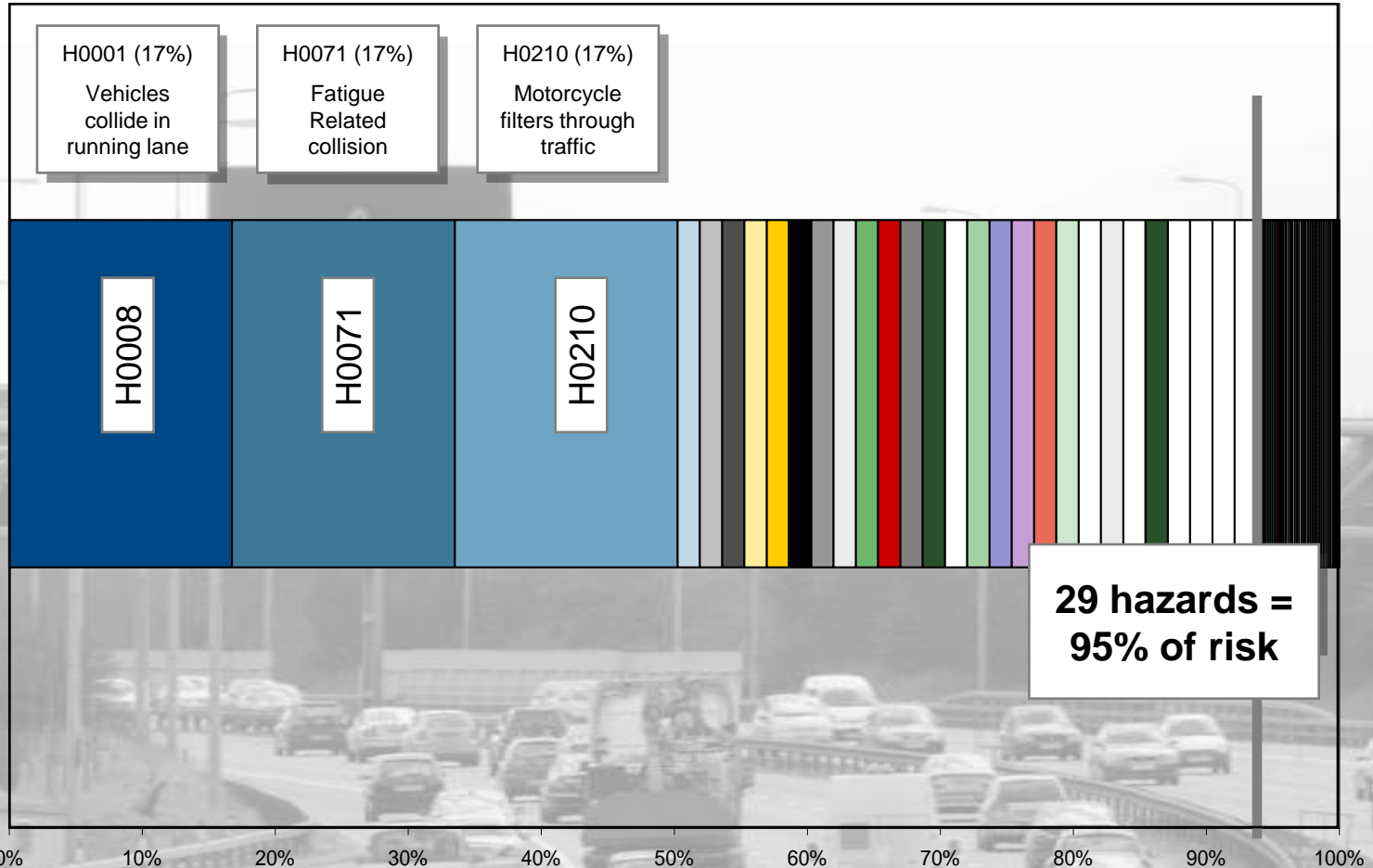


Six accident types account for more than 80% of the total risk within the hazard log



HAZARD DISTRIBUTION

**A small number of hazards make up the majority of risk –
Projects need to focus on these hazards**



- Standard Motorway Provision
- Controlled Motorway (VMSL)
- Hard Shoulder Running (HSR)
- Through Junction Running (TJR)
- Controlled All Lane Running (CALR)
- Ramp Metering (RM)
- High Occupancy Vehicle Lanes (HOV)

Managed Motorways Toolkit

Standard Motorway Provision

CM (VMSL) Scenario

HSR Scenario

TJR Scenario

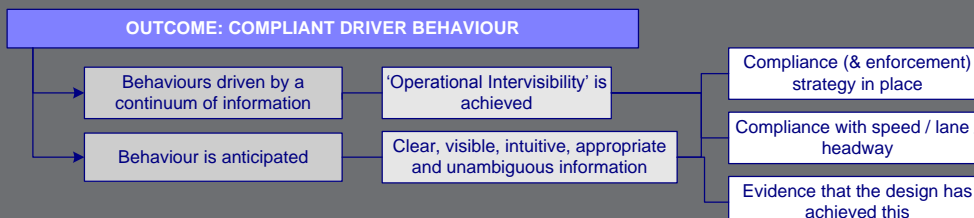
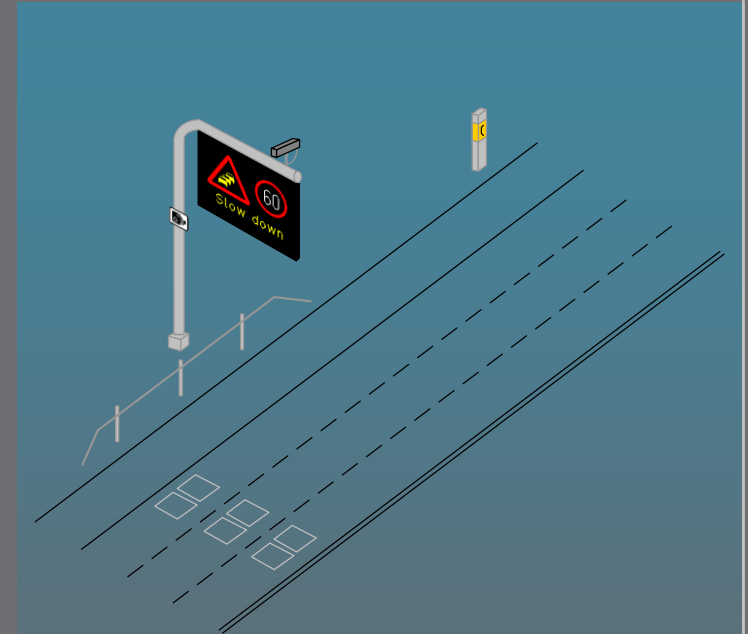
CALR Scenario

RM Scenario

HOV Scenario

INM Scenario

- Different driving environment
- Controlled environment
- Management of incidents
- Operational inter-visibility
- **Future** – schemes with less technology and infrastructure?
- More for less



Relationship Between Technology, Infrastructure and Operators

AGREEING OPERATIONAL APPROACHES

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Resulting in: A Controlled Environment

The 4 E's

- Education (and Encouragement)
- Engineering
- Enforcement
- Evaluation

Safe roads, Reliable journeys, Informed travellers

Thank You

mouchel 