

CURRENT AND FUTURE ISSUES IN SKID RESISTANCE MANAGEMENT IN AUSTRALIA

Presented by:

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Presentation Overview

- Brief background
- Overview of skid resistance management in Australia
- The main issues / challenges
- The way ahead
- Closing remarks



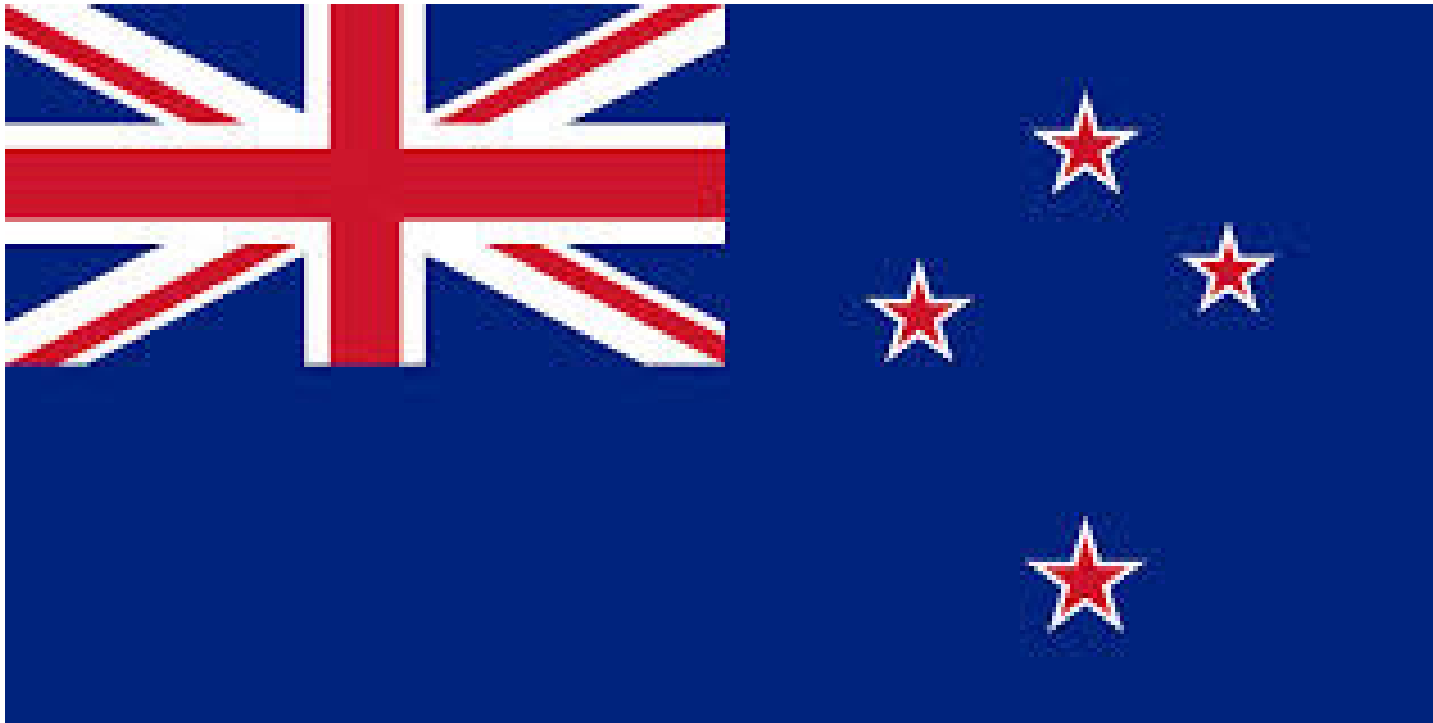
Terminology

- **‘Current’** (since May 2011)



Acknowledgement

- **New Zealand**
-





A few facts.....



Parameter	Australia
Population	23.5 million (est. May 2014)
Population density	7 persons / sq.mile
Number of vehicles	17.2 million (2013)
Average age of vehicles	10.0 years (2013)
Road length	815,074 km (2007)
Length of sealed roads	41%
% spray / chip seal	Approx. 70%
No. of states/territories	8
Fatalities p.a per 100k population	5.2 (2013)
Number of road fatalities	1,188 (2013)

2 Of Our Major / Key Crash Types

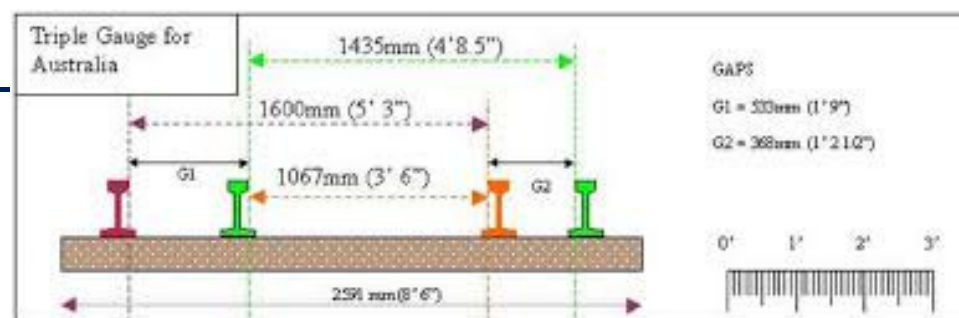


Management of Australia's Highways

- **Federal**
- National road network
- AusLink
- **State**
- 8 SRAs (see map)
- **Local**
- Over 80% of network
- 560 local councils
- Many < 2,000 residents
- Competing demands!



Standardisation Issues?



HOW STANDARDS PROLIFERATE:
(SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC.)

SITUATION:
THERE ARE
14 COMPETING
STANDARDS.

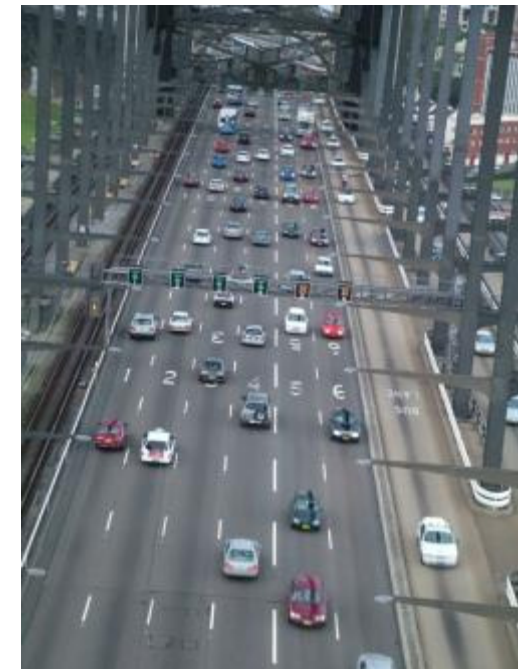
14?! RIDICULOUS!
WE NEED TO DEVELOP
ONE UNIVERSAL STANDARD
THAT COVERS EVERYONE'S
USE CASES.



SOON:

SITUATION:
THERE ARE
15 COMPETING
STANDARDS.

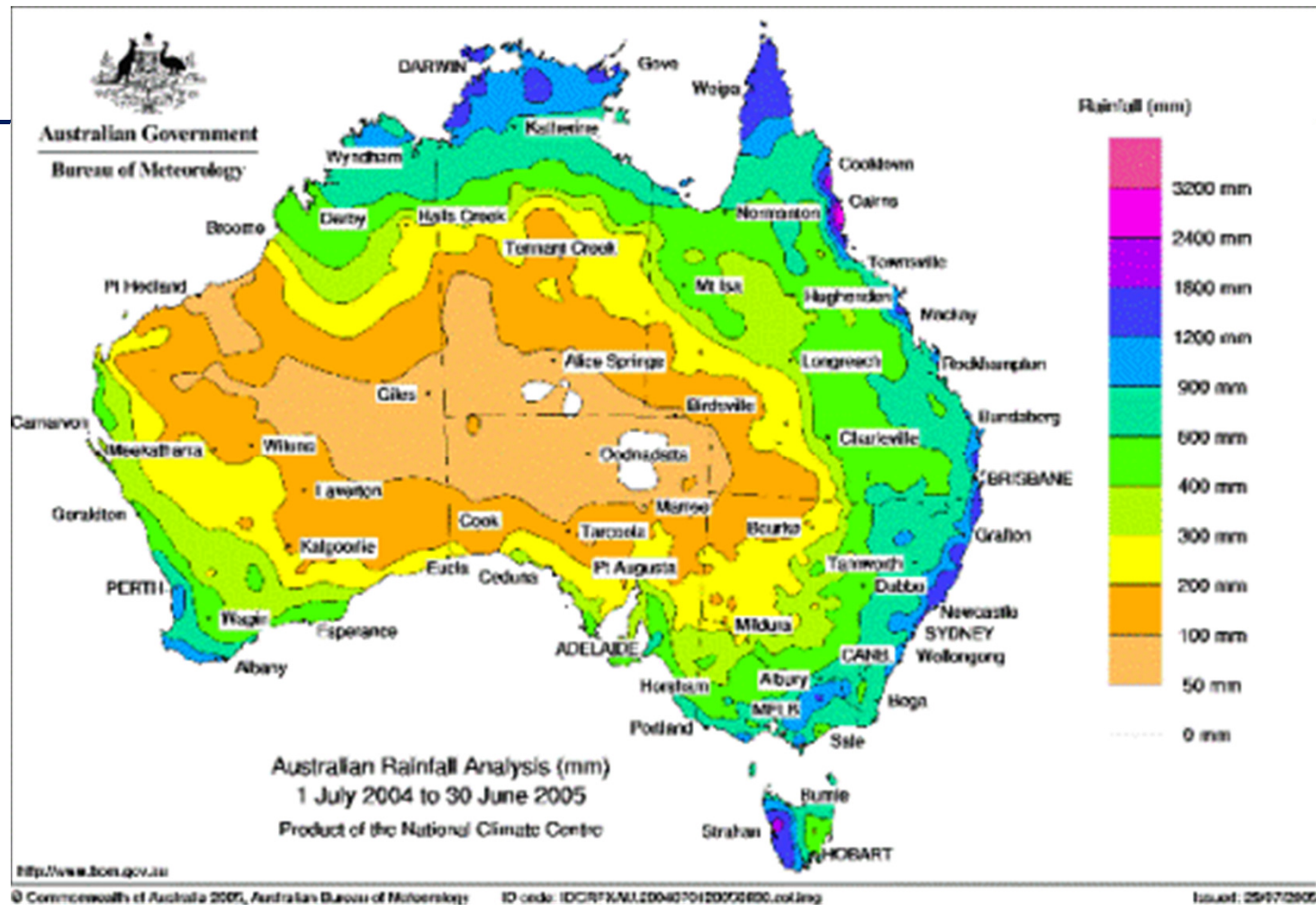
Management of Australia's Highways



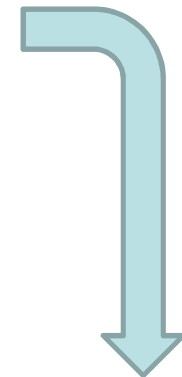
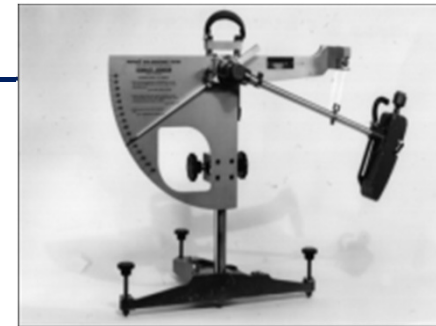
Management of Australia's Highways



Rainfall



Our Skid Resistance Journey

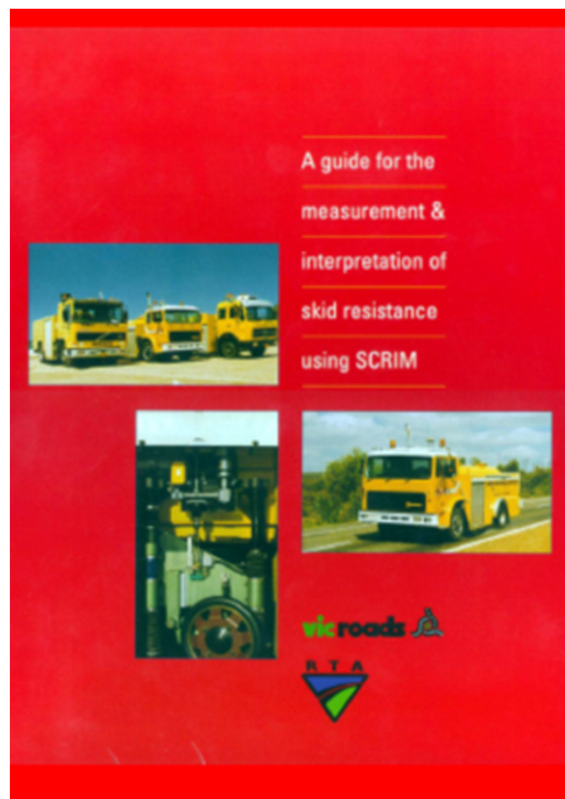


Our Skid Resistance Journey

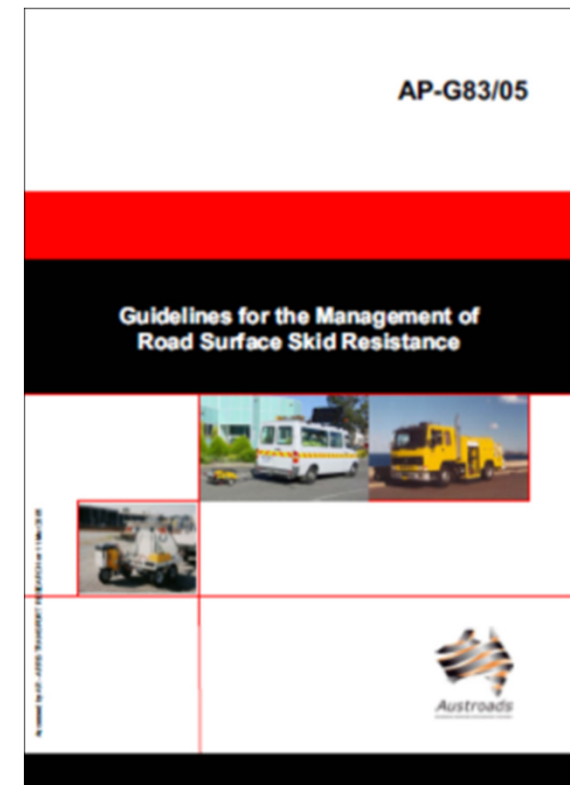


Our Skid Resistance Journey

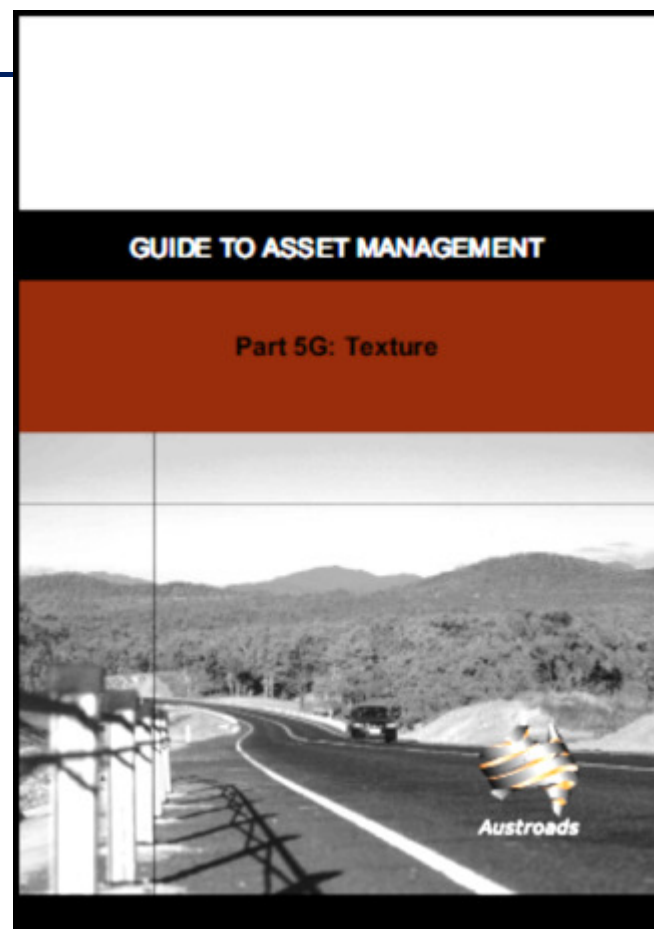
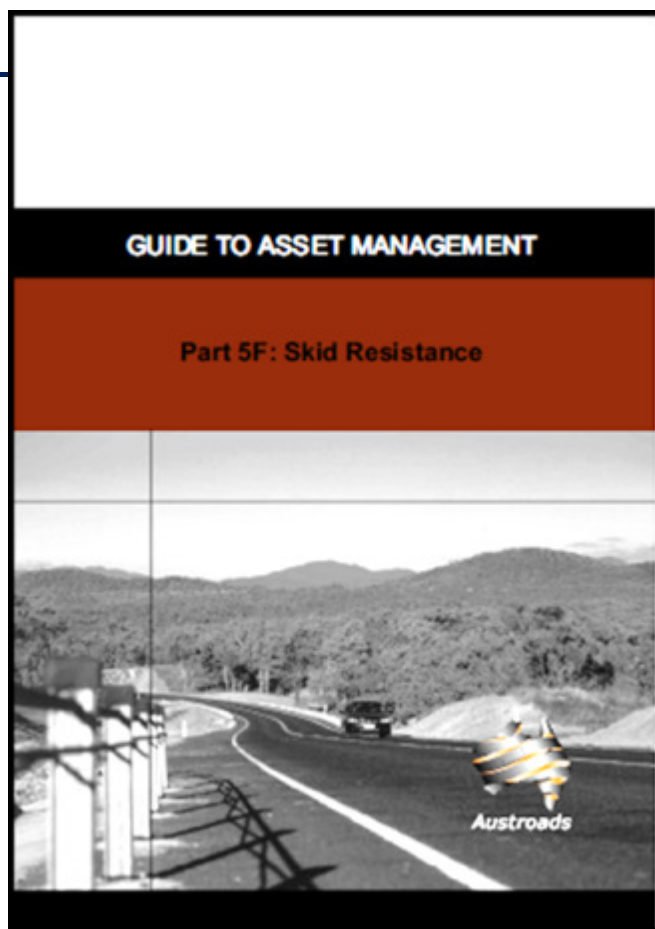
- No mandatory requirement to measure / manage ('duty of care')

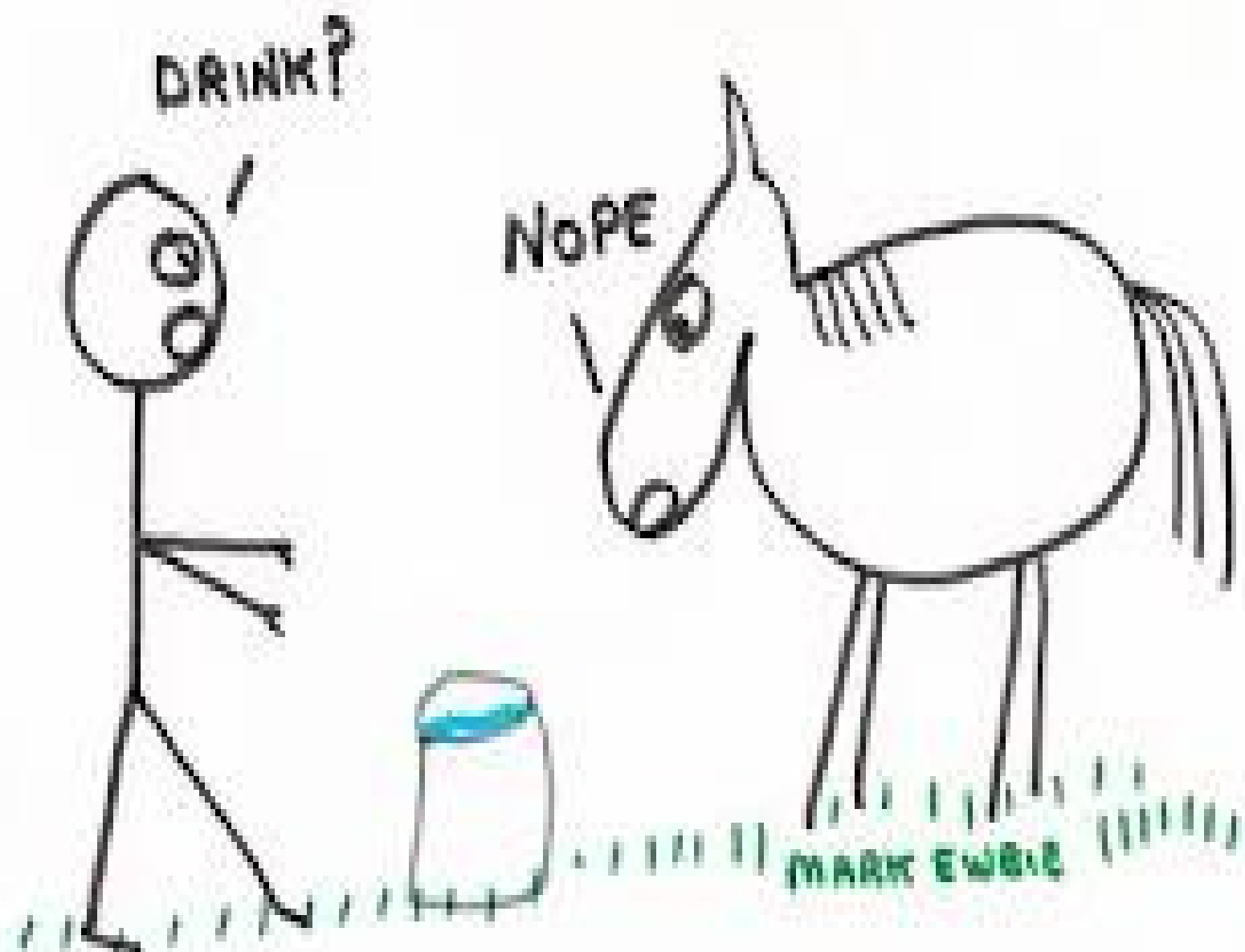


1996 – 2005



Data Collection Guides Followed (2009)





Barriers to (Wider) Implementation

- **Despite compelling arguments for !!!**
- No statutory requirement
- 'True skid crashes very rare' (more pressing needs)
- Not for us (SRAs only, & not all SRAs are doing it)
- Have to collect test data?
- So much to do too expensive, inc. vast & remote road networks
- Must be 'all or nothing'?
- Little knowledge or expertise
- **Still remain!**



Technical Issues



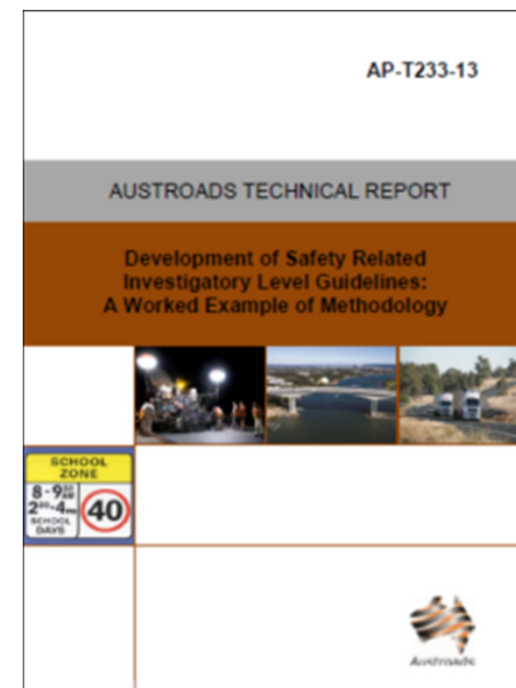
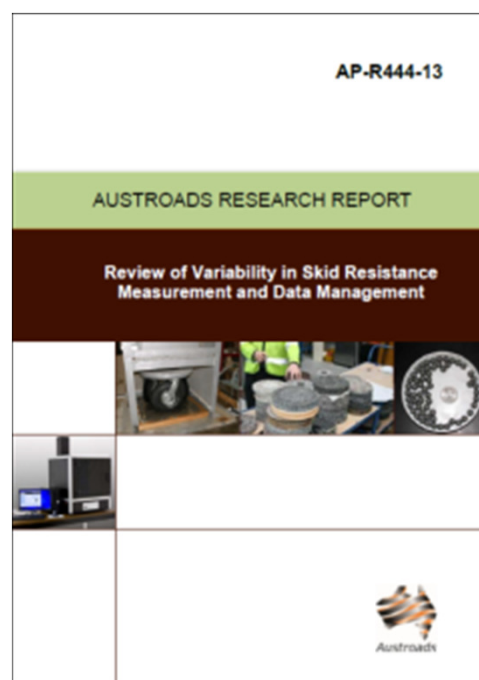
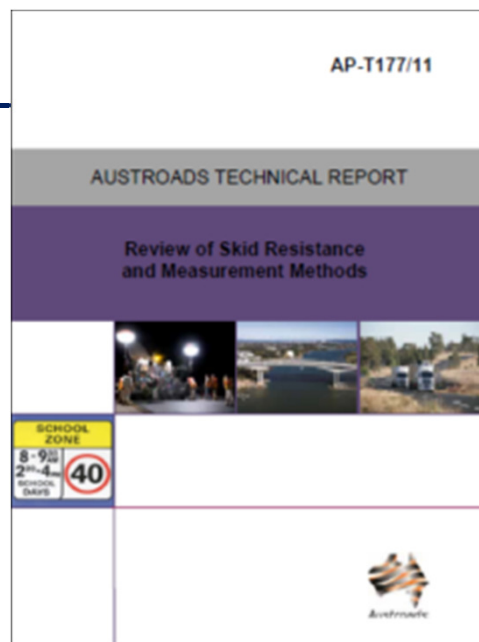
Historical Issues (2006-2011)

- Test equipment availability and correlation
- Post crash testing (inc. Police tests)
- Post-lay / QA skid resistance testing for surfacings
- Macrotexture as a surrogate for SR
- Seasonal variation / correction in SR data
- Rainfall (need to test?)
- First Rainfall Skidding Accidents (FRSA)
- Aggregates – availability & QA (PAFV)
- Flushing of spray seals
- Data analysis and processing – standardisation
- Developing ‘local’ ILs

Further Guidance (2011)



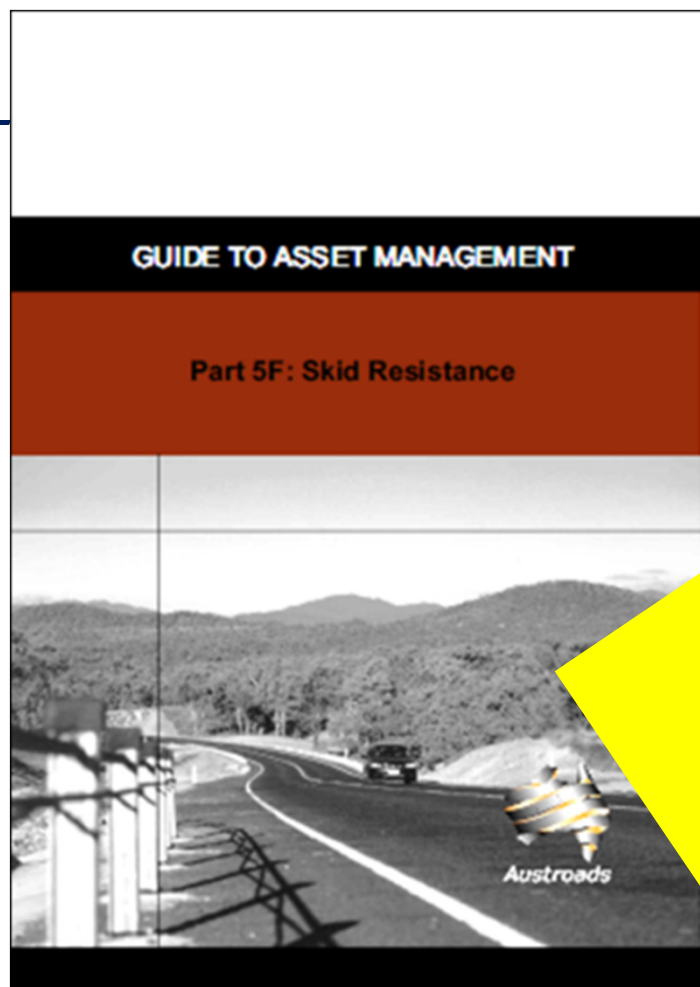
Further Guidance 2011-2013



Current and Emerging Issues

- **Despite the success of further guidance, some historical issues remain or have evolved in scope and/or priority**
- **Some new and emerging issues:**
 - identifying ways to effectively 'sell' network level SR management
 - development of national / regional equipment calibration protocol
 - identify and pilot a suitable post-lay (QA) SR test
 - prediction of in-service performance of aggregates
 - risk management methodology to address aggregate availability
 - how best to manage extensive spray seal network
 - further evaluation of remedial treatments
 - greater understanding of principles and considerations in setting a local suite of ILs and assigning ILs at site level
 - best practice in use of warning signage

Austroads 2013/2014 Program



Review &
Update

In Mitigation

- Level of interest in, commitment to SR issues varies considerably
-
- What hasn't helped us?
 - Extensive, major weather events
 - Austerity measures
 - 'The Departure Lounge' (loss of vital KSE)
 - Messrs. Pratt, Weligamage, Baran, Mackey, Cossens, Hickson etc.



What's Needed?

(author's opinion)



What's Needed?

- Realisation we are not going to get there in 5 minutes
-
- **Renew interest**
 - **Create a new momentum**
 - Don't discard what we have in place – review and improve
 - Grow and encourage new talent
 - Awareness (e.g. ARRB webinars / workshop on ILs at 2014 conf.)
 - Active state road agencies to promote and mentor local government
 - 'Sell' - even a modest, fit-for-purpose local strategy makes a difference
 - [A mandatory requirement?]
 - [A high profile incident / legal case?]

Closing Remarks



Thank You!

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