

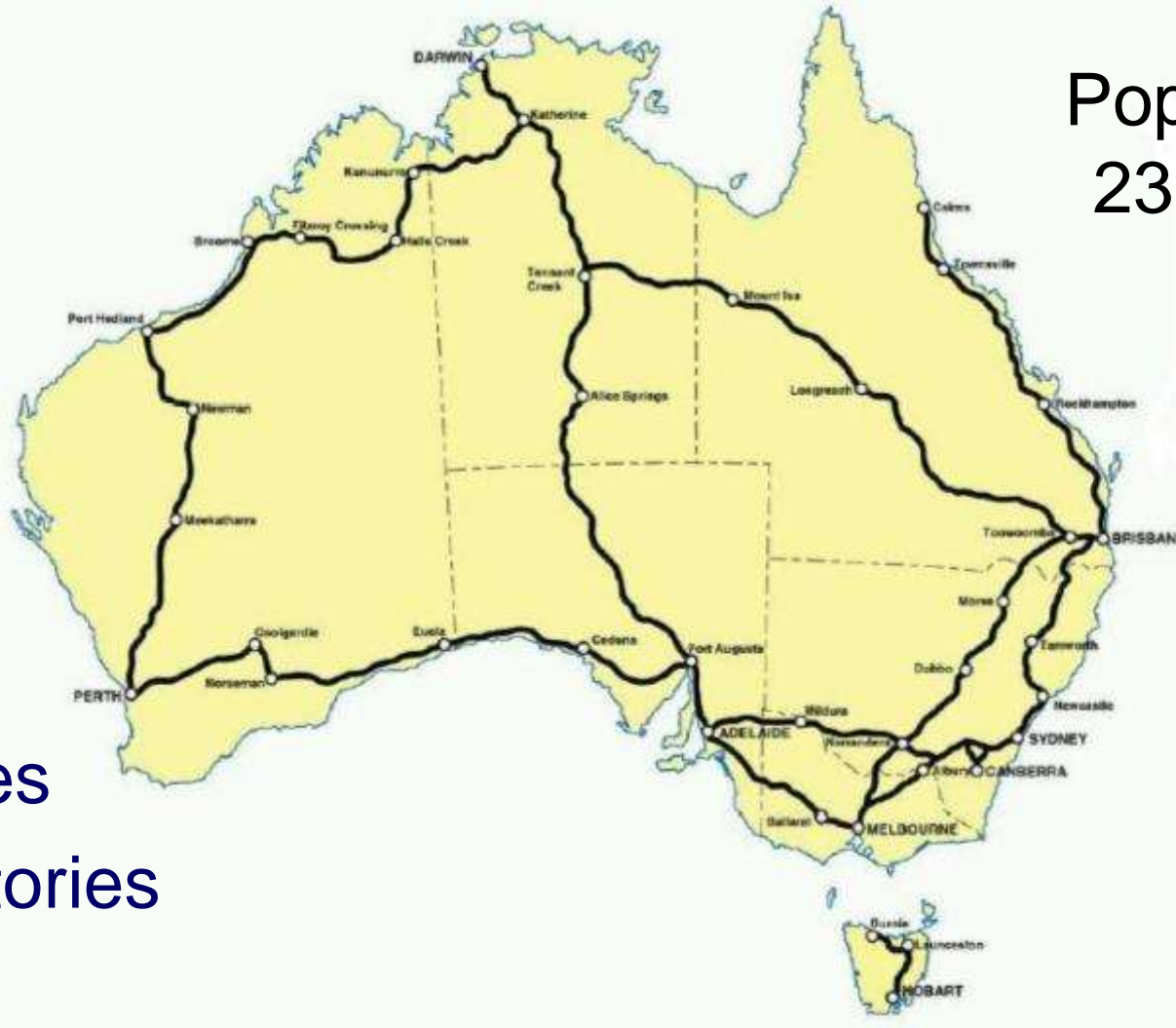
An Australian Perspective

Dr Richard Yeo

Plenary session 4: Key issues and further recommendations for enhanced international transport research cooperation in Horizon 2020

Australia

Population:
23 million



7 states
2 territories

EUTRAIN



Features:

- open look at today's strongly interconnected world
- creating situations of mutual benefit
- strengthening Europe's competitiveness

Some recommendations:

1. priority setting and research topics – web based observatory
2. virtual cooperation centres and specialist champions
3. reduced administrative burden for project funding
4. human capital - training and researcher exchange
5. collaborative use of research infrastructures
6. research implementation and management of IP rights

Recommendations

EUTRAIN

1. priority setting - topics
2. virtual cooperation / specialist champions
3. simplify administration
4. human capital - training and researcher exchange
5. collaborative use of research infrastructures
6. implementation and management of IP rights

Australian perspective

national key outcome areas
geographic distance!

maintain accountability

sustainable expertise model

TRex-Transport Researchers Exchange
opportunities exist

engagement with end users
required

Recommendations

EUTRAIN

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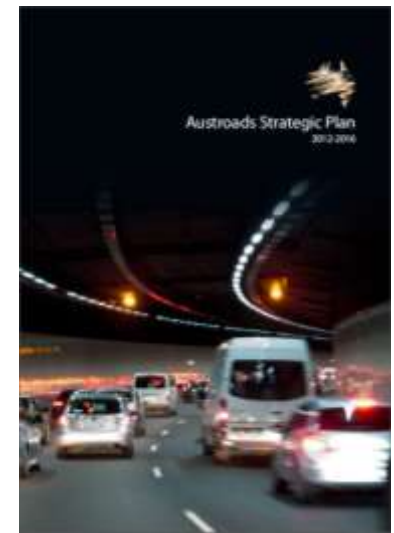
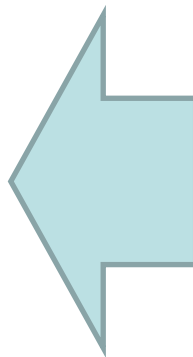
Research Strategy Context - Australia

Four common agency objectives:

- Safety – safe system
- Economic – productivity
- Environment – sustainability
- Social – accessibility



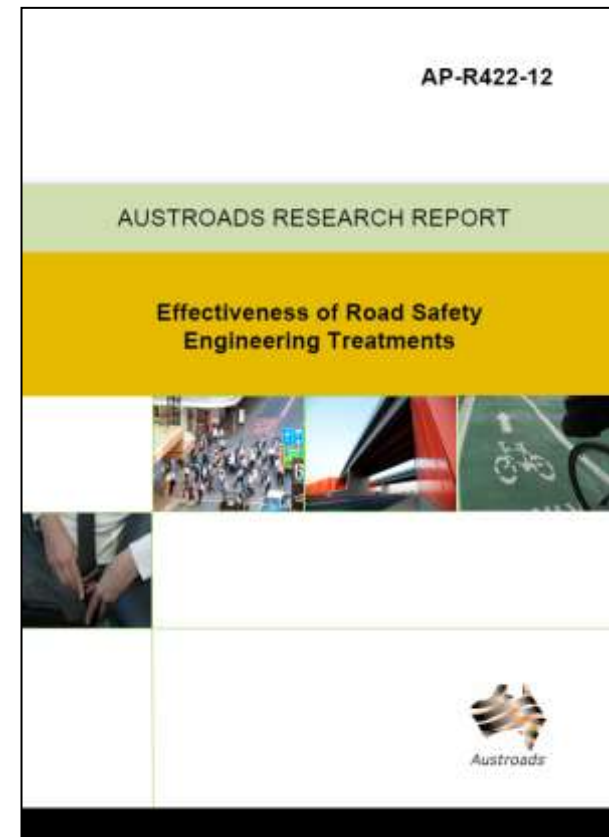
research
collaboration
opportunities



Collaboration in Road Safety

Effectiveness of road safety engineering treatments

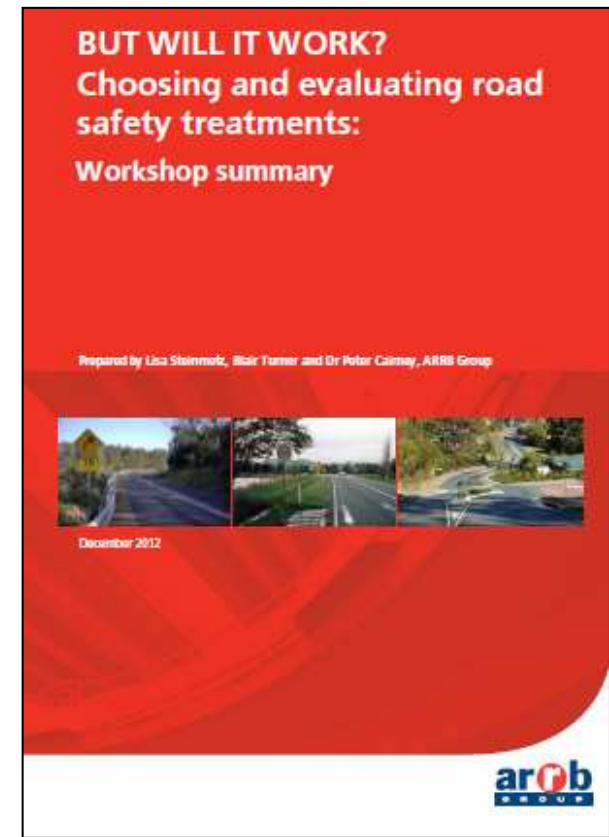
- Crash Modification Factors (CMFs)
 - concerted effort to improve knowledge
 - treatment life and treatment cost issues
 - 57 treatments; 126 CMFs
 - 52% of CMFs now have medium or high confidence
 - guide on how to conduct evaluation



Collaboration in Road Safety

Effectiveness of road safety engineering treatments

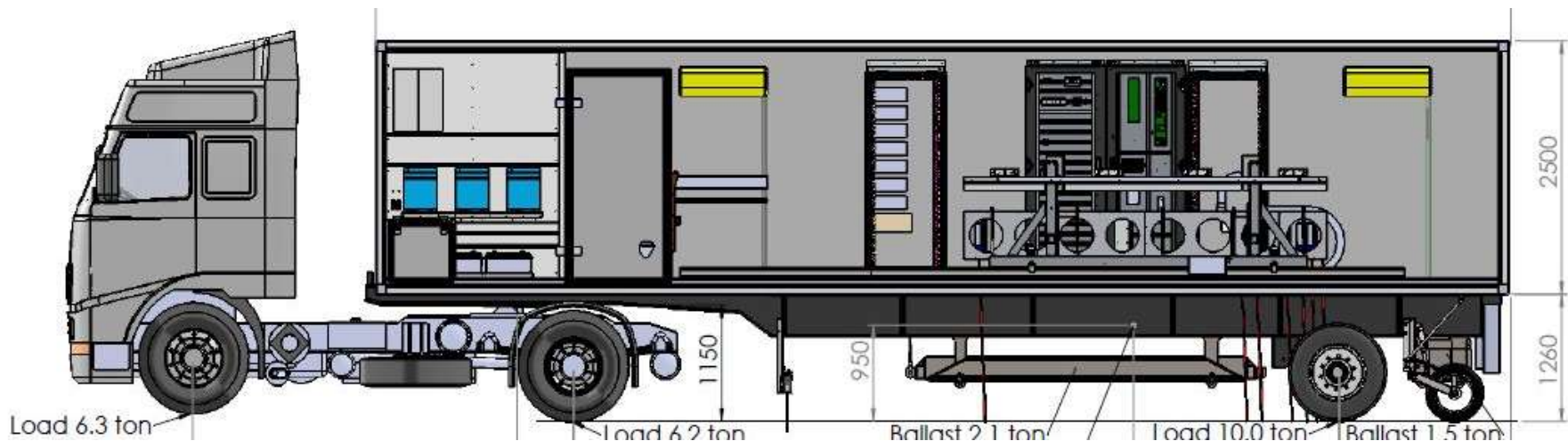
- Crash Modification Factors (CMFs)
 - significant gaps in knowledge remain
 - quality poor for some existing CMFs
 - need information on fatal and serious outcomes
 - use of groups of treatments
 - research required – this is costly
 - international collaboration needed



Productivity - Opportunities for Collaboration

High speed non destructive testing of pavements:

- Traffic Speed Deflectometer implementation
 - harmonisation of test methods
 - complementary collection of additional network condition data
 - data quality



Network Deflection Testing

Traffic speed deflectometer (TSD) international collaboration



South Africa

Poland

Italy

Denmark

UK




Australasia

Productivity - Opportunities for Collaboration

- Collation and analysis of 'Big Data' for network operations:
 - access and analyse emerging datasets from connected vehicles and onboard devices
 - determine travel time/speed, origin destination, route etc.

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All the reliable traffic info services you expect from traffic.com are now on HERE, plus great new smart routing and more.



[Learn more about this](#) [What happens to traffic.com?](#)



Map view ▾ Features ▾  

Traffic conditions

Light traffic  Blocked

Show traffic incidents

 **On map only**

 As a list and on map

Productivity - Opportunities for Collaboration

Performance Based Standards (PBS) for freight productivity:

Encourage innovative vehicle designs:

- safety standards
- infrastructure protection standards



Environment and Accessibility

- climate change adaptation
- network resilience
- surface/pavement properties - rolling resistance/noise
- levels of service – freight, rural and remote



Looking forward

International research collaboration is essential

- EUTRAIN recommendations are strongly supported
- Alignment of priorities opens many possibilities
- Some projects areas of mutual interest:
 - modelling effectiveness of road safety engineering treatments
 - high speed non destructive testing of pavements
 - collation and analysis of 'Big Data'
 - Performance Based Standards (PBS) for freight productivity
 - environment and accessibility

