

# **Heavy vehicle road charging and investment reform in Australia**

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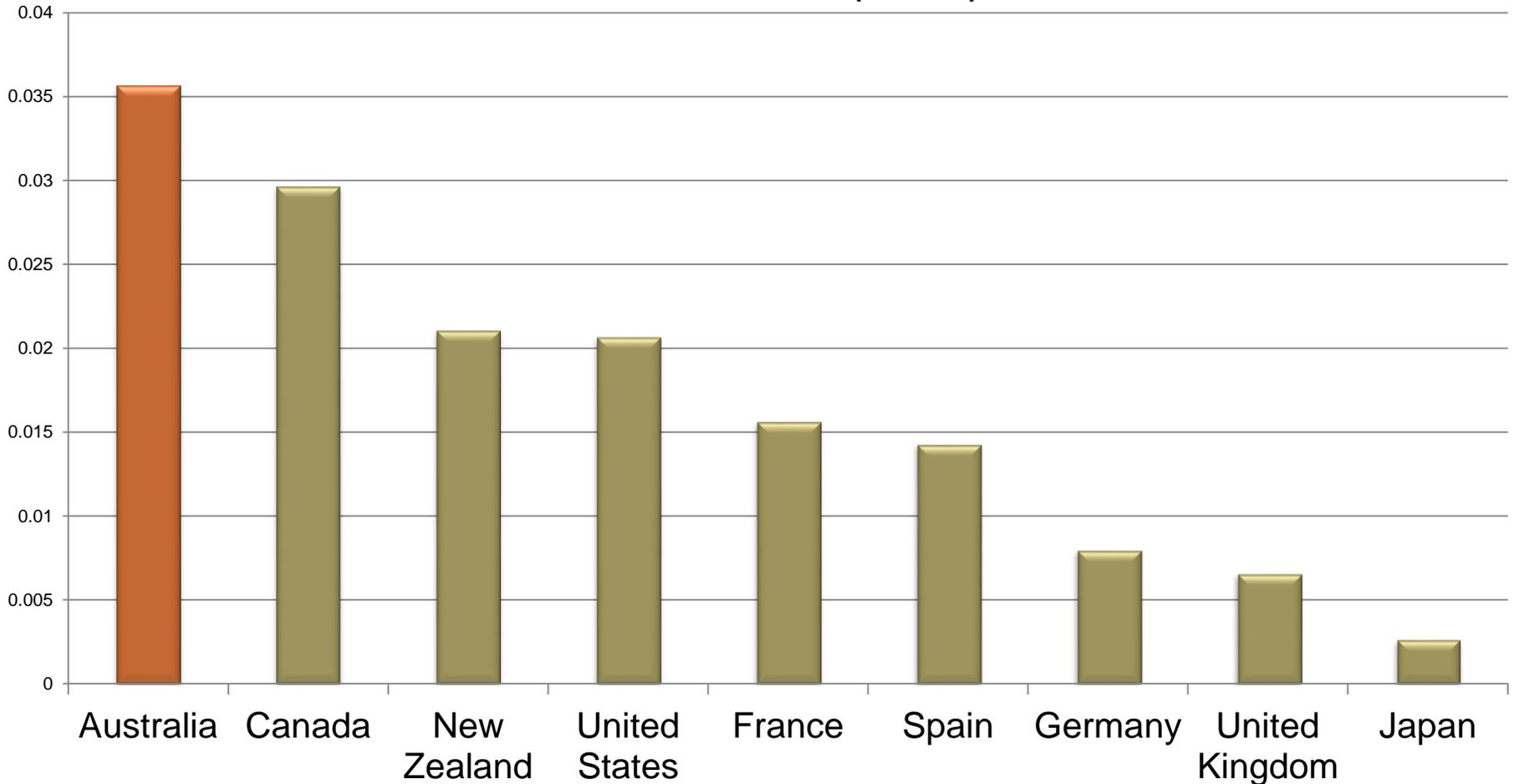
**ACCC /AER Regulatory Conference, Brisbane  
Friday 8 August 2014, Breakout Session 2**

**Australia's transport reforms - moving with the times?**

- The need for reform of Heavy Vehicle road services provision
- Potential elements of such a reform focused on the role of economic regulation
- Scope
  - Snapshot of the Heavy Vehicle road freight sector
  - Problems with the current system
  - The reform process
  - The potential role for economic regulation

# Australia has a huge road network

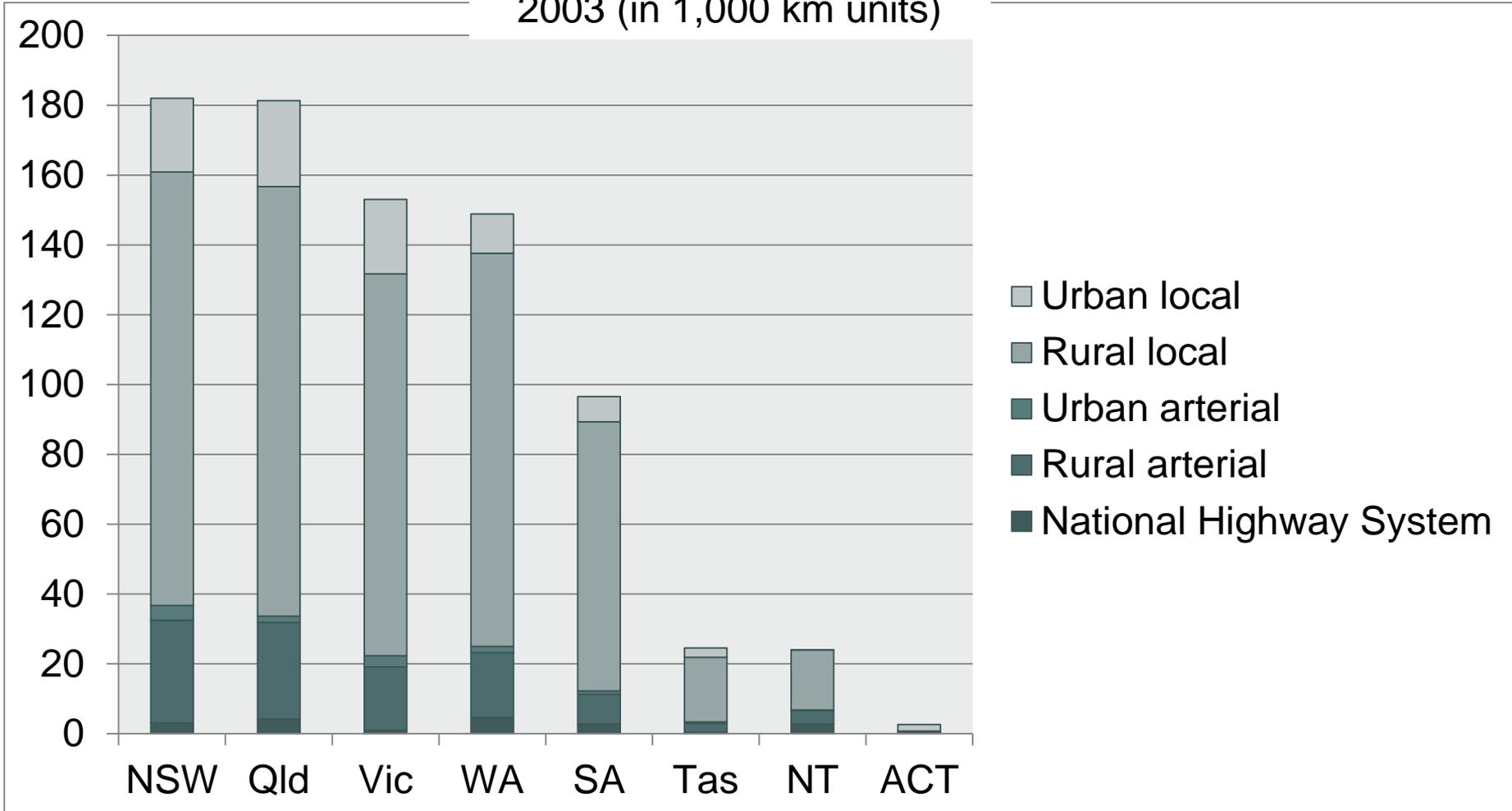
**Total road network - International comparisons**  
Kilometres of roads per capita



- Responsibility
  - All three tiers of government are involved
    - State and local govt provide arterial and local roads
    - National Land Transport network (significant transport corridors) combined responsibility of state and commonwealth
- Roads expenditure
  - Current expenditure across all three levels of government around \$17 Billion annually
  - Heavy vehicle share estimated at around \$2.8 Billion

# The composition of roads types

**Road type by jurisdiction**  
2003 (in 1,000 km units)



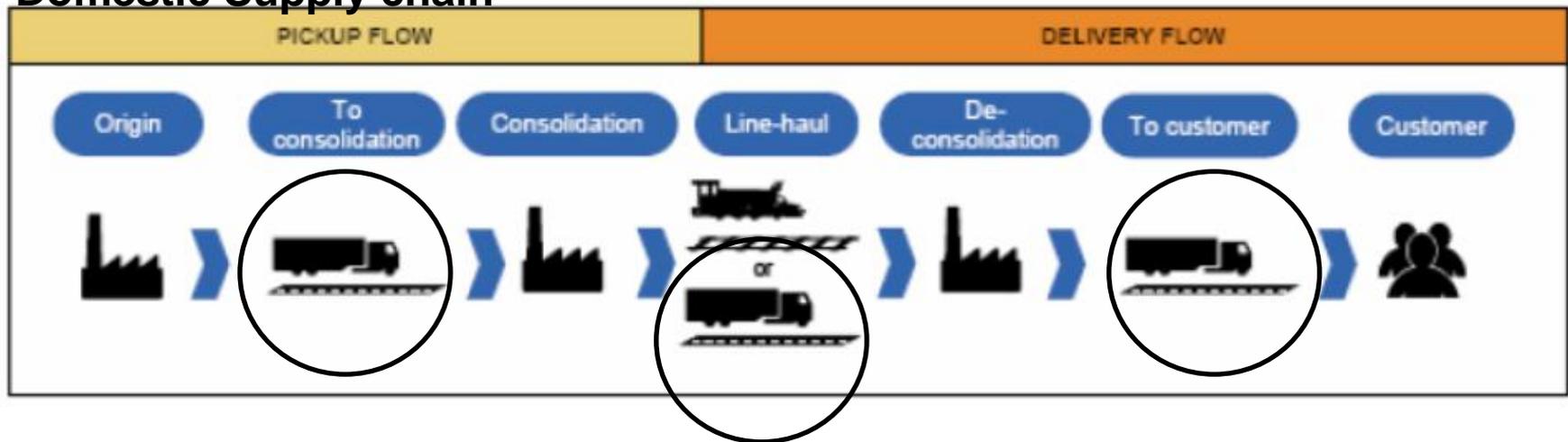
# Specialised road transport an important economic sector

- Cost of moving freight has a significant impact on consumer prices and Australia's export competitiveness.
  - Given large distances between our major cities, towns and rural areas,
- Road freight comparable in size to other important sectors
  - Direct value generated by specialized road transport business adds around \$18 billion to GDP (1.4% of GDP)
  - Electricity = 1.4% of GDP
  - Coal Mining = 1.7% of GDP
  - Agriculture = 1.9% GDP

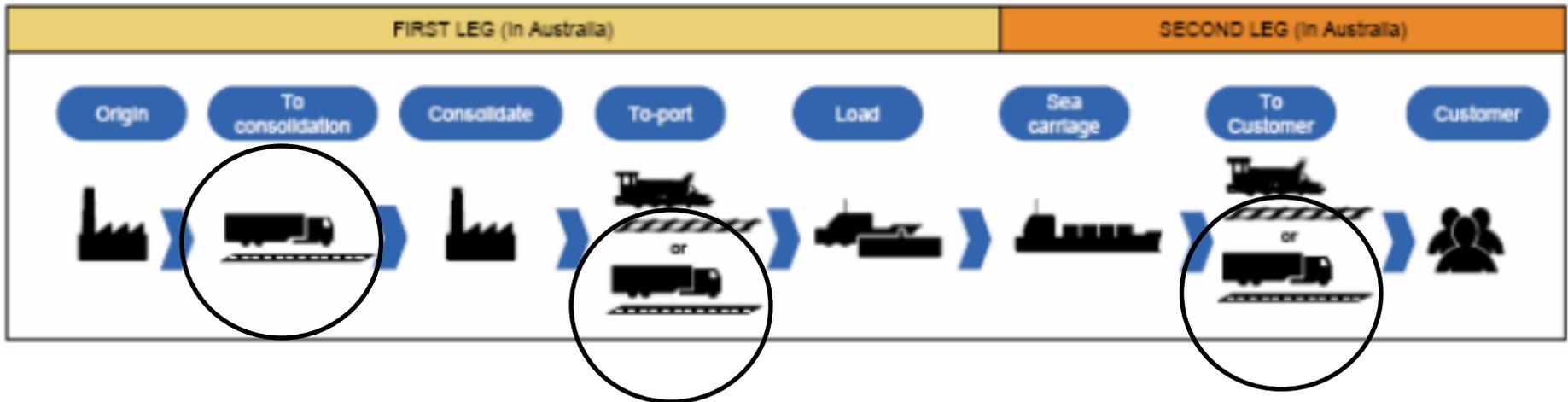
Source: Australian Bureau of Statistics. Australian National Accounts National Income, Expenditure and Product, June 2013 (Table 33. Industry Gross Value Added, Chain volume measures, annual).

# Road transport increasingly a key element of sophisticated supply chains

## Domestic Supply chain



## International supply chain



- Competitive neutrality between heavy vehicle freight services and rail are not a policy consideration
- Economic efficiency problems and solutions considered to centre around Heavy vehicle investment and charging itself and impacts on supply chains

# Competitive distortions between road and rail freight limited

- Competitive distortions between road and rail freight assessed by the PC as limited and not a significant source of inefficiency\*

*The case that road is subsidised relative to rail is not compelling, even accounting for externalities*

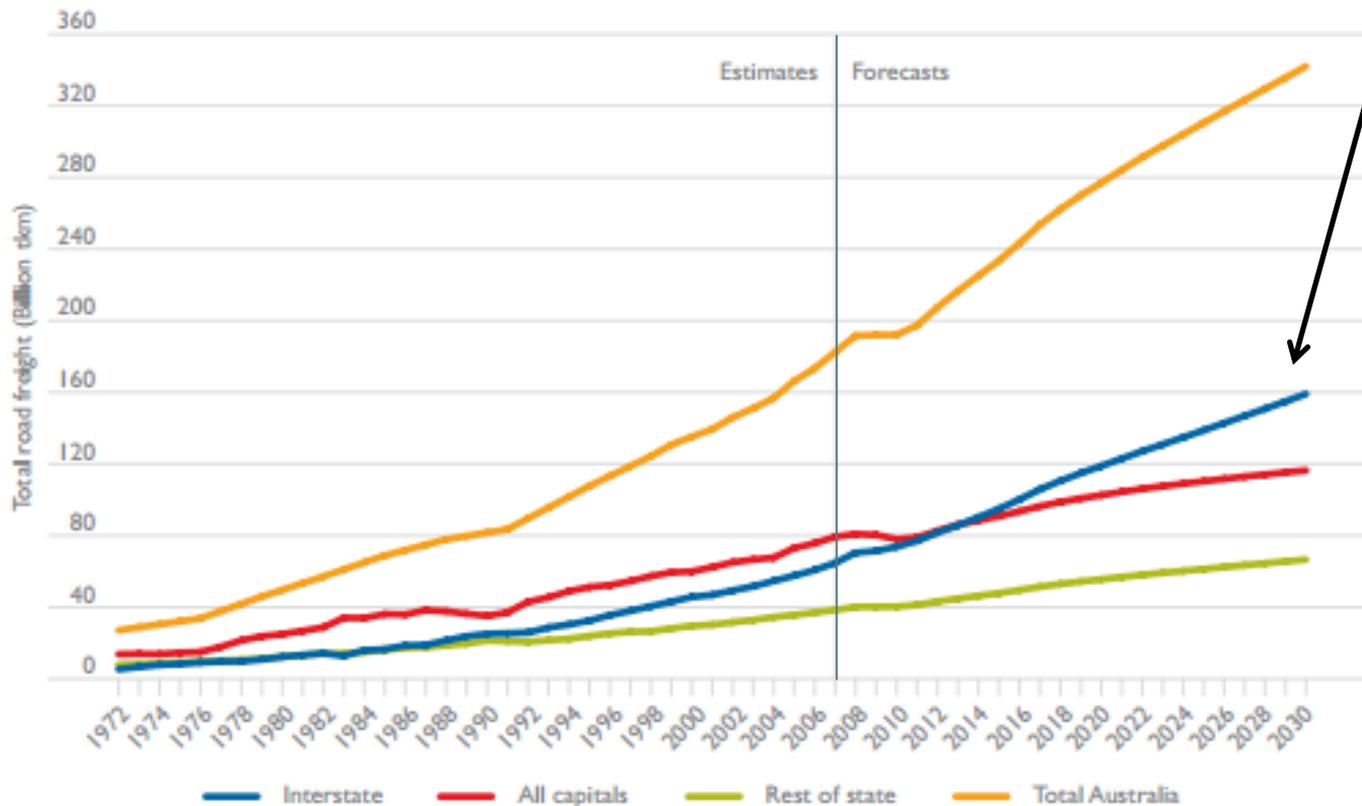
*....even if network road charges were greatly increased, rail would not derive much benefit given limited substitutability and much complementarity between the two transport modes*

- PC found limited substitutability between road and rail freight service - estimates 10 to 15% of freight have viable choice between road and rail.

\* Productivity Commission Inquiry report Road and Rail Freight Infrastructure Pricing April 2007

# Strong growth forecast in road freight task

**F2.2** Road freight estimates and forecasts by interstate (sum of 'from', 'to' and 'through'), capital cities and rest of state, Australia, 1972–2030



- Interstate road freight task is currently around 37% of the total freight task in Australia
  - Fastest growing component.
  - Expected to reach 46.5% of the total road freight task by 2030.

- System for delivering road services to heavy vehicles is complex.
- Most of the functions related to heavy vehicle services also meet the needs of light vehicles.
- Key features of current system
  - Significant investments involving new road construction / upgrades are heavily reliant on specific budget appropriations and are largely made by state and territory governments
  - Investment decision making processes will follow the relevant state or territory government framework for obtaining capital expenditure
  - Road owners (jurisdictions and local councils) determine the allowable level of heavy vehicle access to their respective networks.
  - HV Road charging has very little relationship to costs of provision

# Widespread agreement on problems



**1. Deteriorating roads in regional areas**



**2. Insufficient access for HPV's**



**3. Little involvement of HV industry in planning and prioritisation**

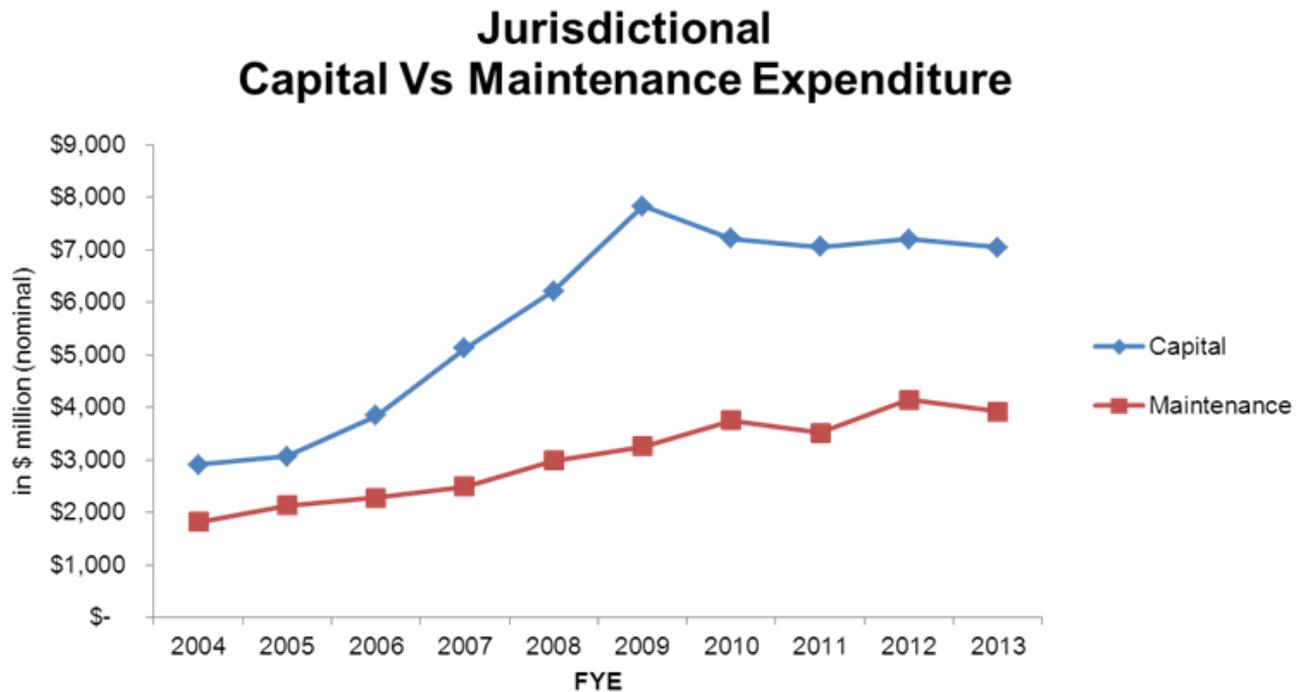


**4. Infrastructure bottlenecks restricting HV access**

## 5. No link between charges revenue and funding - nationally averaged charges

Jurisdictions HV Revenue Vs HV Expenditure				
	Revenue	Expenditure	State Funding shortfall	
New South Wales	\$ 243	\$ 1,322	\$	1,078
Victoria	\$ 281	\$ 659	\$	378
Queensland	\$ 277	\$ 1,281	\$	1,003
South Australia	\$ 96	\$ 222	\$	127
Western Australia	\$ 193	\$ 510	\$	317
Tasmania	\$ 21	\$ 70	\$	49
Northern Territory	\$ 19	\$ 34	\$	15
Australia Capital Territory	\$ 3	\$ 34	\$	31
Commonwealth	\$ 1,740	\$ -	\$	-
<b>Total</b>	<b>\$ 2,872</b>	<b>\$ 4,133</b>	<b>\$</b>	<b>3,000</b>

## 6. Growing gap between capital and maintenance expenditure



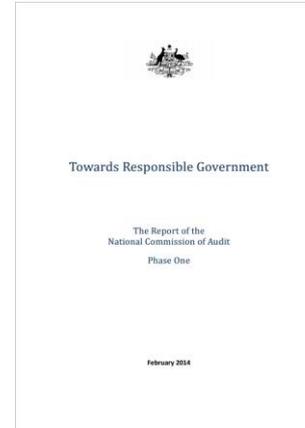
# Many voices in the debate



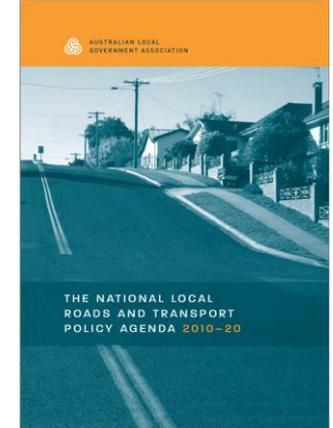
**Productivity Commission**



**The Australia's Future Tax System Review**



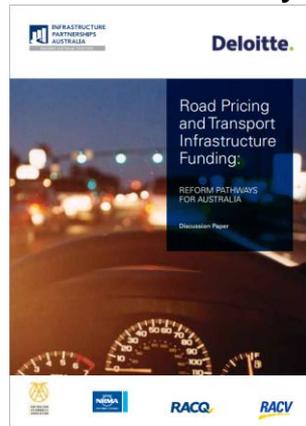
**The Audit Commission**



**Australian Local Government Association**



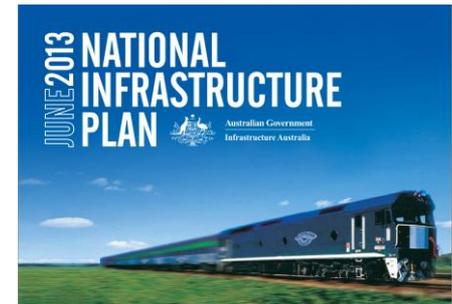
**ACCC**



**Infrastructure Partnerships Australia and Motoring Associations**

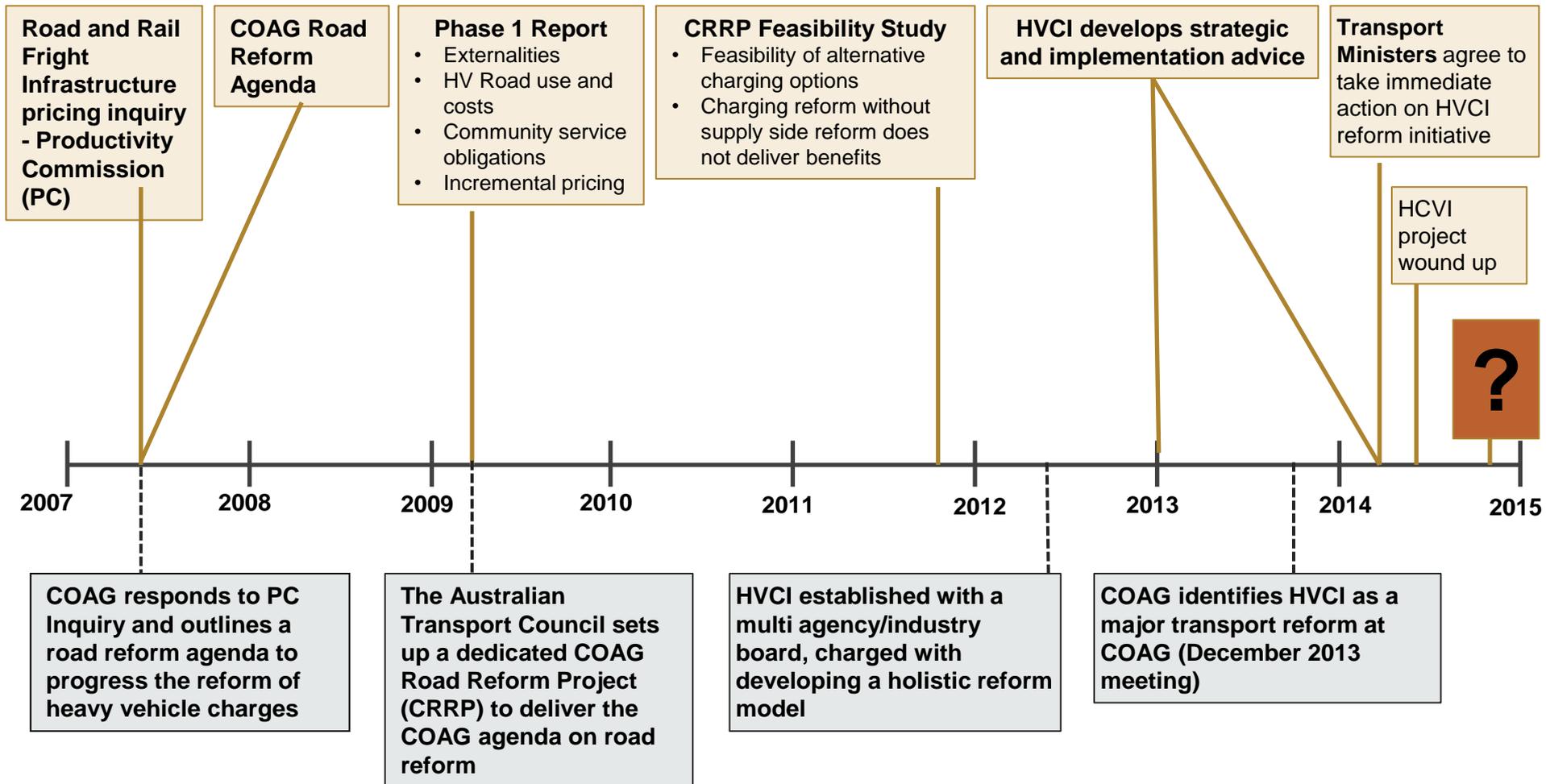


**Business Council of Australia**



**Infrastructure Australia**

# The reform story so far



- Shift focus to providing (and measuring and valuing) **heavy vehicle road services**
  - need to understand road service quality
  - involve users more in planning
- Improve planning and efficiency of expenditure for heavy vehicles
  - ....by setting up jurisdictional based **Heavy vehicle Infrastructure Coordinator (HVIC)**
- Change charging from **tax** to **fee for service**
- **Money follows the truck**
  - distribute heavy vehicle charge revenues to jurisdictional HVCI in line with heavy vehicle usage for funding approved heavy vehicle road programs

# Charging reforms options

## Rebalanced RUC and registration charges

- Maintain current fuel based charges
- RUC becomes a user charge
- Money does not follow the truck

## State based distance charges

- Low tech approach
- Money “starts to follow the truck” though state based charges remain highly averaged

## Static mass distance charging through use of in vehicle telematics

- Use existing telematics where possible
- The ‘holy grail’ for charging reform
- Money follows the truck
- Generates information to support planning
- But issues around costs, reliability, privacy, industry acceptance

# The role of economic regulation

Historically, in most jurisdictions, the role of independent economic regulation is to enable private sector provision of long lived infrastructure in markets that have little or no competition

- Protect customers from monopoly charging
- Confidence that private investors can recover investment and reasonable return
- Other models (eg franchising) not workable

In Australia, (starting with NSW IPART) economic regulation has also served to promote reform for govt. provided infrastructure services

- Replicate more closely how markets work
- Infrastructure/utilities function as businesses
- Strengthen focus on customers
- Promote improved accountability and transparency
- Depoliticise decision-making especially on pricing
- Promote improved long term planning

# An independent Heavy Road services economic regulator could ...

Issue guidelines for preparation of road expenditure plans ... and then approve prices and service standards (supported by expenditure plans)

- Strengthen customer “voice” in planning and reduce influence of other agendas
- Depoliticise planning - promote transparency
- Improve use of best practice tools and processes
- Encourage improved data relevance and quality

Monitoring compliance with agreed service standards

- Improve accountability on road providers for delivering services in line with plan

Enforcing service standard price “bargain”

- Adjust funding if services not delivered in line with plan
- Customers should only pay for way they actually get

## Complexity and costs

- Concern that regulatory requirements and costs might be disproportionate to benefits
- Concern with inappropriate use of concepts developed in another context (e.g. energy)
- Deal with by
  - gradual implementation of any economic regulation model
  - Testing / evaluation / learning

## Practicality for 'small' road owners (councils)

- Will need solutions that are fit for purpose
- Standardised tools / approaches?
- Regional Road groups
- Balance cost and benefits fit for purpose solutions

Road agencies could start to develop and publish expenditure plans

- Trailing as to how planning would work in practice
- Opportunity to develop consultative relationships with industry
- Opportunity to improve life cycle assessment of investment

Asset registers

- Opportunity to link in with expenditure plans and a forward looking determination
- Improve quality and relevance of data
- Improve understanding of service quality and cost relationships

- Details of any particular economic regulation regime (such as energy network regulation) have been developed over many years (hopefully) to be “fit for purpose”
- Good regulation designed according to clear principles and criteria
- Best solutions depend on context
- Apply principles of Best Practice Regulation
- Dangers in simplistically copying other regimes
- Must include regular review process to ensure overall reform is on track in meeting objectives, lessons learned and acted on