Strategic Transport Research and Technology in Australia

*Process and priorities*

Lyn O’Connell, Deputy Secretary, Australian Government Department of Infrastructure and Transport

ATRF, September 28 2011
ASTART identified six primary themes

1. Best use of infrastructure;
2. Filling in the infrastructure gaps
3. Transport choices for sustainable communities;
4. Safe and secure transport;
5. Reducing environmental impacts; and
6. How technology can help.
Outcomes from Strategic Research and Technology Forum

• Jurisdictions undertake research in a wide variety of areas - agree to share research and to avoid duplication

• Agree to collate a register of research by jurisdiction – including a survey of research providers and customers

• This register will be published on BITRE’s website, and complement research/data portals: www.roadresearch.com.au and ATDAN’s Transmet
  www.nss.gov.au/transportmetadata

• The ASTART themes will be revised to include more focus on productivity, cities/planning, and transport pricing (including carbon pricing)

• Opportunities will be provided to collaborate (in virtual research teams)
The Department’s research environment

• Research agenda is shaped by the Commonwealth’s policy priorities
  • Infrastructure investment, carbon emissions and city planning
• Much research is undertaken by the Bureau of Infrastructure, Transport and Regional Economics (BITRE)
• BITRE’s latest statistical report, *Australian Sea Freight, 2009-10* being released today
Urban passenger transport, growing quickly

Source: BITRE 2008, Urban passenger transport: how people move about in Australian cities
Other transport sectors are also growing

• The economic costs of congestion are forecast to be $20 billion by 2030
• The nation freight task is forecast to double by 2030
• The number of trucks on urban roads is forecast to grow 50% by 2030
• Freight through Australian bulk ports will almost double by 2030, driven by export demand
• Freight through capital city container ports will more than double by 2030, driven by demand for both imports and exports
• Flights through capital cities are forecast to double by 2030
Filling in the infrastructure gaps

- Challenges to government include prioritising infrastructure projects; finding the right role for private sector, and making best use of smart infrastructure
- BITRE’s research helps: with forecasts of transport activity; and investigating the economics of road maintenance and investment
- Collaboration with external researchers helps:
  - Recent symposium on toll road patronage forecasting risk
  - SMART Infrastructure Awards: Wollongong University ‘digital bus’
  - Swinburne University, researching low-volume road maintenance needs

Some remaining research gaps:
- Detailed analysis of industrial geography, and its influence on freight
- Detailed data on origin and destination of road freight, by commodity
Carbon price and energy efficiency

- Government is introducing of a carbon price, and complementary transport measures
- BITRE estimates and forecasting transport emissions, and investigates transport energy futures
- Collaborations with external researchers:
  - Analysing changes in aircraft fuel efficiency;
  - Investigating transport energy futures (with CSIRO)
- Remaining research gaps:
  - Further analysis of the carbon footprint of Australian aviation
  - Analysis of the economic viability of alternative transport fuels
Cities and urban planning

- Commonwealth is taking a role in urban strategic planning issues
- BITRE is researching commuting trends in capital cities
- Department is also engaged with external researchers, including:
  - Data-sharing agreement with AURIN
  - Collaborative project with NATSEM on Social Inclusion
- A priority for further research collaboration will be in developing more detailed urban modelling capabilities, to understand the impacts of policy on urban form
A new research collaboration section of the BITRE website

• **www.bitre.gov.au/collaboration** will be our Department’s interface with the research community for collaborative projects

• Updated with details of undergoing and potential collaborative projects

• To join our mailing list, or register as an interested researcher or research organisation, please contact [bitre@infrastructure.gov.au](mailto:bitre@infrastructure.gov.au)
We can all benefit from further collaboration

- Governments can benefit:
  - greater access to current research findings,
  - increased awareness of emerging trends and issues
  - increased awareness of innovations
- Researchers can benefit:
  - more direct influence on the policy debate
  - access to government-held data and models
- Wider community will benefit:
  - better-informed policy debate,
  - ultimately, policy made with a stronger evidence base