# PRODUCTIVITY COMMISSION REVIEW INTO THE ECONOMIC COSTS OF FREIGHT INFRASTRUCTURE AND EFFICIENT APPROACHES TO TRANSPORT PRICING

#### SUBMISSION BY THE AUSTRALIAN BUREAU OF STATISTICS

**May 2006** 

#### Introduction

The Australian Bureau of Statistics (ABS) is Australia's official national statistical agency. It provides statistics on a wide range of economic, social and environmental matters, and covers government, business and the general population. The ABS is only one of a number of Federal, state and local government agencies that contribute to the overall pool of transport statistics. Individual companies and industry associations also contribute to the field of transport statistics.

The ABS submission will provide details of a number of ABS collections and products that would be of relevance to the inquiry.

## ABS transport related collections and data

The ABS has conducted a number of transport activity surveys. Some are conducted on a regular basis while others have been conducted on an adhoc basis subject to availability of resources. The surveys have consisted of collecting data from:

- businesses and government agencies within the transport industry, i.e. organisations supplying data on transport activity; and
- government agencies involved in transport, i.e. motor vehicle registries supplying detail on the size and structure of Australia's motor vehicle fleet.

#### Motor Vehicle Census

The ABS conducts an annual Motor Vehicle Census of Australia's registered vehicles as at the end of March. The snapshot collects information on the number and characteristics of vehicles registered on a certain date. These characteristics include the vehicle type, year of manufacture, fuel used, make, model (for the major makes of passenger vehicles manufactured since 1980), weight, State of registration and postcode of the registered owner.

Although the main purpose of the Census is to provide a population frame for a survey of motor vehicle use, the data published is used by government and industry to assist in modelling and understanding the changing size, structure and age of the registered vehicle fleet.

Motor Vehicle Census, Australia 2005 (cat. no. 9309.0) is available on the ABS web page.

## Survey of Motor Vehicle Use

The Survey of Motor Vehicle Use (SMVU) commenced in 1963, and was conducted thereafter about once every three years up until 1998. Since 1998, the survey has been conducted annually.

All vehicles that were registered with a motor vehicle authority for unrestricted use on public roads at some time during the 12 month reference period (1 November to 31 October) are included in the survey. Unregistered vehicles are not in scope of the survey.

The main outputs produced are estimates of distance travelled by vehicle type and tonne-kilometres for freight vehicles. Estimates are produced for each state and territory.

The main purpose of the SMVU is to satisfy the information needs of government agencies responsible for the allocation of funds for road development, the design and construction of highways, the regulation of road transport operators and energy use analysis. Other uses include information to assist with decisions on road user charges, predicting likely future vehicle use and road transport demand and assessing future road infrastructure investment needs.

While the SMVU provides some information on Australia's road freight task, the sample size used and current survey methodology limits the availability of more detailed information on freight movements and corridor information.

Survey of Motor Vehicle Use, Australia (cat. no. 9208.0) is available on the ABS web page.

#### Freight Movements Survey

The ABS has conducted three freight movement collections, the Interstate Freight Movement Survey (1980-81 to 1991-92), the Freight Movements Survey (1994-95), and Freight Movements Survey 2000.

The Freight Movements Survey 2000 provided estimates of freight moved by road, rail, sea and air for the period 1 April 2000 to 31 March 2001. The Freight Movements Survey was designed to provide statistics about the size and characteristics of the transport task, including freight flows between geographic areas. The survey is the source of figure 1 in the Road and Rail Freight Infrastructure Issues paper released by the Commission.

The statistics for the road component of the collection were based on a sample survey of articulated vehicles that were registered with a motor vehicle registry. Rigid trucks and other commercial vehicles were excluded from the scope of the survey. Data for the other freight movement modes were compiled from information provided by rail, sea and air freight operators.

There are currently no plans to conduct another Freight Movements Survey

*Freight Movements, Australia* (cat.no 9220.0) is available on the ABS web page. A more detailed description of ABS Freight Movement Surveys is provided in appendix 1 of this publication.

## Rail Freight Movements Survey

To complement the freight movements data from the Freight Movements Survey 2000, the ABS undertook a Rail Freight Movement Survey for the 2001-02 and 2002-03 reference periods. The survey collected information about domestic freight movements from private and government owned organisations involved in moving rail freight in Australia. Data was collected on the origin, destination, commodity type, weight and method of transportation. Consequently, key measures such as distance travelled and tonne-kilometres were derived from the data.

As a result of industry restructuring, the production of rail statistics become problematic due to the limited number of entities within the industry. This presented real obstacles to making the data publicly available for policy and planning purposes.

There are currently no plans to investigate re-introducing a Rail Freight Movements Survey.

Rail Freight Movements, Australia, Summary - Electronic Delivery, (cat. no. 9220.0.55.001) is available on the ABS web page.

# Transport Industry Survey

The ABS last published results from a Transport Industry Survey in 1987, for the reference year 1983-84. Products from the survey are on the ABS Historical Publications Index and may be obtained from the ABS library network. These products include:

- Transport Establishments: Summary of Operations by Industry Class, Australia and States (Cat. no. 9103.0);
- Transport Establishments: Details of Operations by Industry Class, Australia and States (Cat. no. 9104.0);
- Transport Establishments: Selected Items of data Classified by Industry and Size Group, Australia (Cat. no. 9105.0); and
- Road Freight Transport Activity of private Enterprises by Industry Division, Australia and States (Cat. no. 9107.0).

The ABS has commenced consideration of the need for more up to date information from a Transport Industry Survey in the context of its priority within our overall economic statistics program and resource constraints.

## Other ABS products

#### **Producer Price Indexes**

Producer Price Indexes (PPIs) measure proportionate, or percentage, changes in the prices of goods and services as they either leave the place of production or enter the production process. PPIs do not measure price levels; rather, they are a measure of average changes in prices from one period to another. The PPI does not measure the value of production or the cost of production, but it can be used to measure changes in output prices received by producers and changes in prices paid by producers for inputs of goods and services used in the production of output.

The ABS compiles the following suite of quarterly input and output price indexes for different sectors of the Australian economy that may be relevant for the Commission's Review. These measures show the changes in the prices that producers' receive for their outputs, as well as the changes in prices that producers' pay for their material inputs.

- 1 Manufacturing Industries Producer Price Indexes
  Materials Used in Manufacturing Industries (MUMI) an input price index
  Articles Produced by Manufacturing Industries (APMI) an output price index
- 2 Construction Industries Producer Price Indexes Materials Used in House Building - an input price index General Construction Industry - an output price index
- 3 Road and Bridge Construction Index

The price index for road and bridge construction measures changes in the prices of the output of the road and bridge construction industry (ANZSIC 4121). The index covers new road construction work only. Maintenance is excluded, as is land acquisition, design, other related technical services, traffic lights and tunnelling. Indexes are compiled for Australia and for each State and Territory. Time series for the index commence at September quarter 1997 for Australia and September quarter 1998 for the States. The indexes for Tasmania, Northern Territory and Australian Capital Territory are not available for publication.

Producer Price Indexes, Australia (cat. no. 6427.0) is available on the ABS web page.

## Energy and Greenhouse Gas Emissions Accounts

In 2001, the ABS released energy and greenhouse gas emissions accounts that presented information on the supply, use and stock of primary energy resources; the supply and use of secondary energy products; and greenhouse gas emissions associated with the use of these energy resources. Emissions for the transport sector were provided.

The account reported that energy use by transport is a major contributor to Australia's energy related greenhouse gas emissions. Total transport activity, including industry and domestic use of motor vehicles, contributes about one quarter of these emissions.

In consultation with users, the ABS is considering how best to produce and resource the production of updated energy and greenhouse gas emissions accounts.

Energy and Greenhouse Gas Emissions Accounts - 1992/93 to 1997/98 (cat. no. 4604.0) is available on the ABS web page.

# Future requirements for transport data and information

The potential roles for the ABS post the Commission's review into the economic costs of freight infrastructure and efficient approaches to transport pricing could involve:

repeating existing surveys, including redeveloping the surveys to better align with current requirements;

producing updated energy and greenhouse gas emissions accounts; and assisting others in collection, collation and analysis of transport data, particular in the area of defining agreed statistical concepts, frameworks, standards and data requirements.

While the ABS remains committed to its existing work program in this area, the ABS has limited capacity to expand its work program without additional funding. Should the inquiry recommend that the ABS take action on some or all of these issues, the ABS would need to seek resource commitment from government and/or industry sources.

#### **Contact Information**

Gemma Van Halderen, Assistant Statistician, Industry and Environment Statistics Branch (phone 02 6252 6977, email g.vanhalderen@abs.gov.au) is the ABS contact for this issue. Gemma would be happy to discuss these matters further with the Commission.

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