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1. Introduction

Transport for NSW (Transport) has developed a comprehensive framework to estimate the economic contribution of the NSW freight transport and logistics sector.

This framework captures the sector's Gross Value Added (GVA), employment, and greenhouse gas emissions. It also provides a detailed breakdown of the sector's contribution by mode, commodity, and geography.

The key objectives of this framework are to:

- Quantify the total economic contribution of the NSW freight transport and logistics sector.
- Disaggregate the sector's contribution by mode, commodity, and geography.
- Forecast the future contribution of the sector to the NSW economy.

2. Overarching approach

The framework defines freight transport as the movement of goods with the primary goal of delivery to a destination.

Logistics activities such as warehousing, storage, and transport support services are also included to the extent they relate to freight.

3. Estimating the total contribution

The value of freight forecasting model captures the total contribution of the freight transport and logistics sector to the NSW economy in 2022-23 and forecasts the sector's contribution to 2060-61.

The total contribution of the freight transport and logistics sector is estimated using a three-part methodology:

1. For-hire freight and logistics GVA is estimated by isolating relevant industries from the Australian Bureau of Statistics (ABS) National and State Accounts data.
2. In-house freight and logistics GVA is estimated based on the equivalent valuation of comparable for-hire services. This involves identifying key transport inputs and applying their contribution to GVA in the for-hire industry to each industry where freight transport and logistics occurs 'in-house'.
3. Supported upstream GVA (the GVA supported by for-hire and in-house freight and logistics through the purchase of input products, such as fuel and tyres) is estimated using the ABS Input-Output tables.

Employment is estimated using a similar two-stage approach, while emissions are estimated by matching the sector's GVA to emissions intensity parameters.

4. Disaggregation

The framework disaggregates the sector's contribution by mode, commodity, and geography using a range of data sources:

- The NSW Strategic Freight Model is used to disaggregate road, rail, and water freight transport GVA.
- ABS Census data is used to disaggregate transport support services, storage, and postal/courier GVA.
- Bureau of Infrastructure and Transport Research Economics (BITRE) airport traffic data is used to disaggregate air freight GVA.

5. Forecasting

The disaggregated GVA, employment, and emissions estimates are forecasted to 2060-61 using the following approaches:

- Road, rail, and water freight transport is forecasted using the TfNSW Strategic Freight Model.
- Air freight is forecasted using BITRE's Australian aggregate freight forecasts.
- Postal and courier services is forecasted using historic national real growth in the transport, postal, and storage services industry.
- Transport support and storage services is forecasted using the disaggregated industry and geography changes in rail, road, and water GVA.
- Upstream GVA is forecasted assuming the ratios between direct and supported GVA remain constant.

6. Definitions

Term	Definition
For-hire GVA	Estimated by isolating relevant industries from National and State Accounts, published by the Australian Bureau of Statistics (ABS). NSW State Account data provides total GVA of the for-hire transport and logistics industry (including passenger activity) which is then disaggregated to include only freight or logistics related activity relevant to NSW.
In-house GVA	Estimated based on the equivalent valuation of comparable for-hire services. Fundamentally, the methodology is based on identifying key transport inputs and applying their contribution to GVA in the for-hire industry to each industry where freight transport and logistics occurs 'in-house'.
Supported upstream GVA	The GVA supported by for-hire and in-house freight and logistics through the purchase of input products, such as tyres, fuel, insurance and registration. This is estimated using the National Accounts Input-Output Tables to identify the value of upstream consumption, and subsequently the corresponding GVA in supplying industries.