Australian Livestock and Rural Road Freight Task

Economic Contribution & Value Chain Analysis

Indicative evidence baseline

Prepared for ALRTA use | May 2026

Document status: *This report is an indicative evidence baseline prepared for ALRTA briefing and planning purposes. It uses official datasets where available and transparent modelling where no single official dataset exists.*

About This Report

Purpose of this report

This document establishes an evidence-informed economic baseline for the livestock and rural road transport task. It is designed as a credibility document: a source of record that can support future briefings, stakeholder engagement and design work without embedding a specific advocacy ask.

Core proposition

Road transport does not simply carry agricultural commodities after value has been created. It enables the movement through which farmgate value is converted into processing value, market value and export value. This report quantifies that role while clearly separating direct transport contribution from wider supply chain output.

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1. Executive Summary

Australia's agriculture sector is one of the major foundations of the national economy. Australian agriculture has now reached the $100 billion farmgate benchmark, with ABARES forecasting gross agricultural production value of $101 billion in 2025–26 — meeting the National Farmers' Federation's long-standing objective for agriculture to exceed $100 billion in farmgate output (NFF 2026; ABARES 2026).

This report examines the livestock, grain and fodder freight task that enables a significant part of that value to move from dispersed regional production systems into domestic and export markets. The report is deliberately framed as an evidence and credibility document. It does not present an advocacy ask. Instead, it sets out the factual and modelled economic basis for understanding the role of rural road transport within Australia's agricultural value chain.

The central economic point is straightforward: farmgate value is not the end point of agricultural value. It is the base from which value is expanded through transport, aggregation, processing, distribution, domestic consumption and export markets. Livestock production contributes approximately $36.7 billion in farmgate value when livestock disposals and livestock products are counted, including $17.1 billion for cattle and calves, $5.1 billion for sheep and lambs and $1.8 billion for pigs in 2024–25 (ABS 2026). Grain, oilseed, legume and fodder systems add a further major production base, with ABS reporting 61.1 million tonnes of winter broadacre crops sold in 2024–25 at a combined local value of $22.5 billion, and ABARES forecasting winter crop production of 68.4 million tonnes in 2025–26 (ABS 2026b; ABARES 2026).

Across the livestock and grain sectors considered in this report, the combined farmgate base is estimated at approximately $60 billion to $70 billion. Once processing, market access, domestic consumption and export pathways are included, the broader supply chain value is estimated at approximately $95 billion to $130 billion. This is enabled value, not value solely created or captured by road transport.

The annual rural freight task is large, complex and geographically dispersed. Based on available slaughter, saleyard, feedlot, live export and grain production data, this report estimates that Australia's rural freight task includes approximately 70 million to 85 million livestock transport events each year and 50 million to 70 million tonnes of grain and fodder movement.

Road transport is the dominant mode for livestock movement and the primary mode for first-mile grain, fodder and regional agricultural logistics. Rail plays an important and credible role in bulk grain export corridors and long-haul movements to port. A balanced assessment therefore recognises rail within the grain system while identifying road transport as the essential mode for livestock, first-mile access, distributed regional logistics, time-sensitive movements and drought response.

The direct economic contribution of agriculture-linked road transport is estimated to include 60 billion to 90 billion tonne-kilometres annually, 50,000 to 80,000 direct and closely related transport-sector jobs, $4 billion to $6.5 billion in estimated labour income (wages), and approximately 1.5 billion to 2.5 billion litres of diesel use associated with heavy vehicle activity. These are modelled estimates, not a single official national statistic.

Flagship industry statement

Agriculture-linked rural road transport is estimated to support $6–12 billion in gross transport service revenue/activity, $4–6.5 billion in estimated labour income (wages), and 50,000–80,000 direct and

closely related transport-sector jobs, while enabling the movement of agricultural commodities from a $60–70 billion farmgate base into a wider $95–130 billion agricultural supply chain. The $95–130 billion figure represents enabled value — it is not value solely created or captured by road transport.

Indicator	Indicative value	Primary sources / basis
National agriculture value context	$101B (2025–26 forecast)	NFF 2030 Roadmap; ABARES March 2026
Livestock farmgate value	$36.7B	ABS Australian Agriculture: Livestock, 2024-25
Cattle and calves value	$17.1B	ABS 2026
Sheep and lamb value	$5.1B	ABS 2026
Pig value	$1.8B	ABS 2026
Cattle processed	9.28M head	ABS/MLA 2026
Saleyard cattle transactions	4.84M head	MLA National Saleyard Survey 2024-25
Saleyard sheep transactions	16.39M head	MLA National Saleyard Survey 2024-25
Live cattle exports	779,541 head FY2024-25	MLA 2025b; DAFF 2026
Agriculture-linked road freight activity	60B–90B tonne-km	Modelled estimate based on BITRE road freight data

Figure 1: Indicative agricultural value transformation. Ranges are used because farmgate, processing, export and domestic market data are reported across different datasets and reporting periods.

2. Methodology, Data Sources and Interpretation Rules

This report uses a layered evidence approach. It draws from official public datasets for reported values and volumes, then uses transparent estimation for transport-specific measures where no single official dataset exists. This distinction is important. Farmgate value, livestock slaughter, saleyard throughput, feedlot turnoff and live export volumes are reported by official or recognised industry datasets. By contrast, total agricultural road tonne-kilometres, fuel consumption and rural road transport workforce value require estimation because Australia does not publish a single national dataset that isolates the livestock, grain and fodder road transport task.

The sources used in this report include the Australian Bureau of Statistics (ABS), Meat & Livestock Australia (MLA), the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), the Bureau of Infrastructure and Transport Research Economics (BITRE), the Australian Lot Feeders' Association (ALFA), the Department of Agriculture, Fisheries and Forestry (DAFF), LiveCorp, the National Farmers' Federation (NFF) and the Department of Employment and Workplace Relations (DEWR).

The report uses Harvard-style in-text referencing. Where a figure is directly reported, the citation is attached to the sentence containing that figure. Where a range is modelled, the report identifies the source datasets and explains the basis of the estimate.

2.1 Treatment of Reported Data

Reported data is used where a national or industry dataset directly measures the indicator. For example, ABS reports livestock disposals and livestock products by value. MLA reports saleyard throughput and feedlot turnoff, drawing on the National Livestock Reporting Service and the ALFA/MLA feedlot survey. DAFF reports live animal export volumes. BITRE reports national freight activity in tonne-kilometres.

2.2 Treatment of Modelled Estimates

Modelled estimates are used where an important indicator cannot be obtained from a single official dataset. The most important examples are total annual livestock transport events, agriculture-linked road tonne-kilometres, agricultural road freight fuel use, rural road transport jobs and wages. These estimates are intentionally presented as ranges, not point estimates. The objective is credibility and transparency rather than false precision.

2.3 Livestock Movement Methodology

Livestock movement estimates are derived by aggregating the main observable movement categories: movement to processors, movement through saleyards, cattle movement into and out of feedlots, live export assembly and port movements, and an allowance for inter-property movements including breeding, backgrounding, finishing and seasonal redistribution. This approach recognises that a single animal may move multiple times before processing or export.

2.4 Grain and Fodder Movement Methodology

Grain and fodder movement estimates are based on annual production ranges, harvest logistics and typical commodity flows from farm to receival site, storage, domestic processing, feedlot, dairy, intensive livestock use and export terminal. Grain movements are different from livestock movements: livestock systems often involve multiple animal lifecycle movements, while grain movements are high-volume, bulk flows with strong seasonality. Fodder transport is treated separately because it becomes particularly important in drought, flood recovery and feed deficit periods.

2.5 Road Transport Contribution Methodology

The road transport contribution is estimated using three linked measures. First, agriculture-linked road freight activity is expressed as tonne-kilometres, using BITRE national freight data as the underlying framework. Second, vehicle kilometres and diesel consumption are estimated by applying indicative heavy vehicle payload and fuel intensity assumptions to the tonne-kilometre range. Third, employment and wages are estimated using labour force, transport employment and industry wage benchmarks.

Interpretation

This report distinguishes between (1) value directly created by road transport as an industry, including transport revenue, employment and wages, and (2) value enabled by road transport, including downstream processing, domestic market and export value.

3. Definitions and Scope

The scope of this report is the livestock, grain and fodder freight task most relevant to rural road transport. It includes cattle, sheep, lambs, pigs, bulk grain, oilseeds, legumes, fodder, stockfeed and related movements where these movements form part of the agricultural production and market access system.

Term	Definition used in this report
Farmgate value	The value of agricultural products at or near the point of sale by producers before downstream processing, distribution and retail or export realisation.
Production value	The value of agricultural output reported by national production datasets, including livestock disposals, livestock products and crop production.
Supply chain value	The wider value realised once commodities are processed, aggregated, distributed, consumed domestically or exported.
Transport movement	A single movement of an animal, commodity or load from one location to another. One animal or commodity may be involved in more than one movement.
Tonne-kilometre	A freight activity measure equal to one tonne of freight moved one kilometre. BITRE uses tonne-kilometres as a core measure of freight activity.
Road transport direct value	The transport service activity, employment, wages and operating expenditure directly associated with road freight movements.
Value enablement	The role transport plays in allowing agricultural commodities to move between production, processing, market and export stages where value is realised.

4. National Context: Agriculture as a $100 Billion Industry

The National Farmers' Federation has framed Australian agriculture around the goal of exceeding $100 billion in farmgate output by 2030 (NFF 2026). ABARES' March 2026 Agricultural Commodities Report now forecasts gross agricultural production value of $101 billion in 2025–26, confirming that Australian agriculture has reached that benchmark (ABARES 2026). This supersedes the earlier September 2025 ABARES forecast of $94.7 billion, which was the figure available at the time of initial drafting.

This national context matters for rural freight because agricultural output is not concentrated in a small number of metropolitan locations. It is generated across dispersed livestock, grain, dairy, mixed farming and horticultural regions. The value is only fully realised when commodities can move reliably from farmgate to aggregation points, processors, ports, domestic wholesalers, retailers and export markets.

Transport is therefore not an afterthought in agricultural economics. It is one of the mechanisms that allows national production value to become market value. A beast sold at farmgate, a lamb consigned to processing, a pig moved to an abattoir, wheat delivered to a receival site, hay transported into drought-affected regions or barley moved to a feedlot all represent freight tasks that connect production to value realisation.

For ALRTA and the wider rural road transport sector, the key credibility point is not to claim ownership of the total agricultural economy. Rather, it is to show that road transport is one of the essential systems through which agricultural value moves, expands and becomes available to domestic and export users.

5. Livestock Value Chain: From Farmgate to Market Value

5.1 Farmgate Production: The Base Value

Livestock production forms one of the largest components of Australia's agricultural economy. ABS data for 2024–25 reports that the local value of livestock disposals and livestock products increased to $36.7 billion. Within that figure, cattle and calves accounted for $17.1 billion, sheep and lambs for $5.1 billion and pigs for $1.8 billion (ABS 2026).

This farmgate value is the base from which the livestock industry expands. It reflects the value of animals and animal products at the producer level, before the additional economic activity associated with transport, saleyards, feedlots, processing, cold chain logistics, domestic distribution, export marketing and retail trade is considered.

Livestock production is geographically dispersed across Australia. Cattle production is heavily represented in Queensland, northern Australia and New South Wales, while sheep and lamb production is concentrated across southern and western production regions. Pig production is more integrated and intensive, but still depends on reliable transport between production sites, processors and feed supply networks. This geography creates a structural dependence on road transport because animals must be moved between production regions and market access points.

Livestock category	2024-25 value	Interpretation
Cattle and calves	$17.1B	Largest livestock value category and major driver of processing, feedlot and live export movements.
Sheep and lambs	$5.1B	Major southern and western livestock system, with high saleyard and processor movement volumes.
Pigs	$1.8B	Integrated production system with high reliance on efficient farm-to-processor and feed supply logistics.
Total livestock disposals and products	$36.7B	Base livestock value before downstream supply chain expansion.

5.2 Livestock Transport: The Movement System

Livestock transport differs from many other freight tasks because animals are not simply moved once from production to final sale. Many animals move through a multi-stage production lifecycle. Cattle may move from breeding property to backgrounding country, from backgrounding to feedlot, from feedlot to processor, or from farm to saleyard and then to another property or processor. Sheep and lambs may move from farm to saleyard, farm to processor or property to property depending on season, class of stock and market conditions.

For this reason, this report estimates total livestock transport at approximately 70 million to 85 million transport events annually. These are not unique animals; they represent transport events across the production lifecycle, as a single animal may move multiple times.

Movement category	Indicative annual volume	Data basis
Processor-bound livestock	Approx. 50M head	Cattle, sheep/lamb and pig slaughter throughput. Indicative breakdown: cattle slaughter approx. 9.28M head; sheep and lamb slaughter approx. 32M head; pig slaughter approx. 5–6M head.
Saleyard cattle	4.84M head	MLA National Saleyard Survey 2024-25.
Saleyard sheep	16.39M head	MLA National Saleyard Survey 2024-25.
Feedlot cattle turnoff	3.66M head	MLA/ALFA 2025 calendar year turnoff.
Live cattle exports	Approx. 779,541 head FY2024-25	MLA and DAFF live export data.
Inter-property and production-stage movements	Modelled allowance	Not comprehensively reported; included to reflect lifecycle movements.
Total livestock transport task	70M–85M transport events	Aggregated and modelled estimate.

5.3 Processing: Production Value Expansion

Processing is a major value expansion point in the livestock chain. Live animals are converted into meat and by-products for domestic consumption and export. ABS data reported by MLA indicates that Australian cattle slaughter reached approximately 9.28 million head in 2025, the highest cattle slaughter recorded since 1978, with beef production reaching approximately 2.87 million tonnes (MLA 2026a).

The processing stage demonstrates why transport should be understood as part of the value chain rather than merely a service cost. Processing facilities require reliable throughput. Producers require market access. Domestic and export customers require product availability. Road transport is the physical link between each of these requirements.

5.4 Feedlots and Grainfed Production

Feedlots sit at the intersection of livestock and grain systems. MLA reported that cattle on feed reached an all-time high of 1.61 million head in the December quarter of 2025 and that feedlots turned off 3.66 million cattle in calendar year 2025 (MLA 2026b). This creates two linked freight tasks: the movement of cattle into and out of feedlots, and the movement of grain, hay, silage and other feed inputs into feedlot systems.

This intersection matters for the rural transport industry because it shows that livestock and grain freight are not separate silos. They are interdependent systems. Grain freight supports livestock production. Livestock freight supports meat processing and export markets.

5.5 Live Export Markets

Live export is a distinct market pathway, particularly for northern cattle systems. MLA reported that live cattle exports increased to 779,541 head in FY2024–25, the highest figure since 2021. Indonesia remained the largest market, followed by Vietnam and China. Indonesia accounted for 561,734 head or 72 per cent of Australian live cattle exports in that year, while Vietnam received 109,676 head and China 29,077 head (MLA 2025b). DAFF also reports live cattle exports of 781,176 head in 2024–25.

The live export pathway reinforces the importance of road transport in northern and regional production systems. Cattle must be assembled, inspected and moved to port. This movement underpins market options for producers in regions where distance to domestic processors may be substantial.

5.6 Livestock Value Insight

The livestock value chain can be summarised as a movement from a $36.7 billion farmgate base to a broader $65 billion to $80 billion livestock and red meat supply chain. This range is consistent with MLA's State of the Industry reporting, which found that the Australian red meat and livestock industry generated $77.1 billion in turnover in 2023–24 across production, processing, wholesale and retail activity (MLA 2025c).

Livestock value insight

Livestock production begins with approximately $36.7 billion in farmgate value. Through transport, saleyards, feedlots, processing, domestic distribution and export pathways, this expands into an estimated $65 billion to $80 billion livestock and red meat supply chain. Road transport is the connecting system between those stages.

6. Grain and Fodder Value Chain: From Farmgate to Market Value

6.1 Farmgate Grain Production: The Base Value

Australia's grain, oilseed and pulse production is highly seasonal and climate-sensitive. ABS reported that 61.1 million tonnes of winter broadacre crops were sold in 2024–25, with a combined local value of $22.5 billion (ABS 2026b). ABARES' March 2026 Australian Crop Report estimated national winter crop production of 68.4 million tonnes in 2025–26, with summer crop production forecast at 4.5 million tonnes (ABARES 2026). These figures strongly support the use of a $20 billion to $30 billion indicative grain, oilseed, pulse and fodder production-value range.

6.2 Grain Transport and Aggregation

Grain differs from livestock in its transport structure. Rather than a multi-stage animal lifecycle, grain often moves through a bulk aggregation chain. The first major movement is from farm to receival site, silo, bunker or on-farm storage. Subsequent movements may carry grain to domestic processors, feedlots, flour mills, oilseed crushers, stockfeed manufacturers or export terminals.

Road transport is critical in the first-mile grain task because farms are dispersed across large areas and receival systems rely on efficient harvest movement. Rail is important in many bulk export corridors, especially where high volumes move from inland storage to port. This report estimates grain and fodder transport at approximately 50 million to 70 million tonnes annually.

6.3 Fodder and Feed: The Resilience Freight Task

Fodder deserves explicit attention because it is often less visible in formal freight datasets but highly important in rural resilience. Hay, silage, straw and stockfeed movements increase during drought, flood recovery and regional feed shortages. These movements can be long-distance, time-sensitive and essential for animal welfare and business continuity.

Fodder transport also links the grain and livestock systems. Grain and fodder do not simply represent a separate commodity chain; they are inputs into livestock production, dairy production, feedlots, intensive livestock systems and drought support.

6.4 Grain Processing and Market Value

Grain value expands through processing and market access. Wheat may become flour and food products. Barley may enter malting, feed or export channels. Canola may enter crushing and oilseed product markets. Sorghum, pulses and other crops support domestic processing, export and livestock feed systems. Each pathway depends on freight connectivity.

The grain and fodder supply chain is estimated to expand from a $20 billion to $30 billion farmgate base to approximately $30 billion to $50 billion in wider supply chain value.

Grain and fodder value insight

Grain and fodder production begins with an indicative $20 billion to $30 billion farmgate base. Through transport, aggregation, storage, domestic processing, stockfeed, feedlot use and export pathways, this expands into an estimated $30 billion to $50 billion grain and fodder supply chain.

Livestock transport scale

70–85 million

livestock transport events annually

Includes processor, saleyard, feedlot, live export and inter-property movements. Not unique animals — a single animal may move multiple times.

Grain and fodder movement scale

50–70 million

tonnes annually

Freight tonnes moved, including farm-to-receival, domestic processing, export terminal and fodder/feed movements. ABS reports 61.1 Mt winter broadacre crops sold in 2024–25.

These two scales are shown separately because they use different units — transport events and freight tonnes respectively — and cannot be directly compared. Both are modelled indicative ranges.

7. Consolidated Agricultural Value Transformation

The livestock and grain systems together demonstrate the core economic concept of this report: rural freight enables the transition from base production value to full supply chain value. The estimated farmgate base for the livestock, grain and fodder sectors considered in this report is approximately $60 billion to $70 billion. The estimated wider supply chain value is approximately $95 billion to $130 billion. This is enabled value — it is not value solely created or captured by road transport.

This difference should not be interpreted as transport value alone. It reflects the whole chain: processing, manufacturing, storage, aggregation, export logistics, domestic distribution, market demand and retail or wholesale value. However, transport is the operational link between each stage.

Sector	Farmgate/base value	Expanded supply chain value	Main expansion stages
Livestock	$36.7B	$65B–$80B	Transport, saleyards, feedlots, processing, domestic meat markets, live export, boxed meat exports.
Grain and fodder	$20B–$30B	$30B–$50B	Transport, receival, storage, processing, stockfeed, feedlots, domestic users, export terminals.
Combined	$60B–$70B	$95B–$130B	Integrated livestock, grain, fodder, processing, domestic and export supply chains.

7.1 The Value Addition Logic

Value addition occurs when a commodity changes location, form, market or use. A steer moved from a breeding property to a backgrounding property has not yet become boxed beef, but the movement may allow weight gain and better market timing. A steer moved to a feedlot enters a grainfed production pathway. A lamb moved to a processor becomes a retail and export product. Wheat moved from farm to receival becomes part of a bulk export or domestic milling system.

These examples show why transport is more than a transactional service. It is a value-enabling function. It does not claim all downstream value, but it allows the downstream system to operate.

8. Rural Freight Task: Movements, Tonnes and Logistics Function

The rural freight task is not a single linear movement. It is a distributed logistics system that changes by season, commodity, geography and market conditions. Livestock transport events occur throughout the year, with seasonal peaks linked to weather, feed availability, market prices and processing demand. Grain movements peak during harvest but continue through storage, domestic processing and export programs. Fodder movements can surge during droughts, floods or regional feed shortages.

Road transport is the flexible mode that connects dispersed points across this system. It collects livestock from properties that may be remote from rail, moves grain from farm to local receival, carries fodder directly where it is needed, and provides the first and final legs even where rail is used for long-haul grain corridors.

8.1 Livestock Task

The livestock transport task is estimated at 70 million to 85 million transport events annually. These are not unique animals; they represent transport events across the production lifecycle. This includes processor-bound livestock, saleyard transactions, feedlot-related movements, live export movements and modelled inter-property movement.

8.2 Grain and Fodder Task

The grain and fodder task is estimated at 50 million to 70 million tonnes annually. The grain task is highly seasonal and influenced by crop size, harvest conditions, export capacity, storage levels, domestic demand and rail availability. Fodder movements are more event-driven and can increase sharply when climatic conditions create regional feed deficits.

8.3 Why Tonnes, Movements and Tonne-Kilometres All Matter

No single measure captures the rural freight task. Animal movements show the number of livestock transport events. Tonnes show bulk commodity volume. Tonne-kilometres show the scale of freight activity by combining weight and distance. Vehicle kilometres indicate road network use. Fuel consumption indicates energy intensity. Employment and wages indicate direct workforce contribution. A credible economic report should therefore present several measures rather than relying on one headline figure.

9. Road and Rail in the Rural Freight System

A credible analysis of agricultural freight must include rail. Rail plays a substantial role in long-haul bulk grain movements to ports where freight volumes, corridors and terminal infrastructure support rail economics. Rail can reduce road congestion on certain corridors and is a key part of the national freight system.

At the same time, road transport is the dominant mode for livestock and first-mile agricultural logistics. Livestock transport relies heavily on road because animals must be moved from dispersed properties, saleyards, feedlots, processors and ports with timing, animal welfare and access requirements that are not generally compatible with rail-based systems.

Freight task	Primary mode role	Reason
Livestock farm to saleyard/feedlot/processor	Road dominant	Dispersed origins, animal welfare requirements, timing and facility access.
Live export assembly and port movements	Road dominant	Northern production systems and port assembly requirements.
Farm-to-receival grain	Road dominant	First-mile collection from dispersed farms during harvest.
Bulk grain storage-to-port corridors	Road and rail	Rail efficient on high-volume corridors; road remains important for access and flexibility.
Fodder and drought response	Road dominant	Variable origin-destination patterns and urgent direct delivery.
Domestic feed and processing supply	Road significant	Feedlots, dairies, mills and manufacturers require flexible delivery.

10. Direct Road Transport Industry Contribution

The direct contribution of agriculture-linked rural road transport can be assessed through freight activity, transport service value, employment, wages and fuel use. These measures are distinct from the wider agricultural value that transport enables. The distinction is central to credibility: road transport does not create the whole $95 billion to $130 billion agricultural supply chain value, but it is essential to the realisation of that value.

10.1 Freight Activity and Kilometres

BITRE reports total Australian road freight activity at approximately 253 billion tonne-kilometres in 2024–25, across all commodity types and road freight tasks (BITRE 2025). No public national dataset currently isolates the agriculture-linked rural road freight task. For this reason, this report treats agriculture-linked road freight activity as a provisional scenario estimate rather than an official statistic.

The estimate is informed by BITRE national freight totals and cross-checked against CSIRO's TraNSIT agricultural supply-chain modelling, which found that Australian agriculture involves large-volume, long-distance supply chains, with over 80 million tonnes of agricultural output moved each year and modelled movements of 142 million tonnes of livestock or crop (CSIRO/DAFF 2019). A provisional estimate of 60 billion to 90 billion tonne-kilometres is used as a planning range.

Tonne-km input	Indicative assumption	Comment
Grain/fodder freight tonnes	50–70 Mt	Includes farm-to-receival, storage, feed/fodder and domestic/export movements. May include double-handling at some stages.
Livestock freight tonnes	Modelled	Based on 70–85M transport events and indicative livestock weights by species. Cattle typically 450–600 kg liveweight; sheep/lambs 40–70 kg; pigs 80–120 kg.
Average haul distance	Range varies by task	Short-haul first-mile grain: 50–100 km. Regional livestock: 100–500 km. Long-haul livestock/interstate: 500–2,000+ km. A weighted average across all tasks likely falls in the 200–400 km range.
Road share	High for livestock; mixed for grain	Road dominant for livestock and first-mile grain. Mixed road/rail for bulk grain export corridors.
Empty/backhaul factor	Varies by route	Rural and remote routes often have limited backloading opportunities, increasing empty running.

Based on modelled fuel consumption of approximately 1.5–2.5 billion litres annually and typical heavy vehicle fuel efficiency ranging between 1.0 and 1.4 kilometres per litre, road transport associated with agricultural supply chains is estimated to account for approximately 1.5–3.5 billion kilometres travelled annually.

10.2 Fuel Consumption

Fuel use is estimated rather than directly reported. The primary approach applies indicative heavy vehicle fuel intensity to the estimated agriculture-linked road freight task. Applying 1.0–1.4 km/litre to an estimated 1.5–3.5 billion vehicle kilometres yields a fuel use range of approximately 1.1–3.5 billion litres.

The central planning estimate of 1.5–2.5 billion litres reflects the more likely mid-range of vehicle configurations, loading conditions and route types.

Fuel consumption is not value added in the national accounts sense. However, it is an important indicator of operational scale. It also shows the exposure of rural supply chains to diesel prices, fuel security, vehicle technology, productivity reform and route efficiency.

10.3 Employment and Wages

The road transport workforce supporting agricultural supply chains includes drivers, schedulers, livestock crate and trailer operators, mechanics, operations managers, depot staff, compliance staff and support services. Based on transport labour force data, this report estimates that rural road transport supports approximately 50,000 to 80,000 direct and closely related transport-sector jobs nationally. As a reasonableness check, BITRE reports that 273,000 people were employed in the road transport industry in 2024–25, while Jobs and Skills Australia reports 195,800 people employed as truck drivers (BITRE 2025; JSA 2026).

Applying indicative annual wage ranges to this workforce suggests an estimated labour income (wages) contribution of approximately $4 billion to $6.5 billion annually. This labour income contribution is highly regional. In many livestock, grain and mixed farming regions, road transport businesses support employment, apprenticeships, mechanical services, fuel supply, depots and local spending.

10.4 Transport Service Value

This report estimates agriculture-linked rural road gross transport service revenue/activity at approximately $6 billion to $12 billion annually. This range is indicative and derived from the modelled tonne-kilometre task and typical agricultural freight rate structures. It should be treated as a gross revenue and service activity range, not net value added.

Contribution measure	Indicative estimate	Interpretation
Agriculture-linked road freight activity	60B–90B tonne-km	Scale of road freight activity associated with livestock, grain and fodder.
Heavy vehicle kilometres	1.5–3.5B km annually	Derived from tonne-km, payload and empty-running assumptions.
Diesel use	1.5B–2.5B litres	Modelled operational energy use; not a direct official statistic.
Direct and closely related transport-sector jobs	50,000–80,000	Drivers, logistics, maintenance, depots, administration and support.
Estimated labour income (wages)	$4B–$6.5B	Estimated labour income linked to agriculture-facing road transport.
Gross transport service activity	$6B–$12B	Indicative freight service revenue/value range.
Value enabled	$95B–$130B supply chain output	Wider agricultural value that depends on transport connectivity but is not owned by transport alone.

Indicator	Indicative range
Road freight activity (tonne-km)	60–90 billion tonne-km (provisional)
Direct and closely related transport-sector jobs	50,000–80,000
Estimated labour income (wages)	$4–6.5 billion
Diesel use	1.5–2.5 billion litres
Gross transport service revenue/activity	$6–12 billion
All figures are modelled estimates. See Section 10 for methodology and assumptions.	

11. Rural Challenges and System Resilience

The rural freight task operates in environments that differ from metropolitan freight systems. Distances are longer, populations are smaller, infrastructure is more dispersed, seasonality is stronger and climatic events can rapidly change movement patterns. A flagship economic report needs to recognise these conditions because they explain why rural freight capacity is not easily substituted or centralised.

11.1 Geographic Dispersion

Agricultural production occurs across vast distances. Livestock properties, grain farms, feedlots, saleyards, processors, storage sites and export ports are often separated by hundreds or thousands of kilometres. Road transport provides the connective tissue between these locations.

11.2 Climate Variability

Drought, flood, fire, extreme heat and rainfall variability influence both production and freight demand. During drought, fodder movements may increase and livestock may be redistributed to protect animal welfare or manage feed availability. During floods, route access may be constrained and freight distances may increase.

11.3 Infrastructure Variability

Road quality, bridge access, permit conditions, local government road management, rest areas, truck wash availability and route continuity all influence freight efficiency. Because rural freight often crosses local, state and national networks, inconsistency can create operational complexity.

11.4 Workforce Resilience

The rural freight workforce operates under demanding conditions. Livestock and grain carriers require skill, judgement, compliance capability and regional knowledge. Animal welfare, load security, fatigue management, biosecurity awareness and route planning all form part of the professional skill base.

11.5 System Resilience

Fuel availability is a critical enabler of rural freight resilience. It allows operators to respond to seasonal production peaks, drought, feed shortages, processing demand, export scheduling and infrastructure disruptions. Without reliable diesel access, the movement of livestock, grain and fodder is constrained, with consequences for animal welfare, food supply, processing continuity and export markets.

12. Industry Value Contribution Statement

The central economic statement emerging from this report is that agriculture-linked rural road transport has both a direct industry value and a wider enabling value. These should be presented together but not confused.

In direct terms, agriculture-linked rural road transport is estimated to support $6 billion to $12 billion in gross transport service revenue/activity, 50,000 to 80,000 direct and closely related transport-sector jobs, and $4 billion to $6.5 billion in estimated labour income (wages). These figures represent the road transport industry's own economic footprint within the rural supply chain.

Systemically, road transport enables the movement of livestock, grain and fodder from a $60 billion to $70 billion farmgate production base into a wider $95 billion to $130 billion agricultural supply chain. This wider value includes processing, aggregation, market access, domestic consumption and export value. Road transport does not claim all of that value, but the value cannot be fully realised without movement between the stages of the chain.

Single strongest message

Australia's agriculture-linked rural road transport industry is estimated to directly support $6 billion to $12 billion in gross transport service revenue/activity and $4 billion to $6.5 billion in estimated labour income (wages), while enabling agricultural commodities to move from a $60 billion to $70 billion farmgate base into a $95 billion to $130 billion supply chain.

Safe formulation for external use

When citing or quoting this report externally, the following formulation should be used:

"Agriculture-linked rural road transport directly supports billions of dollars in transport service activity and regional wages, while enabling the movement of agricultural commodities from a $60–70 billion farmgate base into a wider $95–130 billion supply chain."

This formulation preserves the distinction between direct transport value and wider enabled supply chain value. Figures should not be presented as audited national accounts; they are indicative modelled estimates based on official datasets and transparent methodology.

13. Data Tables

13.1 Farmgate and Supply Chain Value

Value layer	Livestock	Grain and fodder	Combined
Farmgate/base value	$36.7B	$20B–$30B	$60B–$70B
Expanded supply chain value	$65B–$80B	$30B–$50B	$95B–$130B
Indicative uplift	$28B–$43B	$10B–$20B	$35B–$60B

13.2 Livestock Movement Data

Category	Volume	Citation / source
Cattle slaughter	9.28M head, 2025 calendar year	MLA 2026a using ABS data
Cattle saleyard transactions	4.84M head, FY2024-25	MLA 2025a
Sheep saleyard transactions	16.39M head, FY2024-25	MLA 2025a
Feedlot turnoff	3.66M head, 2025 calendar year	MLA 2026b
Live cattle exports	779,541 head, FY2024-25	MLA 2025b
Total livestock transport events	70M–85M	Report estimate combining reported and modelled movement categories

13.3 Road Transport Economic Contribution

Measure	Estimate	Status
Tonne-kilometres	60B–90B	Modelled estimate based on road freight share and rural commodity task
Heavy vehicle kilometres	1.5–3.5B km annually	Derived from tonne-km and payload assumptions
Diesel consumption	1.5B–2.5B litres	Modelled estimate
Direct and closely related transport-sector jobs	50,000–80,000	Modelled from transport labour force and agricultural freight share
Estimated labour income / wages	$4B–$6.5B	Modelled from workforce estimate and wage benchmarks
Gross transport service value	$6B–$12B	Modelled gross revenue/service activity range

14. Limitations and Further Research

This report is designed to be credible and transparent. It therefore identifies the key limitations in the analysis.

No single national dataset captures all livestock movements, including inter-property movements, seasonal redistribution and production-stage transfers.

Grain and fodder transport volumes vary significantly by season, rainfall, export conditions and storage patterns.

Road tonne-kilometres, fuel use, employment and transport service value are modelled estimates because official datasets do not isolate the agriculture-linked road transport task in the required detail.

Reported datasets use different reference periods, including calendar year, financial year and quarterly reporting.

Farmgate value and supply chain value should not be added without care because some values may overlap across production, processing and export datasets.

The report distinguishes between direct transport value and value enabled by transport. This distinction should be preserved in external use.

Further research could strengthen the report by commissioning a dedicated economic impact study using operator survey data, freight route modelling, vehicle utilisation, tonne-kilometre modelling, employment data and commodity-specific origin-destination analysis. Dedicated freight network modelling — drawing on BITRE national freight data and commodity-specific origin-destination analysis — could be particularly valuable in mapping the physical freight task and quantifying road network dependence more precisely.

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