

SUBMISSION

Agricultural Competitiveness Issues Paper

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GrainCorp



SYNOPSIS

Australian agriculture has an unprecedented opportunity arising from the strong forecast growth in global demand for protein. There is already strong global demand for Australian grain – and this growth in demand will enable us to participate in global markets, as long as we can produce enough grain to export and competitively move it to overseas consumers.

However, the unprecedented opportunity is at risk due to the poor performance of the rail infrastructure in eastern Australia which:

- Adds significant cost, reducing the returns available to grain growers and the incentive to increase grain production; and
- Limits supply chain capacity to move export grain effectively and reliably to our port terminals to service growing demand from overseas consumers.

Increased productivity of the rail freight network for grain will be the most important contributor to increasing farm gate returns and the opportunity to respond to increased demand for Australian grains.

Critically, ongoing poor rail freight performance will limit Australia's international competitiveness, as other grain exporting regions (the Americas and Black Sea states) also move to feed the growing world population.

Driving lower cost and increased capacity in Eastern Australia's export grain supply chain does **not** require substantial investment in port infrastructure, given current capability and excess capacity. Realising improvement in supply chain efficiency simply requires modest and targeted investment in key areas of rail capability in the existing infrastructure.

This involves investment in 'above rail' loading capability and 'below rail' sidings and track.

- GrainCorp is currently considering a major program of 'above-rail' investment in its country network to improve rail loading capability and reduce train cycle times between its country silos and port terminals.
- To maximise the benefits of this 'above rail' investment there must be associated short term 'below rail' co-investment from Government in rail sidings. In the long term, further investment is required to increase weight capacity of track.

This submission recommends that investment from Government is now critical.

GrainCorp estimates that targeted investment from industry (above rail) and Government (below rail) will improve the returns available to eastern Australian grain growers by up to an average of \$10.00/tonne; through the reduction in rail costs and improved supply chain reliability and performance.

Government co-investment in rail with industry participants, such as GrainCorp, will deliver substantial industry and public economic benefits:

- The average \$10.00/tonne forecast improvement in prices bid at grain silos will translate into a **\$180 million** annual injection into communities in regional eastern Australia.
- Increase the portion of bulk grain moved to ports from current low of 50% to at least 70% will reduce road movements by **1 million tonnes** – a reduction in 25,000 truck movements a year.
- Support an improvement to the balance of trade of **\$500 million** per annum within

10 years, based on grain production and grain exports increasing by 2 million tonnes per annum, in line with the historical yield trend.

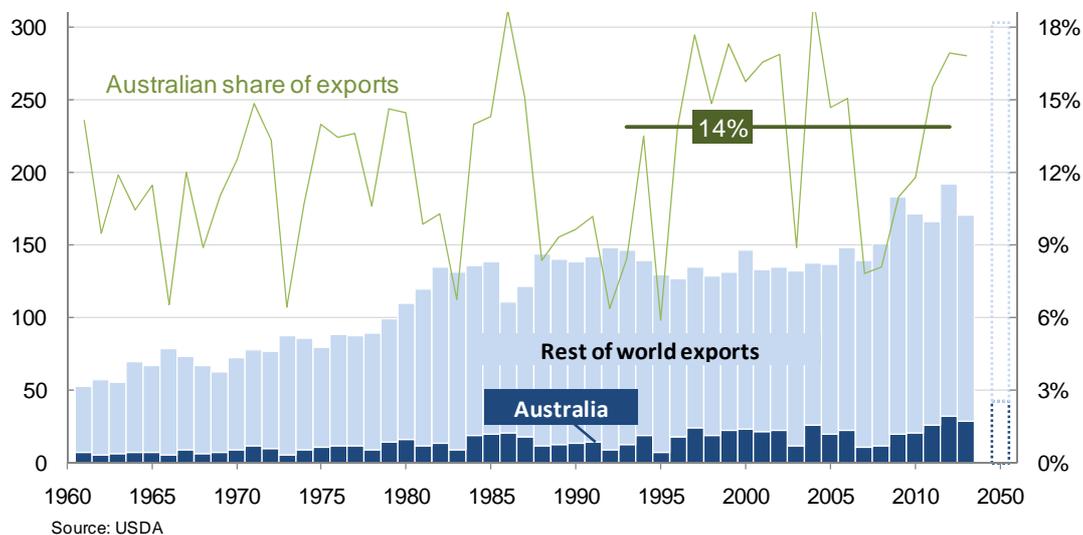
- The forecast reduction in truck movements provides broader public benefits:
 - Avoids the need for substantial road maintenance costs for State and local governments;
 - Improves road safety;
 - Improves community amenity and reduces heavy vehicle traffic and noise levels in the local communities along major routes.

It is important to note that the full benefits to growers and communities as outlined in this document can only be realised if there is targeted investment from both industry and government.

AN UNPRECEDENTED OPPORTUNITY FOR AUSTRALIAN GRAIN

As a significant exporter of dry climate cereal grains, Australia has an unprecedented opportunity to participate in growing global demand for grain. Australia already plays a significant role in the global grain trade. Australia's share of wheat, barley, canola and sorghum exports has kept pace with the increased global trade of grain - averaging around 14% over the past decade as shown in the table below.

Figure 1: Australian share of wheat, barley, canola and sorghum exports

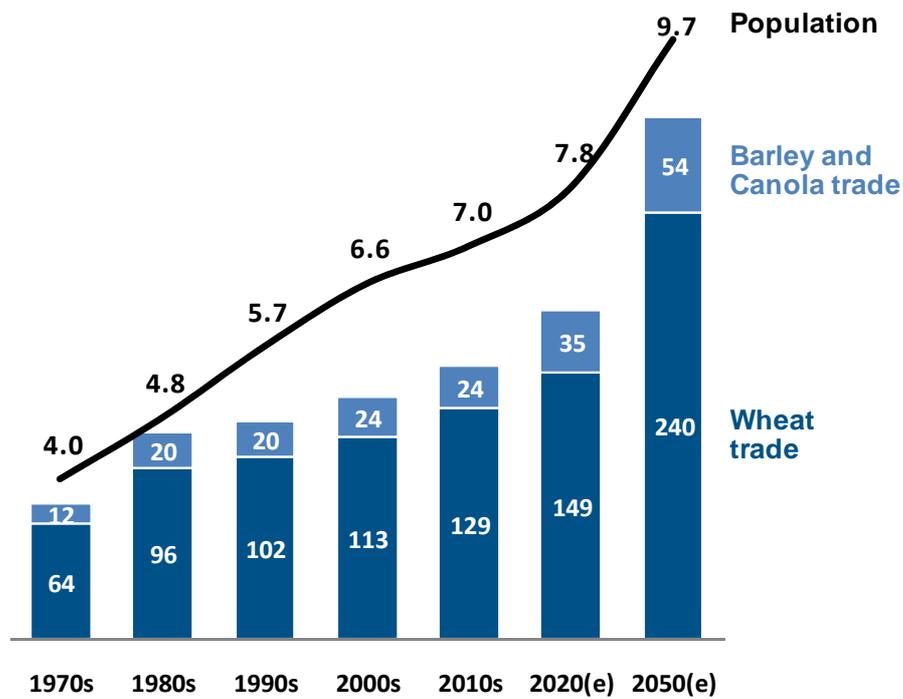


The drivers in the global growth for protein translate into an attractive opportunity for Australian grain growers and the broader industry. By 2050 the world's population will increase by 40%, effectively requiring us to feed a population of up to 10 billion people.

This population growth will amplify global demand for grain with rising living standards. Global grain demand is expected to increase at a faster rate (over 50%) to cater for changing diets with grain being used as feed for meat, dairy and egg production.

The global trade in Australia's core dry climate grains (wheat, barley and canola), is forecast to double in the next 35 years, from 155 to 300 million tonnes per annum by 2050.

Figure 2: Past & projected global trade of dry-climate grains



This growth in overseas grain demand is expected to come from regions that are both close to Australia and are largely import grain dependent; such as the Middle East, North Africa, sub-Saharan Africa and Asia (excluding China).

Australian grain already plays an important role in these regions. It is generally of high quality (e.g. our wheat is dry, clean and white) with a differing production cycle (offsetting the gap left by the major northern hemisphere production zones). This means that any increase in Australian grain production can be readily sold to meet the growing global demand for grain.

Eastern Australian grain growers have the capability to increase grain production to meet increasing global grain demand. Underlying grain production has increased by an average of 1-1.5% in the past 20 years through the adoption of improved varieties and farming techniques. This underlying trend should continue given future improvement in varieties in the near term, coupled with the adoption of genetically modified seed in the long term.

If underlying grain production grew at 1% per annum for the next 10 years, it would translate to an increase in eastern Australian grain production by 2 million tonnes. Conservatively assuming this grain was exported, at an average priced of \$250 per tonne, it would contribute to an annual improvement to the balance of trade of \$500 million per annum within 10 years.

Australian growers will have no problem selling any increase in grain production. The more pressing question for Australian agriculture and the broader national economy is: *will Australia be able to competitively supply grain to meet this increase in demand?*

RISKS TO OUR ABILITY TO CAPTURE THE OPPORTUNITY

GrainCorp is concerned that there are two obstacles that may prevent Australia from being competitive and able to participate fully in the global food opportunity. These obstacles are closely related:

- 1. High cost of rail:** The unlikely willingness of Australian growers to risk producing more grain if rail inefficiency continues restricting the price they receive for their grain – and hence their ability to generate an adequate return.
- 2. Limited capacity of rail:** The limited capacity of our rail freight network – the key link in our export supply chain – to effectively and reliably move the increased grain production to port terminals for export.

It is a simple equation: if Australia does not provide the infrastructure to encourage growers to continue producing more grain; then production and exports may not grow and we may be unable to pursue the upside of growing global demand for our grain.

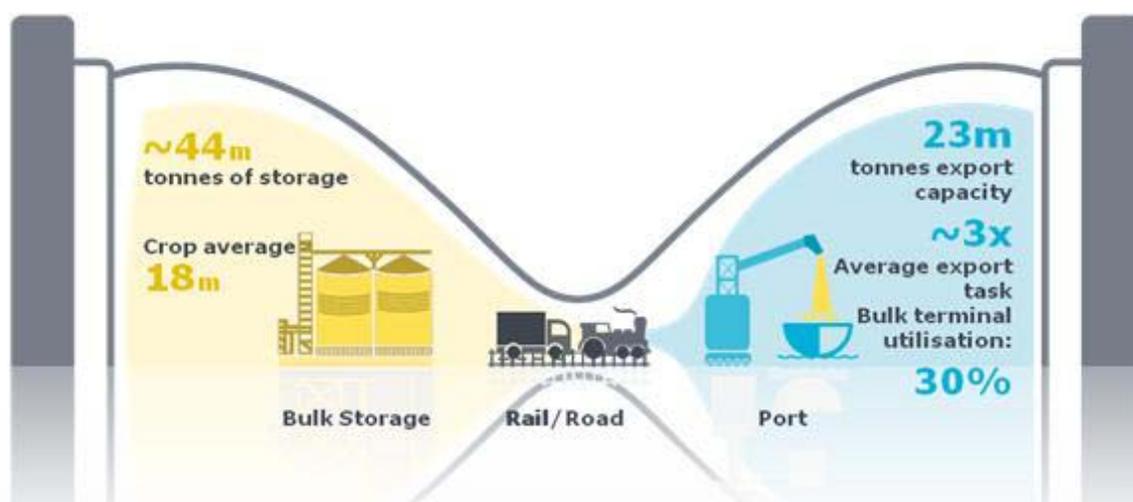
THE EASTERN AUSTRALIAN GRAIN EXPORT SUPPLY CHAIN

The grain supply chain in eastern Australia has significant excess capacity at the receive and export end; offset by a rail bottleneck linking the two, illustrated in the below figure.

Up-country there is at least 44 million tonnes of grain receive capacity¹ – enough to store the annual production of **18 million tonnes almost 2.4 times over**.

There is in excess of 23 million tonnes of export capacity, including GrainCorp’s bulk port capacity plus 8 million tonnes of non-GrainCorp bulk capacity and container capability. Collectively, there is enough capacity to handle the average grain export task of **8 million tonnes almost 3 times over**.

Figure 3 Rail: the bottleneck in the eastern Australian supply chain

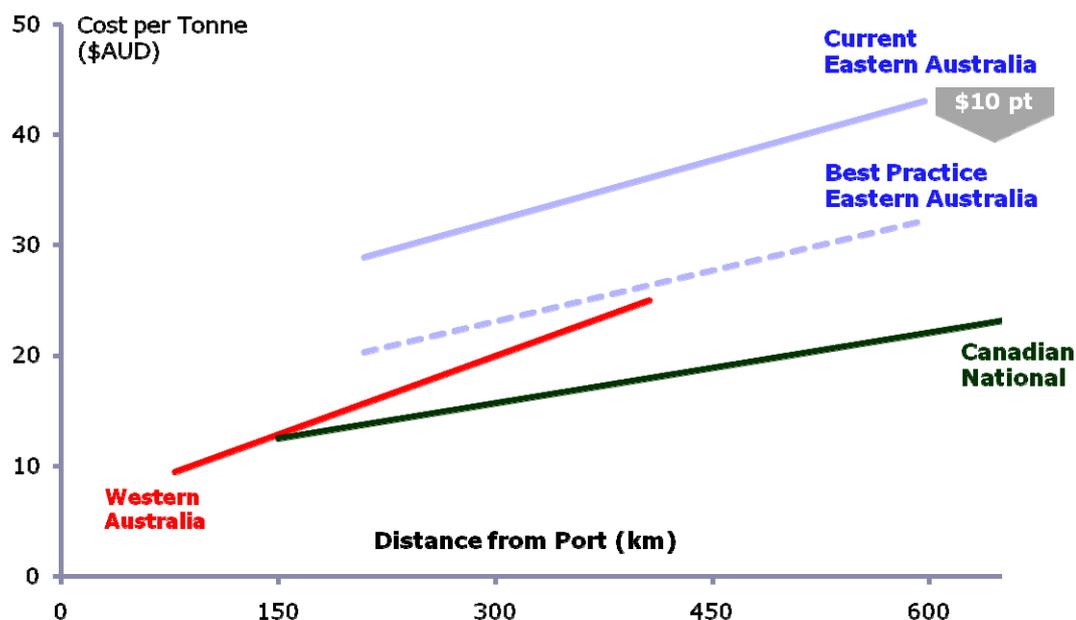


Unfortunately, the competitiveness and capacity of rail as a transport option for grain exports has been declining over many years due to high cost of rail and the resultant modal shift from rail to road transport.

The cost curve in Figure 4 shows that rail transport in eastern Australia is falling further behind best practice in other parts of Australia and the world. Grain rail freight in eastern Australia is estimated to be \$10 per tonne above ‘best practice’ and can cost, for similar distances, \$20/tonne more than in Canada and \$10/tonne more than in Western Australia.

¹ This includes GrainCorp (~22mmt); other bulk handlers and merchants (~10mt); on-farm storage (at least 12mmt) plus other storage providers.

Figure 4: Rail transport industry cost curves

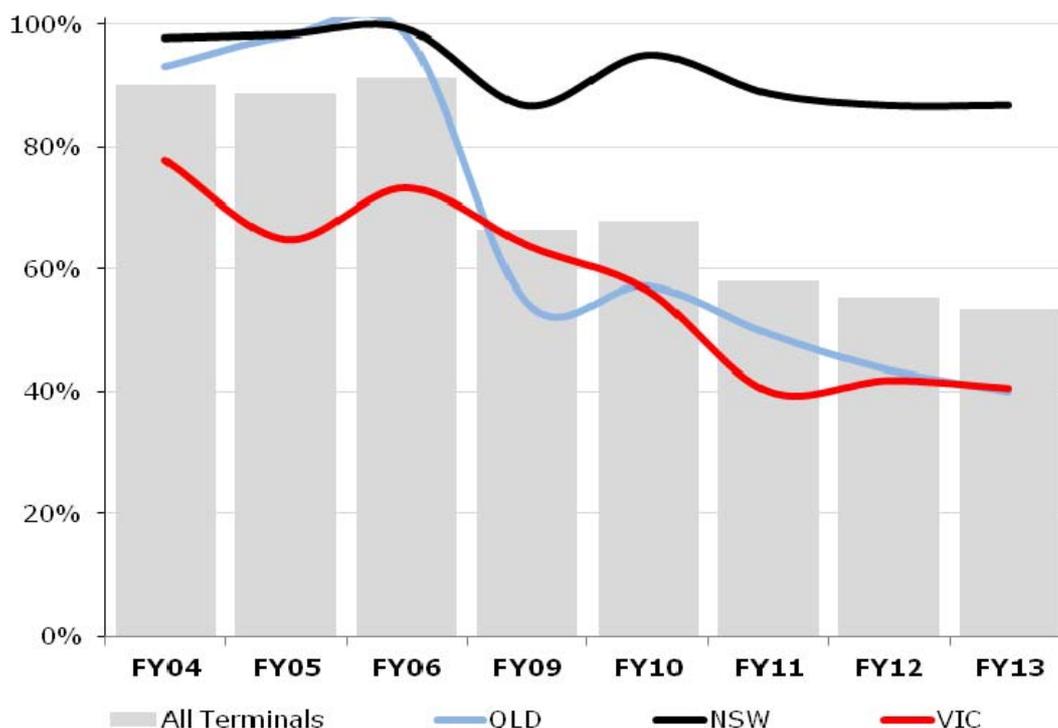


The poor performance of rail in eastern Australia is broadly attributable to three factors:

1. Above rail - Slow loading speeds and cycle times: GrainCorp acknowledges that it needs to invest to improve rail loading infrastructure at its sites, to reduce train cycle times by increasing speed and reliability. Loading infrastructure at many GrainCorp sites is dated, with only 9 of its 280 sites able to load grain quickly to rail (i.e. over 600 tonnes per hour). GrainCorp, as outlined later in this submission, is currently considering a broad program of network investment to deliver a significant improvement in loading performance.
2. Below rail - Short rail sidings: Railway sidings across the GrainCorp country network were constructed many decades ago, when the freight task was substantially different to what it is today. Most of these rail sidings are unable to hold a full 40 wagon train, requiring trains to be broken up, shunted at a site or between 2 or more sites. Only 19 of GrainCorp's 280 sites can handle a full 40 wagon train. This adds substantially to loading and cycle times, increasing costs.
3. Below rail - Weight restrictions on branch lines: Most of the rail network was constructed early last century and has suffered from persistent underinvestment since that time, as governments have prioritised road infrastructure. Consequently, a substantial portion of the network is poor by international standards, operating with substantial payload restrictions of 76 tonnes (gross) or less compared to 82–92 tonnes (gross) on upgraded lines. The majority of eastern Australian grain volume travels on these weight restricted lines and hence the majority of volume (~60%) travels on a train that is up to 20% under-loaded.

Rail's declining competitiveness is illustrated in the chart below, which shows it now only handles 50% of all grain deliveries into GrainCorp's ports, compared to 90% 10 years ago. This is the equivalent of up to 2 million tonnes of export grain per annum lost from rail to road.

Figure 5 Share of rail for bulk export by State



POOR RAIL PERFORMANCE IS LOWERING GROWER RETURNS

Poor rail performance and the loss of grain freight to road is driving lower grower returns in export grain in three ways:

1. **Higher transport cost:** The cost in transporting bulk grain from the country silo to port terminal – an average of \$40 per tonne - accounts for over 50% of all landside supply chain costs. Consequently, it is the most important cost contributor to the grain price bid by traders for a grower's grain.
2. **Higher complexity cost:** Rail is also crucial to the ability to move large volumes of export grain in an efficient and timely manner. The increasing use of road adds complexity and impacts reliability, leading to vessel delays. The average ship for bulk wheat export can be loaded with around 18 trainloads, as opposed to nearly 900 B-double truckloads. This complexity, in addition to higher cost, leads to a further reduction in grain price bids by traders as they need to factor in the cost of execution risk.
3. **Higher handling costs:** Rail allows operational savings at country silos and at port, as it can move larger volumes of a single commodity in bulk, versus the cost in handling smaller volumes through truck deliveries. Operational savings are reflected in GrainCorp's port receival fees, which are \$1.87 per tonne lower for rail deliveries across all commodities.

The increasing cost of transporting grain to port is borne directly by grain growers in the form of lower bid prices for their grain. GrainCorp estimates that the inefficiencies and relatively high cost of the rail network in eastern Australia, coupled with the growing trend to service export demand by road, is costing grain growers around \$10.00 per tonne.

Lower bid prices for export grain translate to lower bid prices for all grain, including domestic bound grain. The export grain surplus, representing around 8 million tonnes in an average 18 million tonne production year, sets the market and floor price for all grain purchased in eastern Australia.

Therefore any achieved reduction in rail transport cost and resultant increase in export grain prices will have a **multiplier 'public benefit'** for all grain – where a \$10 per tonne saving in rail transport cost would generate \$180 million per annum benefit for all growers across eastern Australia.

Unfortunately rail transport costs will continue increase if current trends are allowed to persist. Should rail transport costs continue to erode farm gate returns in eastern Australia, growers are less likely to invest in increasing grain production and buyers will have less confidence in buying grain to supply export markets – forestalling further participation by Australia in growing global demand for grain.

PLAN TO IMPROVE RAIL CAPABILITY IN EASTERN AUSTRALIA

There is an opportunity for the grain industry in eastern Australia to enjoy significantly improved rail transport cost for a modest investment in a relatively short period of 3 years. This plan involves leveraging existing elevation and track infrastructure.

It will involve investment by GrainCorp in its country rail loading capability, a new operating model to improve the efficiency of our business, and co-investment by Government in upgrading rail sidings and track.

1. GRAINCORP INVESTMENT IN RAIL LOADING CAPABILITY

GrainCorp is currently considering a new operating model and a broad investment program of investment in its country network to:

- Develop a core network of 68 high capacity sites (Primary sites) across eastern Australia, focussed on export grain. These sites, with a storage capacity of 10 million tonnes, could handle most of the bulk export grain export moved by rail transport.
- Develop a new rail operating model based on fast cycling 'point to point' 40 to 48 wagon unit-trains between the Primary sites and port terminals. These trains would achieve superior and reliable turnaround time to significantly improve productivity.

This will require the following investment in new rail loading capability at the Primary sites:

- Single rail load points with over-rail garner bins and longitudinal spouts and weight optimisation. This will enable us to load a train in motion with accuracy;
- New or upgraded high speed elevators, tripling the current average load speed - to turn a train around in less than 5 hours; and
- New or upgraded rail bins, with fumigation and blending capability, to pre-position the grain for loading - to improve rail loading reliability.

GrainCorp estimates that this investment, if supported by Government investment in the Government-owned rail sidings at these Primary sites, will:

- Increase train productivity by around 25%. GrainCorp is targeting a reduction in all rail transport costs of around \$5.00 per tonne through its own investment. This lower rail transport cost will be passed back to growers in the form of higher bids at its silos.
- Support increased movement of grain by rail. GrainCorp is targeting to increase the portion of rail into its port terminals from 50% to 70%. This would shift 1 million tonnes of grain from road to rail and provide capacity to service increased export volume with the expected growth in grain production and exports.

The company intends finalising and announcing its intentions during the first half of calendar 2014 – well in advance of the harvest of the 2014 winter crop. The company would welcome the opportunity to work closely with the government to identify opportunities to deliver additional value to regional communities, as the full anticipated benefits to growers, industry and the broader economy GrainCorp’s above-rail investment of can only be unlocked if there is also targeted below-rail investment from Government.

We will provide full details of our funding priorities to the government and the Agriculture Competitiveness Taskforce once they are announced.

2. GOVERNMENT SHORT TERM INVESTMENT IN SIDINGS

Supporting Government investment will be required to extend rail sidings at many of the Primary sites. This would enable the sites to handle unit-trains, by reducing the need to break and shunt trains, unlocking the train productivity benefits outlined above.

The upgrading of rail sidings will require modest co-investment from Government track owners - who own the rail sidings. As an indicative figure, GrainCorp believes that required investment from Government in sidings would be around \$50 million.

GrainCorp will be engaging the five separate track owners, seeking support for this investment. This engagement would be more likely to be successful if there were:

- Direct support from the Commonwealth owned ARTC track owner, where 16 of the 68 Primary sites are located; and
- Commonwealth co-ordination and support of the State owned track owners.

Furthermore there is a need to improve and expedite the planning approval processes to invest in rail capability, which is currently slow and cumbersome.

3. GOVERNMENT LONG TERM INVESTMENT IN TRACK

Over the longer term, further investment from Commonwealth and State governments is required to increase track weight load limits and gauge standardisation.

1. Track payload weights: Around 60% of grain is moved on track this is limited to 76 tonne (gross) or less per wagon. Australian track best practice is 82 to 92 tonne (gross) per wagon. A program to increase track weight limits, which usually involves upgrading bridges, would enable train providers to invest in new low tare and high payload wagons. This would deliver a 20% improvement in productivity.
2. Track gauge standardisation: Eastern Australian grain is serviced by 3 different rail gauges. This creates increased cost by limiting the ability to move wagons between port zones to match the variable export task within a season and between seasons. Benefits could be achieved by:

- Standardising the track in Victoria (in which around 35% of the export volume is already moved from sites on the standard gauge track); and
- Constructing the new inland (standard gauge) railway from Moree to Brisbane via Goondiwindi (with the connecting Thallon line standardised).

GRAIN INDUSTRY AND PUBLIC BENEFIT

GrainCorp acknowledges that funding responsibility for rail is split across Commonwealth and State jurisdictions. However there are substantial national and public benefits that can be realised from a coordinated approach to rail investment, given:

- Agriculture's position as one of the five pillars of the national economy;
- The opportunity presented by growing demand for grain in the developing world; and
- The substantial economic benefit to growers and the economy.

Government co-investment in rail with industry participants, such as GrainCorp, will deliver substantial industry and public economic benefits; namely:

- The average \$10.00/tonne forecast improvement in prices bid at grain silos will translate into a **\$180 million** annual injection into communities in regional eastern Australia.
- Increasing the portion of bulk grain moved to ports from current low of 50% to at least 70% will reduce road movements by **1 million tonnes** – a reduction in 25,000 truck movements a year.
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- The forecast reduction in truck movements provides broader public benefits:
 - Avoids the need for substantial road maintenance costs for State and local governments;
 - Improves road safety;
 - Improves community amenity and reduces heavy vehicle traffic and noise levels in the local communities along major routes.

This opportunity exists now at a modest investment, by the Government working with industry players such as GrainCorp, to realise these significant benefits.

GrainCorp believes that the Commonwealth has a critical role to play in co-ordinating the response from Government to this investment challenge.

We look forward to working with the Government to deliver improved returns to eastern Australian grain growers and the broader economic benefits that will arise from growing grain exports.

CONTACT DETAILS

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