

28 July 2017

Freight and Supply Chain Inquiry
Department of Infrastructure and Regional Development
GPO Box 594
CANBERRA CITY ACT 2601

freightstrategy@infrastructure.gov.au

Dear Sir/Madam,

SUBMISSION: INQUIRY INTO NATIONAL FREIGHT AND SUPPLY CHAIN PRIORITIES

Cement Concrete & Aggregates Australia (CCAA) is the peak industry body representing the heavy construction materials industry in Australia. CCAA members operate cement manufacturing and distribution facilities, concrete batching plants, hard rock quarries and sand and gravel extraction operations throughout the nation.

Our members account for 90% of total industry output, which contributes around \$12 billion to Gross Domestic Product, employing 18,000 Australians directly and supporting the employment of a further 80,000 people.

CCAA members produce and supply the heavy construction materials that are used to build our nation's infrastructure. Providing both the raw material and finished product, heavy construction materials contribute to the construction of our roads, railways, bridges, ports, airports, hospitals, schools and dams.

The reliable and cost-effective supply of materials to local, regional and national markets is fundamental to national productivity and it is CCAA's aim to promote policies that recognise the importance of these materials to Australia's sustainable future.

CCAA welcomes the opportunity to make a submission to the *'Inquiry into National Freight and Supply Chain Priorities.'* We support the intention to develop a National Freight and Supply Chain Strategy for Australia and have used this submission to outline the important role transportation plays in our industry and have identified priority issues for consideration in the development of the Strategy.

THE MOVEMENT OF HEAVY CONSTRUCTION MATERIALS

The heavy construction materials industry is a significant freight user utilising road, rail and shipping to transport materials within Australia.

Heavy construction materials are characterised as high bulk, low value commodities with our members operating across the complete supply chain; from the point of extraction right through to delivery of materials to the end consumer. This makes the industry uniquely placed in terms of understanding the challenges across the freight supply chain.

Road transport is by far the most predominant mode utilised by our industry, preferred over other modes (or in combination with these modes) due to its flexibility in overcoming last mile issues. Whether the end use is an infrastructure project, a multi-residential build or a residential driveway, the final delivery point is always changing and requires access beyond key freight routes.

The Australian Bureau of Statistics, Road Freight Movements Australia (2014), demonstrates the significance of road freight to our industry. 29% of total tonnes carried by road in Australia are comprised of movements of sand, stone, gravel, cement and concrete. This also equates to 12% of total tonne-kilometres carried in Australia.¹

While the industry has typically relied on road transport, distance, congestion and unreliable local road connectivity has led many operators to consider other transport options. Rail and shipping is currently being used to transport raw materials intra and interstate for onwards distribution via road.

Transportation costs equate to approximately 25% of the total cost of heavy construction materials. The closer these materials are to freight corridors and their markets, the less impact transportation has on the overall cost. For example, the average national haulage distance for aggregate from quarry to end-user is 64 km, costing \$13/tonne. If the haulage distance were to increase to 100 km due to urban encroachment or poor planning policies, the additional 40 km haulage will increase transport costs by 35% to \$20/tonne. This is a very real scenario with quarries servicing Sydney now located up to 150km away.

This represents a significant increase in cost given the large volumes of aggregate required for major building and infrastructure projects.

DEMAND FOR HEAVY CONSTRUCTION MATERIALS AND PUBLIC INFRASTRUCTURE

The demand for public infrastructure and heavy construction materials is commensurate with population growth. Australia's population is projected to grow from 24 million at present to 30 million by 2030, with the majority of that growth occurring in urban areas.²

As the country grows, it requires more public infrastructure and therefore demand for heavy construction materials increases. To put this into perspective, it is estimated that:

- Each Australian requires 7 tonnes per annum of quarry materials to support the building of roads, houses and infrastructure to service their needs.
- One kilometre of highway uses up to 25,000 tonnes of crushed rock.
- One kilometre of suburban roadway requires 5,000 tonnes of crushed rock, 750 tonnes of concrete for footpaths, kerbs and gutters and 450 tonnes of asphalt for road surfacing.
- One kilometre of railway requires 2,000 tonnes of aggregate.
- A high-rise building can use up to 1,000 tonnes of aggregate per floor.
- Construction of a typical house, including driveway and landscaping, uses about 110 tonnes of aggregate and 53 m³ of concrete.

Coupled with this, heavy construction materials are typically the single biggest cost component in the infrastructure delivery chain. Research commissioned by CCAA in Victoria, identified that construction materials were the highest input cost of infrastructure (32%) eclipsing both labour and equipment costs. The report also showed, of these three primary costs, it was the most likely to face price escalations over the next decade.³

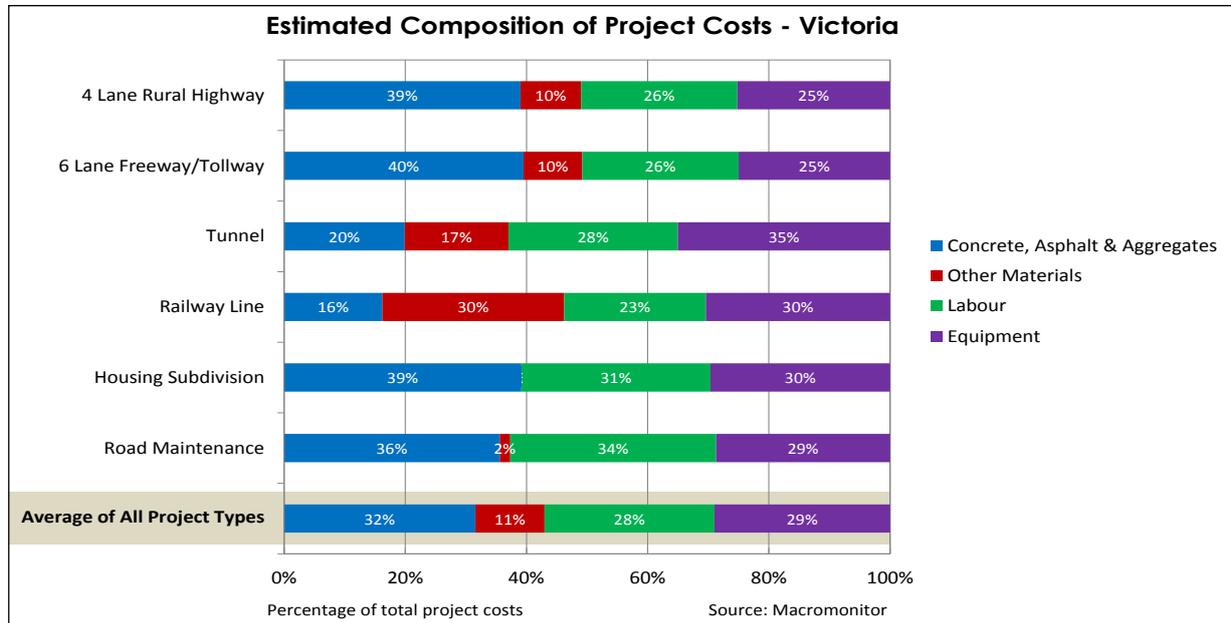
¹Australian Bureau of Statistics, Cat 9223.0, Road Freight Movements, Australia, 12 months ended 31 October 2014

²Australian Bureau of Statistics, Cat 3222.0, Population Projections Australia.

³The Impact of Heavy Construction Materials Prices on Infrastructure Costs in Victoria, Macromonitors, June 2013.

Figure 1 – Estimated Composition of Project Costs – Victoria

Source: *The Impact of Heavy Construction Materials Prices on Infrastructure Costs in Victoria, Macromonitors, June 2013*



The interrelationship between the cost of heavy construction materials and the cost of infrastructure is important. The lack of any forward looking land-use and freight planning will affect the affordable supply of materials, which in turn impacts on the cost of the very infrastructure we rely on to provide for freight efficiencies.

PRIORITY ISSUES

CCAA recognises that a productive and efficient freight system makes a considerable contribution to Australia's social, economic and environmental prosperity. Ensuring our freight system is able to deliver to the needs of businesses and the community into the future requires coordination at the Federal, State and Local Government level.

CCAA welcomes the development of a National Freight and Supply Chain Strategy and has identified the following priority issues that we recommend be considered:

a. Urban Encroachment and Planning

With a period of strong population growth anticipated, particularly in metropolitan areas, integrated transport and land-use planning is imperative.

In particular, this should include the identification and preservation of:

- i. **Strategic Resource Areas** – Extractive and mineral resources are geologically constrained. To ensure their affordable and efficient supply, they must be located close to the markets they serve, including associated transport routes.
- ii. **Industrial lands** – Or 'employment lands' provide the essential jobs and services required to maintain the liveability of Australia's cities.
- iii. **Transport Corridors** – The identification of strategic freight planning, corridor preservation and land-use planning for future freight requirements.

CCAA is disappointed to note that recent trends in planning policy have tended to favour residential development over other uses, thereby allowing these developments to encroach upon industrial lands, as well as freight infrastructure and corridors. This invariably leads to complaints from residents on issues of amenity, despite the fact that the industry was there long before residents.

An example of this is concrete plants located in areas that were historically industrial lands. Over time these areas have progressively been rezoned from industrial to commercial, and then commercial to residential. As residential developments have begun to encroach on concrete plants, operational constraints such as curfews have followed. This reduces the time period in which freight can be transported, therefore contributing to network congestion in peak hours.

Shifting industrial lands further away from metropolitan areas without efficient freight corridors is also problematic, particularly for concrete plants. Pre-mixed concrete is a perishable product, once mixed at the batch plant concrete is required to be onsite within approximately 40 minutes in order for its discharge and placement to meet Australian Standards. Effective transport networks and urban planning linking concrete plants to market are vital to enable industry to meet these obligations.

CCAA recommends that the National Freight and Supply Chain Strategy establishes practical measures to ensure that proper consideration is given to the importance of industrial lands and freight corridors in urban planning systems. This will need to flow through to States and local authorities if tangible outcomes are to be achieved.

b. Heavy Vehicle Access

CCAA strongly supports improved heavy vehicle access, including the promotion of strategic road freight routes for higher productivity vehicles and options for addressing first and last mile issues.

Greater engagement and consistency across Local Government boundaries is a key barrier for our industry. More work needs to be done with Local Government and industry to identify and resolve first and last mile access issues. CCAA believes that Local Government heavy vehicle access systems need to be streamlined to provide consistency and ensure that heavy vehicle access is not impeded.

Our members are strong supporters of Performance Based Standards and their implementation across Australian jurisdictions. There should also be a consistent national approach for Higher Mass Limits, and that vehicles should be regulated on their performance, rather than length and mass. The industry asserts that increased mass limits for truck and dog trailer combinations would provide for strong productivity gains, increased capacity, as well as congestion reduction on the current network.

c. Infrastructure Investment

Disruptions to freight because of road congestion and capacity issues at ports and rail facilities all contribute to the rising cost of transport, which is ultimately passed onto consumers.

The heavy construction materials industry supports a strong and consistent pipeline of infrastructure projects to support a productive and efficient Australian economy. This means identifying those key freight routes required to support business and maintaining and developing infrastructure that best meets future freight needs.

The mapping of current and future supply chains alongside effective infrastructure forecasting and investment are vital to providing an effective freight system into the future. Ensuring we have a productive freight network can be funded through taxes, levies and other charges raised from the freight industry, provided it is 'ring fenced' to be invested back into infrastructure maintenance and development.

Such objectives are linked to the Land Transport Market Reform process currently underway, with CCAA recently submitting on the Discussion Paper for the *Independent Price Regulation of Heavy Vehicle Charges*. In that submission CCAA supported a move towards independent price regulation and in doing so, outlined a number of policy principles that industry believes should be taken into account in the reform process. See CCAA's submission for more information on this matter.⁴

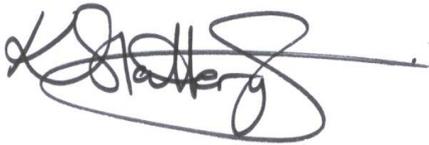
CONCLUSION

An efficient and productive freight system is critical to the nation's economic competitiveness. For this reason CCAA welcomes the development of a *National Freight and Supply Chain Priorities Strategy* to reduce the costs of transporting goods and commodities.

The heavy construction materials industry is a significant freight user in Australia, particularly in respect to road freight. We hope that the unique logistical challenges faced by our industry, as described in this submission, will be considered in the development of the Strategy going forward.

CCAA looks forward to further engagement with the Department of Infrastructure and Regional Development and the Inquiry team on the development of the Strategy.

Yours sincerely,



KEN SLATTERY
Chief Executive Officer
CEMENT CONCRETE & AGGREGATES AUSTRALIA

⁴ Cement Concrete & Aggregates Australia, 14 July 2017, Submission: Independent Price Regulation of Heavy Vehicle Charges.