

Focus on freight

14 September 2023

Safe, efficient, reliable and low-cost freight transport is critical for Victoria’s trade-exposed economy. It supports local businesses and producers, boosts job creation, improves productivity and helps ensure timely delivery of goods.

By many measures, Victoria is Australia’s freight and logistics capital. With the Port of Melbourne - Australia’s largest general cargo and container port - two curfew-free airports and an extensive road and rail network, it is the preferred state for many operators. Committee for Melbourne’s [Benchmarking Melbourne 2023](#) report notes that Melbourne has the fifth largest cluster of locally headquartered firms in mobility and logistics, with recognised innovation niches in warehousing and freight services.¹

To safeguard Victoria’s competitive advantage, it is imperative for there to be a clear vision, investment and planning to meet the challenges linked with higher freight volumes, a growing population, a changing economy and shifting public expectations concerning safety and the environment.

Recent Victorian governments have recognised the importance of the state’s freight and logistics sector, with the establishment of Freight Victoria, as well as the release of ‘Freight Futures’ (2008), ‘The Freight State’ (2013) and ‘Delivering the Goods’ (2018) testament to this. As other major Australian states continue with strategies, regulations and investments in freight, logistics and supply chains, then it is important for Melbourne and Victoria to keep pace.

The Victorian Government could solidify its support for the freight and logistics sector through a series of policies and investments. Committee for Melbourne (the Committee) provides 12 recommendations.

Topic	Summary of Recommendations
Planning	<p>1: Develop and publish a comprehensive, integrated transport plan for Victoria that supports safe, efficient and reliable activities across all facets of freight and logistics.</p> <p>2: Implement appropriate land use zoning and planning controls that support industrial activity growth.</p>
Infrastructure	<p>3: Gauge standardise, upgrade and maintain Victoria’s regional rail freight network (including intermodal hubs) to encourage more freight onto rail.</p> <p>4: Progress planning for the Western Interstate Freight Terminal as part of the dual terminal strategy supporting the Inland Rail project and ensure that these terminals connect seamlessly with this project, as well as with the Port of Melbourne.</p> <p>5: Accelerate investment in renewable energy infrastructure to support greater uptake of battery electric and hydrogen fuel cell freight vehicles.</p>
Regulation	<p>6: Simplify the rail access regime to help ensure that rail costs are competitive with road transport.</p> <p>7: Develop regulations and policies that encourage off-peak network utilisation by the freight and logistics sector.</p> <p>8: Further incentivise uptake of zero emission freight vehicles where applicable.</p> <p>9: Ensure Freight Victoria has adequate capability and resources.</p>
Skills	<p>10: Develop a plan to increase the number of skilled workers entering the freight and logistics sector.</p>
Technology	<p>11: Collaborate with industry to help fast-track the deployment of regulated Intelligent Transport Systems technologies on key freight corridors.</p> <p>12: Develop comprehensive freight network data and publish periodically.</p>

Planning

Issue

In its 2020 [Transporting Melbourne](#) report, the Committee highlighted that Melbourne, and Victoria, do not have a comprehensive, strategic, integrated transport plan that incorporates land use and economic development planning.² Despite a plethora of plans that aim to provide a roadmap for how Melbourne and Victoria should grow, none offer a detailed framework outlining how growth will be managed over the long-term. The proposed update to 'Plan Melbourne' – slated for consultation later this year - may offer an opportunity to deliver such a plan.

Policy

The Committee believes that the Victorian Government should develop and publish a strategic plan detailing how Victoria will grow over the long-term. With Victoria's freight task expected to grow strongly to mid-century,³ integrated freight planning within the context of a broader strategic and economic plan for the state is critical.

An integrated transport plan would comprise detailed freight initiatives and consider end-to-end supply chain systems, including the preferred locations and delivery timelines of Melbourne's proposed intermodal freight terminals and industrial precincts, as well as transparency of intent on transport corridor protection and rail gauge standardisation. Such a plan would provide greater certainty for the private sector so it can make informed business planning and investment decisions.

The COVID-19 pandemic has heightened the need for a detailed plan. In response to the impact of the pandemic on supply chains, it was reported that logistics executives were designing more resilient networks by shifting from 'just-in-time' to 'just-in-case' inventory strategies.⁴ While the extent of this change is still to play out in full, appropriate zoning recognition and planning controls are needed to protect land for new industrial and intermodal precincts, as well as in existing precincts adjacent to the freight terminals and corridors at the Port of Melbourne, Melbourne Airport and Avalon Airport. Such measures will help balance the need for industrial activities, efficient freight operations and community amenity.

Managing urban encroachment, as well as competing land uses of freight and logistics precincts, and transport corridors, is critical to the long-term efficiency and competitiveness of Victoria's freight and logistics sector.⁵

Recommendations

1: Develop and publish a comprehensive, integrated transport plan for Victoria that supports safe, efficient and reliable activities across all facets of freight and logistics.

2. Implement appropriate land use zoning and planning controls that support industrial activity growth.

Infrastructure

Issue

The standard of a region's freight and logistics infrastructure has a direct impact on productivity.⁶ High quality infrastructure, supported with freight-friendly policies, helps reduce freight travel times and costs, and boosts productivity and competitiveness.⁷

Core freight infrastructure, like roads and rail lines, need to be both accessible and affordable to use. Challenges like congestion and investment in upkeep can make it hard for these assets to handle efficient freight transport.

Policy

The Committee encourages sufficient and consistent funding for the upgrade of Victoria's regional rail network, including for improvements to, and rationalisation of, tracks and signalling equipment, as well as new and improved stations.

Rail network gauge standardisation is critical for the resilience of the regional network by providing lower overall operating costs, ready access to modern rolling stock and enhanced connectivity to ports, Inland Rail, intermodal terminals and to the national interstate network. Completing the Murray Basin Rail Project is also important.

Additional rail interoperability measures to harmonise the fragmented rail system should be implemented. Extra costs are being incurred by private rail freight operators in management, maintenance and training with 11 different signalling and train control systems in use across Australia.⁸

Improvements to the regional rail network, including in track axle load limits, would benefit Melbourne. An efficient, reliable and cost competitive rail freight network could encourage the shift of freight from road to rail, helping reduce the number of trucks on Melbourne's roads.

Delivering the dual terminal strategy of Beveridge Interstate Freight Terminal (BIFT) and Western Interstate Freight Terminal (WIFT) would support this endeavour. The integration of these intermodal freight terminals with the Melbourne-to-Brisbane Inland Rail project and Port Rail Shuttle services would increase the commercial viability for more domestic rail freight services. With the number of containers transported by rail to the Port of Melbourne below 6 per cent,⁹ investments and policies are needed – recognising that some key projects are underway, including the Port Rail Transformation Project and the Port Rail Shuttle Network.

The Committee recognises the importance of investing in renewable energy sources and the electricity grid to support greater uptake of battery electric and hydrogen fuel cell freight vehicles. By enhancing renewable energy infrastructure and the electricity grid, it becomes more feasible to power freight vehicles with cleaner technologies, reducing the environmental impact of freight transport. Furthermore, electric freight vehicles, being quieter than combustion engine counterparts, can operate at night, thereby expanding road network capacity during daylight hours.

Recommendations

3: Gauge standardise, upgrade and maintain Victoria's regional rail freight network (including intermodal hubs) to encourage more freight onto rail.

4: Progress planning for the Western Interstate Freight Terminal as part of the dual terminal strategy in support of the Inland Rail project and ensure that these terminals connect seamlessly with this project, as well as with the Port of Melbourne.

5: Accelerate investment in renewable energy infrastructure to support greater uptake of battery electric and hydrogen fuel cell freight vehicles.

Regulation

Issue

Regulation of road and rail infrastructure has a major impact on freight outcomes. Undertaken effectively, it can strike the right balance between community, environmental and economic interests.

With core transport infrastructure supporting various vehicle modes - primarily buses, cars, trains and trucks – implementation of access and operating measures can have a major impact on network usage patterns. Such interventions will become increasingly important as road and rail network congestion intensifies and the need to optimise spare network capacity increases.

Policies and regulations that enable better utilisation of off-peak network capacity could benefit the sector and the public, and simultaneously support safety and environmental objectives.

Policy

The Committee believes appropriate separation of freight and road passenger vehicles is needed. Various road system management interventions could be activated, including dedicated freight lanes and favourable signalling on major arterial roads, which would help prioritise freight movements at certain times and in certain places.

Incentives for more freight movements to be made during off-peak periods when road and rail network capacity is higher should be implemented. After-hours freight deliveries and waste collection within residential areas could be undertaken by electric trucks, which are quick, quiet and efficient.

Interventions are needed to support freight operations around the Port of Melbourne and the state's existing and planned intermodal terminals. This could include dedicated freight lanes, as well as stringent planning controls and buffering to avoid urban encroachment and land use conflicts.

The Committee encourages the government to review the costly and complex regulatory and administrative processes for freight train operators and ensure that rail access costs are competitive with road freight operators.

Transport network pricing reform, including road user charging, could help reduce congestion and overcrowding on the transport network, especially during peak periods.

With Australia's pollution standard for trucks lagging the US and Europe,¹⁰ bold measures are needed to catch up and ensure that more trucks in Victoria's fleet emit less pollution. Policies that encourage the uptake of more efficient, cleaner freight vehicles could be considered. This may include green vehicle rebates or a buy-back scheme as foreshadowed by the Victorian Government. The Victorian Government has invested in various schemes to promote Zero Emission Vehicle (ZEV) adoption in the private sector. The ZEV Commercial Sector Innovation Fund was established to encourage the use of ZEVs in commercial settings, supporting entities like Australia Post. Additionally, limited trials of initiatives like the 'cash for clunkers' scheme have been conducted. Expanding the reach of these initiatives on a larger scale would be welcome.

It is vital to guarantee that Freight Victoria possesses both the capability and resources necessary for enforcing policies that bolster the freight and logistics sector, as this is pivotal for the successful implementation of numerous crucial regulations.

Recommendations

6: Simplify the rail access regime to help ensure that rail costs are competitive with road transport.

7: Develop regulations and policies that encourage off-peak network utilisation by the freight and logistics sector.

8: Further incentivise uptake of zero emission freight vehicles where applicable.

9. Ensure Freight Victoria has adequate capability and resources.

Skills

Issue

Victoria's freight and logistics sector is suffering from a shortage in skilled workers. From truck and courier drivers to handle the e-commerce boom, to supply chain and logistics managers that oversee the planning, distribution and transport of goods, skilled workers are needed across the sector.¹¹ With the freight sector workforce aging twice as quickly as the national average,¹² at a time of industry growth and digitisation, action is needed to attract new workers to the sector with the appropriate skills.

Policy

The Committee believes that a comprehensive plan is needed to ensure the freight and logistics sector has enough skilled workers to meet the demand of a freight task that is growing and digitising. Such a plan would outline the policies and investments needed to ensure there are enough workers with the appropriate skills that can be deployed at the right time.

Recommendation 10: Develop a plan to increase the number of skilled workers entering the freight and logistics sector.

Technology

Issue

From artificial intelligence and machine learning to robotics and 3D printing, new technologies are profoundly impacting the ways in which goods are being manufactured, stored and transported.¹³

There are opportunities the use of these technologies to drive improvements in freight productivity. Timely deployment of intelligent traffic management tools for example, that utilise multimodal sensors, would help address urban transport challenges for freight (and passengers) through more efficient and effective use of transport infrastructure.¹⁴

While deployment of these technologies across the network shows great potential, their uptake could alter freight movements and patterns in unforeseen ways. Making informed decisions, and evolving those decisions over time, requires the utilisation of comprehensive data. Despite the range of technologies and methods available to collect and analyse growing volumes of transport data, more work could be done to consolidate, and provide access to, reliable data on the freight and logistics sector.

Policy

The Committee encourages appropriate deployment of 'intelligent' technologies to support freight transport operations. These technologies can improve the safety and efficiency of freight movements that enhance the responsiveness and performance of Victoria's supply chains.

Government and industry collaboration on research, information exchange and pilot project delivery would help fast-track technology deployment. Such collaboration could improve understanding around the origins and destinations of freight movements, along with the impact of these movements on the natural and urban environments.

Such collaboration needs to be underpinned by the creation of systems that collect and analyse significant volumes of Big Data, which should help uncover hidden patterns, correlations and trends. Its effective utilisation will help ensure that technologies are utilised in the most appropriate points in the transport network and at the most appropriate times. They will also help assist with asset management, including predictive maintenance.

Recommendations

11: Collaborate with industry to help fast-track the deployment of regulated Intelligent Transport Systems technologies on key freight corridors.

12: Develop comprehensive freight network data and publish periodically.

End Notes

¹ Committee for Melbourne, *Benchmarking Melbourne 2023*, 2023.

² Committee for Melbourne, *Transporting Melbourne*, 2020.

³ Infrastructure Victoria, *Victoria's Infrastructure Strategy 2021 – 2051*, 2021.

⁴ B. Masters and A. Edgecliffe-Johnson, 'How just-in-time became just-in-case', *Australian Financial Review*, December 21 2021, accessed 4 January 2023.

⁵ Centre for Supply Chain and Logistics, *A Second Container Port for Melbourne? Build it in the west for 2036*, Deakin University, 2017.

⁶ Department of Infrastructure and Regional Development. Bureau of Infrastructure, Transport and Regional Economics, *Infrastructure, Transport and Productivity*, Australian Government, 2014.

⁷ Infrastructure Victoria, *Victoria's Infrastructure Strategy 2021-2051*, 2021.

⁸ National Transport Commission, *Rail interoperability* (website), Australian Government, accessed 28 February 2023.

⁹ ACCC, *Container stevedoring monitoring report 2021-22*, Australian Government, 2022.

¹⁰ Grattan Institute, *The Grattan Truck Plan*, 2022.

¹¹ R. Barrett, 'Supply of skilled workers nears crisis point', *The Australian*, November 23, 2021, accessed 24 February 2023.

¹² R. Barrett, 'Supply of skilled workers nears crisis point', *The Australian*, November 23, 2021, accessed 24 February 2023.

¹³ B. Stackpole, *5 supply chain technologies that deliver competitive advantage*, MIT Management Sloan School, February 14, 2020.

¹⁴ ERTICO – ITS Europe, *The Role of Intelligent Transport Systems (ITS) in Sustainable Urban Mobility Planning*, 2019.

Disclaimer

The recommendations reflect the synthesis of the Committee's diverse, cross-sectorial membership. No recommendations are attributable to any individual member organisation.