



Brisbane 2032

Freight and Supply Chain White Paper



Queensland Transport Logistics Council

17 August, 2026

→ The Power of Commitment

This Paper has an accompanying web-app for visualising and summarising key findings

<https://qtlcbrisbanegames.netlify.app/>



Project name		Brisbane 2032 Freight and Supply Chain White Paper					
Document title		Brisbane 2032 Freight and Supply Chain White Paper					
Project number		12693363					
File name		12693363 – Brisbane 2032 Freight and Supply Chain White Paper Final v2					
Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
S4	A	X. Yin Ngai I. Caldeira	T. Anderson	On file	T. Anderson	On file	12/05/26

GHD Pty Ltd | ABN 39 008 488 373

Contact: Tristan Anderson, Executive Advisor – Freight Systems and Simulation | GHD

145 Ann Street,

Brisbane, Queensland 4000, Australia

T 0733163000 | **F** 07 3316 3000 | **E** bnemail@ghd.com | **ghd.com**

© GHD 2026

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

This document is in draft form. The contents, including any opinions, conclusions or recommendations contained in, or which may be implied from, this draft document must not be relied upon. GHD reserves the right, at any time, without notice, to modify or retract any part or all of the draft document. To the maximum extent permitted by law, GHD disclaims any responsibility or liability arising from or in connection with this draft document.

Contents

Abbreviations	iv
Executive summary	vi
1. Introduction	1
1.1 Purpose of this report	2
1.2 Scope of work	2
1.3 Limitations	2
1.3.1 Accessibility of documents	3
2. Brisbane 2032: The freight context	4
2.1 Scale and geographic complexity	4
2.2 Freight network vulnerabilities	5
2.2.1 The gateway problem	6
3. What previous Games tell us	7
3.1 Dedicated freight planning delivers results	7
3.2 Information matters as much as infrastructure	7
3.3 Freight must be designed into the GRN, not retrofitted	8
3.4 Legacy requires deliberate design	8
3.5 Comparative analysis	8
4. QTLC initial survey analysis	10
4.1 Assumptions	10
4.2 Key themes	10
5. What industry and the QTLC workshop found	12
5.1 Workshop context	12
5.2 Construction phase	12
5.2.1 Construction phase challenges	13
5.2.2 Construction phase opportunities	13
5.3 Event phase	13
5.3.1 Event phase challenges	14
5.3.2 Event phase opportunities	14
5.4 Legacy phase	15
5.5 How much coordination does Brisbane need?	15
5.6 Key themes from workshop discussion	16
5.6.1 Quality over Quantity for a successful SEQ Forum structure	16
5.6.2 BAU freight, not Games logistics, was the dominant concern	16
5.6.3 Uncertainty is more damaging than restrictions	17
5.6.4 Productivity over more vehicles	17
5.6.5 Information and coordination are as valuable as infrastructure	17
5.6.6 Out-of-hours delivery works but needs early trials	17
5.6.7 The games should be a catalyst for permanent reform	17

6. Root cause analysis	18
6.1 Five root causes	18
6.1.1 Evidence gap (approximately 64 weighted votes)	18
6.1.2 Institutional gap (approximately 71 weighted votes)	18
6.1.3 Network vulnerability (approximately 46 weighted votes)	19
6.1.4 Information asymmetry (approximately 26 weighted votes)	19
6.1.5 Temporal compression (approximately 53 weighted votes)	19
6.2 Root causes connected to recommended actions	19
6.3 Dependencies	20
7. Prioritisation matrix	21
8. Recommendations	22
8.1 Package A: Get the foundations right	22
8.2 Package B: A dedicated freight programme	23
8.3 Package C: Full coordination with permanent legacy	24
8.4 Decision pathway	25
9. Suggested next steps	26
9.1 Brisbane 2032 Freight Management Pathway	27
10. References	28
 Appendix A: Detailed case studies	 30
Appendix B: Workshop attendee organisations	39

Abbreviations

Table 1 Abbreviations list

Abbreviation	Description
ABN	Australian Business Number
ARTC	Australian Rail Track Corporation
BAC	Brisbane Airport Corporation
BAU	Business-as-usual
CCC	Construction Coordination Centre
CILT UK	Chartered Institute of Logistics and Transport (UK)
CLPs	Construction Logistics Plans
FIA	Freight Impact Assessment
FY	Financial Year (e.g., FY2025)
GBP	British Pound Sterling
GC 2018	Gold Coast 2018 (Commonwealth Games)
GHD	GHD (company name used throughout)
GIICA	Games Independent Infrastructure and Coordination Authority
GRN	Games Route Network
HV	Heavy vehicle
IAQ	Infrastructure Association Queensland
IOC	International Olympic Committee
OECD	Organisation for Economic Co-operation and Development
OOH	Out-of-hours (deliveries)
ORN	Olympic Route Network
OSOM	Over-size over-mass
PoB	Port of Brisbane

Abbreviation	Description
PT	Public transport
QFM	Queensland Freight Model
QR	Queensland Rail
QTLIC	Queensland Transport and Logistics Council
SEQ	Southeast Queensland
SEQSTM	SEQ Strategic Transport Model
TCC	Transport Coordination Centre
TDM	Travel Demand Management
TEU	Twenty-foot Equivalent Unit
TfL	Transport for London
TLME	Transport and Logistics Middle East (“... (TLME, 2025)”)
TMG	Tokyo Metropolitan Government
TMR	(Queensland) Department of Transport and Main Roads
TROC	Transportation Operation Centre
WT	WT Partnership

Executive summary

Brisbane 2032 is a multi-year, multi-agency undertaking that will place sustained demand on the Southeast Queensland transport and logistics system. The Games are expected to involve around 10,500 athletes, tens of thousands of media and workforce personnel, and millions of spectators across multiple zones spanning the Brisbane, Gold Coast and Sunshine Coast regions. Delivery will occur alongside a \$7.1 billion venue programme and significant concurrent transport investment, creating a multi-year construction task with peak overlap in the late 2020s and a combined Olympic and Paralympic period extending over approximately two months.¹

For government, the freight task is a continuity-of-service issue as much as an event logistics issue: the same corridors, curfews, staging areas, labour pools and operational windows that support Games delivery also underpin essential everyday supply chains.

This means passenger movement and freight movement need to be planned together, rather than as separate workstreams, because both depend on the same corridors, access rules, staging locations and real-time operating decisions.

In this paper, business-as-usual (BAU) freight refers to routine movements that keep communities and the economy functioning (including retail, manufacturing, fuel, agriculture, and port and airport operations). Games-specific logistics refers to additional tasks driven by the Games (including venue construction, overlay, catering, broadcast and waste). The policy challenge is to enable Games operations while maintaining BAU reliability, affordability and resilience under peak system strain.

This White Paper consolidates desktop research across 7 major sporting events, an industry survey spanning 11 stakeholder groups, and a facilitated workshop with over 45 attendees and live voting. It is intended to support government agencies by translating those inputs into:

- (i) a shared problem statement for freight across construction, event and legacy phases;
- (ii) a prioritised set of potential interventions that can be progressed through existing delivery, assurance and budget processes, and
- (iii) 3 cumulative recommended packages (A to C) that scale from foundational coordination to a full programme with permanent legacy.

The central finding is that Brisbane's freight risk is structural and should be treated as a system-level risk within the broader Games transport programme. **Unlike London, Tokyo or Paris, Brisbane has limited modal and network redundancy: key freight-generating precincts and gateways depend on a small number of corridors with limited substitutes.** This creates a credible risk of cascading BAU impacts, such as missed delivery windows, longer turnarounds, added cost and reduced reliability, if Games-time access arrangements and construction sequencing are not coordinated and communicated early.

This risk is concentrated around SEQ's paired international gateways: the Port of Brisbane and Brisbane Airport. Both depend on the Gateway corridor and surrounding distribution precincts to maintain reliable access for trade, tourism, fuel, air cargo, containerised freight and time-sensitive supply chains. For Brisbane 2032, disruption to either gateway would not be a localised access issue; it would be a whole-of-system risk affecting Games delivery, BAU freight continuity and Queensland's external reputation.

Successful Games logistics coordination means BAU supply chains remain reliable across all phases (construction, Games operations and post-Games dismantling), with clear and timely access arrangements for critical freight, and without avoidable cost escalation or disruption to essential goods and services. If managed well, Brisbane 2032 can also be a catalyst to institutionalise stronger freight coordination capability, better information-sharing and more resilient operational practices for Southeast Queensland beyond 2032.

Brisbane 2032 is more than a sporting event; it is a global shop window for Queensland's technical logistics and supply chain capability. The world's attention, including that of investors, trade partners and major project proponents, will be on the State's ability to move people, equipment and materials at scale, on time and under intense scrutiny. A well-organised Games sends a powerful signal of confidence. Seamless venue logistics, reliable freight coordination and resilient supply chains demonstrate that Queensland can deliver complex, time-critical operations to a world-class

¹ Statistics from the Delivering 2032 Delivery Plan and Qld Gov sources.

standard. This reputation has a long tail: it underpins investor confidence, strengthens the case for future infrastructure and industrial investment, and positions Queensland firms to win work well beyond 2032. The converse carries equal weight. Visible supply disruptions, freight bottlenecks or pre-Games reports of logistical trouble would erode that confidence just as publicly. In a globally televised environment, operational stumbles become reputational events, with the potential to dampen the very investment momentum the Games are intended to catalyse. The opportunity, therefore, is twofold: first, to deliver Games logistics flawlessly; and second, to deliberately showcase the underlying capability, planning systems, coordination frameworks and home-grown expertise as a durable asset for Queensland and Australia. Treating the supply chain not merely as an operational necessity but as a strategic demonstration of competence converts a one-off delivery challenge into a lasting economic dividend.

The core problem

Brisbane's freight vulnerability is structural: Despite being one of Australia's longest continuous urban corridors, Southeast Queensland is characterised by limited transport redundancy, with few parallel routes or modal alternatives. An example of this is the Port of Brisbane (\$73.5 billion trade)² which relies on the Gateway Motorway with limited freight rail capacity, and while urban freight rail exists, none operate at a scale that may be able to absorb displaced road freight during the construction peak and the two-month Games period.

Currently the scale of the 'problem' cannot be truly known by anyone as there is a lack of reliable freight movement data and integrated system modelling in order to discern whether the impact would be minor or significant. The secondary problem therefore is that the scale of the primary problem cannot be known.

Workshop findings

Workshop voting produced clear results: 71% of participants voted for a dedicated freight programme or full coordination (weighted average 3.95/5). The top priorities were institutional: an SEQ Freight Forum (23 votes), Construction Logistics Plans with cumulative impact assessment (22 votes), and freight-specific Games Route Network (GRN) design (21 votes). The dominant legacy theme was permanency, and the most frequent open-text word was 'collaboration'. The sector wants to be at the table, not managed from the outside.

Summary of issues, evidence and recommendations

The following table connects the key issues identified through the research and workshop to the evidence base and recommended actions.

Table 2 Issue, evidence and recommendations summary

Issue	Evidence	Industry Stakeholder Insights	Recommended Action
Corridor-level freight impacts are not yet quantified across the construction, Games and legacy phases	Queensland's freight modelling is fragmented across multiple models with no integrated capability to test Brisbane 2032 construction, Games and legacy scenarios at corridor level.	Common thread across all phases. Corridor competition (28 votes), GRN restrictions (16 votes) and staging constraints (10 votes) are all based on observed overlap, not quantified impact.	Package A (foundational): Commission an integrated corridor-level Freight Impact Assessment before any other intervention. This is the precondition for evidence-based decisions.
Peak construction demand will concentrate on a few key freight corridors	Brisbane 2032 involves a \$7.1B venue programme and \$20B+ of concurrent transport infrastructure, with peak construction overlap forecast for 2027–2029, concentrating movements on major SEQ corridors linking the Brisbane, Gold Coast and Sunshine Coast zones.	Top construction vote (28, 40%). Described as the highest systemic risk: a crunch period with no coordination.	Package A: SEQ Freight Forum + Construction Logistics Plans with cumulative BAU impact assessment

² Port of Brisbane (2025), Strong FY25 trade through Port of Brisbane, Port of Brisbane Pty Ltd, viewed 10 April 2026, <<https://www.portbris.com.au/w/strong-fy25-trade-through-port-of-brisbane>>

Issue	Evidence	Industry Stakeholder Insights	Recommended Action
BAU freight is not a defined requirement in the Delivery Plan	The Delivery Plan 2032 is framed around a 90% public and active transport target for Games trips, while the report notes BAU freight continuity is a co-equal system requirement given shared corridors, curfews, staging areas and operational windows.	13 votes. Freight described as an afterthought, not a co-equal planning consideration.	Package A: Forum provides the institutional mechanism. Freight Impact Assessment provides the evidence base.
GRN access arrangements may constrain freight on low-redundancy corridors	Brisbane has no fully available freight alternative to road (0 of 4), and the Gateway Motorway provides sole road access to the Port of Brisbane, Brisbane Airport cargo, and fuel terminals, making GRN constraints on low-redundancy corridors a material BAU freight risk over a two month Games period across three zones.	Top event vote (16, 43%). Gateway dependency (10, 27%). 70% of event votes on physical constraints.	Package B: Design freight exemptions, access windows and priority corridors into the GRN from the outset.
Operators need early, stable and clear freight access rules	Key freight gateways rely on constrained corridors (e.g., Gateway Motorway approximately 160,000 vehicles/day) and limited network redundancy; given the multi zone footprint and extended Games period, freight operators need early access rules to plan routes, rosters and inventory for BAU continuity.	8 votes. Uncertainty described as more damaging than the restrictions themselves.	Package B: Publish GRN freight rules early. Shared information platform for real-time disruption management.
Out-of-hours delivery needs early trials and an agreed framework	The report notes the existing public transport network is estimated to serve only approximately 50% of projected Games related trips; shifting some freight activity to off peak periods is a practical lever to create road capacity during both the 2027–2029 construction peak and the extended 2032 Games period.	16 votes (26%). Supported but conditional: community acceptance, curfew rules, early trials essential.	Package B: Develop and trial Out-of-Hours (OOH) framework during construction. Package C: Formalise into permanent planning policy.
Games freight arrangements may not transition to BAU	Brisbane 2032 is explicitly a multi phase task (construction, Games operations and post Games demobilisation), and the report positions the Games as a catalyst to institutionalise enduring freight coordination capability and data, without a deliberate legacy transition, temporary arrangements may be lost post 2032.	Top legacy vote (21, 31%). Games described as a catalyst for permanent reform, not a temporary programme.	Package C: Enshrine freight coordination as a permanent function. Three-lives logistics hubs. Retain data capability.

Recommended freight response packages

This White Paper sets out a sequenced set of recommended packages, each building on the previous, to illustrate the minimum actions required for a successful Games, and the additional measures needed to secure long-term freight legacy outcomes.

The stakeholder results support a dedicated freight programme as the minimum credible response, with further measures recommended where Government seeks to maximise resilience and legacy benefits.

Three recommended packages are set out to illustrate the minimum, enhanced and legacy-focused freight responses required to support Brisbane 2032:

- **Recommended Foundations – required in all cases (Package A):** Laying the Foundations. Establish the Southeast Queensland Freight Forum³, require Construction Logistics Plans to be considered systemically and cumulatively, including comprehensive BAU impact assessments, and initiate a corridor-level Freight Impact Assessment. This is a low-cost recommendation and represents the essential level of coordination required prior to the construction peak anticipated between 2027 and 2029.
- **Recommended minimum response (Package B):** Comprehensive Freight Programme. This package builds on Package A by introducing dedicated freight Green Games Route Network (GRN) access protocols, an out-of-hours delivery framework, a centralised information-sharing platform, and contingency plans for ports and airports. It aligns with the approach adopted for London 2012 and is considered a moderate-cost recommendation. Notably, 71% of workshop participants endorsed this package or higher, underscoring strong support for a dedicated freight programme.
- **Recommended enhancement for permanent legacy (Package C):** Comprehensive Coordination with Lasting Legacy. Building upon Package B, this recommendation (dependent on findings of Package A) incorporates the investigation of three-lives logistics hubs, a coordinated staging network, the formalisation of freight coordination as a permanent institutional function, an established out-of-hours delivery policy, and enhanced freight data capability. Package C represents the complete vision, endorsed by 39% of workshop participants, the largest single cohort. Notably, it is the sole package to directly address the permanency theme, allowing benefits beyond the Games.

Illustration of the Brisbane Olympics 2032



3 Such a forum can either be a standalone advisory and working group or be appended to an existing engagement function.

1. Introduction

In 2021, Brisbane was selected to host the 2032 Summer Olympic and Paralympic Games under the reformed Future Host Commission process, scheduled for July–August 2032 (Olympics) and August–September 2032 (Paralympics). This is a multi-venue event, where Games will be hosted beyond the CBD across Southeast Queensland and regional centres, including the Sunshine Coast, Gold Coast, Cairns, Townsville, Whitsundays, Rockhampton, Toowoomba, Maryborough and Mackay.

The 2032 Delivery Plan sets out the Queensland Government’s vision to deliver reliable and integrated transport connections across Southeast Queensland, including major rail, road and metro upgrades linking Brisbane, the Gold Coast and the Sunshine Coast. Brisbane will be the smallest city to host the Summer Games in over 80 years, and the existing public transport network is estimated to accommodate only around 50% of projected Games-related trips, compared to a target of 90% by public and active transport. This gap highlights the need for substantial mass transit investment to support demand and maintain network performance. As with previous Olympic host cities, supply chain and logistics impacts extend beyond the event period, with planning, construction, operations and post-Games legacy phases all influencing transport and freight task requirements.

Accordingly, this report examines two key domains: (1) Olympic-related freight and logistics across upstream, midstream and downstream processes; and (2) business-as-usual (BAU) supply chains, including retail, manufacturing, construction, fuel, agriculture and general commercial freight operating alongside the Games.

Brisbane 2032 also presents a broader strategic opportunity beyond event delivery. It is a global shop window for Queensland’s logistics and supply chain capability, placing the State’s ability to coordinate complex, time-critical operations under international scrutiny. For investors, trade partners and major project proponents, seamless venue logistics, reliable freight coordination and resilient supply chains will signal that Queensland can deliver at a world-class standard. That reputational dividend can outlast the Games themselves by strengthening confidence in future infrastructure, industrial and trade investment. Equally, visible disruption or sustained freight bottlenecks would become public signals of capability shortfall. For this reason, the freight task should be understood not only as an operational requirement, but also as a strategic opportunity to demonstrate Queensland’s planning systems, coordination capability and home-grown expertise on a global stage.

Figure 1 (as illustrated on the following page) provides a pathway-based framing of Brisbane 2032, distinguishing Games-specific supply chains (G) from BAU freight (B) across upstream, midstream, and downstream stages. This highlights the needs of both supply chains that must be jointly considered so that necessary freight processes are not compromised before, during and after the Games.

Figure 1 Games-specific and Business-as-usual Logistics Pathway Overview

Upstream: Planning and Mobilisation



- G** Define Games logistics **scope and demand**, accreditation and **security** design around critical access points
- B** **Scenario planning** around restrictions: **off-peak delivery windows**, rerouting networks, identify critical commodity transport
- G** **Procure/ contract providers**, fleets, warehousing strategy, **construction** or **upgrades** of Games- related infrastructure
- B** Establishing **governance frameworks; data-sharing agreements**, construction consolidation

Midstream: Games Period Management



- G** Inbound and inter-venue distribution; **last-mile transport** of goods to venues, loading docks, timed deliveries
- B** Maintaining freight flows through ports, airports, intermodal terminals; **network management** around corridors near to Games venues
- G** **Real-time operational and mobility control**; crowd management, incident response, designated access routes
- B** **Urban distribution continuity**: servicing hospitals, supermarkets construction sites under restricted conditions

Downstream: Recovery and Legacy Outcomes



- G** **Removal/ return of temporary assets**, waste and packaging management
- B** Post-Games recovery: clear backlog, **normalize delivery windows**. Evaluate impacts against KPIs (consolidation pilots, freight frameworks)
- G** **Asset disposition**, or storage of Games equipment; Close reporting and handover into **legacy reporting**
- B** Establish **institutional legacy** to minimise future disruptions

1.1 Purpose of this report

This White Paper has been prepared by GHD for the Queensland Transport and Logistics Council (QTLIC) to support planning for the Brisbane 2032 Olympic and Paralympic Games. It provides a research and stakeholder evidence-based view of the freight and supply-chain implications for Southeast Queensland, with a focus on protecting BAU supply chains while enabling Games-specific logistics (including venue construction, overlay, catering and broadcast). The findings draw on three evidence streams: desktop research covering seven major sporting events, and Queensland-specific freight data; a targeted survey spanning 11 stakeholder groups; and a facilitated industry workshop with over 45 industry and Government attendees supported by live voting across seven rounds. The voting results represent indicative priorities from a targeted industry group, not a statistically representative sample. Previous major sports events referenced in this report are outlined as below:

- Atlanta Olympics 1996
- Sydney Olympics 2000
- London Olympics 2012
- Gold Coast Commonwealth Games 2018
- Tokyo Olympics 2020
- Qatar World Cup 2022
- Paris Olympics 2024

The work was commissioned by QTLIC in collaboration with the Committee for Brisbane and Infrastructure Association Queensland. Participants included port and airport operators, container terminals, distribution centres, construction materials suppliers, fuel distributors, agricultural exporters, government agencies and industry bodies.

1.2 Scope of work

The scope of work included:

- Review and consolidation of survey responses provided by QTLC to develop an evidence-led synthesis of key freight issues, opportunities and suggested actions, with an explicit lens on BAU supply chains and Games-specific logistics supply chains.
- Targeted desktop research on global major sporting events with a focus on transferrable practices for freight continuity and logistics enablement.
- Translation of report findings into a practical set of recommendations for government and private sector stakeholders and develop a prioritised set of package recommended actions with varied levels of coordination to assist QTLC and partners to sequence actions .
- Prepare a short discussion guide and slide pack to support QTLC’s planned function/taskforce to test and refine themes and solutions for incorporation into the White Paper.

1.3 Limitations

This report has been prepared by GHD for Queensland Transport Logistics Council and may only be used and relied on by Queensland Transport Logistics Council for the purpose agreed between GHD and Queensland Transport Logistics Council as set out in this report.

GHD otherwise disclaims responsibility to any person other than Queensland Transport Logistics Council arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on industry engagement and assumptions made by GHD and described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

The data inputs used in the stakeholder analysis (Sections 6 and 8) are provided by or on behalf of the Queensland Transport and Logistics Council. GHD has not independently verified or checked the inputs beyond its agreed scope of work.

GHD has prepared this report on the basis of information provided by the Queensland Transport and Logistics Council and others who provided information to GHD, which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

Any mentions of “Business-as-usual” in this report refers to the routine freight movements independent of any Olympics-related movement, supporting Queensland’s economy and essential services, and which must continue to operate effectively before, during and after the Brisbane Olympics and Paralympic Games 2032. This includes but is not limited to commercial and retail freight, industrial port and airport freight, regional and interstate transport flows etc.

“Games-specific” dictates freight, logistics and supply-chain activities that exist solely because of the Olympic and Paralympic Games, and which are additional to normal economic activity.

1.3.1 Accessibility of documents

If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.

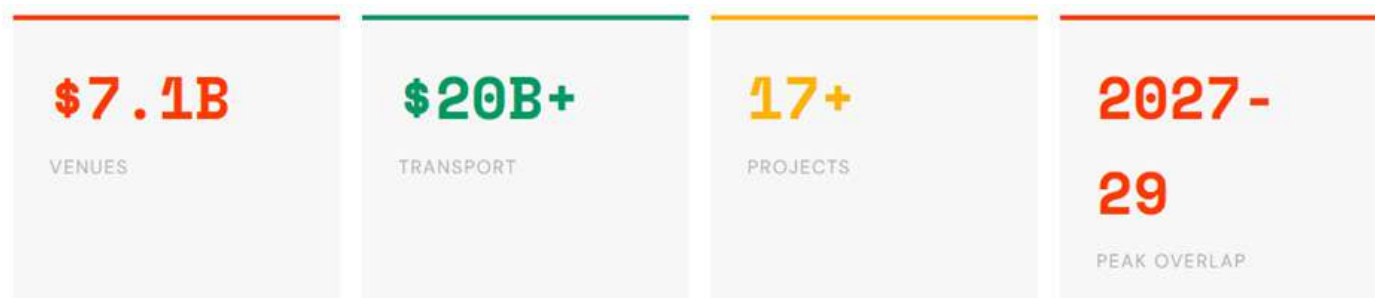
2. Brisbane 2032: the freight context

2.1 Scale and geographic complexity

Hosting 10,500 athletes, 45,000 accredited personnel, and an estimated workforce of 50,000 or more (including volunteers), the scale of Brisbane 2032 will be unprecedented for the region. Competition venues, Athletes' Villages and media centres will be distributed across the Brisbane, Gold Coast and Sunshine Coast zones, connected by corridors of 65 to 85 kilometres. Figure 2 summarises the Brisbane 2032 Context in numbers:

- The venue programme (\$7.1 billion)⁴ includes:
 - Victoria Park Stadium (\$3.8 billion)
 - Athletes Village
 - Brisbane Arena
 - Aquatic Centre
 - Regional venues.
- Concurrent transport infrastructure exceeds \$20 billion:
 - Cross River Rail (\$6.9 billion)
 - The Wave (\$5.5 to \$7 billion)
 - Logan to Gold Coast Faster Rail
 - Brisbane Metro (\$1.2 billion)
 - Bruce Highway (\$9 billion+)
 - Coomera Connector.
- Peak construction overlap is forecast for 2027 to 2029.

Figure 2 Brisbane 2032 Freight Context



This polycentric model⁵ is qualitatively different distinct from previous Games, such as London 2012 (centralised at Stratford) or Paris 2024 (connected by metro). The closest domestic precedent is the Gold Coast 2018 Commonwealth Games, which operated across a smaller footprint but still required a GRN covering more than 300 kilometres for a single-zone, 12-day event.⁶ Brisbane 2032 spans three zones across two months and it is the smallest city in over 80 years to host the Summer Games. Brisbane's existing public transport network serves approximately 50 percent of projected Games trips, with a target of 90 percent by public and active transport.⁷

4 ABC News (2025), Queensland and federal governments strike funding deal for 2032 Olympic Games; <https://www.abc.net.au/news/2025-07-03/queensland-federal-governments-2032-olympics-funding-deal/105490846>

5 Multiple hubs and notes

6 Queensland Department of Transport and Main Roads 2024, Our 2018 Commonwealth Games legacy, Queensland Government; <https://www.tmr.qld.gov.au/About-us/Corporate-information/Our-2018-Commonwealth-Games-legacy>

7 Games Independent Infrastructure and Coordination Authority (GIICA) 2025, 100 Day Review Report; <https://www.giica.au/uploads/documents/100%20Day%20Review%20Report%20-%208%20March%202025%20APPROVED.pdf>,

The multi-zone footprint also creates a regional airport coordination task, with Brisbane Airport, Gold Coast Airport, Wellcamp and other relevant airport interfaces potentially supporting different passenger, freight, charter, emergency logistics and contingency functions during the construction and Games periods.

2.2 Freight network vulnerabilities

Brisbane's freight network vulnerability is a defining relevant feature of the Brisbane 2032 context because it limits the system's ability to absorb disruption. During the 2027–2029 construction peak and the extended Games period, passenger-priority measures, construction staging and incident response will induce peak-to-peak corridor usage as BAU supply chains will be operating in a regular handling capacity. In this setting, the question is not whether freight can be shifted, but whether there are credible alternatives when road access or travel times degrade.

Figure 3 shows the overlap in timing between major BAU infrastructure programmes and Games-related construction, demonstrating the prolonged period during which freight demand is concentrated on the same corridors.

Figure 3 Convergence of major BAU and games-related construction project timelines

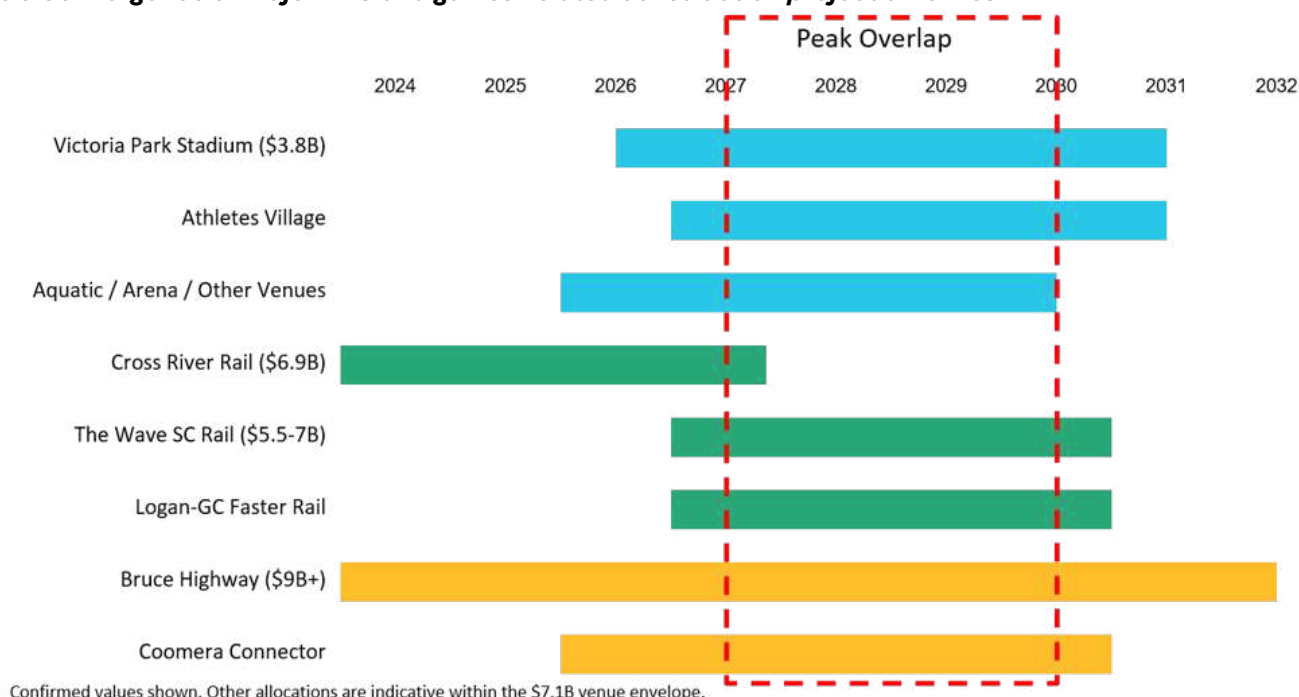


Table 3 provides a high-level comparative lens across 4 recent Olympics host cities by assessing whether alternative freight modes or routes were available at Games time. The comparison highlights Brisbane's structural constraint: it has no fully available alternative to road freight (0 of 4). London, Tokyo and Paris were able to draw on a broader mix of rail, waterborne recommended actions, metro access and/or alternative road routes to maintain continuity when primary corridors were constrained.

Table 3 Freight alternatives comparison across past major sports events

Mode	London 2012	Tokyo 2020	Paris 2024	Brisbane 2032
Freight Rail to Port	Available	Available	Limited	Limited
Urban Rail / Metro	Available	Available	Available	Limited
River or Coastal Freight	Available	Available	Available	Limited
Alternative Road Routes	Available	Limited	Limited	Limited

Gateway corridor exposure should also be viewed in the context of parallel gateway growth. Brisbane Airport precinct growth, including southern precinct activity, and the Port of Brisbane Channel Enhancement Project may each generate additional construction, servicing and logistics movements over the same broad period as Games-related works. These projects reinforce the need for the FIA to test cumulative gateway demand, rather than treating airport, port, construction and Games activity as separate or sequential tasks.

2.2.1 The gateway problem

This vulnerability is most acute on the Gateway Motorway corridor, which functions as a single point of pressure for SEQ's paired international gateways, the Port of Brisbane and Brisbane Airport, as well as fuel terminals and major distribution precincts. For Brisbane Airport, this includes belly-hold freight carried on passenger services, dedicated air cargo services, and airport-linked warehousing and distribution activity that depends on reliable landside access. The corridor carries approximately 160,000 vehicles per day⁸ and provides critical road access to port terminals, airport passenger and cargo facilities, fuel terminals at Pinkenba and Lytton, and the Eagle Farm and Murarrie distribution precincts. In practical terms, any GRN restrictions, incident-related closures or construction staging impacts on the Gateway corridor can translate directly into BAU consequences: longer container turnaround, constrained fuel resupply, disrupted air cargo, passenger access impacts and reduced just-in-time distribution reliability due to limited viable substitutes. The scale of this exposure is reflected in recent disruption experience: during the 2022 floods, Gateway closure affected 49% of Queensland businesses.⁹ For Brisbane 2032, this reinforces the narrative that freight access must be designed into GRN planning and supported by corridor-level impact assessment, rather than assuming displaced demand can be absorbed elsewhere.

⁸ Queensland Department of Transport and Main Roads (TMR) n.d., Gateway Motorway and Bruce Highway upgrades, Queensland Government; <https://www.tmr.qld.gov.au/projects/programs/gateway-motorway-and-bruce-highway-upgrades>

⁹ Small Business Connections 2022, '6 Months from Queensland's flooding: half of state's SMEs still financially impacted', Small Business Connections;

3. What previous Games tell us

Drawing on the experiences of seven prominent global sporting events, a high-level review has revealed four key lessons that can be directly applied to Brisbane 2032. They are Atlanta Olympics 1996, Sydney Olympics 2000, Gold Coast Commonwealth Games 2018 (GC2018), London Olympics 2012, Tokyo Olympics 2020, Qatar World Cup 2022, and Paris Olympics 2024. Each lesson is grounded in practical outcomes observed in recent host cities, and together they offer a roadmap for mitigating operational risks, maintaining supply chain continuity, and maximising long-term benefits for Brisbane and the wider Queensland region.

3.1 Dedicated freight planning delivers results

London 2012 invested GBP 4 million in a dedicated freight programme that included a standing Freight Forum, a freight journey planner, a Code of Practice for Quiet Deliveries and daily operational briefings. The results were measurable: 45% of operators retimed deliveries, a 15% reduction in peak heavy vehicle movements, and approximately 40% reduction in construction heavy vehicle movements through coordinated Construction Logistics Plans. Critically, the Freight Forum, Delivery Unit and Code of Practice were designed for permanency from the outset and continue to operate 14 years later.^{10,11}

By contrast, Atlanta 1996 had no dedicated freight planning. The International Olympic Committee issued a formal reprimand for transport management, and BAU supply chains were materially disrupted¹². This failure prompted fundamental reforms in how subsequent host cities approached logistics planning.

3.2 Information matters as much as infrastructure

Across all case studies, the quality of information provided to freight operators was as important as physical infrastructure. London's success was built on communication quality: real-time disruption information, daily updates and feedback loops via a dedicated Freight Journey Planner that accounted for vehicle dimensions, time-of-day restrictions and GRN conditions. Paris 2024 deployed the J'Optimiz digital platform for real-time access rules, delivery zone management and permit-based controlled access across four tiered security perimeters¹³. Qatar's Al-Nadeeb logistics platform provided electronic customs declarations, risk-based inspections and inter-agency coordination, and remains operational as a permanent logistics tool¹⁴. In each case, operators who had early, reliable information adapted successfully; those without it experienced failed deliveries, wasted trips and unplanned costs.

10 Chartered Institute of Logistics and Transport (UK) 2013, "London 2012 effect" could increase road safety and benefit the environment.

11 Transport for London (TfL) 2013, Olympic legacy monitoring: Adaptations to deliveries by businesses and freight operators during the Games (Travel in London supplementary report), TfL; <https://content.tfl.gov.uk/olympic-legacy-freight-report.pdf>

12 Amodei, R, Bard, E, Brong, B, Cahoon, F, Jasper, K, Manchester, K, Robey, N, Schneek, DC, Stearman, B & Subramaniam, S 1997, 1996 Atlanta Centennial Olympic Games and Paralympic Games event study (FHWA-RD-97-107), United States Federal Highway Administration; <https://rosap.nhtl.bts.gov/view/dot/3105>

13 Cour des comptes 2025, The Paris 2024 Olympic and Paralympic Games, Cour des comptes; <https://www.ccomptes.fr/en/publications/paris-2024-olympic-and-paralympic-games>

14 TLME News Service 2025, 'How the FIFA World Cup has transformed Qatar's transport and logistics landscape', Transport and Logistics Middle East; <https://www.transportandlogisticsme.com/smart-logistics/how-the-fifa-world-cup-has-transformed-qatars-transport-and-logistics-landscape>

3.3 Freight must be designed into the GRN, not retrofitted

Tokyo 2020 exempted freight from expressway toll surcharges, recognising that commercial supply chains could not absorb the same restrictions applied to passenger vehicles. The result was a 25% reduction in passenger vehicle demand on weekdays and an 80% decrease in time lost to congestion, while freight continued to operate throughout the Games period¹⁵. Paris 2024 operated four tiered security perimeters with different vehicle authorisation levels, but late changes to access rules caused delivery failures at venue sites; 15% of logistics operators placed larger advance orders to reduce delivery frequency, and out-of-hours delivery proved unfeasible for some sectors, including butchers needing daytime redistribution and express services that could not be time-shifted¹⁶. The Gold Coast 2018 GRN covered 300 kilometres for a single-zone, 12-day event¹⁷. Brisbane 2032 spans three zones across two months.

3.4 Legacy requires deliberate design

Sydney 2000 demonstrated the default outcome: travel behavioural changes reverted almost entirely after the Games¹⁸. London 2012 is the exception because permanency was deliberately designed from the outset, with the Freight Delivery Unit, Forum and Code of Practice all transitioning to permanent functions. Paris 2024 showed the scale of the reverse logistics task: CEVA Logistics deployed approximately 500 staff for post-Games dismantling, nearly double the setup workforce, with disruptions extending through October 2024 and heightened cargo theft risk as congested routes created opportunities for criminal targeting¹⁹. Qatar 2022 delivered permanent infrastructure legacy through the Doha Metro, Orbital Highway links to Hamad Port and expanded airport cargo facilities, with the Al-Nadeeb platform continuing as an operational tool.²⁰

3.5 Comparative analysis

Table 4 compares freight management across the seven other previous events and Brisbane. Across the case studies, performance depended not only on passenger transport, but on how effectively freight and BAU logistics were protected alongside event operations. The comparative analysis below highlights how approaches range from temporary constraint management to more structured, regulated coexistence models. The table below highlights a set of logistics measures that are transferrable to Brisbane 2032, to tackle some existing freight or supply-chain related barriers, provided they are adapted to Brisbane's polycentric geography, long transport corridors and heavy reliance on road-based freight.

15 Tokyo Metropolitan Government 2022, Tokyo 2020 Measures & Achievements on Transportation, Tokyo Metropolitan Government; <https://www.2020games.metro.tokyo.lg.jp/Tokyo2020%20Measures%20%26%20Achievement%20on%20Transportation2022Mar.24.pdf>

16 Sierra, ME 2024, 'Impacts on Transportation and Logistics Due to the Paris 2024 Olympic and Paralympic Games', Prodensa; <https://www.prodensa.com/insights/blog/impacts-on-transportation-and-logistics-due-to-the-paris-2024-olympic-and-paralympic-games>

17 Queensland Department of Transport and Main Roads 2024, Our 2018 Commonwealth Games legacy, Queensland Government; <https://www.tmr.qld.gov.au/About-us/Corporate-information/Our-2018-Commonwealth-Games-legacy>

18 Brewer, AM & Hensher, DA 2001, The impact of staging a major event on commuters' work and travel behaviour: The Sydney 2000 Olympic Games, Australasian Transport Research Forum (ATRF); <https://australasiantransportresearchforum.org.au/the-impact-of-staging-a-major-event-on-commuters-work-and-travel-behaviour-the-sydney-2000-olympic-games/>

19 CEVA Logistics n.d., Olympic and Paralympic Games Paris 2024, CEVA Logistics; <https://www.cevalogistics.com/en/paris2024>

20 Qatar General Authority of Customs n.d., Al Nadeeb Clearance system, Qatar Customs; <https://www.customs.gov.qa/English/AlNadeeb/Pages/default.aspx>

Table 4 Comparative analysis of freight management across major sporting events

Freight Topic	Atlanta 1996	Sydney 2000	Paris 2024	Tokyo 2020	Qatar 2022	Gold Coast 2018	London 2012	Brisbane 2032
Games logistics	No dedicated freight programme; transport management failures. ²¹	Multi-agency governance structure to managing international and domestic freight; structured processes for customs clearance and last-mile delivery to venues. ²²	One-stop digital platform to undertake manage crowd movement, venue access and last-mile coordination within a live city ²³ environment.	Centralised GRN that allowed streamlined patron access; heavy reliance on behavioural change and government incentive uptake rather than digitisation. ²⁴	Temporary venue-based transport plans with strong use of park-and-ride and shuttle services; limited digital integration. ²⁵	Venue-centric transport operations using park-and-ride, shuttle buses and temporary traffic management. 24/7 Transport Coordination Centre (TCC) allowed for real-time monitoring but only on a governance level ²⁶ Games.	Security screening near Games venues to avoid bottlenecks at critical access points; Olympic Route Network (ORN) for designated road access to Venues; enhanced public transport infrastructure like park-and-ride and boosted train frequency to reduce need for road vehicle usage	Strong focus on passenger mobility, with target of 90% trips to venues by public and active transport, delivered through Brisbane Metro expansion, bus corridors, rail upgrades and venue-specific access planning ²⁷ . Enhanced TCC with digital capabilities exclusively for Games-related passengers.
BAU Freight	BAU supply chains materially disrupted. ²⁸	Regulated co-existence model including accredited delivery regimes and restricted time windows and full capacity handling on Port of Sydney Harbour. ²⁹	Regulated co-existence model: credentialed freight access, time-window controls and managed delivery regimes within security parameters.	Voluntary and administrative suppression of BAU freight (retimed or reduced deliveries, mandatory construction delays) amplified by Covid-19 conditions. ³⁰	Digital and physical infrastructure separation to manage competing logistics, allowing BAU trade to continue in regular handling capacity during Games.	Limited formal BAU freight planning; reliance on localised traffic management and off-peak deliveries.	Freight Management Programme to facilitate off-peak delivery and organised rerouting during the Games; Digital freight information tool for consolidated access; stringent procurement controls for escalated construction timeframes. ³¹	No explicit BAU freight or supply chain management framework outlined in the Delivery Plan. BAU continuity implicitly reliant on road upgrades (Bruce Highway, M1 Gateway) and network capacity improvements rather than Games-time freight governance
Freight Legacy	None (failure prompted later reforms).	Dedicated Freight Manual and Coordination Framework as precedence in Sydney for future urban-mega events ³² .	Emerging institutional legacy in freight access governance and digital permitting for major events in dense urban settings.	Little to no freight legacy since it operated under Covid environment.	Al-Nadeeb logistics platform remained operational; other than that minimal freight legacy, largely operational rather than institutional.	Minimal freight legacy; largely operational rather than institutional. However, it escalated Gold Coast Light Rail projects and widening transport corridors for better traffic capacity. ³³	Freight Delivery Unit, and rail lines and power tunnels development supporting East London community precinct growth; Establishing freight forum to consistently gather participant insights across the supply chain for continued productivity improvement. ³⁴	Legacy focus is on passenger transport network expansion or upgrades, regional connectivity, operational streamlining, and road capacity enhancements ³⁵ . No stated institutional or digital freight legacy.

21 Batuhan, T. (n.d.) The politics of Olympic transportation planning: The case of the 1996 Atlanta Summer Olympic Games; <https://digital.la84.org/digital/api/collection/p17103coll10/id/13721/download>

22 OECD & IOC (n.d.) Sydney 2000's integrated approach to Games delivery. <https://www.oecd-ioc-olympics-planning-toolkit.org/case-study/sydeny-2000-integrated-approach-to-games-delivery/>;

23 Paché, G. (2024) 2024 Olympic and Paralympic Games: Spotlight on urban logistics challenges; https://hal.science/hal-04780300v1/file/TEBR_SepOct24_2024%20Olympic%20and%20Paralympic%20Games.pdf.

24 Tokyo Metropolitan Government (2021) Tokyo Metropolitan Government Olympics 2021 logistics management study; <https://www.2020games.metro.tokyo.lg.jp/Tokyo2020%20Measures%20%26%20Achievement%20on%20Transportation2022Mar.24.pdf>

25 Transport and Logistics ME 2022, 'How the FIFA World Cup transformed Qatar's transport and logistics landscape'; <https://www.transportandlogisticsme.com/smart-logistics/how-the-fifa-world-cup-has-transformed-qatars-transport-and-logistics-landscape>

26 IES Queensland 2018, 'Gold Coast 2018 Commonwealth Games – managing unprecedented challenges in engineering logistics and traffic flow', viewed 6 May 2026; <https://www.iesqlld.org/wp-content/uploads/2023/08/Approved-Comms-Games-Article.pdf>

27 Queensland Government (n.d.) Transport — The 2032 Delivery Plan; <https://www.delivering2032.com.au/legacy-for-queensland/transport>

28 Amodei, R. et al. (1997) 1996 Atlanta Centennial Olympic Games and Paralympic Games event study. United States Federal Highway Administration; <https://rosap.ntl.bts.gov/view/dot/3105>

29 OECD/IOC n.d., Sydney 2000's integrated approach to Games delivery, OECD–IOC Olympics Planning Toolkit; <https://www.oecd-ioc-olympics-planning-toolkit.org/case-study/sydeny-2000-integrated-approach-to-games-delivery/>

30 Tokyo Metropolitan Government et al. (2021) Request for cooperation concerning logistics during Tokyo 2020 Olympic and Paralympic Games; https://www.2020games.metro.tokyo.lg.jp/taikaijyunbi/torikumi/yusou/2020tdm/logistics_pdf/Request_for_cooperation_concerning_logistics_during_Tokyo_2020_Olympic_and_Paralympic_Games.pdf

31 Currie, G., Jones, A. and Woolley, J. (2014) Impacts and lessons from the London 2012 Olympic Games travel demand management program; <https://research.monash.edu/en/publications/impacts-and-lessons-from-the-london-2012-olympic-games-travel-dem/>

32 Sydney Organising Committee for the Olympic Games 1998, Freight manual: Sydney 2000 Olympic Games, Olympic World Library; <https://library.olympics.com/Default/doc/SYRACUSE/3154834/freight-manual-sydney-2000-olympic-games-sydney-organising-committee-for-the-olympic-games?lg=en-GB>

33 Ernst & Young 2018, Gold Coast 2018 Commonwealth Games Post Game Evaluation Report, EY, Gold Coast; https://www.dts.qld.gov.au/_data/assets/pdf_file/0007/1897963/gc2018-beyondthegames-legacy-report.pdf

34 Butcher, L. (2012) London Olympics 2012: transport; <https://researchbriefings.files.parliament.uk/documents/SN03722/SN03722.pdf>

35 WT Partnership (2026) From vision to legacy: A game plan for Brisbane 2032 and beyond; <https://wtpartnership.com.au/wp-content/uploads/2026/02/WT-report-From-vision-to-legacy-a-game-plan-for-Brisbane-2032-and-beyond.pdf>

4. QTLC initial survey analysis

Prior to the workshop a Brisbane 2032 Freight Impacts Survey was conducted amongst 11 key stakeholder groups to translate them into a contextualised opportunities and challenges narrative for the purpose of this Report. QTLC received responses from representatives spanning across the freight supply chain, including investors, consultancies, port & airport managers, warehouse operators, academics, importer/exporters, transport operators, infrastructure delivery bodies as well as stevedores. Stakeholders consistently framed the central risk as access and capacity constraints driven by passenger priority, congestion and cumulative construction disruption. The survey also identified specific operational risks including specialised OSOM (over-size over-mass) escort resources as potential binding constraints, and night works removing network relief capacity as a compounding factor during construction.

4.1 Assumptions

Survey findings are based on a targeted, non-statistically representative sample of stakeholders and are therefore interpreted as indicative rather than definitive. Responses are assumed to reflect each organisation's role and exposure within the supply chain and have been provided in the context of incomplete Games-time detail on security perimeters, credentialling and access rules. The analysis relies primarily on qualitative judgement and assumes broadly consistent interpretation of key terms (e.g. "critical freight", "BAU" and "priority access"), noting that these may vary between respondents and should be validated through subsequent modelling, operational data and scenario testing.

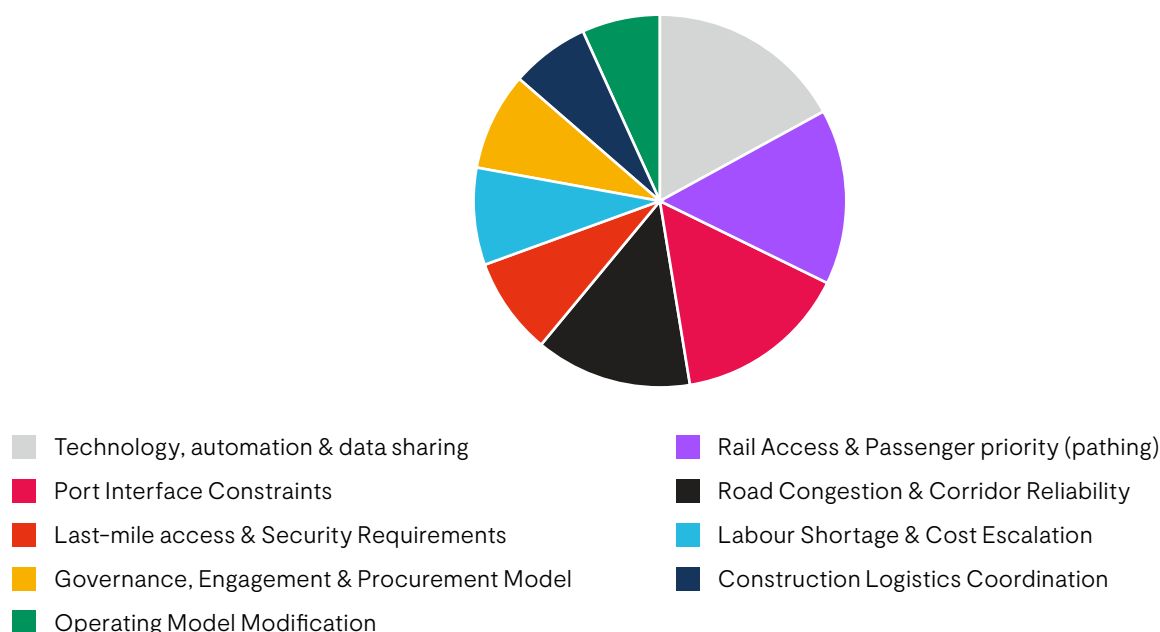
4.2 Key themes

Analyses of the stakeholder findings identified 9 key freight-related themes, with stakeholders consistently framing the central risk as access and capacity constraints on both rail and road, driven by passenger priority, congestion and cumulative construction disruptions.

Figure 4 illustrates indicative number of mentions for each of the following themes across survey responses (mentions out of 11).

Figure 4 Brisbane 2032: QTLC Freight Survey Key Themes (number of mentions)

Key Stakeholder Findings Themes



The list below outlines BAU-related freight implications of each theme:

- **Technology, automation and data sharing:** The most amplified theme across responses, highlights interest in accelerated adoption of tracking, forecasting and automation by 2032 will depend on enabling (often anonymised) data sharing to improve reliability and offset labour constraints.
- **Rail access and passenger priority (pathing):** Freight rail access may reduce with unprecedented levels of passenger operations unless freight pathing and priority settings are agreed early.
- **Port interface constraints (Fisherman Islands/channels):** Maintaining efficient landside links and clear staging/ laydown plans to manage interface constraints and protect terminal performance.
- **Road congestion and corridor reliability:** Overlapping construction and visitor demand may reduce travel time reliability on key corridors, affecting BAU and Games servicing.
- **Venue/last-mile access and security/credentialling:** Venue resupply requires clear security, access and credentialling arrangements (including potential out-of-hours windows) to avoid aborted deliveries.
- **Workforce/material constraints and cost escalation:** Resource shortages across labour and materials may constrain delivery capacity and increase costs during the construction ramp-up.
- **Governance, engagement and procurement model:** Stakeholders seek clearer engagement pathways, procurement transparency and an industry coordination mechanism to align system-wide outcomes, particularly during peak delivery windows.
- **Construction logistics coordination – Construction Logistics Plans (CLP)/Construction Coordination Centre (CCC) / staging:** Coordinated construction logistics planning, booking and consolidation to smooth peaks, reduce trips, and avoid clashing delivery timeframes with Games-related infrastructure construction.
- **Operating model change (24/7, off-peak):** Expanded off-peak and 24/7 operating models may be required at key terminals and for critical deliveries to maintain continuity during peak constraints. Stakeholders highlighted increasing need for information sharing around any operational constraints along midstream pathways of the Games.

5. What industry and the QTLC workshop found

5.1 Workshop context

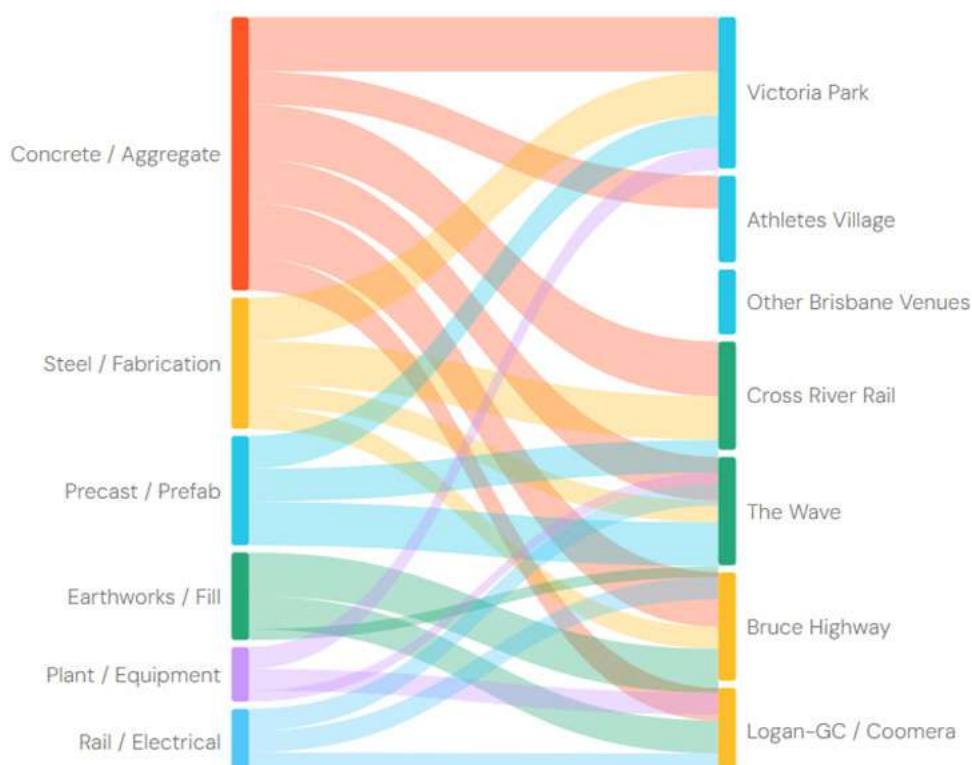
A targeted industry and Government workshop was held by QTLC and GHD to validate and prioritise the freight issues identified through the desktop review and the QTLC survey, with an explicit focus on protecting BAU supply chains while enabling Games delivery. The session was facilitated by GHD and QTLC and used live Mentimeter voting to capture structured preferences across multiple rounds, supplemented by open discussion to test assumptions and identify practical, near-term actions.

An estimated total of 45 participants attended the workshop (both in-person and online), representing a cross-section of the Southeast Queensland freight system, including port and airport-related operators, stevedores and terminals, distribution and warehousing, construction materials and logistics providers, fuel and essential supplies, relevant government agencies, and industry bodies. Discussion and voting were structured around the three Brisbane 2032 phases (Construction, Games-time Operations and Legacy) to surface where constraints are likely to concentrate (e.g., key corridors and access rules) and which interventions should be sequenced first. The results should be read as indicative priorities from a specialist stakeholder group rather than a statistically representative sample, but they provide a clear signal on perceived risk, confidence in current planning settings, and the level of coordination industry believes Brisbane requires. It should also be noted that participants were permitted to select multiple responses during each voting phase.

5.2 Construction phase

The diagram below illustrates the scale of the construction freight task when venue and transport projects are considered together. Every material type flows to every project through the same road corridors, with no coordination assumed.

Figure 5 Illustration of freight flows during peak construction (all projects, uncoordinated scenario)



5.2.1 Construction phase challenges

Against this backdrop, participants identified corridor competition as the dominant construction challenge, attracting 40% of votes. The convergence of 17+ venue projects and \$20 billion in transport infrastructure on shared corridors during the 2027–2029 peak was described as the highest systemic risk. Workforce and materials competition (21 votes – 30%) was framed as a whole-of-society issue extending beyond logistics to housing and migration. The absence of a BAU freight framework in the Delivery Plan (13 votes – 18.6%) was seen as the institutional gap that enables all other risks. Figure 6 demonstrates the results:

Figure 6 Construction phase challenges – workshop survey responses

Construction Phase Challenges (70 votes cast)

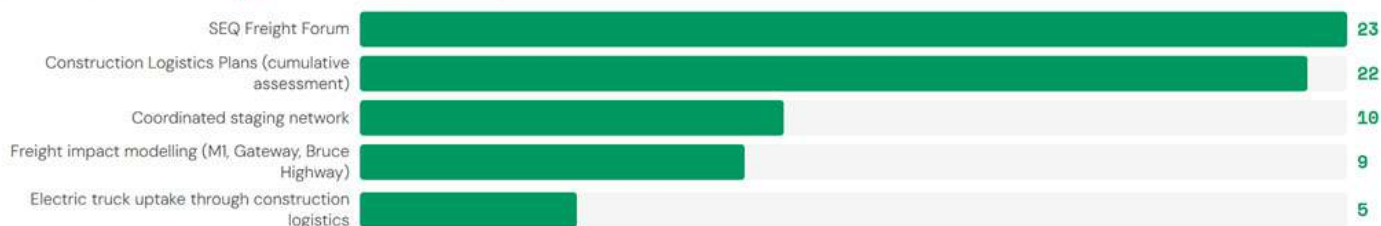


5.2.2 Construction phase opportunities

On opportunities, the Freight Forum (23 votes – 33.3%) and Construction Logistics Plans (22 votes – 31.9%) together attracted 65% of votes, signalling a clear preference for coordination over capital investment. London's CLPs achieved approximately 40% reduction in construction heavy vehicle movements. Coordinated staging (10 votes – 14.5%) addresses the practical problem of inner-city sites with no laydown space. Freight impact modelling (9 votes – 13%) provides the evidence base for every subsequent decision. Figure 7 illustrates the survey responses:

Figure 7 Construction phase opportunities – workshop survey responses

Construction Phase Opportunities (69 votes cast)

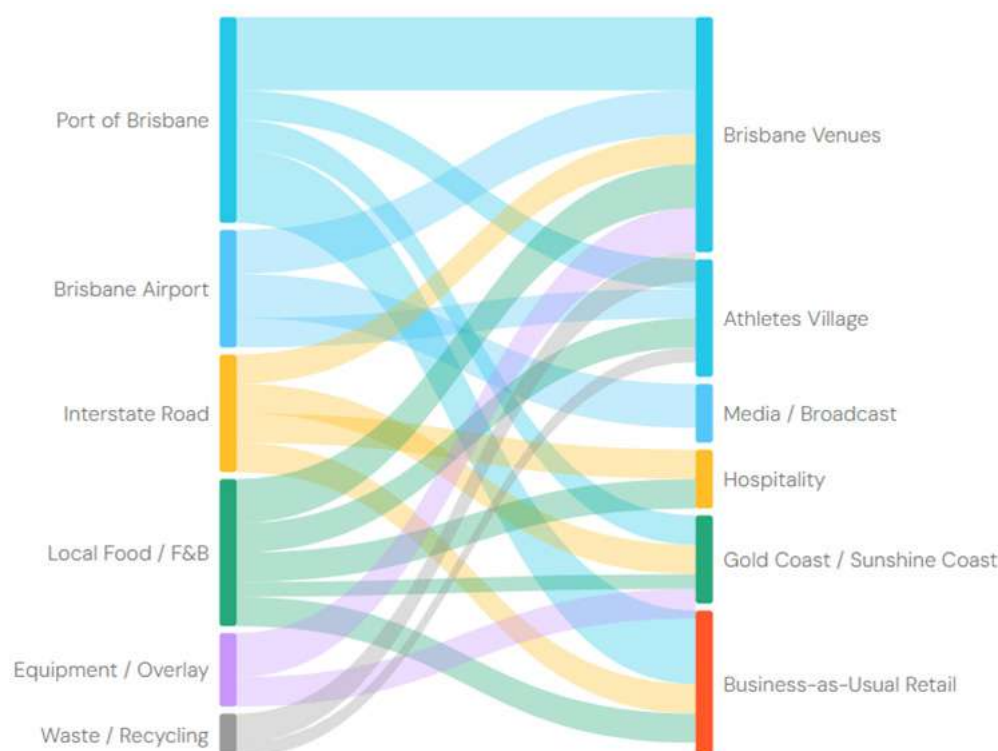


5.3 Event phase

During the Games event phase (July to September 2032), a different freight pattern emerges. Port, airport, interstate, food and beverage, overlay equipment and waste flows all converge on venues, the Athletes Village, hospitality and BAU retail simultaneously.

Figure 8 illustrates the convergence of major freight flows during the Games period, showing how port, airport, interstate and local supply chains simultaneously serve venues, the Athletes' Village, media, hospitality, regional venues and business as usual retail. The diagram highlights the compression of freight movements across multiple zones and destinations onto a limited set of shared corridors.

Figure 8 Illustration of freight flows during Games event phase



5.3.1 Event phase challenges

The GRN and Gateway dependency together attracted 70% of event challenge votes (16 and 10). The room focused on the physical constraint (limited alternative corridors when the GRN restricts road access) rather than the operational details of seasonal overlap. Uncertainty about access rules (8 votes – 21.6%) was described as more damaging than the restrictions themselves: operators cannot plan when they do not know which roads will be available. Figure 9 illustrates the results.

Figure 9 Event Phase Challenges – workshop survey responses

Event Phase Challenges (37 votes cast)

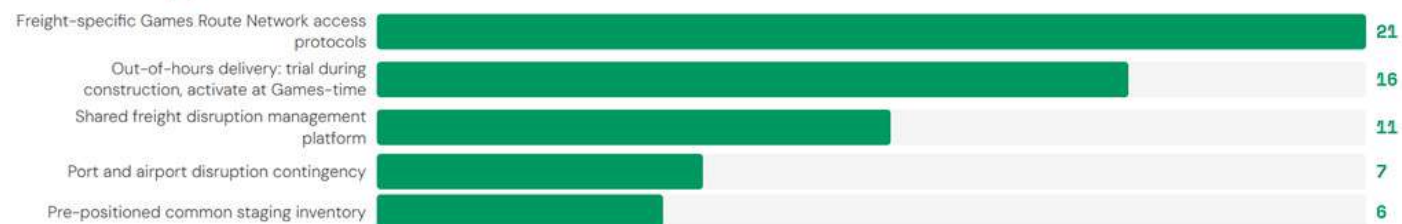


5.3.2 Event phase opportunities

According to the workshop survey responses, freight-specific GRN access protocols emerged as the leading event opportunity, receiving 21 votes (34.4% share). Out-of-hours delivery was also strongly supported, with 16 votes (26.2%), but respondents emphasised the need for community acceptance, well-defined curfew arrangements, and the importance of early trialling before broader implementation. Experiences from other host cities were noted: London achieved a 15% reduction in peak heavy vehicle movements, while Tokyo exempted freight from toll surcharges; however, Paris demonstrated that some sectors could not shift delivery times, highlighting potential limitations. Additionally, a shared information platform (modelled on Paris J'Optimiz and Qatar Al-Nadeeb) was identified as a key opportunity by respondents, reflecting the survey's strong theme around data sharing. Figure 10 illustrates the workshop survey responses:

Figure 10 Event phase opportunities – workshop survey responses

Event Phase Opportunities (61 votes cast)



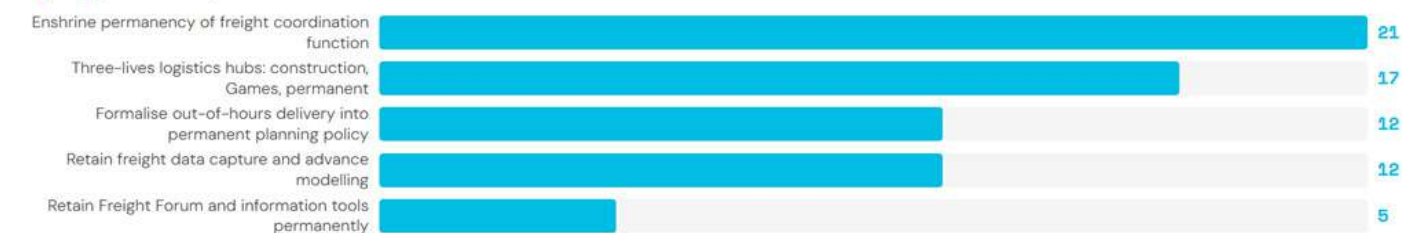
Games Route Network and Gateway dependency attracted 70% of event challenge votes. Freight-specific access and out-of-hours delivery account for 60% of opportunity votes.

5.4 Legacy phase

Permanency dominated legacy voting: the top two items attracted 56% of votes. The room was clear that coordination capability and physical infrastructure must outlast the Games. Enshrining permanency (21 votes – 31.3%) directly addresses the Sydney 2000 pattern where behavioural changes reverted entirely. Three-lives logistics hubs (17 votes – 25.4%) would create SEQ's first purpose-built urban freight precincts, addressing the emergency logistics gap exposed by the 2022 floods. Freight data capture (12 votes – 17.9%) provides ongoing evidence base for infrastructure decisions beyond 2032. Figure 11 demonstrates the legacy initiatives results:

Figure 11 Legacy Initiatives – workshop survey responses

Legacy (67 votes cast)



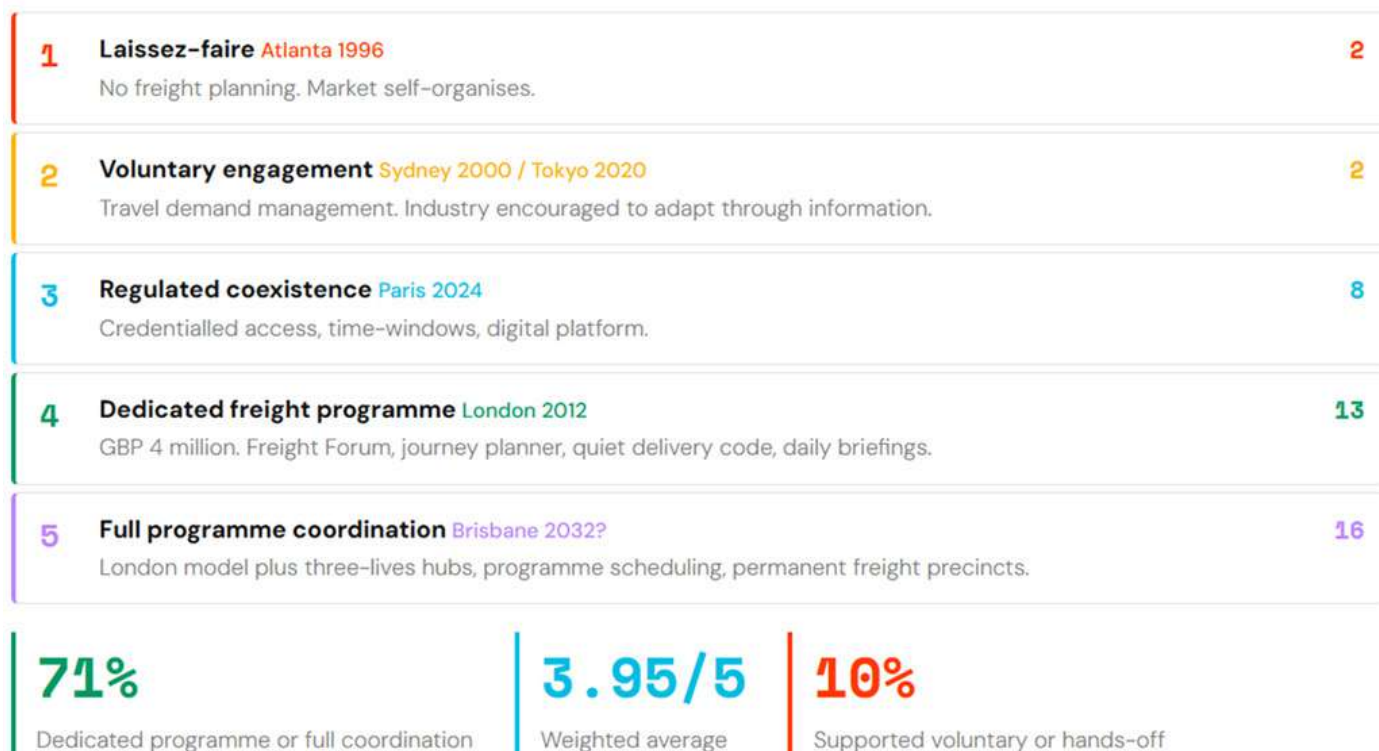
Permanency dominated: the top two items attracted 56% of votes.

5.5 How much coordination does Brisbane need?

Participants were then asked to select the level of freight coordination appropriate for Brisbane, from no coordination (the Atlanta 1996 approach) through to a full programme with permanent infrastructure (extending the London 2012 model). 71% voted for a dedicated programme or full coordination, as illustrated in Figure 12. Weighted average: 3.95 out of 5. Only 10% supported a voluntary or hands-off approach. The message from the room is unambiguous: Brisbane's structural vulnerability justifies active, programme-level coordination.

Figure 12 Intervention Spectrum - workshop survey responses

Participants selected the level of freight coordination appropriate for Brisbane, from no coordination (Atlanta 1996) through to full programme coordination with permanent infrastructure.



5.6 Key themes from workshop discussion

The facilitated discussion surfaced 7 critical themes that explain the voting results and provide context on why certain actions were prioritised. These themes reflect recurrent points raised by participants across the construction, Games-time operations and legacy lenses, and they highlight where uncertainty, corridor constraints and coordination gaps are most likely to translate into BAU supply chain impacts. The themes below should be read alongside the phase-specific voting tables, and they inform the recommended sequencing in Packages A–C.

5.6.1 Quality over Quantity for a successful SEQ Forum structure

The overwhelming majority of workshop participants supporting a dedicated freight programme or full coordination provides a powerful mandate for building a sustainable peak-to-peak freight management framework to accommodate BAU and Games logistics operations, before, during and after Brisbane 2032. A multi-agency SEQ Freight Forum is essential to provide an avenue for all stakeholders across the logistics pathways (both tier-1 and tier-2) to be equally represented, rather than adopting a volunteer coordination model. This fulfils participants' aspirations for a defined decision-making authority or a clear escalation pathway to GIICA.

5.6.2 BAU freight, not Games logistics, was the dominant concern

Speakers repeatedly emphasised that the primary risk is disruption to existing supply chains, not Games logistics per se. Freight needs to keep working through construction and event phases. Several contributors stressed that industry uncertainty would drive costly contingency behaviours: stockpiling, re-routing and reduced operational efficiency.

The convergence of venue construction, transport infrastructure and BAU logistics on shared corridors was described as the highest systemic risk, with participants identifying a crunch period where the network must perform at peak while under maximum strain.

5.6.3 Uncertainty is more damaging than restrictions

Operators do not know which roads will be available, what restrictions will apply, or when rules will change. This was seen as more damaging than the restrictions themselves. Multiple contributions stressed that rules must be published early enough for operators to plan workforce rosters, vehicle deployments and inventory strategies. Paris 2024's experience confirmed this: late changes to access rules caused delivery failures even where the underlying restrictions were manageable. Within Brisbane's context, advanced planning is essential to mitigate risks related to last minute GRN freight protocol changes. This allows a buffer for operators to transition from Pre-Games to Games period logistics window, adjusting roster structures, vehicle deployment plans, labour recruitment, as well as customer delivery agreements, to instil more certainty into the supply chain ecosystem.

5.6.4 Productivity over more vehicles

There was strong support for higher productivity vehicles (larger combinations, higher mass limits) to reduce total truck movements rather than adding more vehicles to a constrained network. Conversely, there was scepticism that fleet electrification would materially solve near-term capacity constraints. On the other hand, some participants expressed reservations regarding the ability of fleet electrification to address immediate capacity challenges in a significant way. Workforce competition was broadened beyond freight to construction, housing and services due to the knock-on effects on the wider local economy. Specialised resources such as OSOM escorts and pilots were identified as potential binding constraints without early regulatory reform.

5.6.5 Information and coordination are as valuable as infrastructure

London 2012 was discussed in terms of communication quality, not infrastructure volume. Real-time information, daily updates and feedback loops were described as essential. Industry representatives stressed that forums and coordination mechanisms were as valuable as physical interventions. The most frequent word in the open-text responses was collaboration.

Industry stakeholders have consistently emphasised the need for genuine partnership and active engagement in the planning and decision-making processes. Rather than being subject to externally imposed management or top-down directives, the sector seeks structured opportunities to contribute their operational expertise, supply chain intelligence, and risk insights.

5.6.6 Out-of-hours delivery works but needs early trials

Night-time and extended-hours delivery was seen as a practical way to create capacity. Speakers emphasised the need for community acceptance, clear curfew rules and early pilots rather than last-minute activation. Noise and social licence were explicitly acknowledged. Paris showed that out-of-hours delivery is not feasible for all sectors (butchers needing daytime redistribution, express services that cannot be time-shifted), reinforcing the importance of trialling before the Games period.

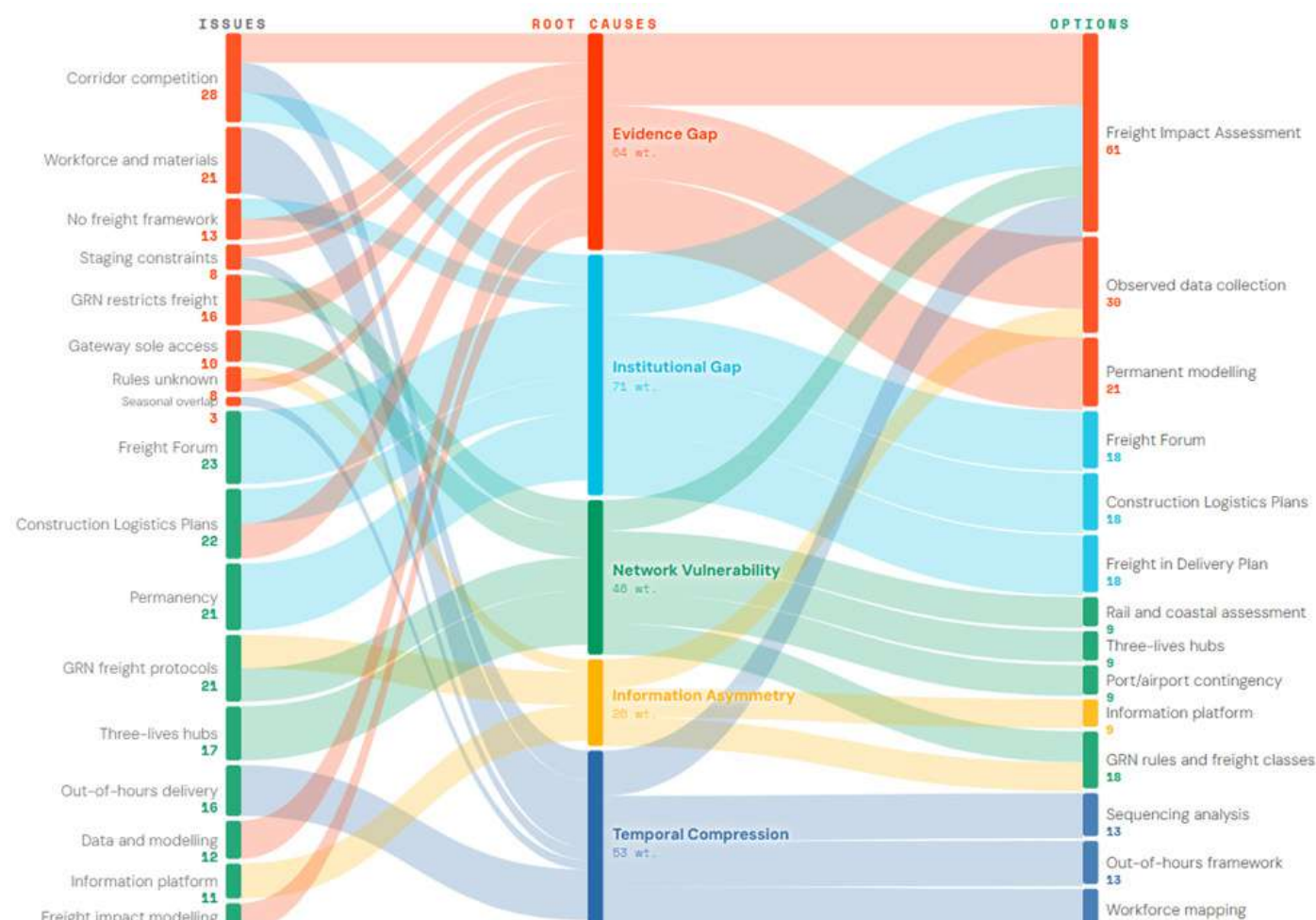
5.6.7 The games should be a catalyst for permanent reform

Many contributions explicitly framed suggestions as things that should be done regardless of the Games. The Olympics was described as a catalyst, not a justification, for long-needed reform. Rail was framed as a legacy opportunity, not just an Olympic response. There was strong sentiment that temporary measures should convert into permanent improvements where successful.

6. Root cause analysis

The workshop identified 17 challenges and opportunities across 3 phases. Many are symptoms of a small number of common root causes. The interactive Root Cause Sankey diagram available in the HTML storyboard at <https://qtlcbrisbanegames.netlify.app/> maps every workshop issue through these root causes to the actions that address them, with flow width representing vote weight:

Figure 13 Root Cause Sankey diagram



6.1 Five root causes

6.1.1 Evidence gap (approximately 64 weighted votes)

Queensland employs three freight modelling systems, but they are not integrated, lack the ability to simulate Olympic Games scenarios, and do not contain sufficient observed movement data. This recurring lack of evidence causes ongoing challenges: robust data is necessary for effective coordination through the Forum, accurate freight volume information is vital for proper GRN design, operators need comprehensive data to make informed decisions, and clear demand profiles are crucial for construction sequencing. The Integrated Freight Impact Assessment addresses four of the five main underlying issues identified, as further actions rely on establishing a strong evidence base.

6.1.2 Institutional gap (approximately 71 weighted votes)

The 2032 Delivery Plan does not incorporate a dedicated BAU freight management framework. At present, there is no established freight coordination body, no mechanism for assessing the cumulative impacts of CLPs, and no institutional arrangement for integrating freight planning with passenger mobility. Brisbane is the only city among those reviewed in the case studies that lacks a formalised framework. The most highly prioritised opportunities, such as establishing a Freight Forum (23 votes), adopting CLPs (22 votes), and developing a permanent freight planning function (21 votes), are all specifically aimed at addressing this institutional gap.

6.1.3 Network vulnerability (approximately 46 weighted votes)

Southeast Queensland features a corridor-based transport network with limited alternative parallel routes. Freight rail links to the port are constrained, and although coastal shipping is available, it does not operate at a scale sufficient to meet urban distribution needs. The Gateway Motorway functions as the principal arterial route serving the port, airport, and fuel terminals. As a result, any restrictions introduced by the GRN are likely to have a significantly greater impact on this corridor city than on previous host cities with denser, more redundant networks. To address these challenges, the development of dedicated logistics hubs and the implementation of freight-specific access protocols, such as “three-lives” facilities, will be essential. These measures will support the mitigation of network constraints through the creation of new infrastructure and targeted management of corridor access.

6.1.4 Information asymmetry (approximately 26 weighted votes)

Currently, operators face significant uncertainty regarding access rules, the timing of changes, and the requirements for effective planning. This ambiguity has been found to be more disruptive than the restrictions themselves, as demonstrated during Paris 2024, where last-minute changes to access arrangements led to delivery failures. To mitigate this root cause, it is recommended to establish a shared information platform, ensure early publication of GRN rules, and provide clear definitions of freight classes, thereby enabling operators to plan effectively and minimise operational risks.

6.1.5 Temporal compression (approximately 53 weighted votes)

Between 2027 and 2029, more than seventeen significant projects (collectively valued at over \$27 billion) are planned to make use of the same key transport corridors. This period aligns with seasonal peaks in export demand, intensifying competition for workforce resources across construction, freight, housing, and essential services.

6.2 Root causes connected to recommended actions

The Integrated Freight Impact Assessment is the single highest-impact action because it addresses four of the five root causes. It is the precondition for evidence-based coordination, freight-informed GRN design, and construction sequencing, in addition to directly resolving the evidence gap.

Table 5 links each root cause to the issues raised and the actions required to address them, demonstrating that the Integrated Freight Impact Assessment is a foundational enabler across most responses and a prerequisite for effective coordination, network design and sequencing.

Table 5 Root causes connected to recommended actions summary

Root Cause	Issues Connected	Actions to Investigate and Address
Evidence Gap (approximately 64 wt. votes)	Corridor competition, no freight framework, staging, GRN restrictions, access rules, Construction Logistics Plans, freight modelling, data capture	Integrated Freight Impact Assessment (foundational), observed freight data collection, permanent modelling capability
Institutional Gap (approximately 71 wt. votes)	No freight framework, corridor competition, Forum, Construction Logistics Plans, permanency	Integrated Freight Impact Assessment (Forum needs evidence), SEQ Freight Forum, Construction Logistics Plan framework, freight in Delivery Plan
Network Vulnerability (approximately 46 wt. votes)	GRN restrictions, Gateway dependency, GRN protocols, three-lives hubs	Integrated Freight Impact Assessment (GRN needs volumes), rail and coastal capacity assessment, three-lives hubs, port/airport contingency, early GRN rules
Information Asymmetry (approximately 26 wt. votes)	Access rules unknown, GRN protocols, information platform	Observed data collection, information platform, early GRN rules and freight classes
Temporal Compression (approximately 53 wt. votes)	Corridor competition, workforce, staging, seasonal overlap, out-of-hours delivery	Integrated Freight Impact Assessment (sequencing needs profiles), construction sequencing analysis, out-of-hours framework and trials, workforce mapping

6.3 Dependencies

The recommended actions are not independent. Key dependencies include:

- Observed freight data collection feeds the Integrated Freight Impact Assessment.
- The Freight Impact Assessment enables Construction Logistics Plans (cumulative assessment requires corridor data), GRN freight rules (access design requires modelled volumes), construction sequencing analysis (requires temporal demand profiles), and three-lives hub planning (requires freight flow evidence).
- The Freight Forum enables Construction Logistics Plan deconfliction across projects.
- Out-of-hours delivery protocols inform GRN freight access windows.
- Community-wide cooperation and acceptance for out-of-hours delivery protocol implementation.

7. Prioritisation matrix

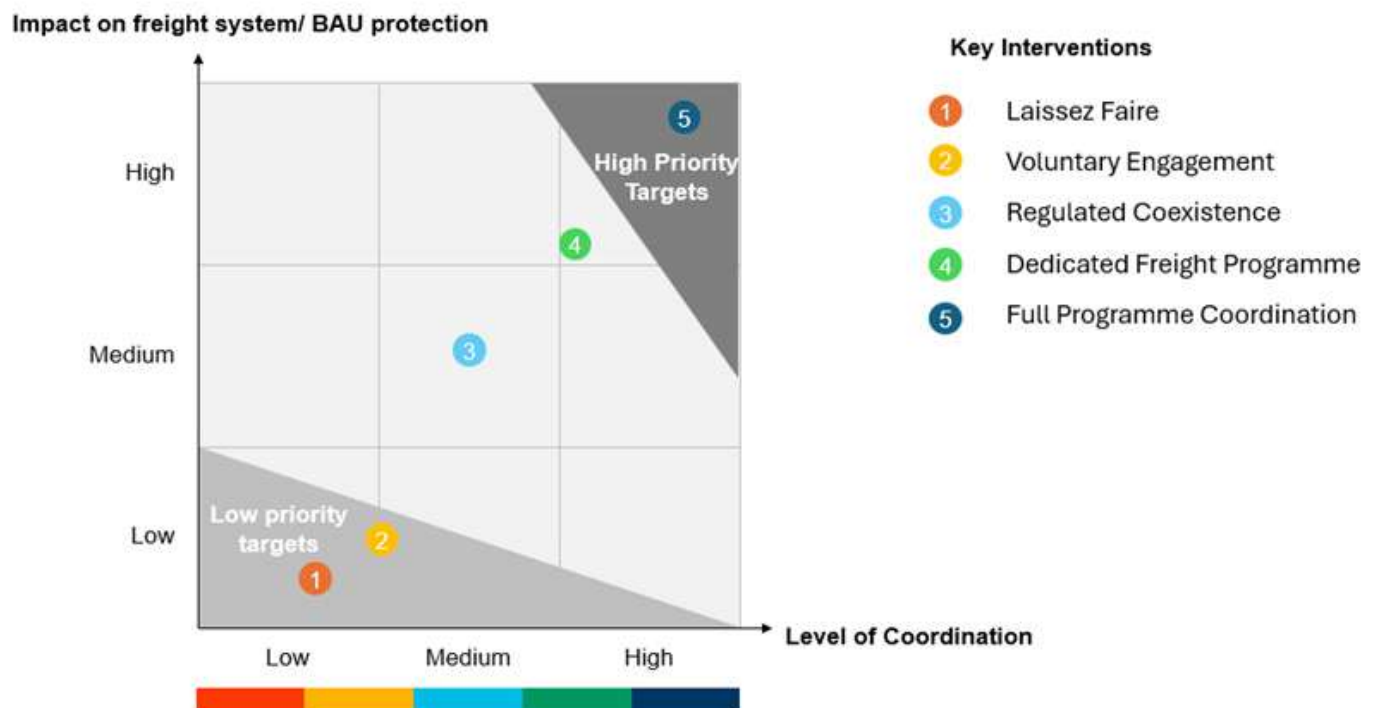
The prioritisation matrix converts the workshop findings and root cause analysis into a single decision framework. The horizontal axis reflects the level of coordination tested in the intervention spectrum, from no coordination to a full programme with permanent legacy. The vertical axis reflects likely impact on business-as-usual (BAU) freight protection, based on both stakeholder preference and the extent to which each intervention addresses Brisbane's main freight risks.

The workshop results provide the first basis for the matrix. Across construction, event and legacy phases, participants consistently prioritised measures that improve coordination, access clarity, shared information and institutional continuity. This is reinforced by Section 6.5, where 71% of participants selected either a dedicated freight programme or full programme coordination, with only 10% supporting voluntary or hands-off approaches. Section 6.6 explains why: BAU freight was the dominant concern, uncertainty was seen as more damaging than restrictions, and information and coordination were viewed as being as valuable as infrastructure.

The root cause analysis provides the second basis for the matrix. The Sankey diagram shows that phase-specific issues converge on five recurring causes: evidence gap, institutional gap, network vulnerability, information asymmetry and temporal compression, with institutional and evidence gaps carrying the greatest weight. This means higher-impact interventions are those that resolve several root causes at once. Accordingly, full programme coordination sits highest, a dedicated freight programme is the minimum credible response, regulated coexistence is partial but insufficient, and voluntary or no-coordination approaches sit lowest.

The matrix below (Figure 14) shows that interventions with the strongest ability to protect BAU freight are also those requiring the highest level of coordination. This reflects both the workshop mandate, where 71% of participants supported a dedicated freight programme or full coordination, and the root cause analysis, which showed that the highest-impact recommended packages address multiple high-weight issues at once, especially institutional gap, evidence gap and network vulnerability.

Figure 14 Prioritisation Matrix for Brisbane 2032 Interventions



8. Recommendations

The recommendations set out in this section are grounded in a combined consideration of the literature review, comparative case studies, industry survey, workshop findings, root cause analysis and prioritisation matrix. Lessons from previous host cities established the practices most consistently associated with freight continuity, particularly early access definition, stronger information flows, dedicated coordination and deliberate legacy planning. Those lessons were then tested against the Brisbane 2032 context through the QTLC survey and industry workshop, which clarified where participants saw the greatest risks to business-as-usual freight across the construction, Games-time and legacy phases. The subsequent root cause analysis distilled these issues into a smaller set of recurring system drivers, with institutional and evidence gaps emerging most strongly. Building on that foundation, the prioritisation matrix translated the evidence into a practical decision framework by assessing interventions according to both their likely impact on BAU freight protection and the level of coordination required to implement them effectively. The recommendations that follow should therefore be read as a sequenced response to a defined problem structure, rather than as a standalone list of individual actions.

8.1 Package A: Get the foundations right

Package A is about understanding the problem, then coordinating around it. This package establishes a thorough understanding of the existing challenges, followed by coordinated action. This involves undertaking an integrated freight impact assessment that consolidates Queensland's various modelling tools (QFM, SEQSTM, QR simulation) to deliver a comprehensive, corridor-level analysis of freight pressure points, identifying both their locations and timing. In parallel, a Freight Forum will be established to facilitate evidence-based collaboration between industry and government, enabling the timely sharing of information and the resolution of conflicts. Construction Logistics Plans will be developed to ensure the cumulative effects on routine freight operations are appropriately addressed.

Table 6 Package A Summary: integrated freight impact assessment

Action	Lead	Timing
Commission an integrated corridor-level Freight Impact Assessment (FIA) on M1, Gateway and Bruce Highway, drawing on QFM, SEQSTM and QR data to quantify the combined effect of construction, event and BAU freight across all phases. Investigate need for common staging areas.	TMR	2026
Establish an SEQ Freight Forum: a multi-agency mechanism involving primary and secondary operators, alongside a standing secretariat with dedicated resourcing.	QTLC with TMR/GIICA	2026
Mandate Construction Logistics Plans for all major projects, assessed for cumulative impact on BAU freight using FIA corridor data	GIICA/TMR	2026-2027
Indicative cost: Low-Moderate. Integration of existing transport models, coordination, planning and modelling, not capital investment.		

Package A addresses the top three construction votes (Forum 23, CLPs 22, freight modelling 9), the Delivery Plan gap, and the evidence gap that underpins every other intervention. The FIA also addresses the fragmentation of Queensland's current freight modelling: three separate models that do not talk to each other and lack observed movement data.

Workshop support for a dedicated freight programme or stronger coordination should be read as a substantive policy signal. It indicates that industry accepts the need for managed access, altered delivery windows and tighter operating conditions during both construction and Games time, but only where those constraints are shaped through a credible process and supported by usable information. In that context, the repeated emphasis on collaboration is best understood as a statement about commercial feasibility: operators can re-plan fleets, labour, inventory and customer commitments when they have enough visibility and influence to make workable adjustments, but they are far less likely to absorb avoidable cost and service risk where decisions are finalised without operational input.

For that reason, the SEQ Freight Forum should be framed as an operating mechanism, not simply a consultation channel. If it has no practical authority, or no defined route for elevating unresolved issues to GIICA, it risks becoming a forum in which problems are discussed but not decided. That would leave core matters such as construction sequencing, freight access windows, cumulative corridor impacts and exception handling unresolved until late in the process, when the costs of change are highest. A clearer governance model reduces the risk of delayed decisions, inconsistent direction across different stakeholders, and dispute escalation into the delivery phase. Representation should also extend beyond peak bodies to include tier-one and tier-two operators, because many of the first impacts of access restrictions, curfew settings, loading constraints and permit rules are felt in day-to-day operations before they are visible at an industry-association level. Broader representation therefore helps mitigate the risk of blind spots in policy design, where arrangements appear workable in principle but fail in practice for subcontractors, specialised carriers, warehouse operators or regional feeders.

The Forum should have clearly nominated senior sponsors who can escalate unresolved matters to GIICA and TMR, so issues requiring government decision or corridor-level intervention are not left unresolved at working-group level.

For Gateway corridor matters, this escalation pathway should include early engagement with relevant State agencies, Brisbane Airport Corporation, Port of Brisbane, Transurban, local government and affected freight operators so access windows, incident response, construction staging and contingency arrangements are tested with the organisations that control or depend on the corridor.

A standing secretariat is equally important to provide dedicated resourcing on managing Forum continuity, facilitating meetings, action registers and coordinating paperwork to test issues across agencies, ensuring that commitments are tracked through to decision and accountability. The resultant risk mitigation will revolve around the loss of institutional legacy and declining industry confidence or even disengagement in the long term.

Without Package A, Brisbane will face two colliding construction peaks with no precise gauge of actual freight impacts, inadequate coordination mechanism and no evidence base for GRN design. With every decision made on assumptions, there is no confirmation as to whether the problem is as significant as industry fears, or where the critical pressure points lie.

8.2 Package B: A dedicated freight programme

This package comprises Package A in addition to comprehensive Games-time freight management, mirroring the measures successfully implemented for London 2012 at a cost of GBP 4 million. Key components include dedicated freight access integrated into the GRN from the outset, the development and trial of an out-of-hours delivery framework prior to the Games, a centralised information platform enabling real-time visibility for operators, and robust contingency plans for both port and airport operations.

Table 7 Package B: Dedicated Freight Programme

Action	Lead	Timing
Develop and trial an out-of-hours delivery framework before construction to establish social licence	TMR/Local Govt	2026-2030
Design freight exemptions, access windows and priority corridors for GRN incorporation, explicitly including airport and port terminals, cargo facilities, access routes, staging areas and contingency movements.	GIICA/TMR	2027-2028
Build a shared freight information platform for real-time disruption management	TMR/QTLC	2028-2030
Develop port and airport disruption contingency plans, including coordination across Brisbane Airport, Gold Coast Airport, Wellcamp and other relevant SEQ airport interfaces.	PoB/BAC/TMR	2029-2031
Indicative cost: Moderate. Full-fledged programme in London cost GBP 4 million.		

Package B addresses the top event votes (GRN design 21, out-of-hours 16, platform 11, port/airport 7). This is the approach London used to achieve 45% delivery retiming, 15% peak HV reduction and a freight programme that still operates today.

From a commercial perspective, an out-of-hours delivery framework is considered one of the most practical levers, but it is essential that social licence is established in advance of pre-Games logistics commencement. Ongoing acceptance by communities, local government, regulators and affected businesses for freight activity to occur outside regular operating hours require consistent demonstration that noise, amenity, safety and local access impacts are being actively managed. Local agencies, particularly those in close proximity to Games-related infrastructure corridors will have to effectively communicate expectations, public benefit to stimulate community-wide confidence in such protocols.

Without Package B freight operators receive GRN restrictions with no managed access, no alternative delivery windows and no real-time information. The result is failed deliveries, cold chain compliance failures, demurrage charges and wasted trips. This is what Paris 2024 experienced when access rules were changed late.

71% of workshop participants voted for this level of coordination or higher.

8.3 Package C: Full coordination with permanent legacy

Package C is Packages A and B enhanced with permanent freight infrastructure and a lasting institutional legacy. This approach represents the comprehensive vision supported by 39% of participants, the largest individual cohort. It includes logistics hubs designed for three distinct phases: construction staging, Games consolidation, and subsequent conversion to permanent freight precincts. The model features an integrated network for coordinated staging, robust freight data capabilities that extend beyond the Games, and enduring institutional frameworks to ensure continuity well after the closing ceremony.

Table 8 Package C: Full coordination with permanent legacy

Action (in addition to Packages A and B)	Lead	Timing
Establish SEQ Forum and commence OOH delivery planning	QTLC with TMR/GIICA; Local Government	2026-2030
Design logistics hubs for three lives: construction staging, games consolidation, permanent freight precincts	TMR/GIICA	2026-2028 (planning)
Coordinate a network of common staging areas and defined construction corridors (if need confirmed)	GIICA	2027-2029
Enshrine freight coordination as a permanent regional function	QTLC/TMR	2026 onwards
Formalise out-of-hours delivery into permanent local government planning instruments	Local Govt/TMR	2030-2033
Retain and expand the integrated freight modelling capability developed through the FIA as a permanent analytical asset, addressing the current fragmentation of QFM, SEQSTM and QR rail models	TMR	2028 onwards

Package C addresses the top legacy votes (permanency 21, three-lives hubs 17, data 12, formalise OOH 12) and the staging network (10). Draws on London 2012 (institutional permanency) and Qatar 2022 (infrastructure and digital legacy).

Without Package C coordination tools and institutional knowledge are dismantled after 2032, repeating the Sydney 2000 pattern. Temporary staging sites revert to other uses. The freight data gathered during the programme is archived. SEQ misses the opportunity to build its first purpose-built urban freight precincts and to address the emergency logistics gap exposed by the 2022 floods.

Indicative cost: higher, but hub investment may be recoverable through the three-lives design (construction staging revenue, then Games use, then permanent commercial operation).

8.4 Decision pathway

Table 9 compares the three recommended packages and illustrates the progression from foundational coordination to a fully integrated freight programme with permanent legacy. The comparison highlights differences in approach, cost, stakeholder support and outcomes, providing a clear decision framework for government.

Table 9 Recommended Package Comparison

Comparative Item	Package A: Foundations	Package B: Dedicated Programme	Package C: Full Coordination
Approach	Regulated coexistence	Dedicated freight programme	Full programme coordination
Precedent	Paris 2024 elements	London 2012	London + Qatar legacy
Workshop support	20% selected this approach	32% selected this approach	39% selected this approach
Cumulative support	91% supported this or higher	71% supported this or higher	39% supported this approach
Cost	Low: coordination and planning	Moderate: programme and platform	Higher: infrastructure + institutional
What it adds	Forum, CLPs, evidence base	GRN protocols, OOH, information	Forum, OOH, Hubs, permanency, data legacy
Legacy outcome	Coordination capability	Programme tools retained	Permanent freight infrastructure and industry confidence

The workshop results indicate that Package B should be treated as the minimum credible response for Brisbane 2032. Support for a dedicated freight programme or a more comprehensive model reached 71%, suggesting a clear preference for structured, state-wide programme coordination rather than a foundational-only approach. Package C reflects the strongest legacy aspiration (39%) and is the only package that involves all of the key stakeholder sentiments from the workshop.

By contrast, Package A is necessary but not self-sufficient in terms of achieving BAU supply chain protection under peak constraints. On that basis, Package B is an optimal package for the government to adopt as the baseline response, while signalling an early pathway to Package C to segue into stronger long-term freight capability.

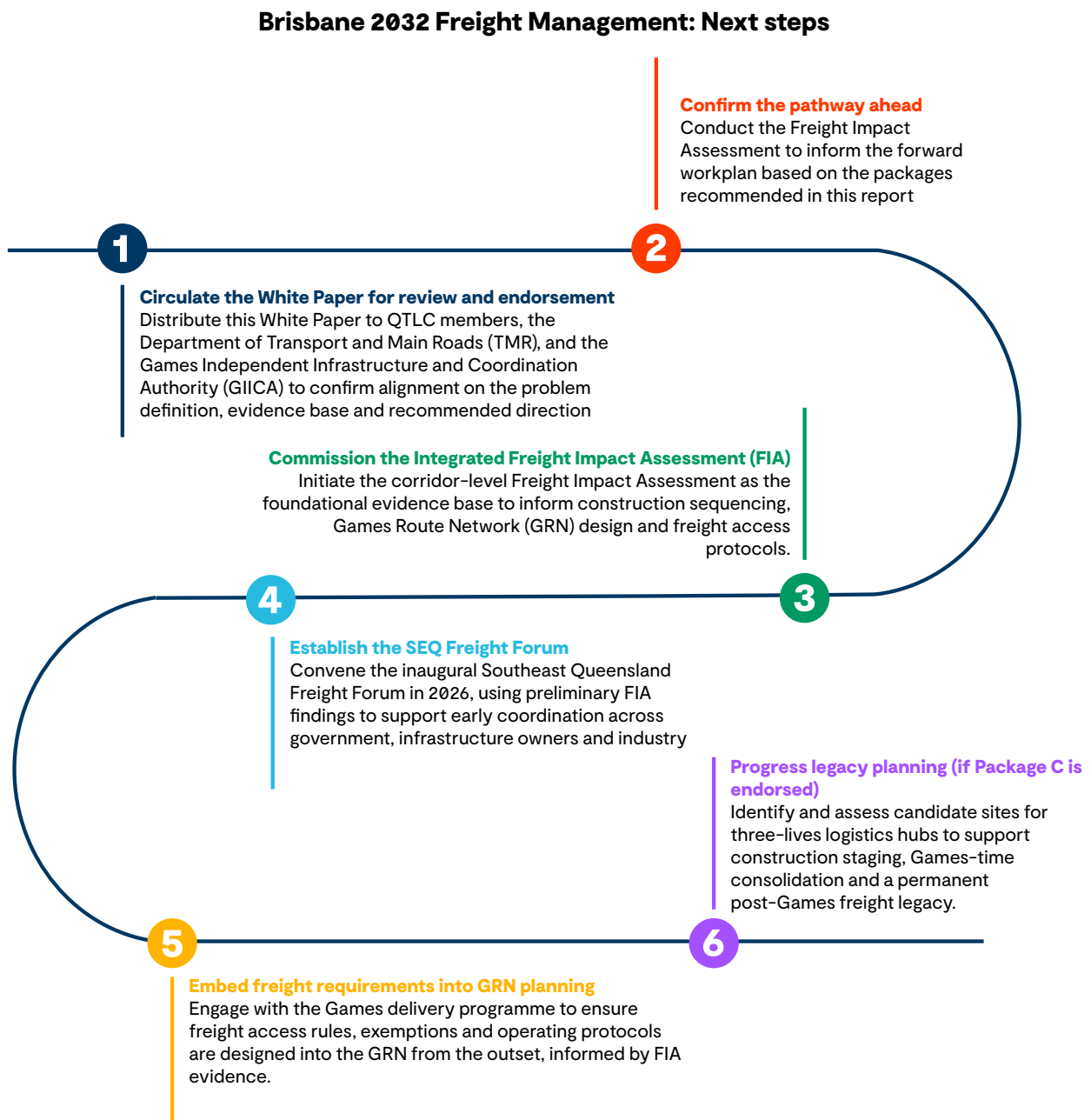
9. Suggested next steps

The following actions provide a clear and sequenced pathway to progress from this White Paper to implementation:

1. Circulate this White Paper to QTLC members, TMR and GIICA for review and endorsement.
2. Decide on recommendation packages (A, B, C), or components of the packages.
3. Commission the corridor-level Freight Impact Assessment as the foundational evidence base.
4. Determine first-tier and second-tier stakeholders to establish centralised secretariat body for SEQ Freight Forum setup
5. Convene the inaugural SEQ Freight Forum in 2026, informed by FIA preliminary findings.
6. Engage with the Games delivery programme to embed freight access protocols into GRN design.
7. Identify candidate sites for three-lives logistics hubs (if Package C is endorsed).

Figure 15 provides a consolidated summary of the recommended next steps, showing how endorsement, evidence, coordination and integration actions align to support timely implementation of the Brisbane 2032 freight programme.

Figure 15 Brisbane 2032 Freight Management Suggested Pathway



9.1 Brisbane 2032 Freight Management Pathway

Table 10 Brisbane 2032 Freight Management Pathway

Step	What it is	Description
1	Circulate the White Paper for review and endorsement	Distribute this White Paper to QTLC members, the Department of Transport and Main Roads (TMR), and the Games Independent Infrastructure and Coordination Authority (GIICA) to confirm alignment on the problem definition, evidence base and recommended direction
2	Confirm the preferred coordination package[XN1.1]	Sequence Package A, B or C as the agreed basis for the scope, ambition and resourcing of the Brisbane 2032 freight programme, noting that the packages are cumulative and undertaken on a multi-phase approach.
3	Commission the Integrated Freight Impact Assessment (FIA)[XN2.1][XN2.2]	Initiate the corridor-level Freight Impact Assessment as the foundational evidence base to inform construction sequencing, Games Route Network (GRN) design and freight access protocols.
4	Establish the SEQ Freight Forum[XN3.1]	Convene the inaugural Southeast Queensland Freight Forum in 2026, using preliminary FIA findings and package sequencing outcomes to support coordination by relevant government, infrastructure owners and industry across the different phases.
5	Embed freight requirements into GRN planning	Engage with the Games delivery programme to ensure freight access rules, exemptions and operating protocols are designed into the GRN from the outset, informed by FIA evidence.
6	Progress legacy planning (if Package C is endorsed)	Identify and assess candidate sites for three-lives logistics hubs to support construction staging, Games-time consolidation and a permanent post-Games freight legacy.

10. References

1. ABC News 2025, 'Queensland and federal governments strike funding deal for 2032 Olympic Games', ABC News, 3 July
2. Amodei, R. et al. 1997, 1996 Atlanta Centennial Olympic Games and Paralympic Games event study, United States Federal Highway Administration, <https://rosap.nhtl.bts.gov/view/dot/3105>
3. Applebome, P 1996, 'Transportation becoming challenge of '96 Olympics', The New York Times, 23 July, <https://archive.nytimes.com/www.nytimes.com/specials/olympics/0723/oly-traffic-art.html>
4. Brewer, AM & Hensher, DA 2001, 'The impact of staging a major event on commuters' work and travel behaviour: The Sydney 2000 Olympic Games', Australasian Transport Research Forum (ATRF), <https://australasiantransportresearchforum.org.au/the-impact-of-staging-a-major-event-on-commuters-work-and-travel-behaviour-the-sydney-2000-olympic-games/>
5. Butcher, L. 2012, London Olympics 2012: transport, UK Parliament, <https://researchbriefings.files.parliament.uk/documents/SN03722/SN03722.pdf>
6. CEVA Logistics n.d., Olympic and Paralympic Games Paris 2024, CEVA Logistics, <https://www.cevalogistics.com/en/paris2024>
7. Chartered Institute of Logistics and Transport (UK) 2013, "London 2012 effect" could increase road safety and benefit the environment', CILT(UK), <https://ciltuk.org.uk/News/News-Centre/ArtMID/7018/ArticleID/6055/%E2%80%9CLondon-2012-effect%E2%80%9D-could-increase-road-safety-and-benefit-the-environment>
8. Cour des comptes 2025, The Paris 2024 Olympic and Paralympic Games, Cour des comptes, <https://www.ccomptes.fr/en/publications/paris-2024-olympic-and-paralympic-games>
9. Currie, G, Jones, A & Woolley, J 2014, 'Impacts and lessons from the London 2012 Olympic Games travel demand management program', Monash University, <https://research.monash.edu/en/publications/impacts-and-lessons-from-the-london-2012-olympic-games-travel-dem/>
10. Dantsuji, T & Nakagawa, M 2024, 'Understanding changes in traffic demand during the Tokyo 2020 Olympic and Paralympic Games', arXiv, <https://arxiv.org/pdf/2409.05296>
11. Ernst & Young 2018, Gold Coast 2018 Commonwealth Games post-games evaluation report, Queensland Department of Tourism, Sport and Racing, https://www.dts.qld.gov.au/__data/assets/pdf_file/0007/1897963/gc2018-beyondthegames-legacy-report.pdf
12. FIFA 2022, 'FIFA World Cup: Public transportation', FIFA Publications, <https://publications.fifa.com/de/final-sustainability-report/environmental-pillar/greenhouse-gas-emissions/public-transportation/>
13. Games Independent Infrastructure and Coordination Authority (GIICA) 2025, 100 Day Review Report, GIICA, <https://www.giica.au/uploads/documents/100%20Day%20Review%20Report%20-%208%20March%202025%20APPROVED.pdf>
14. Hensher, DA & Brewer, AM 2002, 'Going for gold at the Sydney Olympics: How did transport perform?', Transport Reviews, vol. 22, no. 4, pp. 381–399, <https://www.tandfonline.com/doi/pdf/10.1080/01441640110121112>
15. Institution of Engineers & Shipbuilders (IES) Queensland 2023, 'Gold Coast 2018 Commonwealth Games – managing unprecedented challenges in engineering logistics and traffic flow', IES Queensland, <https://www.iesqlld.org/wp-content/uploads/2023/08/Approved-Comms-Games-Article.pdf>
16. OECD 2024, The legacy of the Paris 2024 Olympic and Paralympic Games, OECD, https://www.oecd.org/en/publications/the-legacy-of-the-paris-2024-olympic-and-paralympic-games_d7938b7f-en/full-report.html
17. OECD/IOC n.d., Sydney 2000's integrated approach to Games delivery, OECD–IOC Olympics Planning Toolkit, <https://www.oecd-ioc-olympics-planning-toolkit.org/case-study/sydney-2000-integrated-approach-to-games-delivery/>
18. Olympic Roads and Transport Authority (ORTA) 1999, Olympic venue transport: venue transport plans for the Sydney 2000 Olympic Games, Olympic World Library, https://library.olympics.com/Default/doc/SYRACUSE/45903/olympic-venue-transport-venue-transport-plans-for-the-sydney-2000-olympic-games-olympic-roads-and-tr?_lg=en-GB

19. Paché, G. 2024, 2024 Olympic and Paralympic Games: spotlight on urban logistics challenges, HAL Open Science, https://hal.science/hal-04780300v1/file/TEBR_SepOct24_2024%20Olympic%20and%20Paralympic%20Games.pdf
20. Port of Brisbane (2025), Strong FY25 trade through Port of Brisbane, Port of Brisbane Pty Ltd, viewed 12 May 2026, <<https://www.portbris.com.au/w/strong-fy25-trade-through-port-of-brisbane>>
21. Qatar General Authority of Customs n.d., Al Nadeeb clearance system, Qatar Customs, <https://www.customs.gov.qa/English/AlNadeeb/Pages/default.aspx>
22. Queensland Department of Transport and Main Roads (TMR) n.d., Gateway Motorway and Bruce Highway upgrades, Queensland Government, <https://www.tmr.qld.gov.au/projects/programs/gateway-motorway-and-bruce-highway-upgrades>
23. Queensland Department of Transport and Main Roads 2024, Our 2018 Commonwealth Games legacy, Queensland Government, <https://www.tmr.qld.gov.au/About-us/Corporate-information/Our-2018-Commonwealth-Games-legacy>
24. Queensland Government 2025, 2032 Games infrastructure funding deal confirmed, Queensland Government
25. Queensland Government n.d., Transport – The 2032 Delivery Plan, Delivering 2032, <https://www.delivering2032.com.au/legacy-for-queensland/transport>
26. Sierra, ME 2024, 'Impacts on Transportation and Logistics Due to the Paris 2024 Olympic and Paralympic Games', Prodensa, <https://www.prodensa.com/insights/blog/impacts-on-transportation-and-logistics-due-to-the-paris-2024-olympic-and-paralympic-games>
27. Small Business Connections 2022, '6 Months from Queensland's flooding: half of state's SMEs still financially impacted', Small Business Connections, <https://smallbusinessconnections.com.au/6-months-from-queenslands-flooding-half-of-states-smes-still-financially-impacted/>
28. Sydney Organising Committee for the Olympic Games (SOCOG) 2001, Official report of the XXVII Olympiad Sydney 2000 Olympic Games, LA84 Foundation Digital Library, <https://digital.la84.org/>
29. Sydney Organising Committee for the Olympic Games 1998, Freight manual: Sydney 2000 Olympic Games, Olympic World Library, https://library.olympics.com/Default/doc/SYRACUSE/3154834/freight-manual-sydney-2000-olympic-games-sydney-organising-committee-for-the-olympic-games?_lg=en-GB
30. Tahmasseby, S, Palaniappan, PR & Subramanian, S 2021, 'Traffic impact assessment for the stadiums hosting FIFA 2022 World Cup in Qatar: a case study', ResearchGate, <https://www.researchgate.net/publication/353978618>
31. Tokyo Metropolitan Government 2022, Tokyo 2020 Measures & Achievements on Transportation, Tokyo Metropolitan Government, <https://www.2020games.metro.tokyo.lg.jp/Tokyo2020%20Measures%20%26%20Achievement%20on%20Transportation2022Mar.24.pdf>
32. Tokyo Metropolitan Government et al. 2021, Request for cooperation concerning logistics during Tokyo 2020 Olympic and Paralympic Games, Tokyo 2020 Games Preparation Bureau, https://www.2020games.metro.tokyo.lg.jp/taikaiyunbi/torikumi/yusou/2020tdm/logistics_pdf/Request_for_cooperation_concerning_logistics_during_Tokyo_2020_Olympic_and_Paralympic_Games.pdf
33. Transport and Logistics Middle East (TLME) News Service 2025, 'How the FIFA World Cup has transformed Qatar's transport and logistics landscape', Transport and Logistics Middle East, <https://www.transportandlogisticsme.com/smart-logistics/how-the-fifa-world-cup-has-transformed-qatars-transport-and-logistics-landscape>
34. Transport for London (TfL) 2013, Olympic legacy monitoring: Adaptations to deliveries by businesses and freight operators during the Games (Travel in London supplementary report), TfL, <https://content.tfl.gov.uk/olympic-legacy-freight-report.pdf>
35. WT Partnership n.d., From vision to legacy: a game plan for Brisbane 2032 and beyond, WT Partnership, <https://wtpartnership.com.au/wp-content/uploads/2026/02/WT-report-From-vision-to-legacy-a-game-plan-for-Brisbane-2032-and-beyond.pdf>

Appendix A: Detailed case studies

A-1 Global major sporting event scan

Major sporting events place exceptional demands on host-city transport systems, supply chains and institutional coordination. In these constrained operating environments, it is essential that business-as-usual freight movements, utilities, emergency services and urban logistics continue to operate effectively and reliably.

Experience from recent mega-events demonstrates that successful outcomes are driven by early upstream planning and the effectiveness of integrated operational and governance models, particularly where jurisdictions plan for freight continuity alongside Games-specific logistics.

This section provides a brief comparative scan of recent global major sporting events, highlighting transferrable practices relevant to maintaining freight continuity while enabling event-related logistics in complex urban environments.

A-1-1 Paris Olympics 2024

Paris 2024 was delivered across metropolitan Paris and the Île-de-France region, with most venues within approximately 15 km of each other. This compact, live-city footprint required highly coordinated logistics planning to manage interaction between everyday transport operations and Games-related movement.

Key Lesson for Brisbane: The freight disruption window is measured in months, not weeks. Pre-positioning, loading infrastructure expansion and freight-specific security protocols must be planned well in advance. Brisbane's agricultural supply chains (particularly grain exports through the Port of Brisbane during the July-August winter cropping window) will require specific risk assessment.

Paris Olympics 2024

Background: Paris 2024 was delivered across 41 Olympic and 20 Paralympic venues, hosting 10,500 athletes and approximately 10 million spectators. The scale drove high demand for construction materials, food, accommodation and equipment and coincided with upgrades to Paris' transport network.

Logistics activity included 25 competition venues in the Paris region, 14 security perimeters and >8 million pick-ups/deliveries per week during the Games period.

Challenges:

Multi-modal Network Congestion

Extensive road closures and restrictions in central Paris, alongside metro station closures and venue works, disrupted daily freight movement and shifted congestion across the wider network. System impacts extended to airports and port/hinterland operations as Games-specific movements competed with commercial cargo capacity and peak-season shipping, requiring logistics providers to retime, reroute and adjust dwell/delivery schedules.³⁶

Freight Handling Disruptions

Ahead of the Games, retailers were advised to stockpile, and hauliers were encouraged to shift deliveries to off-peak windows. This tightened last-mile capacity and time-window compliance and increased competition between Games logistics and BAU urban freight (retail, hospitality and medical).

Security perimeters, access controls & credentialing complexity

Four layered perimeters across venues introduced different rules for when and how vehicles could enter, directly affecting freight reliability. Credentials, exemptions and proof requirements for vehicles/drivers (and sometimes receivers) increased the risk of failed deliveries and created queues around venues.³⁷



³⁶ Impacts on Transportation and Logistics due to the Paris 2024 Olympic and Paralympic Games (Prodensa 2024); <https://www.prodensa.com/insights/blog/impacts-on-transportation-and-logistics-due-to-the-paris-2024-olympic-and-paralympic-games>

³⁷ Impacts on Transportation and Logistics due to the Paris 2024 Olympic and Paralympic Games (Prodensa 2024); <https://www.prodensa.com/>

Enhanced screening and Games prioritisation also slowed some customs/cargo processes, affecting time-sensitive inbound freight.

Mitigation measures:

Games-specific Logistics Management

- Priority Olympic Lanes were designated on key routes for accredited vehicles to protect Games-time movements between venues, villages and airports.³⁸
- Ticketing strategies and distributed free-viewing zones helped stagger arrivals and disperse crowd flows across multiple access points.
- Government platforms (e.g., “Anticiper les Jeux”) published day-by-day perimeter and movement information to support journey planning and real-time monitoring.
- Key public transport services were reinforced (more frequent metro/RER services) to move spectators without increasing road congestion.³⁹
- A digital “Games Pass” helped manage authorised access to restricted zones and reduce uncontrolled crowd mixing near venues.⁴⁰

BAU Logistics Management

- Alternative modes/routes were used (e.g., Seine freight and cycle logistics) to bypass road congestion.
- Loading zones were expanded (9,400 to 10,300) and supported by sensors to deter illegal parking and improve turnover/reliability for freight vehicles.⁴¹
- The “J’Optimiz” platform supported freight planning under Games restrictions (mapping/route guidance, permits/QR support and management of delivery zones), helping operators navigate controlled access areas.⁴²
- Bundled procurement systems were deployed to avoid wider supply chain shock which enabled Paris to deliver timely Games venue construction whilst completing the Grand Paris Express mega-metro development.⁴³

Impact:

- 15% of logistics operators placed larger-than-usual advance orders to reduce delivery frequency during the Games.⁴⁴
- Lower exposure to congestion and crowd interference.
- Reduced reliance on just-in-time deliveries during the Games period.
- Out-of-hours delivery model proved unfeasible for many sectors: butchers receiving pre-dawn deliveries still needed to redistribute to restaurants during business hours; home delivery and express services could not be time-shifted.⁴⁵
- Heightened cargo theft risk, as congested routes and predictable vehicle movements created opportunities for criminal targeting of high value foods.⁴⁶

[insights/blog/impacts-on-transportation-and-logistics-due-to-the-paris-2024-olympic-and-paralympic-games](#)

38 From vision to Legacy: A Game Plan for Brisbane 2032 and Beyond (WT Partnership, n.d.); <https://wtpartnership.com.au/wp-content/uploads/2026/02/WT-report-From-vision-to-legacy-a-game-plan-for-Brisbane-2032-and-beyond.pdf>

39 From vision to Legacy: A Game Plan for Brisbane 2032 and Beyond (WT Partnership, n.d.); <https://wtpartnership.com.au/wp-content/uploads/2026/02/WT-report-From-vision-to-legacy-a-game-plan-for-Brisbane-2032-and-beyond.pdf>

40 The Legacy of the Paris 2024 Olympic and Paralympic Games (OECD, 2024); https://www.oecd.org/en/publications/the-legacy-of-the-paris-2024-olympic-and-paralympic-games_d7938b7f-en/full-report.html

41 From vision to Legacy: A Game Plan for Brisbane 2032 and Beyond (WT Partnership, n.d.); <https://wtpartnership.com.au/wp-content/uploads/2026/02/WT-report-From-vision-to-legacy-a-game-plan-for-Brisbane-2032-and-beyond.pdf>

42 The Paris 2024 Olympic and Paralympic Games National Audit (Cour des comptes, 2025); <https://www.ccomptes.fr/en/publications/paris-2024-olympic-and-paralympic-games>

43 The Legacy of the Paris 2024 Olympic and Paralympic Games (OECD, 2024); https://www.oecd.org/en/publications/the-legacy-of-the-paris-2024-olympic-and-paralympic-games_d7938b7f-en/full-report.html

44 Impacts on Transportation and Logistics due to the Paris 2024 Olympic and Paralympic Games (Prodensa 2024); <https://www.prodensa.com/insights/blog/impacts-on-transportation-and-logistics-due-to-the-paris-2024-olympic-and-paralympic-games>

45 Impacts on Transportation and Logistics due to the Paris 2024 Olympic and Paralympic Games (Prodensa 2024); <https://www.prodensa.com/insights/blog/impacts-on-transportation-and-logistics-due-to-the-paris-2024-olympic-and-paralympic-games>

46 Impacts on Transportation and Logistics due to the Paris 2024 Olympic and Paralympic Games (Prodensa 2024); <https://www.prodensa.com/insights/blog/impacts-on-transportation-and-logistics-due-to-the-paris-2024-olympic-and-paralympic-games>

Legacy outcomes:

- Permanent improvements in new urban logistics, boosting public efficiency.⁴⁷
- Retained freight permit and time window system via J'Optimiz platform.⁴⁸

A-1-2 Tokyo Olympics 2020

Tokyo 2020 (held in 2021) provides useful insight into managing freight and passenger logistics as distinct streams during a major event. The programme included restrictions on private vehicles on designated road networks while engaging freight operators separately to support BAU resilience; however, it was delivered without spectators, changing travel demand while maintaining Games logistics complexity.

Key lesson for Brisbane: Freight must be treated as a distinct policy domain within Olympic TDM. Blanket restrictions designed for passenger vehicles can be counterproductive if applied uniformly to commercial freight. Brisbane should design its GRN and TDM measures with explicit freight exemptions or freight-specific management protocols

Tokyo Olympics 2021

Background: The Tokyo Olympic Games was held in 2021 after COVID delays, involving more than 42 venues across central urban areas and the Tokyo Bay Zone near major logistics bases and port facilities. Despite no spectators, Games transport demand remained high: on peak days approximately 2,160 buses were deployed for athletes and approximately 2,654 vehicles for other stakeholders (including accessible vehicles).⁴⁹



Challenges:

Reliance on coordinated transport operations

Games mobility relied on tightly coordinated operations to keep accredited fleets and BAU traffic moving on shared road space, supported by the 24/7 Transportation Operation Centre (TROC). Real-time monitoring and corridor management (including disciplined compliance with the Olympic Route Network) were critical to avoid knock-on impacts on urban freight and commuter movements.⁵⁰

BAU freight disruption

Last mile deliveries and port logistics were disrupted as Games equipment imports overlapped with commercial flows, increasing gate congestion and truck queueing risk. Around 10% of loaded containers were expected to remain in Tokyo Port yards for more than two weeks, reducing yard efficiency.

Mitigation measures:

Tokyo implemented a Travel Demand Management (TDM) programme and established the 24/7 Transportation Operation Centre (TROC) to coordinate Games-time traffic and manage network performance.

Games-specific Logistics Management

- Over 50,000 employers supported telecommuting, staggered hours and leave to reduce peak demand during the Games.
- Expressway toll surcharges applied to passenger vehicles, not freight.
- Provided an interface for route and time-slot planning with real-time travel times.
- Coordinated construction schedules and deferred non urgent works to prioritise Games deliveries.
- Used prioritised lanes near venues and the Olympic Route Network (ORN) linking venues and Villages.

47 The Legacy of the Paris 2024 Olympic and Paralympic Games (OECD, 2024); https://www.oecd.org/en/publications/the-legacy-of-the-paris-2024-olympic-and-paralympic-games_d7938b7f-en/full-report.html

48 The Legacy of the Paris 2024 Olympic and Paralympic Games (OECD, 2024); https://www.oecd.org/en/publications/the-legacy-of-the-paris-2024-olympic-and-paralympic-games_d7938b7f-en/full-report.html

49 Understanding changes in traffic demand during the Tokyo 2020 Olympic and Paralympic Games (Dantsuji, T. and Nakagawa, M., 2024); <https://arxiv.org/pdf/2409.05296>

50 Request for Cooperation concerning logistics during Tokyo 2020 Olympic and Paralympic Games (Tokyo Metropolitan Government, n.d); https://www.2020games.metro.tokyo.lg.jp/taikaijunbi/torikumi/yusou/2020tdm/logistics_pdf/Request_for_cooperation_concerning_logistics_during_Tokyo_2020_Olympic_and_Paralympic_Games.pdf

BAU Logistics Management

- TDM tools (e.g., a Games Transport Impact Map) supported real-time monitoring and coordinated traffic protocols.
- Released next-day congestion forecasts during the Games to support last-mile planning.
- Port of Tokyo extended operating hours to shift freight to off-peak windows and avoid daytime convergence with Games equipment moves.

Impact:

- Toll surcharges reduced passenger vehicle demand by 25% on weekdays and 36.8% on weekends/ holidays.
- 80% decrease in time lost to congestion during the Games period.
- 40% reduction in non-urgent transportation in private vehicles.⁵¹

Legacy outcomes:

- Strengthened multi-agency collaboration, blueprint for future large-scale operations and demonstrated effectiveness of flexible working arrangements.
- Little to no legacy outcomes due to functions under Covid-19 environment.⁵²

A-1-3 Qatar World Cup 2022

The Qatar World Cup illustrates how legacy infrastructure and digital border/logistics systems can be leveraged to keep BAU supply chains operating while delivering event-specific logistics.

Key lesson for Brisbane: Qatar demonstrates the value of accelerating bypass and gateway infrastructure so BAU trade can continue while event operations intensify, and of digital logistics platforms that persist beyond the event period. Nevertheless, financial and capacity considerations may differ in Brisbane's context, particularly where new infrastructure is unlikely to be delivered within the same funding or delivery environment.

Qatar World Cup 2022

Background: Qatar hosted the FIFA World Cup in 2022 with 3.4 million spectators (average stadium capacity 96.3%) across 8 stadiums. The compact geography enabled cross-city movement between venues, particularly in early tournament stages.⁵³

Challenges:

Peak-time surge

Multiple matchdays (up to four/day) compressed turnaround for crowd movement, security and stadium servicing. Last mile access constraints (only 5 of 8 stadiums directly connected to metro) increased reliance on connecting buses and added delay risk.

Multimodal Network Disruptions

Peak periods also stressed air and sea gateways: forecasts included 26,425 air traffic movements and 146 vessels at Hamad Port plus 105 at Ruwais Port (including approximately 125,000 containers). Capacity and processing were expanded to handle event freight alongside BAU volumes.

Mitigation measures:

Event-specific Logistics Management

- Ticket holders used the digital Hayya Card for public transport access and journey planning.
- Matchday services included transport hubs, park-and-ride and metro operations before/after games to manage arrivals and departures.⁵⁴
- Real-time crowd management coordinated the rail fleet and interchange movements during peak demand.⁵⁵



51 Tokyo 2020 Measurements and Achievements on Transportation (Tokyo Metropolitan Government, 2022); <https://www.2020games.metro.tokyo.lg.jp/Tokyo2020%20Measures%20%26%20Achievement%20on%20Transportation2022Mar.24.pdf>

52 Understanding changes in traffic demand during the Tokyo 2020 Olympic and Paralympic Games (Dantsuji, T. and Nakagawa, M., 2024); <https://arxiv.org/pdf/2409.05296>

53 FIFA World Cup: Public Transportation (FIFA, 2022); <https://publications.fifa.com/de/final-sustainability-report/environmental-pillar/greenhouse-gas-emissions/public-transportation/>

54 FIFA World Cup: Public Transportation (FIFA, 2022); <https://publications.fifa.com/de/final-sustainability-report/environmental-pillar/greenhouse-gas-emissions/public-transportation/>

55 FIFA World Cup: Public Transportation (FIFA, 2022); <https://publications.fifa.com/de/final-sustainability-report/environmental-pillar/>

BAU Logistics Management

- Expanded customs facilities and operating capacity at major air/sea/land ports to reduce clashes between BAU freight and event shipments.
- Road/port investments (e.g., Orbital Highway links and expanded deepwater port capacity) helped divert freight from the urban core and accommodate peak volumes.⁵⁶
- Al-Nadeeb connected customs and agencies for electronic declarations, payments and risk-based inspections, reducing clearance delays.

Impact:

- Dual airport operations supported BAU reliability, including long-haul and cargo-linked flights.
- Vessel arrivals were handled under normal capacity with extended customs operations, keeping BAU disruption low.
- Spectators reported positive transport and last-mile journey experiences.
- Al-Nadeeb ensured seamless operations of logistics approval along the supply chain.⁵⁷

Legacy outcomes:

- Delivered permanent upgrades (Doha Metro, Orbital Highway links to Hamad Port, and expanded airport cargo facilities), increasing long-term passenger and freight capacity.
- Al-Nadeeb remains in operation, providing lasting efficiency gains and a reference model for large-event supply chain management.
- Rapid event delivery tools now routinely applied in domestic freight operations to support the development of a self-sufficient logistics ecosystem.⁵⁸

A-1-4 Gold Coast Commonwealth Games 2018

Gold Coast 2018 is a relevant domestic case study for Brisbane 2032, showing how a mid-sized Australian city delivered a multi-venue event within an urban environment while relying heavily on existing road, rail and light rail networks that also support BAU travel, freight and tourism.

Key lesson for Brisbane: GC 2018 demonstrated that TMR has institutional capability for major event transport coordination. Brisbane 2032 presents an opportunity to engage in a step-change in scale and complexity requiring a dedicated real-time freight coordination beyond what was needed for GC 2018.

Gold Coast Commonwealth Games 2018

Background: The Gold Coast hosted the Commonwealth Games in 2018, attracting over 1 million spectators alongside athletes, officials, media and volunteers. Events were distributed across multiple venues, with additional activity in Brisbane, Townsville and Cairns.⁵⁹

Challenges:

Peak-time surge

Same-day scheduling created operational pressure and required years of planning. Compressed turnaround for crowd movement, security and servicing posed risks. Only 5 of 8 stadiums were directly connected to metro stations; others relied on shuttle buses, adding last-mile delay risk^[30] despite Gold Coast Light Rail expansions.

Multimodal Network Disruptions

While not as extensive as Qatar's multimodal freight volumes, the Gold Coast faced challenges in balancing Games-time transport with BAU traffic, especially along the Pacific Motorway and key arterial roads⁶⁰, as trucks were restricted to designated lanes and reduced speed limits on the M1 Motorway.



greenhouse-gas-emissions/public-transportation/

⁵⁶ How the FIFA World Cup transformed Qatar's transport and logistics landscape (Transport and Logistic (TLME), 2025); <https://www.transportandlogisticsme.com/smart-logistics/how-the-fifa-world-cup-has-transformed-qatars-transport-and-logistics-landscape>

⁵⁷ How the FIFA World Cup transformed Qatar's transport and logistics landscape (Transport and Logistic (TLME), 2025); <https://www.transportandlogisticsme.com/smart-logistics/how-the-fifa-world-cup-has-transformed-qatars-transport-and-logistics-landscape>

⁵⁸ Traffic impact assessment for the stadiums hosting FIFA 2022 World Cup in Qatar: a case study (Tahmasseby, S., Palaniappan, P.R. and Subramanian, S., 2021); <https://www.researchgate.net/publication/353978618>

⁵⁹ Our 2018 Commonwealth Games Transport Legacy (Department of Transport and Main Roads Queensland, 2024); <https://www.tmr.qld.gov.au/About-us/Corporate-information/Our-2018-Commonwealth-Games-legacy>

⁶⁰ Gold Coast 2018 Commonwealth Games – managing unprecedented challenges in engineering logistics and traffic flow (Department of Transport and Main Roads Queensland, 2023); <https://www.ieslqld.org/wp-content/uploads/2023/08/Approved-Comms-Games-Article.pdf>

Mitigation measures:⁶¹

Event-specific Logistics Management

A Games Route Network (GRN) with Games Lanes, park-and-ride and enhanced rail services supported last-mile connectivity, backed by a multi-agency Transport Coordination Centre (TCC) for real-time operations and incident response. GC2018 Journey Planner app released to allow pre-booking of park-and-ride spots as well as gauging travel times. A centralised warehouse operation was also set up to allow early stockpiling and processing of Games-related goods.⁶²

BAU Logistics Management

The M1 Management Plan used temporary traffic management (e.g., ramp metering, speed management, signal coordination and enhanced incident response) to minimise disruption to BAU movements. Key road corridors were widened (Bundall Road to six lanes) to improve traffic flow capacity.⁶³

Impact:

- Games-time transport operations were widely regarded as successful, with timely delivery and access to important Games venues.
- The TCC model demonstrated the value of real-time, multi-agency coordination for event operations⁶⁴. The Games itself accelerated the development of major transport projects, particularly the second stage of the Gold Coast Light Rail expansion, linking with its Brisbane counterpart.

Legacy outcomes:⁶⁵

- Validated the effectiveness of dedicated Games Lanes and TDM strategies for future events.⁶⁶
- Demonstrated the value of a centralised Transport Coordination Centre, influencing future Queensland event planning.
- Infrastructure upgrades (e.g. intersection improvements, motorway enhancements) continue to benefit the region's transport network.

A-1-5 London Olympics 2012

London 2012 provides a strong reference case for managing freight continuity in a dense, constrained city during a mega-event. London's approach combined a clearly defined Olympic Route Network (ORN) with targeted travel demand measures and a practical freight engagement programme led by Transport for London, helping businesses plan deliveries, reroute movements and shift activity to off-peak periods. Following is a summary of the key challenges observed, the main Games-time and BAU mitigation measures (including freight journey planning tools and governance coordination), and the longer-term institutional and precinct legacy outcomes.

Key lesson for Brisbane: London demonstrates that the Games can be a catalyst for permanent improvement in urban freight management, but only if the freight legacy agenda is designed in from the outset. Having a sustainable institutional legacy framework will require the establishment of a one-stop Freight Forum and freight coordination function at the earliest window.

61 Gold Coast 2018 Commonwealth Games – managing unprecedented challenges in engineering logistics and traffic flow (Department of Transport and Main Roads Queensland, 2023); <https://www.ieslqld.org/wp-content/uploads/2023/08/Approved-Comms-Games-Article.pdf>

62 Gold Coast 2018 Commonwealth Games Post Games Report (Office of the Commonwealth Games, Department of Innovation, Tourism Industry Development and the Commonwealth Games, 2019); Gold Coast 2018 Commonwealth Games Post Games Report – Dataset – Publications | Queensland Government

63 Gold Coast 2018 Commonwealth Games Post Games Report (Office of the Commonwealth Games, Department of Innovation, Tourism Industry Development and the Commonwealth Games, 2019); Gold Coast 2018 Commonwealth Games Post Games Report – Dataset – Publications | Queensland Government

64 The race to gold – Brisbane's Games transport legacy (Brisbane City Council, n.d.); <https://www.brisbane.qld.gov.au/content/dam/brisbanecitycouncil/corpwebsite/about-council/documents/the-race-to-gold-brisbanes-games-transport-legacy.pdf.coredownload.pdf>

65 The race to gold – Brisbane's Games transport legacy (Brisbane City Council, n.d.); <https://www.brisbane.qld.gov.au/content/dam/brisbanecitycouncil/corpwebsite/about-council/documents/the-race-to-gold-brisbanes-games-transport-legacy.pdf.coredownload.pdf>

66 Our 2018 Commonwealth Games Transport Legacy (Department of Transport and Main Roads Queensland, 2024); <https://www.tmr.qld.gov.au/About-us/Corporate-information/Our-2018-Commonwealth-Games-legacy>

London Olympics 2012

Background: The London Olympic and Paralympic Games was held in Summer 2012, with the Olympic Park in East London serving as the core of the Games. 8.8 million tickets were sold, involving 10,500 athletes, which prompted the organising vision to travel beyond sport, using the Games as a catalyst for urban regeneration.⁶⁷



Challenges:

Network disruption

Significant road restrictions arising from the Olympic Route Network (ORN), including Local Area Traffic Management and Parking Plans, and Movement Management Areas, led to several issues such as uncertainty around journey times, delivery access, and route reliability, particularly around central London. Rerouting to avoid ORN corridors had led to increased fuel consumptions and labour costs, with 36–41% of businesses and freight operators incurring cost increases as a result.⁶⁸

Information asymmetry

Road-network updates were less detailed and stable than public transport, and smaller businesses/operators were less likely to access early information.

Mitigation measures:

Event-specific Logistics Management

- Temporary park-and-ride and targeted peak rail capacity increases to venues
- Setting up a Transport Coordination Centre (TCC) for real-time info, monitoring and incident response
- Used venue-adjacent consolidation centres to pre-screen goods and reduce access bottlenecks

BAU Logistics Management

- Freight Journey Planner as a logistics tool accounting for vehicle dimensions, time-of-day restrictions and ORN/PRN conditions.⁶⁹
- Used pre-ordering/stockpiling and shipment consolidation in office, retail and institutional settings.
- Centralised governance to enable faster, one-stop decisions across jurisdictions.
- Procurement controls to shorten construction timeframes and timely delivery of Games-related infrastructure.⁷⁰

Impact:

- Survey and ANPR analysis showed measurable shift in freight activity toward overnight and off-peak periods.⁷¹
- Improved journey reliability for priority movements without widespread freight disruption.

Legacy outcomes:

- Repurposed the Athlete Village for community housing; delivered new rail lines and power tunnels to support East London regeneration.
- Institutional legacy of freight management framework, established permanent Freight Delivery Unit.⁷²

⁶⁷ Delivering transport for the 2012 Olympic Games (National Audit Office for the Olympics Library, 2012); library.olympics.com/default/digitalCollection/DigitalCollectionAttachmentDownloadHandler.ashx?parentDocumentId=35101&documentId=157645&skipWatermark=true&skipCopyright=true

⁶⁸ Olympic legacy monitoring: adaptations to deliveries by businesses and freight operators during the Games – Travel in London supplementary report (Transport for London, 2013); Olympic Legacy Monitoring: Adaptations to deliveries by businesses and freight operators during the Games

⁶⁹ Freight Advice Programme for London 2012, (Transport 2012); <https://content.tfl.gov.uk/freight-advice-programme-london-2012.pdf>

⁷⁰ From vision to legacy: A game plan for Brisbane 2032 and beyond, (WT Partnership, 2023); <https://www.wtppractice.org/wp-content/uploads/WT-report-From-vision-to-legacy-a-game-plan-for-Brisbane-2032-and-beyond.pdf>

⁷¹ Olympic legacy monitoring: Adaptations to deliveries by businesses and freight operators during the Games (Transport for London, 2013); <https://content.tfl.gov.uk/olympic-legacy-monitoring-adaptations-to-deliveries.pdf>

⁷² Olympic legacy monitoring: adaptations to deliveries by businesses and freight operators during the Games – Travel in London supplementary report (Transport for London, 2013); Olympic Legacy Monitoring: Adaptations to deliveries by businesses and freight operators during the Games

A-1-6 Sydney 2000

Sydney 2000 is a useful comparator for Brisbane because it combined a large multi-venue event with a live metropolitan economy and a strong emphasis on integrated transport governance. While Sydney's network scale and modal options were stronger than Brisbane's, the case still illustrates how freight, venue servicing and business-as-usual activity need to be actively managed together rather than treated as separate tasks.

Key lesson for Brisbane: Sydney shows the value of early multi-agency integration, clear operating manuals and venue-level transport planning, but it also demonstrates that temporary behavioural and operational changes can fade quickly without deliberate institutional follow-through. For Brisbane, the implication is to pair Games-time freight controls with enduring governance, data capability and freight-specific operating frameworks so the benefits extend beyond 2032.

Sydney 2000 Olympics

Background: Sydney 2000 used an integrated, multi-agency delivery model involving the Sydney Organising Committee for the Olympic Games (SOCOG), the Olympic Co-ordination Authority (OCA) and the Olympic Roads and Transport Authority (ORTA), with progressively tighter operational integration close to Games-time.⁷³

Challenges:

Network prioritisation + constrained urban space:

Central Sydney and key precincts required special transport arrangements, creating potential pinch points for servicing and deliveries in dense areas (particularly where road space was reallocated).

Multimodal Network Disruptions

Managing access around Olympic Park / Darling Harbour and distributed venues required careful local planning to protect residents and businesses while still enabling Games operations.⁷⁴

Mitigation Measures:

Event-specific Logistics Management

ORTA developed venue-focused transport plans and undertook consultation to finalise local elements and protect residents/businesses – an approach consistent with maintaining access for servicing while managing disruption.

BAU Logistics Management

The Freight Manual set out practical guidance for Olympic-related freight movements – especially import/export pathways – helping reduce uncertainty and process friction for time-critical goods.⁷⁵

Impact:

- Games-time transport widely assessed as successful, supported by coordinated operations and strong public transport usage.
- A formalised freight guidance approach (Freight Manual) supported more predictable handling of Olympics-related movements (imports/clearance/distribution).

Legacy Outcomes:

- Governance model provides a reference case for integrated Games delivery across multiple agencies.⁷⁶
- Freight legacy was more procedural/documentated (e.g., Freight Manual) than a long-running freight governance platform.



73 Brewer, AM & Hensher, DA 2001, The impact of staging a major event on commuters' work and travel behaviour: The Sydney 2000 Olympic Games, Australasian Transport Research Forum (ATRF); <https://australasiantransportresearchforum.org.au/the-impact-of-staging-a-major-event-on-commuters-work-and-travel-behaviour-the-sydney-2000-olympic-games/>

74 Hensher, DA & Brewer, AM 2002, 'Going for gold at the Sydney Olympics: How did transport perform?', Transport Reviews, vol. 22, no. 4, pp. 381-399; <https://www.tandfonline.com/doi/pdf/10.1080/01441640110121112>

75 Sydney Organising Committee for the Olympic Games (SOCOG) 2001, Official report of the XXVII Olympiad Sydney 2000 Olympic Games (Volumes 1-2), LA84 Foundation Digital Library; <https://digital.la84.org/>

76 Brewer, A.M. and Hensher, D.A. (2001) 'The impact of staging a major event on commuters' work and travel behaviour: The Sydney 2000 Olympic Games', Australasian Transport Research Forum; <https://australasiantransportresearchforum.org.au/the-impact-of-staging-a-major-event-on-commuters-work-and-travel-behaviour-the-sydney-2000-olympic-games/>

A-1-7 Atlanta 1996

Atlanta 1996 remains an important counter example in Olympic transport planning because it exposed the consequences of fragmented governance, road dependence and weak integration between event operations and everyday urban movement. For Brisbane, it is relevant not as a model to replicate, but as a cautionary case that highlights what can happen when freight continuity and business-as-usual supply chains are not built into the Games planning framework from the outset.

Key lesson for Brisbane: Atlanta demonstrates that no-coordination or largely hands-off approaches create real risk for both Games operations and BAU freight. Brisbane should treat this as the lower-bound scenario to avoid freight needs explicit governance, corridor planning, access protocols and operator engagement well before the construction peak and Games period, particularly given Southeast Queensland's limited network redundancy and Gateway dependence

Atlanta 1996 Olympics

Background: Atlanta 1996 was delivered through a privately led organising model with fragmented transport governance and limited public oversight. Transport planning prioritised spectator and athlete movement, with freight treated as a secondary consideration.⁷⁷

Challenges:

Lack of freight integration

No dedicated freight management programme or city-wide delivery framework was established, leaving BAU logistics to compete with Olympic traffic.

Network strain and coordination gaps

Road-dependent travel, inexperienced operators, and incomplete inter-agency coordination caused congestion and unpredictability across the network.

Mitigation Measures:

Event-specific Logistics Management

Central traffic management, ad-hoc ITS deployments, shuttle buses and voluntary travel demand reduction for commuters.

BAU Logistics Management

No formal measures: freight operators' self-managed via off-peak deliveries and ad-hoc rerouting.⁷⁸

Impact:

- Significant Games-time transport disruption drew IOC criticism and media scrutiny, with knock-on delays to normal commercial deliveries.
- BAU supply chains were materially disrupted, increasing costs and uncertainty for local businesses despite some commuter demand reduction.⁷⁹

Legacy Outcomes:

- Atlanta became a cautionary case, directly influencing later hosts (e.g., Sydney 2000, London 2012) to adopt integrated freight and logistics planning.
- Validated the need for dedicated freight governance, formal delivery controls, and early stakeholder engagement in mega-event planning.



77 Amodei, R, Bard, E, Brong, B, Cahoon, F, Jasper, K, Manchester, K, Robey, N, Schneck, DC, Stearman, B & Subramaniam, S 1997, 1996 Atlanta Centennial Olympic Games and Paralympic Games Event Study (FHWA-RD-97-107), Federal Highway Administration, United States Department of Transportation, Washington, DC

78 Batuhan, T 2020, 'A retrospective analysis: 1996 Atlanta Summer Olympics and lessons for future Olympic cities', Journal of Multidisciplinary Academic Tourism, vol. 5, no. 1, pp. 35–51; <https://doi.org/10.31822/jomat.656291>

79 Applebome, P 1996, 'Transportation becoming challenge of '96 Olympics', The New York Times, 23 July; <https://archive.nytimes.com/www.nytimes.com/specials/olympics/0723/oly-traffic-art.html>

Appendix B: Workshop attendee organisations

(Not to be considered as endorsement)

Table 11 List of organisations who participated in workshop and/or provided comment on the draft White Paper

Organisation	
Port of Brisbane	AgForce Queensland
Brisbane Airport Corporation	WSP
Patrick Stevedores	Architectus Conrad Gargett
Norco	Medlog
University of the Sunshine Coast	Linfox
Graincorp	Mov3ment
QUBE	Freight Trade Alliance
2032 Consult	Coles
Committee for Brisbane	Toll
Queensland Transport and Logistics Council	Heavy Vehicle Industry Association
All Purpose Transport	New Hope Coal
Woolworths	Yancoal
National Heavy Vehicle Regulator	Pacific National
Cement and Concrete Aggregates Australia	International Forwarders and Customs Brokers Association of Australia
Transport Professionals Association	Transurban
Queensland Department of Transport and Main Roads	AAL Shipping
Queensland Rail	CleanCo
Laing O'Rourke Australia	MGM
Australian Energy Producers	Australasian Railway Association



GHD

Level 9
145 Ann Street
Brisbane QLD 4000

www.ghd.com

→ ghd.com