ROADS AND TRANSPORT DIRECTORATE

GUIDE TO DEVELOPING A COUNCIL-BASED FREIGHT TRANSPORT STRATEGY

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Roads and Transport Directorate

GUIDE TO DEVELOPING A COUNCIL-BASED FREIGHT TRANSPORT STRATEGY

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Project Manager:

Joshua Devitt	Chief Engineer, IPWEA (NSW & ACT)

Authors:

Nicholas Havyatt	Project Manager, Roads and Transport Directorate
Ai Jen Lim	Research and Policy Officer (to Jun. 2022), Roads and Transport Directorate

Project Group:

Mike Dowd	Chair, Transport Working Group, Independent Consultant
Brayden Soo	Manager, Freight and Supply Chain, National Heavy Vehicle Regulator
Bill Woodcock	Senior Associate, Government and Business Services, Complete Urban
Adrian Milne	Director Infrastructure Services, Lachlan Shire Council
Sylvester Otieno	Divisional Manager Engineering Services, Warren Shire Council
Ben Howard	Director Operations, Parkes Shire Council
Nathan Skelly	Director Infrastructure and Environmental Services, Liverpool Plains Shire Council
Chris Devitt	Independent Consultant
Tym Pieglowski	NSW Transport Network Convenor, Planning Institute of Australia
Scott Greenow	A/Executive Director Freight, Transport for NSW
William Douglas	Cadet Engineer (to Aug. 2023), Roads and Transport Directorate

Published by: Institute of Public Works Engineering (NSW Division) Limited
Level 12, 447 Kent Street
Sydney NSW 2000
Phone: +61 2 8267 3000
Fax: +61 2 8267 3070
Email: rtd@ipweansw.org
https://ipweansw.org/roadsdirectorate/

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1. INTRODUCTION TO THE GUIDE

1. Introduction to the Guide

1.1 Why do we need a strategic plan for freight transport?

Strategic planning for freight transport ensures the efficient movement of goods and services, reduces congestion, maximises safety outcomes and minimises environmental impact. The planning process aims to determine objectives and resources to achieve outcomes, such as improved road safety, streamlined goods movement, and boosting local economic activity. The planning process will involve analysis of the current transport situation, engaging with stakeholders and the community to identify issues and ensure that the strategies meet their needs, and will lead to improved freight transport outcomes benefitting industry and the community-at-large. The planning process spans short (1-2 years), medium (3-5 years), and long-term (5+ years) horizons to ensure sustainable and adaptable solutions.

1.2 General

Aims of the Council-based Freight Transport Strategy:

- Establish a framework for the council to understand and cater to the freight needs of the community and industry.
- Engage actively with the community and stakeholders to understand and address current and future freight demands.
- Secure a strategic position to leverage federal and state funding programs for freight related projects.
- Enable the council to understand the community's short, medium and long-term freight and transport needs.
- Prepare councils to accommodate future changes to freight transport on their networks.
- Promote decision-making that considers and balances the long-term effects of freight activity on productivity, safety and sustainability.

Objectives of developing a Council-based Freight Transport Strategic Plan:

- Integration of community freight needs into the council's strategic and operational plans.
- Setting clear freight transport direction that aligns with the interests of the council, industry, community, and stakeholders.
- Identify the council's short, medium and long-term priorities in planning and managing transport and land use, including local and regional considerations.

Benefits of a Council-based Freight Transport Strategic Plan:

- To understand the community's freight requirements.
- Promoting community involvement, leading to a sense of ownership and proactive participation in addressing road issues.
- Position the council in taking significant advantage of federal and state road funding Programs.
- Promoting consideration of freight movements when determining future projects.
- Establishment of an information database to inform and guide future transport decisions.

1.3 Background

Local governments, from urban centres to rural landscapes, are dedicated to building efficient and secure freight networks. This commitment aims to link people, goods, and services across NSW while catering to our vast state's unique challenges.

Facing evolving regulations and diverse environmental concerns, our guide is both adaptive and forward-thinking, prioritising safety, efficiency and sustainability in freight outcomes. Stakeholders from all sectors are considered in shaping a freight future that drives NSW's progress, while preserving the needs of local communities.

The modern landscape of urbanisation, economic shifts, increasing frequency of natural disasters and globalisation has catapulted the importance of freight and logistics to the forefront of local government planning and development. As communities grow and consumer demands evolve, an efficient, sustainable, resilient and safe freight transport system becomes paramount. This is where the role of local councils becomes indispensable.

Council's Role in Freight Strategy:

Local councils are responsible for designing, planning, and managing local road networks. These roads are typically on the 'first and last mile' and are often critical links in the larger freight transport ecosystem and end-to-end supply chain, including on an international scale. Council's responsibilities extend beyond road maintenance. These responsibilities include:

1. Safety: Ensuring that roads are safe for freight movement and public use, considering the unique challenges of large vehicles.
2. Efficiency: Facilitating ease of movement of goods, which is essential for local businesses, consumers, and the broad community.
3. Sustainability: Implementing measures that reduce the environmental impact of freight movement, such as promoting eco-friendly vehicles or optimising routes to reduce emissions.
4. Engagement: Actively engaging with the community and stakeholders to understand their needs, concerns, and aspirations related to freight transport.
5. Future Planning: Development of long term network planning to manage future demand, develop network resilience, and to adjust to forecasted changes in freight vehicles and the regulatory framework.

Links to State and Federal Policies:

State and federal policies on transport and freight are typically more overarching and provide a broad framework within which local strategies must operate. Consideration of state and federal policies in a local council based strategy is essential.

1. Alignment: Local councils must ensure that their freight strategies align with state and federal policies, ensuring consistency and cohesion across different administrative levels.
2. Feedback Loop: Conversely, local councils can provide insights to state and federal governments, highlighting specific challenges, successes, and needs that can influence higher-level decisions.
3. Resource Allocation: State and federal policies often come with funding programs or resources that councils can tap into. By aligning council strategies with these priorities, councils can better position themselves to benefit from these programs or resources.
4. Legislation and Regulation: Councils understand and adhere to state and federal laws, regulations, and standards related to freight and transport. This ensures that local initiatives are compliant and influential within larger freight frameworks.

Role of Urban Councils:

Traditionally, urban councils are primarily concerned with managing congestion, ensuring road safety, and facilitating the smooth movement of goods. Today, their role has expanded:

1. Intermodal Connectivity: With the rise of global trade and larger ports, urban councils are now involved in road, rail, and sea transport.
2. Sustainability: As urban areas grapple with pollution and environmental concerns, these councils are at the forefront of promoting eco-friendly freight solutions and reducing emissions from freight transport.
3. Tech Integration: The advent of smart cities means integrating technology into freight management, from real-time traffic monitoring to facilitating electric vehicle charging stations.
4. Diverse Stakeholder Engagement: Urban councils now engage with a broader spectrum of stakeholders, balancing diverse needs and expectations, from international businesses to local community groups.

Role of Regional Councils:

While regional councils have always played a role in connecting urban hubs and facilitating long-haul transport, their focus areas have evolved:

1. Infrastructure Development: Regional councils are increasingly involved in major infrastructure projects, such as bypasses to divert freight traffic away from small towns or upgrading roads and bridges to handle heavier vehicles.
2. Economic Development: Recognising the potential of freight as an economic driver, councils are increasingly focussed on developing logistics hubs, industrial areas and promoting regional industries.
3. Community Integration: Unlike their urban counterparts, regional councils face the unique challenge of integrating freight movement with the needs of rural and semi-rural communities, ensuring that transport doesn't disrupt local life.

A well-planned freight strategy is necessary in today's ever-changing transport landscape. By understanding their role and ensuring alignment with state and federal policies, councils can create strategies that benefit their communities, contribute to higher level transport objectives, and ensure goods are moved sustainably and efficiently on the local road network.

1.4 Roads and Transport Directorate

The Roads and Transport Directorate is a joint initiative between the Institute of Public Works Engineering Australasia NSW & ACT Division and Local Government NSW to optimise roads and transport outcomes.

The purpose of the Directorate is to support our member councils to deliver an improved local road and transport network. A network that meets the future needs of the community, industry and economy. A network that is safer for all users and that meets movement and place expectations from local communities. A network that uses resources wisely and is mindful of its impact on the environment.

NSW councils collectively manage over 165,000 kilometres of roads valued at more than $87 billion, representing the single largest community asset in New South Wales.

To succeed in this task, the Directorate undertakes leading-edge road and transport research which underpins our input to policy development, our advocacy initiatives and our published guidance on the road network's design, construction and management and its associated infrastructure.

1.5 Integrated Planning & Reporting

The NSW Office of Local Government's Integrated Planning & Reporting (IP&R) framework provides the supporting strategies and plans outlining more specific and detailed guidance on strategic direction. These Strategic plans are generally grouped into two areas.

1. Higher-level guiding strategies that articulate aspirations and strategic intent.
2. More detailed plans that contain specific priorities about new or enhanced service levels, projects or activities.

These strategies are linked to the Community Strategic Plan, including the identified priorities in the plans. When the strategy contains specific priorities regarding new or enhanced services, projects or activities, the plan will be fed into the Community Strategic Plan.

When the plans or strategies identify new or enhanced services, projects or activities with unfunded commitments, new expenditures should be incorporated into the delivery program, resourcing strategy and operational plan. Some of these items will require grant funding to be achieved.

Some of the plans or strategies that need to be considered when developing the freight transport strategy include.

- Emergency Management Plans
- Flood Management Studies
- Road Safety Plan
- Resilience Plans
- Critical Infrastructure Plan

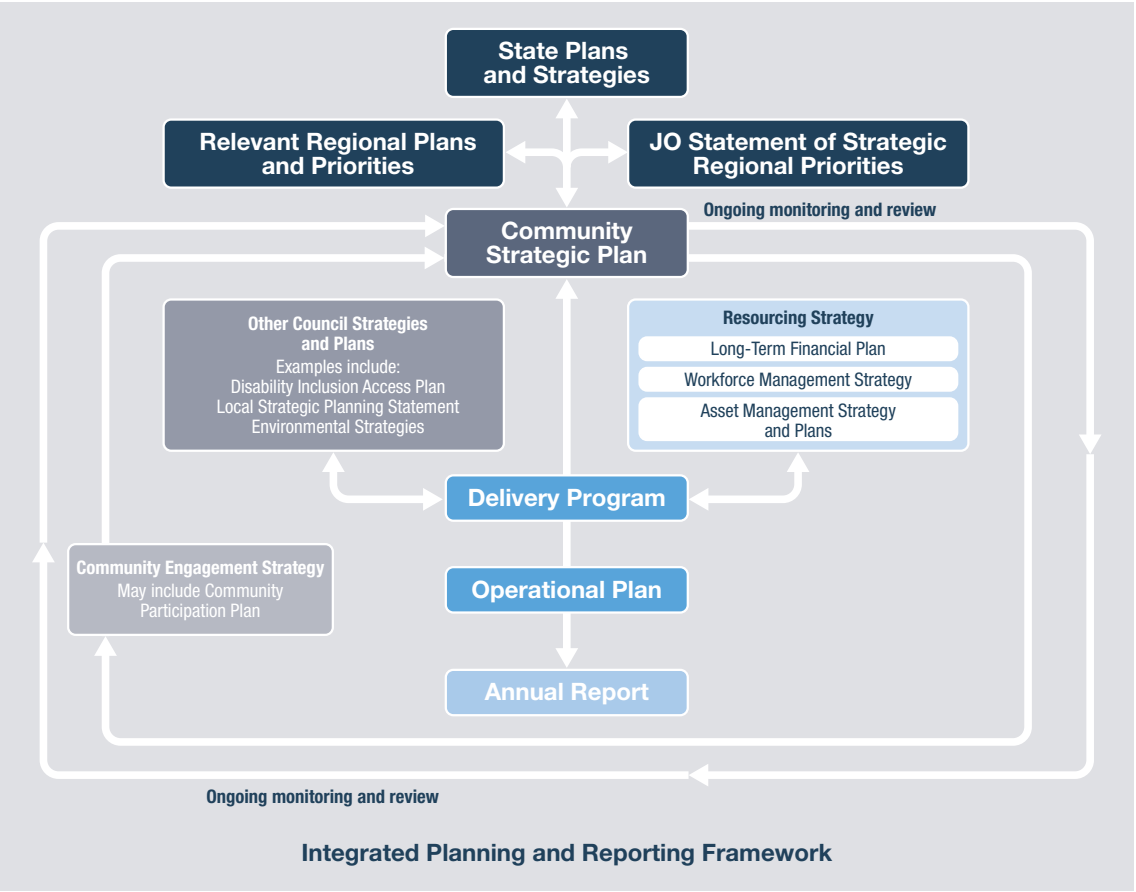

Figure 1: Integrated Planning and Reporting Framework Flow Chart

Source: Integrated Planning & Reporting Handbook for Local Councils in NSW


M7
MOTORWAY
M4
Blacktown
Penrith
Sydney
WALLGROVE RD
Eastern
Creek
2 km
DO NOT
OVERTAKE
TURNING VEHICLE

2. GETTING STARTED

2 Getting Started

2.1 Relevant Resources Available

2.1.1 Council

Reviewing and integrating various existing council strategies and policies is essential when developing or updating a Freight Transport Strategy. Understanding these documents ensures that the Freight Transport Strategy aligns with the council framework. Key documents to consider include:

- Community Strategic Plan
- Delivery Plan
- Operational Plan
- Asset Management Plan
- Local Strategic Planning
- Development Control Plans
- Emergency Management Plans
- Flood Management Studies
- Economic and Tourism Plan
- Road Safety Plan
- Road Maintenance Management Plans
- Resilience Plans
- Critical Infrastructure Plan

Integrating insights from these documents provide a general view of how the Freight Transport Strategy fits into the council's overarching objectives and priorities.

2.1.2 Transport for NSW

Transport for NSW (TfNSW) is responsible for delivering public transport, road, and freight transport solutions. Its resources and tools are essential for councils when developing a comprehensive Freight Transport Strategy:

- Freight and Ports Plan: TfNSW regularly updates its Freight and Ports Plan. This plan provides a strategic outlook on the state's freight priorities and needs. Councils can use this plan to align their strategies with state-wide goals. https://www.transport.nsw.gov.au/projects/strategy/nsw-freight-and-ports-plan
- Traffic Volume Viewer: An online tool that provides traffic count data across various locations in NSW. This is invaluable for councils looking to understand freight movement volumes on their roads and to identify potential bottlenecks or areas of concern. https://roads-waterways.transport.nsw.gov.au/about/corporate-publications/statistics/traffic-volumes/aadt-map/index.html#/?z=6
- Freight Data Hub: A digital platform that aggregates and provides access to a wealth of freight movement data, assisting councils in understanding freight patterns, peak movement times, and key routes. https://www.transport.nsw.gov.au/data-and-research/freight-data
- Road Asset Management: Guidelines and resources related to the maintenance and upgrade of roads crucial for freight movement, helping councils prioritise and manage their infrastructure assets. https://www.transport.nsw.gov.au/system/files/media/documents/2021/TfNSW-Asset-Management-Framework-v4.0.pdf
- Community Engagement Toolkit: Designed to assist in engaging with communities on transport projects. While not freight-specific, councils can leverage this toolkit when discussing freight strategies with local communities. https://roads-waterways.transport.nsw.gov.au/etoolkit/toolbox.html

- Safety Initiatives and Resources: Includes guidelines, training materials, and campaigns focused on ensuring the safe movement of freight across NSW roads. https://www.transport.nsw.gov.au/roadsafety
- Funding and Grant Programs: TfNSW offers funding opportunities for local freight projects. For current grant funding programs, visit the following website. https://www.transport.nsw.gov.au/operations/roads-and-waterways/business-and-industry/partners-and-suppliers/local-government/grant
- Towards Net Zero Emissions Freight Policy: outlines the NSW state level strategy for the transition to a zero emission freight network, and also provides some useful tools for comparison of emissions by vehicle type. https://www.transport.nsw.gov.au/operations/freight-hub/towards-net-zero-emissions-freight-policy

2.1.3 National Heavy Vehicle Regulator

The National Heavy Vehicle Regulator (NHVR) is an independent regulator that administers the Heavy Vehicle National Law. It oversees the management and regulation of heavy vehicles over 4.5t GVM or ATM and their movements across Australia. They offer a suite of technological tools and resources that can be invaluable for councils in understanding the fleet and optimising freight and heavy vehicle flows:

NHVR Portal Accounts: All councils in Heavy Vehicle National Law participating jurisdictions have access to road manager accounts within the NHVR portal. The portal provides a comprehensive digital platform and generates analytics reports related to road management based on restricted access vehicle permit applications that have been transacted through the NHVR portal. The portal's features include:

- Performance Metrics: Gain insights into the operational efficiency and effectiveness of freight movements in the council area.
- Refusal Incidents: Track instances where freight movements were denied for various reasons, providing data to improve decision-making.
- Volume Metrics: Understand the quantity and frequency of freight movements, helping councils identify potential bottlenecks or high-traffic zones.

These reports can be customised based on various parameters, such as vehicle type, route, timeframe, and customer. Additionally, councils can leverage the GIS view feature for a spatial understanding of freight patterns and movements.

Councils can utilise the resources provided by NHVR to better inform their Freight Transport Strategy, ensuring it is data-driven and addresses the unique challenges posed by heavy vehicle movements.

The NHVR provides a number of tools and programs to assist Local Government road managers in assessing the impacts of heavy vehicles on their road network. These include:

- Freight PASS (Productivity and Safety/Sustainability) – an interactive tool to help industry and road managers make more informed safety, productivity and sustainability decisions about the benefits of heavy vehicle combinations on the road network.

  It uses data and methods that road managers trust and already use as part of their transport, infrastructure and economic evaluations (e.g., from Austroads and the Australian Transport Assessment and Planning Guidelines).

  https://www.nhvr.gov.au/consultation/2024/01/17/freight-pass-beta-release
- Pavement Impact Comparison Calculator (Pavement Calculator), an interactive tool to help road managers understand the long-term pavement effects of freight activity on roads.

  The tool's development involved the use of trusted sources already used by road managers in road design and assessments, such as Austroads pavement research and transport agency pavement guideline

  https://www.nhvr.gov.au/consultation/2024/04/05/pavement-impact-comparison-calculator-beta-release
- The Strategic Local Government Asset Assessment Project (SLGAAP) is an Australian Government funded initiative to optimise heavy vehicle access on the local road networks across Australia.

SLGAAP is being developed and delivered by the NHVR to assist local government road managers to undertake heavy vehicle assessments of on-road assets, such as bridges and culverts.

Working collaboratively with engineering consultants and local government road managers, the project supports councils to better understand their asset capability and inform heavy-vehicle access decision-making. https://www.nhvr.gov.au/road-access/local-government-road-managers/strategic-local-government-asset-assessment-project

2.1.4 Austroads

The Austroads Freight Task Force, established in 2007, has representatives from all Austroads member agencies: IPWEA NSW & ACT RTD, Australian state and territory road and transport agencies, the Australian Commonwealth Department of Infrastructure, Transport, Regional Development, Communications and the Arts, the Australian Local Government Association, and the New Zealand Transport Agency.

The National Transport Commission (NTC), the NHVR, and Transport Certification Australia (TCA) are also involved in the Freight Task Force for coordination with their own initiatives and operations and for input into the Austroads Freight program where relevant.

The Freight Task Force assists road and transport agencies in their efforts to address the future freight task and aims to improve road freight operations and integration with other transport modes. As such, the role of the Freight task force is to:

- develop and manage the Austroads road freight research program in line with the Austroads strategic plan.
- provide a forum for the exchange of information on addressing the freight task between Austroads members and related organisations.
- promote national consistency and knowledge sharing between the Austroads member agencies.
- oversee the dissemination of the results of projects and research to agencies and related organisations.
- liaise with other Austroads task forces / review panels on cross program issues.

In developing projects and research, the Freight Task Force focuses on key areas such as:

- environmental sustainability and cultural heritage,
- community consultation and engagement,
- customer service,
- funding and financing options,
- improving data integrity and availability, and
- integration between roads and other transport modes.

The Freight Task Force consults with industry on specific projects through a Freight Industry Consultative Group. The consultation provides industry with updates on Austroads research and an opportunity to provide input into the planning of the future Austroads road freight research program. For more information on the Austroads Freight Task Force https://austroads.com.au/network-operations/freight/freight-task-force-and-projects

2.2 Stakeholder Engagement

Stakeholder engagement is an important step when developing and implementing any strategic plan. The council must understand all stakeholders' perspectives and experiences.

2.2.1 Why is Stakeholder Engagement Important?

Perspectives: All stakeholders bring different perspectives, expertise, and experiences that can help provide a better understanding of issues and potential solutions.

Risk Management: Early engagement can identify potential risks or challenges, allowing the council to address the risks throughout the development of the strategy.

Community Buy-in: Engaging with the community ensures their support and minimises opposition during the strategy's implementation phase.

2.2.2 Key Stakeholders in a Freight Transport Strategy

Internal Council Departments: including asset managers and planners, to ensure the freight strategy aligns with local planning strategies and long term infrastructure plans.

Local Business: Businesses that rely on freight, such as retailers, manufacturers, and agriculture-based businesses.

Residents: Residents living on or near significant freight routes might be affected by noise, traffic, or environmental concerns.

Transport Operators: Transport operators, including trucking companies, logistics providers, and others directly involved in freight movement, both within and outside the council boundary. Refer to Appendix 1 for industry questionnaire template.

Environmental Groups: To address concerns related to emissions, pollution, and the ecological footprint of freight transport.

State and Federal Government: To ensure the strategy is aligned with State and Federal freight transport planning objectives.

Other Councils: Neighbouring councils to ensure that freight strategies are coordinated and cohesive across regions.

2.2.3 Stakeholder Engagement Methods

The following are some examples of stakeholder engagement that could be implemented.

1. Surveys and Questionnaires: To gather quantitative data and general opinions.
2. Focus Groups: For detailed discussions on specific topics and to workshop ideas.
3. Public Meetings and Workshops: Present plans, gather feedback, and address concerns.
4. One-on-One Interviews: With key stakeholders to gather in-depth insights.
5. Online Platforms: Forums, webinars, or interactive portals to reach a wider audience and allow for continuous feedback.

2.2.4 Next Steps

Once feedback is gathered, it's important that the council:

- Analyse the feedback and integrate it into the strategy where appropriate.
- Maintain open communication, updating stakeholders and providing the community with progress on the strategy's development and implementation.
- Ensure continuous engagement, including post-implementation, to gather feedback for refinements and future strategy revision.

Early stakeholder engagement will help to achieve a successful Freight Transport Strategy. The engagement will help ensure the strategy is well-informed and widely accepted by the community and other relevant stakeholders.

3. INVESTIGATING YOUR COUNCIL FREIGHT NETWORK

3 Investigating your Council freight network

3.1 Developing a Freight Movement Plan

A Freight Movement Plan visualises the freight movement strategy, capturing essential data points, routes, and infrastructure, including real or perceived bottle-necks or 'pain points', while facilitating stakeholder understanding and alignment. Given a council's diverse needs and resources, this section aims to provide a flexible framework for developing such a plan, ensuring that it's informative and is adaptable to various platforms, including easily accessible ones like Google Maps.

The plan may consist of an overall plan (i.e. large plan size such as A1) that covers the entire local government area on one page, as shown in Figure 2, or a series of overlapping plans, as shown in Figure 3.

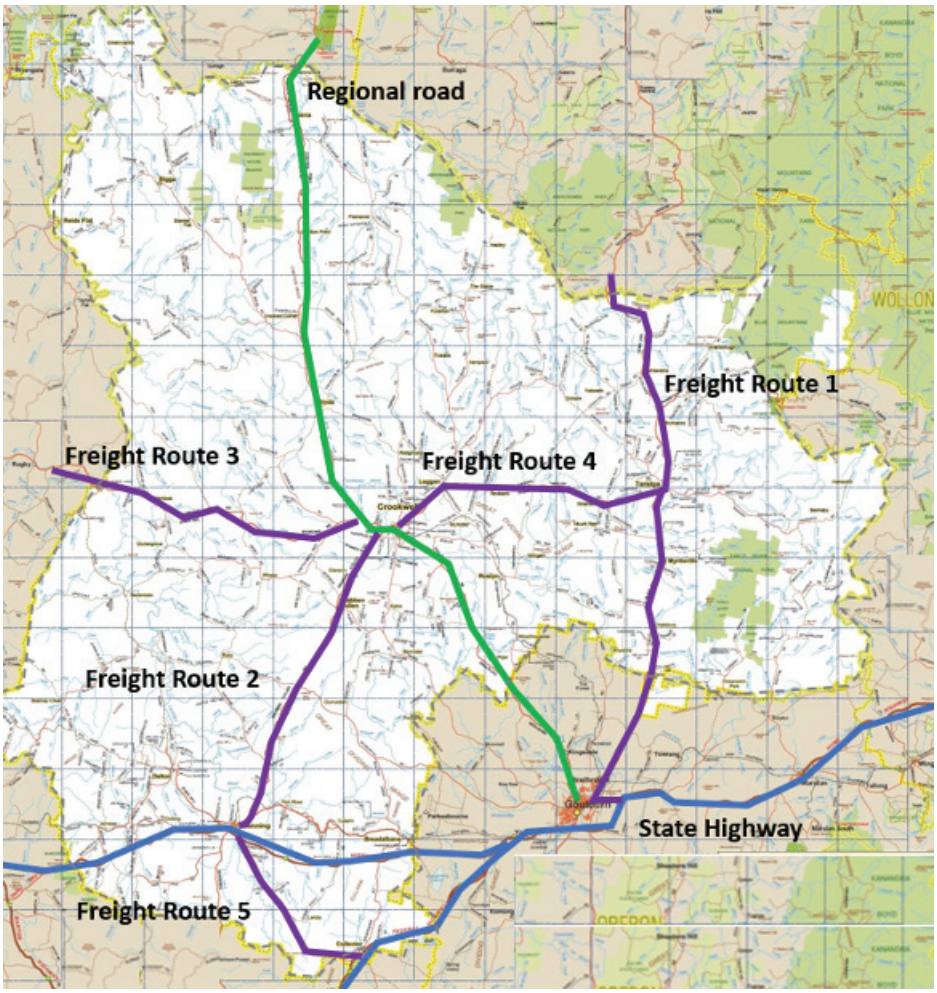

Figure 2: Example plan of shire showing existing major roads and the key inter-shire and intra-shire freight transport routes.

Figure 3: Example plan of shire showing four quadrants with detailed freight information specific local government areas on smaller maps

The recommended minimum details that should be provided on the local road freight strategic plan are:

- Boundaries of the local government council with major towns located. The use of the current council map is a good starting position.
- Colour code the State and regional roads and rail lines in the area
- Colour code the local freight routes, and where appropriate, intra- and inter-regional freight routes.
- Land use may be optional.
- Show colour code dots or icons[1] of the following features on the routes, such as:
  - Grain silos, quarries, mines, major production facilities and sale yards
  - Airports and seaports
  - Bridge condition limits, where available
  - Vehicle height limits, such as bridge heights less than 4.6 m
  - Points of congestion or restricted geometry
  - Key intersections
  - Locations of short stacking issues
  - Flood depth limits, where available
  - Both rail and air freight intermodal locations
  - Heavy vehicle rest areas and uncoupling areas

[1] Consideration should be given to also keeping a database on the GPS location for these sites.

3.2 Local Bridges

In the visual Freight Movement Plan (as discussed above), local bridges of significance should be marked, with annotations or symbols indicating any restrictions or special considerations.

Importance of Local Bridges in Freight Movement:

- **Connectivity:** Bridges often serve as important connectors, linking major freight routes and ensuring the continuous flow of goods.
- **Efficiency:** Well-maintained bridges can reduce travel times, leading to quicker deliveries and reduced operational costs.
- **Safety:** Bridges designed to accommodate heavy freight vehicles and equipped with safety features can minimise accidents and disruptions.

Key Considerations for Local Bridges in a Freight Strategy:

- **Weight Restrictions:** It's important to understand and communicate the weight-bearing capacity of each bridge. Any limitations should be marked and shared to prevent heavy vehicles from causing damage or facing penalties.
- **Width and Height Restrictions:** The dimensions of bridges can limit the types of vehicles that can safely pass. Any restrictions should be indicated to prevent collisions or blockages.
- **Maintenance and Repairs:** Regular inspections and maintenance ensure the longevity and safety of bridges. Plans should be in place for routine checks, timely repairs, and upgrades. This should link to council's asset management plans.
- **Alternative Routes:** For bridge closures due to maintenance, repairs, or emergencies, clearly defined alternative routes should be established and communicated to freight operators.
- **Community Impact:** Consideration should be given to how bridges affect local communities, including noise, aesthetic concerns, and traffic disruptions. Community engagement can provide valuable feedback in this area.
- **Future Projections:** As freight volume and vehicle sizes may increase, bridges should be evaluated for their ability to handle future demands. This might involve planning for upgrades or new bridge constructions.

3.3 Flooding

Flooding can disrupt key freight routes, causing delays and rerouting. Identifying flood-prone areas ensures better planning and response during adverse weather conditions. By preparing for flood scenarios, councils can maintain the flow of goods during or after major events. This can reduce the disruption to supply chains and help councils prioritise roads for repair.

Key Considerations for Flooding in a Freight Strategy:

- **Flood Risk Assessment:** Identify and map flood-prone areas within the freight network, focusing on historical data and climate change projections.
- **Infrastructure Resilience:** Evaluate the vulnerability of critical infrastructure, including roads, bridges, and depots, to flooding. Implement measures to strengthen these assets.
- **Emergency Response Plans:** Develop and communicate clear emergency response strategies for freight operators, including evacuation routes and procedures for flood events.
- **Community and Stakeholder Engagement:** Engage with local communities and stakeholders to understand their experiences and concerns related to flooding and freight movement.
- **Adaptation and Mitigation Strategies:** Implement strategies to adapt to and mitigate the effects of flooding, such as elevated roadways, improved drainage systems, and water-resistant construction materials.

3.4 Addressing Specific Congestion Points

It is importance to manage congestion in freight movement. Reducing congestion at known bottlenecks improves the efficiency and timeliness of freight operations. This will have an overall benefit to all road users. Less time spent in traffic means reduced fuel consumption and operational costs for freight operators.

Key Considerations for Congestion Points in a Freight Strategy:

- **Identifying Congestion Hotspots:** Utilise traffic data to identify and prioritise areas with frequent congestion, especially during peak freight movement times.
- **Traffic Management Solutions:** Consider solutions like dedicated freight lanes, optimised traffic signals, and off-peak delivery schemes to alleviate congestion.
- **Infrastructure Upgrades:** Consider infrastructure changes, such as expanding road capacity or adding alternative routes, to alleviate congestion.
- **Stakeholder Collaboration:** Work with local businesses, residents, and freight operators to develop congestion management strategies that consider all stakeholders' needs.

3.5 Intersections in Urban Areas

Effective intersection management in urban areas is crucial for streamlining freight movement. Well-designed and efficiently managed intersections significantly lower accident risks involving freight vehicles. Such intersections also play a pivotal role in minimising delays and promoting a seamless flow of freight traffic, enhancing overall urban transport efficiency.

Key Considerations for Urban Intersections in a Freight Strategy:

- Design and Layout: Assess intersections to ensure they accommodate freight vehicles, considering turning radii and signal timing.
- Traffic Control Measures: Assess traffic control systems and recommend prioritisation of the freight movement during peak hours or in heavily trafficked areas.
- Public Awareness and Education: Educate the public about sharing the road safely with freight vehicles, especially at busy urban intersections.
- Collaboration with Urban Planners: Ensure that the needs of freight movement are integrated into broader urban development plans.

3.6 Gather Relevant Data

To help inform the council freight strategy, relevant data should be gathered on the current, and potential future, conditions of the network. This data should include:

- Traffic volumes for different types of heavy vehicles currently operating on the road network. This may be sourced from TfNSW or NHVR, or via internal council sources.
- Details of future freight generating developments. Planning authorities have detailed knowledge of development proposals which often include traffic studies, and can be used for this purpose.
- Population projections, which will provide an indication of where traffic volumes aligned with population growth are likely to occur. An area of rapid population growth could have a direct impact on existing freight routes, through added congestion and incompatible traffic mix, to the extent where it forces heavy vehicles to seek an alternative route.

The freight strategy should have a focus on the ongoing collection of detailed traffic data, i.e. traffic volumes, vehicle classification, origin-destination surveys. This will allow council to build-up a detailed understanding of how and where heavy vehicles are travelling over the long term. This type of data will be required when submitting funding proposals, so with robust and long term data council will be able to develop better funding submissions.

A further extension of this data collection could ultimately include the development of traffic models focussed on freight. For example these models could be used to predict changes in freight routes due to issues such as the replacement of an under-capacity bridge, the sealing of a key link road or the upgrade to an area of congestion in the network.

3.7 Implementation and Action Plan

This section should detail the most crucial local freight projects or initiatives that are planned to be undertaken in the short to long term. Each project should be outlined with a clear description of its purpose, objectives, and expected impact on local freight activities. Examples of priority projects could include:

Upgrade of Major Freight Corridors: Improving the infrastructure of key roads to enhance freight movement efficiency and desirability to use certain routes over others.

Development of Intermodal Facilities: Establishing facilities that allow for transition of freight between different modes of transport (e.g., from rail to road).

Enhanced Safety Measures for Freight Corridors: Implementing new safety improvements to reduce risk of accidents and improve road safety.

3.7.1 Roles and Responsibilities

In this section, clearly define who will be responsible for each action or initiative. This includes identifying the main stakeholders, such as government agencies, private companies, and community groups, and specifying their respective roles. For example:

Road Authority: Responsible for providing road maintenance and improvements, policy support, funding, and regulatory oversight.

Transport Companies: Tasked with operational management, adherence to safety standards, and implementation of new technologies.

Community Groups: Engaged in providing feedback, raising concerns, and participating in decision-making processes.

Assigning clear roles and responsibilities ensures accountability and facilitates efficient project execution.

3.7.2 Timeline

Providing an estimated timeline for each project or initiative is crucial for planning and resource allocation. This section should outline the expected timeframes for each project, along with key milestones. Note that some projects may be subject to future funding.

Creating a timeline not only aids in tracking progress but also helps in anticipating challenges and arranging for necessary resources in a timely manner. This will also inform the Community Strategy Plan.

4. DEVELOPING THE STRATEGY

4 Developing the Strategy

4.1 Overview

As mentioned in section 1, the development of a freight strategy is not too dissimilar to other strategic plans which a council may develop for planning purposes. The key steps to undertake throughout this process are:

- Fully understanding the existing freight system, including identifying existing risks and issues
- Predict likely growth over the short, medium and long term
- Identifying future risks and issues
- Developing a long list of options to address these issues
- Undertaking a diligent process to establish a viable short-list of options
- Developing chosen options to a concept design level, which includes key issues such as:
  - Geotechnical
  - Environmental
  - Property access
  - Engineering design to a concept level
  - Statutory approvals
  - Risk assessment
  - Procurement strategy
  - Financial
  - Development of a Project Plan

Once these issues are addressed the council will be in a very strong position to either lobby for external funding or decide to fund the specific project in-house if the financial capacity exists. This also helps councils prioritise freight projects over other competing council projects when establishing 4 year budgets, which is a key part of the IP&R process.

4.2 Strategy Template

The strategy template below aims to provide a framework for councils to develop their own council-based freight transport strategy. Strategies can be created for each council or with a group of surrounding councils, depending on the context of the council. This template can be adapted and tailored to suit the individual council's needs and priorities. The template is based on the recommendations of the IP&R framework for other plans and strategies.

Message from the General Manager

This will be useful to include to achieve broader council engagement and implementation of the Strategy, and provide commentary on the importance and relevance of the Strategy for the council or region and the significance of the freight task. Aspects to cover in the message could include:

- Key data from the Council: Area of land
- Freight insights: Volumes of freight, Value of freight
- Identify that local roads make up about 85% of roads in NSW or X% of the council
- Summary of strategy benefits: e.g., improved productivity with access to farms

Executive Summary

- A high-level overview of the Strategy is detailed in this section, summarising the key details of the Strategy.
- Purpose of the plan and where it fits into IP&R

At a glance

An infographic/diagram showing key statistics about council's freight. For example:

- Number of heavy vehicle trips or container movements per annum
- Tonnage and value breakdown of freight goods (grain, livestock, etc.)
- Number of relevant freight locations in the LGA (e.g., silos, intermodal, quarries, feedlots)

1. Introduction

- **Purpose:** Briefly describe the purpose of the freight transport strategy and its importance to the council and the community.
- **Scope:** Explain the geographical and operational boundaries of the strategy, e.g., Local government Boundary or part thereof.
- **Rationale:** Explain why the strategy is needed, referencing specific challenges, opportunities, or trends.

2. Background and Context

- **Local Context:** Describe the local area, including key industries in and around the council, population density, and geographic features.
- **Regional Context:** Describe the broader regional context. Include key industries, major population density or significant features that are outside the council boundary.
- **Freight Landscape:** Provide an overview of freight operations (including modal preferences), infrastructure, the freight task (goods and commodities, types of flows within and between modes, value and volume) and key players in the area. Key intra- and inter-regional freight routes. Is there seasonality in the freight task (e.g. concentrated within harvest season).

3. Vision and Objectives

- **Vision Statement:** Articulate a long-term vision for freight transport in the council area, this vision will need to align with the council's community strategic plan and delivery plan.
- **Key Objectives:** List the primary objectives the strategy aims to achieve, aligning with the overarching vision.

4. Stakeholder Engagement

(Reference Section 2.2 for detailed stakeholder engagement guidelines.)

- **Key Stakeholders:** Identification of all major stakeholders involved or impacted by freight operations.
- **Engagement Methods:** Address's how stakeholders were engaged and consulted during the strategy development process.
- **Feedback and Integration:** Summarise the feedback received from stakeholders and how it has been integrated into the strategy.

5. Freight Movement Plan

(Reference Section 3.1 for developing a comprehensive Freight Movement Plan.)

Routes and Infrastructure: Highlight the primary freight routes and critical infrastructure.

Challenges and Opportunities: Identify current and potential challenges and opportunities on the routes (e.g., bottle-necks and pain points; industry desire lines and current preferences or future preferences).

Recommendations: Provide recommendations based on the Freight Movement Plan.

6. Local Bridges Consideration

(Reference Section 3.2 for details on the significance of local bridges.)

Bridge Inventory: List all bridges and major culverts relevant to freight movement. Include a list of load-limited or timber bridges and any width restrictions.

Maintenance and Upgrades: Detail the maintenance schedule and any planned upgrades.

Alternative Routes: Identify alternative routes during maintenance or emergencies to support temporary network resilience. Provide an overview if any work is required to ensure safety (e.g. temporary signage, lighting, traffic calming, minor embellishment due to extenuating circumstances etc.)

7. Implementation and Action Plan

Priority Projects: List the most important local freight projects or initiatives to be undertaken in the short term and their benefits.

Roles and Responsibilities: Define who is responsible for each action or initiative.

Timeline: Provide an estimated timeline for each project or initiative.

8. Monitoring and Evaluation

- **Performance Indicators:** Define methods to evaluate the strategy's success.
- **Review Schedule:** Specify when the strategy will be reviewed and updated.
- **Feedback:** Detail how stakeholders can provide ongoing feedback.

9. Resources and Budget

- **Available Resources:** List resources, including funding, personnel, and technology, available for strategy implementation.
- **Budget Breakdown:** Provide an estimate for budget allocation for each project or initiative.

10. Conclusion and Next Steps

- **Summary:** The strategy's main points and the expected benefits.
- **Action:** Summary of the key actions for the strategy's implementation.
- **Acknowledgments:** Thank any contributors, stakeholders, or organisations that played a key role in the strategy's development.
- **How can I find out more?** Contact details to get in touch.

Appendices

- **Freight Data:** Include any freight data, studies, or research used in the strategy.
- **Consultation summary:** Provide an overview of consultation approach, participants, key feedback and responses to feedback (where relevant, reasonable and appropriate)
- **Maps and Diagrams:** Attach maps like the Freight Movement Plan or local bridge maps.

- **Additional resources**
  - Council website
  - Transport for NSW – Farm Gate Access Project, Level Crossing
  - National Heavy Vehicle Regulator
  - Industry – e.g., Australian Trucking Association

A list of some useful resources and websites is available in Section 6.

This template provides an approach to developing a Council-based Freight Transport Strategy. By following this outline and adapting it to local needs, councils can ensure a comprehensive, actionable, and community inclusive strategy. Including references to the IP&R framework ensures alignment with established planning processes.

4.3 Additional Considerations

4.3.1 Safety and Resilience

Safety and resilience are critical to freight transport. As councils develop and implement their strategies, these two aspects must be at the forefront to ensure all stakeholders' well-being and guarantee that freight operations can withstand and quickly recover from disruptions.

Road Safety:

- **Infrastructure Quality:** Ensure roads are well-maintained and free from hazards that might pose risks to heavy vehicles.
- **Signage and Markings:** Appropriate and clear signage, especially in zones with weight or height restrictions.
- **Traffic Calming Measures:** Implement measures where freight routes intersect with pedestrian zones or residential areas.

Driver Safety:

- **Rest Areas:** Adequate and safe rest areas for drivers to stop.
- **Training:** Encourage or facilitate training programs for drivers, focusing on safe driving practices specific to heavy vehicles.

Operational Resilience:

- **Alternate Routes:** Identify and establish alternative routes to ensure continuity in case of disruptions on primary freight paths.
- **Disaster Preparedness:** Develop strategies to quickly respond to and recover from disasters, such as floods, fires, accidents, or infrastructure failures.

4.3.2 Future Freight Task

This section provides an overview of emerging issues and challenges that the freight industry is likely to face, which should be considered as a part of a council freight strategy. These issues come about from rapid growth and change in the freight task, technological advancements, environmental concerns, and changing regulatory landscapes. Key areas of focus include:

Recharging / Battery Swap Facilities for Zero Emission Freight Vehicles:

Issue: With the shift towards zero emission vehicles (ZEVs) in freight transport, there is a growing need for widespread and efficient recharging and battery swap facilities.

Impact: The availability and accessibility of these facilities are crucial for the seamless operation of zero emission freight vehicles, impacting routes, delivery times, and operational costs.

Response: Developing a network of recharging stations and battery swap facilities, possibly through public-private partnerships, is essential. Consideration should be given to line-haul routes that pass through a council's boundaries, to ensure suitable planning and delivery of these facilities.

Increased Axle Loading Impacting Pavements:

Issue: Zero emission freight vehicles are also likely to lead to increased axle loading, particularly over the steering axle, causing more significant wear and tear on road pavements.

Impact: This leads to increased maintenance costs, the need for more durable pavements, and potential disruptions in freight movement due to the increased frequency of road repairs.

Response: Investing in stronger pavement materials and innovative road design can mitigate these impacts. Additionally, regulating maximum axle loads, or limiting access for certain classes of vehicles to parts of the network, might be necessary.

Telematics and Monitoring:

Issue: The use of telematics for real-time monitoring of freight vehicles is on the rise, and likely to become more mainstream in the medium term.

Impact: Telematics offers benefits in terms of route optimisation, maintenance scheduling, and safety enhancements, but it also raises issues related to data privacy and management.

Response: Implementing robust data management policies and ensuring compliance with privacy laws are key. Encouraging the adoption of standard telematics systems across the industry can also be beneficial. Councils can use telematics data to inform freight strategies and longer term asset management planning.

Automated Access Decisions

Issue: The use of automated access systems for heavy vehicle freight movements is likely to become mainstream in the near future.

Impact: These systems will reduce the need for council officer involvement in vehicle access decisions, with freight operators able to seek access permissions automatically.

Response: In order to be implemented, councils will need to have data on the load ratings of all structures on freight routes, as well as develop a framework for the automated approval of access decisions. Funding and resources should be allocated to commence these tasks in the medium term.

Climate Change and Environmental Sustainability:

Issue: The freight industry contributes significantly to greenhouse gas emissions and environmental degradation.

Impact: Severe weather events associated with climate change pose risks to infrastructure, supply chains, and operational stability.

Response: Emphasising sustainable practices, such as using alternative fuels, optimising routes and vehicle types for reduced emissions given the freight task is experiencing unprecedented growth, and adopting green technologies, is crucial. Additionally, investing in research for climate-resilient infrastructure and supply chain practices will help mitigate long-term risks.

Resilience Planning

Issue: During natural disasters, key freight routes may be cut, requiring freight vehicles to use alternate sections of the road network.

Impact: Increased heavy vehicle movements on roads which are not designed to accommodate this traffic can have severe impacts on road pavement condition.

Response: Co-ordination with State and Federal agencies to ensure key freight routes are designed and constructed to be resilient to natural disaster impacts. Identification of likely alternate routes and planning to upgrade assets to accommodate periodic heavy traffic volumes. Advanced planning and guidance material developed to enable quicker responses to unplanned events that may disrupt freight and transport more broadly – these should ideally be socialised early to ensure seamless communication, understanding of requirements and instil confidence.

Automation on Line-Haul Routes:

Issue: The integration of autonomous vehicles in long-distance (line-haul) freight routes is becoming increasingly feasible.

Impact: Automation promises increased efficiency and safety but raises concerns regarding cybersecurity, job displacement, and regulatory challenges.

Response: Developing clear regulations and guidelines for autonomous freight transport and investing in cybersecurity measures are imperative. Retraining programs for the workforce are also crucial.

Strategic Approach

To address these emerging issues, a strategic approach that involves collaboration between industry stakeholders, government agencies, and technology providers is necessary. This includes:

Investment in Research and Development: To innovate solutions for challenges like pavement wear and battery technology.

Policy Making and Regulatory Frameworks: To guide the safe and efficient adoption of new technologies like automation and telematics.

Public Awareness and Stakeholder Engagement: Ensuring that all parties, including the public, are informed and involved in the transformation process, thereby improving the social license of freight.

Infrastructure and land use planning: Identifying critical networks that should continue to be protected for freight operations (e.g. from urban encroachment on industrial areas). Future-proofing the network by identifying untapped corridors and protecting the land in preparation for works.

The future of freight is intertwined with technological advancement and environmental consciousness. By proactively addressing these emerging issues, the freight industry can not only enhance its efficiency and sustainability but also contribute positively to the broader economic and social landscape.

5. NEXT STEPS

5. Next Steps

The development of the Freight Transport Strategy is just the beginning. Regular updates and reviews are critical for the council to benefit from the effective implementation of the strategy.

5.1 Implementing the Strategy

Action Plan: Begin with a clear, detailed action plan highlighting priority projects, responsible teams or individuals, and projected timelines.

Resource Allocation: Ensure that adequate financial, human, and technological resources are allocated for the strategy's execution.

Stakeholder Engagement: Continuous engagement with key stakeholders, including businesses, transport operators, and the community, is crucial. Their feedback can help refine the implementation process and address any unforeseen challenges.

Monitoring: Establish a monitoring process to track the progress of various initiatives. This will help in identifying bottlenecks and ensuring timely interventions. This can be managed through the IP&R reporting framework.

Communication: Maintain open communication channels to update stakeholders on the strategy's progress and any changes or developments.

5.2 Update and Review

Regular Review: Schedule reviews and reporting of the strategy's effectiveness against its objectives and agreed key performance indicators.

Stakeholder Feedback: Encourage feedback from stakeholders during the review process.

External Factors: Review the freight industry for changes, emerging technologies, shifts in regulatory landscapes, and other factors that might influence the strategy.

Adjustments: As part of the review, make or recommend adjustments to the strategy. This could involve updates to routes, showing improvements to the network, changing certain initiatives, introducing new ones, or even discontinuing no longer relevant or practical projects.

Documentation: Document the findings of each review, including the challenges faced, successes achieved, and lessons learned. This will be important for future strategy development.

6. USEFUL RESOURCES

6. Useful Resources

Table 1: Useful sources of general data

Source	Description	Link
Transport for NSW	Freight - Useful links	https://www.transport.nsw.gov.au/operations/freight-hub
Transport for NSW	Focus on Freight Growing local communities September 2019	https://roads-waterways.transport.nsw.gov.au/documents/business-industry/heavy-vehicles/focus-on-freight/focus-on-freight-brochure.pdf
Bureau of Infrastructure, Transport and Regional Economics (BITRE)	Freight Statistics	www.bitre.gov.au/statistics/freight
Dept of Infrastructure, Transport, Regional Development and Communications (https://www.infrastructure.gov.au/transport/freight/network.aspx)	National Key Freight Routes Web App	https://spatial.infrastructure.gov.au/portal/apps/webappviewer/index.html?id=9690eb423b4f446485781ea8a61851d2
CSIRO TraNSIT tool	Transport logistics-TraNSIT	www.csiro.au/en/research/technology-space/it/transport-logistics-transit
		https://publications.csiro.au/rpr/download?pid=csiro:EP198509&dsid=DS1
		www.agriculture.gov.au/ag-farm-food/infrastructure/transit
National Heavy Vehicle Regulator (NHVR)	Local Government Road Managers	www.nhvr.gov.au/road-access/local-government-road-managers
National Heavy Vehicle Regulator (NHVR)	Freight PASS	https://www.nhvr.gov.au/consultation/2024/01/17/freight-pass-beta-release
National Heavy Vehicle Regulator (NHVR)	Pavement Impact Comparison Calculator	https://www.nhvr.gov.au/consultation/2024/04/05/pavement-impact-comparison-calculator-beta-release
National Heavy Vehicle Regulator (NHVR)	Strategic Local Government Asset Assessment project	https://www.nhvr.gov.au/road-access/local-government-road-managers/strategic-local-government-asset-assessment-project
Infrastructure Australia	Australian Infrastructure Audit 2019 - 5. Freight transport	www.infrastructureaustralia.gov.au/sites/default/files/2020-09/audit_freight.pdf
Australian Bureau of Statistics	9223.0 - Road Freight Movements, Australia, 12 months ended 31 October 2014	www.abs.gov.au/ausstats/abs@.nsf/mf/9223.0
National Transport Commission	Who moves what where Report (August 2016)	www.ntc.gov.au/sites/default/files/assets/files/Whomoveswhatwhererereport.pdf
Ports Australia	Port trade statistics from around Australia (select state and port -> generates data for that port)	www.portsaustralia.com.au/resources/trade-statistics
Austroads	Data to Support the Heavy Vehicle Road Reform	https://austroads.com.au/latest-news/supporting-a-future-heavy-vehicle-cost-recovery-and-investment-process
Austroads	Freight Task Force and projects	https://austroads.com.au/network-operations/freight/freight-task-force-and-projects

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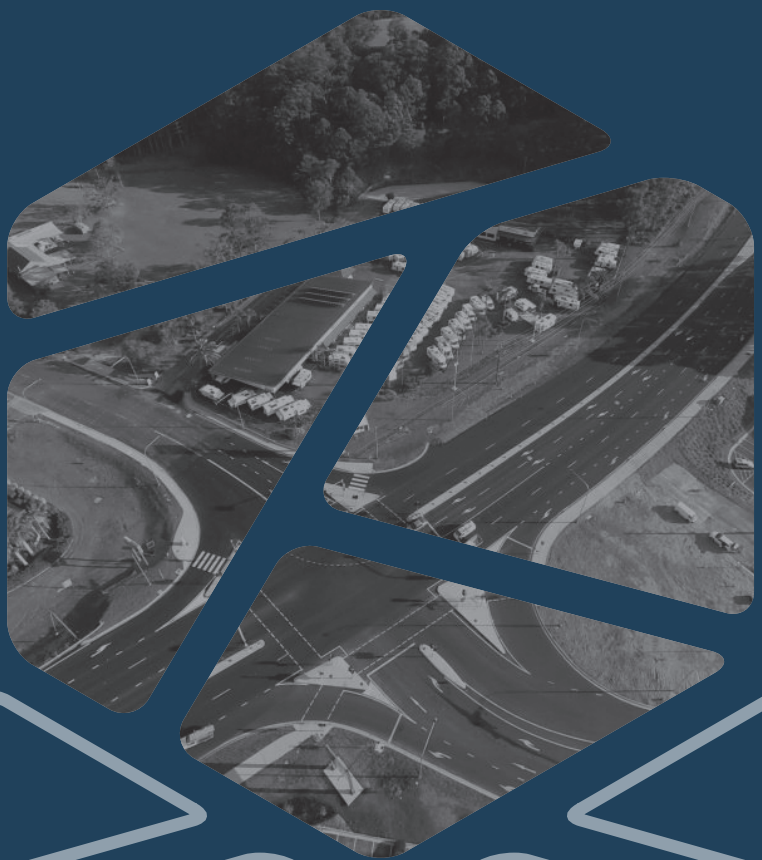

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8 APPENDIX

8 Appendix

Appendix 1 Industry Questionnaire

This Industry Questionnaire aims to develop a consistent set of questions that council officers could ask freight generators/receivers to assist them in collecting freight usage data within their local government area. It is acknowledged that some participants may wish to have their responses remain confidential, which should be considered by each council.

Each council is to provide a list of State and Regional roads in their local government areas or a map showing these roads diagrammatically. Where possible, include on the map the locations of grain silos, intermodal, distribution hubs/zones and other key terminal points for freight movements.

Suggested Questions:

Freight movement and quantities:

1. What is the commodity and what annual tonnage is coming into and leaving the local government area?
2. Where does the freight come from and where is it going? (e.g. within the local government area (LGA) or outside the council boundaries.)
    a. Freight coming into the LGA
    b. Freight leaving the LGA
    c. Freight travelling through the LGA
    d. Freight travelling within the LGA
3. What State and Regional roads are you using to move freight within the council boundaries?
4. Do you access a rail/intermodal terminal? If so, where?

    (Note: Where appropriate, those councils near major airports or ports with docks should include an additional question.)

Freight vehicle combinations

5. What type of container do you use for transport (e.g. pallets, steel containers, bulk material containers/ tippers, enclosed tanker)?
6. What heavy vehicle combinations do you currently use?
7. Why do you use these combinations?
8. What heavy vehicle combinations would most benefit your operations within this local government area?
9. Is your freight movement seasonal, and if so, during which months of the year?
10. If your heavy vehicle combination requires decoupling at some point on the journey, what locations would benefit you to undertake the decoupling of the trailers?
11. Where do your drivers currently stop/rest within this local government area?
12. Have you identified any safety issues at current rest areas and decoupling locations?

Higher Productivity Vehicles

13. Are there any specific routes you would see as a benefit for higher productivity vehicles?
14. Are there any impediments to investing in higher productivity vehicles?

Future Needs

15. Do you foresee a dramatic shift in needs from growth or opportunities within your industry?

Further comments: