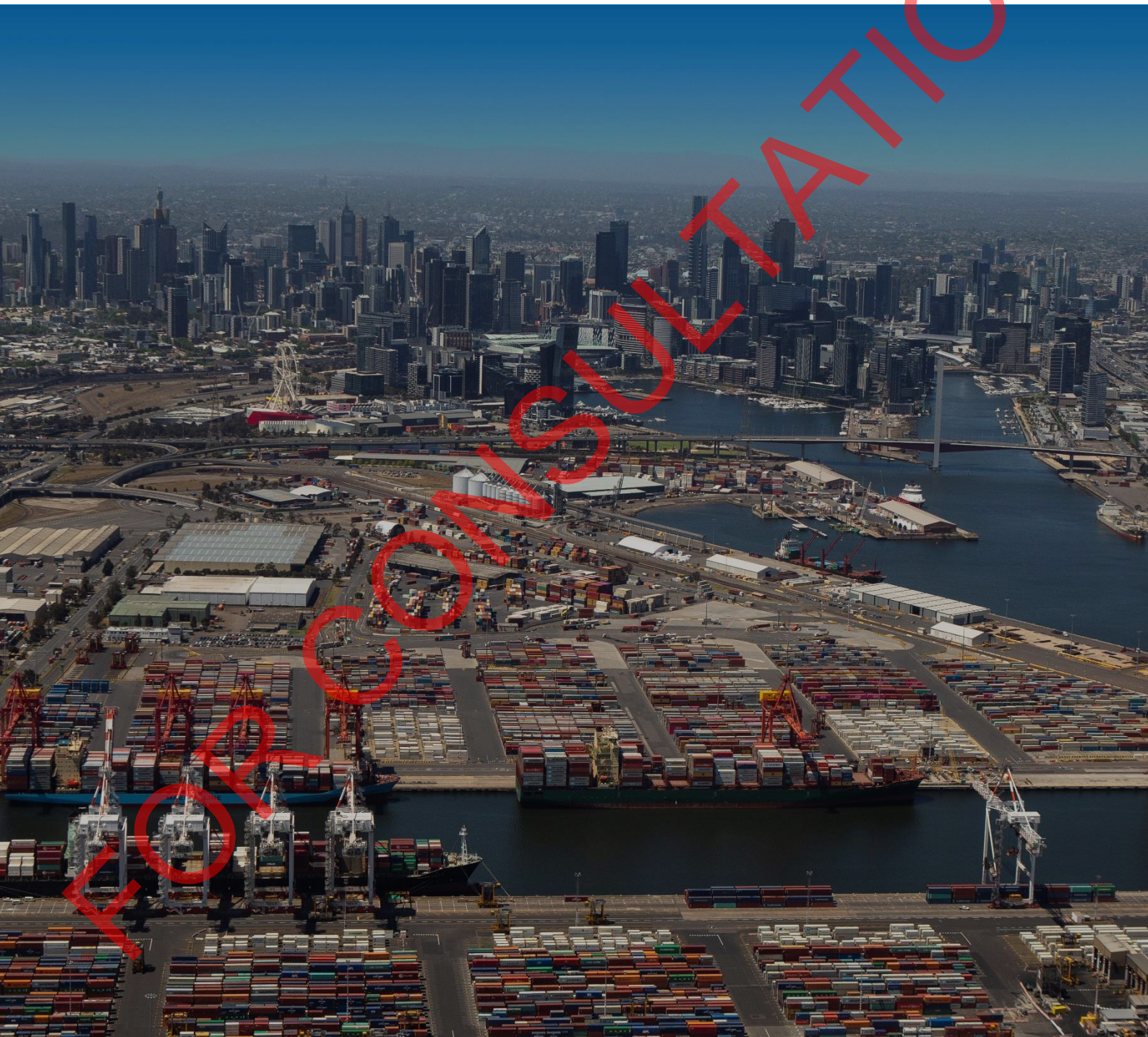


DRAFT NATIONAL URBAN FREIGHT PLANNING PRINCIPLES



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INTRODUCTION

The Commonwealth has committed to lead development of National Urban Freight Planning Principles (the Principles) as a new action in the National Freight and Supply Chain Strategy.

The Commonwealth is working with all levels of government and industry to develop the Principles which require freight's contribution to our economy and standard of living to be balanced with social inclusion and environmental protection. To achieve this the Principles bring together transport and land use planning, and are intended to flow through to strategic planning and detailed planning guidance documents over time.

The Principles recognise:

- the primacy of state, territory and local governments in transport and land use planning.
- that freight and logistics networks are continuously evolving.
- that industry support and ongoing engagement is crucial to capturing the potential benefits of any urban freight planning reform.

Early in the COVID-19 pandemic, governments took steps to minimise any unnecessary barriers to freight movement, including removing delivery curfews, to ensure Australians could receive timely and reliable supplies of essential goods.

This is an opportunity to build on these foundations, working with planning, infrastructure and transport agencies across all states and territories, local government and industry.

PROBLEM

Australia's urban areas are growing, and so is our urban freight task. In 2018-19, people living in our capital cities increased by 1.8%, and capital city growth accounted for 79% of total population growth. Australia's urban freight task is expected to grow by nearly 60% over 20 years to 2040. Freight movements underpin our access to essential goods, such as food and fuel, ensure stores are stocked with products to sell, remove our waste, and deliver the construction materials that keep our cities growing.

As our cities grow, we need to ensure freight moves efficiently in our urban areas, while considering amenity and need for increased housing. Appropriate land use planning, through zoning, network planning and development approval is vital to achieving this balance. Alongside being significant centres of freight demand, our urban areas host significant freight facilities. Sydney, Melbourne, Brisbane and Perth host our four largest airports, responsible for 96% of air freight movements. Sydney's Port Botany and the Port of Melbourne are Australia's largest container ports.

Land use planning and development approvals that inadequately consider noise, vibrations and other amenity impacts of freight facilities can see inappropriate zoning of these facilities, with industrial areas and transport corridors near or in residential and commercial use of land. Restrictions to address amenity impacts including limitations of operating hours, areas of operation and vehicle type dampen productivity of the sector, decreasing economic competitiveness and increasing costs. These restrictions and initial amenity impacts can be avoided through adequate protection of industrial zones and appropriate planning in the construction of residential and commercial precincts near industrial activity.

Urban Supply Chains and Land Use Planning – Grain

With high population growth anticipated in Australia, particularly in urban areas, the supply chain for the cement industry will face significant pressure.

Urban encroachment can impact the overall transportation costs that the industry faces. The closer these materials are to freight corridors and their markets, the less impact transportation has on the overall cost. According to the CCAA, the average haulage distance for aggregate from quarry to end-user is 64km, costing \$13 per tonne. If the haulage distance were to increase to 100km due to urbanisation, the additional 40km haulage would increase transport costs by 35% to \$20 per tonne.

Urban Supply Chains and Land Use Planning – Grain

According to the Australian Export Grains Innovation Centre (AEGIC), Australia supply chains costs are higher than most of its competitors, except for Canada. Transport from regional area receival sites to ports and port charges are generally the highest components of supply chain costs.

If the access of grain producers to least-cost grain paths and operational efficiencies becomes constrained by urban development, then their profitability and ultimately the international competitiveness of Australia's export grain supply chains will be impacted.

Coordinated long-term planning for high-capacity freight corridors will be an important ongoing requirement to continue to progress and capture the benefits of improved efficiency of grain road freight.

Increased congestion in our cities inhibits efficient access to freight facilities and impacts the predictability of deliveries. Poor land use planning is likely the most significant factor contributing to congestion in our fast growing cities. Congestion impacts liveability and the economy. Australian congestion costs equalled \$19 billion in 2016, and are expected to rise to \$39 billion annually by 2031. Better coordination of land use and transport planning will help address rising congestion.

Changes to 'last-mile' delivery – delivery to a final destination – are impacting the operation of our in urban areas. Growth in business to customer, just-in-time and on-demand delivery, driven by e-commerce and home delivery services, are resulting in increased pressure on kerb-side space and increasing interaction between vehicles, pedestrians and cyclists. High-density living arrangements are changing the nature of waste collection and delivery, requiring increased consideration of heavy vehicle access in building design.

The *Inquiry into National Freight and Supply Chain Priorities* and independent research by Infrastructure Australia and the Productivity Commission support the need for governments to better integrate freight needs into strategic land use and transport planning. This includes addressing inconsistencies in how local governments give effect to high level strategic planning documents, local government resourcing constraints and level of technical awareness on freight issues.

Improved consideration of freight in land use planning will drive productivity and liveability benefits. A 1% improvement in freight productivity generates \$8-20 billion in savings over 20 years, and improves environmental outcomes. Avoiding land use conflicts will build cities that balance industrial with housing needs. Building and precinct design that considers emerging freight trends will help ensure consumer demand is met, while considering movement through urban areas.

Urban Supply Chains and Land Use Planning – Waste

Waste movement in Australia is considered relatively efficient but the industry is worried about potential inefficiencies as the country grows. Pressures facing waste supply chains include the significant distances between collection and disposal sites, restrictive curfews constraining pick up times and slow progress in shifting to alternative fuel trucks to reduce fuel costs.

The waste industry also experiences difficulty navigating high density areas. This includes ease of access to bins and skips in building complexes. These difficulties, if they remain unaddressed, will contribute to increasing route inefficiency in urban areas, further increasing costs.

URBAN FREIGHT PRINCIPLES

A key measure of success for the National Freight and Supply Chain Strategy is recognition of the importance and value of freight movement to the community and economy in state and territory strategic planning policies.

The application of these Principles occurs in the context of an established urban environment. The Principles reflect this by highlighting linkages between freight movement and land use planning to assist planners, engineers, developers, transport regulators, operators and other practitioners to create safe, efficient and freight-supportive communities.

They are intended to be used by all levels of government when creating, updating or reviewing planning policy documents, reviewing development applications, or developing transportation plans and are applicable to both new development and redevelopment of existing areas. The Principles are encouraged to be incorporated into state level instruments and mirrored in local planning schemes as appropriate.

The actions listed under the proposed principles are presented for policy makers and land use and transport planners as high level principles to be transferred to specific jurisdictional contexts. They are not intended as an exhaustive list treating all aspects of freight and land use planning systems.

THE SEVEN NATIONAL URBAN FREIGHT PLANNING PRINCIPLES

1 Understand the value, needs and characteristics of freight movement and incorporate in strategic and statutory land use planning

Understanding the value and characteristics of urban freight movement, including requirements of vehicles and goods, is the first step towards ensuring the land use requirements of freight are incorporated into strategic and statutory land use planning.

Desired outcomes:

All aspects of freight are taken into account during strategic planning including economic contribution, vehicle movements, characteristics of transported goods and needs of specific industries or supply chains. Implementation of planning decisions is supported by relevant strategic tools. Planning frameworks remain sufficiently flexible to adapt to freight industry developments and business trends.

Example Actions	
Capability Building	<ul style="list-style-type: none">• Improve capability of local governments to adequately consider characteristics and impacts of industrial activity and associated freight movements when considering zoning adjustments.• Include model provisions on freight specific issues like setbacks, loading zones, ingress and egress to support local governments to cater to the needs of a robust multimodal freight transportation networks.• Work with and educate local governments on technological advancements in freight vehicles, and encourage updated planning schemes to reflect these developments.
Engagement	<ul style="list-style-type: none">• State, territory and local government transport and urban planners work together to understand and incorporate demand parameters in planning considerations.• Encourage coordination, dialogue and data sharing between public sector officials, freight industry representatives and cargo owners and the community to progress toward common goals such as amenity, safety, productivity, and energy efficiency.• Work closely with stakeholders to identify and map location of freight activities, routes, constraints, freight types, and unique needs of specific goods and supply chains.
Frameworks	<ul style="list-style-type: none">• Include a statement of intent in planning policy frameworks to provide support and direction for specific planning instruments, policies or guidelines on accommodating freight movement into planning activities.• Federal, state, territory and local governments incorporate Urban Freight Planning Principles into land use planning instruments.

Innovation	<ul style="list-style-type: none"> • Encourage opportunities to manage freight transport demand in urban areas, such as off-peak freight pickups and deliveries, and new freight technologies. • Investigate and encourage use of innovative technologies such as connected and automated vehicle (CAV) technologies in long-term freight movement planning to prepare current infrastructure for future developments. Consider opportunities to harness CAV data for planning purposes.
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2 Safeguarding the resilience of all major freight handling facilities and corridors within and between neighbouring jurisdictions, including local government areas

As more freight is shipped via truck and rail transport, it is increasingly important to ensure the operational efficiency of existing infrastructure is maintained and enhanced, and that already identified corridors and adjacent lands are safeguarded against conflicting uses.

Desired outcomes

Land use planning considers the vital role urban freight facilities play in ensuring sufficient supply chains. Freight infrastructure and corridors are identified and protected consistently across jurisdictions. Safeguarding considers ability of facilities to adapt to changing business trends. Impacts on residential amenity are avoided through appropriate zoning.

Example Actions	
Capability Building	<ul style="list-style-type: none"> • Develop guidance on addressing dangerous goods transport in land use planning. • Develop planning guidance to support efficient freight servicing of homes and businesses. Guidance should give further detail on the need to provide and protect sufficient land/floor space for storage and distribution activities, including for last mile distribution and consolidation centres. • Continue local government education on heavy vehicle access requirements, including for waste, construction, over-size over-mass and emergency vehicles.
Engagement	<ul style="list-style-type: none"> • Establish mechanisms at a regional level to consult with freight stakeholders on how potential changes add value to local freight facilities and corridors and allow for coordinated infrastructure investments where possible. • Encourage use of land near freight corridors by compatible industries.
Frameworks	<ul style="list-style-type: none"> • Corridor protection is a focus of strategic planning and associated strategic planning tools, and is considered in processes including zoning and acquisition liability.
Preservation	<ul style="list-style-type: none"> • Safeguard existing and planned freight corridors and facilities in planning documents to enhance route efficiency and quality. • Avoid new, infill or mixed use developments close to freight facilities where developments will impinge on facilities ability to meet the freight task. • Require new or infill development to mitigate against noise, emissions and vibrations from freight corridors and facilities.

3 Identify and plan areas for new freight facilities and freight-intensive land uses

Strategic land use plans need to consider potential sources of freight movement, adequate and adapt to population growth and workforce accessibility. Engaging with industry and freight demand modelling can help identify new or expanded growth areas, opportunities for repurposing of existing sites, new factories, new major commercial areas, potential quarries or landfill sites, or new freight distribution facilities.

Desired outcomes

Land use planning identifies and protects land use needs for freight infrastructure, corridors and industrial activities. Corridor planning considers appropriate vehicles for freight task. Land use conflicts are avoided, protecting residential needs and amenity without impeding efficient freight movement. Identification of land for freight use considers emerging business needs. Operation of High Productivity Vehicles are considered in developing appropriate corridors connecting freight significant areas.

Example Actions	
Data	<ul style="list-style-type: none"> Collect relevant data and map all major planned growth areas, and in particular major freight facilities, to ensure future freight corridor needs can be met. Map priority routes for the efficient movement of freight into and out of areas with significant employment, industrial and commercial activity. Access data from emerging technologies, including connected vehicles and infrastructure, to inform emerging demand patterns.
Engagement	<ul style="list-style-type: none"> State, territory and local governments engage with freight industry to consider how operations can adapt to improve amenity, safety and sustainability impacts when considering land use planning issues.
Preservation	<ul style="list-style-type: none"> Identify expansion opportunities for existing facilities and link new freight generators and attractors to networks and future locations for intermodal terminals, container terminals and ports and airports. Planning frameworks remain flexible to adapt to changes in freight facility operation and nature of land use. Lot size specifications consider land size requirements for consolidation and warehousing activity.

4 Plan for efficient freight movements and complementary land uses around intermodal freight facilities

An efficient multimodal freight network is essential to service complex supply chains. Demand for residential and mixed use developments will likely continue encroachment on existing intermodal freight facilities and industrial activity, particularly ports. Consideration must be given to ongoing functionality and intensity of operations when planning for land use changes.

Desired outcome

Zoning decisions balance different needs of freight operations, and residential and mixed-use developments. Requirements for efficient freight movements are incorporated in land use planning decisions. Long term freight outcomes are incorporated into strategic and statutory land use planning. Intensity of freight activity is protected and restrictions avoided. Land use conflicts are avoided, protecting residential needs and amenity.

Example Actions	
Capability Building	<ul style="list-style-type: none"> Continue local government education on heavy vehicle access requirements, including for waste, construction, over-size over-mass and emergency vehicles.
Engagement	<ul style="list-style-type: none"> State and local governments engage with industry to consider how operations can adapt to improve amenity, safety and sustainability impacts when considering land use planning issues.
Preservation	<ul style="list-style-type: none"> Safeguard existing freight oriented land uses and corridors surrounding intermodal facilities at ports, airports and rail yards. Designate and zone land to allow for the expansion of existing freight operations around ports, airports and rail yards to provide greater capacity for the future. Plan for future operations, freight flows and volumes to preserve or grow intermodal facilities, including clustering freight facilities to achieve economies of scale.

5 Promote building and precinct design that considers freight needs

Planning controls for new residential and commercial developments that do not cater for freight delivery and waste management can lead to an over reliance on the kerbside space and create congestion and safety hazards. Appropriate building and precinct design can facilitate adoption of emerging freight technologies.

Desired outcomes

Planning controls and building design consider freight demands and potential interaction with kerbside space and traffic flows, and safety needs of road users. Precinct and building design considers needs and facilitates benefits of emerging electric, connected and automated vehicle technology.

Example Actions	
Capability Building	<ul style="list-style-type: none"> Develop more robust evaluation of loading dock proposals for new developments. Require freight consolidation facilities for new developments. Develop guidance on how to consider last-mile delivery needs in kerb side planning.
Innovation	<ul style="list-style-type: none"> Incorporate infrastructure requirements to support freight innovations in building design, such as electric vehicle charging facilities.
Preservation	<ul style="list-style-type: none"> Precinct planning considers adequate lot sizing for warehousing and distribution activities.

6 Realise the importance of rest and fuel facilities

The importance of facilities to ensure compliance with fatigue and broader safety regulation – such as rest stops – was made very clear during Australia's response to the COVID-19 pandemic. These facilities contribute to the safety and efficiency of freight operations and provide necessary amenities for the health and wellbeing of operators. Considering location of compliance and enforcement facilities is also necessary, including egress into and out of these facilities.

Desired outcomes

Land use planning incorporates consideration of fatigue regulation, and safety, operational and amenity needs of freight operators. Interaction between freight vehicles and other infrastructure users are considered in transport corridor planning, including in design of high-quality facilities to meet safety and operational requirements.

Example Actions	
Data	<ul style="list-style-type: none"> Data is used to identify network gaps and deficiencies in rest facilities.
Engagement	<ul style="list-style-type: none"> Ensure land use planning in urban areas sufficiently considers wellbeing and regulatory needs of operators.
Preservation	<ul style="list-style-type: none"> Identify and safeguard locations along freight corridors for the provision of quality rest area services and compliance facilities. Plan for and work to establish rest and fuel facilities where existing deficiencies are noted, including in urban areas.

7 Respond to changes in freight movements, including smaller scale freight movement and emerging technologies

Strategic plans should recognise the changing nature of freight movements, particularly in the last-mile context. This includes adapting to heavy vehicle developments, changes in distribution facilities, and growing just-in-time and on-demand delivery services. Kerb space requirements of last-mile delivery need to be adequately considered when planning active transport spaces and beautification. Strategic plans should remain flexible to accommodate space and infrastructure needs of emerging technologies including small electric and/or automated vehicles and drones.

Desired outcome

Strategic plans consider changes in the nature of freight and resulting effects on planning, including connected, automated and electric vehicle requirements. Facilities and infrastructure to support smaller scale, last-mile freight operations are considered in planning urban spaces and their contribution to liveability and business needs. Strategic plans incorporate long-term freight outcomes.

Example Actions	
Engagement	<ul style="list-style-type: none"> Engage freight industry to identify opportunities for operations to improve amenity, safety and sustainability outcomes when considering land use planning issues. Local governments engage with freight industry to consider alternative ways to move freight through residential areas, including off-peak delivery.

Innovation	<ul style="list-style-type: none"> • Initiatives to improve the efficiency of urban freight, including by encouraging innovative approaches to using space for freight and servicing in the CBD and other key urban centres through concepts such as delivery service plans for individual buildings, precinct delivery models and shared loading docks. • Plan and support the use of electric freight vehicles for deliveries in built-up areas to reduce the noise and emissions impact of freight. • Consider opportunities to encourage adoption of new vehicle technologies including guaranteed road access and graduated curfews.
Preservation	<ul style="list-style-type: none"> • Plan for the size and number of trucks and delivery vehicles that will need to negotiate the core area when reviewing standards for roads, private developments and infrastructure within urban centres. • Kerb side planning considers last-mile delivery and provides adequate space for light commercial vehicles and on-demand delivery services.

NEXT STEPS

The draft principles will be refined through public engagement culminating in 2020, including through a short survey (see [Attachment B](#)). Once concluded, updated principles will then be brought forward for endorsement by Infrastructure and Transport Ministers in 2021.

Once agreed to by governments, the Principles and suggested actions will be incorporated into state and territory planning frameworks, and given effect in local government planning schemes.

It is intended that implementation of the Principles will be supported by the development of detailed guidance documents for use by planners, including a 'Planning for Freight' toolkit and collection of best practice case studies.

APPENDIX A – URBAN FREIGHT

Urban freight is all movements of goods in to, out from, through or within the urban area, including service transport and construction traffic as well as waste and reverse logistics. It includes a variety of freight operations, commodities, freight formats, timing demands and vehicles used to connect a myriad of origins and destinations for different products. It is a critical enabler of the economic activity of cities, and by extension the nation, and the standard of living enjoyed by all.

Urban freight is the result of logistic decisions, which seek to move goods efficiently within a production and distribution system. A city is provisioned by a large number of supply chains, one for each economic sector. All these supply chains are the result of logistic decisions, which are in turn based on the demands of the production and distribution sectors, themselves dependent on the behaviour of economic agents such as households and firms. Supply chains for urban goods can be categorised into three principal channels, as follows:

Industrial Production: Comprises manufacturing of heavy and light goods bound for businesses, retail outlets and for export. Product shipments range from chemicals, petroleum, and motor vehicles to packaged goods, including shipping containers.

Retail Distribution: Comprises businesses that distribute consumer products like food, electronics, publications, and housewares through wholesale, store-front facilities and direct delivery.

Service Provision: Comprises service-oriented businesses supplied with, or handling, goods for their engagements, such as constructing facilities, caring for health, mounting exhibitions, moving household goods, and removing waste.

Despite its importance to cities, urban freight also competes for space with other urban functions and thus can generate negative impacts on the economy, accessibility, quality of life and attractiveness of urban areas. Moreover to fulfil demand transport companies have little discretion over where or when they are to deliver goods as they are restricted by conditions set by others i.e. shop opening hours, curfews and inadequate infrastructure. They are also often required to operate on the most congested and heavily regulated parts of the transport network.

As a largely private sector run activity, finding publically available data to model the feasibility and impacts of transport policies targeted at urban freight can be challenging. Encouraging private sector firms to sell or share data with the public sector can be problematic for a range of reasons – cost, privacy and competitive advantage – and when data is available, it may difficult to relate to the various logistics activities without freight industry experience. Paradoxically, public sector agencies may also lack awareness of attempts by businesses to mitigate negative externalities of urban freight, which could be adopted more widely.

APPENDIX B – SURVEY

Urban freight planning was one of the critical areas for action arising from the industry led Inquiry into National Freight and Supply Chain Priorities. To address this, the Commonwealth is developing national urban freight planning principles in collaboration with state and territory governments as an action of the National Freight and Supply Chain Strategy.

Q1: Are the Principles appropriate and do they cover off the areas you think are needed to improve planning for freight?

Q2: Will the Principles help state and local governments to recognise the need for freight impacts and logistics planning?

Q3: Is anything critical for urban freight planning missing from the Principles?

Q4: Publication of the Principles will be supported by real-life examples where land use planning has considered needs of freight. Do you have any best practice examples? Please note the Department may contact you regarding your answer, for further detail.

Q5: To support the application of the Principles, what guidance, tools or other measures need to be in place to assist governments and planners?

Q6: Are there any other relevant comments you wish to make?

Please provide your details below. [All will be optional] By providing your details, you consent to being contacted by the Department.

Name: _____

Email address: _____

Contact number: _____

Company: _____

Jurisdiction: _____

Thank you for taking the time to complete this survey.