



3. Guiding principles in planning for freight and servicing activity

This section sets out the key guiding principles in planning for freight and servicing activity in urban centres. These principles apply to new and existing developments as well as existing precincts, greenfield sites and any other locations where planners need to balance the needs of freight and servicing movements against placemaking objectives.

Primary principles, which relate directly to the place outcomes sought from a building or precinct, and secondary principles, which help to ensure the broader benefits of an efficient freight and servicing task are considered.

3.1 Freight and servicing as a derived demand

Freight transport is a commercial activity and a derived demand. This means there is no direct demand for the transport service itself. Rather, the demand is for the good or service being transported. For example, customers at a coffee shop initiate demand in the supply chain for milk, coffee, cups and ultimately waste collection. The supply chain therefore generates several transport movements to deliver to the coffee shop. Transport movements – specifically freight and servicing vehicle movements – are also a direct function of land use (for example, retail land use which permits the coffee shop) and broader placemaking objectives at work in different areas.

Consequently, planners designing buildings and precincts must be aware of the demand for freight vehicle movements that these developments are likely to generate. In the past, plans for new developments and precincts have not always taken this demand into account. Often, there is a disconnect between the placemaking objectives of new proposals and the servicing facilities that are proposed to support them.

When onsite loading and servicing facilities proposed to support new developments are inadequate or poorly managed, the building will be unable to accommodate its logistics task, particularly at peak times. Instead, freight and servicing vehicles visiting the building will need to rely on kerbside parking, causing congestion in the surrounding area. In the case of waste servicing, reliance on kerbside collection and the associated loss of valuable kerbside space for this activity further affects a building's serviceability.

The Toolkit is intended to help developers and other stakeholders plan for the freight and servicing task in the design of buildings and precincts to secure a shared vision for place. Key to this is understanding the building's demand profile and designing loading facilities that are self-sufficient and able to accommodate the vehicle movements this demand will generate. By shifting from providing the minimum compliant facilities to adopting a best practice approach to planning for freight and servicing, stakeholders can help to ensure that land use and placemaking objectives are met.

Key Planning Principle

The design and management of loading facilities should directly reflect the land use and shared vision for place in a building or precinct.

3.2 Freight and servicing as enablers of placemaking objectives

Freight and servicing movements are often viewed as a risk to amenity and placemaking objectives, largely due to the visual, noise and air pollution these movements tend to create. This tension, which may be exacerbated by planning and management approaches to freight and servicing, tends to become apparent only after the key design parameters of buildings and precincts have been decided. Another source of tension is the fact that many people are unlikely to perceive a direct responsibility for or personal benefit from freight and servicing movements. Therefore, they are less likely to tolerate the negative impacts of these movements.

As a result, common planning responses to freight and servicing challenges include restrictions on when and where these movements can occur, and limitations on the size and type of vehicles as well as the times of day they can be used (e.g. curfews). These responses can inadvertently undermine placemaking objectives by making it more difficult to deliver goods and services to businesses and residents alike, ultimately resulting in practices that are detrimental to local amenity.

Freight and servicing movements are inextricably linked to the demand generated by a building or precinct. By fulfilling this demand, they help to ensure placemaking objectives are met. These movements allow restaurants and cafés to receive products, retail outlets to receive stock, public areas to be maintained and waste to be removed, among a range of other activities.

Stakeholders can improve place outcomes with an integrated and proactive approach to planning for the logistics task. Incorporating freight and servicing into initial designs and plans creates opportunities to separate freight access points from public spaces; optimise loading spaces to accommodate the most efficient vehicle types; minimise total movements; and provide ancillary facilities to support freight consolidation and after-hours servicing. It also enables a range of other initiatives that can increase the efficiency and reduce the overall impact of the freight and servicing task.

Properly understanding and actively planning for the transport task is the most effective way to minimise its negative effects – such as congestion, air, noise and visual pollution – on a building or precinct. An efficient and discrete freight and servicing function is a foundation for successful placemaking.

Key Planning Principle

Loading facilities and freight and servicing management strategies should be prioritised in the initial design of a building or precinct to align with and support the shared vision for place.

3.3 Promoting self-sufficient buildings and precincts

Nearly every building or precinct will generate private and commercial vehicle movements. The number and type of these trips will depend on the land use and placemaking objectives at work. As vehicles travel to and from buildings or precincts and dwell at kerbsides, they generate direct costs due to road wear, and externality costs due to congestion and pollution.

Road use charges (such as registration and fuel excise) go some way to helping governments recover these direct costs. However, there are fewer mechanisms in place to recover externality costs – in particular, the broader economic costs incurred when vehicle demand exceeds kerbside capacity. While many local authorities charge private vehicles for parking in busy areas with kerbside capacity constraints, loading zones across NSW are provided free of charge.

In economic terms, an efficient market is one in which the costs of a transaction are borne by the parties engaged in that transaction. Where freight and servicing vehicles cannot park in off-street docks at their destination and must rely on the kerbside, the full costs of delivery are not borne by the market participants: the site's owners, the suppliers and purchasers of the good or service, and the transport operator. Instead, some of these costs are shifted to third parties: taxpayers, who fund the provision, maintenance and policing of kerbsides; other road users, who are unable to access scarce kerbside capacity or are delayed by freight vehicles searching for kerbside space; and other businesses and visitors in the precinct, due to the visual, air and noise pollution caused by these movements.

The obvious solution is to ensure buildings and precincts have enough onsite, off-street capacity to accommodate the freight and servicing vehicle movements their demand generates – in other words, that they are self-sufficient. The feasibility of this solution may vary according to the size of the building or precinct, and the land use. In areas with lower-density land uses, externality costs may be negligible while the cost of providing off-street parking and unloading capacity may be prohibitively high relative to the overall cost of the development. As density increases, such as in urban centres, externality costs and the costs of remedial treatments to address them will increase, while the relative cost per movement of providing adequate off-street capacity will decrease.

It is important to note that best practice management of the freight and servicing task does not simply involve providing a sufficient loading space in a building or precinct. It also means ensuring that this space is accessible to appropriate sizes and types of vehicles, managing vehicle arrivals, encouraging consolidation between tenants and customers and aligning with the place vision. These concepts are explored in greater detail in **Section 6.5**.

Key Planning Principle

The design of buildings and precincts should enable them to be self-sufficient and not rely on kerbside space to support their freight and servicing demand.

3.4 Balancing amenity, transport and building efficiency



Early morning deliveries via Pitt Street Mall, Sydney CBD

An effective planning framework balances the needs of a place's different users appropriately. It is key that planners and developers incorporate freight and servicing considerations into their designs for both new and existing buildings and precincts. However, it is equally important they ensure that the design of freight and servicing facilities is not done in isolation or in a way that detracts from amenity or place outcomes. Particularly in dense urban centres, architects and developers are challenged to fit all the necessary features into a building. Loading facilities, including loading access within a building, can be difficult to accommodate yet they are essential for the building to operate efficiently.

TfNSW's **Future Transport 2056** includes a Movement and Place Framework. This Framework is intended as a tool for managing the road network in a way that supports safe, efficient and reliable journeys for people and freight while enhancing the liveability and amenity of places (TfNSW 2018, p.17). It provides a template for balancing the needs of different users across different parts of the road network, and applies equally to individual developments and precincts. By starting with an understanding of a road network's functions, planners can ensure that loading facilities, access points and place functions are appropriately orientated to the relevant parts of the transport network. The Framework also demonstrates how good planning and management of freight and servicing activity can enable good place outcomes, as discussed in **Section 3.2**.

Supporting Planning Principle

TfNSW's Movement and Place Continuum should be used as an enabling tool to plan and manage freight and servicing movements to and from buildings and within precincts.

3.5 Leveraging freight and servicing to deliver economic, social and environmental benefits

Vehicle movements generated by buildings and precincts affect the efficiency of the greater transport network. While an individual building or precinct's impact may be modest, the cumulative impact of the buildings and precincts in an urban centre is more significant, both on the streets surrounding individual sites and on the broader network.

Planning and approving authorities in particular have an opportunity to improve customer outcomes by ensuring that freight and servicing is well-planned and well-managed. Good planning and management means enabling the use of the most efficient vehicle types, minimising vehicle movements, facilitating consolidation to minimise total journeys, encouraging out-of-peak movements and providing alternative last mile delivery options. These actions can secure broader economic outcomes by improving network efficiency, and can unlock social and environmental benefits by reducing congestion and emissions.

Supporting Planning Principle

Good planning for freight and servicing movements can deliver broad economic, social and environmental benefits.



Figure 5 Key principles to guide planning for freight and servicing activity