

Street Design

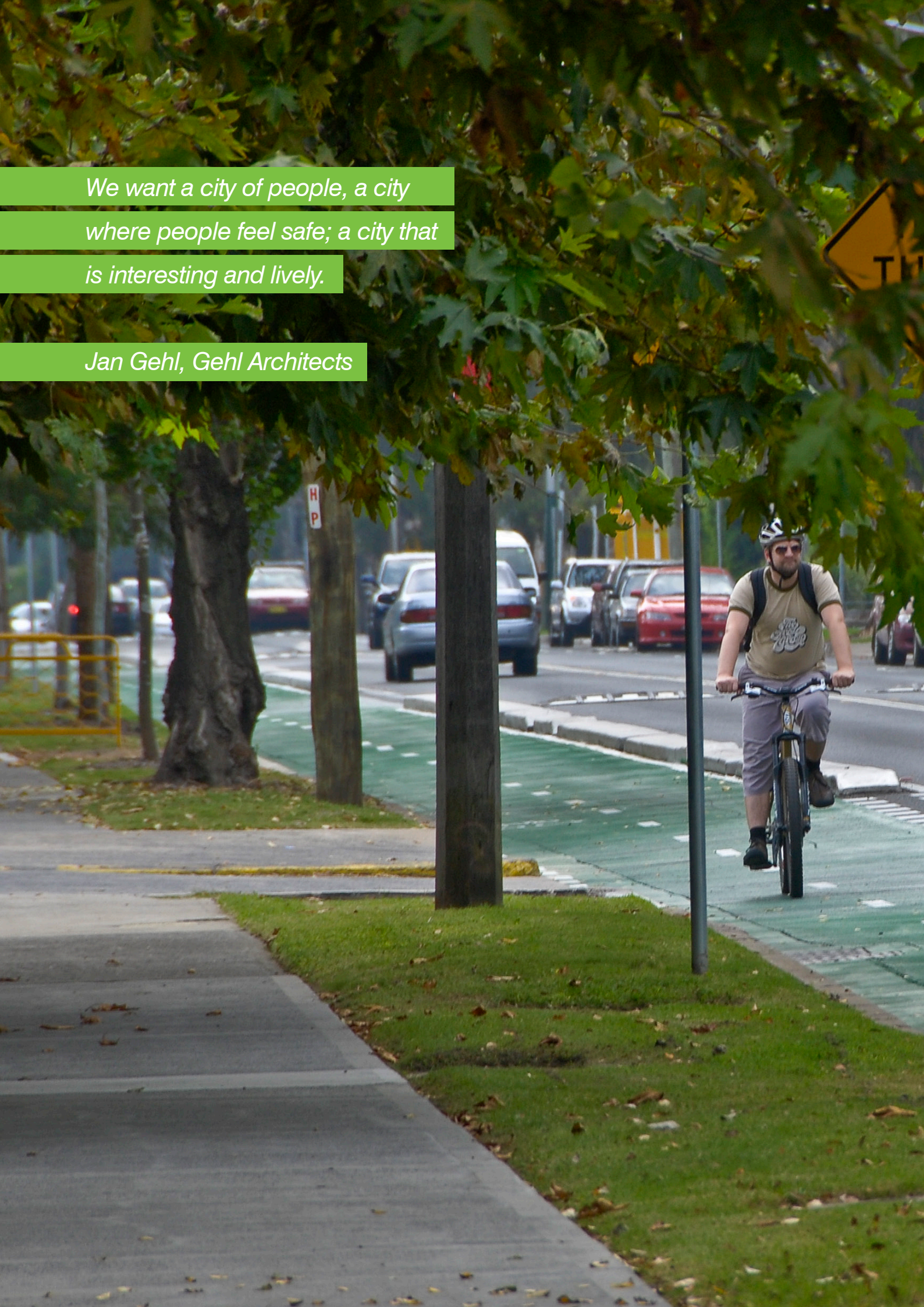
PART D



PART D

*We want a city of people, a city
where people feel safe; a city that
is interesting and lively.*

Jan Gehl, Gehl Architects



Street Design

D.1 FUNCTION

Our streets are the most important public spaces in the City. The street network connects people to their homes, employment, services and recreation every day. The street is the primary space in which people experience the city. Safe and vibrant streets are essential to the economic prosperity of the City. All street design needs to provide for all people, regardless of age and ability.

The street has many functions. The primary function of the street is to facilitate movement of people and goods in and around the city. It also fulfils important social, ecological and economic functions.

The key functions of Sydney streets are:

Place – The Street has an important community function. It can be a place for walking, meeting, shopping, playing, socialising, recreation and rest. The street provides space for formal and informal social activity within the community. Economic activity, such as shops, along the street can stimulate social activity. In residential areas, the street should promote good relationships between neighbours. The street should be attractive and invoke a sense of community pride and ownership. It can also reinforce the cultural and historical identity of a place.

Movement – Streets primarily function as a network for movement of people and goods. Pedestrians, cyclists, buses, light rail and private vehicles all travel through the city on our streets.

Access – The street provides access to and from properties and services. Access to shops is achieved via a footpath and shop frontage. Access to public transport is provided by bus stops or light rail stops. Other forms of access within the carriageway provide for service and commercial vehicles, taxis, car share parking and dedicated cycleways.

Environmental – Streets allow natural processes to continue to work in the City, by providing space for trees and vegetation, stormwater collection, management, and infiltration and distribution. Trees in the street provide shade and amenity for pedestrians, reduce summer temperatures, support activity in the street. Trees and vegetation can also make a street legible, and support a local character or 'sense of place'.

Infrastructure – Drainage, utilities and street lighting all provide fundamental servicing and safety for all neighbourhoods. Sustainable systems within this street can bring environmental benefits such as flood control, efficient stormwater recycling and green ecology into the streetscape.

D.2 TYPES

There are many types of streets within the City. Because the primary function of streets is to facilitate movement, streets have traditionally been organised in a hierarchy that is reflective of their vehicle movement function. They are commonly termed transit corridors, arterial roads, collector roads, local streets, laneways and shared zones.

This hierarchy of street types reflects the traffic volumes on streets, and does not reflect the other diverse factors that make up a street. Streets can not be considered independently on the function of vehicular movement. When all other factors are considered; of place, access, environmental and infrastructure, a different hierarchy of street character is formed. This is formed by how the street is used, for example retail high streets that have a high functional use for vehicle movements as well as support high patterns of pedestrian movement. It is important to understand the complete functions of the street when allocating space, to create balanced street use outcomes.

New Streets Where new streets are planned, in new neighbourhoods, street types are established in the Development Control Plan to reflect the needs of the place. New streets should have physical dimensions appropriate to their mix of functions, that is, a width that enables all the functions of movement, access, place and ecology and infrastructure, to operate safely and effectively.

Existing Streets In Sydney, many existing streets have the same width, regardless of their mix of functions or where they sit in a functional hierarchy. Their function is driven by their context and made to fit within the existing proportions of the street. The common City Street Types found across the City are General Streets such as Arterial roads, Village Main Streets, Local Streets, Laneways, Slow Streets, Shared Zones and Transit Streets. These are further defined in this section.

State Owned Streets The City includes streets that are controlled by the State Government, that carry high volumes of vehicular traffic, they each have a unique combination of functions. These streets include Broadway, South Dowling Street, Oxford Street, King Street, William Street and Cleveland Street. They carry high volumes of vehicular traffic, which often makes them unpleasant and sometimes unsafe environments for pedestrians and cyclists. At the same time, these streets can have significant pedestrian and retail functions, servicing their local neighbourhood which entails a high degree of pedestrian activity. Site-specific solutions will be required to promote pedestrian and cycle access, place and amenity in the street. The City will work with the State Government to improve the quality of these streets.

Each street has a common set of functional design considerations. Design resolution is site specific, and cannot be generalised by type. Part E Street Design Coordination sets out the priorities for design decision making in the coordination and layout of elements in the street.

City Street Types

The common City Street Types define the basic role for streets across all Character Areas of the City.

Primary to defining a street type is to understand how streets interact with adjacent land uses. Secondary, is the role of the street; as a connector for pedestrian, cycle, transit and/or vehicle movement, setting the hierarchy of movement activity on the street. Thirdly, the interweaving of streets, footpaths, buildings and open spaces, defines Sydney's vibrant urban fabric and creates places for people within the streetscape.

The following section describes the typical street types of:

- **General Streets** - Arterial Roads
- **General Streets** - Village Main Streets
- **General Streets** - Local Streets
- **Laneways;**
- **Slow Streets;**
- **Shared Zones;** and
- **Transit Streets.**

General Streets – Arterial Road

Arterial Roads accommodate higher volumes of traffic and higher volumes of pedestrians where there are mixed uses of retail, commercial and residential uses. The vehicle and pedestrian zones are separated and the street character and physical appearance will vary due to the land use context.

Arterial roads are State Owned roads, differentiated from other General Street types by their higher volumes of traffic. Arterial roads have the highest volumes of vehicular traffic than any other General Street type.

Aim: Arterial Streets aim to facilitate vehicular traffic as a primary function, whilst allocating adequate width in footpath zones for place function.

Design Objectives

- Support a high balance of function for vehicular traffic and public transport, whilst providing for adequate and safe movement functions for pedestrians and cyclists;
- Promote walkability on street edge footpaths and provide opportunity for street furniture and outdoor dining; and
- Provide cycleways where consistent with the City's Cycle Strategy and Action Plan 2007-2017.

Examples include: Oxford Street, Broadway, William Street, Cleveland Street.



Cleveland Street, Surry Hills

General Streets – Village Main Streets

Village Main Streets support a balanced movement function between traffic and pedestrians. The vehicle and pedestrian zones are separated, and the street character and physical appearance responds to a high volume of active retail and commercial frontages. The standard urban speed limit of 50km/hr applies as the urban speed limit and where there are high pedestrian activity areas and school zones, 40km/hr applies.

A Village Main Street can sometimes be differentiated by separated cycleways and transit priority functions. A separated cycleway is only considered for streets that are designed for such treatments under the City's Cycle Strategy and Action Plan 2007-2017.

Aim: Village Main Streets aim to balance function of 'place' with movement, allocating adequate width in footpath zones for place function, while maintaining clear zones of through vehicle movement for public transport and local traffic.

Design Objectives

- Support a balance of function between pedestrian, cyclists, public transport and vehicular movement;
- Promote walkability on street edge footpaths and provide opportunity for street furniture and outdoor dining; and
- Provide cycleways where consistent with the City's Cycle Strategy and Action Plan 2007-2017.

Examples include: Crown Street in a Village Centre Area. Pitt Street in the City Centre Area, Harris Street in a Village Centre Area.



Crown Street., Surry Hills

General Streets – Local Streets

Local Streets, similar to Village Main Streets support a balanced movement function between traffic and pedestrians. Traffic volumes are generally lower than a Village Main Street and primarily function access for residential mixed use with local retail and commercial uses. The typical speed of a Local Street is 40km/hr.

Similar to a Village Main Street, a Local Street may be nominated as a cycle route, and on-street marked cycle can be considered (refer to the City's Cycle Strategy and Action Plan 2007-2017).

Aim: Local Streets aim to balance the functional movement patterns of local traffic with adequate width in footpath zones for pedestrian amenity and place function.

Design Objectives

- Support a balance of function between pedestrian, cyclists, public transport and vehicular movement;
- Promote walkability on street edge footpaths to provide for safe and legible connections from public transport to residential dwellings.
- Provide cycleways where consistent with the City's Cycle Strategy and Action Plan 2007-2017.

Examples include: Marriott Street, Redfern, a Local Area.



Marriott Street, Redfern

Laneways

Laneways are small scale streets that typically carry low numbers of vehicles and are mostly for local access only. They can be used solely for service functions or they may have a partial or full closure to vehicular traffic and/or low speed restrictions in a dedicated shared zone environment. Refer to Part E for further Shared Zones design coordination.

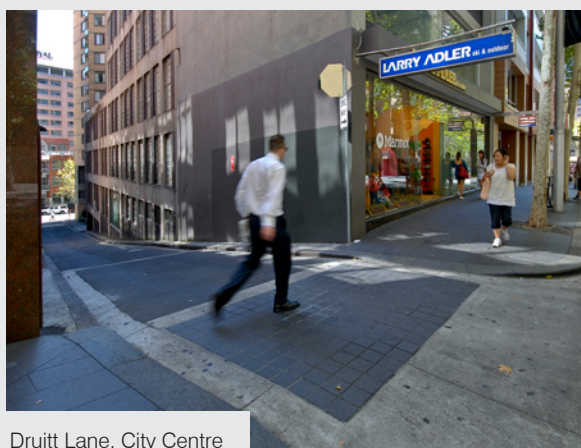
Laneways can serve as valuable public space and when applicable should be designed with seating, landscaping and pedestrian lighting to create safe, attractive and usable space.

Aim: The aim of the laneway is to provide increased pedestrian access where ground floor uses activate the space, and allow for low levels of vehicle and servicing access.

Design Objectives

- Support a balance of function between vehicular access and pedestrian access;
- Promote walkability within the laneway and provide opportunity to activate ground floor uses by inclusion for street furniture and outdoor dining in City Centre locations;
- Vehicular access may be limited to restricted hours for loading and servicing; and
- Provide vehicular access to residential property in local areas.

Examples include: Druitt Lane in the City Centre Area.



Druitt Lane, City Centre

Slow Streets

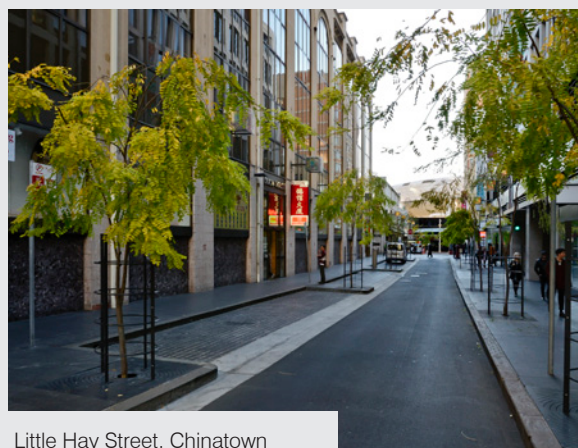
Slow streets make extensive use of traffic calming measures and include reduced speed limit signage to discourage vehicular through-traffic, reduce vehicular speed and green the streetscape, creating a comfortable environment for bicycling and walking. Local Streets and Laneways can be designed to deliver a Slow Street and include additional public domain benefits. The Slow Streets aim is to reduce speeds to 30km/hr.

Aim: Slow Streets aim to reduce traffic speeds, to prioritise a higher use of pedestrian and cyclist movement, creating a comfortable environment.

Design Objectives

- Support a balance of function between vehicular access and pedestrian access;
- Promote walkability through widening of the footpath zone.
- Provide opportunity to activate ground floor uses by inclusion for street furniture and outdoor dining in City Centre locations;
- Inclusion for traffic-calming measures and reduced speeds to 30km/hr.

Examples include: Little Hay Street, Chinatown City Centre Area.



Little Hay Street, Chinatown

Shared Zones

A Shared Zone is a street shared safely by vehicles and pedestrians. It has a low speed limit of 10km/hr. Shared zones are designed to support pedestrian and public life through alternative paving materials, removal of raised kerbs (if drainage considerations allow), footpath extensions and thresholds, seating, landscape treatments, and pedestrian lighting that collectively creates a strong differentiation from traditional vehicle priority streets which reminds drivers that they should proceed cautiously and slowly.

Shared Zones are often kerbless, providing a flush environment for pedestrians, cyclists and low speed vehicles to share the same space, special consideration needs to be given to the provision of adequate tactile or other clues for visually impaired people including options for 'safe' spaces (normally along the building line) if a traditional kerblines is not provided.

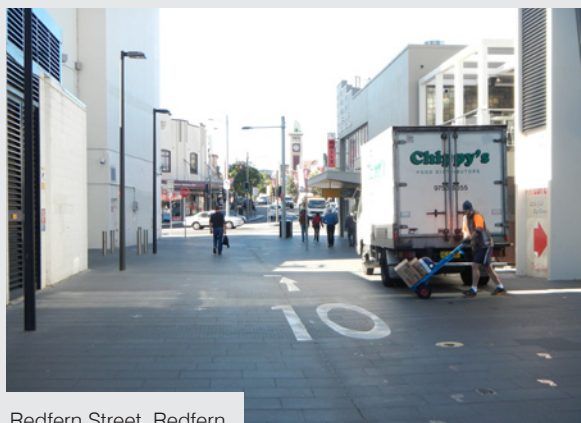
Aim

A shared zone aims to create a shared safe street corridor of movement for pedestrians and vehicles.

Design Objectives

- Promote safe primary access for pedestrians and cyclists in a shared environment;
- Inclusive access requirements are a priority to ensure safe navigation of the street;
- Street elements must be located in coordination with through movement zones; and
- Vehicular access may be limited to restricted hours for loading and servicing.

Example: Redfern Street, Redfern in a Village Centre Area, Wilshire Street, Surry Hills, in a Local Area.



Redfern Street, Redfern

Transit Streets

Transit streets are existing or proposed future street types associated with active frontages, that provide a high priority to public transport operations. Hay Street in Haymarket is an example of a light rail transit street. George Street is an example of a proposed future transit street, being identified as a preferred light rail route for the City Centre.

The extension of light rail routes beyond the City centre such as Devonshire Street will involve existing streets being redesigned or new streets in urban renewal areas constructed to accommodate light rail. Transit Streets are streets where private vehicles to have limited or no access, and bus or light rail use is prioritised. Delivery access may be allowed at all times or in off-hours, and cycle lanes may be provided if space permits.

Aim

The Transit Street aims to prioritise through movement on the street through inclusion for multiple modes of transport including dedicated public transport zones, cycleways and high quality footpath zones.

Design Objectives

- Support a high function of public transport;
- Promote walkability on street edge footpaths and provide opportunity for street furniture and outdoor dining; and
- Opportunity to provide a dedicated cycleway where consistent with the City.

Examples include: Hay Street in the City Centre Area and the future George Street and Devonshire Street light rail.



Indicative George Street's future light rail

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