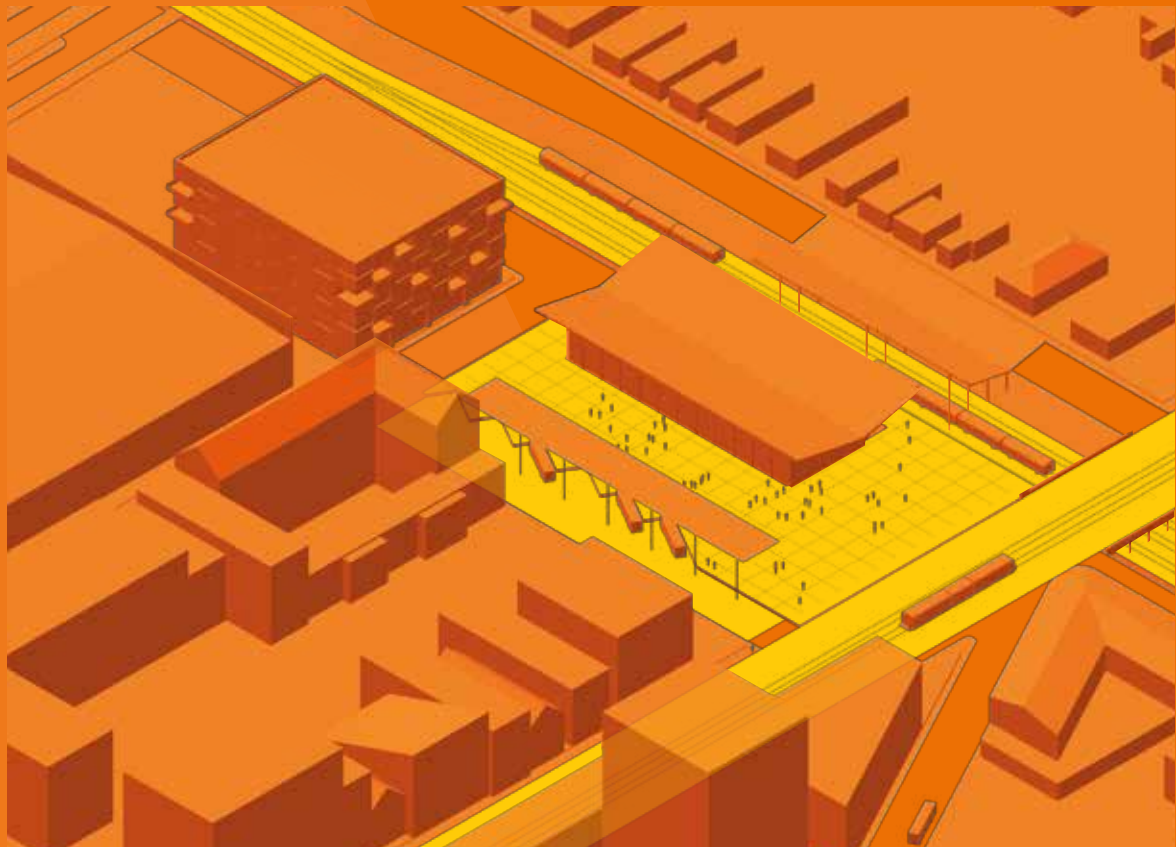# Element 4
Public transport environs

Element 4 Public transport environs

This element covers

4.1 Public transport environs principles

Urban design principles for public transport environs.

4.2 Railway station precincts

The integration of railway stations with their surrounding environment.

4.3 Public transport interchanges

Bus or tram interchanges that are either stand-alone, adjacent to a railway station or located at a transport node, such as a park-and-ride facility.

4.4 Railway corridor environs

Land and activities adjacent to the railway operating corridor.

This element does not provide guidance on public transport infrastructure design, level of service for public transport, or the train, tram or bus traveller experience while travelling on public transport.

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4.1 Public transport environs principles

Public transport environs includes the public spaces, streets, buildings and activities located around railway stations, bus and tram interchanges, and adjacent to railway corridors.

Why is it important?

Where public transport nodes are located near other activities and facilities, they provide mutual support through enhanced convenience and accessibility, and a safer public realm.

This element assists in delivering enhanced safety and amenity in the public realm and in private development in the vicinity of railway stations, public transport interchanges, and railway corridors. The engineering, servicing or management issues of the public transport are guided by other appropriate authorities. See also Public Transport Guidelines for Land Use and Development (Department of Transport 2008) and also the Guideline sources and references for a list of technical guidance.

Related guidance

Element 2   Movement network

Element 2.6   Public transport on roads

Element 3.1   Public spaces principles

Element 3.2   Street spaces and plazas

Objective 4.1.1 To ensure convenient pedestrian and bicycle access to railway stations and public transport interchanges

4.1.1a Provide continuous, direct pedestrian and bicycle access routes from the surrounding neighbourhood to railway stations and public transport interchanges.

> → **TIP** Pedestrian and bicycle access routes to a public transport node should accommodate both public transport users and others moving around the neighbourhood. More people on the paths will create a safer environment.

4.1.1b Provide a continuous active frontage along pedestrian approach paths to railway stations and public transport interchanges.

> → **TIP** Pedestrians feel unsafe where vacant lots or blank walls front pedestrian paths.

4.1.1c Arrange pedestrian approach paths with clear sightlines to and from railway station buildings, and to and from public transport interchanges.

4.1.1d Where a bus or tram interchange is co-located with a railway station, connect them with a direct, sheltered pedestrian path.
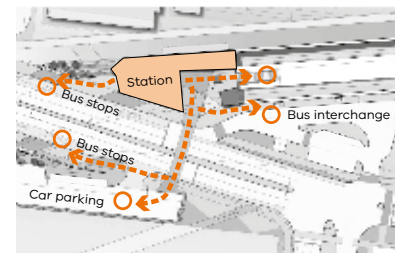
4.1 **Public transport environs principles**

Objective 4.1.2   To ensure safety and amenity around railway stations and public transport interchanges

4.1.2a   Locate active public spaces and secondary uses adjacent to railway stations and public transport interchanges.

> → **TIP** Active public spaces and secondary uses, such as food vendors, or drycleaners, can attract other people to the railway station or public transport interchange area. This helps increase the numbers of people using the station or interchange area and improves security.

4.1.2b   Locate public transport waiting areas, particularly pick-up and drop-off areas, and taxi ranks where they are clearly visible from the pedestrian approach paths and nearby buildings.

4.1.2c   Where railway stations are co-located with a bus interchange, arrange waiting areas with clear views to approaching buses.

> → **TIP** Sharing waiting areas for train and bus travellers can increase activity levels and contribute to a sense of safety.
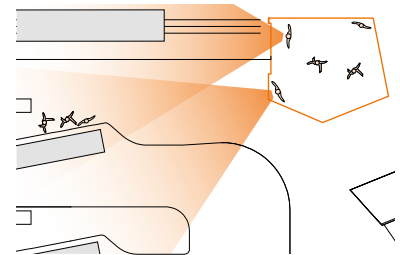
Objective 4.1.3   To ensure comfortable and serviceable railway stations and public transport interchanges

4.1.3a   Provide weather protection, comfortable seating and public amenities, such as waste bins and drinking fountains.

4.1.3b   Locate way-finding signage at logical and visible points along approach paths to and within the railway station or public transport interchange.

4.1.3c   Locate real-time travel information where it can be seen by waiting passengers in all light conditions.

> → **TIP** When selecting a location for electronic display screens take into account the effects of bright sunlight and sun angles on screen visibility.

4.1.3d   Provide both casual and secure bicycle storage near the railway station or public transport interchange.

> → **TIP** Casual bicycle storage, such as hoops, provide an easy-to-use facility, while secure cages provide for longer term storage.

Objective 4.1.4   To ensure the railway station or public transport interchange contributes to a sense of place and local character

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4.1.4 a   Develop a palette of materials, furnishings and plantings for public space within the railway station precinct or public transport interchange that is consistent with the preferred palette of the surrounding area.

→ **TIP** Where multiple agencies deliver infrastructure and urban design works, a consistent palette of fixtures and finishes enables co-ordinated repairs and contributes to a sense of place.

Objective 4.1.5   To effectively maintain public transport environs

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4.1.5 a   Establish a place management agreement that identifies management and maintenance responsibilities and processes.

→ **TIP** Public transport interchanges and their adjacent public spaces have different agencies responsible for management. A place management agreement and place maintenance processes can assist a coordinated and consistent approach.

4.2 Railway station precincts

A railway station precinct is the area in the immediate surrounds of a railway station. Local movement networks converge on railway stations, concentrating activity in the precinct. Railway stations also provide for pedestrian crossing of the railway line. The railway station precinct can function as a social space where people meet or watch the world go by. Railway stations are located in a number of different settings – activity centres, residential neighbourhoods, semi-rural or industrial – resulting in different levels of activity and use patterns in each precinct.

Where a railway station is co-located with other uses and facilities, activity may be spread over more of the day. Where a station stands alone, activity may have temporal peaks, often resulting in patchy activation through the day. Where present, station and ancillary staff can provide informal surveillance in the station area.

Why is it important?

Railway stations attract a wide range of travellers and commuters who arrive or depart on foot, by car, bus, tram, or bicycle, and who wait or change modes. Station buildings also may be used for community activities.

This element provides design guidance for the immediate surroundings of railway stations. It does not include design considerations within the paid (ticketed) area. The engineering, servicing or management issues of public transport are guided by other appropriate authorities. See also Public Transport Guidelines for Land Use and Development (Department of Transport 2008) and also the Guideline sources and references for a list of technical guidance.

Related guidance

Element 2	Movement network
Element 4.1	Public transport environs principles
Element 6	Objects in the public realm

4.2 Railway station precincts

Objective 4.2.1   To integrate the railway station with the surrounding area

4.2.1a   Arrange railway station forecourts as a key part of the public space system and movement network.

→ **TIP** Station forecourts are both public spaces and arrival and setting-off points for a journey.
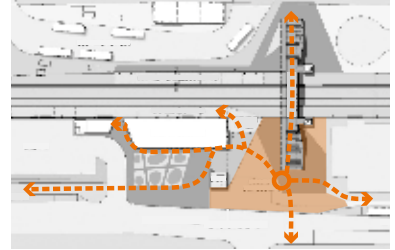
4.2.1b   Locate convenience retail uses close to the station entry.

→ **TIP** Where a station kiosk or a shop overlooks the station approach path and platform, staff provide informal surveillance and passengers feel safer.

4.2.1c   Locate local pedestrian and bicycle crossings of railway lines outside the station 'paid' (ticketed) area.

→ **TIP** By locating railway line crossings outside the paid area, the paths can be used by the general public to move about the wider neighbourhood.

4.2.1d   Locate commuter car parking areas away from main pedestrian approaches to the railway station.

→ **TIP** Large commuter car parking areas can pose a barrier to pedestrian movement and they are inactive areas outside peak times. See Element 2.8 Car-parking lots.
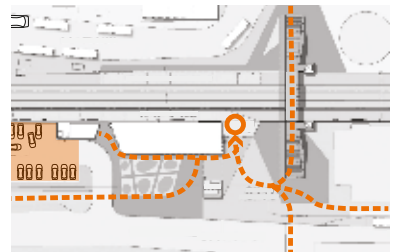
Objective 4.2.2   To support amenity and safety on private property in railway station precincts

4.2.2a   Where a private lot abuts a railway property, set buildings back from the boundary with the railway property.

→ **TIP** Avoid building to the lot boundary on the railway land interface. Railway property is not usable as a public way or for providing access to light and ventilation in adjacent buildings. Set buildings a sufficient distance back from the boundary to provide access for maintenance and repairs to buildings and services, and to allow for light and ventilation access for the building.
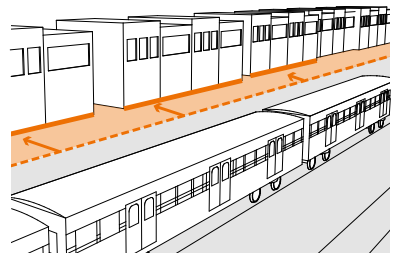
4.3 Public transport interchanges

A public transport interchange is a place where people can access or transfer between public transport modes and routes. Interchanges vary in size and may be stand-alone, adjacent to a railway station, or located at a transport node, such as a park-and-ride facility.

The interchange may be located in a building or an open area, with passenger facilities such as shelters and enclosed waiting spaces, travel information, public conveniences and shops. Buses and trams are large vehicles with limited manoeuvrability, therefore detailed design must consider safety and engineering issues.

Why is it important?

Interchanges have a concentration of pedestrian activity, accessing the interchange from multiple directions or changing modes. The movement patterns may have temporal peaks, often resulting in patchy activation. Functional, safe and convenient pedestrian movement to and within a public transport interchange is a major objective.

This element provides design guidance for the immediate surroundings of public transport interchanges. It does not include design considerations within a paid (ticketed) area. The engineering, servicing or management issues of the public transport are guided by other appropriate authorities. See also Public Transport Guidelines for Land Use and Development (Department of Transport 2008) and also the Guideline sources and references for a list of technical guidance.

Related guidance

Element 1.2   Activity centre structure

Element 2.6   Public transport on roads

Element 4.1   Public transport environs principles

Element 6   Objects in the public realm

Objective 4.3.1 To provide functional and safe movement within public transport interchanges

Public transport interchanges function well when centrally located with direct and separated access lanes for public transport vehicles. See Element 1.2 Activity centre structure for location and access guidance for public transport interchanges.

4.3.1a Within public transport interchanges, provide pedestrian paths separated from the vehicle lanes.

4.3.1b Where a bus interchange is arranged as parallel ranks, provide direct, dedicated pedestrian paths and crossings over bus lanes or roads.

→ **TIP** When pedestrian paths and crossings are located in inconvenient places, pedestrians may cross roads informally and put themselves at risk.
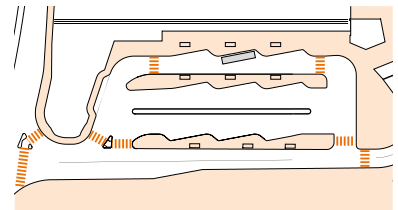
4.3.1c Where a bus interchange is linear along a street edge, provide a continuous, unobstructed passenger shelter.

→ **TIP** Shelter structures and other obstructions must be clear of pedestrian and vehicle travel paths, and meet requirements for disability access. See Guidelines sources and references for further guidance.
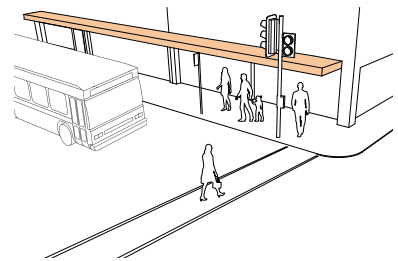
Objective 4.3.2 To ensure the public transport interchange protects the amenity of adjacent sensitive uses

4.3.2a Locate active, non-residential uses on the interface with public transport interchanges, and locate more sensitive uses away from the interchange area.

→ **TIP** Bus and tram interchanges generate many vehicle movements and operate from early morning to late night. Noise and light may disturb sensitive uses nearby if located close to an interchange.

4.4 Railway corridor environs

Railway corridor environs focuses on land and activities adjacent to the railway operating corridor. Along the length of the corridor, adjacent land may accommodate a variety of uses including streets and roads, public open space, residential or commercial development.

Railway corridors contribute to an effective movement network. Railway corridors may carry metropolitan passenger, regional passenger or freight trains. Railway corridor crossing points channel and concentrate pedestrian, bicycle and vehicle movement to specific locations.

Railway crossing points are used by both commuters and the general public. Crossing points can be existing at-grade or new grade-separated crossings. Grade separated crossings are either by an underpass (subway) or an overpass (footbridge). The design of new transport routes and new developments, where applicable, must provide for grade separation at railway crossings except with the approval of the Minister for Public Transport.

Why is it important?

Some railway corridors, due to their length and widely-spaced safe crossing points, can be a barrier to movement in the wider area. Space adjacent to the railway operating corridor, if safely separated, can provide opportunities for linear open space, and pedestrian and bicycle paths. Railway stations and crossing points along the corridor can be locations for more intense activity.

Some train operations can result in noise and vibration effects on nearby properties, especially where a freight service operates or the track curves or climbs, or where there is a signalised level crossing. Development within the railway corridor environs should consider the potential amenity impacts of the railway operating corridor, and constraints on public access.

This element provides design guidance for the immediate surroundings of railway corridors. It does not include design considerations within the operational rail corridor. The engineering, servicing or management issues of the public transport modes are guided by other appropriate authorities. See also Public Transport Guidelines for Land Use and Development (Department of Transport 2008) and also the Guideline sources and references for a list of technical guidance.

Related guidance

Element 2   Movement network

Element 4.1   Public transport environs principles

Objective 4.4.1   To enhance connectivity and access in railway corridor environs

4.4.1a   Provide conveniently located grade separated pedestrian and bicycle crossings across railway corridors, motorways and other natural barriers, to connect neighbourhoods and key destinations.

> → **TIP** In urban areas, the crossing location and frequency should be informed by local circumstances and need.

> → **TIP** The design of transport routes at new developments must provide for future grade separation at railway crossings except with the approval of the Minister for Public Transport.

Objective 4.4.2 To enhance the amenity and safety for adjacent uses in the railway corridor environs

Railway corridors are not public spaces. However, as there is no requirement on the railway operator to fence the railway track area, the railway operating corridor may sometimes appear as quasi-public space, in particular where it is adjacent to a public road or actual public space. Development adjacent to a rail corridor should include suitable fencing to prevent access to the corridor. Advice from the rail track authority is to treat rail land as private property, unless advised otherwise by the authority.

4.4.2a Where a railway operating corridor serves only metropolitan passenger services, provide a street between the railway operating corridor and the surrounding area, to provide an active frontage.

→ **TIP** A street is not an effective noise buffer, but metropolitan services generally make less noise than diesel freight trains.
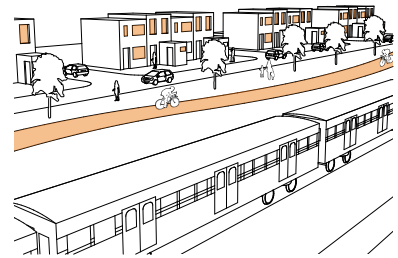
4.4.2b Where a railway operating corridor serves freight or regional passenger services, design buildings or structures to provide a noise buffer for adjacent buildings and the surrounding area.

→ **TIP** While buildings designed to provide a noise and vibration barrier are appropriate in freight or regional passenger corridors, sound walls, if well designed, may also be a solution.
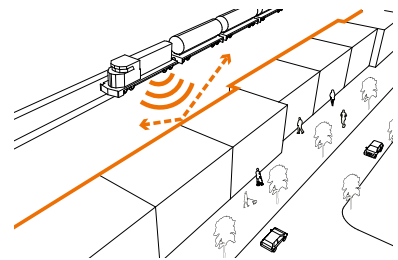
4.4.2 c Where a private lot abuts a railway corridor, set buildings back from the boundary with the railway property.

→ **TIP** Avoid building to the lot boundary on the railway land interface. Railway property is not usable as a public way or for providing access to daylight and ventilation in adjacent buildings. Set buildings a sufficient distance back from the boundary to provide access for maintenance and repairs to buildings and services, and to allow for light and ventilation access for the building.
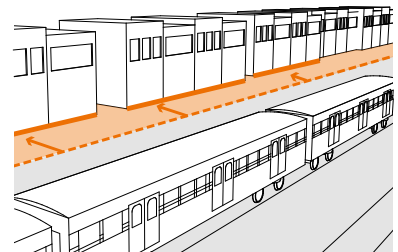
4.4.2d Where a building wall faces a railway corridor, design the building facade to dissipate noise.

→ **TIP** Faceting the building wall, or using a sound-absorbing surface finish can reduce noise transmission into bordering buildings.

4.4.2e Where a building wall or fence interfaces a railway corridor, use wall and fence finishes that resist graffiti and vandalism.

→ **TIP** While vegetation on walls discourages graffiti, maintaining the plantings is an additional management cost and responsibility.

Objective 4.4.3   To ensure buildings and uses adjacent to the railway corridor support safe railway operations

4.4.3a   Locate trees and planting along railway corridors to maintain clear sightlines for train drivers, and to ensure branches do not fall onto the rail infrastructure.

→ **TIP** Maintaining clear sightlines between an adjacent path and the rail operating corridor also ensures that pedestrians and cyclists can see approaching trains.

4.4.3b   Use visually non-reflective surfaces on buildings and structures facing the railway corridor to avoid glare and train driver distraction.

4.4.3c   Shield the railway operating corridor from light spill from adjacent properties to avoid train driver distraction.

→ **TIP** Train driver distraction, caused by bright lights, colours or shiny surfaces, can pose safety risks to train operations.

Objective 4.4.4   To ensure effective place maintenance in railway corridor environs

4.4.4a   Where development or works are proposed on land abutting a railway corridor, consult with railway agencies early in the planning process.

→ **TIP** See Guideline sources and references, for rail environs responsible authorities and agencies.

4.4.4b   Establish a place management agreement that identifies management and maintenance responsibilities and processes.

→ **TIP** Railway corridor environs are complex areas to manage. A place management agreement and place maintenance processes can provide for coordination and consistency.