

Development Control Policy 1.6

Planning to Support Transit Use and Transit Oriented Development

	Background notes	2
1	Introduction	3
2	Application of the policy	4
3	Policy objectives	4
4	Policy measures	5
	4.1 Transit-supportive development patterns	5
	4.2 Land use to support transit	5
	4.3 The public domain in transit oriented precincts	6
	4.4 Transit supportive design	7
	4.5 Integrating transit infrastructure	7
	4.6 Precinct planning	8
5	Implementation	8
	Indicative area of application of policy	9

Background notes

Amendments to Development Control Policy 1.6 Planning To Enhance Public Transport Use DC 1.6 1999, was adopted by the Western Australian Planning Commission (WAPC) in 2005 to reflect the Government's vision for a sustainable future as outlined in the Network city and the State Sustainability Strategy. The amended policy is titled Development Control Policy 1.6 Planning to Support Transit Use and Transit Oriented Development.

The Perth and Peel region now has a public transport system that is sufficiently extensive to consistently promote land uses that maximise the opportunities for land use and public transport integration. This integrated approach serves to enhance accessibility by travel modes other than the private car, and plays a significant part in the promotion and maintenance of urban sustainability.

Within existing developed areas, there are clear opportunities to intensify existing activities and to promote new uses that will make better use of transit facilities and services. As the public transport system is further refined and extended, there will be emerging opportunities for new development that is focused upon, and maximises the benefits derived from significant new public investments in transit infrastructure.

There are obvious benefits of a planning policy that encourages the integration of land use and transit facilities. Higher residential densities and mixed use developments in the walkable catchments of transit facilities have the potential to reduce car dependence; to increase accessibility for those without access to private cars; to reduce congestion on the road network and the demand for new road space; to reduce fuel consumption and air pollution; and to provide quality diverse and affordable forms of housing and development. These benefits combine to produce an attractive and viable alternative to car-based suburban and urban fringe development.

Mixing compatible uses in transit-oriented precincts within an environment that favours walking and cycling makes it possible to reduce private vehicle use. It becomes feasible for trips to become multi-purpose (ie to serve several trip purposes at the one location) and to include travel on multiple modes, therefore reducing the number of separate trips requiring private vehicle use. Mixing uses also promotes more efficient operation of the system by generating travel demand in both directions and spreading transit use beyond the morning and evening peak periods.

This policy seeks to maximise the benefits to the community of an effective and well used public transit system by promoting planning and development outcomes that will support and sustain public transport use, and which will achieve the more effective integration of land use and public transport infrastructure.

The policy is an integral part of a range of policies directed towards greater urban sustainability, in accordance with the State Planning Strategy and Statement of Planning Policy 3 Urban Growth and Settlements (SPP3). The following policy measures from SPP3 are particularly relevant to this policy:

- Supporting higher residential densities in and around neighbourhood centres, high frequency public transport nodes and interchanges.
- Clustering retail, employment, recreational and other activities which attract large numbers of people in activity centres around major public transport nodes so as to reduce the need to travel, encourage non-car modes and create attractive, high amenity mixed-use urban centres.
- Providing access for all to employment, health, education, shops, leisure and community facilities by locating new development so as to be accessible by foot, bicycle or public transport rather than having to depend on access by car.

I Introduction

Policy approach

The development potential related to transit facilities in metropolitan Perth is variable, and the nature of the relationship between transit and land use cannot easily be classified into a consistent set of development scenarios that readily lend themselves to corresponding individual policy approaches.

The nature and role of transit facilities themselves is also not static, but changes over time, sometimes in response to localised factors but also in response to wider policy decisions, for example on service frequencies, fare structures and other operational factors. The actual physical form of transit facilities may also change, through the improvement of individual components of the system, or through wider network revisions and extensions.

In this context, and in recognition of the level at which the WAPC is able to influence these issues, this policy takes a generalised rather than geographically place-based approach, while still seeking to ensure that the provisions reflect and address the variety of situations in which the relationship between urban form, land use and transit may be enhanced, promoted and planned for.

This approach places much of the emphasis for the detailed delivery of transit related development outcomes upon local government planning processes, through the preparation and consistent application of appropriate provisions within town planning schemes, and associated planning policies and design controls, developed and applied under the guidance provided by this WAPC policy. Achieving the policy's objectives will therefore require a collaborative approach between the WAPC and local governments.

It is also critical to the effectiveness of the policy that state government agencies apply its principles in the development and implementation of government projects.

Defining 'transit oriented precincts'

Research into the relationship between accessibility and the use of transit facilities consistently indicates that there is a common 'threshold' for walking to those facilities. This equates to:

- about 10-15 minutes walking time, or an 800 m distance, for rail stations, transit interchanges or major bus transfer stations or terminals, and
- about 5-7 minutes walking time, or 400 m, for bus stops located on bus routes with multiple bus services that are high frequency of 15 minutes or less during peak periods (see map attached).

It is also accepted that these distances may be exceeded under particular circumstances, for example where a rail station lies centrally within a confined 'corridor' of development that may somewhat exceed 1600 m in total width. They may also be limited in some local cases, for example where physical barriers prevent access.

Where the nature of bus services and facilities are such that they can be considered to offer the same level of service and 'permanence' as rail-based services, the provisions of this Policy will normally be applied to the precincts around those facilities. In the case of typical on-road bus stops on normal local routes, it is accepted that the potential lack of permanence of such facilities and services may make a direct transit oriented development (TOD) response difficult, however the general guidance provided in this Policy on planning for bus-based transit in the urban structure should still be applied.

It is accepted that the development potential in TOD precincts as defined in this policy will be variable. The policy establishes principles that should be adhered to wherever possible, but TOD requires a place-based approach to precinct planning and design to define, protect and secure optimal TOD outcomes.

Measuring accessibility

In making a broad assessment of accessibility to transit facilities, and in reviewing the associated urban structure, the threshold distances described above can be taken as simple radial measurements, however a much more accurate picture of real accessibility can be obtained by using the 'ped-shed', or walkable catchment, technique, plotting actual walking distances against the existing or proposed street network.

As well as providing a very good picture of the overall level of accessibility to transit afforded by neighbourhood structure, this technique can also be very helpful in identifying specific issues and shortcomings of a development pattern that may be addressed

by making in some cases relatively simple changes that have a significant impact on the overall level of accessibility within a place.

The WAPC therefore encourages the use of the 'ped-shed' and related techniques for designing and testing subdivisions for accessibility to transit facilities, and will itself apply those techniques in assessing relevant proposals.

2 Application of the policy

This policy applies to all areas of the state, within transit precincts as defined under the policy, and is intended to inform government agencies, local government, landowners and prospective developers of the policy approach which will be applied by the WAPC when considering:

- development or redevelopment within transit oriented precincts as defined in section 1 of this policy;
- the need for transit services and the provision proposed to be made for those services in new development areas; and
- proposals for the redevelopment of existing transit facilities and other network changes and improvements.

The policy will be applied by the WAPC:

- in determining subdivision and development applications;
- in advising on town planning schemes, scheme amendments and local planning strategies;
- in preparing and reviewing structure plans for developing areas and areas undergoing redevelopment;
- in preparing amendments to the Metropolitan Region Scheme and to country region schemes; and
- in providing advice to the Minister for Planning and Infrastructure on matters relevant to the application of the policy.

3 Policy objectives

- To promote and facilitate the use of public transport as a more sustainable alternative to the private car for personal travel, to enhance community accessibility to services and facilities, including employment opportunities, community services and recreational facilities, and to improve equity in accessibility for those who do not own or have access to a car.
- To encourage spatial patterns of development that make it easier to plan and efficiently operate public transport services, and for the existing and potential users of public transport to access those services.
- To encourage balanced public transport rider-ship along transit corridors by creating places that are destinations as well as points of departure.
- To ensure the optimal use of land within transit oriented precincts by encouraging the development of uses and activities that will benefit from their proximity and accessibility to public transport, and which will in turn generate a demand for the use of transit infrastructure and services.
- To ensure that opportunities for transit supportive development are realised, both on public and privately owned land, and that transit infrastructure is effectively integrated with other development, to maximise safety, security and convenience for transit users.
- To promote and facilitate walking and cycling within transit oriented precincts by establishing and maintaining high levels of amenity, safety and permeability in the urban form, and to promote and facilitate opportunities for integrating transport modes by creating opportunities for convenient, safe and secure mode interchange.

4 Policy measures

4.1 Transit-supportive development patterns

Urban structure is the foundation of a transit supportive environment. Effective transit is fostered by a more compact urban form, mixed uses, higher development densities and activity levels, and especially by spatial patterns of development that make it easier to plan and efficiently operate transit services, and for users to access those services once they are in place. For these reasons:

- 4.1.1 The street pattern within transit-oriented precincts should be designed to enhance general walkability, and to facilitate pedestrian access to transit facilities. A responsive grid pattern provides good general permeability and connectivity and a choice of routes, but may need to be modified to accommodate radial connections focused on transit stops, particularly closer to the stop, to provide more direct access and reduce the need for pedestrians to ‘zigzag’ through the grid of streets.
- 4.1.2 Street patterns that require pedestrians to divert from the most direct routes, and especially to backtrack, should be avoided. If absolutely necessary, short lengths of pedestrian access way may be used to provide ‘missing links’ through the grid, provided that their safety and security can be ensured, however under most circumstances good street layout and design should be used to minimise walking distances, rather than a segregated system of pedestrian routes.
- 4.1.3 The street pattern within transit-oriented precincts should be designed to enhance commuter and recreational cycling, and to facilitate cyclist access to transit facilities. A responsive grid pattern with on and off road facilities provides good general permeability and connectivity and a choice of routes.
- 4.1.4 A diversity of lot sizes in subdivisions within transit oriented precincts, matched with a robust street layout, is encouraged as it provides greater flexibility of development options, and enhances the robustness of the urban structure, making it easier for the precinct to evolve over time through a progressive intensification of activities and change to uses that will more effectively support transit use.

4.1.5 Structure plan preparation and subdivision design in ‘greenfield’ situations should make appropriate provision for the planning and operation of bus services. A grid-based street pattern is supported because it provides for more direct, better spaced transit routes, disperses general traffic more effectively to limit congestion that can impede bus services, and provides permeability and maximum flexibility in bus route planning. Road network planning should also ensure that all relevant local and district facilities, including shopping facilities, recreation facilities, schools and other community facilities, can be accessed by bus services.

4.1.6 As with rail stations, bus stations and major bus interchanges should be serviced by a well connected network of local streets that maximises accessibility for those within walking distance of the facilities, and in general, the provisions of this policy relating to matters such as accessibility, amenity, safety and security also apply to the bus services and facilities provided at those locations.

4.2 Land use to support transit

The level of transit patronage is closely linked to the quality and frequency of the service provided. In turn, the service able to be provided is a function of the density and mix of land uses that generate potential transit users. An appropriate mix and balance of land uses can be a major contributor to the use and effectiveness of transit facilities. Within transit-oriented precincts, the emphasis should be on uses which are likely to promote transit use, and which will benefit by being accessible to and by transit facilities.

Mixing compatible uses in transit-oriented precincts within an environment that favours walking, makes it possible for one transit trip to serve a wide variety of purposes, compared to dispersed uses that are more likely to generate several separate trips, which will be made mainly by car. For these reasons:

4.2.1 Residential development should be encouraged close to transit facilities, to help in creating a sense of place that makes a TOD precinct more than just a place where transit is available, giving places an individual identity within the urban fabric.

4.2.2 Higher density residential development, in particular, places greater numbers of residents close to transit services, increasing the potential for those residents to look to transit as a travel option, with a corresponding increase in patronage. In reviewing town planning schemes and proposed scheme amendments that include transit precincts as defined by this policy, the WAPC will expect local governments to identify and promote opportunities for residential development at a minimum density of 25 dwellings per hectare, and will expect the application of densities substantially higher than 25 dwellings per hectare where sites have the advantage of close proximity to a rail station, major bus interchange or bus route that provides service frequencies equivalent to rail. The WAPC will also work with local governments in the development of measures and incentives to ensure that coded densities are achieved in practice.

4.2.3 Densities should be increased through a subdivision pattern, which allows for the progressive intensification of activities. In newer suburbs it is sometimes not practical to achieve higher densities at the initial stages of subdivision, particularly when public transport services are not yet fully implemented. In such cases the subdivision pattern should be robust, to allow for future more intensive subdivision and development as the suburbs mature and demand for public transport increases.

4.2.4 Other uses that are likely to be significant generators of transit trips should also be located close to transit facilities wherever possible. Relevant uses include offices and other 'high-density' employment-generating activities, intensive leisure facilities, and retailing. Similar considerations apply to uses such as aged persons development, schools and tertiary education uses, hospitals, community facilities and social services.

4.2.5 Locating educational buildings within transit-oriented precincts is appropriate where they include the more intensive elements of the institution such as teaching facilities and indoor recreation facilities, however the more land-extensive/low-intensity elements of schools and other similar 'public' uses,

for example playing fields, should not be dominant elements within the walkable catchment of transit facilities.

4.2.6 Encouraging the greater use of transit services for journeys to work is an important policy objective; however, land-extensive, low development-and-employment density activities such as some general industrial uses, bulky goods retailing and business parks, and warehousing should not be located within transit-oriented precincts unless it can be demonstrated that the particular circumstances of a development will favour transit use.

4.2.7 Building robustness into the planning of transit oriented precincts is also encouraged because it can make it easier for the area to evolve, and for the progressive replacement of less intensive uses and activities, for example replacing surface level car parking with structured parking and more intensive uses, including more compact mixed use developments and higher density residential uses.

4.2.8 The development of transit supportive uses on publicly owned land has the potential to catalyse other similar changes within transit-oriented precincts, especially where the public land is strategically located. The WAPC will encourage public agencies, in either disposing of surplus publicly owned land within transit oriented precincts, or developing their own land for public purposes, to consider the implications for accessibility to, and the use of transit services.

4.2.9 It can be particularly desirable to locate major civic buildings in TOD precincts, where they can actively contribute to the amenity of the area and act as significant generators of transit use.

4.3 The public domain in transit oriented precincts

Almost all transit users are pedestrians for at least a part of their journey, even if only for a short walk from a train or bus to a park-and-ride facility. The amenity, quality and safety of the public domain within transit oriented precincts are therefore important factors in establishing and maintaining an environment that will encourage people to access transit

facilities on foot, as well as promoting walking generally within these neighbourhoods. For these reasons:

- 4.3.1 Streetscapes should include features that will help to promote walking by improving the general level of amenity along pedestrian routes to and from the transit facility. Climate moderation in the form of verandas, canopies and arcades, and landscaping, will help to increase the level of comfort for pedestrians and the likelihood that people will see walking to the transit stop as an attractive option. Well-lit pedestrian routes and waiting areas are also essential for convenience and safety.
- 4.3.2 Continuity of footpaths should be ensured along both sides of the street within transit precincts. Neighbourhood layouts should be planned to avoid pedestrians having to cross major roads, or to traverse or be forced out of their direct way to by-pass other obstacles to access transit facilities.

4.4 Transit supportive design

Section 1 of this policy highlights the importance of an appropriate framing urban structure in transit-oriented precincts. Design and structure planning, including subdivision plans and road design, must also take into account bus services and their design requirements. The design of individual developments, especially where they have an immediate relationship with transit facilities, can be a significant factor in encouraging increased use of public transport. For these reasons:

- 4.4.1 Land uses that promote interest, interaction and activity should be used to animate frontages along the principal pedestrian routes leading to and from the transit facility. Uses should be oriented to the street and the public domain, and should include activities at ground floor level that promote interaction and surveillance, provide interest for pedestrians, enhance security, and increase the attractiveness of walking to access transit facilities.
- 4.4.2 Development should be designed to facilitate access to and enhance the legibility of transit facilities. There may be opportunities for the physical integration of developments with transit infrastructure, incorporating uses that

support the station, for example retail uses that will provide services to, and benefit from the custom of transit users.

- 4.4.3 The design of developments, especially in proximity to stations, should be robust, to allow for the use of buildings to change over time, to uses that may be more appropriate to a transit-oriented precinct and supportive of transit use.

4.5 Integrating transit infrastructure

The integration of transit facilities and other land uses is actively promoted by this policy, and the design and operation of transit infrastructure should assist in integrating transit facilities with their surroundings. For these reasons:

- 4.5.1 Transit infrastructure should be designed to suit the scale and character of its surroundings.
- 4.5.2 Transit facilities should be designed to provide a high standard of amenity for transit users, with appropriate station-based facilities, and a safe and secure environment, especially for those users accessing the facilities on foot or by bicycle.
- 4.5.3 Transit facilities should be designed to facilitate mode interchange in a safe, secure and convenient manner, and without dominating the station setting or restricting easy pedestrian access.
- 4.5.4 Where the transit facility includes significant building structures, it should be designed to reflect the civic nature of the transit function, to contribute to the quality of the public realm, and to assist in the legibility of the station in its precinct setting.
- 4.5.5 The development of new transit infrastructure should consider the possible severance effects of new line work on existing and future local community connections. Where an existing or proposed station development incorporates a pedestrian crossing point that plays an important role in assisting local connectivity and accessibility, the design of the station should allow for that crossing to be available for public use at all times, rather than just during the operating hours of the station.

4.6 Precinct planning

In order to maximise the potential of transit oriented precincts to support and engender increased use of transit services, they will typically require comprehensive planning, which has regard for community values. In the case of new development areas, this will generally occur through the preparation of a structure plan. In the case of already-developed areas, it may be through the preparation of a precinct plan, either on an individual basis or as a part of the process for developing a local planning strategy, and leading to the inclusion of appropriate provisions within the local town planning scheme. Liaison with the Public Transport Authority is highly desirable at this stage.

Local planning strategies should describe the existing and proposed public transport network serving the strategy or plan area, should identify specific opportunities for integrating land use and public transport and maximising the use of transit facilities within the study area, and should clearly articulate how those opportunities will be realised through the inclusion of appropriate planning provisions within the local town planning scheme. The WAPC will work collaboratively with local government to ensure that relevant opportunities are identified and optimised.

In carrying out the necessary analysis as part of the local planning strategy process, and in developing related planning provisions, local governments should have particular regard to matters such as:

- residential density and diversity;
- the scale and intensity of non residential uses; especially car oriented land uses;
- the encouragement of public transport use over car use;
- the encouragement of mixed use development, both generally and within individual developments;
- flexible and robust planning provisions that allow for uses and activities in a transit oriented precinct to change and intensify over time;
- the development and application of scheme parking standards that reflect the availability within the precinct of transit facilities and that provide discretion to vary standards, and to progressively replace surface level car parking close to stations with other more transit supportive uses over time; and

- the potential to use planning provisions to provide incentives for appropriate development in transit oriented precincts, including reduced parking standards and floor-space 'bonuses'.

For the immediate environs of transit facilities, local government is encouraged to consider the preparation of precinct plans that provide greater detail with respect to both land use and the physical form and relationship of development in the precinct to the transit facility, including design guidelines.

5 Implementation

This policy will be implemented by the WAPC in the following ways:

- In providing advice to the Minister on the preparation, review and amendment of town planning schemes.
- In providing advice to local government on the preparation, review and amendment of town planning schemes, and the preparation of local planning strategies.
- In considering applications to subdivide land within transit oriented precincts.
- In determining applications to develop land within transit oriented precincts.
- In considering structure plans for new development areas and for the redevelopment of existing urban areas.

The WAPC will support the policy by:

- promoting and publicising successful transit oriented development projects;
- supporting the ongoing development of a TOD program within government as a key mechanism for implementing the principles of Network city;
- encouraging community engagement in local visioning processes with a TOD focus;
- working to develop local and state government partnerships for the implementation of TOD;
- providing ongoing guidance to the development industry and local government in the application of this policy; and
- providing incentives for affordable housing near transit.

Indicative area of application of policy

