

Mixed Density

Definition

Mixed density refers to residential development that contains a mix of housing types such as single dwellings and multi units and a variety of development forms such as size and height. For new residential developments mixed density is encouraged as it provides housing choice, which promotes a more diverse community and caters for various stages of life, maximises infrastructure and land, and supports the provision of public transport.



Mixed Density Residential, Perth
Source: TPG Town Planning and Urban Design

Overview

Governments often set targets for residential density to assist with targets for growth and to achieve sustainability outcomes for a city, region or suburb. Residential density is calculated by either the number of dwellings per hectare or by the number of people per hectare. Providing mixed density residential through a mixture of low, medium and high densities is a way of achieving these targets.

A complementary term is mixed land use which describes having a variety of land uses co-locating side by side in a street or one above the other, such as shops at ground level with residential development above. A mixture of residential densities can also be achieved within a mixed land use development.



Higher residential densities should be located near activity centres and public transport routes, Perth
Source: TPG Town Planning and Urban Design

A mixed density residential development can support:

- improvements in public transport usage and the integration of transport services
- development of high density housing at strategic locations near transit centres
- opportunities for increased private investment and business innovation
- improving the overall quality and surveillance of places¹
- provision of opportunities for walking and cycling
- provision of a range of housing choices for various lifestyles and age groups, and
- building communities that offer fair access for all to services and employment opportunities.

¹ The above points adapted from Melbourne 2030 Activity Centres

http://www.dse.vic.gov.au/melbourne2030online/content/implementation_plans/05b_action4.html

In principle mixed residential developments with predominantly higher residential densities should be located near activity centres and along public transport routes to maximise access and convenience to services. Predominantly medium density development should be in locations of high amenity, which may coincide with activity centres or neighbourhood parks, such as open space corridors, nature reserves, lake/water side, as well as in close proximity to public transport routes. The remaining residential areas can be allocated to lower density housing, with the lowest density located at the fringes of an estate bordering non-urban areas (CSIRO, 2008).

Why?

Research has shown that increased housing density or mixed density is one of the built environment features that contributes to increased active transport, along with mixed use planning and increased connectivity (Gebel et al, 2005). At the regional and city wide scale, increasing housing density can improve the proximity between homes and destinations. This is a major factor influencing active transport.

Encourage

Mixed density residential development should be developed in an integrated way with connected street networks, mixed use land uses and public transport to ensure:

- walking, cycling and public transport is planned and supported
- key destinations, such as shops, schools and medical centres, are within walking distance
- good streetscape integration and enhanced public space surveillance
- high quality public transport (ie. direct and frequent) is accessible to residents
- high quality building design which contributes to the function, attractiveness and conviviality of an area
- adequate public areas are provided within walking distance (up to 800 metres), including open space and a variety of places for social interaction.

Rule of thumb

Mixed density developments should be integrated with surrounding development, in areas with connected street networks, mixed land uses, public transport and with supporting infrastructure including walkways, public areas and cycle paths.

Avoid

- Mixed density development that is not well integrated or designed, especially with key destinations, public spaces and supporting infrastructure.

REFERENCES

CSIRO Sustainable Ecosystems, 2008, *Your Development - Density Fact Sheet*
<http://yourdevelopment.org/factsheet/view/id/581>

Department of Sustainability and Environment, Victoria *Melbourne 2030 Planning for Sustainable Growth*
http://www.dse.vic.gov.au/melbourne2030online/content/implementation_plans/05b_action4.html

Department of Urban Affairs and Planning (DUAP), 2001 *Integrating Land Use and Transport*, NSW Department of Urban Affairs and Planning, Sydney.

Gebel, K., King, L., Bauman, A., Vita, P., Gill, T., Rigby, A. and Capon, A., 2005, *Creating healthy environments: A review of the links between the physical environment, physical activity and obesity*. Sydney, NSW Health Department and NSW Centre for Overweight and Obesity.

LEED for Neighbourhood Development, 2006, *Understanding the Relationship between Public Health and the Built Environment, Design, Community and Environment*, U.S.A.

Newman, P., Kenworthy, J., 1999. *Sustainability and Cities*. Island Press, Washington D.C.