



12.0 Infrastructure

12.1 Overview

In planning for residential development, a key consideration is the capacity of infrastructure to absorb growth. This includes (but is not limited to) the following infrastructure types:

- Roads and intersections,
- Drainage,
- Parkland and open space, including cycling and walking trails,
- Community infrastructure such as community centres, libraries, and cultural facilities,
- Public transport,
- Educational institutions and services.

Responsibility for the planning and provision of these infrastructure types does not sit solely with Council. For example, drainage infrastructure is provided on a localised level by Council, feeding into larger drains managed by Melbourne Water.

Responsibility for some infrastructure types is beyond Council's role altogether, such as educational infrastructure. However, Council may have an advocacy role in these cases to other levels of government in seeking improvements, such as for additional capacity at local schools.

12.2 Identification of Areas for Residential Growth

The proposed residential framework in Chapter 7 identifies areas in and around Major and Large Neighbourhood Activity Centres as priority locations for medium and high-density housing, which is an integrated housing and infrastructure approach driven by State Government policy. **Plan Melbourne 2017-2050** (Melbourne's overall strategic plan) promotes the benefits of compact, sustainable, higher-density neighbourhoods in established areas:

'It enhances the economic viability of development, improves the economic viability of infrastructure delivery and utilises existing infrastructure'.^{52(p.46)}

In Yarra Ranges, the priority locations for residential development (Substantial Change Areas) are close to established activity centres and typically well equipped with existing infrastructure. However, while they may be generally well positioned to absorb growth, they will all need infrastructure improvements over time to accommodate increases in development. To plan for this, this Chapter seeks to identify implementation mechanisms to achieve the required improvements, and integrate this into Council's infrastructure planning and advocacy programs.

While infrastructure in some areas may not yet be suitable for increased residential development, this will not prevent the rezoning of these areas for increased development, providing the required infrastructure upgrades can be delivered in a timely way. In cases where infrastructure cannot be delivered viably (such as due to environmental or other constraints), land will not be proposed for rezoning to allow for additional development as part of the Housing Strategy.

12.3 Traffic and Parking

Community feedback to the Housing Strategy Discussion Paper raised concerns about the impact of medium density development on transport infrastructure, in particular:

- Increased traffic on local roads; and
- Increased on-street parking

These issues are therefore most relevant to the Substantial Change Areas and Increased Change Areas identified in Chapter 7, being the priority locations for medium to high density housing. Yarra Ranges' Integrated Transport Strategy 2020-2040 prioritises these areas for improvements to walking and cycling access and use of public transport, particularly for short trips, as an alternative to increased car traffic^{53,p.26,48}.

12.3.1 Traffic

To support planning applications for medium density development, developers are required to submit a traffic report demonstrating an acceptable impact on the local traffic network, which is reviewed by Council and can be challenged at the Victorian Civil and Administrative Tribunal (VCAT).

In instances where traffic volumes exceed accepted levels, developers can be asked to make development contributions for infrastructure improvements such as intersection upgrades to maintain a functional road network.

In Yarra Ranges' residential areas, it is rare for traffic generation from new development to be assessed as causing an unacceptable level of congestion for local roads, based on state-wide standards for traffic volumes on local roads.

Notwithstanding this, there are areas with narrow or unsealed roads, or having poor sightlines and visibility, arguably unsuited to support medium density development. The Housing Strategy has sought to reduce allowable development density in some identified areas through the application of revised zones, as detailed in Chapter 7. An example is Black Street in Lilydale, where it is intended to apply a lower-order residential zone than the zone that currently applies, to restrict allowable development.

In addition, Council regularly reviews traffic capacity of local roads and intersections to determine a program for priority improvement works. Where improvements are needed to State-managed major roads and arterials, Council advocates to the State Government to achieve this. An action of the Housing Strategy is to advocate to the State Government for improved road infrastructure, particularly within the Lilydale Activity Centre, Mooroolbark Activity Centre, Chirnside Park Activity Centre, and Substantial Change Areas.

12.3.2 On-Street Parking

Additional on-street parking caused by increased residential density can add to traffic congestion issues in local roads, due to a narrowing of the available road width.

This is not an intended consequence of unit and townhouse developments, which are required to provide adequate off-street parking to avoid this issue occurring. However, in practice, it is acknowledged that garages within these new developments are commonly used for varying purposes unrelated to car storage, which results in additional cars parked on local streets.

To address this issue, actions of this Chapter include:

- Explore using a local planning policy to discourage tandem parking arrangements for medium density developments in Substantial Change areas. This is due to tandem parking often resulting in use of designated car parking areas for non-car-storage purposes.
- Explore options to improve on-street parking in areas identified for higher residential densities, and commercial precincts with good public transport accessibility, including the potential introduction of a parking permit system integrated with Council's planning permit system.

Within commercial areas, Structure Plans for Lilydale, Mooroolbark, and Chirnside Park encourage high density apartment development. These are well located areas near public transport, where it is reasonable to expect a reduced reliance on car usage for personal transport purposes. Therefore, in order to make apartment development an attractive option for land developers in these centres, an Action of the Housing Strategy will be to investigate a Parking Overlay as a means to reduce standard parking provision rates under the Yarra Ranges Planning Scheme.

12.4 Drainage and Water Sensitive Urban Design (WSUD)

12.4.1 Water Sensitive Urban Design (WSUD)

At a State-wide level, there is now increasing policy focus on limiting detrimental environmental effects of stormwater on downstream waterways, such as increased flow velocity after rainfall events, and increased sediment and nutrient flows, which impact the environmental and biodiversity values of waterways⁵⁴. This is particularly important for Yarra Ranges, which contains many priority catchments with high environmental values, where a higher level of stormwater management is recommended, as set out in the Environmental Protection Agency (EPA) Stormwater Management Guidelines.^{55(p.8)}

Planning Schemes now require WSUD strategies as part of new development that can reduce impact on downstream waterways by retaining and/or treating stormwater on-site, with an objective to restrict downstream flows to pre-development levels.⁵⁶ WSUD strategies may include water tanks or rain gardens within development sites, or at a precinct scale may involve wetlands⁵⁴.

This policy shift has also reduced the pressure on the reticulated drainage system, by directing increased responsibility for stormwater management onto private developers, rather than residing solely with Local and State Government via management of the reticulated drainage system.

12.4.2 Reticulated Drainage System

Despite the emergence of Water Sensitive Urban Design (WSUD) in stormwater management, there remain residential areas where the reticulated system lacks the required capacity.

To address this, Council is now undertaking a new Municipal Stormwater Management Plan (MSMP), which will identify gaps in drainage infrastructure and map areas at risk of flooding from the urban drainage system. This work will be done in coordination with the Housing Strategy, with a focus on the Substantial

Changes Areas identified in Chapter 7, being the locations where medium and higher density housing are encouraged. The completion of the MSMP is an action of the Housing Strategy.

12.5 Parkland and Open Space

As increased medium and higher-density housing is constructed in Yarra Ranges, the size, distribution and types of open space will also increase in importance. Higher-density development such as apartments, typically have small private outdoor space provided on balconies or roof-top gardens, and therefore rely on residents having good access to high quality, Council-managed open space including walking and cycling paths.

Council has a Recreation and Open Space Strategy (ROSS) adopted in 2013 setting out a strategy and policy framework for open space, including for all associated trails, facilities, and open space functions. However, the ROSS needs updating to reflect changing demographics, development patterns, and open space needs. Council has commenced work on a new Strategy, which will need to integrate with the framework for residential development presented in this Housing Strategy.

An action of the Housing Strategy is to complete a new Municipal Open Space Strategy to create an integrated framework for open space provision.

12.6 Other Infrastructure

12.6.1 Infrastructure Requiring Council Investment

Other infrastructure planning required by Council includes planning for community centres, libraries, and cultural facilities. This is undertaken on a centre-by-centre basis as needed and when opportunity arises.

An example of this is the Community Heart in Lilydale (CHIL) Project, partly funded by the State Government's Suburban Revitalisation Program, which is based on an identified need for integrated community facilities in Lilydale, including flexible indoor and outdoor public spaces.

Council planning for community infrastructure will continue into the future, for Lilydale and other centres, based on identified need for community facilities.

12.6.2 State Government Infrastructure

Public transport and educational facilities are not Council's role to provide directly. However, where shortages are identified, Council advocates to the State Government for improvements. An example of this is the duplication of the rail line between Mooroolbark and Lilydale Railway Stations, which is an item on Council's advocacy program to the State Government.

An action of the Housing Strategy is to advocate to the State Government for improved public transport infrastructure, particularly within Lilydale Activity Centre, Mooroolbark Activity Centre, Chirnside Park Activity Centre, and Substantial Change Areas.

12.7 Funding Mechanisms

12.7.1 Council's Capital Expenditure Program

This is a recurring 10-year expenditure program used by Council to allocate funding for the majority of new Council-owned infrastructure, and improvement of existing infrastructure and assets, based on identified need.

12.7.2 State and Federal Government Grant Funding

Adding to Council's recurring budget, specific infrastructure projects can receive grant funding from other levels of government, such as the Roads for Community Project. In 2019 the Federal Government announced funding for Council to seal roads within the Dandenong Ranges and surrounding areas through this funding program.⁵⁷

12.7.3 Development Contributions

Council can collect levies from new development of private land to facilitate the timely provision of planned infrastructure. Outside of defined Growth Areas, this is undertaken through negotiated agreements between Council and a developer or via a formal Development Contributions Plan (DCP). In some instances, levies are limited to specific land areas, such as contributions for the Kinley Estate (former Lilydale quarry) or a defined area such as an Activity Centre. This is intended to avoid infrastructure shortfalls caused by increased population due to a particular development or concentration of development. Alternatively, a municipal wide DCP can be introduced into the Planning Scheme that will require a financial contribution from all new development across the municipality unless specifically exempted.

While Development Contributions Plans (DCPs) can assist in funding new infrastructure they can be costly to establish and administer. In established residential areas such as Yarra Ranges, where growth is limited, they can carry financial risk to Council due to low cost recovery and the levies can vary considerably depending on the location. Due to these uncertainties, an action of the Housing Strategy is to advocate to the Victorian Government for a review of legislation governing DCPs in established residential areas, with a view to creation of more cost-effective DCP approaches.

12.7.4 Special Charge Schemes

The Local Government Act 1989 provides Council with the ability to introduce a Special Charge Scheme where landowner contributions can be sought for infrastructure improvement projects, typically roads, footpaths, and drainage. Further information on this is available in Council's Special Charge Scheme Policy⁵⁸:

<https://www.yarraranges.vic.gov.au/Council/Corporate-documents/Policies-strategies/Special-Charge-Schemes-Infrastructure-Improvements/Special-Charge-Scheme-FAQs#section-2>

12.8 Actions

- 1.** Identify anticipated road, intersection, and drainage infrastructure improvements needed based on the allowable residential densities under the Chapter 7 residential framework and implementation mechanisms and integrate this into Council's future infrastructure planning and advocacy work.
- 2.** Consider planning scheme provisions to discourage tandem parking arrangements for medium density developments in Substantial Change areas.
- 3.** Explore options to improve on-street parking in areas identified for higher residential densities, and commercial precincts with good public transport accessibility, including the potential introduction of a parking permit system integrated with Council's planning permit system.
- 4.** Investigate the use of a Parking Overlay in the commercial areas of Lilydale, Mooroolbark, and Chirnside Park.
- 5.** Adopt a Council Stormwater Management Plan, utilising the information on residential development provided in the Chapter 7 Residential Framework, to inform:
 - a. Priority catchments for drainage improvement strategies
 - b. Identification of required Council capital works projects and timing
 - c. Planning Scheme changes required to reflect areas at risk of inundation caused by overland flows from the urban drainage system, in order to integrate flood mitigation into the design of future development (such as raised floor levels, on-site drainage approaches, overland flow paths, and/or other strategies).
- 6.** Integrate the framework for residential development in Chapter 7 into a new Municipal Open Space Strategy.
- 7.** Advocate to the State Government for improved public transport and road infrastructure within Lilydale Activity Centre, Mooroolbark Activity Centre, Chirnside Park Activity Centre, and Substantial Change Areas.
- 8.** Advocate to the Victorian Government for a review of legislation governing DCPs in established residential areas, with a view to creation of more cost-effective DCP approaches.