INFRASTRUCTURE

Infrastructure provision

Overview
The provision of an adequate level of physical and social infrastructure is one of the major issues facing the Cardinia Shire over the coming decades. The timely provision of infrastructure is necessary to foster economic development, ensure the well being of the community and protect the environment.

Key issues
- Recognising the infrastructure demands of an interface Council with significant urban growth and substantial rural areas and townships.
- Providing for funding mechanisms to ensure the provision of infrastructure in developing areas.
- Coordinating infrastructure provision.

Objective
To ensure the timely provision of physical and social infrastructure in order to foster economic development, ensure the well being of the community and protect the environment.

Strategies

Funding
- Provide for the payment of infrastructure contributions and development contributions, as appropriate, to fund physical and community infrastructure associated with urban development.
- Provide for the sale of surplus Council owned land to assist in funding the provision of infrastructure.
- Work in partnership with the Federal and State Governments to identify priorities, and secure funding for capital works projects.

Provision
- Provide appropriate and timely infrastructure services including water, sewerage, drainage and roads.
- Encourage the development of both pedestrian and bicycle links throughout the municipality.
- Encourage links between different forms of public transport, activity centres and surrounding residential areas.
- Provide for the establishment of high capacity telecommunications infrastructure (eg fibre optic cables) particularly in existing and future employment lands.

Implementation

Application of zones and overlays
- Applying a Infrastructure Contributions Overlay (ICO), or Development Plan Overlay (DCPO), as appropriate, to the Urban Established Area precincts to require the provision of infrastructure as part of new developments or redevelopments.
- Including surplus Council owned land in an appropriate zone to facilitate its sale and development.

Further strategic work
- Amending Schedule 1 to the Development Contributions Plan Overlay to apply the Pakenham Township Development Contributions Plan, September 1997 (Amended June 2017) to the Pakenham township.
Freeways, declared arterial roads

Overview

Freeways and Declared Arterial Roads are managed by VicRoads under the Road Management Act 2004. One of Council’s key objectives as part of its Corporate Plan is to ensure a quality road network. Freeways and declared arterial roads perform an important function in the movement of people and freight, including tourist traffic. It is therefore critical that through land use and transport planning, Council seeks to maximise the efficiency, safety and visual outlook of these roads.

Key issues

- Providing for access and associated intersection works to declared arterial roads.
- Providing for the upgrade and construction of future declared arterial roads, including Koo Wee Rup Road and the Koo Wee Rup and Lang Lang bypasses.
- Designating and managing future declared arterial roads (eg McGregor Road).
- Provide east-west connections within the southern parts of the urban growth area.
- Widening, upgrading and realigning existing roads.
- Concentrating commercial activities along arterial roads to within strategic nodes.

Objective

To provide for an efficient, safe and attractive arterial road network and to ensure effective integration of land use, transport and environmental outcomes.

Strategies

Road upgrades

- Provide for the upgrading of the interchange with the Princes Highway at Beaconsfield to provide access for Beaconsfield residents to the Princes Freeway.
- Provide for the future upgrading of the Koo Wee Rup Road to provide a high standard arterial road connection between Pakenham and South Gippsland Highway.
- Seek the construction of the Koo Wee Rup bypass as a priority.
- Provide for the timely future upgrading of interchanges with the Pakenham bypass to meet increasing traffic demands at Beaconsfield, Officer South Road, Cardinia Road and McGregor Road.
- Facilitate the development of the Lang Lang bypass.
- Provide for the extension at Thompsons Road from Cranbourne through to Koo Wee Rup Road.
- Provide for the extension of Grices Road from Berwick South to Cardinia Road to a standard capable of consideration as an arterial road.
- Encourage the upgrade of existing substandard declared arterial roads through pavement widening, rehabilitation and realignment.

Development

- Ensure the location and design of any access has regard to the efficient and safe movement of traffic along the road.
- Ensure the integrated planning of future declared arterial roads as shown in the Casey-Cardinia Growth Area Framework Plan 2006 (or as amended).
- Avoid ribbon commercial development along arterial roads, and limit main road oriented commercial activities to strategic nodes preferably within township and urban areas.
- Ensure that access to new developments conform with Vic Roads Access Management Policy.
Application of zones and overlays

- Applying a Road Zone (Category 1) to declared freeway or arterial roads.
- Including land required for road improvements such as widening and realignments in a Public Acquisition Overlay.

Local roads

Overview

Council is responsible for the care and maintenance of the local road network within the municipality, which includes about 1,300 km of local roads of which approximately 900 km are unsealed. Future development in the Urban Growth Area will increase the demand for local roads infrastructure. There is also the existing need to provide adequate roads and streets in the townships and the upgrading of the existing local road network to support economic development and maintain environmental values.

Key issues

- Providing an appropriate hierarchy for local roads.
- Prioritising local road upgrades, taking into consideration strategic importance, maintenance cost, vehicle counts, safety rating, cost to seal, truck volume and bus route.
- Managing the impacts of new development on the existing local road network.
- Identifying bridges with a limited structural capacity, particularly timber bridges in the Koo Wee Rup swamp area.
- Completing the Lang Lang bypass to keep the heavy vehicles associated with the sand extraction industry out of the Town Centre.
- Designating and managing future arterial roads.

Objective 1

To provide an efficient, safe and attractive local road network and minimise potential adverse impacts from traffic on the amenity of adjoining residents

Strategies

- Progressively update local roads to a sealed standard.
- Facilitate the development of the Lang Lang Bypass.
- Ensure access to new development is not allowed from an unused or unconstructed road unless no other option is available for access to land via the existing road network.
- Ensure unused roads not reasonably required for existing or future access are closed and either retained as reserves or consolidated with adjoining land.

Objective 2

To manage the impact of the use, development and subdivision of land on the local road network.

Strategies

- Ensure that consideration of an application for the use, development or subdivision of land takes into account the classification of the road under the road hierarchy, the existing design, service and alignment of the road, and the likely effects it may have on future services and condition of the road.
• Ensure that development that will significantly increase the amount of traffic or heavy vehicles using the local road network be located where access is available from a declared arterial road, local arterial road or collector road.

• Ensure that the subdivision of land to create residential or rural residential lots not be allowed unless access to lots is via a sealed road.

Implementation

Application of zones and overlays

• Applying the Road Zone Category 2 to local arterial roads.

• Including land required for road improvements such as widening and realignments in a Public Acquisition Overlay.

• Progressively applying the infrastructure Contributions Overlay (ICO), as appropriate, to the Urban Growth Area precincts as new Infrastructure Contributions Plans are developed.

Reference documents

Pakenham Township Development Contributions Plan, September 1997 (Amended June 2017)
Cardinia Shire Council Road Safety Strategy 2016-2025
Cardinia Local Road Strategy, 2004
Cardinia Shire Council Road Management Plan, 2004
Development of a Road Classification, Geometric Design and Maintenance Standards for Sealed and Unsealed Roads in Cardinia Shire ARRB Transport Research Ltd, 2002

Public transport

Overview

The sparse nature of settlement in the municipality affects the viability of providing public transport to all residents, and there is a need to look at innovative and cost effective means to maximise public transport services in the Cardinia Shire. The limited public transport services that are currently available is an issue of concern raised consistently by the community.

Development in the growth area should be undertaken in a manner which encourages the provision and use of public transport services.

Key issues

• Providing for new railway stations and upgrades of existing railway stations.

• Establishing an appropriate bus network within the entire municipality.

• Recognising the need for a more accessible and comprehensively managed community transport system that links to the Principal Public Transport Network within the growth area.

Objective

To maximise the opportunity for public transport services to be provided in a coordinated manner to meet the needs of existing and future residents.

Strategies

Design and integration

• Provide for development in the urban growth area which encourages the effective and efficient provision of public transport services.

• Develop a best practice design that provides for development of the local road network with a coordinated approach to public and sustainable transport.
- Ensure streets are designed to accommodate bus routes for public transport and community transport vehicles, particularly in terms of road width and associated infrastructure.
- Facilitate better integration and coordination between public and community transport services.
- Encourage improved services and integration between bus and rail services within the municipality.

**Railway stations**
- Support the upgrading of both the Pakenham and Officer railway stations as a key element of these major activity centres.

**Bus routes**
- Facilitate north-south bus route links from rural townships to Pakenham.

**Implementation**

**Application of zones and overlays**
- Applying the Public Acquisition Overlay to any land required for future public transport and associated use.

**Further strategic work**
- Including adequate provisions for public and community transport services and facilities when developing planning provisions and policy.

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**Pedestrian and bicycle network**

**Overview**
Providing infrastructure to facilitate alternative transport options such as walking and cycling is important in developing environmentally, socially and economically sustainable communities. Walking and cycling are important recreational pursuits, and are also becoming increasingly popular ways of travelling to places of work, education and retail activity. Pedestrian and cycling paths are important in order to create communities that support active lifestyles.

**Key issues**
- Connecting pedestrian and bicycle networks with key destinations to promote alternative transport options.
- Providing pedestrian and bicycle trails for recreational and sporting activities.
- Providing for the safety of pedestrian and cyclists when using paths.
- Recognising the Great Southern Rail Trail as a significant regional project across the four municipalities of Bass Coast Shire, Cardinia Shire, City of Casey, and South Gippsland Shire.

**Objective**
To develop well-located, safe and interconnected pedestrian and bicycle networks within the municipality.

**Strategies**

**Connectivity**
- Provide for safe and efficient pedestrian and bicycle movements to connect railway stations, bus stops, activity centres and major community facilities within the Urban Growth Area and in rural townships.
- Ensure connectivity between new and existing development including pedestrian and bicycle paths.
• Provide a continuous and safe off-road shared path along the Princes Highway between Beaconsfield and Pakenham.
• Provide a walking and cycling network that is inclusive of people with mobility difficulties.
• Support and provide for the establishment of the Great Southern Rail Trail.
• Provide for a link to the Great Southern Rail Trail from the Pakenham Railway line.

Design and safety
• Ensure that new development does not compromise existing and future pedestrian and bicycle networks.
• Facilitate appropriate crossing points at areas with high traffic.
• Ensure that the access and design of off-street parking addresses pedestrian and bicycle movement.
• Encourage passive surveillance over pedestrian and bicycle paths through appropriate siting and design.
• Provide DDA compliant paths, ramps and rest areas on appropriate trails.

Implementation
The strategies in relation to pedestrian and bicycle networks will be implemented through the planning scheme by:
• Use of policy and exercise of discretion

When deciding on applications for new subdivision and other development, consider, as appropriate:
• Pedestrian and Bicycle Strategy, August 2017.
• Healthy by Design, January 2017, checklist (Cardinia Shire).

Reference documents
Cardinia Shire Pedestrian and Bicycle Strategy, August 2017
Healthy by Design, January 2017 (Cardinia Shire)
Safer Design Guidelines for Victoria, 2005

Community services and facilities

Overview
The population in the Cardinia Shire is primarily focused on the activity centres and townships, with a growing emphasis on the urban growth corridor. It is important that all residents in the Cardinia Shire have a reasonable level of access to a range of services and facilities, and that these services and facilities are provided in response to community needs. The provision of local recreational and community facilities also assists in bringing people together, and developing a cohesive community.

Key issues
• Acknowledging the diversity of age groups within the Cardinia Shire and the importance of providing services to meet the needs of particular age groups such as children, youth and the aged.
Recognising that providing accommodation for aged people in townships is important particularly where the unavailability of such accommodation would lead to people being forced to leave a community with which they have a strong association.

Providing adequate community services and facilities in rural townships.

Improving access to tertiary education facilities by public transport services to the city and more locally to facilities such as Federation University and Chisholm TAFE at Berwick.

Establishing higher education facilities in the growth corridor

Objective
To provide residents with a reasonable level of access to a range of community services and facilities and to ensure that these services and facilities are provided in response to community needs.

Strategies
Infrastructure

Encourage the integration of public transport linkages to improve access to higher education facilities outside of the municipality.

Location

Establish community facilities in the most accessible location for local residents having regard to their service catchment.

Co-locate community and recreational facilities and encourage joint management of these facilities.

Facilitate the establishment of commercial activities (eg: medical practitioners) community based organisations (eg: churches) and early years services (ie childcare) which serve the needs of the community in activity centres and in residential areas where they can be provided in a manner which minimises any impacts on the amenity of the area.

Provide for accessible community hubs in new residential developments comprising, where appropriate, a primary school, community centre, open space and local commercial facilities (convenience shop, medical centre, etc).

Provide the opportunity in townships for the development of accommodation for aged people including retirement villages, special accommodation houses and nursing homes.

Support the establishment of a higher education facility within Pakenham.

Implementation

Application of zones and overlays

Applying the Public Use Zone to existing and proposed publicly owned community facility sites to facilitate their development.

Reference documents

Planning for Community Infrastructure in Growth Areas, April 2008