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1.0 INTRODUCTION

1.1 Project scope

The Metropolitan Planning Authority (MPA) has prepared the Mt Atkinson and Tarneit Plains Precinct Structure Plan Community Infrastructure Needs Assessment to understand the demand and nature of community infrastructure and open space to support the future residential population and workforce of the Mt Atkinson and Tarneit Plains Precinct. This assessment is part of the ongoing precinct structure planning process and will inform the preparation of a Precinct Infrastructure Plan for the Mt Atkinson and Tarneit Plains PSP.

This assessment has specifically focused on the following community infrastructure and open space items:

- Multipurpose community centres
- Early childhood facilities
- Community rooms
- Youth-oriented spaces
- Primary schools
- Secondary schools
- Sports reserves
- Tennis courts
- Hard court
- Indoor recreation
- Local parks
- Emergency services

This assessment identifies the number of facilities needed to support the future community arising directly from the projected population of the Mt Atkinson residential area. It provides recommendations for the location and size of facilities and responsibilities for their funding and delivery. The report also briefly addresses the provision of open space in the Tarneit Plains employment area and provides recommendations in regards to appropriate locations for its delivery. For the most part of this report, it will refer to Mt Atkinson as the study area and will make mention to Tarneit Plains when discussing open space delivery.

The report has not accounted for any external demand to be met within the precinct or assumed that any demand from the Mt Atkinson precinct will be met in surrounding areas. The report specifically aims to identify the need for community infrastructure of a local order. The population forecasts for Mt Atkinson do not meet the benchmarks for high order infrastructure. Lower order infrastructure refers to Level 1 and Level 2 infrastructure and facilities. Level 1 includes neighbourhood level community facilities providing for catchments of up to 10,000 people. Level 2 refers to district level facilities providing for catchments between 10,000-30,000 people. Level 3 and 4 provides for sub-municipal and municipal level facilities for catchments between 30,000 - 60,000 people and beyond.

The Mt Atkinson Specialised Town Centre will provide opportunities to integrate a mix of higher density residential and employment with mixed use, retail and restricted retail uses with supporting community, open space and recreational facilities, and larger educational and health establishments (e.g. tertiary campuses, vocational training, hospitals and specialised medical services).

In the future the town centre may attract higher level services, however this assessment does not identify future services of this level. A discussion about future higher level services should be had at a later stage once development has occurred and the centre has established specialist uses. This will assist in the identification of complimentary higher level services that could be provided.
1.2 Project context

The purpose of the report is to inform the future urban structure of the Mt Atkinson & Tarneit Plains Precinct Structure Plan (PSP) and associated documentation, including the Mt Atkinson & Tarneit Plains Infrastructure Contributions Plan (ICP). The Mt Atkinson & Tarneit Plains ICP is a framework to facilitate the timely provision of planned infrastructure to the community. The ICP may be made of one or two parts, a standard levy and/or a supplementary levy. The standard levy is a pre-set rate that may be used to fund transport, community and recreation infrastructure and public land provision. In particular circumstances a supplementary levy may also apply.

The PSP will identify basic and essential infrastructure and services for future residents, visitors and workers and the ICP will assist in delivering the infrastructure identified. This report will establish the precinct’s requirements for community and open space facilities ranging from public and private, State Government and Council. The Mt Atkinson & Tarneit Plains PSP will clarify the infrastructure to be directly provided by the developer and what infrastructure should be provided by the State, including through other funding sources such as Growth Area Infrastructure Contributions.

Mt Atkinson and Tarneit Plains have been identified as two distinct precincts in the MPA PSP program, however a single PSP covering both precincts is to be developed. A single PSP is appropriate as there is no obvious boundary between the two precincts. Employment land use designations will be applied across both precincts and undertaking a single PSP will allow for a more efficient approach to be undertaken. The Tarneit Plains PSP does not contain any residential land use and it is not considered to trigger demand for community infrastructure other than open space.

1.3 Methodology

The methodology was based on adopted benchmarks and provision models developed by the MPA and iterative discussions with Council and State Government departments and relevant external stakeholders.

Key issues and opportunities were identified for the delivery of community infrastructure in the growth areas within the Melton growth corridor.

A demographic review was undertaken of surrounding and comparable growth area communities to determine a likely population profile of the future community, in particularly Caroline Springs and Taylors Hill.

Benchmarks were applied to the population projections based on full development including proposed dwelling yields, to determine the community infrastructure items to supports the future community.

Ongoing consultation with Melton City Council, Department of Education and Training (DET) and the Catholic Education Office of Melbourne (CEOM) has provided input to preferred configurations and locations of education and community facilities within the PSP itself.
2.0 STUDY AREA

Mt Atkinson and Tarneit Plains PSP is located within the Melton growth corridor in the City of Melton and covers parts of the localities of Mt Cottrell, Truganina and Rockbank. The precinct is bounded by the Western Freeway to the north, Hopkins Road to the east, Middle Road to the south and the future Outer Metropolitan Ring road (OMR) to the west. The area will undergo a full transition of land use as part of large scale residential, commercial and industrial development, with considerable population increase and demographic change.

2.1 Metropolitan and regional context

The wider area incorporating Mt Atkinson and Tarneit Plains is a rural district characterised by the terrain of the basalt plains. The precinct is positioned to the south east of the existing Rockbank Township and to the south west of Caroline Springs. Rockbank Township is a small urban settlement of approximately 500 dwellings to the east of the Leakes Road interchange. Caroline Springs is a Major Town Centre at the current western growth front and along with a network of future planned major town centres such as Rockbank Major Town Centre and Plumpton Major Town Centre, will service the future needs of the precincts with higher level facilities and employment opportunities.

Mt Atkinson and Tarneit Plains is included in the West Growth Corridor Plan\(^1\) which is a high level integrated land use and transport plan that provides a strategy for long term development in the western growth area corridor of Melbourne. It identifies broad transport networks, industrial and employment zone, residential areas and recreation precincts. Mt Atkinson will be home to approximately 19,700 people in the next 20–30 years, contributing to the projected population increase to 255,000 residents within the City of Melton by 2031 and an ultimate population of 400,000 or more\(^2\).

The Mt Atkinson and Tarneit Plains precinct will contribute to an employment hub for the west. The location adjacent to the future Western Interstate Freight Terminal makes it a vital employment hub and residential precinct within the West Growth Corridor. Higher order services, research and development, and local service businesses will thrive in this well connected network, and will offer specialised services to industry located in Mt Atkinson and Tarneit Plains as well as to the Western Industrial Node which stretches south east from the PSP area. It will also play a vital role in industrial, freight and logistics activity and diversify its economy with new industrial areas, business areas and activity centres contributing to growth and diversification. It will contribute to the targeted 164,000 or more new jobs across the western corridor.

The Hopkins Roads Business Precinct will to contribute to the achievement of greater diversity of employment opportunities in the West. It provides opportunities to integrate a mix of employment uses which have potential to directly connect to the arterial road system and will become a focal point.

The local needs of the community will be serviced by a Specialised Town Centre centred around a future train station, as identified on the Western Growth Corridor Plan. The Mt Atkinson Town Centre will be a vibrant mixed use centre with the retail core supported by a range of commercial, entertainment, education, recreation and civic uses providing residents easy access to a range of services.

A number of areas have been identified as having areas of biodiversity and landscape values. Approximately 196 hectares has been nominated for conservation purposes.

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Figure 2 Immediate PSPs Surrounding the Mt Atkinson & Tarneit Plains PSP Area

- 1079 Rockbank North
- 1080 Kororoit
- 1080.2 Regional Park
- 1083 Warrawee
- 1084 Ravenhall
- 1099 Rockbank Western Grassland Reserve
- 1081.2 Rockbank South

MT ATKINSON & TARNEIT PLAINS
COMMUNITY INFRASTRUCTURE AND OPEN SPACE NEEDS ASSESSMENT
2.2 **Future development and community**

The PSP will outline and manage the growth of the Mt Atkinson and Tarneit Plains area from an historic agricultural settlement, to a thriving part of Metropolitan Melbourne. The Mt Atkinson Specialised Town Centre will form the heart of the Hopkins Road Business Precinct while being of an appropriate scale, design and location to service the future residential community within the Mt Atkinson community, and to compliment centres proposed in the future Kororoit and Rockbank Precincts.

The town centre will provide opportunities to integrate a mix of higher density residential and employment with mixed use, retail and restricted retail uses with supporting community, open space and recreational facilities. The town centre will have a main street focus and will provide a core retail area appropriately located to support major supermarket anchors and discount department stores, along with opportunities to provide fine grained small local enterprises and a mix of commercial uses.

The Mt Atkinson residential area will provide a diversity of housing options. At full development, the PSP will accommodate 6,700 new dwellings based upon an average density of 16.5 lots per hectare. It will be of a scale in which local level facilities such as schools and open space can be delivered to service the new communities. The PSP will provide employment opportunities through the provision of land zoned for industrial, commercial, retail and bulky goods uses which will create over 18,745 full time equivalent jobs in the long term.

Growth within the Precinct will be supported by new and improved transport networks. The PSP identifies future upgrade works to Hopkins Road, Greigs Road Riding Boundary Road and the future construction of an east-west boulevard centrally located within the PSP. These works will improve transport access in a rapidly developing area and will provide an important linkage between communities and to housing, jobs and services. Public transport access will be by bus in the first instance, with potential for rail access at a new train station along the Melbourne-Ballarat line and will provide the anchor for the Specialised Town Centre to be established within the precinct.

Tarneit Plains is directly south of Mt Atkinson and is a future industrial area. The area will not accommodate any future residential but will provide the opportunity for the delivery of industrial jobs in the Melton corridor. A linear trail is proposed within the existing 60 metre Greigs Road reservation, providing a strong connection into the Rockbank PSP area. Although the Outer Metropolitan Ring Road will limit access into Rockbank from Mt Atkinson, connectivity proposed at Greigs Road allowing both vehicle, cycling and pedestrian access into local neighbourhoods. It is anticipated that these facilities will be delivered during the initial stages of development. A pedestrian bridge is currently proposed over the Western Highway promoting pedestrian and cycling movements and will be delivered in a timely manner with the future train station. This will provide immediate access to the community facilities proposed in the Kororoit precinct.
Figure 3  Mt Atkinson & Tarneit Plains West Growth Corridor

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2.3 Surrounding areas

A number of new settlements are currently planned or being developed around Mt Atkinson. Surrounding land uses and developments relevant to the precinct include:

**Rockbank Precinct Structure Plan**

Rockbank Precinct Structure Plan is immediately west of Mt Atkinson PSP. The precinct is otherwise bounded by Western Freeway to the north, Paynes Road to the west, the future OMR to the east and Greigs Road to the south. The precinct includes a total area of 750 hectares and its future land use will be predominantly residential in nature. Rockbank is projected to have a future population of 22,200 people and yield of 7,932 dwellings. Mt Atkinson has existing connections to the Rockbank Township through Greigs Road and the Western Freeway.

**Rockbank South Precinct Structure Plan**

Rockbank South Precinct Structure Plan is located south of Rockbank PSP. The precinct is not part of the MPA’s current preparation program (2015/2016). The precinct is bounded by Greigs Road to the north, Mt Cottrell Road to the west, the future OMR to the east and the Urban Growth Boundary (UGB) to the south. The precinct includes a total area of 650 hectares and its future land use will be predominantly residential in nature. Rockbank South is projected to have a future population of 19,400 people and yield of 6,930 dwellings.

**Kororoit Precinct Structure Plan**

Kororoit Precinct Structure Plan is located north of the Mt Atkinson PSP and Western Freeway. The West Growth Corridor Plan identifies the primary land use as residential with approximately 400 hectares of open space and conservation. Kororoit is projected to have a future population of 25,130 people and yield of 8,980 dwellings.

2.4 Key transport corridors

**Western Freeway**

The Western Freeway is a major freeway linking Melbourne and Ballarat via Melton. The east-west freeway connects to Melbourne’s freeway network via the Western Ring Road and splits the Melton growth corridor. Direct access to the Western Freeway will provide the primary vehicular access point to the precinct via Hopkins Road.

**Ballarat Rail Line**

The Ballarat Line is mostly single-track regional passenger rail service between Melbourne and Ballarat. Future rail network upgrades are proposed to expand the line to four tracks (electrified) to Melton Station, including a new Mt Atkinson Station.

**Outer Metropolitan Ring road (OMR)**

The OMR is be a proposed freeway incorporating four rail tracks within its median, connecting the Hume Freeway at Kalkallo with the Princes Freeway near Werribee. The freeway will be grade-separated to span above the Western Freeway, the rail corridor and potentially Greigs Road. Nonetheless, the OMR will create a significant visual and perceived boundary to the east of the precinct. Construction will be long-term in nature and not commence before 2020.
3.0 KEY OPPORTUNITIES AND CONSIDERATIONS

3.1 Transition of land use

Mt Atkinson currently comprises a range of pastoral and agricultural land use, primarily used for grazing as well as existing industrial uses including rock crushing and residential landscape supplies. The area will undergo a full transition of land use as part of large scale residential, commercial and industrial development, with a considerable population increase and demographic change. Although development of the precinct will take place over thirty years (up to 2046), the population growth rate in the area over that period – approximately 19,700 new residents in Mt Atkinson contributing to the projected population increase to 255,000 residents within the City of Melton by 2031 and an ultimate population of 400,000 or more – is rapid in the Melbourne context and requires comprehensive delivery of community infrastructure and open space to support it. The infrastructure must support activities that will build a strong sense of community, like that available in established suburbs where the development of community uses has taken place over much longer periods of urban development.

3.2 Collocating compatible uses

Best practice approaches to community infrastructure promote the collocation of community infrastructure with other complementary services to strengthen the development of community hubs. There may or may not be interaction between these facilities. Together, however, they create a focal point for community activity and allow people to make a single trip to access a wide variety of services. These hubs can be large in size and include facilities (Council and non-Council) which serve a major town centre catchment or smaller in size and comprise facilities that cater for a local town centre or local convenience catchment area.

Collocation can often provide greater land use efficiencies by enabling the sharing of resources. For example, there are opportunities to maximise land efficiencies through the collocation of public open space with schools in strategic locations. Three school sites have been located adjacent to areas of public open space, creating an opportunity for greater land use efficiencies through the shared use of school grounds and public open space. Other potential benefits of collocating include various recreation and/or community facility options being available in one destination and opportunities to minimise infrastructure duplication (e.g. car parking). The proposed land uses within Mt Atkinson have been considered in terms of providing configurations of related activities in a compact manner in order to optimise the use of land and achieve synergies.

The opportunity to collocate or share spaces depends on a number of key considerations. These include, but are not limited to:

- Ensuring that uses and activities are compatible, complimentary and have the ability to support each other;
- Ensuring that the types of facilities and services provided are adequate with the scale of the overall facility and the area in which it is located;
- Ensuring that there is a shared and agreed understanding of usage requirements; and
- Ensuring that the catchment is not reduced from the collocation of multiple community uses.

The PSP seeks to provide suitable conditions for shared use of future facilities, subject to future use of these.

The Department of Education and Training has provided a number of examples of opportunities for schools and community partners (local councils, community organisations, sport and recreation providers, other education and training providers and not-for-profit organisations) to work together and share the use of school facilities. These examples are:

- Using school premises for community halls and meeting spaces
- Opening school facilities up for use as community recreation facilities
- Creating spaces to support school-aged holiday, before- and after-school programs
- Providing information technology centres for community use
- Sharing libraries or resource centres
- Sharing performing arts spaces
- Collocating preschool centres on school grounds
- Sharing sporting facilities

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3 State Government Victoria, Department of Environment, Land, Water and Planning, Victoria In Future 2015 – Population and Household Projections to 2051, 2015, Melbourne

4 Victoria State Government, Department of Education and Training (DET), Schools as Community Facilities: Policy Framework and Guidelines, 2005, Melbourne
3.3 Accessible and connected facilities

The location of community facilities will affect people’s use and connection to the services provided. The location should also maximise accessibility through good access to public transport (multi-nodal where possible), pedestrian and cycle paths.

*Plan Melbourne Refresh Discussion Paper* is focused on providing 20-minute neighbourhoods. This means the ability to meet every day, non-work needs locally, primarily within a 20-minute walk. For a community to thrive, the community services need to be easily accessible for everyone.

Planning for new facilities should consider the broader precinct’s context and linkages that provide good access and placement in a high profile and visible location in addition to the collocation and sitting near other compatible services such as schools, commercial and retail opportunities and open space. Providing infrastructure in central locations improves the community’s capacity to access facilities and services by public transport and active transport such as walking and cycling.

Community facilities should be central to their neighbourhood catchment and where people can access them conveniently, including by public transport and ideally as part of their daily travel routine (i.e. near town centres and community hubs). It is also important to ensure that each neighbourhood has safe, walkable connections to public transport stops and local facilities.

The precinct should promote connected on and off road path networks that allow for bike and pedestrian use and links key facilities. Where appropriate, paths should be through and around sports reserves and local parks which link the facilities and connect to the main path network.

3.4 Early and staged delivery of community facilities

Mt Atkinson PSP area is planned to be a self-contained community. However, during the early stages of development, infrastructure contributions may not yet be sufficient to fund the purchase of public land and construction of community facilities.

During the early stages of development, opportunities for use of shared or temporary spaces should be sought to assist in the delivery of early services. Examples of integration may include:

- Expansion of an existing public buildings for community services to provide meeting rooms and educational spaces;
- Negotiated shared use of school facilities for meeting spaces and sport facilities for local sports clubs;
- Provision of maternal and child health services through schools; and
- Design facilities to accommodate interim uses (e.g. planning for playgroup equipment on land nominated as ultimate development for a future public use).

Forging partnerships with the private and public sector can assist in delivering early facilities and services to the community. In some instances, partnerships between organisations have assisted in early provision of services. For example, partnerships can be developed with non-government providers (such as education institutions, clubs and places of worship) to allow general public access to underutilised facilities at certain times of the day/week for social services and programmes. Community centres have been established in new areas by developers to provide flexible early community space at low cost, for example in a converted display home at Selandra Rise. Churches and schools will often include potential meeting spaces. Relocatable buildings have also been used by Councils in some Greenfield precincts to enable the provision of services to newly established communities.

Partnerships and collaborative arrangements will be critical in Mt Atkinson to support the delivery of community infrastructure and local services during the earlier stages of development. Local and state government, non-government organisations and developers will have a role to play in developing innovative delivery models to ensure resources are available to the community.

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3.5 **Provision of flexible and adaptable community facilities**

Planned infrastructure must avoid being overly prescriptive for communities whose needs will evolve over the life of the precinct’s development. As the community grows, facilities will need to become more responsive to cater to the needs of different target groups, including young people, older people and people from different cultural backgrounds. Families and first time home owners are generally attracted to Greenfield suburbs due to the affordability and the appeal of more generous private space, parks and local services such as child care and a range of housing options. It is important that services are relevant to local residents and can be flexible enough in their design to respond to changing needs of a growing and maturing community. Fundamentally, the infrastructure provided must be capable of adapting to local circumstances and cater to the changing community needs and aspirations of its users and support a more diverse population.

Models for community infrastructure capable of accommodating a variety of programs and services and having the flexibility to change functionality over time will be necessary. The needs and interests of the local communities may change and therefore community infrastructure must be able to respond by allowing for change in uses. For example, proposed models for community infrastructure should aim to respond to changing trends in sports participation, with open space available for a range of uses.

It is important when planning for future community infrastructure that consideration is given to the staging of facilities and to reassess population projections, demographics and aspirations. This may give some guidance as to where future capacity may be required in facilities that are planned for.

Short term and long term benchmarks, for example, have been developed for kindergarten rooms. Short term benchmarks respond to the short term peak of population that generally occurs during the first ten years of development of the new community. This is applied collaboratively with Growth Area Councils and key service delivery partners. Once the provision requirements for the number of rooms is established for the short term and long term, consideration needs to be given as to how kindergarten rooms that are no longer required once peak demand has subsided convert into a new use. As a general rule, approximately one third of kindergarten rooms will be required to convert to alternate use in the long term. It is important that they are adaptable multi-use rooms that can be repurposed to support other community uses.

An example of planning for kindergarten rooms in the short and long term include planning a community facility that comprises four kindergarten rooms where at least one room has been designed so that it can be easily repurposed to support an alternative community use. Another example is integrating several kindergarten services into primary schools with the intention of converting the kindergarten room into classroom space in the long term.

3.6 **Existing community facilities**

There is no existing community infrastructure within the PSP area. Approved planning permit has been issued for an education facility to be built by Edmund Rice Services for a period of 10 years. The facility will also operate a range of community programs which include indoor and outdoor activities.

The existing Rockbank Township is adjacent to the Mt Atkinson PSP and forms part of the Rockbank PSP. The Township will form the initial basis of an expanded Rockbank community. Existing community infrastructure and open space in the township are planned to be expanded or improved through infrastructure contributions associated with the Rockbank PSP.

The new Rockbank Primary School, a government school targeted to the existing Rockbank community, has an enrolment of approximately 70 students and on a site approximately 1.4 hectares in size. The school is sited on an area approximately one-third the size of standard government primary school and expansion unlikely. The school will be unable to assist in servicing residents from Mt Atkinson.

Ian Cowie Recreation Reserve is the sports and recreation reserve for Rockbank Township, situated directly next to Rockbank Primary School. The reserve site covers 3.7 hectares and comfortably caters for the existing population. The Rockbank Hall is a small town hall and is at capacity.

Given the scale of development proposed for Rockbank PSP, it is not expected that existing community infrastructure in the Rockbank Township would have any spare capacity for future residents of Mt Atkinson and Tarneit Plains. Together with Mt Atkinson isolated nature due to transport corridors constraining vehicle and pedestrian access and no existing community infrastructure capacity in nearby Rockbank Township, this demonstrates the importance for early delivery in Mt Atkinson.
3.7 Local topography and barriers to movement

The proposed location of the three community hubs within Mt Atkinson take into consideration the local topography and the restrictions to direct access to community infrastructure and open space.

The volcanic cone is a dominant landscape feature in the centre of Mt Atkinson and an important local amenity associated with significant cultural values. The cone creates a barrier to pedestrian and vehicle access to facilities and impacts the catchments for facilities. It is appreciated for its Aboriginal cultural heritage sensitivity as well its unique visual contribution to the landscape. These elements will contribute to the precinct’s sense of place and identity. It is important to maintain the visual integrity of the cone/recreation capabilities. Future infrastructure, including sports pavilions, must not impact on sight lines and must comprise sympathetic landscaping. Existing utility easements (gas and power) and infrastructure within the precinct impose some constraints on locating community infrastructure and open space. There is also a need for designated space for infrastructure such as the gas pipeline requirements along Hopkins Road. The locations of schools and community centres are limited by the existing high voltage transmission line, gas pipeline requirements and quarry impacts on land use.

The proposed OMR alignment provides for the orderly growth of the Melton growth corridor. The OMR is likely to create a significant barrier between future PSP communities. Maintaining the existing Greigs Road connection into the Rockbank PSP will be critical in ensuring that Mt Atkinson does not become an isolated community. The Western Freeway carries heavy through traffic and the Melton rail corridor separates the northern employment and Kororoit and Plumpton residential communities from the Mt Atkinson residential area to the south. Similarly connections including off road connections over major barriers like the Western Freeway and Melton rail are important to cater for residents who would prefer to use cycling (in particular) to access other areas of Mt Atkinson.
4.0 DEMOGRAPHIC PROFILE

Population forecasts and demographic trends will impact on the future demand for community infrastructure in Mt Atkinson.

4.1 Population and dwelling forecasts and assumptions

At full development it is anticipated that the Mt Atkinson PSP area will be home approximately 19,700 new residents. This is based on 408.18 hectares of land available for residential development. Mt Atkinson will not be required to meet additional demand for community infrastructure from surrounding suburbs and nearby master planned communities. The two residential precincts, Rockbank and Kororoit, have both addressed the community infrastructure required to support their projected future populations.

Table 1  Mt Atkinson dwelling and population forecasts

<table>
<thead>
<tr>
<th>Hectares</th>
<th>Dwellings</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total precinct area</td>
<td>1,531.68</td>
<td></td>
</tr>
<tr>
<td>Total developable area</td>
<td>896.89</td>
<td></td>
</tr>
<tr>
<td>Net developable area – residential</td>
<td>408.18</td>
<td>6,700</td>
</tr>
<tr>
<td>Net developable area – employment</td>
<td>488.71</td>
<td>19,700</td>
</tr>
</tbody>
</table>

Table 1 provides a brief summary of the land available for both employment and residential development. The table indicates that the minimum dwelling yield anticipated for Mt Atkinson PSP is 6,700 new dwellings and 19,700 people. Mt Atkinson has the ability to deliver an additional 1,120 dwellings, based on 25 dwellings per hectare, in areas zoned mixed use, within the Specialised Town Centre and areas identified as medium density on Plan 5 in the PSP document. This could result in a further 3,100 new residents and can influence the ‘tipping point’ for the provision of particular community infrastructure and open space. This will be an important consideration when deciding upon the inclusion of infrastructure that does not immediately meet the provision benchmark. The MPA’s PSP Guidelines mandate that an average net density of 15 dwellings per developable hectare or more is to be achieved across all residential PSP areas as part of an effort to encourage housing choice, density and affordable places to live. Recent subdivision developments across the growth areas of the Melton corridor have achieved higher ‘per hectare’ densities that average 16.5 dwellings per hectare. The Mt Atkinson residential area has adopted this density for the calculation of community infrastructure and open space provision in order to more accurately reflect future development outcomes in the Melton corridor.

There are a number of new estates under construction in proximity to Mt Atkinson that are being developed at around 18 dwellings per net developable hectare, particularly in Taylors Hill West, Diggers Rest and Toolern PSPs. A recent subdivision in the Toolern PSP area was approved for an average density of 22 dwellings per net developable hectare. It is important to consider recent development and subdivision trends within the municipality by looking at a range of densities and apply them to the community infrastructure benchmarks. This will determine whether the planned community infrastructure and open space provisions will meet the needs of a potentially higher future population and to identify the ‘tipping point’ for additional infrastructure and open space. In the instance where the population or dwelling yield does not reach the benchmark for certain infrastructure items but comes reasonably close it will be important to consider these recent trends together with the potential for medium density development when making final decisions.

Table 2  Dwelling and population forecasts based on higher densities

<table>
<thead>
<tr>
<th></th>
<th>Dwellings (18 dwellings per ha)</th>
<th>Population</th>
<th>Dwellings (22 dwellings per ha)</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential yield assumption</td>
<td>7,300</td>
<td>20,500</td>
<td>9,000</td>
<td>25,000</td>
</tr>
</tbody>
</table>
4.2 Demographic trends and assumptions

A review of age structure and household types for established Greenfield suburbs in the City of Melton can aid in understanding the future demographic profile for Mt Atkinson. Taylors Hill and Caroline Springs were master planned communities that are close to capacity.

Development for Caroline Springs commenced in the late 1990s on Greenfield land with the construction of the Delfin Caroline Springs estate. Growth occurred rapidly from 1999 and between 2001 and 2006 the population quadrupled. Development is nearing completion and has reached a population of 24,025. Taylors Hill followed a similar pattern to Caroline Springs with development dating primarily from the late 1990s. Rapid growth took place between 2001 and 2011 and growth is expected to continue but at a slower rate. Taylors Hill has a current population of 11,769 people.

Caroline Springs and Taylors Hill have both undergone growth over a sufficient timeframe to create demographic data over that time. Caroline Springs and Taylors Hill indicate a consistent pattern within the Melton Growth Corridor. The nature of growth for Caroline Springs and Taylors Hills is considered to be similar to that anticipated for Mt Atkinson.

The projections illustrated on Table 3 and Table 4 below detail the likely age profiles and household composition patterns for Caroline Springs and Taylors Hills based on recent data available. It is anticipated that residents of these areas are more likely to reflect an age profile similar to Mt Atkinson given that Mt Atkinson is likely to attract similar new residents.

Table 3  Caroline Springs and Taylors Hill Forecast Age Structure (2016)

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>Caroline Springs</th>
<th>Taylors Hill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babies and pre-schoolers (0-4)</td>
<td>8.5%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Primary schoolers (5-11)</td>
<td>13.8%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Secondary schoolers (12-17)</td>
<td>8.6%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Tertiary and independence (18-24)</td>
<td>8.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Young workforce (25-34)</td>
<td>16.4%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Parents and homebuilders (35-49)</td>
<td>26.8%</td>
<td>26.2%</td>
</tr>
<tr>
<td>Older workers and pre-retirees (50-59)</td>
<td>9.3%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Empty nesters and retirees (60-69)</td>
<td>5.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Seniors (70-84)</td>
<td>2.7%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Elderly aged (85 and over)</td>
<td>0.2%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Forecast .id, using data from Australian Bureau of Statistics Census of Population and Housing 2011 to 2036

Table 4  Projected household profile (2016)

<table>
<thead>
<tr>
<th>Household profile</th>
<th>Caroline Springs</th>
<th>Taylors Hill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Couple families with dependents</td>
<td>50.7%</td>
<td>58.8%</td>
</tr>
<tr>
<td>Couples without children</td>
<td>21.0%</td>
<td>20.3%</td>
</tr>
<tr>
<td>Group households</td>
<td>1.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Lone person households</td>
<td>12.9%</td>
<td>9.0%</td>
</tr>
<tr>
<td>One parent family</td>
<td>11.4%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Other families</td>
<td>2.2%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

Id profile, using data from Australian Bureau of Statistics Census of Population and Housing 2006 and 2011

At full build out, the dominant age group in Caroline Springs and Taylors Hill is parents and home builders. The majority of households are likely to be couples with children, particularly young children. Growth area assumptions typically show increases in the number of babies and pre-schoolers, primary school children and young workers. Knowledge of how the age structure of the population is changing is essential for planning age-based facilities and services.
These population forecasts raise a number of considerations for the planning of community infrastructure including:

- Anticipated increase in demand for early years services such as long day care and kindergarten, particularly related to new families moving into the area and to families with two parents working
- Future demand for services and programs for young people that support physical activity and encourage social connection and participation in local events
- Potential demand for places and spaces that support home based employment and volunteering opportunities, particularly as the population ages.

It can be assumed that young families will be the dominant household type during the initial stages of the precinct’s development. With first homebuyers and young families are currently well-represented in the Greenfield suburb, the most obviously conclusion relating to community infrastructure is the need for facilities and services that support this key demographic: maternal and child health care, kindergartens and primary schools and parks. There will be a significant proportion of households with no children to be represented by a mix of empty nesters and first home buyers with no children.

Facilities supporting children should be designed to be flexible. When not required for the maternal and child health service, the rooms could potentially be made available for other council and non-council community services programs that need consulting rooms. The Councils will continue to deliver the service from this multifunctional setting.

Mt Atkinson will also need to plan for older members of the community, gradually requiring increased aged services and facilities over time as adult residents choose to remain within the community. The opportunity to ‘age in place’ and remain near family and friends in the neighbourhood must be adequately supported by social infrastructure.

Following build out of Mt Atkinson it should be anticipated that the population will age over time and living situations will change. For example, the age of children over 2011 and 2016 in both Caroline Springs and Taylors Hill showed that children were getting older. It can be assumed that these areas are attracting people who are deciding to start families and are wanting to remain in the same area whilst bringing up their children. Knowledge about how the age structure of the population is changing is important for planning age-based services and facilities, such as child care, schools and recreation. In contract, in 2026 there is a predicted need for a more diverse range of both housing stock and community facilities as children begin to leave the home increasing the number of older age group types, more typically older workers and retirees as well as empty nesters and retirees.

Table 5  Caroline Springs forecast age structure – age groups

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>2011</th>
<th>2016</th>
<th>2026</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babies and pre-schoolers (0 to 4)</td>
<td>2,273</td>
<td>2,052</td>
<td>1,662</td>
</tr>
<tr>
<td>Primary schoolers (5 to 11)</td>
<td>2,648</td>
<td>3,316</td>
<td>2,536</td>
</tr>
<tr>
<td>Secondary schoolers (12 to 17)</td>
<td>1,712</td>
<td>2,057</td>
<td>2,012</td>
</tr>
<tr>
<td>Tertiary education and independence (18 to 24)</td>
<td>1,652</td>
<td>1,998</td>
<td>2,486</td>
</tr>
<tr>
<td>Young workforce (25 to 34)</td>
<td>4,236</td>
<td>3,932</td>
<td>3,427</td>
</tr>
<tr>
<td>Parents and homebuilders (35 to 49)</td>
<td>5,606</td>
<td>6,439</td>
<td>5,407</td>
</tr>
<tr>
<td>Older workers and pre-retirees (50 to 59)</td>
<td>1,707</td>
<td>2,226</td>
<td>3,253</td>
</tr>
<tr>
<td>Empty nesters and retirees (60 to 69)</td>
<td>853</td>
<td>1,317</td>
<td>1,946</td>
</tr>
<tr>
<td>Seniors (70 to 84)</td>
<td>399</td>
<td>637</td>
<td>1,306</td>
</tr>
<tr>
<td>Elderly aged (85 and over)</td>
<td>24</td>
<td>50</td>
<td>93</td>
</tr>
<tr>
<td><strong>Total persons</strong></td>
<td><strong>21,111</strong></td>
<td><strong>24,025</strong></td>
<td><strong>24,128</strong></td>
</tr>
</tbody>
</table>

Population and household forecasts, 2011 to 2036, prepared by .id, the population experts, December 2014
<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>2011</th>
<th>%</th>
<th>2016</th>
<th>%</th>
<th>2026</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babies and pre-schoolers (0 to 4)</td>
<td>1,442</td>
<td>12</td>
<td>1,204</td>
<td>9</td>
<td>816</td>
<td>6</td>
</tr>
<tr>
<td>Primary schoolers (5 to 11)</td>
<td>1,485</td>
<td>12</td>
<td>1,893</td>
<td>14</td>
<td>1,269</td>
<td>10</td>
</tr>
<tr>
<td>Secondary schoolers (12 to 17)</td>
<td>964</td>
<td>8</td>
<td>1,152</td>
<td>8</td>
<td>1,039</td>
<td>8</td>
</tr>
<tr>
<td>Tertiary education and independence (18 to 24)</td>
<td>977</td>
<td>8</td>
<td>1,159</td>
<td>8</td>
<td>1,199</td>
<td>9</td>
</tr>
<tr>
<td>Young workforce (25 to 34)</td>
<td>2,493</td>
<td>20</td>
<td>2,218</td>
<td>16</td>
<td>1,899</td>
<td>14</td>
</tr>
<tr>
<td>Parents and homebuilders (35 to 49)</td>
<td>2,978</td>
<td>24</td>
<td>3,661</td>
<td>26</td>
<td>2,859</td>
<td>22</td>
</tr>
<tr>
<td>Older workers and pre-retirees (50 to 59)</td>
<td>943</td>
<td>8</td>
<td>1,280</td>
<td>9</td>
<td>1,187</td>
<td>14</td>
</tr>
<tr>
<td>Empty nesters and retirees (60 to 69)</td>
<td>536</td>
<td>4</td>
<td>774</td>
<td>6</td>
<td>1,198</td>
<td>9</td>
</tr>
<tr>
<td>Seniors (70 to 84)</td>
<td>368</td>
<td>3</td>
<td>575</td>
<td>4</td>
<td>1,026</td>
<td>8</td>
</tr>
<tr>
<td>Elderly aged (85 and over)</td>
<td>21</td>
<td>0</td>
<td>52</td>
<td>0</td>
<td>100</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total persons</strong></td>
<td><strong>12,207</strong></td>
<td><strong>100</strong></td>
<td><strong>13,968</strong></td>
<td><strong>100</strong></td>
<td><strong>13,222</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Population and household forecasts, 2011 to 2036, prepared by .id, the population experts, December 2014
5.0 **DEMAND CALCULATIONS**

Greenfield development areas must cater for a full range of facilities and services that provide opportunities for education (primary, secondary, tertiary, vocational and adult learning), health and well-being (health and support services, emergency services, age-specific services), recreation and leisure (organised and informal sport and recreation, cycling and walking, leisure) and social and cultural interactions.

Acknowledging the many facilities and services required by the growing community, this report emphasises a need to determine social infrastructure facilities suitable for delivery using infrastructure contributions, as well as land uses that have a spatial impact (land take) associated with their provision.

The needs assessment identifies:

- Some items not suitable for delivery in the infrastructure contribution plan
- Items suitable for delivery in the infrastructure contributions plan
- Items that affect land take
- Provision ratios and order of each infrastructure item affecting net developable area in the precinct.
- Items not suitable for delivery in the ICP

The following facilities, whilst essential to the ongoing development of the precincts and the well-being of the future community and neighbourhoods, will not be funded through an infrastructure contribution plan:

- Town centres
- Hospitals
- Medical centres
- Places of worship
- Emergency services
- Residential aged care centres
- Community/public art
- Government Schools
- Non-Government School

These facilities will be delivered through either private or not-for-profit organisations, state government funding and other forms of funding. Local parks are provided through Clause 52.01 of the Melton Planning Scheme.

**Items suitable for delivery in the ICP**

The following facilities are eligible to be funded in whole or part by an infrastructure contributions plan for Mt Atkinson and Tarneit Plains:

- Multi-purpose community centres
- Neighbourhood houses
- Kindergartens
- Maternal and child health centre
- Local sports reserves and local parks
- Tennis courts
- Hard courts
- Indoor recreation centres
- Tertiary education facilities
- Emergency services facilities

**Items affecting precinct net developable area**

The following facilities are not eligible for funding through infrastructure contributions but will be identified in the report, if required for delivery as part of the precinct:

- Government primary schools
- Government secondary schools
- Non-government primary schools
- Non-government secondary schools
- Tertiary education facilities
- Emergency services facilities

**Provision ratios for ICP items and items affecting precinct land take**

The needs analysis for facilities and open space to be delivered across the precinct is undertaken by predicting the future population and/or NDA and by applying an indicative provision rate for each type of infrastructure.

Provision ratios guide how much community infrastructure is to be planned for the future population. The community infrastructure items selected for this assessment and the provision ratios used are generally based on those identified in the *Planning for Community Infrastructure in Growth Area Communities: Standards Project* and some recently identified benchmarks.

The population and dwelling yields used for calculating future demand for community infrastructure and open space in Mt Atkinson is based on 19,700 future residents and 6,700 future dwellings.

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7. ASR Research Pty Ltd, *Planning for Community infrastructure in Growth Area*, 2008, City of Melton, City of Wyndham, City of Whittlesea, the City of Casey and the City of Hume.
5.1 General community facilities

The community facilities identified in this section of the report includes only Level 1 and Level 2 type facilities. The population and dwelling projections for Mt Atkinson do not reach the benchmark provisions for Level 3 type facilities (see Appendix 1 for the Community Infrastructure Hierarchy).

Table 7  Needs analysis of community infrastructure based on population projections for Mt Atkinson PSP

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Early childhood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multipurpose community centre</td>
<td>Neighbourhood house</td>
<td>Kindergarten rooms</td>
</tr>
<tr>
<td>Land take for facility</td>
<td>0.8 hectares</td>
<td>0.4 hectares</td>
</tr>
<tr>
<td>Provision ratio</td>
<td>1 per 8,000 people</td>
<td>1 per 20,000 people</td>
</tr>
<tr>
<td>Demand analysis</td>
<td>2.50</td>
<td>0.98</td>
</tr>
<tr>
<td>Proposed provision</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Multi-purpose community centres

Multi-purpose community centres play an important role in accommodating flexible spaces for a combination of community uses and activities. They cater for maternal and child health, kindergartens, child care, youth services, lifelong learning, community art, senior citizens clubs and cultural groups as well as being available to hire for community and private functions.

ASR Research’s provision ratios recommend one multipurpose community centre (Level 1) per 8,000 people and one neighbourhood house per 20,000 people (Level 2). Table 7 indicates that there is a need of two multipurpose community centres and one neighbourhood house in Mt Atkinson, in other words there is two hectares of community facilities required to support the future population of Mt Atkinson.

In regards to delivery models, there has been a recent shift of approach from using a domestic house for a neighbourhood house to operating neighbourhood house services from a multipurpose community centre or library. Within the Mt Atkinson community, the neighbourhood house can be provided as part of the delivery of a multipurpose community centre, upgrading it to a Level 2 centre, however, Melton City Council has requested the option to deliver the neighbourhood house as a standalone facility within the Specialised Town Centre nearby higher order services and facilities.

Level 1 multipurpose community centres are generally delivered with early childhood facilities with no additional land take required. A multipurpose community centre requires in total 0.8 hectares of land. A Level 2 neighbourhood house requires 0.4 hectares. A neighbourhood house, also known as community learning centre, includes a youth space, additional classroom space and specialist facilities.

Community centres should typically be collocated with government primary schools as part of a community hub, preferably with no road separating the two uses. By having a range of services and facilities (eg. schools, kindergartens and maternal and child health) in one hub effectively creates a ‘one-stop-shop’. The hubs are planned to be close to public transport and the local shopping strip. This means it become accessible for most of the members of the community.
**Kindergarten rooms and maternal and child health**

Kindergarten rooms are typically delivered as part of a multipurpose community centre with the provision of two to three kindergarten rooms per facility. Table 5 indicates four kindergarten rooms should be delivered at a ratio of one room per 2,100 dwellings. In the short term an alternative provision ratio is provided and recommends one room per 1,400 dwellings.

Melton City Council’s preferred delivery model is three kindergarten rooms per community centre. In the short term, five rooms in total are recommended, however in the long term only four rooms are likely to be required. The delivery model from the short term to the long term requires consideration by the Council.

Two dual nurse maternal and child health consulting room facilities are recommended to enable one to be collocated with each kindergarten facility. These facilities should be integrated with Level 1 community centre, requiring no additional land take.

Kindergarten and maternal and child health rooms should allow for flexibility and re-adaption. Flexibility enables accommodation for a range of users and groups and a focus for the potential service delivery of classrooms, youth services and consulting suites for outreach services. This reflects the move away from single purpose facilities in order to better meet the needs of diverse community groups. This allows for more efficient use of infrastructure and supports the delivery of community services such as Early Years Services, Youth Services, Community Arts and Cultural Diversity.

It can be difficult to make a clear link between population growth and demand for specific activities such as senior centres, youth centres or community learning centres as needs vary over time and between communities as demographics, socio-economics and local circumstances change. Flexibility can provide for most of these activities and can be modified when required to meet changing needs.

### 5.2 Education

**Table 8  Needs analysis of schools based on population projections for Mt Atkinson PSP**

<table>
<thead>
<tr>
<th></th>
<th>Government schools</th>
<th>Non-government schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary</td>
<td>Secondary</td>
</tr>
<tr>
<td></td>
<td>3.5 hectares</td>
<td>8.4 hectares</td>
</tr>
<tr>
<td>Analysis of demand</td>
<td>2.23</td>
<td>0.74</td>
</tr>
<tr>
<td>Proposed provision</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

**Government Schools**

The provision rate for new primary schools in growth areas is one per 3,000 dwellings. The predicted dwelling yield for Mt Atkinson at full development suggests the need for approximately two 3.5 hectare government primary schools. The delivering agency, the Department of Education and Training (DET), has confirmed that Mt Atkinson should nominate the provision of two government primary school locations.

Provision rates for new secondary schools in Greenfield areas is one per 9,000 dwellings. Mt Atkinson does not have a projected dwelling yield that triggers the need for a government secondary school. If to apply a dwelling yield based on a higher density (i.e. 18 dwellings per hectare) the benchmark is still not met for the provision of a Government secondary school in the precinct.

Government secondary schools are proposed in the future Rockbank, Kororoit and Plumpton communities and will have the capacity to support future Mt Atkinson residents. The road and shared path network has been planned in a manner than ensures direct and safe links to proposed nearby secondary schools. A pedestrian overpass over the Western Freeway is proposed to improve path user’s accessibility between the Kororoit and Mt Atkinson precincts.

The indicative provision rate for government specialist school is one per 60,000 dwellings. A specialist school has not been identified in the precinct. Although Mt Atkinson does not have dwelling yield to support a future specialist school, the Melton municipality is expected to increase to 258,900 residents/88,300 households by 2031\(^8\). It is likely that an additional specialist school will be required to meet the needs of the Melton municipality. DET has confirmed a likely need to establish a government specialist school in the Plumpton PSP.

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\(^8\) Department of Environmental, Land, Water and Planning, *Victoria in Future 2015: Population and Household Projections to 2051*, 2015 Melbourne
Non-Government Schools

A high level approach is required when planning for non-government schools in growth areas. The non-government school sector should be involved in each stage of the precinct structure planning process. Sites for non-government schools are shown in PSPs where a clear case is made for the need for such a school and where there is a demonstrated commitment to establish a non-government school on the site.

Catholic primary and secondary schools are specifically provisioned for in PSPs as part of the planning process and consultation undertaken with the Catholic Education Office Melbourne (CEOM). The strategic location of school sites is part of their wider future schools mapping for the western growth areas. The need for future Catholic schools is established through forecasts of future enrolments utilising sources such as Australian Bureau of Statistics census data. The *Catholic Schools in Context* brochure offers strategic justification for providing a Catholic secondary school in Mt Atkinson. It is recognised that the future train station proposed within the precinct will greatly benefit and draw students from neighbouring suburbs to the secondary school.

The provision rate used for new Catholic primary schools is 1 per 8,000 dwellings. The calculated provision suggests that a non-government primary school is required. During the course of the consultation process of the PSP, the Catholic Education Office expressed a formal interest in establishing a Catholic Secondary School in Mt Atkinson to serve the broader catchment beyond the PSP area. Its proposed location is in close proximity to the Major Town Centre and future train station. Ultimately the provision of non-government schools is a decision made by the provider but can be advised by the MPA and Council through consultation.

Opportunities should be explored with the CEOM to collocate, share and integrate service delivery models between non-government schools and other community facilities. This may include establishing in the short term the early delivery of certain community centre facilities within the Catholic school that can later evolve into classrooms.

No other non-government school providers have identified the need for school sites in this precinct, however, future school developments may be approved through the normal planning process.

5.3 Open space and recreation

Open space in growth area precincts should be equitably distributed across the precinct, maximising access by the local community and contributing to amenity. The MPA's *Precinct Structure Planning Guidelines* state that ten per cent of the Net Developable Area in residential areas should equate to total public open space.

Table 9  Needs analysis of open space and recreation

<table>
<thead>
<tr>
<th>Local parks</th>
<th>Sports reserves</th>
<th>Indoor recreation centre (2 courts)</th>
<th>Lower order tennis facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.10—1.70 hectare</td>
<td>10 hectare or 6 hectares reserves</td>
<td>1.2 hectares</td>
<td>6 court facility 0.4 hectares</td>
</tr>
<tr>
<td>4% of residential NDA</td>
<td>6% of residential NDA</td>
<td>1 per 20,000 people</td>
<td>1 court per 2,500 people</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Calculated land take (ha)</th>
<th>Proposed lake take (ha)</th>
<th>Proposed provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>13.86 (0.5 uncredited)</td>
<td>19 local parks</td>
</tr>
<tr>
<td></td>
<td>26 (2.58 uncredited)</td>
<td>2 x 10 ha sports reserve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 x 6 ha sports reserve</td>
</tr>
</tbody>
</table>

9 Catholic Education Office Melbourne, *Catholic Schools in Context*, 2013, Melbourne
The Precinct Structure Plan and Infrastructure Contributions Plan deliver, as a development obligation, local open space of up to 10% of net developable area; generally this is divided into 4% of NDA for local parks and 6% of NDA for local sports reserves but can be tailored to suit local requirements and conditions. As a guide, 3% to 5% of NDA should be set aside for local parks and 5% to 7% of NDA should be set aside for sports reserves. The proposed breakdown of open space within Mt Atkinson residential area is 3% for local parks and 7% for sports reserves.

The precinct is home to a volcanic cone referred to as Mount Atkinson. The area has been zoned Rural Conservation Zone (RCZ) to preserve is environmental values and cultural sensitivity. Tree and shrub plantings, shade structure, walking paths and other typical park elements will be provided further down from the cone’s summit. Given that the RCZ covers an area of approximately 50 hectares and is planned to provide a future park use subject to negotiation with the land owner, this report calculates a reduced local park provision to 3%.

For the Mt Atkinson precinct (at 408.18 hectares of residential net developable area), the acceptable range for the provision of 12 to 20 hectares for local parks and 20 to 28 hectares for sports reserves.

Table 9 shows that the proposed land take for sports reserves is 26 hectares. This provision amount exceeds the acceptable range of up to 24.5 hectares, however, approximately 2.58 hectares is located outside the residential NDA and located within the RCZ land, thus reducing the provision amount to 23.4 hectares within the precinct.

Local parks

Melton City Council’s draft Open Space Strategy 2014-2016 advises that local parks should be delivered in varying sizes catering for a diverse range of functions (i.e. gathering spaces, walking pets, linear connections, and community focal points). The MPA's guidelines recommend that local parks be located within 400 metres safe walking distance of 95% of all households. They are considered as local level infrastructure and generally includes paths, seats, trees, open area with basic playgrounds in most cases.

Pocket parks are typically less than 0.2 hectares according to Council’s draft Open Space Strategy 2014-2016. Small parcels of open space that may be underdeveloped or serve a purely amenity function. These spaces are highly valued in areas where the provision of open space is limited. Pocket parks are proposed within the employment areas of the precinct to provide amenity and respite for future workers.

31 local parks (21.32 hectares) of varying sizes are proposed across the residential and employment areas of the PSP area. A number of open space reserves are proposed, connecting people to landscape and heritage features as well as nearby sports reserves. There is a provision of 12 local parks and linear reserves, comprising 7.49 hectares, are distributed across the industrial areas of the precinct. They are placed in locations abut drainage assets and distributed to ensure that walking distances for local works do not exceed 400m.

Sports fields

Table 9 indicates that a total of 26 hectares of land for local sports reserves is to be provided across the Mt Atkinson precinct. Local sports reserves should cater for the outdoor sports (netball, Australian football, soccer, cricket, tennis, hockey, baseball, softball, etc). Outdoor sporting facilities should be based on the needs of the community with the aim to maximise participation. The MPA’s Precinct Structure Planning guidelines stipulate that sports reserves should be provided within one kilometre of 95 per cent of all dwellings.

Melton City Council’s provision model promotes a range of sporting field sizes to cater for a variety of local sports activities and to respond to new patterns of sports participation. For example soccer, rugby, and hockey require less space and can generally be catered for on six hectare sites while AFL ovals, cricket, softball and baseball fields require greater land takes of typically ten hectares due to dimension requirements of the fields.

Each sportsground also provides for wider user needs by providing play spaces for children and youth activity nodes. Finally, each reserve will include a community pavilion to suit the size of the park, containing facilities such as change rooms, toilets, first aid and storage.

Pavilions could be costed and designed in a more flexible way rather than being designed for a single purpose. Pavilions have the capacity to provide for playgroups, meeting rooms for community groups to use such as scouts and local choirs. This could also allow for the early delivering of community facilities.
**Tennis courts & hard courts**

Tennis facilities can be collocated with sports reserves to allow shared use of facilities. Melton’s Tennis Strategy recommends a best practice target of one court per 2,500 people. Applying this benchmark to the future population of Mt Atkinson equates to the need for approximately eight tennis courts. Melton City Council’s Tennis Strategy sets a minimum of four courts per facility. Council, however, has a preference for a six court facility or eight court facility collocated with a six hectare sports reserves. Table 9 shows that eight courts are required in the precinct. To be in accordance with Council’s preferred provision model, it is recommended that 0.6 hectares for the provision of an eight court facility be collocated with the 6 hectare sports reserve.

Melton City Council prefers the collocation of hard courts (e.g. netball), of at least six netball courts, with ten hectares football/cricket ovals at no extra land take. One hard court facility is generally provided per 16,000 people and requires 0.5 hectares within a ten hectare sports reserves. Two ten hectare sports reserves are provided within the precinct, Council can advise its preferred location for collocation.

**Regional open space**

Regional open space, sometimes referred to as ‘higher order’ or ‘district’ open space, should be included in a precinct structure plan if the relevant Council (in this case, Melton City Council) commit to delivering the facility using its own resources for both land purchase and infrastructure construction. The West Growth Corridor Plan outlines that the regional sports reserves should be delivered at a ratio of 0.5 hectares per 1,000 people but of a minimum of 25 hectares in total size. Mt Atkinson does not have a sufficient population to support regional open space.

**Indoor recreation centre**

Growth Area benchmarks trigger the need for one publically provided indoor recreation centre. Benchmarks specify a provision ratio of one indoor court facility (two courts) per 20,000 people. An indoor recreation can accommodate the needs of sports such as basketball, netball, volleyball, badminton, squash, indoor cricket and soccer, table tennis and gymnastics.

Council has confirmed the provision of a lower order 1.2 hectare indoor recreation centre. The location of the indoor recreation facility should be focused on collocation with education and community facilities.

Opportunities could be explored for the collocation of a shared indoor recreation facility if the Catholic school is delivered during the early stages of development.

**5.4 Emergency services**

Additional population growth in Mt Atkinson may generate the need for additional emergency services and facilities. The number and type of facilities, timing of development and locations is determined by planning process undertaken by the Department of Justine and other relevant services.

The MPA has consulted with emergency services as to whether the inclusion of any such services is desired within the precinct. There are a number of existing and planned emergency infrastructure items located within the precinct and surrounding communities. The MPA will continue a dialogue with the emergency services agencies to future provision strategies and their short, medium and long term plans for the Melton Growth Corridor and how that will impact on all future PSPs. Consideration should be given to collocation of emergency services with other emergency services and community facilities particularly where services are based on volunteer participation. An emergency services facility should have main road frontage, be easily accessible and be located so that it can achieve good emergency response times.
6.0 SPATIAL CONSIDERATIONS

Facilities identified through the needs analysis have been located into a number of community hubs that will serve local neighbourhood catchments and connect to each other via an open space network.

6.1 Mt Atkinson PSP Community Hubs

Mt Atkinson PSP will have three hubs. Their composition is outlined in Table 10.

Table 10  Community hubs located with Mt Atkinson Precinct Structure Plan

<table>
<thead>
<tr>
<th>Community Hub</th>
<th>Facilities</th>
<th>Total land take (hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hub 1</td>
<td>Non-government Primary School</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Non-government Secondary School</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Indoor Recreation Centre</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sports Reserve &amp; Pavilion</td>
<td>6 (2.58 uncredited)</td>
</tr>
<tr>
<td></td>
<td>Neighbourhood House</td>
<td>0.4</td>
</tr>
<tr>
<td>Hub 2</td>
<td>Government Primary School</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Multipurpose Community Centre</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>Sports Reserve &amp; Pavilion</td>
<td>10</td>
</tr>
<tr>
<td>Hub 3</td>
<td>Government Primary School</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Multipurpose Community Centre</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>Sports Reserve &amp; Pavilion</td>
<td>10</td>
</tr>
</tbody>
</table>

All items outlined in Table 10 except for the schools are eligible for inclusion in the Mt Atkinson Infrastructure Contributions Plan and will be fully apportioned to the precinct.
Figure 4  Community Hubs within Mt Atkinson Residential Area

- MT ATKINSON WEST COMMUNITY HUB
- MT ATKINSON EAST COMMUNITY HUB

- Greigs Road
- Edmund Rice Centre

- MT. ATKINSON NORTH COMMUNITY HUB

- MT ATKINSON SOUTH COMMUNITY HUB

- MT ATKINSON SURVEY BEACON & GROUND MARK
- MT ATKINSON SURVEY BEACON & GROUND MARK
- MT ATKINSON SURVEY BEACON & GROUND MARK

- Trees / shrub planting
- Trees / shrub planting
- Trees / shrub planting

- Local convenience centre
- Local convenience centre
- Local convenience centre

- Neighbourhood house
- Neighbourhood house
- Neighbourhood house

- Car park
- Car park
- Car park

- Connector street
- Connector street
- Connector street

- Key local access street
- Key local access street
- Key local access street

- Arterial road
- Arterial road
- Arterial road

- Indicative pedestrian / cycle path
- Indicative pedestrian / cycle path
- Indicative pedestrian / cycle path

- Indicative shared path
- Indicative shared path
- Indicative shared path

- Service open space (drainage)
- Service open space (drainage)
- Service open space (drainage)

- Service open space (heritage)
- Service open space (heritage)
- Service open space (heritage)

- Mixed use
- Mixed use
- Mixed use

- Conservation area (RCZ)
- Conservation area (RCZ)
- Conservation area (RCZ)

- Pavilion
- Pavilion
- Pavilion

- Mt Atkinson survey beacon & ground mark
- Mt Atkinson survey beacon & ground mark
- Mt Atkinson survey beacon & ground mark

- Trees / shrub planting outside view corridors
- Trees / shrub planting outside view corridors
- Trees / shrub planting outside view corridors

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7.0 CONCLUSIONS AND RECOMMENDATIONS

The Mt Atkinson Precinct Structure Plan, Community Infrastructure and Open Space Needs Assessment has been prepared by the Metropolitan Planning Authority (MPA) to support the population growth of Mt Atkinson. It provides an assessment of the future demand for community infrastructure and open space in Mt Atkinson residential area and includes spatial recommendations and proposed infrastructure delivery models to meet that demand.

To deliver the necessary community infrastructure and open space in a manner that simultaneously satisfies the needs of local community catchments and attempts to provide connections between them, a ‘community hub’ model of delivery that links to the open space network is proposed for the Mt Atkinson residential area.

The inventory of community infrastructure and open space outlined for each community hub will directly inform infrastructure contributions required as part of its development. It is intended that the community infrastructure and open space will be delivered by the Infrastructure Contributions Plan, where applicable, wholly or in part.

The main key opportunities to be considered includes:

**The collocation of facilities and services**
- Community infrastructure should be collocated with complementary services as this will give the opportunity to strengthen community hubs. The precinct structure plan provides suitable conditions and opportunities for shared use of future facilities.
- Potential efficiencies and partnerships with private providers and non-government organisations should be explored.

**Well-connected and accessible facilities**
- Facilities should be placed in high profile location to maximise the accessibility to public transport and pedestrian and cycle paths. The location of facilities should be placed in convenient areas and visible locations that are collocated with other services.

**The provision of flexible and adaptable community facilities**
- Facilities must be able to cater the needs of different target groups. As such, planned infrastructure must avoid being overly prescriptive and be highly flexible to respond to the evolving needs of the precinct’s development.

**Respecting local topography and understanding barriers to movement**
- It is important to acknowledge, respect and preserve significant cultural heritage within Mt Atkinson. More specifically, the appreciation for the volcanic cone at the centre of Mt Atkinson should be maintained and acknowledged when planning transport movement.

**Timing and delivery of social infrastructure**
- Timing and delivery of social infrastructure should be directly linked to the staging of residential and commercial development within the three precincts.
- Individual community facilities may be delivered in stages to appropriately respond to need as it emerges.
- During the early stages of development, opportunities for use of shared, multi-purpose or temporary spaces should be sought to assist in the delivery of early services.

This will ensure that the community facilities provided in the Mt Atkinson Greenfield development area will provide opportunities for education, health and well-being, recreation and leisure and social and cultural interaction for the emerging community.
## Appendix 1 - Community Infrastructure Hierarchy

<table>
<thead>
<tr>
<th>Level</th>
<th>Items</th>
</tr>
</thead>
</table>
| **Level 1**<br>Provision ratios<br>up to 10,000 people | - Government Primary Schools (including out of schools hours care)/Early Years Facility  
- Level 1 Council Community Centres/ Early Years Facility/Neighbourhood House  
- Level 1 Active Open Space  
- Level 1 Passive Open Space (including level 1 playgrounds)  
- Long Day Child Care Centres  
- Social housing |
| **Level 2**<br>Provision ratios<br>between 10,000 and 30,000 people | - Government Secondary Schools  
- Catholic Primary Schools  
- Level 2 indoor recreation centres  
- Level 2 Council Community Centres/Early Years Facility/Neighbourhood Houses  
- Low Order Tennis Facilities  
- Low Order Youth Facilities  
- Maternal & Child Health (within every second level 1 early years facility)  
- Occasional Child Care (as part of every neighbourhood house and leisure centre)  
- Residential Aged Care |
| **Level 3**<br>Provision ratios<br>between 30,000 and 60,000 people | - Libraries  
- Aquatic Leisure Centres  
- Community Arts Centres  
- Catholic Secondary Schools  
- Higher Order Active Open Space Reserves  
- Level 3 indoor recreation centres  
- High Order Tennis Facilities  
- Lawn Bowls Facility  
- High Order Dedicated Youth Facilities  
- Level 3 Council Community Centres  
- Level 3 Council and Community Services Health Precincts (DHS Level 2 Community based health precincts - dedicated outreach health precinct sites)  
- Early Childhood Intervention Service  
- PAG facility  
- Delivered meals facility  
- Level 3 adventure playgrounds  
- Other independent schools |
<table>
<thead>
<tr>
<th>Level 4</th>
<th>Provision for the total municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Main Council Civic Centre</td>
</tr>
<tr>
<td></td>
<td>• Level 3 Community-based health precincts – Day hospitals that contain main or outreach</td>
</tr>
<tr>
<td></td>
<td>• Community Health Centre site (including Mental Health)</td>
</tr>
<tr>
<td></td>
<td>• Synthetic athletics track</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 5</th>
<th>Provision for two or more municipalities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Highest Order Performance Arts Facility</td>
</tr>
<tr>
<td></td>
<td>• Universities/TAFEs</td>
</tr>
<tr>
<td></td>
<td>• Level 4 Community-based health precincts - Hospitals with community-based health services</td>
</tr>
<tr>
<td></td>
<td>• Regional Parks</td>
</tr>
</tbody>
</table>