

Wellbeing Assessment of the Castle Plaza Development Plan Amendment

Report

for

**City of Marion
Department of Health**

**From
Quigley and Watts Ltd.**

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1. Introduction

Quigley and Watts and Martin Ward were contracted by the Department of Health and the City of Marion to develop and facilitate an assessment process. The purpose was to assess how well the Development Plan Amendment (DPA) for the redevelopment of the Castle Plaza site in Edwardstown contributed to reaching the 'Healthy Transit-Oriented Development (TOD) Principles', and identify where the DPA could be further strengthened. This assessment process formed part of the Castle Plaza Health in All Policies health lens project.

1.1 Aims

The aims of the work were to:

1. trial the feasibility of applying the Healthy TOD Principles to a DPA process in a local government setting.
2. trial a Health Lens Rapid Assessment Process within a local government setting as part of the Health in All Policies (HiAP) approach.
3. identify whether the Castle Plaza DPA can be strengthened to support the delivery of urban form that
 - a. supports positive health and wellbeing
 - b. increases community amenity
 - c. delivers a commercially viable and sustainable development.
4. engage with key agencies to build and strengthen partnerships.
5. identify opportunities for the City of Marion to incorporate the findings of the Health Lens Rapid Assessment Process into future DPAs for the Castle Plaza TOD as well as future development proposals.
6. provide Department of Health and City of Marion staff with opportunities to gain the skills and knowledge necessary to apply a rapid assessment process in other work areas of the City of Marion, and in other council areas.

1.2 South Australian Government and City of Marion Commitment to Health

South Australian Government

The South Australian Government is committed to improving the health and wellbeing of the population, as reflected in the South Australian Strategic Plan (SASP). Targets contained in the Plan reflect direct and indirect factors that contribute to the health wellbeing of the population and include T3.6 Use of Public Transport, T1.21 Strategic Infrastructure, T3.5 Greenhouse Gas Emissions, T3.7 Ecological Footprint, T3.12 Renewable energy, T3.14 Energy efficiency-dwellings, T2.2 Healthy Weight, T2.4 Healthy South Australians, T2.8 Statewide Crime Rates, T2.9 Road Safety- Fatalities and T2.10 Road Safety- Serious Injuries.

City of Marion

Community wellbeing, which is synonymous with 'health', is a high priority for the City of Marion. This is evidenced in Council's membership of the World Health Organization's Alliance for Healthy Cities. The *City of Marion Strategic Plan 2010-2020 'Broad Horizons Bright Future'* and associated Theme Plans representing *Community Wellbeing, Healthy Environment, Dynamic Economy and Cultural Vitality* set out the vision, direction and strategies for the future of a healthy city.

To ensure robust health outcomes are achieved across all sectors, the City of Marion has a strong commitment to building collaborative partnerships with state and federal governments, its business community, and importantly the wider community that is represented by individuals and groups that have a diversity of interests and needs.

1.3 Background information

30-Year Plan for Greater Adelaide

The South Australian Government has recently developed its '*30-Year Plan for Greater Adelaide*'. The *30-Year Plan* is an integrated approach to urban planning and amongst other objectives seeks to fundamentally shift the mix of new residential development from being predominantly at the urban fringe to being predominantly within infill areas. TODs are an essential part of achieving greater infill development that is also integrated with public transport, employment and a range of facilities including retail outlets and services.

Castle Plaza has been identified as a TOD and required a DPA to enable the development to proceed.

In the past, land use development was centred on automobile use and has consequently contributed to a range of health, social and environmental concerns. These include the global epidemic of obesity, community isolation, poor air quality, over-consumption of valuable land and increased reliance on private vehicles which are reliant on ever depleting supplies of fossil fuel. Well planned TODs offer a different approach to development and offer new lifestyle options for people. They provide more travel choices as well as greener and healthier travel options through the creation of new walkable communities in and around TODs. The *30-Year Plan* seeks to create more walkable neighbourhoods, develop higher density areas of good-practice, sustainable urban design, and create a network of open space precincts to absorb local carbon emissions and provide sheltered, cooler places for people to use.

Role of Development Plan Amendments

Across South Australia, each Council is required to maintain a Development Plan - a legally binding document that sets out the guidelines for development in the Council area. This is the primary document that contains the City's planning vision and policies. A Development Plan Amendment enables Council to provide enough land for future use, respond to changing development and population patterns and reflect State Government objectives for future development. The DPA consists of an explanation of the proposed changes to the existing Development Plan as well as the research that underpins these proposed changes. The process associated with each DPA includes a number of checks and balances, including a public consultation period; an informal information session; an official, formal public hearing; and consultation with other government agencies.

DPAs are integral to enabling a change in the nature of development in a given area. A DPA requires endorsement by both the relevant Council and the State Government. DPAs achieve better policy outcomes where there is effective collaboration across State agencies, the development proponent, Council and the community.

Health in All Policies

The Health in All Policies (HiAP) approach was adopted by the South Australian Government following a key recommendation from Professor Ilona Kickbusch as 2007 Adelaide Thinker in Residence. 'Health lens' is part of the broader HiAP approach and involves a collaborative process between Department of Health and other government agencies to analyse their proposals, plans and policy decisions to identify opportunities to maximise the health benefit to the South Australian community and, at the same time, to achieve the other agencies goals.

Applying a health lens to the planning and delivery of TODs can help understand the complex interplay between a range of factors that impact on health and wellbeing and hence the "liveability" and desirability of these developments.

Healthy TOD Principles

The development of Castle Plaza Healthy TOD sub-Principles builds on a recently completed collaborative TODs Health Lens project between four South Australian Government agencies: the Department of Health, the Department of Planning and Local Government, the Department for Transport, Energy and Infrastructure, and the Land Management Corporation. One of the key outcomes of this project was a Healthy TODs information resource, including a series of Healthy TOD Principles. The City of Marion has drafted sub-principles (under the broad Healthy TOD Principles) which are particularly relevant to the Castle Plaza development. These principles (*see Appendix 1*) have been used as the basis of the key tool for this Rapid Assessment Process.

The City of Marion and the Department of Health recognised that the redevelopment of Castle Plaza provided an ideal opportunity to trial the application of the Healthy TOD Principles to a proposed TOD site.

Castle Plaza Development

The Castle Plaza TOD, located between South Road and the rail corridor in Edwardstown, is one of the first to be planned and constructed within the context of the *30-Year Plan* and is of a similar scale to the Bowden TOD being developed by the State Government's Land Management Corporation. Castle Plaza is predominantly in single ownership by developer Colonial First State. The developer purchased the adjacent Hills Industries site (approximately 8 hectares) in 2007 and is well advanced in the development of a design for the extension of their retail area. Colonial First State has undertaken significant analyses and investigations and is ready to proceed with the development of the site once rezoning has been gazetted.

City of Marion endorsed a draft DPA for community consultation on 28 September 2010. This consultation occurred from November 2010 - January 2011. A copy of the DPA is in *Appendix 2* of this report.

City of Marion wished to undertake a health lens project to investigate opportunities to strengthen its DPA policies so as to increase the potential for an improved urban environment which will support health and wellbeing.

1.4 Definitions and Acronyms

The following definitions have been used in this report:

- 'Castle Plaza Development (CPD) site' – the area for which the DPA has been submitted.
- 'Castle Plaza TOD' – the area including the DPA area and the neighbouring areas

CPD	Castle Plaza Development
CPTED	Crime Prevention Through Environmental Design
IDC	Integrated Design Commission
DFC	Department of Families and Communities
DPLG	Department of Planning and Local Government
DTEI	Department of Transport, Energy and Infrastructure
EPA	Environment Protection Authority
OPAL	Obesity Prevention and Lifestyle program
PIA	Planning Institute of Australia
SASP	South Australia's Strategic Plan
TOD	Transit-Oriented Development

2. Approach – Wellbeing Assessment

The Healthy TOD Principles developed through the collaborative health lens process and revised by the City of Marion are holistic and include components such as liveability, biodiversity, economic growth and environmental sustainability to name a few.

As a continuation of the HiAP approach Department of Health and the City of Marion agreed to jointly undertake a health lens analysis of the Castle Plaza DPA. The purpose of this analysis was to assess how well the Castle Plaza DPA contributed to reaching the Healthy TOD Principles and where it could be further strengthened.

Development of assessment process and tool

An innovative process was required and a new process and wellbeing appraisal tool was drafted by Quigley and Watts Ltd and Martin Ward to be used throughout a three-day rapid assessment process. The agenda for the three day workshop is presented as *Appendix 3*.

The process and tool needed to allow a complex DPA to be transparently assessed in a pragmatic and useful manner for decision makers. To undertake the work, five supporting aspects were required:

1. A set of principles against which the proposal could be assessed, in this case the City of Marion Healthy TOD Sub-Principles (already available).
2. A thorough understanding about the proposal being assessed, in this case the Castle Plaza DPA (provided by the workshop participants).
3. A thorough understanding of the decision-making process so that recommendations for change could be useful (provided by the participants).
4. Excellent working relationships between the key stakeholders.
5. Participation by people with appropriate knowledge and skills including a good understanding of economic, environmental, social and cultural issues and trends.

The process was designed to provide a pragmatic assessment approach where identifiable gains could be made to the DPA using limited time and human resources. Because many of the components that make up the Healthy TOD Principles cannot be objectively defined or measured the draft tool was further developed by the workshop participants based on their knowledge, and then the DPA was scored against the refined tool. The scoring process identified whether the DPA was likely to meet, or not meet, the desired outcomes set by the participants. The benefit of this situation is that the information produced is simple to understand and communicate, and it is highly likely to be useful to the decision maker.

While there are well-established practices for assessing impact across multiple criteria, they are typically not undertaken in a single workshop and instead are undertaken as separate assessments e.g. Environmental IA, Social IA, Health IA, cost-benefit etc. The intention of this health lens approach was to further develop the scoring scale using the City of Marion Healthy TOD Sub-Principles, assess each of the necessary principles, make an assessment of the DPA policies and develop recommendations in one integrated meeting.

The three day wellbeing assessment workshop was held from 30 November – 2 December 2010.

Participants in the wellbeing assessment workshop included:

State government agencies Department of Health
 Department of Planning and Local Government
 Department of Transport, Energy and Infrastructure
 Land Management Corporation
 Housing SA

City of Marion
 Colonial First State (site owner)
 Jensen Planning

Scoring Process

The scoring scale developed by participants in the workshop is presented in Appendix 4.

The scoring scales show the:

- Criterion – overarching groupings of criteria that relate back to the groupings in the City of Marion Healthy TOD sub-principles
- Sub-Criterion – (31/32 etc) key elements of the City of Marion Healthy TOD sub-principles.
- Description – a more detailed description of the sub-criterion.
- Scoring scales – a 5-point scale from negative (-1) through to strongly positive (+3), that sets out potential outcomes for the DPA
- Assessment Criteria – selected issues under each of the scoring scales that reflect one or more important aspects within each subcriterion.
- Lower bound –the lowest acceptable conditions that in turn *should* contribute to a healthy community. The lower bound as assessed by the workshop participants is denoted by a **blue** square
- Upper bound – more ambitious conditions that should contribute to a healthy community both within the DPA area and for people living outside the DPA area. A stretch target. The upper bound as assessed by the workshop participants is denoted by a **green** square.
- DPA Scores - the rating given by participants of the Castle Plaza DPA against the scoring scale, denoted by a black circle.

Castle Plaza Development Plan Amendment Health Lens - Final list of criteria								
RED								
Criterion			Description	Moderate negative impact -1	Neutral impact -0	Moderate Positive impact +1	Strong positive impact +2	Positive impact beyond TOD area +3
J. Workplace access and amenity	31	Employment and economic diversification	Enables establishment of diverse economic activities providing up to 3000 new jobs	Less than 250 new jobs accommodated on Castle Plaza site	Less than 500 new jobs accommodated on Castle Plaza site	At least 1000 new jobs	At least 2000 new jobs AND local hiring policy	At least 3000 new jobs AND local hiring policy AND sustainable workplace travel policy
	32	Education and training services	Access to all levels of education and training services (via public or active transport)	Poor public transport services to training / education sites	Frequent public transport only available during peak periods to training / education sites	Frequent public transport available within 800 metres of TOD during extended periods to training / education sites	Frequent public transport available within 400 metres of TOD during extended periods to training / education sites	2+ AND Light and heavy rail to range of CBD and metro education facilities. When scored anticipating new rail station

The Criteria and assessment criteria identified were:

Principal Criteria/Criterion	Assessment Criteria
Workplace Access and Amenity	Employment and economic diversification
	Access to education and training services
	Diversity of type and size of businesses
	Broadband access
Healthy Environments	Water use
	Water sensitive urban design
	Greenhouse gas emissions
	Outdoor air quality
	Indoor air quality
	Noise – outdoors in the public realm
	Noise – indoors in the private realm
Physical Activity	Biodiversity
	Permeable neighborhoods linking with surrounding areas
	Connectedness – destinations within the CPD site
Sustainability and vibrancy	Active transport
	Integration – mix of land uses
	Open space
Mental health and wellbeing	Net housing density and diversity
	High amenity streetscapes
Sense of place	Crime prevention through environmental design (CPTED)
	Streetscape legibility
	Structure – street connectedness
	Afterhours use of sites
	Community and civic space in commercial area
Social inclusion and cohesion	Art, celebration of community identity and culture
	Building design and flexibility
	Affordable housing
	Housing tenure
Accessible public transport	Inclusive design process
	Public transport access
	Travel modes
	Residential car parking
	Retail car parking
Climate change mitigation	Office car parking
	Energy efficient commercial building design
	Energy efficient residential building design
Access to healthy food	Use of renewable energy
	Access to healthy food

The workshop had an appropriate number of participants to run four small groups. Therefore the criteria were divided into four groupings so that each group had a similar number of criteria to assess. There was a broad attempt to keep like content areas together, but the main rationale for the groups was work volume (i.e. number of criteria per group). The four groups were colour coded as follows:

Red group	Workplace access and amenity Healthy environment
Black group	Physical activity Sustainability and vibrancy Mental health and wellbeing
Green group	Accessible public transport Climate change Access to healthy food
Blue group	Social inclusion and cohesion Sense of place

2.2 Assessment Criteria, Upper and Lower Bounds and Castle Plaza DPA Score

Within their four groups the workshop participants:

- Refined the assessment criteria and the elements of the 5-point scoring scale.
- Identified the upper and lower bounds of the 5-point scoring scale against the assessment criteria
- Scored the Castle Plaza DPA against the assessment criteria
- Developed a series of recommendations for the DPA, the City of Marion, State Government Agencies and the developers. The recommendations can be found in Sections 3 and 4 of this report.

This report outlines the Recommendations as well as the findings from the process of scoring the Castle Plaza Development Plan Amendment.

3. Recommendations – Development Plan Amendment

A number of the recommendations were directed specifically at the DPA process. To supplement this work participants recorded additional information (where possible) and this has also been captured for each of the assessment criteria as described below.

Add to Objectives

Specific wording changes to the Objectives of the DPA were identified by participants, as outlined below – additions are in **bold**.

Objective 0 – A development that is different to what has occurred before, that is innovative and visionary, that pushes the boundaries in development quality and development design to support holistic social, economic, cultural and environmental outcomes.

Objective 1 – A vibrant ~~transit~~ **people** focused activity centre servicing the **diverse** retail, employment, **office**, community services, **socio-cultural** and housing needs of the community within the surrounding district, integrated with a highly accessible public transport network.

Objective 2 – High density **and high quality** residential development, **that includes** a minimum of 15 per cent affordable housing, designed to integrate with areas of open space, non-residential activities and public transport nodes.

Objective 3 – Development that **focuses on the needs of diverse peoples** to increase vitality and activity and achieves a safe and secure built environment through the activation of street frontages and adoption of appropriate design, materials, lighting, furniture, landscape and **local** public art.

Objective 4 – Creation of a network of **prioritised** pedestrian and cycle paths **within the site** linking retail, employment and residential activities with each other and public transport nodes, **and connecting to networks outside the site.**

Objective 5 - Development that minimises any adverse impacts upon **people**, the amenity of the locality **experienced by people**, and conflict between land uses **that might unduly affect people.**

Objective 6 – *Removed* (Development that contributes to the desired character of the zone.)

Objective 7 – A mixed use zone that is a model for protecting and promoting the health and wellbeing of diverse peoples. Children, families, youth, adults, older people, people with disabilities and people from diverse cultural backgrounds.

Add to Desired Character:

- References such as ‘welcomes; supports; provides’, ‘for people; diverse peoples; families; children; youth; older people, people with disabilities’
- Instinctive way-finding/legibility both within and into Castle Plaza site
- Reinforces strong links with services and facilities outside of the site
- A mix of hard/soft, green and play space for active/passive recreation
- Describe ‘space that may in the future be used for a farmers market’
- Specific references to ‘design and siting of buildings (especially residential) to respond to and mitigate noise from rail, road and mixed uses’.
- Public spaces that have provision for residential entertaining
- Local indigenous planting in landscaping
- Cultural dimensions that reflect the history of the site, indigenous peoples, relevant migrant groups and mainstream Australian culture
- Describes office, residential and retail buildings that are connected to high speed broadband
- Specific reference to development that contributes to improvements in outdoor and indoor air quality through building design, and mitigation of poor outdoor air quality by siting.
- ‘flexible large floor plate office space’

Add to Principles of Development Control

- 2 (a) or 4 - include space that may in the future be used for a farmers market
- 8 (c) ‘and has a lower priority than cycle or pedestrian modes’
- ‘8 (e) ‘the ‘siting’ and design of buildings, especially residential, respond to and mitigate noise from rail, road and mixed uses’
- 8 (f) ‘High speed broadband is available to and within all buildings’
- 8 (g) – ‘contributes to improvements in outdoor and indoor air quality [include indoor if not covered by building code] through building design, and mitigation of potentially negative outdoor air quality by ‘siting’.
- 8 (h) – ‘it is a leading example of energy efficiency, greenhouse gas reduction, water use, water capture and water reuse’ (note, this is across the site, not just for buildings)
- 8 (i) – ‘high speed broadband capability is able to be used within and throughout each building’.
- 14 - Remove ‘shared traffic zones’
- 14 (a) include ‘a mix of hard/soft, green and play space for active/passive recreation’, and ‘shade’
- 14 (c) – ‘entertain’
- 14 (g) – ‘local indigenous planting, trees’
- 14 (i) - ‘local indigenous planting, trees, local public art and spaces for display of art’
- 14 – ‘hard/soft green and play space for active/passive recreation’
- 14 (j) – expand description of ‘water sensitive urban design measures’ to be explicit
- 14 (k) – incorporate cultural dimensions, motifs, designs, names that reflect the history of the site, indigenous peoples, relevant migrant groups and mainstream Australian culture
- 16 – Question the appropriateness of this principle as density should address this issue. If density does not address this issue, then specify different density levels for core/heart of the site.
- 20 - Dwelling layouts should be adaptable to accommodate: (d) accessibility and usability for people of all ages and for people with disabilities; (e) diverse family sizes, student housing, special needs housing, a diverse range of users (i.e. artist studios).

- 27 - 'surrounding areas'
- 27 (c) – include way-finding/legibility-within and –into Castle Plaza site

Concept Plan to:

- Map local streets with potential for low speed residential mixed areas that have pedestrian and cyclist priority
- Show pedestrian and cycling linkages, including 2-way permeability
- Identify existing cycle-use routes (along street network), dedicated cycle-ways, and proposed dedicated cycle-ways (e.g. along rail line), along with suggested access points into and out of the Castle Plaza site

Investigate special provision for:

- A community garden
- A space that is flexible enough to be able to be used for a Farmers Market if desired by future residents
- High quality student housing with lower car parking ratios

Undertake:

- a social audit/needs analysis as part of the process to inform decisions taken on the DPA

4. Recommendations – State Government, City of Marion and Developer

The following recommendations were identified through the process of assessing the DPA but sat outside the DPA process.

Each sector had recommendations specifically directed at them. They are:

Recommendations to State Government

Recommendations	Agency
Public transport	
Government Ministers support a new train station (and inter-modal facilities such as bike parking) at Castle Plaza site to support the reduced car park ratios.	Ministers
Support electrification of rail corridor.	DTEI
Ensure that bus route services in the TOD connect with rail.	Public Transport Services Division of DTEI
Investigate the better characterisation of public transport demand and opportunities, to inform a public transport plan for the CPD site and wider.	DTEI
Ensure public transport frequencies and hours of operation are reviewed/extended.	DTEI
State and public transport providers deliver clean, affordable, efficient and safe public transport to reduce private transport vehicle use.	DTEI
Provide access to the Castle Plaza site from the proposed cycleway along the rail line.	DTEI
Provide pedestrian crossing across South Road at Raglan Avenue, coordinated with adjacent intersection crossings.	DTEI
Urban structure	
Marion City and DTEI to identify ways to connect the existing community to the CPD site across South Road.	DTEI
Establish appropriate pedestrian crossings across the rail corridor, and maintain or improve access across South Road, for example add a pedestrian crossing across South Road.	DTEI
Redevelop South road.	DTEI
Develop design standards for shared zones and endorse (where local roads give priority to pedestrians and cyclists).	DTEI
DTEI to provide cycle access from the proposed cycleway along the railway line into the CPD site.	DTEI
Energy efficiency	
Promote energy efficient buildings to public.	
DPLG to investigate policy options for climate change adaptation to be included in the Development Plans and Development Plan Amendments.	DPLG

Recommendations	Agency
Economic	
Include the pursuit of 3000 jobs as part of the state and local governments 30 year plan.	
Consider CPD site as a developing service centre for Southern Adelaide.	DTED
Housing	
Investigate with Developers, State Government and Council the feasibility of accessible and adaptable residences being a focus of developments.	
State government, Council, PIA and Peak Bodies to educate the market about the types of dwellings available and opportunities they provide.	
The Minister consider supporting future DPAs around TODs to get a policy framework to support the TODs in achieving their density targets and acknowledge that there will likely be the need for transition zones.	
Review the current definition of affordable housing and the model, to create a new rating that reflects upfront and lifecycle costs.	Housing SA
State government and Marion City Council to provide incentives to developers to increase percentage of affordable housing above 15%.	DFC
BDP modules	
BDP modules to include stronger policy on human sale, light, shade, renewable energy, housing diversity.	DPLG

Recommendations to City of Marion

Recommendations	
Marion City Council to provide feedback to DPLG on their modules to support the importance of housing diversity.	
Public Transport	
Investigation of a new rail station being built as part of a City of Marion submission to the State Infrastructure Plan.	
City of Marion and Onkaparinga to convene working group on joint issues (e.g. public transport) for TODs.	
Urban structure and active transport	
Marion Council to review existing bicycle and pedestrian pathways that connect (or need to connect) into the TOD and to allocate budget to create/enhance connections.	
Liaise with the City of Mitcham to integrate cycle and pedestrian networks.	
Ensure connections from the CPD site are made to venues in the wider TOD area, e.g. Edwardstown Oval, the Recreation Centre, Greenway via safe attractive walking and cycling paths. Consider traffic calming in Raglan Street.	
City of Marion to develop a Traffic Management Plan that is inclusive of pedestrians and cyclists that incorporates traffic calming, way finding and signage.	
Council to work with other interest groups to get the finalisation of the Design Criteria for 'Shared Zones', particularly the requirements for cyclists and pedestrians.	
Encourage developer and their consultants to use streets for people compendium.	
Developer and Marion City Council to review streetscape legibility and instinctive way finding within and into/out of the TOD. For access into/out of TOD particular focus was requested by the participants on the existing and proposed train stations, and across South Road.	

Urban Structure and public realm
Develop a Maintenance Management Plan for the public realm.
Development of quality flexible spaces that support structured and semi-structured activities in the public realm and commercial areas.
Review development policy on existing residential areas for structure – human scale, coordination.
Engagement between Marion City Council and Developer to negotiate the development of community and civic space in the commercial area.
Provide developer the Council's Open Space Plan, Street Tree preferred list and street furniture list.
Negotiate with developer to give unique vision and feel.
Suggest Universal Access as a design principle for within the CPD site, for example for the vision impaired, wheelchair/push chair access, beyond minimum standards.
Provide space and amenity for a farmers market to operate, if requested by the community.
Ensure appropriate Adelaide City Council mixed use policy is adhered to, and go beyond this minima if required.
Ensure appropriate BDP high intensity mixed use draft policy is adhered to, and go beyond this minima if required.
Economic
Encourage developer (Colonial) to partner with other mixed used developers.
A market assessment of office accommodation in the region is needed.
Support and encourage local employment opportunities.
Monitor job numbers, sq metres of office space built, and number/type of residential units built.
Encourage the residential developments to be of high quality to attract all types of potential workers.
Marion Council to investigate whether businesses can provide a delivery service for those shoppers who walk or cycle.
Housing Affordability
Work with developers and Housing SA to identify appropriate percent of affordable housing for CPD and wider TOD.
State government and Marion City Council to provide incentives to developers to increase percentage of affordable housing above 15%.
Marion City Council and the developer to negotiate with DFC about interest in affordable housing within the CPD site and wider TOD site.
Consider investigation of incentives for affordable/community housing providers such as rates rebates.
Alternatively, negotiate with other affordable housing providers.
Housing Diversity
Investigate optimal housing tenure diversity and depending on the evidence examine policy that can support the desired outcome.
Consider investigation of Student Accommodation within the CPD site.
Housing Density
Council needs a broader DPA that reviews density around this TOD and others – may encourage differing densities and dwelling types.
City of Marion and the Developer to confirm density targets for the CPD site and wider TOD.
City of Marion and the Developer to investigate the appropriateness of row-dwellings on the ability to achieve residential density targets for the CPD site and beyond.

Housing Accessibility
Investigate with Developers, State Government and Council the feasibility of accessible and adaptable residences being a focus of developments.
Engagement Process with the Public
Holistic models of engagement to be investigated, agreement reached about a process for meaningful engagement agreed and resources to develop tools.
Develop a more extensive consultation plan at DPA and Structure Plan levels.
Resources and staff for consultation during DPA, Structure Plan and Precinct level needs to be adequate to undertake collaboration with stakeholders, and to upskill staff
Undertake a social audit/needs analysis to inform CPD site/TOD and what services are needed. Ensure these services are specifically included in the DPA. Conduct with developer. Check what existing data can be used before undertaking social audit/needs analysis.
Get information about needs of cyclists/pedestrians.
Adequate resourcing in Council to facilitate an expected increase in community activities.
Developers and Council to give consideration to the Arts Community as investors to encourage culture and community connectedness. Involvement of this community in structure and precinct planning required.
During the master planning stage, work with the developer to create a 'Crime prevention and safety Provision Plan'. Consult with Police's Community Crime Prevention Unit and the community about these issues.
Energy Efficiency
Understand developers ESD scale.
Work with developer to aim for higher energy efficiency ratings for commercial and residential buildings.
Investigate with developers the capture of energy and resources consumption across the TOD, for example with Lochiel Park.
Promote energy efficient buildings to public.
Water and Air
Include Castle Plaza site in 'Waterproofing Marion' and other water re-use investigations.
Investigate possibility of on- or near-site water capture and reuse, e.g. at Edwardstown Oval.
Request residential mains use data from State Government for similar sites (that could be used as a baseline).
That green spaces are included within the CPD site, and are maintained with non-mains water wherever possible.
Biodiversity
The City of Marion to investigate greenway corridors nearby. Ensure CPD site links to greenway corridors to support regional movement of biodiversity (plus local indigenous vegetation).
Healthy food
Develop a community garden policy.

Recommendations for the Developer

Recommendations
Urban Structure
The Developer asked to undertake a road safety audit that includes consideration of vehicle hierarchy.
Developer and consultants to use 'streets for people' compendium.
Ensure public/private outdoor spaces have provision for residential entertaining.
Use Universal Access as a design principle for within the CPD site, for example for the vision impaired, wheelchair/push chair access, beyond minimum standards.
Develop Maintenance Management Plan with Council for shared public realm.
Energy Efficiency
Work with Council to aim for higher building and residential energy efficiency ratings.
Use energy efficient street lighting.
Housing
City of Marion and the Developer to investigate the appropriateness of row-dwellings on the ability to achieve residential density targets for the CPD site and beyond.
Negotiate with DFC about interest in affordable housing in Castle Plaza TOD (alternatively other affordable housing providers).
Investigate with Developers, State Government and Council the feasibility of accessible and adaptable residences being a focus of developments.
Work with developers and Housing SA to identify appropriate percent of affordable housing for CPD and wider TOD.
Engagement with the Public
Undertake a social audit/needs analysis to inform CPD/TOD and what services are needed. Ensure these services are specifically included in the DPA. Conduct with Council.
Developer to consult with the local Police Community Crime Prevention Unit as part of the community consultation phase during Master Planning.
Developer to consult with the wider community about CPTED during the Master Planning stage.
Biodiversity
The Developer to support the regional movement of biodiversity through the use of local indigenous vegetation that connects to these corridors.
The developer to use local indigenous vegetation in landscaping.
The developer includes deep root zones in landscaping to allow tree planting for shade and cooling.
Economic
Ensure office floor plates are flexible enough to cope with a large employer should one be interested in the future.
Air and Water
To discuss with DPLG (Alison Collins) about the current drafting of the State Government specifications for building along main roads regarding air quality and noise.
If not covered by the building code, the development should take into account improving indoor air quality using non-mechanical means.
Push beyond legislated minimum water conservation measures in residential dwellings and develop innovative practice.
Consider Water Sustainable Urban Design technical manuals in design and built form.

5. Findings – Scoring of Castle Plaza Development Plan Amendment

The following section provides discussion around the scoring of the Castle Plaza DPA against the assessment criteria and the development of the recommendations. It should be noted a number of the recommendations highlighted in this section are outside the scope of the DPA, rather they are directed at Marion City Council, state government agencies and the developers.

The principal criteria have been reported in the same order in which they were assessed in the workshop, as described in Section 2.

Workplace Access and Amenity

Employment and economic diversification (31) and Diversity of type and size of businesses (33).

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
J. Workplace access and amenity	31	Employment and economic diversification	Enables establishment of diverse economic activities providing up to 3000 new jobs	Less than 250 new jobs accommodated on Castle Plaza site	Less than 500 new jobs accommodated on Castle Plaza site	At least 1000 new jobs	At least 2000 new jobs AND local hiring policy	At least 3000 new jobs AND local hiring policy AND sustainable workplace travel policy

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
	33	Diverse type and size of businesses	Development is flexible enough to accommodate diverse businesses that are consistent with objectives of the DPA	Undesirable land uses	Under-utilised land	DPA articulates a range of compliant developments consistent with the objectives of the development.	Large commercial and retail floor plates adaptable for small and large tenancies	Not applicable

Discussion

These criteria were scored against the DPA, and for 31, just scored against the jobs (not the local hiring policy). Participants knew the retail development would generate an additional 740 jobs and a further 1800 other jobs calculated from the 30,000 square metres of office space to be developed. The Developer stated that office space development is unlikely to be undertaken by the developer without commitment from a long-term large tenant. Participants believed there was a substantial risk that the office development therefore may not go ahead in the short-medium term. This has the potential to undermine a substantial component of the TOD concept if employment relies solely on retail development (approximately 740 additional jobs).

The nature of the TOD was believed by the participants to encourage both local employment and local residential development. Participants believed that the current local skill base was more likely to match the retail jobs that are expected to be created, but are less likely to match the office jobs. In support of the job creation prospects, the Economic Development Plan and City of Marion Strategic Plan both describe that diversity of jobs is needed (retail and office, small and large employers). There is a lack of large employers within the City of Marion at present.

At present there is a good understanding of the current level of jobs in the City of Marion, and the sectors/size of businesses present. This provides a solid baseline for future monitoring of changes in job numbers. Participants noted that it would be important to monitor the amount of square metres of office space built, and the number/type of residential units built.

The local hiring policy generated substantial debate amongst participants. That such a policy could not be foisted on businesses, or that such a policy could be incentivized by Council rather than dictated to. It was noted that Davoren Park Development has a local hire policy. It was agreed that some of the positive outcomes expected from the Castle Plaza Development relied

on local hiring, and while some were happy to leave this to the market, others noted situations where this had not worked and argued for modest Council intervention.

What recommendations can we make to support a healthy Castle Plaza Development, and who are they directed at?

- City of Marion to strongly encourage the developers to partner with other mixed-use developers, particularly for office and residential.
- Ensure office floor plates are flexible enough to cope with a large employer should one be interested in the future.
- DTED consider the Castle Plaza Development a centre for developing service industries in Southern Adelaide.
- Monitor job numbers, square metres of office space developed, and number/type of residential units developed.
- A market assessment of office accommodation in the region is needed.
- Encourage the residential developments to be of high quality to attract all types of potential workers.

Access to education and training services via public or active transport (32)

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area	
			-1	-0	+1	+2	+3	
J. Workplace access and amenity	32	Education and training services	Access to all levels of education and training services (via public or active transport)	Poor public transport services to training / education sites	Frequent public transport only available during peak periods to training / education sites	Frequent public transport available within 800 metres of TOD during extended periods to training / education sites	Frequent public transport available within 400 metres of TOD during extended periods to training / education sites	2+ AND Light and heavy rail to range of CBD and metro education facilities. When scored anticipating new rail station

Discussion

Participants acknowledged that the scope of the DPA cannot influence frequency of public transport services, however it can influence location. It was acknowledged by participants that the Castle Plaza DPA site was less likely to have substantial new educational facilities included, and therefore good access to nearby sites was required, by foot/cycle, or by public transport. However, participants did note that education services was a potential gap in the DPA as it is seldom mentioned. The current score of +2 envisages no new rail station, and the score would change to +3 if that occurred.

Locations of training and education providers are known, but access to them by foot/cycle or public transport, destinations/origins is unknown. How much the Castle Plaza development will contribute to such access is also unknown. An assessment of how the Castle Plaza DPA might impact on these transport options would be useful, and that could inform a Transition Transport Plan (if required).

If a new station was constructed for the Castle Plaza site it would be likely that other nearby station(s) would close. Heavy rail requirements for station distances also exist. Participants believed the Castle Plaza train station, that could potentially be the tram/train interchange, would ultimately increase the catchment for people using public transport and that it would link well to existing bus routes. It is important to better understand the above blocks/promoters to constructing/consolidating Edwardstown and Woodlands public transport hubs to Castle Plaza.

Recommendations

- Investigation of a new rail station being built as part of a City of Marion submission to the State Infrastructure Plan.
- Joint DTEI/ City of Marion investigation into better characterisation of public transport demand and opportunities with a view to develop a public transport plan for Castle Plaza and environs.
- City of Marion recommends to DTEI that extension of public transport service frequencies and hours of operation be investigated.
- City of Marion and Onkaparinga to convene a working group on joint issues (for example, public transport) for TODS.

Broadband access (37)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
J. Workplace Access and Amenity	37	Broadband access		Broadband not accessible from all buildings on the site	Broadband access in all buildings on the site	High speed broadband available to office and retail tenants on the site.	Ubiquitous high speed broadband access.	N/A

Discussion

This criteria was scored against the DPA. Participants acknowledged that broadband access was now a core utility for economic performance, and for accessing social networks, and health and social information. Participants noted that the current DPA did not mention broadband access, and believed that specific mention was needed.

Recommendations

- DPA specify adequate utilities and services for the site, including high speed broadband.

Healthy Environments

Water use (17)

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area	
			-1	-0	+1	+2	+3	
E. Healthy Environments	17	Water use	Reduction in levels of mains water use (for residential only)	No reduction in mains water use by land use	<10% reduction in mains water use by land use	10% reduction in mains water use by land use	20% reduction in mains water use by land use	30% reduction in mains water use by land use

Discussion

This criteria was scored against the wider TOD area and used the existing knowledge of the participants. Participants believed that the scale needed to reflect residential mains water use when compared against comparable land uses, rather than against existing residential mains use, as there is no residential use on the CPD site at present.

Participants acknowledged the importance of water reuse for two reasons. Firstly, to reduce the water footprint of the CPD site and secondly, to acknowledge that water use (from any source) is critical for maintaining any developed greenspaces. This was especially true for the CPD site as any residential housing is unlikely to have any/substantial personal greenspaces attached to their dwellings. Participants cited literature studies showing strong evidence between greenspaces being protective and supportive of mental wellbeing.

Recommendations

- That any developer includes water conservation measures in the residential dwellings that go beyond state minimum requirements and represent innovative practice.
- That greenspaces are included within the CPD site, and are maintained with non-mains water wherever possible.
- Data about residential mains use from similar sites (that could be used as a baseline) should be requested from State Government.

Water sensitive urban design (18)

Criterion			Description	Moderate negative impact -1	Neutral impact -0	Moderate Positive impact +1	Strong positive impact +2	Positive impact beyond TOD area +3
E. Healthy Environments	18	Water sensitive urban design	Water run-off sustainably managed and water quality maximised	Increased flows or pollutants enter water	Water quality and flows remain at pre-development levels	20% water reuse, e.g. permeable paving, rainwater tanks,	Above 50% water reuse, e.g. underground water storage and swales,	2+ Above 80% water reuse, e.g. regional connection through purple pipes, green roofs and living walls,

Discussion

This criteria was scored against the DPA. Participants noted that the current DPA did discuss 'provide for water sensitive urban design measures' in public open spaces – but no other mentions were made. For example water reuse targets, capture or reuse, or private spaces were not described. Recommendations for the DPA are in Section 4.

Recommendations

- The City of Marion includes the Castle Plaza site in investigations about water re-use and 'Waterproofing Marion'.
- The developer and the City of Marion to investigate the probability of on-site or near-site (e.g. Edwardstown Oval) water capture and reuse.
- The developer to consider use of Water Sensitive Urban Design technical manuals for design and built form.
- The developer includes deep root zones in landscaping to allow tree planting for shade and cooling.

Reduce greenhouse gas emissions by land use effects on trip generation (19)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
E. Healthy Environments	19	Greenhouse gas emissions	Reduce greenhouse gas emissions by land use effects on trip generation	Emissions by land use equivalent to current emission levels	Emission levels reduced by <10%	Emission levels reduced by 10% by 2020 and 20% by 2050	Emission levels reduced by 20% by 2020 and 40% by 2050	Emission levels reduced by 40% by 2020 and 60% by 2050

Discussion

Participants noted that other indicators, such as travel modes, and energy efficiency are relevant to this. Participants were unable to judge emission reductions and scored this criteria based on their existing knowledge. Participants believed that further information was required around current greenhouse gas emissions baseline and emissions from current trips.

It was also noted by participants that while apartments have higher energy use than low density dwellings, that this is offset by mixed land use, close proximity to services and public transport, walkability and overcoming private vehicle dependence. Street lighting was considered an important land use effect, and participants made a recommendation relevant to that.

Recommendations

- As per recommendations relating to travel modes.
- Developers consider use of energy efficient street lighting.

Outdoor air quality (20)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
E. Healthy Environments	20	Outdoor air quality	Urban design and siting to minimise impact of poor air quality	Design and siting does not consider poor air quality	Design and siting recognises impact of South Road corridor and industrial areas	Design and siting has low level mitigation of South Road corridor and industrial areas	Design and siting has high level mitigation of South Road corridor and industrial areas	Design and siting improves air quality in Castle Plaza

Discussion

This criteria was scored based on the DPA. This was scored +1 on the basis of the removal of the intersection on South Road, which alone was believed by participants to substantially improve air quality around that area. Commercial-only uses along South Road, the set-back of residential dwellings were believed to be good mitigations to reduce the number of people exposed to the lower air quality of South Road. Participants also believed that electrification of the rail may improve air quality near that area. This good design was believed to be somewhat offset by the new east-west road (and subsequent flow of vehicles) through what is planned to be a high density residential area. Green roofs and additions of trees/plantings to the site would also help. Detailed recommendations to the DPA are contained in Section 4 of this report.

Recommendations

- The City of Marion supports the electrification of the rail corridor on the basis of improved air quality.
- The developer to discuss with DPLG about the current drafting of the State Government specifications for building along main roads regarding air quality and noise.
- DPA adapt design guidance for construction along main roads currently being developed by State Government.

Indoor air quality (20a)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
E. Healthy Environments	20a	Indoor air quality	Urban design and siting to enhance or improve air quality	Does not meet minimum requirements of EPA and/or building code	Meets minimum requirements of EPA and building code	Improves air quality with minimal use of mechanical means	Improves air quality using non-mechanical means	Not applicable

Discussion

This criteria was scored based on the DPA. Participants were unsure if the air quality in the indoor shopping centre was being monitored, but that data would be required as a baseline for this criteria. The +1 and +2 scores were based on the assumption that outdoor ambient air quality was acceptable (met EPA requirements), as outdoor air quality is known to substantially impact on indoor air quality. Participants were unsure whether indoor air quality was covered by the building code, but if not, believed some action was required. Mechanical air conditioning was considered normal practice by participants, but in conjunction with reducing energy use, participants queried there could be use of non-mechanical means to maintain indoor air quality.

Recommendations

- If not covered by the building code, the DPA should recommend the development take into account improving indoor air quality using non-mechanical means.

Noise – outdoor in the public realm (21)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
E. Healthy Environments	21	Noise – outdoor in the public realm	Siting and location of public realm to mitigate noise impact	Siting and design of public realm does not respond to noise impacts	Siting recognises noise impacts	Siting and design responds to minimise noise impacts	Siting and design responds to minimise noise impacts and significantly mitigates noise impacts	Not applicable

Discussion

This criteria was scored based on the DPA. Regarding the wording of the scale: Participants noted that ‘mitigates’ implies a measurable outcome whereas responds means an intention is featured in the design.

Participants believed commercial-only uses along South Road and the set-back of residential dwellings to reduce the number of people exposed to the noise levels from South Road were good recognition of the impact of noise. However, this was offset by location of the residential area next to the rail corridor and neighbouring industrial area, and by the new east-west road (and subsequent flow of vehicles) through what is planned to be a high density residential area. Participants described that the siting of the mixed use zone next to the residential dwellings will also require substantial noise mitigation, especially use of public and private outdoor spaces. Use of public and private outdoor spaces for entertaining was encouraged by participants, but such activities had to be planned for in the DPA, including from a noise mitigation perspective. Detail of recommendations to the DPA are in Section 4 of this report.

Recommendations

- DPA should require that the design considers noise from both South Road, rail, industrial, mixed use (especially public and private outdoor spaces) and internal roads.
- Developer to ensure public/private outdoor spaces have provision for residential entertaining.
- Ensure appropriate BDP high intensity mixed use draft policy is adhered to, and goes beyond this minima if required.

Enhance biodiversity (36)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
L Biodiversity	36	Enhance biodiversity	Soft landscaping that enhances biodiversity	Loss of significant trees and biodiversity	Retention of existing vegetation and significant trees	30% of new plantings locally native	80% of plantings locally native	100% of plantings locally native with connection through greenways (biodiversity corridors)

Discussion

This was scored based on the DPA. Participants believed this was a substantial gap in the Development Plan and DPA, and that planning for biodiversity and significant trees in the future is required. At present the DPA specifies the retention of some of the existing mature stand of trees on the Hills site, which was considered a good start.

Recommendations

- The City of Marion to investigate greenway corridors nearby.
- The Developer to support the regional movement of biodiversity through the use of local indigenous vegetation that connects to these corridors.
- The developer to use local indigenous vegetation in landscaping.
- The developer includes deep root zones in landscaping to allow tree planting for shade and cooling.

Physical Activity

Permeable neighbourhoods linking with surrounding areas (14)

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area	
			-1	-0	+1	+2	+3	
D. Physical activity	14	Permeable neighbourhoods – linking with surrounding areas	Creation of a permeable neighbourhood that promotes walking cycling and incidental activity	Street pattern and public realm is impermeable or has minimal permeability	Street pattern encourages walking/cycling within CPD	Street pattern and public realm encourages walking/cycling within CPD AND has some connection to surrounding area transit stations	1+ AND strong pedestrian/cycling connections to surrounding area and transit stations	1+ AND seamless integration of pedestrian/cycling connections to surrounding area and transit stations (grade separated from vehicles on South Road)

Discussion

This criteria was scored against the DPA. Participants noted that the concept plan showed pedestrian and cycling linkages within the CPD site, but it did not show a two way flow in/out of the site. To facilitate linkages out of the CPD site and to deal with the expected increase in demand of pedestrians accessing the CPD site (due to the development), participants believed a pedestrian crossing was required at Raglan Avenue, across South Road. Without this additional pedestrian access participants believed that further community severance would occur, and people may react to this by driving the short distance to the CPD site from their nearby homes. Those households without two cars may not access the site as often as they would want to. Any groups that do not have good access will have reduced access to any social activities and economic activities.

Dedicated cycle ways and existing routes/roads used by cyclists were not identified in the surrounding areas, and connections to these were not identified. For example there is a proposed dedicated cycle lane along the other side of the rail line. Linking these into the site will increase the likelihood of incidental physical activity.

Recommendations

- DTEI to provide access to the Castle Plaza site from the proposed cycleway along the rail line.
- DTEI to provide pedestrian crossing across South Road at Raglan Avenue, coordinated with the adjacent intersection crossings.
- City of Marion to develop a Traffic Management/Sustainable Transport Plan that is inclusive of pedestrians and cyclists that incorporates traffic calming, way finding and signage.

Connectedness – destinations within the CPD (15)

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
			-1	-0	+1	+2	+3
15	Connectedness-destinations within the CPD	Proximity to services and facilities	Loss of connections between residences, services, PT, workplaces and open spaces.	Lack of connections between residences, services, PT, workplaces and open spaces maintained.	Most major services required are within 800m of origin and destination within CPD	Most major and minor services required are within 800m of origin and destination within CPD	All major and minor services required are within 400m of origin and destination within CPD.

Discussion

This criteria was scored against the DPA. Participants acknowledged that further work on the definitions of origin and destination were required for this criteria. For example, do the criteria relate to:

- distance from every potential origin (such as a residence) to every potential service destination
- distance from every potential origin (such as a residence) to a transit point
- distance from a transit point to every potential service destination.

Notwithstanding this, the physical size of the CPD site allowed the participants to score the DPA as a +1, as 800m was about the full length of the site. Participants were unsure of the services that should be included when considering such a measure, leading to substantial discussion about the need to know more about social services actually required. For example, the criteria did not list children’s play areas as a necessary destination, though participants believed such areas were essential. Participants also discussed the importance that the CPD site should not ‘suck-in’ all of the existing social services in the wider TOD and surrounding area, and instead should support those services by making movement between them as easy as possible. Participants were pleased to see that the DPA desired character statement reinforced the strong links with existing services that surrounded the wider TOD area.

Recommendations

- Undertake a social audit/needs analysis to inform CPD/TOD and what services are needed. Ensure these services are specifically included in the DPA. Conduct alongside the developer.

Active transport (16)

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
			-1	-0	+1	+2	+3
16	Active transport	Pedestrians and cyclists to be highest priority in road hierarchy in CPD	Road layout and design accommodates cars over pedestrians/cyclists		Low speed residential streets within CPD that have equal priority for all users	Low speed residential streets and high place value within CPD that have equal priority for all users	Substantial car free precincts where pedestrians and cyclists have full priority

Discussion

This criteria was scored against the DPA. Participants did not specify a neutral impact. The DPA scored -1 because of its lack of discussion about prioritisation of transport modes. Participants also noted that there was no discussion in the DPA about active transport beyond the CPD site into and from the wider TOD area. Participants noted that the DPA maintained existing vehicle movement hierarchies, that would reduce the likelihood of achieving the desired active movement space discussed in the DPA. Active transport was noted for its positive impacts on multiple health and social outcomes, such as cardiovascular health and social inclusion. By changing the vehicle hierarchy the participants believed they could maximise the use of public realm spaces by people, and improve road safety outcomes. Participants were interested in the design of shared zones/naked streets, possibly within a Concept Plan.

Recommendations

- Council to work with other interest groups to get the finalisation of the Design Criteria for 'Shared Zones', particularly the requirements for cyclists and pedestrians.
- The Developer be asked to undertake a road safety audit that includes consideration of vehicle hierarchy.
- The City of Marion informs the Developer and the Developer's traffic consultants of the Streets For People Compendium currently being developed by the SA Active Living Coalition.
- City of Marion to construct a shared zone concept for use in the CPD site (in conjunction with DTEI) if the Streets For People Compendium is not finalised.

Sustainability and Vibrancy

Integration – mix of land uses (1)

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area	
			-1	-0	+1	+2	+3	
A. Sustainability and Vibrancy	1	Integration	Mix of land uses integrates work, education, home, retail and recreation space to meet daily/weekly needs	Development does not incorporate mix	Development incorporates horizontal mix at ground level	Development incorporates vertical mix adjacent to public transport station/stops	Development incorporates vertical mix adjacent to public transport station/stops/destinations and in area beyond	Not applicable

Discussion

This criteria was scored against the DPA. Participants noted that the CPD site was designed for vertical mix adjacent to public transport stops. Users discussed that the mix of land uses was the critical aspect to achieving the desired social, economic and health outcomes. At present the participants were unsure what mix was needed on the CPD site and beyond, as a social audit/needs analysis had not yet been undertaken. Participants were also wary of specifying that all buildings be prescribed to have a mix of vertical uses, particularly those away from the heart of the TOD and in the transition areas. A discussion about the appropriateness, or not, of row-dwellings next to the heart of the CPD-site occurred. Those in favour of row-dwellings suggested density could be met, and that there is a firm market for such properties; and development could start immediately; whereas those less in favour believed that density might be compromised, compromising the TOD concept. Consensus was not reached.

Connections to land uses on the border of the TOD, such as Edwardstown Oval and the Recreation Centre were also considered important.

Participants noted that if mixed use with appropriate residential density could be achieved, where residents and workers were able to meet their daily and weekly needs onsite, then outcomes such as improved wellbeing, high quality of life, access to healthy foods and decreased car dependence might occur.

Recommendations

- Undertake a social audit/needs analysis to inform CPD/TOD of required services. Ensure these services are specifically included in the DPA. Conduct alongside the developer.
- City of Marion and the Developer to investigate the appropriateness of row-dwellings on the ability to achieve residential density targets for the CPD site and beyond.
- Ensure connections from the CPD site are well made to venues in the wider TOD area, e.g. Edwardstown Oval and the Recreation Centre.

Open space (2)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
A. Sustainability and Vibrancy	2	Open space	Creation of public open spaces (for water conservation, mental health, social cohesion, incidental activity and recreation)	Open spaces are inaccessible AND with low amenity value	Open spaces are not functional	Functional open spaces in accessible locations	Functional open spaces in accessible locations that meet the needs of different population groups	2+ AND attract users from outside the CPD

Discussion

This criteria was scored against the DPA. Participants discussed the need to focus on those open spaces within the CPD site, and access to open spaces within the wider TOD. Strengthening the links to the Edwardstown Oval via safe and attractive walking and cycling paths were considered important. Participants noted that the open spaces being described in the DPA made no mention of the type of open space, or how it might be used. Participants noted that many of the benefits of open spaces were known to derive from greenspaces, soft surfaces and play spaces, and these were not specifically mentioned in the DPA. Similarly, active use of open space versus passive use of open space were discussed as important concepts to consider when designing the open spaces. Benefits from getting the open spaces ‘right’ were potential improvements in social capital, contribution to physical activity, contribution to SASP Healthy Weight targets, and assisting dealing with heat island effects. Participants noted that greenspaces appealed to all demographics of people and would be important for attracting businesses to the area.

Participants noted that the SA Active Living Coalition’s Literature Review on Open Spaces, *‘Creating Active Communities: How can open and public spaces in urban and suburban environments support active living?’* (UniSA, 2009) could be a resource for designers to consider. Recommendations that support fully functional open spaces link to the 30-Year Plan and to greenway strategies.

Recommendations

- Marion City Council and the Developer work collaboratively with the Council to define open space, preferred street trees, and furniture. Marion Council work with the developer to develop a unique vision and feel for the site.
- Marion City Council work to link the Edwardstown Oval to the Greenway.
- Marion City Council strengthen the integration between the Castle Plaza TOD with the Edwardstown Oval through safe and attractive walkway and cycle paths, with potential consideration of traffic calming in Raglan Street.
- Marion City Council and the Developer develop a ‘Maintenance Management Plan’ for the public realm.

Net housing density and diversity (9)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
A. Sustainability and vibrancy	9	Net housing density	Net housing density that promotes inclusivity, diversity and mixed communities	Development achieves 25 dwellings per hectare	Development achieves 35 dwellings per hectare	Development achieves 50 dwellings per hectare	Development achieves 70 dwellings per hectare	Not applicable

Discussion

The criteria was assessed against the DPA. The criteria described not just residential density, but also alluded to aspects of dwelling type diversity. Participants noted that both were important, and a mix of dwelling types for different size family units, ethnic groups and ages were needed. Participants described an ideal situation where a person can grow up in this area, passing through each stage of life, and finding the right type of accommodation at each life stage. Participants described that getting the right mix of dwelling types and density was critical to achieving the desired outcomes for a TOD, such as contributions to social capital, economic growth, income, access to services, social interaction, and reduced anxiety/depression. Participants were interested in having a definition of 'diversity of housing types/building type' being explicitly described.

Some participants did not believe that a density of 70 dwellings per hectare would be possible on the CPD site given the already large footprint of retail (and proposed additional retail and offices), but may be achievable within the wider area. Participants wanted to see more detail into where and how the residential density target for the CPD site could be met.

Participants described that the 30-Year Plan sets out the desire for 70 dwellings per hectare.

Recommendations

- Marion City Council and the developer to negotiate with DFC about interest in affordable housing within the CPD site and wider TOD site.
- Alternatively, negotiate with other affordable housing providers.
- Consider investigation of incentives for affordable housing providers such as rates rebates.
- Consider investigation of Student Accommodation within the CPD site.
- City of Marion and the Developer to confirm density targets for the CPD site and wider TOD.

Mental Health and Wellbeing

High amenity streetscapes (23)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
F. Mental health and wellbeing	23	Streetscapes	Safe, attractive, green, high amenity streetscapes and pedestrian/cyclist areas that encourage social interaction	Low quality streetscapes which are not well activated with adjacent development	Standard streetscapes which are not well activated with adjacent development	High quality streetscapes which are activated with adjacent development	Very high quality streetscapes which are activated with adjacent development	2+ and encourages pedestrians and cyclists from beyond the TOD AND encourages street life

Discussion

This criteria was scored against the DPA. Participants determined the character statement required additional description of the type of streetscape if the desired outcomes were to be guaranteed. For example, footpaths on both sides of the street, or naked streets, inclusion of street trees, street furniture, lighting and signage to help people find their way and signage to contribute to a sense of place.

Recommendations

Recommendations were made for the DPA only, have been presented in Section 4.

Crime Prevention Through Environmental Design (CPTED) (24)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
F. Mental health and wellbeing	24	CPTED design including passive surveillance	CPTED used in public space design and building design	Limited use of CPTED principles or passive surveillance	CPTED principles including passive surveillance used in major public spaces of Castle TOD	CPTED and passive surveillance used in open spaces, streetscapes and public transport areas	CPTED and passive surveillance used in open spaces, streetscapes, public transport areas and through active frontages in private development	2+ AND TOD is recognised as a safe and inviting place - day and night

Discussion

Participants described that the application of CPTED to the design would increase the likelihood of residents and workers feeling secure, and a perception of safety is important for reducing the likelihood of anxiety. It would also ensure there are not isolated areas.

Participants noted that the development of a master plan could be dependent upon another developer being engaged and seeking a master planned approach due to the limitations of Colonial First State’s company structure to undertake different forms of development.

Recommendations

- Marion City Council and Developer to develop a Crime Prevention and Safety Provision Plan during the master planning stage.
- Developer to consult with the local Police Community Crime Prevention Unit as part of the community consultation phase during master planning .
- Developer to consult with the wider community about CPTED during the Master Planning stage.

Sense of Place

Streetscape legibility (28)

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area	
			-1	-0	+1	+2	+3	
1. Sense of place	28	Streetscape legibility for both pedestrians and vehicles	Street design creates clarity and ease of interpretation of surrounds and direction of movement within and outside the retail/residential area	Difficult to interpret locality and key destinations	Ability to interpret location of key destinations	Ease of way finding throughout the TOD	Ease of way finding throughout the TOD through good design and key destinations highlighted	2 plus and adjacent areas

Discussion

This criteria was scored against the Development Plan and the DPA. Participants noted that limitations on instinctive wayfinding were presented by the road and rail corridors, and therefore any design solutions needed to work within the current environment. Participants questioned whether legibility was being decreased by redesigning Raglan Avenue into a street with a bend in it.

Participants noted that for instinctive wayfinding to become a reality, that integrated actions would be needed between the Developer, Council and DTEI. The Healthy TODs guidelines have evidence about the importance of connectedness on businesses.

Recommendations

- Marion Council, Developer and DTEI to identify ways to connect the existing community to the CPD site across South Road.
- Developer and Marion City Council to review streetscape legibility and instinctive way finding within and into/out of the TOD. For access into/out of TOD particular focus was requested by the participants on the existing and proposed train stations, and across South Road.
- Consider the redevelopment of South Road. Consider a new railway station for the CPD site.

Structure - Street connectedness (29)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
I. Sense of Place	29	Structure – street connectedness	New building height and designs that facilitate a sense of connection with the street	New building height and designs for human scale that facilitate a connection with the street not used in Castle TOD	New building height and designs for human scale used in all major roads of the Castle TOD	New building height and designs for human scale used in all major roads of the Castle TOD AND 50% of Castle TOD area (other thoroughfares)	New building height and designs for human scale used in all major roads of the Castle TOD AND 90% of Castle TOD area (other thoroughfares)	2+ AND experience is shared and work programme is expanded into surrounding suburbs

Discussion

This criteria was scored against the DPA. The participants agreed that the criteria should apply to all roads and thoroughfares, though exact percentages were a guide only. Participants questioned whether the criteria should be measured against existing structures/streets in the CPD site.

Recommendations

- Council to review the Development Policy on existing residential areas.
- Department of Planning and Local Government BDP modules have the potential to have a stronger policy focus on building design and siting in relation to human scale, light and shade, etc.

After hours use of sites (30)

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area	
			-1	-0	+1	+2	+3	
I. Sense of Place	30	Afterhours use of sites (including malls, greenspaces)	Afterhours use of sites encouraged	Minimal after hours activities	After hours use of sites occurs in external mall area	After hours use of sites occurs in external mall area and adjacent to open space	After hours use of sites occurs in external mall area, adjacent to open space and train station precinct	2, plus Castle Plaza TOD recognised as inviting area with a range of out of hours activities

Discussion

This criteria was scored against the DPA. Participants described that after hours use of the site should contribute to a sense of safety (linking to CPTED) and a sense of quality. Use of the site should include a mix of activity types, such as structured, semi-structured and unstructured; and of both commercial and public realm areas. Participants were clear that anti-social after hours use of the site is undesirable, and questioned the appropriateness of after hours use of the train station precinct. This provoked discussion about noise issues in particular.

Participants were unsure of the types of spaces needed for potential afterhours use. However a lively use of community space was considered important by participants, and that spaces should be provided that are high quality, and flexible for multiple uses. To further encourage the use of spaces once they were built, participants described the need for suitable resources to drive activities and work with communities in those spaces. Participants described the desire for artist/studio type development to promote the arts, though were unsure if 'the market' would provide such an opportunity.

Adelaide City Council, SA Policy, economic data and demographic data were considered potential sources of evidence or investigation.

Recommendations

- Development of quality flexible spaces that support structured and semi-structured activities in the public realm and commercial areas.
- Developers and Council to give consideration to the Arts Community as investors to encourage culture and community connectedness. Involvement of this community in structure and precinct planning required.
- Adequate resourcing in Council to facilitate an expected increase in community activities.
- Understand the community profile and possible needs via a Social audit/Needs analysis.

Community and civic space in commercial areas (30a)

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
			-1	-0	+1	+2	+3
I. Sense of Place		Community/civic space in commercial area	No space available	External space only	External + indoor facility	Multi-use community facility	

Discussion

This criteria was scored against the DPA. Participants described the need for spaces for art and celebration of the community’s identity and culture to be explicitly created; and that the spaces needed to be highly functional and flexible. Participants noted that the DPA spoke mostly about community spaces in the public realm, but were very interested in similar spaces within the commercial area – bringing these two spheres of life together. Again, participants discussed the need to understand exactly what the community needed with respect to community and civic spaces.

The area beyond the TOD should be investigated for existing facilities, and areas in the City of Mitcham should also be acknowledged. Participants described that Noarlunga and Rose Hill (NSW) as areas worth investigating to contribute information to this criteria. The Marion City Council Community Services Review would also be useful.

Recommendations

- Engagement between Marion City Council and Developer to negotiate the development of community and civic space in the commercial area.
- Undertake a Community Social audit/Needs analysis as part of the DPA process – consider undertaking alongside Mitcham City.
- Council to identify its needs and clearly communicate those to the developer.

Social Inclusion and Cohesion

Building design flexibility (10)

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area	
			-1	-0	+1	+2	+3	
C. Social inclusion and cohesion	10	Building design flexibility	Accessible building design and adaptable for life stages (Housing SA criteria, not necessarily class C, but with some components, e.g. step-less entry)	Less than 10% of residences accessible/capable of adapting	Less than 20% of residences accessible /capable of adapting	More than 50% of residences accessible /capable of adapting	More than 90% of residences accessible /capable of adapting	Not applicable

Discussion

Participants were unable to score this criteria due to insufficient detail in the DPA. Participants questioned whether such issues were covered under the Building Code, but it was felt that while some would likely be covered, others would not. Accessibility was considered very important by participants, as that increases the likelihood that the dwelling can be used across life stages. Participants described how internal adaptation (size) and the possibility for mixed use (work/retail) could also be explored. Housing SA was noted as an organisation that may be able to assist with information on this topic. Other sources of evidence were: Charles Landry; Fred Hansen and Laura Lee from the Adelaide Thinkers in Residence; the COAG Report on Australian Cities; and the Universal Housing Design Guidelines.

Recommendations

- Marion Council, State Government and Developers to investigate the feasibility of accessible/adaptable residences to be the focus of developments.

Affordable housing (11)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
C. Social inclusion and cohesion	11	Affordable housing	Provision of affordable housing	Less than 15% of housing meets the Government definition of affordable housing	15% of new housing is affordable (that includes 5% for high needs rental housing)	Greater than 15% and less than 30% of new housing is affordable (that includes 5% for high needs rental housing)	Greater than 30% of new housing is affordable (that includes 5% for high needs rental housing)	Not applicable

Discussion

This criteria was scored against the DPA and the Development Plan. Participants did not believe affordable housing was available outside of the TOD. Housing cooperatives were discussed and it was queried where they fitted into this development and into the TOD. Participants believed that relationships between State Government, LGA and the Developers were required to achieve the desired increase in proportion of affordable housing. Participants acknowledged that 'the market' demand would be a potential inhibitor, as would be buy-in from developers and the State Government. Recognition of the cost of the property over its life was needed to avoid affordable houses becoming unaffordable once on-sold. There was believed to be considerable community support for affordable housing.

Investigation of current development and economic models, such as Housing SA's City Development was recommended. Also, whether any areas had provided >15% of affordable housing in the past, and confirmation of what the outcomes of affordable housing have been for communities.

Participants described that monitoring of this criteria could be undertaken by counting the number of affordable houses built; and evaluating current projects and their compliance, e.g. Light Square in Adelaide and Lightsvie.

Recommendations

- State Government to review the definition of affordable housing and model to create a rating that reflects upfront and lifecycle costs.
- Marion City Council, State Government and Developers to work together to identify the appropriate percentage of affordable housing within the CPD site and that in the wider TOD.
- Marion City Council and State Government to provide incentives to Developers to increase the proportion of affordable housing.
- Marion City Council to provide feedback to DPLG on their modules to support the importance of housing diversity.
- State government, Councils, Planning Institute of Australia and Peak Bodies to educate the market about the types of dwellings available and opportunities they provide.

Housing tenure (12)

C. Social inclusion and cohesion	12	Housing tenure	Security of tenure for various household types (given). Diversity of tenure types (rental, owning). Maintenance of affordable housing	75% of housing is rental	50:50 rental and ownership (rental includes supported accommodation for aged, mental health and people with disabilities)	75% housing is ownership (rental includes supported accommodation for aged, mental health and people with disabilities)	Not Applicable	Contribute to housing diversity (e.g. providing accommodation options previously not available in the region)
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Discussion

Housing tenure was considered to be outside of the scope of the DPA and was therefore not scored. Further, it was considered difficult to regulate. Participants were well aware of the importance of housing tenure in contributing to the diversity of housing options available to local people. Participants also believed there was an opportunity to provide accommodation options that have previously not been available in the region, such as 10-year leases. Investigation into the proportions of rental vs ownership that are optimal was suggested. Participants believed that Housing SA may have investigated other Housing SA projects in terms of tenure diversity, ratios and outcomes for the community.

Recommendations

- Investigate optimal housing tenure diversity and depending on the evidence, examine policy that can support the desired outcome.

Inclusive design process (13)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
C. Social inclusion and cohesion	13	Inclusive design - process	Public areas and facilities (open space, buildings, community spaces within retail areas that are all-weather) designed with input from diverse groups (culture, stage of life, ability)	Public areas and facilities designed without input from diverse groups	Public areas and facility designs are consulted with the public via usual means	Public areas and facilities are designed with very early input from the public and inclusion throughout	Public areas and facilities are designed with very early and targeted input from vulnerable groups and inclusion throughout	2+ AND design approach is used beyond the Castle TOD

Discussion

Participants acknowledged that an inclusive design process results from stakeholders' willingness to work collaboratively rather than from a policy prescription. Council community engagement frameworks, Government Acts and regulations were seen as the minimum standard for an inclusive design process, but it was acknowledged that this could be met without undertaking good engagement. Participants noted that the Council and the Developer could initiate an inclusive design process along with the community. Issues raised elsewhere such as CPTED, affordable housing, accessible and functional diversity of public and commercial spaces could all be explored in such a process.

Participants questioned whether the public areas and facilities should be examined separately, and whether the outcomes of that should influence the development approval process. A further benefit of an inclusive design process would be the bringing together of multiple stakeholders, such as DPLG, the Developer, DTEI, Council, SA Health, NGO's, business groups, traders groups, multicultural SA and community groups.

Projects for Public Space (USA), Village well, IAP2 Public Participation Spectrum, Portland Office for Neighbourhoods. Participants queried whether it would be useful to approach the State Government's Integrated Design Commission. The social audit/needs analysis would also form a component of the engagement needed.

The Council, as custodians of the public space, were seen as a critical partner to the State government for driving effective consultation.

Recommendations

- Resources and staff for consultation during DPA, Structure Plan and Precinct level needs to be adequate to undertake collaboration with stakeholders, and to upskill staff.
- Holistic models of engagement to be investigated and agreement reached about a process for meaningful engagement agreed.

Accessible public transport

Public transport access (4) and Travel modes (5)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
B. Accessible public transport	4	Public transport access	Improved access for more people to PT network	Access is not improved by the TOD	All developments are within 800m walking of PT stop	All developments within 600m walking of PT stop	All developments within 400m walking of PT stop	2+ AND good walking and cycling connections to surrounds

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
B. Accessible public transport	5	Travel modes	Greater range of travel modes available and used	No bicycle paths or poor pedestrian environment	New movement network maintains existing standards	Well integrate pedestrian and cycling throughout TOD	Integrated network that connects to the PT stops/network	2+ AND connects with other networks outside the TOD

Discussion

These criteria were compiled by the participants and scored against the Development Plan Amendment. It was noted that the public transport access criteria did not capture the disability-friendly design connotations of public transport access, and that this should not be forgotten. Similarly the importance of facilities to promote inter-modal trips, such as bike-storage facilities was described. Participants discussed factors that would inhibit achieving the outcomes for these criteria, and identified the following: the state government not viewing transport as separate from land use issues; budget constraints from local and state governments; and Rail Safety Act restrictions. In contrast, the links to state and federal policy and a willing developer with land use in single ownership were enablers to achieving the outcomes for these criteria. Also, other parts of the DPA supported both criteria, such as the reduction of car parks.

The 30-Year Plan for Adelaide supports the achievement of both the public transport access and travel modes criteria via the targets for population density and increased calls for sustainability. Similarly, South Australia's Strategic Plan aligns well with both criteria, via the healthy weight target and the desire for an increase in public transport use. The Healthy TODs principles, the Healthy Environment Plan, Healthy cities, City of Marion Strategic Plan, Physical Activity Strategy, State Cycling Strategy, and the Department of Health's Obesity Prevention and Lifestyle (OPAL) project would all be supported by these criteria being achieved.

Participants noted that the current DPA did not show the footpath or cycling paths through the CPD site or beyond, and participants were particularly interested in seeing connections made beyond the CPD site.

Monitoring the progress of both criteria was discussed, and participants described the use of a network analysis tool, the patronage counts of public transport modes, the location of public transport stops within the built form, and distance cycled/walked as potential tools/measures.

Recommendations

- To relevant Ministers that the train station is located at Castle Plaza.
- Work with Public Transport Services Division of DTEI to ensure bus routes service the TOD and connect with rail.
- Marion Council to review existing bicycle and pedestrian pathways that connect (or need to connect) into the TOD and to allocate budget to create/enhance connections.
- Liaise with the City of Mitcham to integrate local bike and pedestrian networks.
- Request DTEI to establish appropriate pedestrian crossings across the rail corridor.
- Request DTEI maintain or improve appropriate pedestrian access across South Road.
- Suggest Universal Access as a design principle for within the CPD site, for example for the vision impaired, wheelchair/push chair access, beyond minimum standards.

Car parking – residential, retail, office (6, 7, 8)

Criterion			Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area
				-1	-0	+1	+2	+3
B. Accessible public transport	6	Residential car parking	Reduce private car parking requirements	Ratio of car parks per dwelling is higher than current Development Plan requirements	Ratio of car parks is same as current Development Plan requirements	Car park ratio decreases by 25%	Car park ratio decreases by 50%	Car park ratio decreases by 60%
B. Accessible public transport	7	Retail car parking	Reduce public car park requirements to service retail area	Ratio of car parks is higher than current Development Plan requirements	Ratio of car parks is same as current Development Plan requirements	Car park ratio decreases by 10%	Car park ratio decreases by 20%	Car park ratio decreases by 30%
B. Accessible public transport	8	Office car parking	Reduce car parking for office accommodation	Ratio of car parks is higher than current Development Plan requirements	Ratio of car parks is same as current Development Plan requirements	Car park ratio decreases by 10%	Car park ratio decreases by 30%	Car park ratio decreases by 50%

Discussion

These criteria were scored against the DPA. Participants calculated the approximate decrease in the DPA from usual car parking policy and calculated a decrease of 50% for residential, 18% for retail and 37.5% for office car parking. The ‘market’ tolerance for residential, retail and office space with reduced car parking is a potential inhibitor of meeting this criteria. For the developer, there is a substantial cost in providing car parking, so reductions in car parks may mean lower costs. Similarly, space not used for car parking can be used as open space to reduce the heat island effect, or provide a public space. Participants believed that reduced car parking supported use of other sustainable forms of transport such as public transport, walking and cycling. These forms of transport are also known to have other benefits such as improved health outcomes and improved safety.

Participants were interested in whether such criteria might have impacts beyond the TOD, where a reduced ability to park in the TOD affected City of Mitcham residents for example.

Residential car parking may be able to be decreased further if student housing or other forms of development are proposed where car parking would be less justified. Also, there was a suggestion that services in the local area could support those who do not have a car, for example grocery delivery.

State Government targets for reducing the carbon footprint (SASP) and the Council’s Healthy Environment Plan would both be supported by meeting this criteria. Progress on monitoring these three criteria could be by counting the number of car parks approved for each category of built form; by tracking mode of transport via census data, by traffic volumes on local roads, trip origin and destination surveys, DTEI patronage data on walk up/kiss and drop/ park and ride usage at stations.

Recommendations

- Marion Council to encourage and support local employment opportunities.
- State and local government to pursue the delivery of 3000 jobs as per the 30-Year Plan for Greater Adelaide.

- State/Public Transport providers deliver clean, affordable, efficient and safe public transport to reduce private vehicle use.
- Government Ministers support a new train station (and inter-modal facilities such as bike parking) at Castle Plaza site to support the reduced car park ratios.

Climate Change Mitigation

Energy efficient commercial building design (34), Energy efficient residential building design (34a) and Use of renewable energy (35)

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area	
			-1	-0	+1	+2	+3	
K. Climate Change mitigation	34	Energy efficient commercial building design (NABERS Rating)	Commercial buildings are energy efficient and accredited (using the NABERS environmental rating scheme)	Some new commercial buildings achieve less than 3.5 star rating	All new commercial buildings achieve 3.5 star rating	All new commercial buildings achieve 4 star rating	All new commercial buildings achieve 5 star rating	All new commercial buildings achieve greater than 5 star rating
	34 a	Energy efficient residential building design (BCA Rating)	Residential buildings are energy efficient and accredited (using an environmental rating scheme)		All new residential buildings achieve less than 6 star rating	All new residential buildings achieve 6 star rating	All new residential buildings achieve 7 star rating	All new residential buildings achieve 7+ star rating
	35	Use of renewable energy (non carbon based power)	Non carbon based power such as solar electricity and wind power are used extensively			Rating to be developed		

Discussion

Participants did not have enough information available to rate the energy efficiency of commercial building design. Energy efficient residential building design was scored using the general knowledge of participants, and use of renewable energy was scored against the Development Plan.

Participants noted that the star ratings can change over time, so the criteria for 34 and 34a would need to change to match. The new Building Code of Australia (BCA) requirement for commercial buildings had a different star rating system and participants suggested use of this new system. It was acknowledged that the affordability of the development may be an issue when meeting energy efficiency ratings, however such ratings are also likely to make the buildings more attractive to future users. Such ratings strongly support Federal, State and Local Government policies, such as the State Strategic Plan (SASP), the Council's Strategic Plan, the Council's Healthy Environment Plan, the Council's Development Plan, and the BCA. The developer described that energy efficiency was a key consideration in funding a new building due to the high desirability that tenants had regarding lower running costs.

Energy and water consumption could be used to track future building performance.

Use of renewable energy was discussed as worth exploring, despite a scale not being available. Given the lack of focus on this, participants scored this criteria as 'business as usual', and so a neutral impact. Participants suggested non-renewable energy ties in to public lighting, and also into adaptation measures for flood risk and heat island effects. Participants queried what Colonial First State's ESD Scale/measure was.

Recommendations

- Marion Council to understand the Developer's ESD scale.

- Marion City Council to work with Developer to aim for higher 'star' ratings on developments.
- Council and State Government to promote energy efficient buildings to community.
- DPLG to have greater emphasis on non-carbon based power in the BDP.
- Marion Council to investigate with the Developer the potential to capture energy and resource consumption across the TOD, for example with Lochiel Park could be used as a source of information.
- Marion Council and DPLG to investigate policy options form climate change adaptation to be included in DP and DPA.

Access to healthy food

Criterion		Description	Moderate negative impact	Neutral impact	Moderate Positive impact	Strong positive impact	Positive impact beyond TOD area	
			-1	-0	+1	+2	+3	
G. Access to healthy food	27	Access to a range of healthy food (including supermarkets, farmers markets, community gardens, cafes and restaurants)	Healthy, affordable, fresh food options within walking distance	Less than 500 residents within walkable (800m) of healthy affordable fresh food choices	1000 residents within walkable distance (800m) of healthy affordable, fresh food choices	1500 residents within walkable distance (800m) of healthy affordable, fresh food	2000 residents within walkable distance (800m) of healthy affordable, fresh food	2,000 plus residents within walkable distance (800m) of healthy affordable, fresh food

Discussion

This criteria was scored against the DPA. It was considered a fundamental requirement to have access to a supermarket, whereas participants thought other food outlets were less critical. Non-outlet food access was discussed substantially, such as farmers markets, community gardens, co-operatives. Minimising fast food options was also discussed.

Participants were unsure of the demand for such non-outlet food options, and suggested these be included as components of a social audit/needs analysis. If such components are used, way-finding with signage was noted as a potential promoter to their use. Council's Community Bus was known to be used by people with reduced mobility to access the supermarket.

OPAL data and information was seen as a potential source of information and advice for this criteria. Other information sources were the Heart Foundation's Healthy by Design Guidelines, Illona Kickbusch's Thinker in Residence work, and Healthy Spaces and Places website <http://www.healthyplaces.org.au/site/>.

Recommendations

- Marion Council to develop a Community Garden Policy.
- Provide space and amenity for a farmers market to operate, if requested by the community.
- Marion Council to investigate businesses to provide delivery service for those shoppers who walk or cycle.

6. Further work

A small number of the criteria could not be scored due to insufficient information:

- 10 - Accessible building design and adaptable for life stages
- 12 - Security of tenure for various household types
- 20a - Urban design and siting to enhance or improve air quality
- 34 - Commercial buildings are energy efficient and accredited

The group also identified three other criteria that needed further development into a scale, scoring and subsequent discussion/recommendations. They were:

- Housing diversity
- Inclusive design (outputs) - Public areas and facilities (open space, buildings, community spaces within retail areas that are all-weather) for diverse groups (culture, stage of life, ability). Participants believed that the outputs of design, such as layout, flexibility of space, provision of community services (libraries, special needs, health, etc), shopping, dwelling types, office scale and type is required. For example, participants suggested a minimum floor area be given over to community space along the same lines as the 12% open space provision.
- Indoor air quality

It is recommended that further work is undertaken on these criteria to complete the assessment. This will depend on the available resources at Marion City and Department of Health, especially regarding these criteria's relative importance to the overall wellbeing assessment.

7. Next Steps

The following steps were identified by the Castle Plaza Partner Group :

- Finalise and distribute the Castle Plaza Wellbeing Assessment 3-day workshop report
- City of Marion/Department of Health develop a project proposal and brief for presentation to Colonial First State for a jointly funded Social Plan (referred to in report as a social audit/needs analysis)
- Scope and develop a Social Plan
- Finalise list of recommendations from workshop and distribute to nominated agencies
- Department of Health and City of Marion project group to continue to meet to oversee implementation/communication of workshop outcomes

8. Conclusions

Figures 1 and 2 below show a summary table of the workshop outcomes. These include the agreed assessment criteria, the agreed upper and lower bounds for each criteria and the scores given to each criteria for the Castle Plaza DPA. Additional detail on each of these is provided in Appendix 3. While a scale was not developed for criteria 35 - Use of renewable energy; and criteria 33 - Diversity of size and types of businesses; the group was still able to score the DPA. Developing a scale for these criteria was considered useful.

Of the 33 assessment criteria that were scored:

- 1 met the upper bound
- 12 scored above the lower bound but did not reach the upper bound
- 8 scored on the lower bound
- 10 scored below the lower bound
- 2 were scored but upper and lower bounds were not set.

The best performing Criteria (those scoring predominantly above the lower bound) were Workplace Access and Amenity, and Accessible Public Transport. The domain where all assessment criteria at least met the lower bounds (or better) was Mental Health and Wellbeing. The remaining Criteria all had one or more assessment criteria below the lower bound: Physical Activity; Healthy Environments; Sustainability and Vibrancy; Climate Change Mitigation; Access to Healthy Food; Social Inclusion and Cohesion; Sense of Place; Biodiversity.

For those assessment criteria scored below the lower bound, participants were able to make a number of helpful recommendations about how to improve the score. Those specifically directed to the DPA are in Section 4, and those recommendations with a wider brief than the DPA follow in Section 5.