Open Space Practices in High Density Areas

Gold Coast City Council
March 2015
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Executive Summary

It has been noted by many that participation in sport, recreation and leisure pursuits can assist the health and well being of individuals, and conversely, inactivity can lead to significant detrimental impacts\(^1\). Other reports note that simply ‘seeing green’ can have a positive impact on individuals’ mental health and wellbeing\(^2\).

Without being exhaustive, inactivity can lead to doubling the risk of cardiovascular disease, increasing Type 2 diabetes, obesity and breast and bowel cancer\(^3\). As well, a number of other diseases and conditions are also associated with lack of physical activity including high blood pressure, high blood cholesterol, congestive heart failure, stroke, gallstones, osteoarthritis, some forms of cancer, pregnancy complications, poor female reproductive health, bladder control problems and depression\(^4\).

A report commissioned by Sport and Recreation Victoria, Department of Planning & Community Development noted that the World Health Organisation estimated that physical inactivity causes 1.9 million deaths worldwide annually and conservatively over 16,000 deaths annually in Australia\(^5\).

The cost of physical inactivity in Australia has been estimated at around $13.8 billion annually, with the direct annual health care cost alone in Australia at approximately $5 billion annually\(^6\).

Given these statistics it is clear that providing opportunities for active participation through the provision of sport, recreation and open space facilities is an essential element. Many studies have shown significant links between better health outcomes and open spaces\(^7\).

However, there is often a tension between what might be considered the ‘optimal solution’ for sport, recreation and open space opportunities, and what can be provided in an affordable manner.

This issue becomes even more pronounced in high density situations for many reasons, including land constraints, higher land costs, funding challenges and the perceived relative importance of land for sport, recreation and open space versus other essential infrastructure networks (such as roads, water and sewer).

\(^2\)Townsend & Weerasuriya, 2010
\(^3\)Gies 2009, Medibank Private, 2008, The Cost of physical Inactivity
\(^4\)ibid.
\(^5\)Sport and Recreation Victoria, Department of Planning and Community Development, March 2010,
\(^6\)Medibank Private, 2008, The cost of physical inactivity
\(^7\)Groenewegen et al 2003; Villeneuve et al 2012; Takano et al 2002; Liu et al 2007; Coombes et al 2010; Lee and Maheswaran 2010; Barton and Pretty 2010; Maas et al 2006; Pinder et al 2009; White 2013
In many environments, and particularly high density ones, the need to find a balance between the provision of sport, recreation and open space opportunities in a way that assists affordability and does not compromise health and well being outcomes is critical.

With this in mind, in December 2014, MAK Planning and Design Pty Ltd, together with C Change Sustainable Solutions Pty Ltd and John Wood Consultancy Services were commissioned by Gold Coast City Council to document practices in the provision of sport, recreation and open space in high density areas. The aim of the study was to provide examples of how high density areas are providing open space solutions, while still meeting health and well-being objectives.

This report reviewed 29 practices around the world (including within the Gold Coast) and these were assessed for their potential relevance to the Gold Coast.

The assessment conducted showed that the Gold Coast is already utilising many of the open space practices noted here. However, with the exception of a few, most of the practices noted could be utilised more so in the Gold Coast High Density Coastal Strip in some form, or with some qualification. Without being exhaustive, practices that could potentially be further implemented or investigated include:

- Providing sports fields in less dense but well located areas to alleviate costs associated with the land requirements in high density areas;
- Using transport links (such as the light rail link) and natural features as dual purpose for recreation and travelling;
- Recognising the beach and waterways as bona fide recreational areas, and accounting for these in the Council’s desired standards of service (while acknowledging that these areas are subject to weather, erosion and climate change impacts);
- Replicating ‘beach like’ environments elsewhere so that the demand on the beach front is decreased;
- Embellishing more existing areas, including providing additional lighting so the space could be utilised safely at night as well as during the day, synthetic fields and hardening of surfaces, all access playgrounds, having more Dog off leash areas – either permanently or during specific times;
- Linking smaller spaces, and ensuring that a ‘trail’ of spaces was well advertised;
- Investigating further dual use of car parks and other areas (such as schools) that might be able to provide recreational areas in times when the primary use was in less demand;
- Investigating street reclamation in areas, particularly adjacent to the beach to create more formal and usable spaces;
- More formal use of beach front in area, for example through the establishment of a Gold Coast style muscle park or something more akin to the Gold Coast (for example, potentially skating park)
- Increasing the use of green gyms, volleyball areas, basketball areas, and having market areas such as those in Venice Beach, Los Angeles along the beachfront.

BALANCE
where appropriate and also in other areas;

- Investigating the options for further rooftop parks, and/or sinking car parks to provide recreational areas on top.
- Investigating environmental initiatives, such as green walls, green rooftops and potentially more community gardens;
- Providing further incentives for developers to create open spaces adjacent to existing commercial opportunities such as cafes, restaurants and shopping malls (such as the example in Oracle Towers Broadbeach);
- Investigating the establishment of future Plazas/Piazzas, for the purposes of art, culture and social expression.

In order to determine which practices are appropriate for the high density coastal area and potentially future high density areas (and in what specific locations), it would be pertinent for Council to complete further assessments. These assessments would first test the overall appropriateness of the initiative by location. The appetite / demand (or otherwise) for each of the initiatives with the current residents and visitors to the area could then be determined, and if the practice was in demand, the potential cost of the initiative could be assessed. The demand could then be compared to the cost and the overall net benefit (or otherwise) could be determined. If an overall benefit was present, then Gold Coast City Council may wish to incorporate the initiative into its Recreation Network.

Investigation into how tourists currently use and would like to use sport, recreation and open space facilities would also be highly beneficial and an important element in the assessments (as this component is relatively unknown).

Investigation into areas that are over or under embellished, and the extent to which embellishing areas promotes / curtails appropriate levels of open space usage would also add considerable value.

Furthermore, investigation of how people currently use commercial spaces as recreation (such as cafes, shop malls), whether people would utilise open spaces adjacent to cafes, restaurants, shops malls, and whether people would value further communal open space in private developments, would add value in determining how much weight should be given to these opportunities in a reviewed Sport, Recreation and Open Space strategy for the high density strip. As noted throughout the document, although the provision of private open space and recreational pursuits should not be at the expense of public opportunities, they can alleviate the expectation of public land provision to some extent.

Upon the conclusion of these investigations, Council may wish to move to a needs based assessment set on appropriate parameters for their sport, recreation and open space facilities, and/or include ‘minimum’ standards needing to be achieved (rather than desired standards).

Regardless of the approach taken, it would be in Council’s interest to adopt a rigorous marketing and promotional campaign to ensure that all their current assets were known and utilised to their optimum levels.

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8 For example, Council may wish to ensure that one of the parameters was that land for formal sports participation was provided outside the high density strip, regardless of individuals’ desires.
Introduction

In December 2014, MAK Planning and Design Pty Ltd, together with C Change Sustainable Solutions Pty Ltd and John Wood Consultancy Services were commissioned by Gold Coast City Council to document practices in the provision of sport, recreation and open space in high density areas. The aim of the study was to provide information on how high density environments are maximising the health and well-being associated with the provision of sport, recreation and open space outcomes in ways that are affordable and implementable.

This report provides the output associated with the commission. The report discusses:

• Health and cost implications of inactivity, and the need for open space;
• The challenges faced by the Gold Coast City Council and high density areas generally with respect to providing sport, recreation and open space;
• The current planning context in the Gold Coast, with respect to the policy environment and the demographic / economic characteristics in the high density area;
• An outline of practices / examples used in other high density areas trying to maximise health outcomes while balancing provision of sport, recreation and open space with affordability; and,
• A series of options that might be applicable for the Gold Coast with regard to future sport, recreation and open space provision; and
• Concluding remarks.

Health and Cost Implications of Inactivity

It has been noted by many that participation in sport, recreation and leisure pursuits can assist the health and well being of individuals, and conversely, inactivity can lead to significant detrimental impacts\(^9\). Other reports note that simply ‘seeing green’ also has a positive impact on mental health and wellbeing\(^10\).

Without being exhaustive, inactivity can lead to doubling the risk of cardiovascular disease, increasing Type 2 diabetes, obesity and breast and bowel cancer\(^11\). As well, a number of other diseases and conditions are also associated with lack of physical activity including high blood pressure, high blood cholesterol, congestive heart failure, stroke, gallstones,

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\(^10\) Townsend & Weerasuriya, 2010
osteoarthritis, some forms of cancer, pregnancy complications, poor female reproductive health, bladder control problems and depression\textsuperscript{12}.

A report commissioned by Sport and Recreation Victoria, Department of Planning & Community Development noted that the World Health Organisation estimated that physical inactivity causes 1.9 million deaths worldwide annually and conservatively over 16,000 deaths annually in Australia\textsuperscript{13}.

The cost of physical inactivity in Australia has been estimated at around $13.8 billion annually, with the direct annual health care cost alone in Australia at approximately $5 billion annually\textsuperscript{14}.

Given these statistics it is clear that providing opportunities for active participation through the provision of sport, recreation and open space facilities is an essential element. Many studies have shown significant links between better health outcomes and open spaces\textsuperscript{15}.

However, there is often a tension between what might be considered the ‘optimal solution’ for sport, recreation and open space opportunities, and what can be provided in an affordable manner.

This issue becomes even more pronounced in high density situations for many reasons. These are described in more detail in the following section, and include land constraints, higher land costs, funding challenges and the perceived relative importance of land for sport, recreation and open space versus other essential infrastructure networks (such as roads, water and sewer).

In many environments, and particularly high density ones, the need to find a balance between the provision of sport, recreation and open space opportunities in a way that assists affordability and does not compromise health and well being outcomes is critical.

\textsuperscript{12} Gies 2009, Medibank Private, 2008, The Cost of physical Inactivity
\textsuperscript{13} Sport and Recreation Victoria, Department of Planning and Community Development, March 2010, Cost Benefit Analysis and Economic Contribution of Community Sport and Recreation Infrastructure, A report by SGS Economics and Planning
\textsuperscript{14} Medibank Private, 2008, The cost of physical inactivity
\textsuperscript{15} Groenewegen et al 2003; Villeneuve et al 2012; Takano et al 2002; Liu et al 2007; Coombes et al 2010; Lee and Maheswaran 2010; Barton and Pretty 2010; Maas et al 2006; Pinder et al 2009; White 2013
Challenges

The provision of sport, recreation and open space is considered by most to be an essential part of the safe and healthy functioning of an area\(^{16}\). Indeed, in Queensland, the ‘community purposes’ network, which includes sport, recreation, open space, and community facilities is defined as one of the essential development infrastructure networks\(^{17}\). In the Gold Coast City Council, this network is called the ‘Recreational Facilities’ network.

There is a plethora of studies that note that the provision of sport, recreation and open space opportunities can assist in tackling issues associated with obesity, diabetes and heart related diseases\(^{18}\). This is considered vitally important, particularly given that rates associated with these largely preventable diseases have been on the increase in most western societies over the last few decades\(^{19}\).

In Queensland, as in many jurisdictions across the world, sport, recreation and open space is often based at least partly (if not wholly) on a formulaic expression of the community’s needs. One recognised ‘standard’ of sport, recreation and open space provision has been that communities are adequately covered if around 4 hectares of publically accessible land per 1000 people is provided\(^{20}\). Within this 4 hectare rate, it is assumed that a diversity of sport, recreation, and open space will be provided\(^{21}\).

However, there is considerable debate within the planning community regarding whether a ‘standard’ for land provision is the most useful way of planning for sport, recreation and open space. In some areas, other approaches have been adopted. For example, in 2012, Redland City Council decided that rather than demarcate a quantum of land for sport, recreation and open space, that they would undertake a ‘needs and desires’ based assessment of the types of activities people wished to be involved in. Considerable community consultation took place, and from the knowledge acquired an innovative approach that matched activities to the open spaces and parks in people’s neighbourhoods and suburb catchment areas was completed. The strategy recognised that providing great accessible places for people to easily participate in outdoor recreation, community and

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\(^{16}\) Redland Shire Council, 2012; Open Space Strategy 2026, Brisbane City Council, 2014 City Plan; Gold Coast City Council, Our Living City; Heart Foundation et al (2010); Heart Foundation (undated); Heart Foundation, Planning Institute of Australia & Australian Local Government Association (2009); Australian Government Department of Health and Ageing; National Heart Foundation of Australia (2014); Access Economics for Australian Research Alliance for Children and Youth (2009)

\(^{17}\) Department of State Development, Infrastructure and Planning: Infrastructure Charges (include proper source).


\(^{20}\) Many areas within SEQ, including Gold Coast City Council; Brisbane City Council; Logan City Council; Sunshine Coast Council

\(^{21}\) Community facilities are not generally captured within this ‘benchmark’, but rather are based on other principles of provision.
sporting activities was vitally important to the health and well-being of Redland community members, and the accessibility and usability of the space was more important than simply the size or quantum of the space alone.

Nonetheless, there are many areas that do adopt a general standard for the provision of land associated with sport, recreation and open space. While this general ‘standard’ can be met on average across most local government areas, many areas with high density environments are finding it difficult to meet - and the coastal / tourism strip within the Gold Coast City Council area is no exception.

Based on a recent assessment of sport, recreation and open space provision, the Gold Coast City Council is currently providing around 2.7 hectares per 1000 people, while its Desired Standard of Service suggests that 3.7 hectares per 1000 people is the aim. It is noted that the provision of 2.7 hectares per 1000 people does not include State Government Land or beach land, and does not take into account the numbers of tourists that might be using these community facilities.

So the actual provision level of sport, recreation and open space areas in the Gold Coast’s high density area may seem to be low - but is it? Comparison of the Gold Coast’s provision to other high density areas would suggest that it may not be. Brisbane City Council’s current desired standard of service for their ‘Centres’ (which are their higher density areas) is 2.12 hectares / 1000 population, together with accessibility criteria. Discussions with Brisbane City Council’s officers indicate that when assessed on a neighbourhood basis, these desired standards are not necessarily met everywhere.

Regardless of the adequacy or not of the standards that are adopted, there are many interacting reasons for why there is often a lower rate of provision of sport, recreation and open space in high density areas when compared to their greenfield counterparts. These include that:

- **Land Constraints:** Most sport, recreation and open space policies and strategies have been designed with urban greenfield situations in mind, where land is widely available for parks and recreation at a relatively affordable cost. In contrast, high density areas are generally associated with concentrated and increasing populations with historically defined public areas (in terms of location and quantum), which have often been based on less than strategic / proactive policies. In this sense, high density environments are often ‘land constrained’ with regard to land for community purposes.

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22 Redland Shire Council, 2012, Open Space Strategy 2026
23 Gold Coast City Council, Our Living City, Gold Coast City Council Planning Scheme
24 pers comm. L Swartz, BCC, 30 January 2015.
25 For example, in many areas across SEQ and Australia, prior to around the 1990s, a general principle was 10 percent of the land being considered for development was to be gifted for open space. As noted later in the text, this allowance often provided less than desirable land for open space, due to flood prone land, environmental land, and smaller parcels of land being gifted.
• **Population Growth:** The land constraints in high density environments would not be as much of an issue if forward planning was associated with ultimate populations expected in these environments. However, planning for the ‘ultimate’ build out of high density environments is difficult as the expected carrying capacity of land is constantly changing. For many high density areas, the current and projected populations were never envisaged at the time when the earlier ‘footprints’ of development and land for sports, recreation and open space were being determined, and as noted above, prior to the 1990s many jurisdictions did not proactively determine desired ‘networks’ of open space. For example, up until 1995, the Gold Coast had a policy of requiring developments to dedicate 10 per cent of their land to open space areas. This often resulted in either less than ideal land dedicated to the open space/recreation network (for example flood prone land and/or environmental land) and/or small parcels that were sometimes limited in their use. Gold Coast City Council’s first comprehensive and proactive policy for the planning for sport, recreation and open space occurred in 1995. At this time, the population was around 375,000 and forecast to increase to around 520,000 by 2011\(^{26}\). Of this, approximately 10 per cent was expected to be located in the area now called ‘the coastal high density strip’\(^{27}\). In contrast, by 2013 the Gold Coast was home to 537,844 people\(^{28}\), and this was expected to increase to 779,376 equivalent persons by 2031\(^{29}\). Of the 2013 population, 43 per cent of the city’s population was in the high density strip, and this was expected to increase to 46 percent by 2031.

• **High Land Values:** Providing appropriate levels of sport, recreation and open space for future populations in high density environments would be much more achievable if land values allowed for an affordable reclamation of land for public open space. If this was the case, the land constraints noted above would not be an issue. However, land values per square metre are much higher in the higher density areas when compared to greenfield areas given the respective development capacities in each of the area types, and therefore the opportunity cost of retrofitting a park where a 10 storey building might currently be is considerable.

• **Funding Challenges:** The above situations are compounded by the challenges of who pays for the infrastructure. In Queensland, funding the land component for sport, recreation and open space is usually the domain of infrastructure charges together with general rates\(^{30}\). The current infrastructure charges regime in Queensland (at 2014) has no explicit link to either the establishment cost of the item (in this case land values), or the extent of previously provided infrastructure of the same network. Rather, local governments can adopt an infrastructure charge by use type up to a specified maximum charge, which is determined by the State. With some qualification, this could means that the infrastructure charge for a two

\(^{26}\) Gold Coast City Council, 1997, EMME/2 Traffic model

\(^{27}\) ibid


\(^{29}\) Gold Coast City Council, 2013 Infrastructure Demand Model Water & Sewerage Demands, Gold Coast Water

\(^{30}\) In the Gold Coast’s situation, about 70 percent of the establishment costs of sport, recreation and open space infrastructure is funded by rates and 30 percent by infrastructure charges.
In addition to the above, there are also other challenges associated with the provision of sport, recreation and open space facilities in local government settings. These include the following:

- **Minimal Private Outdoor and Communal Space:** High density environments are generally associated with minimal private outdoor living areas / yards and communal space, and therefore access to publically accessible space is generally regarded as a high priority, particularly amongst planners. However, despite there being a number of studies that determine the differences in how sport, recreation and open space facilities are used in high density situations versus greenfield situations, often the recommended strategies associated with their provision are similar regardless of the density of the environment being planned. Given the challenges in providing sport, recreation and open space in higher density environments, differentiation in provision principles and standards is warranted.

- **Demographic Considerations:** Further to the above point, in general, demographic characteristics would suggest that it would not be unexpected for higher density environments to have lower proportions of families with dependent children, higher proportions of couples and group households, and populations with higher median ages. In addition, some suggest that people living in high density areas have a higher resilience to lower levels of open space provision. The general sporting and recreational pursuits of these populations have been associated more with linear track / trail movements (such as walking, running and riding) than the utilisation of formal sports areas. Nonetheless, there seems to be no evidence or research to suggest the ‘optimum’ level of land or embellishments for sports, recreation or open space areas in high density situations, which is not surprising given that it is likely that this would change for all different types of parks and spaces. It would be useful

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31 Pers comm. P. Brookfield, Gold Coast City Council

32 Pers comm. L. Swartz, BCC; Gold Coast City Council, User Demand Analysis
for Gold Coast City Council to explore principles of provision for overall provision as well as embellishments in high density areas where land for open space is limited.

- **Facility Linkages:** In a high density situation, the links to or between sport, recreation and open space facilities are often undeveloped, and therefore often not as safe, convenient or as obvious as they could be. Where links are not in place, the usability of each of the parks as a system is minimised. Linkaging facilities either physically or visually can enable the ‘sum of the parks to be higher than the parks alone’.

- **Sustainability:** Improving the sustainability of sports, recreational and open space areas / facilities by the reduction of life cycle and other environmental costs has become increasingly important in recent years. Main considerations include greater use of solar energy, more efficient lighting, incorporation of water sensitive design, use of recycled materials, improved biodiversity and economic self-sufficiency. These factors are particularly important in high density urban situations where long-term management and maintenance costs are a major consideration.
Planning for Sport, Recreation and Open Space in the Coastal Area of the Gold Coast

The Gold Coast City Council’s High Density Coastal Area

As shown in Figure 1, the Gold Coast City Council’s High Density Coastal area is a strip that extends from Paradise Point – Hollywell in the north, along the coastal area to Coolangatta in the south. The area includes around 121 square kilometres - or 9 per cent of the total Gold Coast City Council Area - but is home to around 43 percent of the total population. At the 2011 Census, there were 211,925 people resident in the Coastal strip. The population for the whole of the Gold Coast City Council area in 2011 was 515,202 people.

The coastal strip is also the main area that hosts tourists visiting the Gold Coast. Based on Gold Coast City Council’s water demand modelling, it is estimated that tourists can total an additional 20,000 equivalent persons on top of the resident population at any given time.

It is important to note the demographic characteristics of the high density coastal strip, as this has (or can have) implications on the demands for sport, recreation and open space.

When analysing Australian Bureau of Statistics Census data for 2011, it can be seen that the area has considerable differences from the rest of the Gold Coast area, including:

- Considerably less people aged between 25 and 64, and 0 to 19, depicting lower numbers of families in the high density area, but higher numbers of people aged 74 and over (refer Figure 2). This is reflected in a higher median age for the coastal area (41 years old) when compared to the average for the Gold Coast LGA (37 years old) and also the proportion of couple families with no children (47 percent of families in Coastal area versus 36 percent in ‘Rest of Gold Coast’).
- Lower average household size (2.25 persons per household in the Coastal Area compared with 2.5 persons per household for the Gold Coast generally).
- Slightly lower proportions of Australian born people (64 percent in the Coastal areas versus 66 percent in the ‘Rest of the Gold Coast’ area).

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33 It is noted that while the coastal strip is currently Gold Coast City Council’s main high density area, future planning suggests that other areas (such as Coomera) could also become high density environments. The findings associated with this report should also extend to other future high density areas.

34 It is noted that the difference in median ages would be more pronounced if the comparison area was ‘rest of the Gold Coast’ rather than the Gold Coast LGA. Due to the pre-analysed information from the Basic Community Profiles, not all of the Coastal areas information could be compared to the ‘rest of Gold Coast’.

• Considerably higher proportion of households without motor vehicles (9 percent for Coastal Area versus 3 percent for ‘Rest of Gold Coast’ area).

Figure 1: Planning Areas for Recreational Facilities within the Gold Coast
• Significantly higher density housing, with over 14 percent of dwellings being classified as 4 storeys or more in the Coastal area, whereas this characteristic was only 1 percent in ‘Rest of Gold Coast’ area, and,

• Considerably lower proportions of people who are either in the process of paying off a mortgage or owning their homes outright (56 percent in the Coastal area versus 66 percent in the ‘Rest of Gold Coast’ area).

Interestingly, the median income for individuals, families and households in 2011 was similar between the Coastal areas and the whole of the Gold Coast LGA.

Figure 2: Age/Gender Histogram for Coastal Areas of Gold Coast versus “Rest of the Gold Coast”: Population counts from the 2011 Census Data
Usage of Parks and Facilities

According to the Gold Coast City Council’s Parks User Groups and Facility Demand \(^{36}\), parks and facilities were utilised in many different ways. The top 15 outcomes are shown in Figure 3 below. When viewing the outcomes, please note that Gold Coast advises it was difficult to capture the demand for sports usage as individuals who were at sports facilities were generally there as participants (and therefore were not available for surveying).

Figure 3: Park User Demand for Gold Coasts Parks and Facilities \(^{37}\)

\[^{36}\] Gold Coast City Council, 2010, *Park User Groups & Facility Requirements Study, Integrated Open Space Services*

\[^{37}\] The Park Use Demand Index was calculated in the following manner:

**Frequency of Visit Index**

Multiply the count for each reason by the following weightings:

(Daily = 330, Few Days per Week = 150, Weekly = 52, Fortnightly = 26, Monthly = 12, Every Few Months = 4, Twice per Year = 2, Yearly = 1, Less than Once per Year = 0.5, First Time = 0.25). Add the results for each frequency element to arrive at the Frequency of Visit Index for each reason.

**Length of Stay Index**

Multiply the count for each reason by the following weightings:

(>4 hrs = 5, 2-4 hrs = 3, 1-2 hrs = 1.5, ½-1 hr = 0.75, <½ hr = 0.25)

Add the results for each frequency element to arrive at the Length of Stay Index for each reason.

**Park Use Demand Index**

Multiply the Frequency of Visit Index by the Length of Stay Index to arrive at the Park Use Demand Index for each reason.
As well as differences in demographic characteristics, people living in high density environments in the Gold Coast utilise parks and facilities in considerably different ways. Figure 4 shows the differences between those living in high rise dwellings and those in detached / semi-detached / attached dwellings.

**Figure 4:** Reasons for using parks and facilities: High Rise compared to Detached / Semi-detached / Attached dwellings (n=367 for High Rise, n=381 for Detached / Semi-attached / Attached)

As can be seen in Figure 4, people living in high rise apartments are less likely to be using the parks and facilities for family time, children’s play or for dog exercise.

The most important reasons for park usage as reported by people from high rise apartments were to enjoy outdoors / park / natural environment / view, to exercise, to simply relax / enjoy peace and quiet or to visit the beach.

No information associated with how tourists use the Gold Coast’s sport, recreation and open space assets could be retrieved.
Policy Environment

In Queensland, sport, recreation and open space is considered ‘development infrastructure’ (refer text box below), and from July 2016, local governments will need to plan for development infrastructure through a Local Government Infrastructure Plan (LGIP) (which forms part of the planning scheme). Prior to the introduction of a LGIP, planning for development infrastructure was through a Priority Infrastructure Plan (PIP) \(^{38}\) and some local governments (Gold Coast included) are still utilising their PIP while preparing their LGIP.

Development infrastructure is defined as (Sustainable Planning Act, 2009: s627)

(a) land or works, or both land and works, for

(i) water cycle management infrastructure, including infrastructure for water supply, sewerage, collecting water, treating water, stream managing, disposing of waters and flood mitigation, but not water cycle management infrastructure that is State infrastructure; or

(ii) transport infrastructure, including roads, vehicle lay-bys, traffic control devices, dedicated public transport corridors, public parking facilities predominantly serving a local area, cycle ways, pathways and ferry terminals; or

(iii) public parks infrastructure, including playground equipment, playing fields, courts and picnic facilities; or

(b) land, and works that ensure the land is suitable for development, for local community facilities, including, for example, the following—

(i) community halls or centres;

(ii) public recreation centres;

(iii) public libraries.

An LGIP is that part of a planning scheme that “identifies the local government’s plans for trunk infrastructure that are necessary to service urban development at the desired standard of service in a coordinated, efficient and financially sustainable manner”\(^ {39} \).

The purpose of an LGIP is to:

- Integrate infrastructure planning with the land use planning identified in the planning scheme;

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\(^{39}\) ibid.
• Provide transparency regarding a local government’s intentions for the provision of trunk infrastructure;
• Enable a local government to estimate the cost of infrastructure provision to assist its long term financial planning;
• Ensure that trunk infrastructure is planned and provided in an efficient and orderly manner;
• Provide a basis for the imposition of conditions about infrastructure on development approvals.

The Gold Coast City Council’s planning for infrastructure is currently carried out through their PIP. The Gold Coast City Council’s PIP is Part 8, Division 1 of the Gold Coast City Council’s Planning Scheme.

The Gold Coast’s PIP is essentially divided into three sections:

• Growth assumptions (where and to what extent population and households are likely to locate throughout the LGA over the next 10 to 15 years);
• Desired Standards of Service (the ‘desired’ standards that govern the planning for the networks); and,
• Plans for Trunk infrastructure (these are the outcomes of applying the DSS to the growth assumptions, and then ‘ground truthing’ the outcomes to determine what is able to be provided. The ‘Plans for Trunk infrastructure’ is a schedule of works for each of the infrastructure networks)

The overall desired outcomes associated with the Gold Coast’s Recreation Facilities Network include:

• Ensuring that access is maximised and there are opportunities for the community to freely participate in recreational pursuits;
• Increasing park usage and encouraging community health;
• Protecting and enhancing environmental assets;
• Maximising the efficient utilisation of natural resources;
• Integrating land for recreational facilities with social services, environmental and heritage assets;
• Promoting cycle ways and walking trips;
• Providing facilities in such a way that can be adapted in the future in line with emergent demands and trends.

The DSS for the Recreational Facilities Network in the Gold Coast City Council is divided into three geographical areas. These are:

• Northern Planning Zone;
• Southern Planning Zone; and
• Coastal Planning Zone.
The Coastal Planning Zone contains the high density living environments in the Gold Coast and was depicted in Figure 1 earlier, and denoted by the blue shading.

As noted in Council’s Planning Scheme, these planning zones were determined having regard to “similarities in existing standards of service, projected growth, management of user demand, opportunity for co-functional use between residential and commercial catchments, cost of supplying recreational facilities infrastructure and opportunities for uses to benefit from the infrastructure”\(^{40}\).

The DSS notes the desired areas of land per 1000 people, desired access standards to recreational facilities, minimum recreation facility sizes, minimum flood immunity and maximum areas for maximum grades.

The desired area of land per 1000 people for recreation facilities are replicated below. As can be seen from the table:

- The coastal zone is expected to host local, district and city-wide recreation facilities, district and city sports facilities, district community facilities, and city-wide outdoor recreation facilities; and,
- The overall provision rate of recreational facilities land in the coastal area is 3.7 hectares and the northern and southern zones is 5.1 hectares. Combining these elements roughly relates to an average provision of around 4 hectares per 1000 people across the LGA. As stated earlier, the actual provision of recreational facilities in the coastal area is around 2.7 hectares per 1000 residents, but this does not include significant tracks of State land, such as the beach, waterways and canals. In addition, the provision rate of 2.7 hectares per 1000 residents does not take into account tourist populations, which if it did, would lower the provision rate again. Discussions with Gold Coast City Council officers note that despite the lower provision, there has been few community complaints.

<table>
<thead>
<tr>
<th>Recreation Facilities Category</th>
<th>Coastal Zone (Ha/1000 Residents)</th>
<th>Northern and Southern Zones (Ha/1000 Residents)</th>
<th>All Zones for Commercial Uses (Ha/1000 Employees)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local</td>
<td>District</td>
<td>City</td>
</tr>
<tr>
<td>Recreation</td>
<td>1</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Sport</td>
<td>n/a</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>n/a</td>
<td>0.2</td>
<td>n/a</td>
</tr>
<tr>
<td>Outdoor Recreation</td>
<td>n/a</td>
<td>n/a</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{40}\) Gold Coast City Council, Our Living City, Gold Coast Planning Scheme, Part 8, Division 1.
Practices in Sport, Recreation and Open Space Provision

In order to determine additional ways sport, recreation and open space might be provided in the Gold Coast City Council’s high density coastal strip (while still maintaining healthy outcomes and a focus on affordability), a review of current practices in the Gold Coast and other cities was undertaken. In addition to the Gold Coast, other high density areas such as Brisbane CBD, Melbourne CBD, Docklands, Miami Florida, Vancouver, Venice Beach Los Angeles, New York, Singapore, Hong Kong, North Sydney, Seattle, Edmonton and Dubai were reviewed. These areas were selected as they were all high density, most were coastal areas and all had a range of practices associated with the provision of sport, recreation and open space. In addition, although not a high density environment, Redland City Council was also reviewed and is discussed due to the needs based approach undertaken.

The following tables outline the key findings of the literature review. Practices that are documented include the following. It is noted that many of these have been implemented in the Gold Coast to date:

- Needs based assessments, rather than standards based assessment;
- Locating sports fields outside high density areas;
- Synthetic fields for sports field use;
- Preservation of natural features;
- All access playgrounds;
- Dog off leash areas (DOLA);
- Community gardens;
- Green roofs;
- Green walls;
- Men's Sheds;
- Muscle parks
- Outdoor gyms, green gyms, compact gyms;
- Use of waterways;
- Create green space from existing Council assets;
- Reclaiming roads/roundabouts;
- Open air markets;
- Remediation and redevelopment of lands;
- Create dual use of land;
- Multi-use of transport corridors;
- Bike hire schemes;
- Increased visual access for safety;
- Offer a range of small spaces (or 'pocket spaces') that are linked;
- Plazas;
- Indoor activities at malls;
- Create 'public space' within private developments;
- Implement development impact fees for parks;
- Creation of a new legislative division to provide funding for open space;
- Developing new revenue streams;
- Philanthropy;
- Council / Private Partnerships

Tables summarising key findings are provided below.

<table>
<thead>
<tr>
<th>Practice</th>
<th>Needs based assessment rather than standards based assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Rather than have numerical standards for quantum of land to be allocated in the sport, recreation and open space networks, a needs based assessment matches activities demanded to park and open space opportunities. This has been successfully applied in Redland City Council.</td>
</tr>
<tr>
<td><strong>Examples of where it has been applied:</strong></td>
<td>Redland City Council</td>
</tr>
<tr>
<td></td>
<td>Not explicitly used in the Gold Coast City Council but perceived need is a factor when identifying parks.</td>
</tr>
<tr>
<td><strong>Strengths</strong></td>
<td>Requires substantial consultation and expert input into determining appropriate networks. Requires regular monitoring to ensure that new trends are being accounted for and that spaces can successfully adapt to new demands.</td>
</tr>
<tr>
<td><strong>Weaknesses / Challenges</strong></td>
<td>Provides higher probability that parks and open spaces will be utilised by community members. Matches demand with spaces. Provides a better understanding of how people want to use spaces, which can assist in the marketing and promotion of the recreation network.</td>
</tr>
</tbody>
</table>

### Practice

#### Locating sports fields outside high density areas

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given the high land values in high density environments together with the large land take of sporting facilities, some jurisdictions do not provide sports fields within high density areas (unless they were there historically).</td>
<td>Gold Coast, Brisbane, Melbourne, Sydney, Canberra, Redcliffe.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Releases land for other purposes. May assist in improving private transport access to facility if the high density environment is traffic constrained. Land acquisition costs are less expensive.</td>
<td>May increase travel time to a sports facility for those located in a high density environment. May decrease the potential for public transport access to the sporting facility.</td>
</tr>
</tbody>
</table>

Aerial Photo of Adelaide CBD showing Significant Open Space & Sporting Fields outside the City Centre
## Practice
### Hardening surfaces – synthetic fields for sports field use and parks

#### Description:
Use synthetic surfaces to increase availability and carrying capacity of sports areas and parks where there is increased demand.

Instead of using natural turf on sporting ovals, use synthetic turf so that there are not issues of overuse of sports ovals. Replace natural surfaces around play facilities in parks with synthetic surfaces.

#### Examples of where it has been applied:
Most major cities e.g. Gold Coast, Brisbane, Sydney, Canberra, Melbourne

In Canberra artificial sport ovals are being developed adjacent to schools (i.e. outside the school fence) and these are used as community ovals after school hours.

#### Strengths
- Increased carrying capacity allowing almost unlimited training and competition
- Improved safety
- Reduced maintenance

#### Weaknesses / Challenges
- Not ‘natural’
- Finding space, and cost of installation/maintenance
- The surface can become too hot in summer causing burns if it is not watered.
- Covering the fields and air-conditioning is expensive
- May not be an approved surface for high level competitions
- Has life of 7-12 years generally before replacement

---

### Practice

#### Preservation of natural features

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural features can offer more diverse play opportunities for children. The preservation of existing trees, shrubs, waterways and grass for open space can protect environmental assets, maintain biodiversity and increase recreational use.</td>
<td>Multiple locations, for e.g. City of Melbourne; Broadwater Park, Gold Coast; Weston Park, Canberra; Central Park, New York.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve local microclimate, Better carbon storage, Reduced runoff, Cooler with vegetation cover, People may use public spaces more, shade.</td>
<td>Have to work with what already exists and the location of these features. Can sometimes add further costs.</td>
</tr>
</tbody>
</table>

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43 ibid.
### Practice

#### All access playgrounds

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovative playgrounds that allow for a range of abilities – inclusive/universal access. Parks and facilities that are equally accessible to the elderly, the disabled as well as those without disabilities. Creating a space that does not specifically look different from a normal playground, but increases the accessibility for all abilities.</td>
<td>Boundless Playground, Canberra, Livvi’s Place Ryde, Sydney, Brisbane’s all access playgrounds, Broadbeach Gold Coast.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusivity, Safe outdoor spaces for children of all abilities, Modern playgrounds are designed very attractively. Boundless in Canberra has shown there is plenty of interest in the private sector for contributing to these ventures. Can be indoor and a commercial venture.</td>
<td>May increase establishment costs, depending on the design.</td>
</tr>
</tbody>
</table>

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**Practice**

**Dog off leash areas (DOLA)**

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fenced or unfenced legal areas for dogs to be off their leash and socialise with other dogs. Some have obstacle courses included. May be located in parkland, open space and beaches. Occasionally include dog agility courses. In NY, there are specific times set where it is DOLA – this is typically in ‘off-peak’ times. Need to consider the size and ensure it is large enough. Should have access to seating, shelter, water and bins. Should include feature trees and landscaping, shade and within walking distance to people’s homes.</td>
<td>A multitude of areas, including Redlands, Gold Coast, New York.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can assist in building social cohesion as people feel more included in civic life.</td>
<td>Need to ensure that the areas are well maintained and that people are responsible for their pet’s behaviour and faecal output.</td>
</tr>
</tbody>
</table>

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### Community gardens

**Description:**
Community gardens can be included in high density developments to provide a shared community space for recreation and health purposes. Community gardens are a productive space where the public can contribute to growing vegetables and herbs for consumption. Should be located with consideration of availability of water, neighbours, proximity to public transport, access to toilets, current and potential use of land, environmental considerations such as soil suitability and access to sunlight.

**Examples of where it has been applied:**
Many locations, often as part of new developments but on a larger scale in places such as:
- City of Melbourne, Redland City Council,
- COGS (Canberra Organic Growers Society),
- Canberra,
- Singapore – Hort Park
- Vancouver – Davie Village Community Garden
- Gold Coast – Varsity Veggies, Joan Park

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productive space. Encourages healthy lifestyles and good nutrition. Improves local food security. Can act as an area to improve civic participation and cohesion.</td>
<td>May be neglected without adequate organisation. Needs an active overall manager and consistent promotion.</td>
</tr>
</tbody>
</table>

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### Practice

#### Green roofs

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
</table>
| Use of rooftops for green space – mainly for recreation and open space rather than sport, although this can occur too. Provide an option for private open space where no other options exist. Weight, the soil mix, and the planting palette are the primary considerations in good green roof design. | City of Melbourne  
The Domain, Sydney (sport fields)  
Kaiser Center Garage, Oakland, California  
Seattle City Hall  
Chigago  
Nanyang Technological University’s School of Art, Design and Media., Singapore |

### Strengths

Use of an otherwise unused space, particularly in high density areas where space is at a premium.  
If a car park is buried the open space can be at ground level.

### Weaknesses / Challenges

Inability for large trees to grow.  
Difficulty of public access.  
Surveillance and safety.  
Equity of access.  
Lack of connectivity.  
Where planning is less than optimal, the provision of roof top spaces may result in less open space being provided at ground level.  
Rooftop spaces do not always achieve the multiple benefits of public space at ground level collocated with other facilities.

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<table>
<thead>
<tr>
<th>Practice</th>
<th>Green walls⁴⁸</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Vertical spaces of green plants, lining walls and concrete. Green walls have a simpler structure than green roofs. High-tensile steel cables are commonly used as framing for climbing species with the plants themselves planted in large irrigated containers, often for the extent of the wall.</td>
</tr>
</tbody>
</table>
| **Examples of where it has been applied:** | City of Melbourne  
Musee Du Quai Branly Green Wall, Paris  
Singapore  
Manila, Philippines  
Hong Kong  
Rockefeller Square, New York  
Central Park, Sydney |
| **Strengths** | Mitigating urban heat island effect by reducing heat absorbing surfaces. Increase moisture and evapotranspiration. Visually appealing |

### Practice

#### Men’s Sheds / Women’s Spaces

**Description:**
Communal modern Men’s Sheds are emerging across Australia. Sheds are used for many purposes, for example restoring furniture or bicycles, fixing lawn mowers or young men learning skills from older men, skilled men teaching school children, producing products for the community and/or for commercial purposes.

Women’s Spaces can also be created.

**Examples of where it has been applied:**
Redlands City Council, Clarendon Vale in Tasmania, Bowral, Mosman Park WA, many other cities in Australia, Gold Coast

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
</table>

---

### Practice

#### Muscle parks

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscle parks: Outdoor weights park. Open playground with a gated area that encloses weight lifting equipment, the second area is a sand box with gymnastic, rope climbing, and acrobatic bars</td>
<td>Venice Beach, Los Angeles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity of utilisation of beach front, parks</td>
<td>Requires supervision</td>
</tr>
<tr>
<td>Encourages outdoor health</td>
<td>Can be commercially run (and therefore not accessible for non-members)</td>
</tr>
<tr>
<td></td>
<td>Being outdoor can be weather affected</td>
</tr>
</tbody>
</table>

---

### Practice

**Outdoor Gyms / Green Gyms / Compact Gyms**

<table>
<thead>
<tr>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor green gyms.</td>
</tr>
<tr>
<td>Outdoor gym and sporting equipment in a compact space. Multiple sport or fitness activities catering to a high number of people at any one time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mansfield Brisbane (and other locations)</td>
</tr>
<tr>
<td>England – extensively</td>
</tr>
<tr>
<td>Gold Coast</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity of utilisation of beach front, parks.</td>
</tr>
<tr>
<td>Encourages outdoor health.</td>
</tr>
<tr>
<td>Highly compact.</td>
</tr>
<tr>
<td>Free alternative to commercial gyms.</td>
</tr>
<tr>
<td>May have broader appeal to less fit people.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being outdoor can be weather affected.</td>
</tr>
<tr>
<td>Maintenance and safety inspections required.</td>
</tr>
</tbody>
</table>

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51 http://aus.tgogc.com/
<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
</table>
| Use of rivers and waterways for recreation, sports, transport and open space. Use of waterfront for boating and outdoor dining. Creek corridors can be valuable recreation spaces and wildlife corridors with natural character. They are often used as a movement corridor for pedestrians and cyclists. | Docklands, City of Melbourne  
Yarra River, Victoria Harbour,  
Melbourne  
Alexandra Canal, Singapore  
Redcliffe, Cairns and Darwin, Australia |

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
</table>
| Maintains natural environment and base asset does not need to be created.  
Encourage and maintain wildlife.  
Provide a recreational link and nature corridor. | Consideration of complementary uses for public space and how they might coexist.  
Size and capacity considerations.  
Existing and potential access.  
Existing and potential infrastructure.  
Physical qualities of the space  
Possibilities of floods |

---

<table>
<thead>
<tr>
<th>Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create green space from converting existing Council asset</td>
</tr>
</tbody>
</table>

**Description:**
Opportunities from existing underperforming assets. Transformation of a concrete car park to a green space including lawn and trees. Can include sustainable elements such as rainwater use.

**Examples of where it has been applied:**
- Collingwood, Victoria.
- Los Angeles
- Gold Coast

<table>
<thead>
<tr>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses land already owned by Council.</td>
</tr>
<tr>
<td>Creates a new green space.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>May be reluctance to release asset.</td>
</tr>
<tr>
<td>Can give rise to conflicts between different users of space and challenges the conventional understanding of the highest and best use of a land asset.</td>
</tr>
<tr>
<td>Essential to consult prior to implementation.</td>
</tr>
</tbody>
</table>

---

## Practice

### Reclaiming roads/roundabouts

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing streets networks can be used to create a new public and shared open space. Closing streets, or sections of streets, in the development that would have otherwise brought traffic through allows for large spaces and a pedestrian pathway. Temporary closures are also very effective e.g. weekends, at night.</td>
<td>Times Square NY, other parts of New York, Arbutus Walk, Vancouver, Albert Park, Melbourne, Gold Coast, Lavelle Street Market</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjoins neighbourhoods, improving connectivity. Promotes walking and cycling.</td>
<td>Traffic changes in and around closed streets. Requires detailed assessment of traffic, statutory process for road closure. Requires community consultation (road users and residents), followed by Council decision.</td>
</tr>
</tbody>
</table>

---

### Practice

**Open Air Markets**

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
</table>
| Outdoor space for stallholders to sell their wares. This may include road closures while markets are on. There is often a focus on local designers at markets for items such as: artworks, sculptures, furniture, handmade toys, homewares, skincare, fashion and jewellery. It also can include local entertainment and local produce and food stalls. | Ocean St in Maroochydore  
Wynnum, Brisbane  
Manly, Sydney, NSW  
Mindil Beach Markets, Darwin  
Eumundi Markets, QLD  
Paradise Point, Coolangatta, Gold Coast  
Most world cities. |

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
</table>
| Supporting local micro / small businesses and talent.  
Can bring people in from out of area.  
Family friendly.  
Strengthens local economies.  
Attracts tourists. | Disruption to traffic where road closures facilitate the markets. Need to consider the provision of facilities such as toilets, parking, public transport, food, drinks and shelter. |

---

Washington DC.
### Practice

#### Remediation and redevelopment of lands

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
</table>
| Remediation of polluted land to create a more liveable, attractive open space. Previously contaminated land can be made usable and much more attractive. For example, Darling Harbour in Sydney remediated and redeveloped that space and used a mix of public art, water features, grass, native vegetation, shade and paved areas. | South Bank, Brisbane  
Haig Park, Perth  
Darling Harbour, Sydney  
Homebush/Olympic Park, Sydney  
Runaway Bay Sports Park, Pizzey Park, Gold Coast  
Developments in Hong Kong  
Cheonggyecheon, Seoul, South Korea |
| A similar practice is re-establishing natural areas in formally developed areas such as Cheonggyecheon Stream in Seoul, South Korea | |

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public art, water features and native vegetation can increase the vitality and liveability of higher density residential areas. Provides a multi-function pedestrian area.</td>
<td>Can be expensive, need to ensure the net benefits outweigh the losses. In Haig Park, groups were displaced and there was a net loss of available urban greenspace, reduction in affordable housing and creation of a gentrification effect on surrounding properties.</td>
</tr>
</tbody>
</table>

![Darling Harbour, Sydney](image1)

![Southbank, Brisbane](image2)

![Cheonggyecheon, Seoul, South Korea](image3)

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**Practice**

Create dual use of land

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
</table>
| Large private spaces such as car parks and school grounds are not always used on weekends or out of hours and so may be used for events such as markets, or one off fairs and community events. | North Sydney Council  
Farmers Market - Friarsgate Car Park, Birmingham  
Sunday Market LaTrobe University, Bundoora, Melbourne  
Gold Coast, Miami SHS Markets, Palm Beach SGS Markets, Broadbeach Soccer Club |

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
</table>
| Significant cost savings. Reduces pressure for additional land. | Provides limited and temporary open space.  
Negotiation needed to use land for public recreation.  
Continuity of the access to the open space can often rely on relationships between land owners/managers. |

---

### Practice

#### Multi-use of transport corridors

**Description:**
Locating pedestrian / cycle trails within transport corridors and disused or historic transport routes can be reused as recreational facility (e.g. High Line Park is a public park built on an historic (disused) elevated rail line in New York).

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usually provide ideal grades for walking / cycling. Connects areas together and extends linear open space network. Creates more linear opportunities which can be popular in high rise areas where running/walking and exercise in general is popular.</td>
<td>Need to ensure there is no conflict with transportation uses. Safety needs to be the highest priority.</td>
</tr>
</tbody>
</table>

**Examples of where it has been applied:**
High Line Park, New York

---

## Description:
Bike hire schemes are programs that aim to encourage more people to cycle around high density areas. Generally, a series of bikes are located at several stations throughout the city, and people can register to use the bikes either free of charge or for a minimal fee.

## Examples of where it has been applied:
- Many areas across Europe
- Brisbane

<table>
<thead>
<tr>
<th>Bike Hire Scheme in Brisbane</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Bike Hire Scheme in London</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Bike Hire Scheme, Stockholm</th>
</tr>
</thead>
</table>

## Strengths
- Sustainable solution to moving around a dense area.
- Affordable and easy to access.
- Potential to reduce road congestion and noise and improve air quality.

## Weaknesses / Challenges
- Often restricted to people over a certain age.
- In Brisbane, people are required to wear helmets (which are provided), and this has been one of the biggest drawbacks.

http://www.thehighline.org/
<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
</table>
| Increasing visual access to enable 24/7 access and encourage passive and active surveillance of areas by a continuous stream of activity and people. To maximise opportunities a range of uses in adjoining areas can promote better usage, lighting of parks is essential, the use of security personnel is often utilised. The parks can also come with a campaign that encourages neighbourhood reporting, and designs should minimise ‘hidden corners’. | Docklands, Melbourne  
Perth  
Singapore City  
Ma On Shan, Hong Kong  
Gold Coast |

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
</table>
| Increase 24/7 usage of public space.  
Reduction of public fear.  
Decrease in crime.  
Visually appealing. | Existing urban design may make this unfeasible.  
Maintenance of visual aesthetics.  
Retaining biodiversity and habitat. |

### Practice

#### Offer a range of small spaces (or ‘pocket spaces’)

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
</table>
| A range of spaces that provide small park like settings in contrast to the surrounding industrial and commercial areas. | New York  
Hong Kong  
Gold Coast |

#### Strengths

Diversity of spaces offers privacy and meeting places.  
Very popular with workers, particularly during meal breaks.

#### Weaknesses / Challenges

Shade from tall buildings.  
Need good night lighting.  
Spaces are usually too small for kicking a football or skateboarding, reducing the utility for local residents.  
It is important to promote a sense of openness and safety by ensuring views from the parks are not obstructed.  
Increases management and maintenance costs.

---

### Practice

#### Plazas/Piazzas

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paved areas between or completely surrounded by buildings. Function as meeting places. No restrictions in regards to vegetation or paving – all different kinds exist.</td>
<td>Suncorp Piazza, Southbank.</td>
</tr>
<tr>
<td></td>
<td>Brisbane, outside BCC.</td>
</tr>
<tr>
<td></td>
<td>Melbourne, Federation Square.</td>
</tr>
<tr>
<td></td>
<td>Gold Coast, Circle on Cavil</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use can be more transitory than parks.</td>
<td>Can feel lonely and alienating due to their size.</td>
</tr>
<tr>
<td>Can be used for events.</td>
<td>Often underutilised due to lack of shade and seating.</td>
</tr>
<tr>
<td>Well designed plazas can be used for a variety of activities.</td>
<td>Activities in plazas are often highly regulated due to conflict over appropriate use.</td>
</tr>
<tr>
<td></td>
<td>Adjacent land uses should include a mix of retail, entertainment and dining opportunities.</td>
</tr>
</tbody>
</table>

---

### Practice

#### Indoor activities at malls

**Description:**
Attractions and activities on a large scale inside shopping malls. Attractions such as theme parks, playgrounds, ice rinks, aquariums, and ski fields are located indoors in huge shopping malls.

**Examples of where it has been applied:**
- Dubai, UAE
- Las Vegas, USA
- Mall of Asia, Manila Philippines

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not dependent on having good weather. Air conditioned. Caters to spectators as well as participants.</td>
<td>Not necessarily available for free access for the community. Operators of the malls can exclude patrons at their discretion. Needs private investment.</td>
</tr>
</tbody>
</table>

**Dubai Ice Skating Rink, Dubai Mall**

**Circus Circus, Las Vegas**

---

[^3]: [http://www.thedubaimall.com](http://www.thedubaimall.com)
### Practice

#### Create ‘public space’ within private developments

<table>
<thead>
<tr>
<th>Description:</th>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
</table>
| Government provide incentives to private developers to create public open space within new developments. This can be encouraged by offering a bonus plot ratio to developers who provide specific space or facilities. | Hong Kong  
Vancouver  
Oracle Towers, Broadbeach, Gold Coast  
Gold Coast Planning Scheme bonuses |

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
</table>
| Releases land for other purposes.  
May assist in improving private transport access to facility if the high density environment is traffic constrained. | Can restrict access for many  
Needs to be physically and visually connected to public space at upper levels to encourage use by public. |

---

64 Urban Land Institute (2011) *Ten Principles for a Sustainable Approach to New Development. Towards Sustainable and Integrated Large-Scale Developments for a More Liveable Hong Kong* Washington DC, p18
### Practice

**Implement development impact fees for parks**

<table>
<thead>
<tr>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fees would be directly related to the impact new users will have on the demand for parks and recreation facilities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seattle. In 2000, the Seattle Parks and Recreation Board introduced a pro-parks levy, which will raise up to $198.2 million for parks and green space projects over a period of eight years, plus an anticipated $1.98 million in interest earnings.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact fees leverage private funds with public benefits and resources</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact fee revenue cannot be used to fund maintenance or make up for current deficiencies.</td>
</tr>
<tr>
<td>Impact fees for parks could conflict with other City goals for the imposition of impact fees, such as affordable housing.</td>
</tr>
<tr>
<td>Cumbersome to implement and manage</td>
</tr>
</tbody>
</table>

### Practice

**Explore alternative revenue streams**

<table>
<thead>
<tr>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compatible commercial activities and services can provide a revenue stream to fund park management &amp; maintenance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of where it has been applied:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most major cities, New York, Vancouver</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional to traditional income sources.</td>
</tr>
<tr>
<td>Involves private sector.</td>
</tr>
<tr>
<td>Enhanced safety and security.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weaknesses / Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awarding and management of leases needs to be transparent.</td>
</tr>
<tr>
<td>Ensuring quality service delivery.</td>
</tr>
<tr>
<td>Commercial use of public open space.</td>
</tr>
</tbody>
</table>

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As well as the information noted in the above tables, some overall key learnings were revealed and some gaps highlighted through the practices review. These included:

- **Purpose and flexibility:** Sport, recreation and open space should have a purpose as well as versatility and should be provided to respond to a known or perceived demand. Consideration should be given to the population size and the character of the development area and surrounding environment when planning for the recreational facilities. A ‘needs based’ assessment that matches activity demands (such as the Redland’s example), can be beneficial so long as the outcomes are achievable and the flexibility of the space is maintained such that areas can adapt to future demands.

- **Size only matters a little:** High density areas around the world seem to understand that while size is important, the level of embellishments can increase a park’s usability significantly, so long as the ability to undertake activities in an area remains (that is, the park or open space is not ‘over crowded’ with embellishments). In this respect, while a minimum level of space might be considered appropriate as a desired standard of service for a high density environment, more emphasis could be placed on the expected...
embellishment or the ability of areas to cater for certain activities.

- **Unknown elements – Tourists:** Although tourists are often a high proportion of people within high density areas, the ways tourists use sport, recreation and open spaces is relatively unknown, or at least not publically documented. It would be worthwhile filling this information gap to assist the future planning of the Gold Coast City Council recreation network.

- **Sports facilities outside high density areas:** Although it is vitally important that access to each of the components of the networks is as easy as possible, facilities that are essentially a ‘drive to’ destination (such as sporting facilities) could be located outside of high density areas altogether, particularly where private and public transport access is convenient. If located appropriately, sports facilities outside high density areas would still be accessible as driving an extra 5 to 10 minutes is not likely to have a material impact on people.

- **Consider all types of open spaces:** Often in open space planning, significant tracts of publicly utilised land, such as the beaches, canals and other water bodies and the recreational elements of environmental areas are not included in the overall desired standards of service. This can result in the perception that the land dedicated for recreational purposes is less than it is in reality. Beaches, water bodies and environmental areas are all bona fide recreational spaces and should be acknowledged in open space and recreation planning.

- **Beach and water demand:** The demand for beach and usable water environments is generally high in areas where climates are conducive to water activities. Areas such as the Gold Coast can have high demand for their beach areas. There may be opportunities to create other ‘beach like’ areas (like Southbank’s artificial beach in Brisbane) in land to lessen the demand for the beach front.

- **Increasing resilience:** Site hardening by replacing natural surfaces with synthetic surfaces (sports and parks), upgrading facilities and additional embellishments can all add to the ‘usability’ of space. This is particularly important in high density areas where land is at a premium and is difficult to augment.

- **Increasing capacity:** Embellishments can often add to the capacity of an open space area. However, it is important to ensure that areas are not ‘over embellished’ 66, but embellished to a level where usability and flexibility can be maintained. In some cases, this might mean removing underutilised embellishments. Investigation into how embellishments are used in the Gold Coast, and how they can add / detract value from parks would be useful.

- **Linking spaces:** A series of linked spaces can add versatility and usability to the recreational network, and where this happens, the sum of the parks can total more than the individual elements. Linking can be physical, through pathways or visual, through

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66 There seems to be no evidence or research to suggest the ‘optimum’ level of embellishments for sports, recreational or open space areas, which is not surprising given that it is likely that this would change for all different types of parks and spaces. It would be useful for Gold Coast City Council to explore principles of provision for embellishments in high density areas where land is limited.
elements such as enhancing streetscaping and trees.

- **Safely increasing usage hours**: Visibility and connectivity is essential to ensure safety of open space and increasing usage. Lighting is an important consideration, particularly in a high density environment as it can assist safe usage at night as well as providing a creative element to the area.

- **High quality spaces**: Designers should aim to produce high quality spaces. The ongoing maintenance and management of public open space is crucial to maintaining a quality development. So whilst development and maintenance costs remain important considerations, solutions that aim to maximise the attractiveness, durability, quality of finish or suitability to use of space as well will increase the usability and demand for the areas.

- **Private / commercial space as legitimate recreational area**: Many elements of the built form can have recreational value but are only accessible on a fee for service basis. For example, cafes are often utilised as a recreation element, as are cinemas, theme parks and shopping centres. Although it is important to not rely on these private elements as the sole provision of recreational opportunities, further research into understanding the value of these elements in the recreation landscape might assist in determining the additional value of these private / commercial elements.

- **Activating open space adjacent to commercial space**: As well as investigating how people value commercial opportunities such as cafes, there are successful examples of open spaces adjacent to uses such as cafes, restaurants and shopping malls. The Oracle Twin Towers in Broadbeach, Gold Coast is one example. Adjacent to the café is a small, simple, yet highly utilised space, offering recreational space for children and parents. While this is in private ownership, it is highly utilised. The Sunshine Coast has examples of public open spaces next to restaurants (for example the park near Ricky’s Bar and Restaurant) near Weyba Creek.

- **Multi-function areas**: Landscape character and design in open spaces and streets generally are essential to enhancing the appeal and safety of a development area, and these should be completed with multi-use functions in mind. For example, if planned appropriately, on weekends car parks can double as a market space, driver training circuits, remote controlled car tracks and host other activities. Creating dual use land may also provide significant cost savings.

- **Hidden car-parking, accessible parks**: Some high density environments have ‘sunk’ their car parks and included sport, recreation and open space on the surface (for example the Domain in Sydney). This can increase open space areas in a way that is still affordable and productive.

- **Re-claiming street space**: Street closures (temporary and permanent), pedestrian priority areas, nature strip widening can all assist in diversifying the open space and recreational elements. As shown in the tables above, New York’s Time’s Square is an example of where street closures together with widening the pavements can create substantial high value recreational areas. There are examples on the Gold Coast (eg. Lavelle Road) where areas are used as a market on a temporary basis. Exploration into the additional demand for these types of activities would be useful. In addition, there are other examples in the Gold Coast where ends of streets that front onto the beach
appears to be a park but is still classified as a road (eg. Clifford Street and Aubrey Street, Surfers Paradise). These types of examples could add to the formal open space provisions if there was clarity over the land’s primary or best use and purpose.

- **Marketing and promotion:** Marketing and promotion can significantly increase park usage and diversify the functions of the areas. Targeted and demand driven promotion has assisted in the overall usage and popularity of recreation and open space facilities. Brisbane City Council has a considerable focus on marketing and promoting their open spaces, and have found that the usage of parks, recreation and open spaces has increased markedly\(^{67}\). In addition, demand from private operators (such as personal trainers, general presentations and bands and live music/arts) to utilise the spaces has also increased considerably in line with marketing and promotional activities\(^{68}\). Issues associated with public liability need to be considered, but can be worked through to ensure that utilisation opportunities can be maximised.

- **Creating land:** Land reclamation, or extending areas of use into waterways and beaches using piers and jetties have been utilised in areas around Australia and the world.

- **Funding options & improving revenue streams:** There are many options for funding for projects, including community support and various levels of government input where the benefits are evident. While these differ across different jurisdictions, further research into appropriate funding means for the Gold Coast could occur. In addition, recreational areas can assist their revenue streams by integrating appropriate commercial activities into parks, open space and sports centres. Uses such as cafes / food and drink outlets, canoe and bike hire, events, merchandising can all be revenue generating exercises. Sports uses in Logan City Council have utilised these mechanisms and in some areas are nearly at full cost recovery.

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\(^{67}\) Pers comm. L Swartz, BCC, 30 January 2015.

\(^{68}\) Ibid.
Considerations for Future Sport, Recreation and Open Space Planning in the Gold Coast’s Higher Density Coastal Strip

The preceding section outlined practices currently undertaken in high density areas, including the Gold Coast City Council. This section considers the appropriateness or otherwise of including more of these practices in the Gold Coast City Council’s high density environment (and future high density environments). To do so, the practice is compared against each of the principles included in the recreational facilities component of the Gold Coast’s PIP, with an emphasis on whether the practice could enhance healthy outcomes while assisting in affordable delivery. It is emphasised that these assessments have been made from the Consultant team’s viewpoint, rather than a considered assessment by Gold Coast City Council. Should the Council proceed with implementing more of the practices noted below, it is highly recommended that a full assessment of their appropriateness for the Gold Coast be completed.

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Maximise access</th>
<th>Free Participation</th>
<th>Flexible and adaptable in the future</th>
<th>Increase park usage</th>
<th>Protect and enhance environmental assets</th>
<th>Maximise the efficient utilisation of natural resources</th>
<th>Integrate recreational facilities with social, environmental and heritage assets</th>
<th>Enhance healthy outcomes</th>
<th>Assist affordability</th>
<th>Potentially Applicable to the Gold Coast?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Needs based assessment rather than standards based assessment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td></td>
</tr>
</tbody>
</table>
### Principles for Recreation Facilities (as per GCCC’s DSS in their PIP), and considerations of affordability

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Maximise access</th>
<th>Free Participation</th>
<th>Flexible and adaptable in the future</th>
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<th>Enhance healthy outcomes</th>
<th>Assist affordability</th>
<th>Potentially Applicable to the Gold Coast?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Locate sports fields outside high density areas</strong>&lt;br&gt;Would need to ensure located on accessible routes, and would be useful to plan bike/walkways on safe major routes. Would need to ensure that environmental assets were protected and not suggested as places for these facilities</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Synthetic fields for sports field use</strong>&lt;br&gt;Could increase the use of fields and decrease maintenance costs, but would need to ensure that surfaces were not too hot for summer activity</td>
<td>✔ ✔</td>
<td>✔ ✔</td>
<td>✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Preservation of natural features</strong>&lt;br&gt;Can enhance the environment and provide diverse areas, but can sometimes incur more costs</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td><strong>All access playgrounds</strong></td>
<td>✔ ✔</td>
<td>✔ ✔</td>
<td>✔ ✔</td>
<td>✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Dog off leash areas (DOLA)</strong>&lt;br&gt;Need to be clear about times when dogs are allowed. Would benefit from marketing and promotion</td>
<td>✔ ✔</td>
<td>✔ ✔</td>
<td>✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Innovation</td>
<td>Maximise access</td>
<td>Free Participation</td>
<td>Flexible and adaptable in the future</td>
<td>Increase park usage</td>
<td>Protect and enhance environmental assets</td>
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<td>Integrate recreational facilities with social, environmental and heritage assets</td>
<td>Enhance healthy outcomes</td>
<td>Assist affordability</td>
<td>Potentially Applicable to the Gold Coast?</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>-------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>---------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Community gardens</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Community gardens work best if there is a paid manager. This can take away from the affordability. However, their existence can add much value to the health and wellbeing of an area.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Green roofs</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Access can sometimes be difficult depending on &quot;whose roof&quot; is being utilised, but can provide space that would otherwise not be available.</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Green walls</td>
<td>×</td>
<td>-</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Good environmental outcome</td>
<td>×</td>
<td>-</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Men's / Women's Sheds</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Provides diversity and an opportunity for inter-generational mentoring</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Muscle parks (or something similar)</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Provides a great way to diversify the use of beachfront areas, but can require a considerable land take.</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Innovation</td>
<td>Maximise access</td>
<td>Free Participation</td>
<td>Flexible and adaptable in the future</td>
<td>Increase park usage</td>
<td>Protect and enhance environmental assets</td>
<td>Maximise the efficient utilisation of natural resources</td>
<td>Integrate recreational facilities with social, environmental and heritage assets</td>
<td>Enhance healthy outcomes</td>
<td>Assist affordability</td>
<td>Potentially Applicable to the Gold Coast?</td>
</tr>
<tr>
<td>------------</td>
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<td>------------------------</td>
</tr>
<tr>
<td><strong>Outdoor gyms, green gyms, compact gyms</strong>&lt;br&gt;Easy to add to any area, relatively cost effective, added embellishment to increase use without needing further space</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️ ✔️</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️ ✔️</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️ ✔️</td>
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<td>Yes</td>
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<tr>
<td><strong>Use of waterways</strong>&lt;br&gt;Can provide further areas for recreation and open space that were not originally considered as part of a ‘standard’ being provided. Can provide diversity in activities</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️ ✔️</td>
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<td>Yes</td>
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<tr>
<td><strong>Create green space from existing Council assets</strong>&lt;br&gt;Need to have spare assets available, and can be difficult to show that using the asset as green space is the highest and best use.</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️ ✔️</td>
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<td>Yes</td>
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<td><strong>Reclaiming roads/roundabouts</strong>&lt;br&gt;Can be expensive, but can add substantially to the land areas for sport, recreation and open space.</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️ ✔️</td>
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<td>Yes</td>
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<tr>
<td><strong>Open Air Markets</strong>&lt;br&gt;Can often add to the character and sense of community of an area. Provides identity and a diversity of activities, some of which can be free to participate in.</td>
<td>✔️ ✔️ ✔️ ✔️ ✔️ ✔️</td>
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<td>Yes</td>
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</tbody>
</table>
### Principles for Recreation Facilities (as per GCCC’s DSS in their PIP), and considerations of affordability

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Maximise access</th>
<th>Free Participation</th>
<th>Flexible and adaptable in the future</th>
<th>Increase park usage</th>
<th>Protect and enhance environmental assets</th>
<th>Maximise the efficient utilisation of natural resources</th>
<th>Integrate recreational facilities with social, environmental and heritage assets</th>
<th>Enhance healthy outcomes</th>
<th>Assist affordability</th>
<th>Potentially Applicable to the Gold Coast?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Remediation and redevelopment of lands</strong></td>
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<td>Can be expensive, but can also assist in enhancing environment while providing other areas of interest that would not otherwise be present.</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
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<td><strong>Create dual use of land</strong></td>
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<td>Assists in affordability by not needing to double up on land take associated with a variety of uses.</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔</td>
<td>✔ ✔</td>
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<tr>
<td><strong>Reuse of transport corridors</strong></td>
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<tr>
<td>Can maximise healthy options, so long as safety taken into account, particularly in high density areas given that many activities are associated with linear corridors (eg walking/cycling/running).</td>
<td>✔ ✔</td>
<td>✔ ✔</td>
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<td><strong>Increased visual access for safety</strong></td>
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<tr>
<td>Can increase access due to the additional perceived and actual safety of the area</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔ ✔</td>
<td>✔ ✔</td>
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</table>
| **Offer a range of small spaces (or ‘pocket spaces’) that are linked**  
Can change the dynamics of what was previously just one small space, to a series of linked adventure areas. | ✗ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | Yes |
| **Plazas**  
Can be expensive to develop but can also provide important areas for art, cultural activities as well as other formal activities. | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | Yes |
| **Indoor activities at malls**  
These would need to be ‘additional’ to the public realm as the private owners of the malls could exclude people if desired, but they can add to the diversity of experience in any given area. | ✗ ✗ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | Yes |
| **Create ‘public space’ within private developments**  
This would require revisiting planning parameters in the Planning Scheme, but could alleviate a component of public land required elsewhere. Access issues would need to be considered. | ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | ✓ ✓ ✓ ✓ | Yes |
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</thead>
<tbody>
<tr>
<td><strong>Implement development impact fees for parks / Creating new legislation</strong>&lt;br&gt;Not sure these would be appropriate for the Gold Coast</td>
<td>×</td>
<td>×</td>
<td>✅</td>
<td>✗</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>No</td>
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<tr>
<td><strong>Create new revenue streams</strong>&lt;br&gt;This could value add to existing facilities and therefore increase participation and assist affordability. The cost of activities included would need to be monitored to ensure that the inclusion of another revenue stream did not inadvertently make people stay away.</td>
<td>✅</td>
<td>✗</td>
<td>✅</td>
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<td>✅</td>
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<td>Yes</td>
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<tr>
<td><strong>Philanthropy</strong></td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
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<td>✅</td>
<td>✅</td>
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<td>Yes</td>
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<tr>
<td><strong>Public / Private partnerships</strong>&lt;br&gt;Can be contractually difficult, but can have win – win situations for all parties involved.</td>
<td>✅</td>
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Concluding Remarks

The assessments conducted have shown that the Gold Coast is already utilising many of the open space practices noted here. However, with the exception of a few, most of the practices noted could be utilised more so in the Gold Coast High Density Coastal Strip (and other high density environments in the future) in some form, or with some qualification. Without being exhaustive, practices that could potentially be further implemented or investigated include:

- Providing sports fields in less dense but well located areas to alleviate costs associated with the land requirements in high density areas;
- Using transport links (such as the light rail link) and natural features as dual purpose for recreation and travelling;
- Recognising the beach and waterways as bona fide recreational areas, and accounting for these in the Council’s desired standards of service (while acknowledging that these areas are subject to weather, erosion and climate change impacts);
- Replicating ‘beach like’ environments elsewhere so that the demand on the beach front is decreased;
- Embellishing more existing areas, including providing additional lighting so the space could be utilised safely at night as well as during the day, synthetic fields and hardening of surfaces, all access playgrounds, having more Dog off leash areas – either permanently or during specific times;
- Linking smaller spaces, and ensuring that a ‘trail’ of spaces was well advertised;
- Investigating further dual use of car parks and other areas (such as schools) that might be able to provide recreational areas in times when the primary use was in less demand;
- Investigating street reclamation in areas, particularly adjacent to the beach to create more formal and usable spaces;
- More formal use of beach front in area, for example through the establishment of a Gold Coast style muscle park or something more akin to the Gold Coast (for example, potentially skating park)
- Increasing the use of green gyms, volley ball areas, basketball areas, and having market areas such as those in Venice Beach, Los Angeles along the beachfront where appropriate and also in other areas;
- Investigating the options for further rooftop parks, and/or sinking car parks to provide recreational areas on top.
- Investigating environmental initiatives, such as green walls, green rooftops and potentially more community gardens;
- Providing further incentives for developers to create open spaces adjacent to existing commercial opportunities such as cafes, restaurants and shopping malls (such as the example in Oracle Towers Broadbeach);
- Investigating the establishment of future Plazas/Piazzas, for the purposes of art, culture and social expression.
In order to determine which practices are appropriate for the high density coastal area and potentially future high density areas (and in what specific locations), it would be pertinent for Council to complete further assessments. These assessments could first test the overall appropriateness of the initiative by location. The appetite / demand (or otherwise) for each of the initiatives with the current residents and visitors to the area could then be determined, and if the practice was in demand, the potential cost of the initiative could be assessed. The demand could then be compared to the cost and the overall net benefit (or otherwise) could be determined. If an overall benefit was present, then Gold Coast City Council may wish to incorporate the initiative into its Recreation Network.

Investigation into how tourists currently use and would like to use sport, recreation and open space facilities would also be highly beneficial and an important element in the assessments (as this component is relatively unknown).

Investigation into areas that are over or under embellished, and the extent to which embellishing areas promotes / curtails appropriate levels of open space usage would also add considerable value.

Furthermore, investigation of how people currently use commercial spaces as recreation (such as cafes, shop malls), whether people would utilise open spaces adjacent to cafes, restaurants, shops malls, and whether people would value further communal open space in private developments, would add value in determining how much weight should be given to these opportunities in a reviewed Sport, Recreation and Open Space strategy for the high density strip. As noted throughout the document, although the provision of private open space and recreational pursuits should not be at the expense of public opportunities, they can alleviate the expectation of public land provision to some extent.

Upon the conclusion of these investigations, Council may wish to move to a needs based assessment set on appropriate parameters\(^69\) for their sport, recreation and open space facilities, and/or include ‘minimum’ standards needing to be achieved (rather than desired standards).

Regardless of the approach taken, it would be in Council’s interest to adopt a rigorous marketing and promotional campaign to ensure that all their current assets were known and utilised to their optimum levels.

\(^{69}\) For example, Council may wish to ensure that one of the parameters was that land for formal sports participation was provided outside the high density strip, regardless of individuals’ desires.
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