Part 3.
Better Gold Coast streets and spaces
The Gold Coat Rapid Transit (GCRT) project provides a unique opportunity to rethink and reshape the streets and spaces of the Gold Coast, reclaiming them for people and revegetating them to provide a sustainable and subtropical public realm.

Streets are the arteries of our cities, allowing people, goods and vehicles to move from place to place. As a city shaped by the freedom provided by private car travel, roads and streets have always shaped the public realm of the Gold Coast. In recent decades the competing demands for a finite amount of road corridor space has resulted in a shift in balance that favours the private vehicle, usually at the expense of cyclists, pedestrians and streetscape elements such as trees.

The Gold Coast City Council open space and greening strategy identifies ‘the green’ (bushland), ‘the gold’ (beaches) and ‘the blue’ (the waterways) as quintessential features that define the Gold Coast, its character, and its desirability as a place to live and visit. Projected growth for the region presents a challenge for the long-term management of civic infrastructure, open space and public realm. To ensure a sustainable, liveable and functional city, these facilities must be well-maintained, adaptable to changes in lifestyle and technology, and capable of supporting the health and well-being of the community.

With the approaching integration of the light rail system into many of the city’s key networks, more demands will be made on its public realm. Interrogation of public realm spaces and linkages throughout the corridor has revealed critical inadequacies in provisions for pedestrians, cyclists and public transit users. These include undesirable and inadequate paths of travel for pedestrians in a subtropical climate, poorly considered interfaces between streets and buildings, fragmented networks resulting from the lack of safe and accessible crossings (many of which are severed by private development), and fragmented provision for both commuter and recreational cyclists.

This section proposes strategies for achieving enhanced public realm outcomes throughout the GCRT corridor, allowing the Gold Coast to build on its existing assets, and fully realise the opportunities provided by this city-making project.

Note: Detailed advice in this section does not take account of GoldLinQ proposals for the dedicated GCRT corridor. Emphasis is focussed on surrounding streets and integration. There is no commentary on those streets directly associated with the GCRT infrastructure, as public realm works in these relevant streets are being delivered under a separate contract.

Revegetating streets

Increasing the number and quality of trees on Gold Coast roads and streets provides the best opportunity to significantly enhance the city’s public realm. Revegetating Gold Coast streets reclaims them for people, providing a sustainable and subtropical public realm, and strengthening ‘the green’ of the Gold Coast so it can fully complement ‘the blue’ and ‘the gold’ components of the city’s character and open space.
Public realm – the space used by everybody

What is public realm and why is it important?
Public realm is used by everybody. As people move between their homes, schools, and places of leisure or employment, they do so in the public realm.

The Gold Coast public realm is made up of a wide variety of places and spaces, including:
- Roads and streets
- Beaches
- Waterway corridors
- Parks and plazas

What does high quality public realm provide?
High quality public realm contributes to successful, thriving cities in many ways:

**Diversity**
- There is a variety of different places, spaces and experience, ranging from formal, city-scale spaces to small and intimate spaces
- The widest possible variety of uses is provided for

**Richness**
- There is detail and interest for all senses: scent, colour, texture
- There is a place for acknowledging cultural heritage
- There is a place for art

**Vitality**
- There is movement and a sense of ‘life on the street’
- There is commercial trade and activity
- There is a place for spectacle, events and celebration

**Safety**
- All people feel safe whilst carrying out their activities: shoppers, pedestrians, cyclists, delivery staff, motorists, public transport travellers, children, and all adults, including the elderly or those with special access requirements
- The space feels safe to use by day and night

**Comfort**
- The space is thermally comfortable: cool and shaded in summer, warm in winter, protected from strong wind and rain
- There are places to rest along a journey
- Levels and gradients are easy to traverse

**Functionality**
- The space works for the purpose it was designed for: trees have room to grow, delivery vans and buses have room to manoeuvre, cyclists have space to pass, footpaths can accommodate pedestrians, there is room for outdoor dining
- It is easy to carry out maintenance activities
- All levels of mobility are provided for

**Connectivity**
- It is easy to get from one space to another
- Spaces are legible, and easy to understand; if signage is provided, it is simple and clear

Prepare by HASSELL for GCCC
Public open space opportunities on the Gold Coast are diverse with a good distribution of active and passive recreation spaces spread throughout the corridor.

A range of experiences caters to many - from the hinterland rainforests to the popular entertainment districts through to the lengthy stretch of sandy beaches. Visitors and residents alike have much to choose from.

The list of public assets continues to grow with the recently refurbished and expanded parklands at Southport Broadwater, Surfers Paradise foreshore revitalisation, proposals for a ‘river walk’ corridor between Sundale and Pacific Fair, and funding approved for additional sections to the Oceanway.

The following table assesses the existing general provisions of public realm and open space on the Gold Coast against four criteria: quantum, quality, connectedness and function.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Key observations</th>
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</table>
| Quantum  | > Good allowance of open space provided across the Gold Coast  
> Parks and green space occupy 410 hectares or 20% of the corridor land area  
> Roads and infrastructure occupy 395 hectares or 40%  
> Waterways and canals occupy 270 hectares or 14%  
> Beaches occupy 50 hectares or 2% |
| Quality  | > Quality varies  
> High quality parks and green space include Surfers Paradise foreshore and Southport Broadwater Parklands  
> High quality streets include Orchid Avenue, Surfers Paradise and Short Street, Southport. These streets are vibrant, pedestrian and cycle-friendly, comfortable and functional  
> Low quality streets include major traffic arteries such as the Gold Coast Highway and local streets such as Surf Parade, Broadbeach and Queen Street, Southport. These streets are car-dominated, unfriendly to pedestrians and cyclists, visually unattractive and uncomfortable |
| Connectedness | > Level of connectivity varies but is generally poor  
> The Oceanway provides the highest level of north-south connectivity  
> East-west connections are poor  
> Open space parcels are generally discrete and not linked to other open spaces  
> There is minimal opportunity to move between open spaces along canal and waterway edges |
| Function | > Level of functionality varies  
> Many streets display an imbalance in functionality weighted towards vehicular movement, at the expense of pedestrians, cyclists and other public realm contributions |
There are four significant opportunities to create a better Gold Coast public realm:

1. Improve the existing provisions
2. Create new linkages
3. Investigate land in public ownership for catalyst opportunities
4. Explore alternative models for creating new public space

Improving existing public realm provisions

Occupying some 20% of the total corridor area, rethinking roads and infrastructure provides an opportunity to make a substantial contribution to an improved Gold Coast public realm. Transforming roads to ‘streets for people’ will be examined in greater depth in the following pages, leading to proposals for new street typologies for the Gold Coast.

Linkages

Despite the relatively high proportion of open space within the corridor, there is a shortfall in the quality of linkages between the spaces, and a number of precincts that are entirely devoid of large open space parcels. A strong series of connections between these spaces would deliver a more integrated green network for the region, and transforming latent, under-utilised spaces into shady share paths, contemporary playscapes and enticing interactive trails would improve opportunities within urban areas. Two key opportunities to deliver this strategy are the enhancement of suitable areas adjacent to canals into built out ‘river walks’, transforming privatised edges into publicly accessible links, and reinforcing the Oceanway into a continuous oceanfront promenade. Both strategies return waterways to the public realm for all to enjoy. This network could be further complemented by strategically located green bridge links to prioritise pedestrian and cyclist flows.

Land in public ownership

Additional public realm opportunities exist with Council owned properties currently reserved for future development, or forming part of the residual land strategy of GCRT works. These land parcels present valuable opportunities for transformation into functional public space within the core urban areas. Realising the potential of these spaces within an intensive urban area can benefit the recreational needs of many ‘urban’ family residents, as well as visitors, by providing safe, well-surveilled parks and trails for water and interactive play, jogging tracks, and places to meet in distinctive community places.

New public realm provisions

Projected population growth and pressures on existing public open space provides Council with an exciting opportunity to investigate changes in the provision of open space and how alternative methods of integration can be implemented. Alternatives that could be further investigated include:

> Review of the quantity and timing of new provisions to achieve ongoing increases
> Design improvements to achieve best practice outcomes
> Council and stakeholder reviews to adapt policy enabling new opportunities to provide open space within both public and private spaces, such as:
  > Gardens in the sky
  > Green roofs and walls
  > Rooftop gardens
  > Publicly accessible/privately operated spaces
  > Vertical landscapes
  > Super trees
  > Community gardens
  > Edible landscapes
  > Podium landscapes
  > Mid-block linkages
  > Relaxation of streetscape requirements (e.g. clear zones, path widths, tree callipers, service locations, etc)
> Review of street verge landscaping treatments to reduce council expenditure on maintaining turf strips in preference of low maintenance planted garden beds
> Temporary installations
Implication of GCRT

It is unquestionable that the introduction of the GCRT will alter the urban fabric of the Gold Coast. It will provide the public with greater options for how they choose to travel between home and other destinations. With time, education and promotion of public transport use, how people move through the corridor will adjust and adapt: the goal is for fewer cars on the roads and increased foot and cycle traffic. To encourage this change it is not enough for the GCRT journey itself to be efficient, the journey from home to a transit station must be attractive, comfortable, easy to use, and safe. Delivering connected street networks capable of dealing with station patronage demands will successfully integrate the infrastructure within its wider neighbourhood context.

Potential changes to the existing public realm resulting from the GCRT project include:

- Increased pedestrian and cycle traffic on streets directly linked to stations
- Increased urban development around stations creating ‘hubs’
- Increased urban development on streets directly linked to, and within close proximity of, stations
- Increased need for collocation of public transit, such as bus and rail interchanges

The implications of these changes on existing streets include:

- Increased foot traffic conflicting with inadequate footpath widths and unappealing streetscapes
- Existing provision of street furniture, lighting, cycle infrastructure is inadequate to need
- Increased safety issues due to inadequate intersection thresholds, subsequently increasing jay walking and risky pedestrian/cyclist movements
- Increased numbers of cyclists attempting to share roads with vehicles
- Traffic impacts in proximity to other public transport stops due to increased patronage (e.g. bus stops within proximity to stations that provide onward journey connections)

A public realm improvement strategy for better Gold Coast streets and places

1
Walkable city – greenways and blueways project

10
Great streets project covering all eight east-west connections and two unifying subtropical streets

100
Urban places project aimed at realising urban public realm on the coast

1000
Small scale interventions, unifying placemaking elements (such as wayfinding signage, street furniture and light palette, a public art strategy (eg. GCRT/ traffic substation art) and, at a city building scale, network interventions such as bike path improvements, city cycle scheme, end of trip bike stations, boat parking spaces, and a public ferry service on waterways

10 000
New trees strategy, combined with a mature tree nursery and public-private street tree planting program

GCRT – A catalyst for public realm improvement

The GCRT project provides the Gold Coast with a unique opportunity to catalyse a broad public realm improvement strategy that delivers a more attractive, sustainable and efficient city, from the macro to the micro scale.

A focus on converting roads to streets, and to revegetating Gold Coast streets will enable Council to deliver public realm enhancements from the city scale down.
Existing streetscape typologies

Streets are the main arteries of our cities, transporting people through everyday life. Every trip is important and begins and ends as a pedestrian, whether it is driving from home to work, catching a bus to the beach or riding a bike to school. Most street networks, however, do not cater equally for each of its user groups, typically prioritising private vehicular movements over pedestrians, cyclists and public transit.

Throughout the Gold Coast street network, consideration and provision for pedestrians and cyclists has suffered in comparison with vehicular transport. The focus on multi-lane, car dominated environments has resulted in typical street conditions that exhibit:

- Lack of street trees and greenery, predominantly low-maintenance turf verges
- Hostile microclimates (e.g. hot due to a lack of shade and breezes, expansive pavements creating high glare, poor consideration for effects of orientation)
- Extensive on-street parking
- Narrow footpath widths
- Intermittent footpaths
- Inconsistent provision of equitable access and Disability Discrimination Act (DDA) requirements
- Visual clutter (e.g. transmission lines, light posts, building signage and outdoor furniture)
- Constrained public utility allocations restricting streetscape opportunities
- Abrupt interfaces between developments and public domain
- Pedestrian, cyclist and vehicle points of conflict, particularly at crossings
- Infrequent pedestrian crossing opportunities on major roads
- Restrictions to access due to land ownership structures

Street quality

The quality of the street, its character, and the level of pedestrian comfort are important factors that either encourage activity or hinder use. Tree lined streets, such as Short Street and Elkhorn Avenue, exemplify the traits of a quality streetscape – they are more pleasant, the temperature is cooler, and pedestrian patronage is high. A well-organised street must provide a quality environment that successfully accommodates space for a diversity of users, including solitary walkers, families with strollers, commuter cyclists and everyday traffic.

There is a strong and direct relationship between form, function and use of public realm and legibility, connectivity and diversity. Enhancing the sustainability of public realm streets and spaces requires consideration of the following criteria:

- Is it responsive to recreation needs in that location and projected use of the space (i.e. active, passive, transitional, temporary, etc)?
- What changes in recreational trends and technologies have occurred?
- Is the proposal considerate of, and appropriate for, the context?
- Does the space enable both day and night use?
- Is it easily maintained?
- Is it responsive to current and changing climatic conditions (e.g. long-term droughts, higher rainfall in winter or long hot summers)?
- Is it adaptable to change, such as fluctuations in climate or seasons (high rainfall, strong winds, drought, sea air, etc)?
- Does it increase recreational opportunities that strengthen the character and attractiveness of the city?
### Key issues and opportunities

#### Congested, car dominated streets, Southport

<table>
<thead>
<tr>
<th>Issue</th>
<th>Key challenges and opportunities</th>
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<tbody>
<tr>
<td>Lack of shade</td>
<td>Comfort / subtropical</td>
</tr>
<tr>
<td>Streets are hot, lack of breeze</td>
<td>Microclimate and local cooling</td>
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<tr>
<td>Existing services, overhead power</td>
<td>Minimise Urban Heat Island Effect (UHI)</td>
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<tr>
<td>Limit opportunities for street trees</td>
<td>Street canyons</td>
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<tr>
<td>Poor pedestrian amenity</td>
<td>Citywide carbon offset strategy</td>
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<td></td>
<td>Utility relocation</td>
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<td></td>
<td>Utilise recycled water</td>
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<td></td>
<td>Water sensitive urban design</td>
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<td></td>
<td>Trees, super trees, green edges provide shade relief, lower temperature and humidity of the street and improve pedestrian comfort</td>
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</tbody>
</table>

#### Battling car dominance

<table>
<thead>
<tr>
<th>Issue</th>
<th>Key challenges and opportunities</th>
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<tbody>
<tr>
<td>Streets are dominated by cars</td>
<td>Reclaim streets for people</td>
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<tr>
<td>Pavement surfaces expanding for increasing traffic movements</td>
<td>Balance pedestrian, cycle and vehicle priority</td>
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<tr>
<td>Unappealing spaces to walk or cycle</td>
<td>Encourage walking</td>
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<td></td>
<td>Increase effective walkable catchment of GCRT to surrounding neighbourhoods</td>
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<td></td>
<td>Reduce speed</td>
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<td></td>
<td>Widen road surface pavements</td>
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<td>Safety</td>
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<td></td>
<td>Relief - planting and improved street amenity</td>
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<td></td>
<td>Convert car park zone to space for street tree planting</td>
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</tbody>
</table>

#### Clear space for walking and cycling

<table>
<thead>
<tr>
<th>Issue</th>
<th>Key challenges and opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide streets are difficult to cross</td>
<td>Pedestrian priority</td>
</tr>
<tr>
<td>Low amenity</td>
<td>Cycle network</td>
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<tr>
<td>Inconsistent provisions</td>
<td>Path provision</td>
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<td></td>
<td>Signage</td>
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<td></td>
<td>Green bridge links</td>
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<td></td>
<td>Blueways (river walk)</td>
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<td></td>
<td>End of trip provision</td>
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<td></td>
<td>Safety</td>
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<td></td>
<td>Vistas</td>
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The existing Oceanway provides a critical north-south walking and cycling network for the city.
<table>
<thead>
<tr>
<th>Issue</th>
<th>Key challenges and opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cycle city</strong></td>
<td>Network, Path provision, Signage, Green bridge links, Adequate end of trip provision, Comfort</td>
</tr>
<tr>
<td><strong>Well defined and legible</strong></td>
<td>Flexible setback within private domain for street tree planting, Public - private domain definition, Cognition, wayfinding and views, Minimise visual clutter, Rationalise layout of footpath, Direct, convenient, connectivity, Nodes</td>
</tr>
<tr>
<td><strong>Distinctive richness – interest and of its place</strong></td>
<td>Views and vistas, Planting themes, Materials, Subtropical or tropical or locally appropriate, Interest and urban ‘events’ to make walking and cycling a pleasure, Investigate notion of ‘blobs and slivers’ to reclaim street for large canopy trees, Intersections and nodes, Public art strategy, Signage, lighting, street furniture, Vital streets, a pleasant place to be</td>
</tr>
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Transforming and reconfiguring streets

Currently, Gold Coast streets predominantly service vehicles and parking. Significant public realm and active transport improvements can be achieved through the reconfiguration of existing streets and road reserves, enabling a move to new streetscape typologies.

A diverse variety of streetscape transformations can be created using a simple toolkit:

- Decreasing on-street parking
- Reducing the width and/or quantity of traffic lanes
- Increasing footpath widths
- Increasing shade provision
- Improving cycle facilities

Within this toolkit the detailed consideration of surface treatments, street furniture, structures, and tree and plant species will further respond to and embed the Gold Coast streets within the subtropical and coastal context. The images below demonstrate the type of public realm achievable through a staged reconfiguration of a street.

Functional streets

As many streets vary in width and edge treatments, each street will need to be reviewed and redesigned in detail on a case by case basis. A suite of street typologies establish a precedent for typical street types on the Gold Coast that can be manipulated in structure to best fit the confines of individual road reserves.

To maximise the transformational benefits of reconfiguring streets, Council should seek to review current road engineering standards with the Department of Transport and Main Roads and other stakeholders. Working in partnership it may be possible to relax some of the current performance requirements and standards.

Key issues relating to the reconfiguration of streets include:

- Clear zone and setback requirements constrict street tree placements within the road corridor
- Small frangibility tree calipers limit the palette of potential street tree species
- Use of verges is constrained, due to uncoordinated distribution of underground services and public utility plant easements
- Transmission wires and associated infrastructure cluttering overhead space and limiting tree canopies and intermittently disrupting awnings
- Conflicting opinions on cycling standards and the lack of unified council strategy limit the integration of active transport initiatives

Healthy cities

Contributing to the urgency for public realm improvements is the increased promotion of active transport by many Australian capital cities. The federal government recently committed to a national guide for capital cities to work towards implementing international best practices for active transport, with the goal of a sustainable and healthy future Australia. The benefits of integrating active transport initiatives within future infrastructure works include a range of social, economic and environmental benefits:

- Improved mobility, which is critical for successful cities and community-building
- Higher ratings of ‘liveability’, typically quantified by the many subjective elements that contribute to ‘quality of life’, such as safe environments with low crime rates, functional infrastructure, opportunities for education and recreation, close connectivity between home and work, and interaction with nature
- Incidental health benefits from physical activity, potentially saving the Australian healthcare system up to $1.5 billion a year

Transformation – from old to new typologies
Research indicates that there is a strong connection between the health of the population and the designed structure of cities. Well-designed and thoughtfully considered cities can ultimately deliver sustainable communities, as healthier populations result from increased physical activity. Walking and cycling can also generate substantial social, economic and environmental benefits, including:

> Lower vehicle usage resulting in less congested roads thereby reducing emissions and improving air quality
> Improved physical well-being with lower cases of lifestyle related diseases, which thereby generates a stronger workforce with the potential to work beyond current retirement age
> Improved social well-being with greater pride and sense of community, which thereby creates safer, more active and attractive public spaces

**Active places**

Transforming streets to better accommodate pedestrians and cyclists will generate increased ‘foot’ traffic. Typically, this helps stimulate economic activity for retail and commercial developments and can provide a catalyst for economic redevelopment.

New building typologies on the coast aim to support street activation through mixed use designations and improved street interfaces. Historically, private development patterns had an internalised and exclusionary approach to green space provision and street frontages. The proposed new built form typologies will integrate with the public realm by engaging street frontages with transparent boundaries between private and public spaces. The addition of flexible setback zones to property boundaries will allow for a diversity of elements, such as outdoor dining, wider footpaths and increased landscaping areas, enhancing the perceived expanse of a streetscape and public realm. Flexible setbacks have been highly successful in cities such as Vancouver, resulting in street frontages that are visually rich, greener, and well-maintained, with costs borne by private developers.

Active streets and places need to feel and be safe. Crime Prevention through Environmental Design (CPTED) principles should be applied, including strategies for:

> 24-hour surveillance and activity reinforced by mixed use developments
> Built form and landscape that enables casual surveillance, clear sightlines to streets, and exterior elements that avoid entrapment
> Adequate lighting provisions
> Legible designs that enable easy wayfinding

**Augmenting public realm**

Revitalised streets are essential components of the public realm renewal strategy, providing improved connectivity to plazas, parks, canals and oceanfront, as well as encouraging active transport. Progressive public space provisions will further transform the public realm. Potential opportunities have been identified and are recommended for further exploration, including:

> Revitalisation of existing parklands, such as Broadwater Parklands, Carey Park and Queens Park
> Reintroduction of the community to its city waterway edges through a series of public ‘walks’, including reconnecting missing sections of the Oceanway
> Redevelopment opportunities of large publicly owned land parcels, such as Main Beach Caravan Park or Macintosh Island
> Improved east-west movement corridors with the introduction of a suite of ‘green bridges’ that would unlock the canal system for improved connectivity and increased public access to the coast’s open space network
> Rejuvenation of under utilised spaces, such as degraded footpaths and laneways, expansive car parking areas or street ends, into new, shared open spaces and urban plazas
> Exploration of innovative technologies and strategies to deliver greater open space provision with new developments, such as flexible setbacks to property boundaries, rooftop and rain gardens, green edges and walls, and engaging canal edges on publicly owned land
> Engagement with interested stakeholders to identify new public realm opportunities within neighbourhoods suffering from a low ratio of open space to population

Exemplar landscape treatments and edge transition from street to private development, Roma Street Parklands, Brisbane

Activation of the river edge with public access and recreation space in South Brisbane

Prepared by HASSELL for GCCC
The following defines the visions and objectives for improving the streetscapes and public spaces on the Gold Coast. Eight key design principles and three design drivers underpin a design rationale for achieving better streets and places.

**Envisioning typologies**

**Eight key design principles for good streets and places**

The design of the streetscape and public realm aims to achieve a level of richness and texture to the variety of people places in the city. The design of streets and places evolve from a series of guiding principles that establish intrinsic qualities within the landscape of the city and unfolds a narrative within it.

**Thresholds**
Active and passive
Occupiable
Flexible zone
Green edges
Deep shade and filtered light
Arbour, screens, structures

**Journey**
Movement
Clear space for walking and cycling
Playful
Wayfinding
Legible linkages
Terminating vistas

**Sustainability**
Innovative
Future generation
Test bed
Urban Heat Island effect (UHI)
Modify microclimate

**Water**
Ocean to canal (gold to the blue)
Cooling/comfort
Nourishment
Misting
Still/moving/sparkling/playful

**Colour**
Subtropical
Patterns
Emotive
Suggestive
Characterful
Soothing or Invigorating

**Sense**
Interest
Awareness
Responsiveness
Triggers
Delight
Energising

**Texture**
Patterns
Shadows
Rhythm
Linking elements
Grain
Art and sculpture

**Vitality**
Living streets
Green streets
Pedestrian and cyclist priority
Places for people
Dynamic places
Comfort and legibility
Three key design drivers for good streets and places

1. Public realm

The century of cities

Public places are important to the function of a growing city. The Gold Coast is unique in that its geographical context between ocean and hinterland, as well as substantial canal network, has provided much of the corridor with expanses of ‘borrowed’ landscape. As the urban density of the region grows, shortcomings in the quality of and access to public realm are revealed. Comparative to other major cities, the Gold Coast is ranking highly in its efforts to rectify key issues and perform as well as, or better than, its counterparts. Public realm interventions should aim to deliver a sustainable, distinct and diverse range of public spaces that unify the city. Public domain must be robust, accessible, functional, flexible, safe, sustainable, attractive and memorable places for people.

World’s most liveable city

Every individual has both material and psychological needs. It should be the aspiration of every city to cater to these needs and assess success through measurable means. Liveability is one of these measures, demonstrated by a number of critical life factors including access to food, shelter, and water, personal safety, medical assistance, and opportunities for employment and recreation. High ratings of liveability often reflect the health of a city and its natural environment, as well as stimulate popularity for tourism and global recognition as an exemplar city. A range of annual international surveys assess cities against numerous ‘liveability’ factors that include healthcare, culture, environment, education and personal safety. Vancouver, Canada has been the top ranking city of this survey for five consecutive years (2007 – 2011) followed by four Australian capital cities within the top ten (Melbourne, Sydney, Perth and Adelaide).

“Mid-sized cities in developed countries with relatively low population densities tend to score well by having all the cultural and infrastructural benefits on offer with fewer problems related to crime or congestion.”

(Reuters Life, 2011)

Attributes of liveability

These top ranking cities set a precedent for the Gold Coast, exemplifying outcomes which aspire to deliver outstanding city living, sustainable environments, and stimulated social and economic activity, generating a highly-valued, liveable city. Attributes of a successful, liveable city must include:

> Resilient food, water and waste systems, clean air
> Affordable and diverse housing
> Good health, including mental health
> Personal and public safety
> Economic and education opportunities
> Accessible and reliable transport
> Good quality telecommunications
> Social capital
> Community well-being
> Health of the broader environment
> Beautiful places
> Diversity of population and neighbourhoods
> Inclusive and adaptable decision-making

(source: GRATTAN Institute, 2010)
2. Movement and connectivity

Streets and places for people

Well-designed streets enrich people’s lives, promote activity and interaction, and provide opportunities for incidental meeting and interaction within comfortable and safe environments. Spaces that encourage this behaviour and invoke a sense of freedom come from rich landscapes alive with ambience and an atmosphere equitable to people of all abilities.

This can be achieved through many streetscaping components that include lush landscaping, integrated street furniture, adequate signage and wayfinding, good lighting, adaptable structures, suitable materials, calming colour schemes, and an abundance of public art.

Continuity and enclosure

Successful place-making relies heavily on maintaining a sense of ownership and safety through distinguishable boundaries between public and private. Clear and legible spaces allow free-flowing movement and define acceptable uses without reliance on overt physical barriers.

The strength of a safe and respectful community can come from entrusting a sense of ownership and stewardship of the public domain.

Ease of movement and connectivity

Public streets are critical components of public realm. Movement corridors that prioritise people above vehicles become popular urban spaces, which can be further heightened by offering a diversity of travel options, extensive shade, and being well-connected within the wider network.

Successful connections must include:
> Continuous, legible networks
> Vibrant and safe links
> Comfortable footpath widths
> Clearly defined uses of space
> Consistent at-grade crossing opportunities – the shortest route is always preferable wherever safety is not compromised
> Shortened waiting times at intersections and crossings
> Adequate waiting space at street corner thresholds
> Public access and connection to natural assets, such as waterways, river edges, and ocean fronts
> Regular opportunities to stop and rest (rest points must adequately provide furniture)

Well-integrated streetscape components

Providing signage and distinctive pavements to define use of space

Private garden frontages greening city streets

Embracing transition from public to private
3. Diversity and robustness

**We were all created equal**

Outstanding design must meet the demands of a diversity of users and offer unique experiences.

Equitable access for people of all abilities is a necessary legislative component of the design of new places, ensuring that all places are accessible and functional for all potential users.

All new development should aim to sensitively integrate built form within the existing landform to minimise drastic grade changes and ensure paths can seamlessly transition from the street to building entries. Scenarios that require daunting and overwhelming stairs and ramps should be avoided.

**Contextually appropriate**

Successful public realm considers the inherent character of place through inspiration derived from the existing landscape. Responsive design leads to better functioning and more comfortable spaces that will also contribute to local distinctiveness. Designing streets and places with in-built flexibility leaves a legacy that can adapt to changes in both climate and land use, and deliver value for money as manageable assets for Council and the private sector.

These street typologies are a component of a holistic and multi-faceted city-building framework that all together prioritises the actions for creating legible streets, active places, sense of place, and distinctive spaces for a successful and sustainable subtropical city.

A diverse and robust city can be attributed to:

> Design that is appropriate to its context, integral for contributing to character and places of high amenity
> Active building frontages and multifunctional spaces
> Transparency between private and public realm, where suitable
> Considerate design, responsive to climatic conditions
> Planning for modal shift
> Provision of a diversity of experiences that promote recreation, relaxation, education and inspiration

**Actions for a greener Gold Coast**

The following actions are recommended to enable revitalisation of streets and public places:

> Benchmark best practices for people streets and cycling
> Review existing street sections to improve the layouts of road reserves
> Record existing shade provision
> Review existing underground service for discussion on potential collocation of services or relaxation of clearance requirements
> Review footpath qualities and quantities for citywide consistency and to ensure infrastructure is adequately delivered to meet population projections
> Identify streets and linkages with pedestrian and cycle priority
> Review edge treatments and development policies to enhance street interfaces with developments
> Develop strategies for subtropical design and microclimate responsiveness
> Develop strategies to improve pedestrian amenity
> Rationalise existing street typologies, layout, character etc for the delivery of better ‘green’ streets by 2031
Envisioning typologies

Design priorities for new typologies

**Street layouts**
Propose a new general arrangement for street layouts that balances core values with best practice design, which ultimately achieves the following outcomes:

> Creates a legible hierarchy of roads
> Returns the street to prioritising pedestrian and cyclist movements
> Enhances the experience through improved amenity and better structure
> Integrates movement corridors and enhanced connectivity to the GCRT system directly from home to station to work/school/play
> Creates distinctive, functional streets respectful of context and climate
> Adaptable and durable streets that are low maintenance and robust
> Flexible in nature for transitions in land use, lifestyle, technologies and community interests over time
> Consistent with the strategic city building aspirations of the Gold Coast

**Retrofitting**
Explore opportunities to prioritise and retrofit existing streets within the study corridor to enable the following outcomes:

> Creates greener streets for improved amenity and shade provision
> Prioritise pedestrian movements by widening footpaths to accommodate projected foot traffic volumes
> Create multifunctional verge space that is flexible to:
  > A diversity of travel options
  > Incorporating street furniture
  > Integrating bus shelters, arbours or retail kiosks
  > Locating signage
  > Providing street lighting
  > Maximising street tree and understorey plantings
  > Flexible parking zones for loading or disabled access
> Ensure surface treatments, planting palettes, and furniture elements are consistent for a cohesive look, distinctive character and ease of maintenance
> Provide dedicated cycle paths wherever possible
> Provide dedicated bus lanes on major roads
> Improve microclimate through various streetscape treatments including large canopy street trees, arbours, awnings, and/or other potential design initiatives developed through detailed design
> Identify opportunities for public realm interventions

**Cycle network**
Provide a well-connected cycle network with appropriate provisions to achieve the following outcomes:

> Consideration of all types of cyclists (commuters, recreational and local access users)
> Provide different types of paths appropriate to street hierarchy and needs e.g. dedicated on-road cycle lanes, segregated cycle lanes, share paths, off-road cycle tracks/veloways
> Cater to the range of road speeds and environmental factors
> Wherever possible, provide consistent, hazard-free pavements
Demonstration typologies

Overview

This section of the report proposes typologies for rejuvenating key streets within the corridor study area.

It reviews existing carriageway and verge configurations and recommends improvements in layout, space dedications and streetscape regimes. The designs proposed offer either interim and/or ultimate solutions with a listing of desirable final outcomes. These are described as key points and accompanied by typical streetscape plans and sections. The desired landscape character, amenity and quality of the streets are also described and supported by exemplar imagery.

The street typology changes proposed were derived from an assessment of the existing road types, their function in the road, pedestrian and cycle network, their contextual location, proximity to retail centres, and their relationship to the proposed GCRT alignment. Further detailed studies are recommended on a case by case basis to survey existing landscape, services and built form constraints. Streets pertaining to the GCRT alignment, its edges and related public realm works are not discussed within this report as these elements will continue to be developed by GoldLinQ under a separate contract.

The design rationale proposed for the typologies provides a strategic vision for improving the function and amenity of streets. Current road standards, including clear zones, setbacks, road speeds, cycle provisions and utilities, have been considered, however are not subject to commentary within this report. These are engineering items that require further review and discussion with relevant parties.

It is also recommended that detailed design work be undertaken with engineering services, urban planners, and traffic planners to develop comprehensive local area master plans for key locations. This should coincide with a review of existing streetscape guidelines with a view to further developing comprehensive “Streetscape Design Guidelines” for the corridor study area and each of the precincts (i.e. Southport, Main Beach, Surfers Paradise, Florida Gardens and Broadbeach).

The diagrams below illustrate the design rationale for streetscape transformation, showing both the challenges to be found in current typical public realm and streetscape scenarios, and the benefits and improvements to be gained.

Existing: overhead powerlines restricting trees and poor visual amenity

Existing streetscapes are uncomfortable microclimates that are hot, high glare, and lack breezes

Proposed: greener streets with regular tree provision, shaded verge and active paths

Streets will become greener and provide more shade suitable for a subtropical climate, becoming inviting spaces for people.
Demonstration typologies

Key actions to create better streets on the Gold Coast

> Benchmark best practices for people streets and cycling
> Review existing street sections to improve the layouts of road reserves
> Record existing shade provision
> Review existing underground service for discussion on potential collocation of services or relaxation of clearance requirements
> Review footpath qualities and quantities for citywide consistency and to ensure infrastructure is adequately delivered to meet population projections
> Identify streets and linkages with pedestrian and cycle priority
> Review edge treatments and development policies to enhance street interfaces with developments
> Develop strategies for subtropical design and microclimate responsiveness
> Integrate Water Sensitive Urban Design (WSUD) initiatives for best practice drainage solutions that achieve natural irrigation of streetscaping and optimal water management outcomes
> Develop strategies to improve pedestrian amenity
> Rationalise existing street typologies, layout, character etc for the delivery of better ‘green’ streets by 2031

Common design elements

Demonstration street typologies were created using combinations of the following design components, to achieve reconfiguration of street layouts:

> Reduced speed limits
> Relaxation of setback requirements for street trees
> Narrowed traffic lanes
> Removal of median or reduction in width
> On and/or off-road cycle provisions
> Footpath and share path provisions
> Consistent shade provision through street trees and/or shade structures
> Alternate types of shade to modify microclimate
> Flexible zones along verges for optional treatments, such as parking bays, loading zones, disability parking/loading, structures, kiosks, planting
> Flexible setback zones along shared property and reserve boundaries

Benchmarking: investigation of new cycle infrastructure, such as recent installations of segregated lanes on Bourke Street, Sydney

Benchmarking: popular local, national and international streets were reviewed to understand footpath widths, methods of shading, and integration of street furniture. This example is in the Canberra CBD.
Items for investigation

The following items are recommended for further investigation:

> Transition strategies between GCRT and non-GCRT sections of the boulevard
> Design alterations needed for variations in road reserve width
> Appropriateness of central right and left turn ‘slot’ lanes in urban environment
> Intersection, pedestrian crossing and driveway crossing integrations
> Review of DTMR and Council regulations for potential relaxations to road engineering requirements
> Specific locations of disabled parking bays and set-down areas within streetscapes (should be considered on a case-by-case basis)
> Definitive locations for accessible on-street parking bays and passenger set-down areas for people with disabilities (typically collocated within proximity to hospitals, medical centres, other medical service providers, and shopping centres)
> Definitive locations for commercial loading zones on streets with no parking

Strategies: options for on-street parking provision were explored to balance parking allocation with pedestrian and cycle access. Egerton Street, Emerald, Queensland
**Gold Coast Boulevard**

**Design intent**

The principal arterial north-south connector for the city is to be renamed ‘Gold Coast Boulevard’ reflecting its revitalised, active transport-oriented streetscape. Subtropical boulevard treatments exhibit prominent street trees with lush understorey plantings and wide, high-quality footpaths lining the edges. Clearly distinguished zones allow safe and balanced passage of pedestrians, cyclists, buses and motorists alike.