



Contents

Contents	1
1 'The Creating Streets for People on a page'	2
2 Introduction and Purpose	4
3 Strategic Context & Direction	6
4 Design Direction	12
5 General Design Guidance	14
6 Street Typologies	26
7 Implementation	38

1 'Creating Streets for People on a page'

Draft Vision

To adapt our street network for an evolving and growing municipality - supporting the transformation of land uses, and environmental, economic, and community needs

The vision will be achieved by moving from a service infrastructure and vehicle centred design to a place making and people focused approach, aligned with global best practice. The Policy will guide future investment in the street network in The City of Brimbank (Brimbank) to create people focused places that facilitate active travel choices, community cohesion, and adaptation for the future climate.

Objectives

The primary objectives of CSP are delivering:

- a walkable Brimbank that promotes healthy lifestyles across all ages and abilities by providing comfortable shaded streets and safe links between destinations;
- a network of green corridors between parks and reserves servicing the community and supporting biodiversity;
- vibrant and safe retail and leisure areas where streets provide seating, dining, and play spaces for the community to gather and interact; and
- in combination with the Cycling and Walking Strategy creating a safe, direct, cycle network linking destinations within and beyond Brimbank.



Summary of key directions

Reimagining road space

Ensuing that street design delivers:

- reallocation of parking and road space to create greening opportunities and to facilitate increased opportunities for cycling and walking; and
- conversion of larger underutilised areas of road to pocket parks.

Quieter streets

Investigate opportunities for:

- lower speed limits and associated traffic management measures to improve public safety;
- through traffic route closures;
- pedestrian priority areas and increased crossing locations; and
- shared spaces in activity centres and quiet residential living streets.

Greener, cooler streets

Building resilience for the future climate and travel choices by:

- increasing canopy tree cover;
- utilising Water Sensitive Urban Design (WSUD) focused street design;
- enhancing biodiversity and creating habitat corridors:
- considering future EV charging requirements;
- facilitating integration of streets with public transport requirements; and
- creating accessible and equitable spaces.

Advocacy

Facilitating engagement with state authorities to seek better people and place outcomes from state owned, and designed, roads and where Creating Streets for People projects interface with them.

Guidance

Creation of developer guidelines for new streets within Brimbank.



2 Introduction and Purpose

Policy Imperative

The creation of the Creating Streets for People (CSP) Policy is an action in the Council Plan for 2021-2025 and has the potential to help address the below objectives.

- Create liveable neighbourhoods with services close by;
- Increase physical activity and healthy eating;
- Build social connections;
- Improve transport connections (footpaths, cycle paths, roads);
- Increase the number of trees and canopy cover;
- · Reduce carbon emissions; and
- Take action on climate change.

Street design can deliver outcomes to aid meeting these objectives, either directly or indirectly. These can include creating better places for people to spend time and form social connections, or facilitating more sustainable travel choices by providing opportunities for active travel and consequently reducing carbon emissions.

Streets and COVID-19

Although the economic, social, and environmental benefits of 'living locally' have been understood for many years, the social, environmental, and local economic impacts of the COVID19 Pandemic lockdowns have reinforced the benefits of a locally based lifestyle on Brimbank's communities and residents. It has also highlighted gaps or issues in our infrastructure to support this lifestyle.

The lockdown's restrictions on travel and use of public facilities refocused the use of our streets as public realm to maintain residents' physical activity, access locally sourced goods, and maintain social interaction to support mental health.

Council identified increased utilisation of public realm and stewardship of public spaces by the community during 2020-2021 through increased community requests for management and protection of public realm infrastructure and environmental assets.

The way we travel, shop, and socialise has been affected by the pandemic restrictions and these changes to varying degrees, will continue to occur long after the restrictions are lifted. The experience of working from home during lockdown has created

a push for ongoing flexibility in work environments by employees and employers. Almost 50% of Brimbank's employed persons work in industries that are associated with office based roles (ABS, 2016). Although the dominant industry is currently manufacturing, the National Employment and Innovation Cluster (NEIC) and significant rail infrastructure investment planned for Brimbank will be a catalyst for a shift in demographics and industries. Prior to the Government mandated work from home directions ceasing, 75% of Australian workers thought employers would still support their future work from home plans (University of Sydney, 2020).

This new 'working from home' presence in our suburbs, together with housing growth can create additional demand for local services supporting a range of local facilities and greater investment in 'living locally'. Our streets must improve access to, and functionality of, local shops and facilities, enhancing the vibrancy of our suburbs.

There is an opportunity to support our residents in maintaining this new lifestyle through encouraging sustainable travel behaviour, discouraging local car trips, and maintaining the momentum for use of our streets and public spaces for physical activity and social interaction.

The creation of this Policy is timely, and can address these issues through people-focused design and management of our streets to adapt to the social, economic, and environmental needs of today and the future. These improvements will not only enhance local liveability within Brimbank but will have greater environmental, social, and economic benefits for the region beyond.

A snapshot of Brimbank's streets

- Cycling currently only accounts for 1% of all trips originating in Brimbank, although walking accounts for 13% - overall active transport trips are lower in Brimbank compared to the Victorian Integrated Survey of Travel and Activity (VISTA) average. The State transport sector emissions reduction pledge includes an objective for 25% of all trips to be 'active transport';
- VISTA data has recently been updated to cover 2012-18. Data indicates 7.6% of private vehicle trips originating in Brimbank (around 28,000/day) are 1km or less; and
- Ongoing tree planting is already underway within existing streets to increase canopy cover.

Community Engagement Feedback

Initial community engagement was carried out through Council's Your Say Brimbank website. Key points are summarised below.

- 422 people visited the Your Say page and 136 people contributed to feedback;
- The top description of their residential streets were 'unattractive' and 'hot (in summer)' and for their local main road were 'noisy', 'unattractive', 'fast', and 'unsafe';
- Almost everyone used their streets during the pandemic for 'walking or exercising' and over a third for 'talking with neighbours', 'riding, skating or scooting', and 'sitting outside';
- The majority of people (68%) do not enjoy using their local shopping strip for outdoor dining or other activities, due to reasons such as 'lack of offering', 'no space for it', 'impact of traffic and parking', and 'lack of trees';
- Important features selected for local streets included 'outdoor trade and eating opportunities', 'vibrant and beautiful spaces', 'better for pedestrians', 'greening', and 'road safety'; and
- When asked about the streets the community love, the responses highlighted tree lined streets, car-free streets, and ones incorporating safe cycle routes.

The community feedback has informed the subsequent work on the Policy document and its guidance.

Purpose of Creating Streets for People

The preparation of a Policy provides Council with a framework to create a long term vision for how Brimbank's streets should look, function, and support the community, now and into the future.

By defining a 'Brimbank wide' approach of these considerations, Council can provide a targeted and equitable approach to street improvements that can be integrated into our existing systems of design, delivery, and maintenance of streets. A holistic approach to creating better streets in Brimbank ensures a consistent and practical approach to street design and management.

It also allows Council to effectively advocate or provide minimum requirements to external parties who design and manage streets within Brimbank, such as the Department of Transport and major industrial, commercial, and residential developers.

The CSP Policy will necessitate undertaking an analysis of the streets of Brimbank on an incremental basis during Council's road rehabilitation program, ensuring that any critical gaps in street infrastructure are identified and rectified to better support our community, economy, and environment.

The CSP Policy outlines a framework for a strategic and technical approach to creating streets for people in Brimbank and includes technical design guidance, an implementation framework, and planning considerations.

3 Strategic Context & Direction

Paradigm shift in transport planning

Globally there is a paradigm shift in transport planning, from getting people from A to B as guickly and as conveniently as possible, to a broader, more holistic approach that adopts liveability metrics like health & wellbeing and environmental consequences. These changes are also being facilitated by a technological shift to zero emissions transport, Big Data, and the sharing economy. Inhabitants of cities the world over are moving from ownership of private vehicles to using them in alternative ways, with mobility as a service (MaaS) becoming more prevalent. MaaS allows users to plan, book, and pay for mobility services, reducing the need for private car ownership, one of the best know services is Uber. Autonomous vehicle technology and flexible working locations are likely to see this shift become greater in future.

The counterpoint to this shift is a current gap in infrastructure and a rising population, which short to medium term is likely to exacerbate traffic issues within Brimbank. With considerable investment in rail infrastructure on the horizon street design must balance the often competing requirements of a future transit scenario with the needs of current car dependent households.

Council previously commissioned GHD Consultants (GHD) in 2002 to utilise the Victorian Integrated Transport Model (VITM) to assess the impact of proposed infrastructure and land use developments within Brimbank on Council's strategic transport network. Under a 'business-as-usual' model, without a shift in street design, it was found that the number of congested streets within Brimbank would increase significantly by 2041 with a corresponding reduction in average speeds. The CSP Policy aims to facilitate the opportunity for the community to switch to active transport for shorter local trips and to improve the wider strategic cycling network.

The role of streets in liveable cities

The role of streets in urban areas has always been to facilitate movement of people and goods, however in recent decades the convenience and affordability of travel by personal vehicles has meant a shift to a car dominated environment. This shift has brought about a range of unsustainable social, environmental, and economic consequences, such as reduction in social cohesion, higher emissions, and households in fuel and housing stress, due to long commutes. Globally, cities are now attempting to reverse that trend and create streets for people, which prioritise slower, sustainable, more active travel, such as cycling and walking. The vision for Brimbank has those objectives in mind, whilst acknowledging the continued need for car borne travel alongside it. The CSP Policy fits alongside other existing and future strategic work to deliver a liveable city being carried out by Council and State Government, such as:

- Plan Melbourne's 20 Minute Neighbourhoods;
- Housing Strategy, Neighbourhood Character Strategy, and Residential Development Framework;
- Creating Better Parks Policy and Plan;
- Urban Forest Strategy:
- Brimbank Tree Policy;
- Cycling and Walking Strategy;
- Industrial Design Guidelines;
- Parking strategy;
- Heritage and Aboriginal Cultural Heritage Strategies;
- Activity Centres Strategy; and
- Brimbank Planning Scheme update.

The role of streets as public space

Although the primary open space function within Brimbank is provided by parks, reserves, and squares, there is great opportunity for streets to complement, support, or contribute to these spaces. Examples of how this can be achieved include:

- redesigning streets to connect and integrate to parks and reserves;
- utilising cul-de-sacs, court bowls, and underutilised road areas as pocket parks and play spaces;
- consider closing quieter neighbourhood streets to through traffic or making them one way to create opportunities for pocket parks:
- delivering shared zones, pedestrianised areas, and hard landscaped wide pavements in activity centre streets, in recognition of the complex and dynamic activity centre environment; and
- streets becoming shared spaces, which can be multifunctional to meet community needs.

The nature strips within Melbourne makeup 30% of the open space across the city, illustrating how significant streets can be in fulfilling this role. Despite the important contribution streets can make they will always be supplemental to areas such as parks, reserves, squares, and plazas and can not be utilised as a substitution for dedicated public, communal, and private open space provision.

Living Locally – 20-minute neighbourhoods

One of Plan Melbourne's key principles is the 20-minute neighbourhood, to facilitate living locally. Brimbank's network of streets is one of the key components in achieving the ambitions of a 20-minute neighbourhood concept across the municipality. Streets support a number of transport modes, they connect residents with destinations, such as shops, schools, and parks and provide valuable space for community interaction, particularly in town centres. The CSP Policy supports 20-minute neighbourhood objectives.



Strategic transport priorities that influence streets

Various transport strategies will align future infrastructure with the Brimbank Community Vision 2040 and CSP, including a possible Integrated Transport Strategy and future updates to the Cycling and Walking Strategy (2016). The Policy will also be used to support advocacy and provide guidance when negotiating with State Government on local and strategic transport projects.

Current street typologies in Brimhank

Currently streets are given a functional classification which is derived from a traffic management point of view, they are:

- Main Roads (Arterial)
- Main Roads (Brimbank Owned)
- Sub Arterial
- Local Collector
- Local

This approach does not adequately reflect the use of these roads by the community for uses other than vehicles and does not represent the character and nuances of context.

New place based street typologies

In order to identify key streets for investment and to ensure equity of provision every street in Brimbank has been classified as one of the following typologies:

- Mixed Activity Street
- Residential Connector Street
- Local Activity Street
- Neighbourhood Street
- Living Street
- Commercial Access Road
- Industrial Road
- Service Lane
- Higher Order Roads not council owned

These new place based typologies are derived from Department of Transport (DoT) Movement and Place principles and have been assessed to ensure they are applicable in the Brimbank context. Additional information on each relevant typology is included in section 6, which also covers the appropriate design guidance. The Higher Order Roads, such as Ballarat Road, are excluded from this Policy, but the DoT Movement and Place principles and CSP Policy will be used to engage with State Government with any discussions around projects concerning these major roads.

Over time streets will fully transition to new place based typologies, however existing typologies will still play an important role in specific planning considerations and will remain in use.

Department of Transport's Movement & Place approach

Victoria's strong population growth continues to place pressures on our transport system.

That's why we've developed an approach to designing our roads and streets that meets the increasing needs of people and businesses while also creating or improving great places that make up our state.

Traditionally, roads and streets are considered only movement corridors to get us from A to B.

The Department of Transport's new approach, the Movement and Place framework, recognises that streets not only keep people and goods moving, they're also places for people to live, work and enjoy.

This means when we plan and develop the transport network, we need to balance the needs of both transport users and place users and design a mix of transport modes that are appropriate to how the road and places are used by communities.

Whether they are pedestrians, drivers or cyclists, Movement and Place puts people at the centre of transport planning.

It offers a common language to support meaningful discussions with communities about how we can address and prioritise Victoria's future transport challenges.

Longer streets that pass through multiple areas of a city can change functions along their length.

A single street may change road and street types as the surrounding land uses or as movement functions change.

For example, a street may transition from a Boulevard to a Mixed Activity Street as it passes through an activity centre. Different mode networks merge and diverge, so a road may change into Connector and City Street types as it reaches its strategic destination.

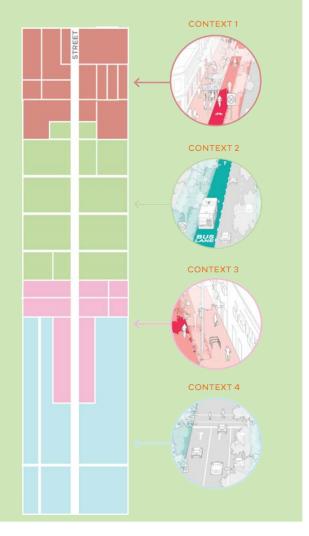
Because of the nature of Victoria's road and street network, there are many streets that have different functions at different points along the street.

Sydney Road, Royal Parade and Elizabeth Street are good examples of streets that have different requirements along its length.

Understanding how streets change through the city in response to context is fundamental to the practice of street design.

A single street can have multiple changing contexts.

This diagram shows how one street can transition between four distinct contexts. As this context changes, so too does the defined road and street type.



Brimbank mapping analysis

Municipality wide mapping has been carried out to classify all streets across Brimbank with the new typologies. Due to the more contextual nature of the typologies this results in some streets having multiple different typologies along their length. Once classified a street would be generally expected to remain in those same category, however new facilities and development could necessitate an update to individual streets where land use changes. This will be particularly likely in areas subject to considerable urban renewal, such as the Sunshine Priority Precinct.

The mapping process picks up those streets which contain community trip generators, such as shops, libraries, parks, and employment as well streets where people live. The mapping element of the CSP Policy aims to address how people connect with the places they need to go.

Streets in significant activity centres

Streets within Metropolitan and Major Activity Centres generally fall outside the typologies considered in CSP, but are covered by the draft DoT typologies. Additionally, some major activity centres, such as Watergardens, are privately owned areas, which have an internal focus and do not always integrate well with adjacent streets. Any changes to these streets are generally covered by a Structure Plan, bespoke master planning process, or a planning application and therefore while the CSP Policy does not have a direct focus, it can influence these processes. For example, assessing planning permit applications to determine if their approach has the same place making and people first principles as the CSP Policy. The Brimbank Activity Centres not specifically relevant to the CSP Policy are:

- Sunshine Metropolitan Activity Centre;
- Sydenham Regional Activity Centre;
- Brimbank Central Major Activity Centre;
- Keilor Downs Major Activity Centre;
- St Albans Major Activity Centre; and
- Deer Park Village Major Activity Centre.

Much of the guidance set out in this Policy is already being incorporated into spatial planning and urban design documents, such as Structure Plans, Urban Design Frameworks, and Built Form guidance. The CSP Policy will fill the gap in design guidance for smaller streets which are not significant enough to generally justify a full master planning process.



4 Design Direction

Key objectives for Creating Streets for People

The fundamental direction for CSP is the conversion of road space from vehicular movement and parking to space for people and planting. This change of focus within streets will create:

- a walkable Brimbank that provides inclusive, comfortable, shaded streets and safe links between destinations accessible to all:
- a safe, direct, connected cycle network linking destinations within and beyond Brimbank;
- a network of green corridors between parks and reserves servicing the community and supporting biodiversity;
- vibrant and safe retail and leisure areas where streets provide seating, dining, and play spaces for the community to gather and interact;
- streets which manage stormwater within the road reserve, reducing the need for grey infrastructure;
- more attractive spaces for community gatherings and connections; and
- spaces to grow food and connect with nature.

These objectives will create the framework of streets to facilitate 20-Minute Neighbourhood objectives, allowing people to live more locally. It will be achieved

- greening streets by increasing planting areas and addressing Environmentally Sustainable Design (ESD) objectives and climate change adaptation requirements:
- traffic calming measures, such as planted outstands replacing parking and other road areas;
- strengthening local urban amenity;
- creating and connecting spaces for socialising and connecting people;
- creating play spaces and other parklets where opportunities are available;
- reducing impermeable surfaces;
- increasing canopy cover and shading;
- slowing traffic speeds;
- improving footpaths; and
- adding cycling infrastructure.

Existing and future street functions

The pandemic brought the role of streets in modern life into sharp focus, but the next 30 years will bring considerable additional changes. The climate emergency, the world's transition of its energy supply to renewable generation, and the challenge of waste and resources issues will accelerate. This will create many issues in street design, such as:

- a changing public transport network, including on demand, shared, and autonomous vehicles;
- waste streams becoming more segregated and requiring additional bins;
- deliveries and servicing provided by autonomous vehicles and drones;
- transitioning of services with reduced gas connections, potential for wireless connectivity, dispersed electricity storage and generation;
- higher density development;
- a hotter microclimate, exacerbated by hard surfaces;
- on street parking requirements for shared and electric vehicles:
- legible and consistent road markings for autonomous vehicle requirements;
- additional and changed signage;
- dynamic traffic systems;
- personal electric mobility devices eq. scooters;
- virtually silent vehicles at low speeds;
- increasingly severe stormwater events;
- changed rainfall patterns;
- species extinction and migration;
- recycled materials within road surfaces;
- new smart infrastructure;
- changed traffic and car parking volumes, likely to increase initially before declining; and
- ensuring equity of movement for those with mobility impairments.



5 General Design Guidance

Design elements common to all streets

Although the streets across Brimbank vary hugely in terms of widths, uses, activity, and context there are certain fundamental design elements which should be incorporated into all streets. To avoid duplication in each of the typologies the below is a summary of elements which must be considered for all street typologies.

The interventions are not exhaustive and alternative design methods can be considered where appropriate and revisions to the document will be actioned at regular reviews as interventions are implemented, tested, and refined.

Sense of place 1.

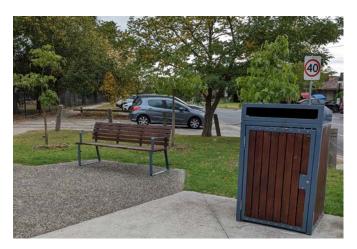
The focus of CSP is improving place making outcomes in our streets. Key considerations in the design of every street should be the:

- a. function of the street, or its typology, which may vary along the length of it;
- b. local identity, in particular arts, culture, and heritage considerations:
- c. character of abutting land uses, such as formal planting in parks, informal vegetation in reserves, taller built form, lower density setback homes, could all prompt different design responses in the street;
- d. potential activity in the public realm, such as school pickup, major events, markets, and food growing;
- e. opportunities for punctuating the road space with planting areas allowing small stands of trees to reinforce the sense of place. These areas can serve other functions, such as improving the microclimate and by encroaching on the space traditionally occupied by vehicles it can reduce the monotony of regularity improving driver concentration and encouraging slower speeds; and
- f. opportunity to minimise the number and width of crossovers from abutting development, such as by creating shared crossovers.



Street furniture can create a dramatic contrast with planting areas

OM B Lynch Memorial Gardens, Sunshine.



A consistent style of street furniture is important to avoid street clutter and enhance the sense of design and place

Kennedy Street, Keilor



Locally appropriate street furniture can provide continuity and vibrancy to the space. Patterns, colours, materials, and shapes can all be utilised to tie together elements of the street into a holistic design

Hampshire Road, Sunshine.



The use of different planting styles can be used to reinforce the sense of place. Informal planting in Fitzroy complements the character of the area

Gertrude Street, Fitzroy



The creative use of lighting can enhance the sense of place at night

Princess Street, St Albans



Planting and seating areas can be combined to define spaces and form barriers between the road area and adjacent public realm. Robust materials and the soft landscaping can be utilised to create a contrast and greater interest.

Alfrieda Street, Civic Plaza



Art pieces can provide a focal point to public spaces and can be permanent or temporary installations.

QHampshire Road, Sunshine



Gateway treatments can provide visual cues to drivers to slow down and expect greater pedestrian activity as well as enhancing the sense of place and wayfinding.

Victoria Street, Richmond

2. Improved active travel outcomes

By creating people focused streets it will enhance the opportunity for better active travel outcomes. Improved walking and cycling outcomes can be created by:

- a. providing appropriate footpath widths for the location and expected volume of pedestrians and filling in 'missing links' within the existing streets;
- b. the default intersection treatment for side streets should be a continuous footpath, with corresponding vehicular ramps and platforms. This provides visual cues to drivers and reinforces that pedestrians have priority over cars at intersections and slows traffic:
- c. considering the appropriate cycling infrastructure for the street, prioritising the strategic network within the Walking and Cycling Strategy, to ensure a connected network across Brimbank:
- d. providing protected bike lanes where feasible, before considering alternative cycle infrastructure;
- e. designing in multifunctional street elements, such as utilising car parking to separate and protect cycle lanes:
- f. aligning speed management devices, such as raised areas and narrowed 'pinch points' in streets with pedestrian crossing points;
- g. providing sufficient easy to read wayfinding signage to support feelings of safety; and
- h. providing cycle parking at all trip generators.



A protected bike lane with warning signs for kerbs and changing road colouration to distinguish the intersection

Hampshire Road, Sunshine



A separated bike lane within the central median strip

St Georges Road, Northcote



A mid-block shared path crossing with priority to active travel modes

Scotchmer Street, North Fitzroy



A protected bike lane meeting an intersection. A variety of on-road treatments are provided to maximise awareness of both drivers and pedestrians

Wellington Street, Collingwood

3. Appropriate design speed

Streets must be designed for the intended speed of vehicles and relative importance of those users, rather than a standardised outcome regardless of location. Larger connector streets or higher order streets may still require higher speed limits to facilitate cross city movements, but lower order residential streets and activity centres can be more appropriately designed for lower speeds. Design speed must be carefully balanced with place and active travel outcomes.

The regular requirement to add splitter islands and road humps and cushions to local streets to address speeding is a by-product of car centred street design, which the CSP Policy aims to address, and where feasible these options should be avoided. Potential design approaches include:

- a. ensuring streets are designed according to their place based hierarchy and strategic requirements;
- b. reduction of road widths to provide greater space for place based and active travel outcomes;
- c. prioritising traffic calming measures as an alternative to road humps;
- d. ensuring that where road humps are necessary consideration is given to utilising the vertical change in surface to provide at grade pedestrian crossing points;
- e. minimising impact on cyclists ensuring speed humps are sized and shaped appropriately;
- f. considering using lateral/horizontal shifts in the vehicular carriageway. This can reduce opportunity for distant forward visibility slowing vehicle speeds and allowing opportunities for place making on both sides of the street. This can also be achieved by alternating parking on opposite sides of the street, for example;
- g. utilising parking, planting, and public realm areas to narrow the carriageway to create 'pinch points' further slowing traffic or creating give way areas where traffic must stop for oncoming vehicles; and
- h. minimising corner radii at intersections and corners.



Narrowing of carriageway adjacent to an intersection creating a pinch point to slow traffic

Perth Avenue, Albion



Planted outstands create opportunities for tree canopies to more quickly provide shading across the street and create a sense of enclosure. This can have the effect of slowing traffic and can also be combined with a change in level of the road surface

Clarke Street, Sunshine



Bold contrasting colours in the shared space on, provides visual cues to drivers that the space is a low speed shared environment

Princess Street, St Albans

4. Services

A key function of streets is the provision of services, such as water, electricity, and telecoms. Where possible all services should be underground so as not to interfere with tree canopies, necessitating line clearance work to the crown.

The location of services, in both existing and new streets must be flexible to accommodate alternative street designs which meet CSP objectives.

Where possible streets should be designed to:

- a. minimise services:
- b. underground existing services, where feasible;
- c. allow sharing of service trenches and pits to minimise the extent of street area affected by parallel services to the street;
- d. avoid the need to relocate existing services where this does not compromise other design considerations, to minimise cost and disruption, by minimising new streetscape assets above them;
- e. run services under the road surface to minimise future impact on the public realm and planting where nature strips are impractical, such as in activity centres; and
- f. share connections from abutting development, minimising services running perpendicular across the footpath and nature strip.

5. Integrated Water Management

The approach to storm water management should progress to the utilisation of blue and green infrastructure, including WSUD assets replacing grey infrastructure. All streets should:

- a. align with goals and objectives in the Brimbank Sustainable Water Management Strategy 2013-2023 (or updated) document;
- b. positively address the water cycle, both now and in future climate change scenarios;
- c. remove storm water grey infrastructure and replace it with green infrastructure, where feasible;
- d. consider capture and reuse of runoff from adjacent land uses;
- e. maximise reuse of stormwater within the street or nearby parks and reserves; and
- f. improve the water quality entering the wider stormwater network from the street.



Street trees with extensive pruning to the crown to accommodate power lines





A swale designed into an urban setting

Oawson Street, Sunshine



Storm water can be channelled into raingardens by using kerb cutouts

Old Calder Highway, Keilor



A green wall as part of a Sustainable Urban Drainage System (SUDS) approach to storm water management

Victoria, London



Extensive planting areas provide opportunities for infiltration of stormwater in an otherwise urban location with impervious surfaces

University Square, Carlton



Water can be incorporated into urban environments for placemaking amd children's play, as well as stormwater management

Gadigal Avenue, Zetland, NSW



A swale utilised for stormwater management at the interface of a street and a park

Neil Street, Sunshine



A swale created in place of on-street parking

Obawson Street, Sunshine

6. Increased tree canopy cover

The goal of the Brimbank Urban Forest Strategy 2016-2046 is to achieve a minimum of 30% canopy cover across the municipality by 2046 and also for every street to achieve a minimum of 30% canopy cover. All streets must therefore be designed to:

- a. align with goals and objectives in the Brimbank Urban Forest Strategy 2016-2046 and Brimbank Tree Policy 2021;
- b. consider the mature canopy size in relation to power lines and other built form when specifying trees;
- c. ensure trees are planted with best practice root zone considerations;
- d. ensure trees are provided with adequate protection from vehicles, both from impact and compaction of the growing medium; and
- e. consider the existing and preferred future neighbourhood character of streets when selecting tree species.



Tree planting retrofitted into the footpath where no naturestrip is available for planting

Wellington Street, Collingwood



Extensive tree planting within an activity centre

Hampshire Road, Sunshine



A tree pit suitable for use in a formal urban area

Service Street, Sunshine

7. **Reduction of impermeable surfaces**

Impermeable surfaces across the street should be reduced to improve stormwater outcomes. Reduce permeable surfaces by:

- a. aligning with goals and objectives in the Brimbank Sustainable Water Management Strategy 2013-2023 (or updated) document;
- b. considering the use of permeable paving areas where feasible;
- c. increasing planting areas;
- d. minimising crossovers for new developments; and
- e. developing a minimum of percentage reduction target for inclusion in an update to the CSP Policy.

8. Reduction of road surface

Options should be explored to reduce the extent of the road surface for vehicular use and also parking provision. The space gained can be utilised for planting, footpaths, cycling infrastructure, or WSUD treatments as appropriate to the typology. Design responses should:

- a. maximise the opportunity for space in the road reserve for non-vehicular uses; and
- b. consider a minimum percentage reduction by typology, or overall, in a future update of the CSP Policy.





Reconfiguration of an intersection to create a safer pedestrian environment and to reduce impermeable areas and increase planting

Ballarat Service Road, Albion



A pocket park created from excess road space

Glengala Road, Sunshine West



A pocket park and additional planted areas will be gained from the removal of a lane of traffic

Simmie Street, Sunshine West

9. **Parking review**

There should be a review of parking within the street to determine how and when it is being utilised and opportunities for reduction. Designs must however ensure that informal parking will not take place on nature strips. The design should:

- a. consider the Brimbank Parking Strategy's direction for the area;
- b. ensure runs of parking bays are interspersed with planted outstands containing canopy trees to both break up the dominance of on-street parking and to address the urban heat island effect;
- c. contain a maximum of six parking bays between planting areas; and
- d. consider whether parallel, 90 degree, or angled parking is appropriate to the street conditions to aid in narrowing the road corridor, slowing traffic.



Bike parking replacing car parking outside a supermarket

Best Street, Fitzroy North



A car parking space utilised for bike parking, demonstrating how much more space efficient bikes are compared to cars

Wellington Street, Collingwood



Angled parking can be a more efficient use of space than parallel parking

Keilor Village, Keilor



On-street 90 degree parking broken up by a street tree and planted outstand reduces the dominance of parking and provides shade and biodiversity

Bell Street, Fitzroy

10. Equitable and safe access for all

Design for every ability and gender and ensure equitable access to streets and services within the municipality, by:

- a. reviewing projects against DDA and other requirements as appropriate;
- b. considering mobility impaired access within the streetscape;
- c. utilising raised crossing points for pedestrians at intersections;
- d. providing sufficient rest stops, such as benches and seats, for those unable to walk longer distances between destinations;
- e. including provisions for blind and partially sighted requirements, such as tactile paving;
- f. providing for wheelchair and pram users, ensuring access ramps are provided at appropriate gradients and widths;
- g. ensuring lighting strategies adapt to increased canopy cover, which can reduce street lighting effectiveness:
- h. explore appropriate lighting that avoids the 'floodlit effect' and provides consistent and layered lighting;
- i. ensure streetscapes can be easily well-maintained to improve perceptions of safety and maintain access;
- j. supporting mixed use areas where people can walk, play, eat, and exercise at different times of the day ensuring that the area is used at all times;
- k. incorporating formal and informal play areas to activate the spaces and support carers using the streets; and
- l. ensuring vegetation is managed to maintain passive surveillance and good sightlines.



Children's play area built into landscaping elements

Hampshire Road, Sunshine



Continuous crossing points between public realm and footpath areas support access by the mobility impaired

Alfrieda Street, St Albans



Moveable benches offer places of respite on nonmarket davs

Hampshire Road, Sunshine

11. Servicing

The ability for service and emergency vehicles to access our streets and spaces are critical to the smooth running of the urban environment. However designing streets for the maximum vehicle size which require access, when that access requirement is for a short period of time on a weekly basis or only in an emergency is an inefficient use of public realm, which is at a premium in the city. The design of streets must:

- a. facilitate the necessary access for waste collection and other services;
- b. ensure access for emergency services is maintained;
- c. be appropriate to the modal share. For example turning radii for larger vehicles requiring access for less than 1% of the street usage must not be the default design position;
- d. provide for connected streets to minimise the requirement for service vehicles turning;
- e. consider textured overrun areas at corners, which can facilitate larger vehicle access, but deter use by passenger vehicles. They should be avoided at pedestrian desire lines and crossings where they could cause danger for the visually impaired or other DDA issues:
- f. prioritise carriageways for passenger vehicles and other regular road users, with larger vehicle access accommodated by additional areas of public realm which can be utilised for short periods, such as court bowl turning areas. Excepting the requirements of regular public transport provision;
- q. ensure turning space provided relates to its environment, not exclusively to vehicle movement;
- h. consider automated barriers, such as bollards, which can facilitate infrequent access to pedestrianised spaces



Mountable area to allow for larger vehicle turning movements

Service Street, Sunshine

12. Address changing street design criteria

With the rapidly changing technological advancements in transport, street design must adapt and ensure spaces are fit for purpose going forward. Ensure consideration is given to:

- a. future charging/refuelling needs of electric vehicles;
- b. road marking and signage requirements for autonomous vehicles; and
- c. the need for future smart traffic management control, for example sensors at traffic lights.

13. **Ecology**

Streets can play an important function by supporting and providing habitat and by mitigating climate change. The design of streets must consider:

- a. prioritising native and indigenous species for planting;
- b. balancing the requirement for canopy cover and shading of the public realm with adjacent protected grassland habitats;
- c. supporting pollinators with plant selection; and
- d. appropriate species for WSUD assets, such as swales and rain gardens.



Bollards can be used to control vehicular access, ensuring that only authorised service vehicles can access streets

Victoria Mall, Coburg



A green wall can provide biodiversity in areas with limited space for traditional planting areas

Victoria, London



Bollards in the down position allow free traffic movement, but can be raised to close streets to be used as event space

Clarke Street, Sunshine



A raingarden presents an opportunity for greater ecological outcomes within the urban environment

• Keilor Village, Keilor



Planted areas can provide a variety of habitat, not just grassed verges

Keilor Village, Keilor

6 Street Typologies

Mixed Activity Street

These streets support local and neighbourhood activity centres, and provide important local goods and services to the community. Many are in need of investment to support economic development and renewal to service changing community needs. Activity centres which provide a diversity of goods and service will support the community to 'live locally'.

DoT Typology Objectives

The below table lists the Objectives set out in the Draft Urban Roads and Streets Design Guide and the corresponding Brimbank design response. These design responses supplement the standard CSP design guidance set out in the previous section.

14. Mixed Activity Street example design elements

Consideration should be given to the inclusion of elements, such as:

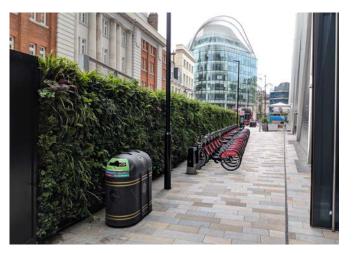
- a. outside dining opportunities adjacent to cafes, restaurants, and bars;
- b. traffic calming to support the pedestrian environment;
- c. pedestrianisation, or shared areas, of streets;
- d. protected bicycle lanes;
- e. enhanced public realm amenity, which can be used as a catalyst for private investment;
- f. new seating for rest and social interaction;
- g. improved pedestrian linkages across desire lines;
- h. reconfiguring parking areas to reclaim road space; and
- i. a speed limit reduction for the area.

DoT Movement & Place Typology Objectives	BCC Creating Streets for People Design Response
Support commercial and mixed-use land uses including local shops and services	Allocate appropriate space in the public realm to allow for uses such as outdoor displays, outdoor dining, and temporary street markets
Strengthen a sense of unique identity as a local destination	Engage in a people-focussed design approach through community engagement and placemaking
Encourage pedestrian movement and provide regular crossing opportunities	Widen footpaths and extend kerbs to reduce crossing widths and improve pedestrian visibility and safety
Enable safe cycling connections with opportunities for bicycle parking	Provide separated bicycle lanes and bicycle parking
Move people through public transport	Public realm and street design improve access to public transport
Facilitate vehicle movement to serve localised land uses	Ensure adequate access for servicing all buildings is maintained
Integrate landscape treatments that complement street size and character	Use tree and other plant species that enhance Brimbank's activity centre streets and places
Enhance urban amenity through street furniture	Provide street furniture and infrastructure such as seating, water play features, drinking fountains, public toilets, and other street furniture appropriate to the size and requirements of the community and project budget
Integrate appropriate Water Sensitive Urban Design systems	Consider opportunities for stormwater capture and reuse from buildings as well as the road reserve



Bollards for vehicular access control to create a pedestrianised outside dining area

Victoria Mall, Coburg



A green wall providing urban greening in an activity centre

Victoria, London



High quality flexibile street furniture

Victoria, London



Moveable seating and planting areas allow for the flexible use of the public realm within the activity centre

Hampshire Road, Sunshine



An off-road cycle lane through the activity centre, buffered from the road and main pedestrian thoroughfare by planting

Hampshire Road, Sunshine



An activity centre intersection redesign provides additional spill-out space for a cafe, continuous footpath for pedestrians, robust planting, and access control with moveable bollards

Clarke Street, Sunshine

Residential Connector Street

Residential Connectors are access corridors that move high volumes of people. These residential streets must still serve a function of efficiently moving vehicles around the area, but must also safely accommodate segregated cycling movements in strategic corridors.

DoT Typology Objectives

The below table lists the Objectives set out in the Draft Urban Roads and Streets Design Guide and the corresponding Brimbank design response. These design responses supplement the standard CSP design guidance set out in the previous section.

15. **Residential Connector Street** example design elements

Consideration should be given to the inclusion of elements, such as:

- a. separate cycle lanes when indicated by the Cycling and Walking Strategy, and where feasible elsewhere;
- b. a design speed of 50kph and a lower limit where feasible:
- c. providing shading and shelter at bus stops;
- d. adding frequent pedestrian crossings of an appropriate type for the volume of users and vehicles expected;
- e. reallocating parking and road space for improved greening;
- f. implementing a WSUD strategy to reduce flood issues and reduce need for grey infrastructure; and
- g. adding appropriate street furniture, such as seating and shelter, at appropriate intervals to provide respite for the mobility impaired

DoT Movement & Place Typology Objectives	BCC Creating Streets for People Design Response
Support and respect residential land use	Seek to deliver a high quality landscape buffer between vehicles and residences
Ensure the street is a pleasant and safe place to live	Consider if the speed limit can be lowered to 50kph
Support local pedestrian movement and crossings at key desire lines	Widen footpaths and extend kerbs to reduce crossing widths and improve pedestrian visibility and safety. Ensure crossings at pedestrian desire lines
Facilitate safe, separated cycling movement along strategic corridors	Provide separated bicycle lanes in locations identified in Brimbank Cycling and Walking Strategy
Move people with public transport	Public realm and road design to improve access to public transport
Facilitate vehicle movement across the city	Ensure the requirement to move vehicles through the street efficiently is balanced by its place function and abutting residences
Integrate landscape treatment that provide a buffer to adjacent land use	Provide layers of planting, which mitigate noise and particulate pollution from vehicles
Enhance native ecology through a connected green corridor	Connect the planting in the street to adjacent habitat areas



Off road bike path adjacent to a footpath, both buffered from traffic by a nature strip and tree planting

O'hea Street, Coburg



A vegetated swale WSUD asset as part of a storm water strategy

Sunvale Community Park, Sunshine



An off road shared user path separated from traffic lanes and shaded by a generous landscape buffer

Old Calder Highway, Keilor

Local Activity Street

These types of streets support a variety of local amenities, such as schools, parks, and community facilities. They support a variety of social interactions and active travel choices and provide a high quality environment.

DoT Typology Objectives

The below table lists the Objectives set out in the Draft Urban Roads and Streets Design Guide and the corresponding Brimbank design response. These design responses supplement the standard CSP design auidance set out in the previous section.

16. Local Activity Street example design elements - Parks

Consideration should be given to the inclusion of elements, such as:

- a. exploring irrigation opportunities via stormwater capture and reuse; and
- b. continuation of park planting palette and design features to provide continuity and a gateway element on the street.

17. Local Activity Street example design elements - Community facilities, such as libraries and healthcare

Consideration should be given to the inclusion of elements, such as:

- a. areas of well shaded public realm for waiting and socialising;
- b. ensuring adequate disabled accessible parking; and
- c. flexible areas of public realm for events.

18. Local Activity Street example design elements - Schools

Consideration should be given to the inclusion of elements, such as:

- a. facilitating safe routes to school via shared paths, wider footpaths, additional crossing points, and traffic calming;
- b. areas of well shaded public realm for waiting and socialising;
- c. implementing protected cycle lanes, where possible;
- d. coloured surfacing for school zone;
- e. gateways designating school zones; and
- f. opportunities to provide play equipment.

DoT Movement & Place Typology Objectives	BCC Creating Streets for People Design Response
Support residential and public land uses	Design public realm appropriately for the abutting land use, with greater public space outside public buildings
Strengthen access to community facilities including schools, childcare, medical clinics, recreation	Ensure pedestrian desire lines to facilities have crossing points. Improve cycling infrastructure at destinations
Facilitate access to public open space	Provide clear entry to parks and legible wayfinding
Encourage dwelling, social interaction and a sense of community	Provide street furniture including seating, picnic settings, water fountains, bicycle parking to support
Support pedestrian movement and provide frequent crossing in response to desire lines	Widen footpaths and extend kerbs to reduce crossing widths and improve pedestrian visibility and safety
Enable safe cycling movements through and to destinations with end of trip facilities	Provide bicycle lanes in locations identified in Brimbank Cycling and Walking Strategy and bicycle parking
Encourage public transport movement with frequent stops	Ensure public transport stops are at appropriate activity nodes and regularly spaced. Ensure whether protection is included wherever possible
Support slow vehicle movement to serve local land use	Utilise traffic calming measures such as reduced carriageway widths and raised pedestrian crossings
Use landscape treatments that complement the scale of the street and improve the user experience	Include large canopy trees to provide shading and other lower planting to increase amenity and place based outcomes
Encourage a sense of ownership through involving the local community in the placemaking design process	Engage is people-focussed design approach through community engagement and placemaking
Integrate appropriate Water Sensitive Urban Design systems that enhance climate resilience	Consider the wider water catchment area and the potential for capture and reuse of stormwater



A rainbow pedestrian crossing can contribute to a vibrant sense of place [Source: Adobe Stock Photos]

Unknown



Enlarged pedestrian areas and seating outside Bargoonga Nganjin North Fitzroy Library entrance and a pedestrian crossing allowing direct access

North Fitzroy



An area of public realm outside a school providing shade, seating, and bike parking

Lee Street, Carlton North



A vegetated swale could be integrated into the street to filter stormwater before being captured for use in an adjacent park

Sunvale Community Park, Sunshine



Enlarged public realm outside a public building can be multifunctional, providing spill-out space for events, queuing areas, or servicing. Access from vehicles here is controlled by moveable bollards

Bowery Theatre, St Albans

Neighbourhood Street

Neighbourhood streets are connected streets supporting a slower pace of local movements. They are local living streets with a lower intensity of street activity.

DoT Typology Objectives

The below table lists the Objectives set out in the Draft Urban Roads and Streets Design Guide and the corresponding Brimbank design response. These design responses supplement the standard CSP design guidance set out in the previous section.

19. **Neighbourhood Street example** design elements

Consideration should be given to the inclusion of elements, such as:

- a. cycling infrastructure where it aligns with the strategic network;
- b. opportunities to reconfigure streets to provide pocket parks;
- c. providing traffic calming elements; and
- d. seating at appropriate spacing for mobility impaired members of the community.

DoT Movement & Place Typology Objectives	BCC Creating Streets for People Design Response
Support and respect residential land use	Design the public realm appropriately for the residential uses and active travel requirements
Encourage low intensity on-street activity with opportunities for social interaction	Consider the use of shared spaces and how areas can be repurposed as shared community assets for food growing or play
Encourage localised pedestrian movement	Provide minimum width footpaths and plant trees to provide shade
Facilitate safe on road cycling movement	Provide bicycle lanes in locations identified in Brimbank Cycling and Walking Strategy and bicycle parking
Support slow local traffic movement	Widen footpaths and extend kerbs to reduce crossing widths and improve pedestrian visibility and safety. Narrow the traffic corridor
Integrate consistent landscape treatments that reinforce local distinctiveness and improve urban environment amenity	Prioritise native and indigenous species and align with any neighbourhood character guidance
Encourage a sense of ownership through involving the local community in the placemaking design process	Engage in people-focussed design approach through community engagement and placemaking
Integrate appropriate Water Sensitive Urban Design systems to manage storm water runoff and enhance ecology	Provide rain gardens and other WSUD assets to improve stormwater management





Underutilised road space reclaimed for a pocket park

Glengala Road, Sunshine West

Living Street

Living streets are quiet calm residential streets, with vehicular through movements discouraged. They are usually court bowls or cul-de-sacs, offering the potential for shared spaces and play to spill out into the street area.

DoT Typology Objectives

The below table lists the Objectives set out in the Draft Urban Roads and Streets Design Guide and the corresponding Brimbank design response. These design responses supplement the standard CSP design guidance set out in the previous section.

20. Living Street example design elements

Consideration should be given to the inclusion of elements, such as:

- a. opportunities to provide additional public realm within areas traditionally reserved for infrequent vehicular turning movements;
- b. areas for community food growing opportunities;
- c. opportunities for informal play space.

DoT Movement & Place Typology Objectives	BCC Creating Streets for People Design Response
Support and respect low intensity residential land use	Design the public realm appropriately for the low intensity residential uses
Provide space for the local community to interact, rest and play.	Consider using shared areas and reduction of roadspace only utilised for occasional traffic movements
Encourage all people who walk, ride or drive to share the space	Encourage low speeds and equal priority within the street for all users
Support local pedestrian movement	Provide minimum width footpaths and increase trees to provide shade
Support slow local traffic movement and discourage or prohibit through vehicle movement	Utilise traffic calming measures such as reduced carriageway widths and raised pedestrian crossings
Integrate landscape treatments that reinforce local distinctiveness and improve user amenity	Prioritise native and indigenous species and align with the objectives in the Neighbourhood Character Study
Integrate flexible street elements that encourage social interaction and enhances user experience	Consider the use of shared spaces and how areas can be repurposed as shared community assets for food growing or play
Integrate appropriate Water Sensitive Urban Design systems to manage storm water runoff and enhance ecology	Provide planting to increase amenity and reduce the urban heat island effect



The use of angled parking can free up space to retrofit street trees into existing streets, whilst maintaining parking levels





Glengala pocket park, which was created from surplus road space

Glengala Road, Sunshine West

Service Access Lane

Service lanes have historically provided an important function providing access to the rear of residential and commercial properties. Laneways within Melbourne CBD have also become synonymous internationally with public art, hospitality activity, and a highly pedestrianised movement network. Within Brimbank there are increasing numbers of residential laneways being proposed and delivered within medium density areas to reduce the impact of garages on the streetscape.

DoT Typology Objectives

The DoT objectives do not fully align with the function of newer laneways and additional developer guidance will be created as an action of this Policy.

21. Service Access Lane example design elements

Design requirements will vary widely across this typology, dependant on adjacent land uses and modes of transport requiring access. Further work will be required to determine acceptable standards for service lanes to be adopted by Council. Until such time as full design standards are available consideration should be given to the inclusion of elements, such as:

- a. opportunities for surveillance from adjacent land;
- b. whether the provision of trees and other landscaping is feasible, given dimensions, services, and shading of adjacent built form;
- c. access for waste removal, if appropriate;
- d. if footpaths or a shared surface is appropriate;
- e. if the length of the laneway necessitates passing areas;
- f. determining if one way or two way access is appropriate;
- g. WSUD opportunities; and
- h. equitable access arrangements for all people.

DoT Movement & Place Typology Objectives	BCC Creating Streets for People Design Response
Support the operation of surrounding land uses including commercial, residential, public and industrial uses	Consider the abutting land uses and servicing requirements to ensure design outcomes are appropriate
Ensure perceptions of safety are maximised for workers and visitors	Ensure landscaping elements do not adversely impact safe movement of people and reduce visibility. Ensure adequate lighting is provided which does not spill into sensitive adjacent uses
Facilitate safe pedestrian movements and servicing activities	Consider if separate footpaths are feasible or appropriate, if not ensure shared spaces are slow speed safe environments
Encourage slow vehicle movement to serve localised land uses	Utilise materials, landscaping, parking, and other elements as appropriate to ensure low speeds are maintained
Facilitate local freight access to support land uses	Ensure laneways are designed for the size of vehicles requiring access without compromising the overall quality of place
Use robust materials reflecting the intensity of use	Consider the users and activities taking place and ensure materials are appropriate



An existing laneway containing a residential conversion of a former industrial building, which now provides passive surveillance opportunities to the street

Exhibition Street, Fitzroy



A rear laneway providing vehicular access to townhouses on both sides. Vertical greening has been provided to soften the hard landscaping of the laneway

Maribyrnong

Commercial Access Road

These are significant roads in major industrial areas supporting regional movement into local streets. They are wide in character, with multiple lanes and large scale big box uses, generally well setback from the street. They provide access to goods and services and are where people work.

DoT Typology Objectives

The below table lists the Objectives set out in the Draft Urban Roads and Streets Design Guide and the corresponding Brimbank design response. These design responses supplement the standard CSP design guidance set out in the previous section.

22. **Commercial Access Road example** design elements

Consideration should be given to the inclusion of elements, such as:

- a. aligning with the Industrial Design Guidelines;
- b. bus stops with weather protection;
- c. gateway elements, or planting, to define important areas of economic activity; and
- d. opportunities for habitat areas in central median strips.

DoT Movement & Place Typology Objectives	BCC Creating Streets for People Design Response
Support commercial and light industrial land uses	Ensure the efficient movement of large vehicles is not compromised
Strengthen wayfinding and support intuitive, clear entry points to land use for workers and visitors	Consider gateway treatments and landscape design to support wayfinding
Ensure pedestrian crossings over driveways and across the street are frequent, safe and support access to land uses	Provide safe pedestrian crossing options
Facilitate safe cycling movements	Consider shared user paths or on road cycle lanes as appropriate
Support mobility options including public transport	Support the provision of bus services and enhance connectivity
Support high volumes of goods and people to move through and to destinations in vehicles	Provide for adequate road widths and good visibility of the public realm
Facilitate freight access to support land uses	Ensure the efficient movement of large vehicles is not compromised
Integrate landscape treatments to improve urban environment amenity, providing a human scale	Provide large scale canopy tree planting to address the issues with wide streets and perceived lack of enclosure
Enhance climate resilience with appropriate Water Sensitive Urban Design systems	Consider opportunities for these significant streets to contain swales and other WSUD elements



Pedestrian crossing and central planted refuge within a business park [Source: Google Street View]



Industrial Road

These working streets make up the majority of industrial areas within Brimbank, supporting industrial activity. They are wide, supporting the largescale movement of goods and are characterised by large scale warehouses and manufacturing.

DoT Typology Objectives

The below table lists the Objectives set out in the Draft Urban Roads and Streets Design Guide and the corresponding Brimbank design response. These design responses supplement the standard CSP design guidance set out in the previous section.

23. Industrial Road example design elements

Consideration should be given to the inclusion of elements, such as:

- a. aligning with the Industrial Design Guidelines;
- b. robust WSUD elements and additional planting to provide greening to areas which are traditionally lacking in green space; and
- c. providing public space areas for workers to take breaks, including shade trees.

DoT Movement & Place Typology Objectives	BCC Creating Streets for People Design Response
Support industrial land uses and their workers	Provide high quality landscaped areas interspersed with on street parking provision
Facilitate significant movement of goods and people in vehicles	Ensure the efficient movement of large vehicles is not compromised
Enable safe localised pedestrian movements	Provide footpaths on both sides of the street
Facilitate freight though movement and access land uses	Provide for adequate road widths and good visibility of the public realm
Integrate landscape treatments to improve urban environment amenity, providing a human scale	Consider appropriate landscape areas to provide for worker amenity during work breaks as well as supporting active travel
Enhance climate resilience with appropriate Water Sensitive Urban Design systems	Ensure WSUD elements, such as rain gardens are included



Bus shelters can improve public transport ridership and experience



7 Implementation

Integrating change into existing functions and processes

The processes that currently occur in Council that inform budgets and delivery methods of street design include:

- road rehabilitation projects;
- streetscape Master Plans;
- State or Federal government streetscape related projects or grant funding programs;
- strategic planning documents;
- planning decisions and negotiations;
- design guidelines;
- Developer Contribution Plans;
- developer works; and
- the private sector.

Currently these processes can be strengthened to address the change that is required across the municipality. The purpose of the CSP Policy is to be wide ranging and guide the renewal of Council assets and to also to act as a starting point for future dedicated developer design guidance for creating new streets.

The CSP Policy will ensure best practice streetscape design is applied consistently across Council assets, as well as informing stakeholder led projects, and as an advocacy tool.



A streetscape activation program to reclaim the street within a local activity centre as a pedestrian friendly environment with parklets and artwork on the road

Glengala Road, Sunshine West

How Council prioritises works

Although the Policy aims to influence all streetscape interventions resource constraints mean this will be a long term process of incremental change as opportunities arise.

How we decide which road rehabilitation project requires additional funding and urban design direction will primarily be determined by strategic priority, access to existing, or additional funding, and maximising return on investment to the community. For example, implementation of changes to a street identified in the Walking and Cycling Strategy would have a much greater impact on the community than a court bowl redesign, due to the numbers of users.

While this approach will focus investment where most impact can be realised certain design interventions should be cost neutral and can therefore create a positive change in delivery, as opposed to a strictly like for like replacement approach.

Reduction of road surfaces

The cost to Council of road rehabilitation work is a significant expense (\$10M+ per annum), which due to climate change and increased road users this cost is likely to increase. Reducing the area of road surface in the municipality has huge potential for cost savings. Increasing canopy cover creates more shade, which can also increase the lifecycle of suburban streets.

Temporary solutions

Although the intent will be permanent streetscape redesigns there will be scope for 'pop-up' interventions with lower capital cost requirements allowing the trialling of new pedestrian friendly designs to be undertaken. These designs can then be modified subject to community and officer feedback as a permanent solution when the feasible.



Temporary streetscape activation trial of reallocation of road space

Alfrieda Street, St Albans



To ensure the Policy is having the desired impact on Brimbank's streets a method of benchmarking various metrics is required. There are various means of measuring success of the CSP Policy, both at an organisational level and from a built environment perspective, which are currently under investigation. As technology and Big Data progresses the level of analysis, spatial extent, and breadth of data type will increase. The below table includes a list of metrics which are expected to be available for evaluation on an annual basis across the road reserve (property boundary to property boundary), either on a council area wide basis or project specific.

The evaluation methods will be regularly reviewed and adjusted as appropriate if new data sources become available. New data for previous years may become available in future as advances in Artificial Intelligence analysis of historic aerial photography becomes possible.



Shared street trial using a simple patterned road surface and temporary planters and seating

Rose Street, Fitzroy



Reclaiming road space can be done in cost effective ways, such as the addition of protected tree planting areas and bike parking outside an apartment building

St David Street, Fitzroy

Metric	Data source	Goal
Road carriageway vs public realm	Engineering team by project	Increase in public realm share
	GIS team municipality wide	
Canopy cover	GIS team municipality wide	Increase
Permeable surfaces	Engineering team by project	Increase
Resident satisfaction	Pre and post project surveys	Increase
Traffic accidents	TAC	Decrease
Cycle infrastructure	Engineering team by project	Increase
	GIS team municipality wide	
Storm water diverted for reuse	Engineering team by project	Increase
On street parking	Engineering team by project	Decrease

Action Plan

Key (I) Immediate, Year 1 (S) Short, Years 2-5 years (O) Ongoing * Actions that will be referred for budgetary consideration

ACTION	TIMEFRAME
Switch focus of capital works budget from like for like replacement to CSP principles	S
Review capital works budget annually for major CSP opportunities	0
Update streets hierarchy mapping as required – new parks, masterplanned communities, major retail areas, schools, etc	0
Create a major streets master plan program as other strategic or operational opportunities arise	0
Prepare a streetscapes working group that discusses all street upgrades that form part of the annual capital works program	I
Review Council guidance around services	S
Integrate CSP principles into future 20 Minute Neighbourhood projects	S
Ensure Neighbourhood Character Study aligns with strategic direction of CSP	S
Ensure CSP projects support Brimbank's future Integrated Transport Strategy, promoting sustainable transport methods over private vehicle use	S
Draft and adopt developer guidelines to complement CSP Policy, in particular the laneway typology	S
Review and update 'Measuring success' metrics annually	0
Identify demonstration project opportunities to test methodology:	0
> Derrimut Street, Albion	
> Suffolk Road, Sunshine North	
> Alfrieda Street, St Albans	
Prepare business case for budget consideration	S



Brimbank City Council

Telephone 9249 4000

Email info@brimbank.vic.gov.au Post PO Box 70, Sunshine, VIC 3020

Hearing or speech impaired?

- TTY dial 133 677
- Speak & Listen 1300 555 727
- www.relayservice.gov.au, then enter 03 9249 4000



Find us on Facebook, Twitter and YouTube

- f www.facebook.com/brimbankcouncil
- www.twitter.com/brimbankcouncil
- www.youtube.com/brimbankcitycouncil



