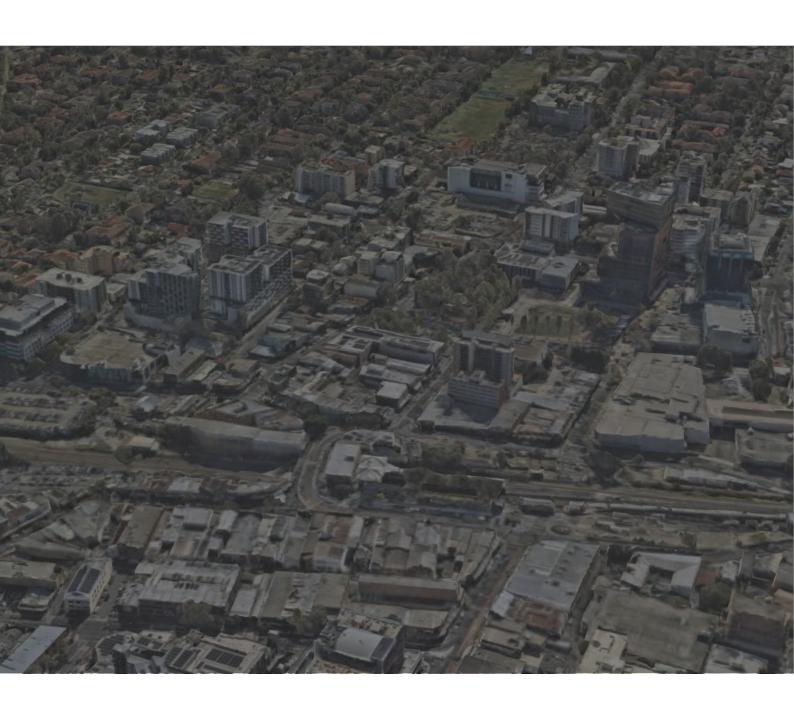


# **Bankstown City Centre Transport Oriented Development (TOD) Rezoning**

**Precinct Transport Statement** 

Stantec Ref: 300305399 | Date: 23 October 2024



## **Version Control**

Revision	Date	Comment	Prepared By	Approved By
A-Dr	22 May 2024	Draft for DPHI/TfNSW review	TK	Will Fooks
B-Dr	14 June 2024	Exhibition version	LI / TK	Will Fooks
С	19 September 2024	Final	TK	Alex Blackett
D	23 October 2024	Revised Final	LI	Alex Blackett

Prepared by:

Stantec Australia Pty Ltd (Stantec)



#### **Acknowledgment of Country**

In the spirit of reconciliation, Stantec acknowledges the Traditional Custodians of Country throughout Australia and their connections to the land, waters and community.

We recognise and respect the culture and beliefs of the Darug and Eora people, and their custodianship of the land now known as Canterbury-Bankstown.

Stantec pays respect to their Elders past, present, and emerging, and extends that respect to all Aboriginal and Torres Strait Islander peoples.

Image: Coming Together by Stephen Nicholson of the Wurundjeri People for Stantec

#### Limitations

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# 1. Background and purpose

#### 1.1 Overview of the Transport Oriented Development Program

In December 2023, the NSW Government introduced the *Transport Oriented Development Program* to "create more well-located homes close to transport, jobs and services" in response to the ongoing housing crisis.<sup>1</sup>

Specifically, the Program aims to:

- Increase the housing supply in well-located areas.
- Enable a variety of land uses (residential, commercial and recreational) within walking distance of train and metro stations.
- Deliver housing that is supported by attractive public spaces, vibrancy and community amenity.
- Increase the amount of affordable housing in these locations.

The Department of Planning, Housing and Infrastructure (DPHI) has identified eight precincts for accelerated State-led rezoning across Sydney to achieve the above objectives. These precincts were selected based on data, advice and feasibility analysis, and were determined to have the enabling infrastructure, access to transport and capability to support additional housing growth.

DPHI will lead the master planning, accelerated rezoning and introduction of planning controls for these eight precincts, including Bankstown.

More broadly, the Program also includes new assessment pathways for residential development, affordable housing requirements, additional funding for community infrastructure, amended design guidance and planning controls for a further 37 locations in the Six Cities Region. These latter elements are complementary and beyond the scope of this review.<sup>1,2</sup>

# 1.2 Purpose of this Precinct Transport Statement

DPHI is working with other government departments (such as Transport for NSW) and a multi-disciplined consultant team to draw together the relevant planning work to support the rezoning. This includes expertise across flooding, urban design, affordable housing, social infrastructure, economics, ecology and heritage, infrastructure delivery and transport.

The central output is an Urban Design Framework which brings together the work of the various disciplines into a cohesive central framework for the rezoning and development of the precinct, as well as relevant planning controls for the Local Environment Plan (LEP).

This Precinct Transport Statement (the Statement) was developed in parallel with the Urban Design Framework and sets out the basis and assessment of transport provision and associated planning controls, as summarised in Figure 4.

Specifically, the role of this Precinct Transport Statement is to demonstrate "how the transport network will support the proposed precinct plan, including any additional population and employment, while also delivering the desired place outcomes".<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> A Shared Responsibility: The plan to begin addressing the housing crisis in NSW, NSW Government, 7 December 2023



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<sup>1</sup> Transport Oriented Development Program, NSW Government, December 2023

Figure 4: Context of this Precinct Transport Statement in the wider rezoning process<sup>3</sup>



Adapted based on Network Planning in Precincts Guide<sup>3</sup>

## 1.3 Vision-led approach to precinct transport planning for Bankstown

Planning for Bankstown is based on a 'visionled' approach, consistent with the NSW Government's *Future Transport Strategy*, *Network Planning in Precincts Guide* and the NSW Movement and Place Framework.<sup>3,4,5</sup>

This approach leads with a long-term vision and objectives for the precinct, with measures and initiatives identified to shape the transport outcomes in the precinct as it grows, rather than assume current travel patterns and behaviours. The theory is depicted in Figure 5.<sup>4</sup>

FUTURE

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Figure 4 The vision and validate approach.

Figure 5: Visual depiction of 'vision and validate' approach

A vision-led approach also requires changes in how levels of traffic congestion and vehicle travel times are perceived in defining infrastructure requirements, to balance with the vision for place outcomes and the viability of housing and transport projects. For example, the Guide to Transport Impact Assessments has shifted to focus on person trips (rather than vehicle trips), to better reflect the wide range of ways in which people travel.<sup>6</sup>

The Movement and Place Framework has also established a set of 36 Built Environment Indicators (BEIs)<sup>7</sup> which are based on qualities that contribute to a well-designed built environment and align closely to desired outcomes for a Transport Oriented Development. Relevant indicators include street space for pedestrians, pedestrian crowding, safe speed for environment and permeability. These indicators can be used to guide further planning and investment decisions as the precinct grows.

<sup>&</sup>lt;sup>7</sup> Built Environment Indicators, NSW Government



<sup>&</sup>lt;sup>3</sup> Network Planning in Precincts Guide, NSW Government, 14 July 2022

<sup>&</sup>lt;sup>4</sup> Future Transport Strategy, Transport for NSW, September 2022, p. 7

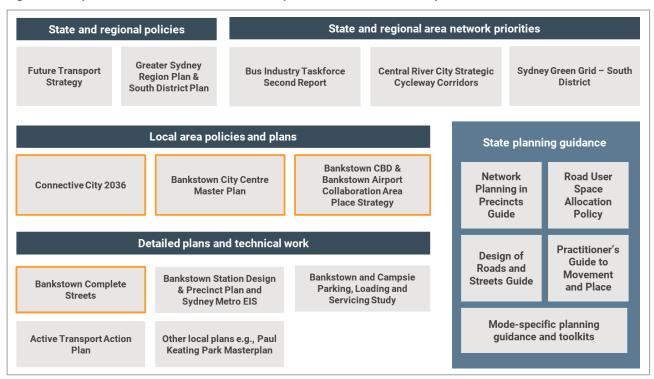
<sup>&</sup>lt;sup>5</sup> About Movement and Place, NSW Government

<sup>&</sup>lt;sup>6</sup> <u>Guide to Transport Impact Assessment - Key Changes</u>, Transport for NSW, March 2024

## 1.4 Summary of previous work

A suite of work has been undertaken in recent years, ranging from broad strategic transport priorities to technical guidance, detailed local transport studies and action plans. Figure 6 provides a snapshot of the transport policy landscape, with relevant inputs referenced throughout this Statement.

Figure 6: Snapshot of recent, relevant work as inputs to this Precinct Transport Statement



Key inputs highlighted in orange and introduced below.

Four of the reference materials include detailed consideration of networks and priorities in Bankstown CBD:



## 1.5 Gap analysis of previous work

Given the extensive planning undertaken, this Statement is focussed on drawing together existing materials, updating to reflect recent developments and supplementing with further data.

A gap analysis was undertaken to assess previous work against reasonable expectations for transport planning for a precinct rezoning. The gap analysis covered the materials set out in Figure 6 and found that:

- There is good coverage of anticipated degree of growth, and visions which set out the proposed direction for how this growth is supported through transport. Refer Section 3 of this report.
- Various mode share targets have been set across different documents. The main targets in Complete Streets and
  Connective City 2036 cover areas beyond Bankstown CBD. They are not aspirational enough or do not capture the
  full range of trips, such as work trips only. A more aspirational mode share target for all trips in Bankstown CBD
  would help to communicate the magnitude and direction of expected change. Refer Section 3.3 of this report.
- Strategic connections between Bankstown and other important centres are identified in a range of state and regional
  policies, but the relative importance and magnitude of transport movement to/from each destination is not well
  understood. Likewise, strategic modelling outputs would help to understand the relative directionality and magnitude
  of movements to/from Bankstown to inform transport networks and priorities. Refer Section 4 of this report.
- Proposed transport networks are well-established through extensive work by Council in Complete Streets and Bankstown Masterplan. However, there is an exercise in updating these networks to reflect most recent planning and fill any gaps since this work was undertaken. Refer Section 5 of this report, with notable changes below.

From a network perspective, recent developments include publishing of the Bus Industry Taskforce *Second Report* (2023), updated Strategic Cycleway Corridors (2023), detail on the design of Bankstown Station as part of Sydney Metro and revisions to the proposed layout of bus interchanges in Bankstown's CBD. The location of the proposed Bankstown Hospital and population and job yield have also been revised. The implications of these changes are reflected in Sections 4 and 5.

From a policy perspective, the NSW Government's Movement and Place Framework has emerged and matured in recent years. The direction and intent of earlier planning remains consistent with Movement and Place – to consider movement holistically across modes and enable strong place outcomes in urban centres such as Bankstown.

## 1.6 Scope of this Precinct Transport Statement

Growth within a major urban precinct, such as Bankstown, occurs incrementally over several decades. For example, the planning, approval and construction of a residential building may take several years. When completed, the building may change local transport needs or include changes to transport infrastructure or the streetscape environment.

At the same time, Council, state government and agencies (such as Sydney Metro) and other private sector stakeholders (e.g., car share) will deliver their own projects which evolve the precinct in some way. Global factors such as economic conditions, technological advances, consumer preferences and global disruptions will also influence the way a precinct grows and evolves.

As such, the focus of strategic planning in support of a rezoning, and this Precinct Transport Statement, is on:

- Establishing an overall vision and objectives for transport in Bankstown, including the role of transport in supporting other city objectives.
- Setting out the strategic transport needs, issues and opportunities, which are critical to achieving these objectives.
- Outlining clear network priorities and supporting policies which:
  - address these needs, issues and opportunities.
  - make the case for projects which achieve the critical transport outcomes.
  - form a central point of reference for stakeholders, to ensure everyone is working in a consistent direction towards achieving the transport outcomes for the precinct.

What is in scope?	What will be resolved in future phases?
<ul> <li>Establishing a transport vision and objectives.</li> <li>Understanding the critical movement needs, within and beyond the precinct.</li> <li>Setting out clear network priorities and supporting policies which meet these needs, in line with the vision.</li> </ul>	Specific details on how the priorities are realised, such as street cross-sections or intersection layouts, locations of traffic calming, vehicle access points or bus route and service planning. These matters are addressed through later detailed planning, Development Applications or as standalone projects for investment.

This report is structured accordingly, with each section supported by targeted data and policy:

- Setting out the existing transport context (Chapter 2).
- Outlining the future transport policy direction and establishing a vision for Bankstown CBD (Chapter 3).
- Summarising the future network needs, including key destinations and connections and how wider strategic networks can be realised in Bankstown (Chapter 4).
- Outlining networks and policies which support delivery of the vision and strategic directions (Chapter 5).

This Statement draws together the findings of previous work as much as possible (without reinterrogation), updating based on more recent planning work and filling strategic gaps where necessary. This statement is also intended to remain succinct, and to reference rather than reproduce material as far as possible.

To align with previous planning work and other planning workstreams, this Statement adopts the year 2036 as a simple way to discuss future conditions and sets the transport direction accordingly, regardless of when the anticipated growth is ultimately achieved.

# 2. Existing transport context

## 2.1 Bankstown TOD precinct

The Bankstown TOD precinct (herein 'Bankstown CBD') is bounded by Hume Highway to the north, Stacey Street to the east, Dellwood Street to the south and various residential streets to the west, as shown in Figure 7. This area is generally consistent with the Bankstown Master Plan and Complete Streets.

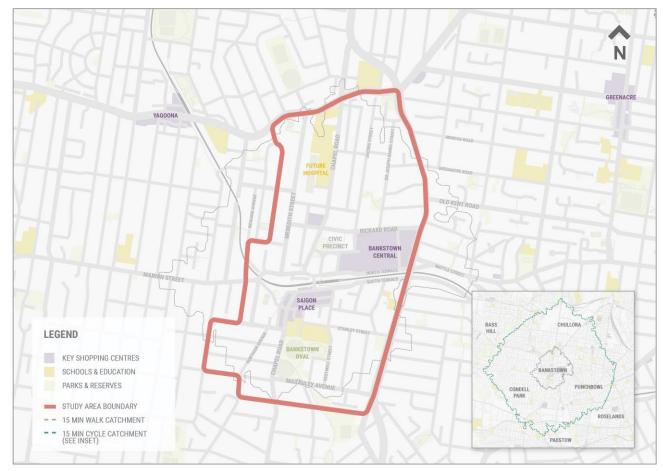


Figure 7: Extent of Bankstown TOD Precinct, with approx. 15 minute walk catchment and study area overlaid

Sources: refer data and map attribution at rear of report. Not to scale. Indicative catchment areas sourced via ArcGIS, originating from civic precinct.

This area is largely within 1,200 metres of Bankstown Station, as envisaged in the NSW Government's Transport Oriented Development Program.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> Transport Oriented Development Program, NSW Government, December 2023



#### **Current transport context** 2.2

#### 2.2.1 Snapshot of existing transport networks in Bankstown

Walking	The highest level of walking movement occurs in Saigon Place, Bankstown Station and around Bankstown Central.
	Footpaths and walking paths are generally present across the Bankstown CBD area, however they vary in quality and amenity. There are some gaps in crossing facilities on desire lines.
	Major transport infrastructure such as rail lines and major roadways (Stacey Street, Hume Highway) present a barrier to walking, given limited crossing opportunities, reaffirmed by catchment mapping. <sup>9</sup>
Cycling	There are minimal cycling facilities within the CBD.
	A shared path exists connecting south from Grahame Thomas Oval to the Salt Pan Creek corridor, and on the west side of the rail line towards Yagoona Station. However, these facilities do not connect to the CBD, nor is there a cycling network connecting destinations within the CBD.
	As for walking, major roads present a barrier to cycling, including high-volume, high-speed traffic and limited crossing opportunities to surrounding communities.
Rail	Bankstown Station is located central to the precinct, with services running broadly east-west and providing connections west to Liverpool, north to Lidcombe and east to Punchbowl, Campsie, Sydenham and the CBD.
	Station access is located on an island, surrounded on three sides by Bankstown City Plaza (mixed bus/traffic street), with access via signalised pedestrian crossings.
Bus	The CBD is serviced by 23 bus routes <sup>10</sup> and two interchanges, located south of the station at Bankstown City Plaza and north of the station at Bankstown Central.
	Bus routes generally run north-south through the CBD via Chapel Road and Restwell Street before dispersing to a range of local and regional destinations in all directions. <sup>11</sup>
	Bus routes and operations are complex in the core of the precinct, given the combination of terminating routes, through routes, multiple interchanges, layovers and circuitous street network.
Freight	Key industrial and innovation areas in the vicinity of Bankstown include Chullora to the north, Bankstown Airport/Milperra to the south-west and Padstow to the south. Moorebank and the intermodal terminal are also nearby to the west.
	Stacey Street, Milperra Road, Hume Highway and the M5 are important strategic freight links.
	Local freight and servicing vehicles also access the CBD, particularly Bankstown Central.
Road	The CBD has strong regional road connections provided by Stacey Street (A6) and Hume Highway (A22), in the north-south and east-west directions respectively. Canterbury Road (A34) and the M5 South Western Motorway provide further east-west connectivity further south.
	Local vehicle access to the CBD and surrounds is predominantly provided by Macauley Avenue, Chapel Road, North Terrace, Stanley Street and Rickard Road, with most streets within the CBD accessible to vehicles.

<sup>&</sup>lt;sup>11</sup> Parramatta, Fairfield, Liverpool & Bankstown region network (effective 24 September 2023), Transport for NSW



<sup>&</sup>lt;sup>9</sup> Travel time analyses sourced from <u>Targomo</u>
<sup>10</sup> Advised by Transport for NSW

#### 2.2.2 Current road network performance

In 2018/19, traffic modelling undertaken for Complete Streets Bankstown showed that important roads and streets in the Bankstown area are experiencing reduced travel speeds and traffic congestion during peak periods. Stacey Street was found to be performing with a poor level of service, with other streets within the precinct such as Rickard Road and Macauley Street facing increasing pressure in peak periods. <sup>12</sup>

An Infrastructure Australia review in 2019 found that the Stacey Street (A6) corridor is amongst the most congested routes in Sydney. 13,14

More recently, strategic transport modelling sourced for this Precinct Transport Statement<sup>15</sup> reaffirms that Stacey Street is approaching capacity in the vicinity of Bankstown in the afternoon peak period.

Figure 8: Average travel speeds under 'existing' conditions (2018 data), Complete Streets



Complete Streets, Canterbury Bankstown Council, p. 29

#### 2.2.3 Other current network issues and opportunities

Other transport issues highlighted through previous work include:

- No facilities to support cycling within Bankstown CBD.
- Limited street appeal and sense of place in some locations.
- · Missing connections between Bankstown CBD and regional cycling routes.
- High volume of traffic crashes involving people walking and cycling.
- Barriers to walking and cycling access caused by large-scale infrastructure (e.g., major roads, rail corridor), limited through-site permeability and/or limited crossing opportunities.
- High car use, including for short trips and rat-running on local streets.
- Large amounts of unregulated and free car parking, which promote car use.
- Opportunity to reduce through-vehicle movements in Bankstown CBD.
- Opportunity to establish clearer bus corridors through Bankstown CBD, given current routing is complex.
- Opportunity to establish clearer street network priorities more broadly, including improvements to street environment for walking and place.
- Opportunity to make better use of road space to deliver movement and place outcomes.
- Opportunity to accommodate trips from the centre to surrounding areas to access non-centre activity destinations

<sup>15</sup> Strategic modelling outputs provided by Transport for NSW, based on a PTPM foundation model, PM peak, 2021, using 2022 input assumptions. Refer 'Modelling Note' at the rear of this report for further detail and limitations.



<sup>&</sup>lt;sup>12</sup> Bankstown Complete Streets Project – Traffic Modelling Assessment Report, GTA Consultants (now Stantec), April 2019

<sup>&</sup>lt;sup>13</sup> A3 and A6 Corridor Capacity, Infrastructure Australia

<sup>14</sup> Urban Transport Crowding and Congestion, Infrastructure Australia, June 2019

# 3. Future transport direction and vision

## 3.1 Anticipated growth

The Bankstown CBD precinct is currently home to 16,500 residents, 6,200 dwellings and almost 10,000 jobs. The Bankstown City Centre Master Plan contemplated a future with almost triple the housing and more than double the number of jobs compared to today, as shown in Figure 9.<sup>16</sup>

Further built form testing as part of this TOD rezoning process has shown the potential for an increased number of jobs, consistent number of dwellings and lower expected resident population relative to the Masterplan.<sup>17</sup>

Figure 9: Anticipated growth in Bankstown CBD

Measure	Current (2016)	CBC Masterplan Future (2036)	Change	Bankstown TOD vision (2036)
Residents (population)	16,500	37,400	+34,000 (+206%)	50,500
Dwellings	6,200	18,700	+14,000 (+225%)	20,200
Jobs	9,700	30,000	+14,300 (+147%)	24,000

In summary, Bankstown CBD is expected to undergo substantial growth in jobs and residents enabled by the proposed TOD rezoning compared to today, with a commensurate increase in the transport task (including freight and servicing).

#### 3.2 Future transport direction

#### 3.2.1 Delivering a Transport Oriented Development (TOD)

Globally, Transit or Transport Oriented Developments (TODs) have emerged as a planning approach for urban centres, based on clustering a high density of homes, jobs and services around good quality public transport. TODs are typically designed to enable regional movement to and from a centre by good quality public transport and local movement by walking and cycling, with measures in place to manage vehicle speeds and volumes, such as traffic calming and parking management.

The higher land use densities necessitate a shift towards more space-efficient ways of movement, but also increase the viability of frequent public transport services, as well as local businesses and services. As a result, the intent is for more people to live locally and travel by walking, cycling and good quality public transport, with reduced reliance on car ownership and use.<sup>18</sup>

The NSW Government's *Transport Oriented Development* program aligns with these global TOD principles - to create more housing close to existing public transport, services and open space, reduce urban sprawl and enable more people to meet their local needs within walking distance.<sup>8</sup>

To achieve these outcomes, street environments need to evolve along with the increased density and renewal of TOD precincts. As TOD precincts become higher density environments, their street networks should gradually seek to increase their place function and the quality of their public spaces for pedestrians. The planning of these developments needs to shift from a focus on roads, traffic congestion and vehicle travel times towards more relevant metrics such as pedestrian safety and amenity, built form character and opportunities for city greening.

<sup>&</sup>lt;sup>18</sup> Transit Oriented Development, Victoria Transport Policy Institute, September 2019



<sup>&</sup>lt;sup>16</sup> Bankstown City Centre Adopted Master Plan, Canterbury Bankstown Council, September 2021, p. 3

<sup>&</sup>lt;sup>17</sup> Bankstown City Centre Transit Oriented Development State Led Rezoning - Urban Design Report, SJB, 14 March 2024

#### 3.2.2 A transport vision that delivers TOD principles at Bankstown CBD

To align this transport statement with local policy and the NSW Government's Transport Oriented Development program, a transport vision has been developed. This transport vision was refined in consultation with Transport for NSW during the development of the statement.

#### The vision being:

The community in the Bankstown City Centre will have an efficient, inclusive, and sustainable transport network, catalysed by the new metro line, that meets the needs of a growing population. This will mean a shift to active and public transport, creating more liveable public spaces by moving traffic to a CBD ring road, and providing more equitable access for all.

To succeed in this vision, the objectives to be achieved are:

- 1. **Connectivity**: Transport connections are integrated so travel is reliable, frequent, and seamless within and beyond the precinct.
- 2. Mode Share: 60% of all trips are made by walking, cycling and public transport, and 40% by private car by 2036.
- 3. Safety: The precinct is safe for pedestrians and cyclists, road safety is improved and road accidents are reduced.
- 4. **Accessibility:** The transport needs of all, including the young, elderly and those with mobility issues, are met by an accessible transport network.
- 5. **Sustainability**: Walking, cycling, and public transport are promoted to reduce carbon emissions and foster healthy communities.
- 6. Liveability: Streets are human-centred and enhance liveability and amenity in the precinct.
- 7. Productivity: Freight is efficient and supports of urban services, businesses, health and education sectors.

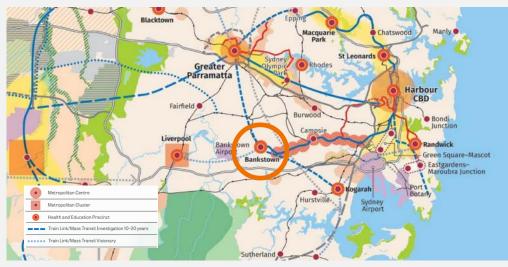
#### 3.2.3 State policy direction creates the context

## Greater Sydney Region Plan

Greater Sydney Commission, 2018 The Greater Sydney Region Plan shows Bankstown as a 'health and education precinct' and 'strategic centre', expected to feature a mix of land uses, growth in jobs which are close to where people live and good public transport, walking and cycling access.

The Plan also envisages a network of strategic 'mass transit' connections between key centres in Sydney, including between Bankstown and Parramatta, Liverpool, Kogarah and Sydney CBD, as shown in Figure 10.

Figure 10: Strategic connections from Bankstown to other key centres



Greater Sydney Region Plan (p. 14-15), with Bankstown circled

These regional connections are consistent across wider local and state planning strategies, including *Complete Streets*, NSW Government's *Future Transport Strategy*, *Bankstown CBD* and *Airport Place Plan, Connective City 2036* and the Bus Industry Taskforce's *Second Report*.

# Future Transport Strategy

NSW Government, 2022

The NSW Government's overarching transport strategy focuses on liveability, economy and vibrant, sustainable communities. Relevant to precinct rezoning, Government proposes to deliver these outcomes by broadening transport choices, stabilising Greater Sydney's traffic, improving interchange, reallocating road space to more efficient modes of transport, investment in walking and cycling and planning of Strategic Cycleway Corridors.

Government also supports sustainable travel to "flatten the peak and optimise the network" and promote healthier lifestyles, give more priority to public transport and reallocation of road space to "make the most of our existing assets".

## Other key relevant state transport policies and guidance for precinct planning

The TfNSW Road User Space Allocation Policy aims to "reduce private motor vehicle trips within built-up areas to support efficient movement and enhance the amenity of places". This includes prioritising the needs of people walking, cycling and using public transport ahead of vehicles.

The Network Planning in Precincts Guide includes principles to "support successful places and encourage walking, cycling and public transport journeys". This includes through co-location of land uses along walking, cycling and public transport corridors, permeable street networks and good walk and cycle connectivity. Movement of goods and freight should be based on desired place outcomes.

#### 3.2.4 Local policy direction

# Connective City 2036

Canterbury-Bankstown Council, 2019 Council's municipal transport strategy envisages Chapel Road as a civic street of public, health and education destinations, and The Appian Way as the civic focus for the city centre. The plan also reinforces the M5, Hume Highway and Stacey Street as metropolitan transport and freight corridors, and upholds the mass transit corridors proposed to Parramatta, Liverpool, Kogarah and Sydney CBD.

The strategy introduces a target to reduce car mode share to work across the whole municipality from 62 per cent to 30 per cent.

## Bankstown Complete Streets CBD Transport and Place Plan ('Complete Streets')

Canterbury-Bankstown Council, 2019 Complete Streets sets a vision for Bankstown CBD as a "desirable destination to live, work and visit, famous for its cultural diversity and walkable streets bustling with life". The Plan seeks to "ensure that as the CBD develops, priority is given towards a more liveable, safer and more attractive public domain that supports all modes of transport".

The key directions are to prioritise access by walking, cycling and public transport, improve streetscapes, simplify the bus network and improve integration and direct traffic movement to the periphery of the CBD. The Plan proposes to reduce car mode share from 74 per cent of all trips to 60 per cent of all trips.

#### Bankstown City Centre Master Plan

Canterbury-Bankstown Council, 2021 The Bankstown Master Plan seeks to create a liveable, vibrant, sustainable and accessible place which supports jobs and investment.

From a transport perspective, the Master Plan implements the principles of Complete Streets, reaffirms a clear north-south pedestrian spine on Chapel Road and The Appian Way/Restwell Street, supports density around the station, seeks improved permeability and improved connections from the CBD to surrounds by active and public transport. The Plan also proposes maximum car parking rates in the core of the precinct (within 400 metres of the station), with both minimum and maximum parking rates proposed in the balance of the study area.

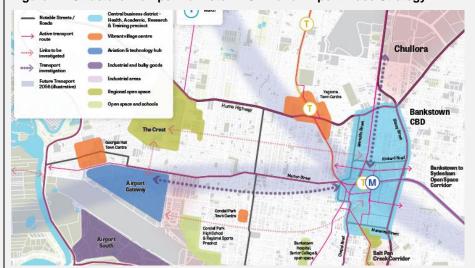
## Bankstown CBD and Bankstown Airport Place Strategy

Greater Sydney Commission, 2020 The Place Strategy envisages Bankstown as well-connected to Greater Sydney via mass transit links and a place where people can easily choose to walk or cycle.

The Strategy proposes this through improved crossings over major corridors, reduced parking rates (including maximum parking rates), improved walking and cycling connections and identifying appropriate last-mile freight routes.

The Place Strategy also proposes an active transport network to surrounding neighbourhoods, and local strategic connections to Bankstown Airport and Chullora.

Figure 11: Structure Plan per Bankstown CBD and Airport Place Strategy



Connective City 2036 Canterbury- Bankstown Council, 2019	Council's municipal transport strategy envisages Chapel Road as a civic street of public, health and education destinations, and The Appian Way as the civic focus for the city centre. The plan also reinforces the M5, Hume Highway and Stacey Street as metropolitan transport and freight corridors, and upholds the mass transit corridors proposed to Parramatta, Liverpool, Kogarah and Sydney CBD.  The strategy introduces a target to reduce car mode share to work across the whole municipality from 62 per cent to 30 per cent.
Other Council plans and strategies	Council's Active Transport Action Plan 2021-2031 <sup>19</sup> identifies a series of priority connections for walking and cycling from Bankstown, including Sefton, Chullora, Padstow Heights, Greenacre, Georges Hall and Punchbowl (and beyond).
	Council's Cultural Diversity Plan 2024-2028 <sup>20</sup> notes that the region has a highly diverse community, with almost half of residents born overseas. Unemployment, low income, social isolation and difficulty navigating Australian systems are commonly reported as challenges. The Plan highlights the need for communal spaces and opportunities to share culture.
	Council's Employment Lands Strategy <sup>21</sup> supports increase in jobs and population in Bankstown CBD, particularly around Bankstown Metro station. The strategy also supports improved amenity, public domain and built form outcomes.

# 3.3 Mode share target for Bankstown City Centre

Mode shares are globally the most common transport planning metric which give a broad sense of how people choose to travel in an area. They are usually presented as the share of car trips relative to other modes such as walking, cycling, and public transport.

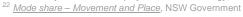
Mode shares are an overall indicator of the relative quality and attractiveness of the underlying transport systems in the area. When an area is served by convenient, frequent public transport and safe, comfortable walking and cycling paths, private car use tends to be lower as people choose to travel in other ways.

Setting a mode share target is helpful in transport planning because it:

- Communicates the future vision for the way that people travel, including the level of change expected from today and comparison to other areas.
- Informs the design of transport systems and networks to achieve this level of change.
- Can be measured through existing processes and measures, such as the Census or the Household Travel Survey.
- Are a critical element of transport modelling.
- Indicates how well various parts of the system meet the travel needs of the community.
- Increasingly being used to implement Vision and Validate to realise wider objectives such as decarbonisation.

Mode shares are endorsed as a 'core indicator' in the NSW Government's Movement and Place framework.<sup>22</sup>

<sup>&</sup>lt;sup>21</sup> Canterbury Bankstown Employment Lands Strategy, Canterbury-Bankstown Council, June 2020





<sup>&</sup>lt;sup>19</sup> Active Transport Action Plan 2021-2031, Canterbury-Bankstown Council, April 2021

<sup>&</sup>lt;sup>20</sup> CBCity Cultural Diversity Plan 2024-2028, Canterbury-Bankstown Council, December 2023

#### 3.3.1 Existing mode share targets

Complete Streets set a mode share target of "60% of total trips by car, down from 74% today, based on Vancouver's similar success in the last 20 years of achieving 50% split between car travel and sustainable transit".<sup>23</sup>

The most recent available data shows car mode share remains relatively unchanged since that time – approximately 73 per cent pre-COVID and 76 per cent post-COVID. The current mode share is lower (62 per cent) if linked walk trips are included.<sup>24</sup>

Further mode share targets have also been proposed across various planning materials for different scales, timeframes and users (for example, a journey to work target in *Connective City 2036*). These targets are consistent with the vision to reduce the share of trips taken by car in favour of walking, cycling and public transport.<sup>25</sup>

## 3.3.2 Mode share target for Bankstown CBD

The mode shares set out in Complete Streets are based on a wide definition of Bankstown (called 'Bankstown Statistical Area 3 (SA3)') which extends to Bass Hill, Chullora and Greenacre in the north, Bankstown Airport in the west and Georges River to the south. The Bankstown CBD represents a small part of this area.

Based on the areas of Sydney and Vancouver which are of similar density and desired transport characteristics to the future Bankstown CBD, a car mode share of 40 per cent for all trips is an appropriate mode share target to communicate the aspiration, and potential, to achieve a more substantial shift to walking, cycling and public transport. <sup>27,26</sup>

#### 3.3.3 Rationale for the mode share target

In lower-density industrial or residential suburbs, there is higher reliance on car travel compared to higher-density centres close to rail lines and bus hubs, such as Bankstown CBD.<sup>22</sup> For example, the mode share achieved in the City of Vancouver (50 per cent car mode share) comprises a blend of lower car use in the central city areas (29 to 36 per cent) and higher car use in suburban areas (up to 66 per cent).<sup>27</sup>

Similarly, the mode share target set out for Bankstown SA3 will be a blend of areas which have lower and higher car use. Setting a target for reduced car mode share in Bankstown CBD reflects the future higher-density, mixed-use, transport-oriented development close to high-quality transport connections. In turn, this means that there is a stronger opportunity for people to travel by walking, cycling and public transport compared to other suburban or industrial areas with limited transport alternatives.

This target is comparable to areas such the broad North Sydney – Mosman and Chatswood - Lane Cove SA3 areas and their surrounds today. These reflect an appropriate aspiration, given the mix of high-density CBD core with some residual lower-density residential surrounds, positioning on a Metro line with high frequency services, and role amongst other connected strategic centres.

Relevant comparators are shown to help contextualise the target in Figure 12.

<sup>&</sup>lt;sup>27</sup> 2016 Vancouver Panel Survey - Summary Report, McElhanney in association with Mustel Group, April 2017



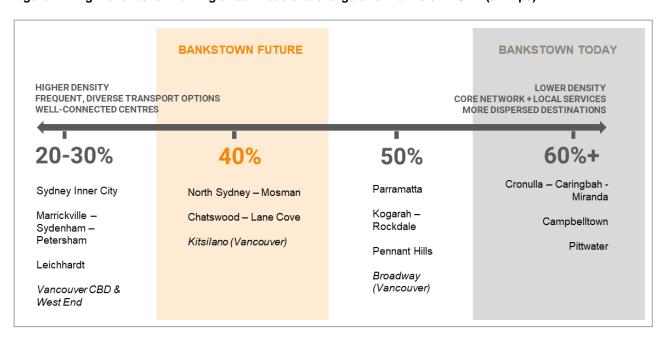
<sup>&</sup>lt;sup>23</sup> Bankstown Complete Streets - CBD Transport and Place Plan, Canterbury Bankstown Council, October 2019, p. 81

<sup>&</sup>lt;sup>24</sup> Household Travel Surveys by SA3, Transport for NSW for 2019/20 ('pre-COVID') and 2022/23 ('post-COVID'). Linked walk trips refer to walking to another mode, such as a bus stop.

<sup>&</sup>lt;sup>25</sup> For example: <u>Connective City 2036</u>, Canterbury Bankstown Council, March 2020 // Sydney Metro City & Southwest Sydenham to Bankstown Upgrade – Technical Paper 1 – Traffic (Part 8), Transport & Access, AECOM, August 2017

<sup>&</sup>lt;sup>26</sup> Stantec analysis of Household Travel Survey data by SA3, Transport for NSW

Figure 12: High-level benchmarking of car mode share targets for Bankstown CBD (all trips)<sup>26</sup>



Showing select Sydney SA3 areas (as the finest grain detail available in the Household Travel Survey database) and relevant sub-areas of Vancouver in italics. SA3 areas are large areas which typically include the relevant centres and several surrounding suburbs.

The car mode share target for Bankstown CBD includes consideration of linked walking trips to public transport, as the vision for the precinct includes a desire to promote access to other forms of transport (such as rail) by non-car modes. It also considers a reduction in car parking in new developments within the precinct.

Over time, planning for the precinct will continue to reduce car mode share (including below the target where feasible), particularly given a high share of trips are expected to occur locally or to/from surrounding suburbs.

# 4. Future transport needs

#### 4.1.1 Strategic transport movements

Strategic modelling shows that:28

- Approximately 40-45 per cent of Bankstown CBD trips are local (e.g., start and finish within Bankstown CBD). These
  trips have the potential to be undertaken by walking and cycling.
- Approximately 30-35 per cent of Bankstown CBD trips are to/from surrounding suburbs (within approximately five kilometres' radius). These trips have the potential to be undertaken by cycling and bus.
- Approximately 10 per cent of Bankstown CBD trips are to/from destinations along the 'strategic corridors' to Parramatta, Liverpool, Kogarah and Sydney CBD. These trips can be served by proposed mass transit (refer Figure 10 and Section 4.1.3).

These travel patterns are summarised visually in Figure 13. In all, about 80 to 85 per cent of trips to/from Bankstown CBD have the potential to be undertaken by walking, cycling and public transport. The ability of these sustainable transport modes to support a variety of trip purposes will depend on the improvements made to those services. For example, for bus trips to be used for shopping, Sunday services of an acceptable frequency would be required. For cycling trips to be used to carry passengers or cargo, bicycle lanes and parking would need to be designed to support larger bicycles.

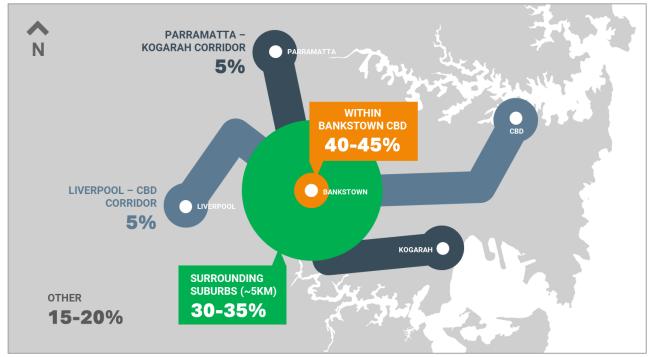


Figure 13: Destinations of trips which start in Bankstown CBD in 2036 (and vice versa)<sup>28</sup>

Summary graphic based on PTPM foundation model for 2036.<sup>28</sup> Not to scale.

The origins of trips towards Bankstown are shown in Figure 14, and destinations of trips from Bankstown are shown in Figure 15, both for the afternoon peak period. These figures show that most Bankstown trips are to/from the local area or surrounding suburbs, with the remaining trips starting/finishing in all directions.

It does not appear that any individual centre outside of Bankstown and surrounds generates a substantive share of overall travel demand. Some of the trips returning to Bankstown in the afternoon more distinctly originate from employment centres such as Macquarie Park, Sydney CBD and Inner West, Mascot/Airport, Kogarah and Liverpool (shown in Figure 14), however these represent a relatively small proportion of overall Bankstown trips.

<sup>&</sup>lt;sup>28</sup> Based on PTPM foundation model outputs supplied by TNSW for 2036, all trips, all modes starting and finishing in the Travel Zones most closely representing the Bankstown TOD study area, using the PM peak period as an indicative reference point. The PTPM is calibrated at the large area GMA level – local area calibration of the PTPM has not been undertaken for this project. Refer 'Modelling Note' at the rear of this report for further detail and limitations.



-

TOWARDS BANKSTOWN
ORIGINS OF TRIPS TOWARDS
BANKSTOWN CBD

PAPRAMATIA

SYDNEY OLYMPIC
PARK

BANKSTOWN

BANKSTOWN

BANKSTOWN

AIRPORT

NO. OF TRIPS

10 - 50
50 - 100
1100 - 200
200 - 500
500 - 1000

Figure 14: Origins of trips with a destination in Bankstown CBD - PM peak period, 2036, all trips<sup>29</sup>

Zones with fewer than ten trips not shown. Not to scale.

1000+

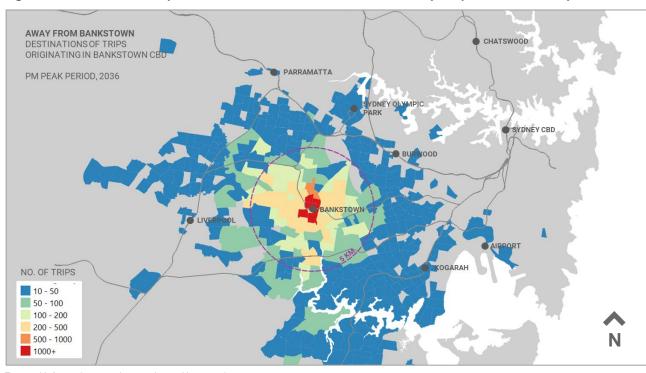


Figure 15: Destinations of trips which commence in Bankstown CBD - PM peak period, 2036, all trips<sup>29</sup>

<sup>&</sup>lt;sup>29</sup> Based on PTPM foundation model outputs supplied by TNSW for 2036, all trips, all modes starting and finishing in the Travel Zones most closely representing the Bankstown TOD study area, using the PM peak period as an indicative reference point. The PTPM is calibrated at the large area GMA level – local area calibration of the PTPM has not been undertaken for this project. Refer 'Modelling Note' at the rear of this report for further detail and limitations.



Zones with fewer than ten trips not shown. Not to scale.

These modelling outputs are based on the NSW Government's city-wide planning and network assumptions that provide a common basis for future network planning. While the proposed TOD rezoning is likely to create higher local demands than shown in the current model, the overall impact on network planning can be addressed at a project level and does not materially impact on the strategic projects or recommendations contained in this statement. <sup>30</sup>

Bankstown CBD represents an important but small quantum of the millions of future residents, jobs and trips made across Sydney reflected in the modelling. The higher level of local uplift is unlikely to significantly alter strategic movement patterns, but will increase the magnitude of those movements.

Supporting future transport needs will require:

- Good, accessible walking networks within Bankstown CBD to promote local trips by walking/wheeling.
- Good cycling networks, both within Bankstown CBD and to surrounding suburbs. In the future, these may have an increasing role in supporting other emerging personal transport options, where permitted. These will also play a role in urban delivery (e.g., food delivery).
- Reliable bus movement through the city centre to support frequent, reliable services.
- Good bus interchange and access, including associated bus layover and turnaround facilities.

#### 4.1.2 Implications of a 'status quo' approach

Strategic modelling shows that as the region and Greater Sydney continue to grow, more vehicles could be expected to use the road network under a 'status quo' approach. This includes across both the regional road network (e.g., Stacey Street) and selected streets within the precinct, refer Figure 16.31



Figure 16: Road network volume/capacity (V/C) ratio around Bankstown CBD32

<sup>32</sup> Volume / capacity ratio is a common measure of road network performance and shows the amount of expected vehicle demand relative to the amount of assumed road capacity. At a V/C ratio of more than 0.8, a road is approaching its capacity, with increasing delays and reduced speeds. The V/C plots indicate midblock performance only and may not be representative of intersection approach or actual intersection performance. Modelling outputs provided by Transport for NSW, based on a PTPM foundation model and 2022 input assumptions, which are have lower job and residential population assumptions than currently expected in Bankstown. The PTPM has been calibrated at the large area GMA level – local area calibration of the PTPM has not been undertaken for this project. Refer 'Modelling Note' at the rear of this report for further detail and limitations. Streets with V/C of less than 0.2 has been filtered out for clarity (e.g., to remove centroid connectors).



Basemap: OpenStreetMap, @ OpenStreetMap contributors, refer attribution at rear of report. Not to scale.

<sup>&</sup>lt;sup>30</sup> Compared to <u>Travel Zone Projections (TZP22)</u> for the area most closely reflecting Bankstown CBD.

<sup>31</sup> Based on PTPM foundation model outputs supplied by TNSW for 2036, using the PM peak period as an indicative reference point. Refer 'Modelling Note' at the rear of this report for further detail and limitations.

Research commissioned by Infrastructure Australia shows that in the future, road congestion will continue to increase, even with the current "unprecedented" pipeline of committed infrastructure investments and an increasing mode shift to public transport. Congestion is expected to increase most rapidly across the middle of the day and is also expected to increase across weekends. It will also be more common for congestion to be encountered in both directions during peak periods as employment grows in Sydney's west and the vision for a polycentric city is realised.<sup>14</sup>

The study also confirms that Stacey Street and M5 Motorway will remain in the top ten most congested roads in Sydney during both the morning and evening peaks, with approximately 70 per cent of the journey time due to congestion.<sup>14</sup>

The NSW Government's Future Transport Strategy sets a policy to stabilise traffic levels in Greater Sydney and make the most of existing assets, including by reallocating road space to more efficient modes of transport.

In summary, a vision-led response recognises:

- Mode shift will be important to 'slow the growth' of personal vehicle traffic and best enable freight, servicing and
  other needs. Road congestion will play a role in mode shift and travel behaviours (e.g., timing or need to travel).
- Bus priority will be important to ensure efficient and reliable access to/from and through Bankstown CBD.
- A need for behaviour change to reduce reliance on private car use and increase walking, cycling an public transport choice. This includes improved pedestrian and cycle crossings over major traffic corridors.

#### 4.1.3 Delivering strategic transport needs (from policy) in the precinct

#### Sydney Metro Southwest, Sydney Train services and future mass transit connections

The conversion of the T3 Bankstown train line between Sydenham and Bankstown to 'metro standards' is underway as part of Sydney Metro Southwest. The project will upgrade the line to provide modern, accessible trains and station facilities and high-capacity, frequent, reliable rail services, expected by late 2025.<sup>33</sup> Once converted, there will be a Metro service every four minutes in each direction in the peak period, five minutes in the interpeak period and every 10 minutes off-peak. In future, there will be ultimate capacity for services to be increased to a metro train up to every two minutes in each direction under the city.

The future Metro will create additional capacity to accommodate the projected population growth in Bankstown and other stations along the line. When the Metro opens, the number of people accessing Bankstown Station is expected to increase by approximately 30 per cent, with almost 80 per cent of all trips to/from the station expected to be undertaken by walking, cycling and public transport. This includes more than double the number of people accessing the station by bus (compared to current), a 30 per cent increase by walking and a decrease in the share of people accessing by car.<sup>34</sup>

To complement the Metro, a new train service will also be introduced between Bankstown and Lidcombe, operating as the new T6 line. Passengers interchanging at Lidcombe will be able to access T2 Leppington & Inner West and T3 Liverpool & Inner West line services to the Sydney CBD and T2 Leppington & Inner West Line services to Parramatta.

In the long term, there is potential for new mass transit connecting Bankstown with Parramatta and Kogarah. Transport for NSW is currently investigating options for future underground rail lines in the vicinity of Bankstown Station to determine potential corridor protection requirements in the precinct. Depending on the final alignment, maximum excavation depths at some properties may be limited.

The transport framework should facilitate these movements with precinct design and infrastructure to support:

- Good walking and cycling access to the station from within the city centre and surrounding neighbourhoods.
- High-quality station interchange with bus services, including associated layover, turnaround and access priority.
- Fewer trips by car to access rail / metro services.

<sup>34</sup> Sydney Metro City & Southwest Sydenham to Bankstown Upgrade – Technical Paper 1 – Traffic (Part 8), Transport & Access, AECOM, August 2017



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<sup>&</sup>lt;sup>33</sup> Minns Labor Government will deliver Sydenham to Bankstown section of City and Southwest Metro, NSW Government, August 2023 // Sydenham to Bankstown, Sydney Metro

#### Strategic 'rapid' and 'frequent' bus connections through Bankstown CBD

The Bus Industry Taskforce is a collective of bus operators, industry experts, the workforce and community representatives commissioned to make recommendations to Government to improve the efficiency, reliability and equity of bus services across the state.<sup>35</sup>

In October 2023, the Bus Industry Taskforce released their Second Report, which included recommendations for 10 'rapid' and 27 'frequent' routes as priorities for investment in the short-to-medium term (next ten years).<sup>36</sup>

Frequent route	A 'Frequent' bus route provides connections to high-capacity modes and local destinations, supporting the core bus network. It provides high-frequency turn-up-and-ride services, across the day, seven days a week.		
Rapid route	A 'Rapid' route spans strategic road corridors, provides direct services and links major hubs. It has the highest level of service frequency, bus priority and reliability, alongside dedicated branded fleet and stops.		

Definitions per Bus Industry Taskforce Second Report.36

With respect to Bankstown, the recommendations include a rapid route connecting to Liverpool and Burwood, and two frequent routes connecting to Sutherland, Hurstville and Parramatta. These routes would travel generally north-south through Bankstown.

Light Rail
Sydney Trains & Metro
Priority rapid bus routes
Priority frequent bus routes
Existing frequent bus routes
Existing frequent bus routes

Bushall Priority Frequent bus routes

Existing frequent bus routes

Bushall Priority Frequent bus routes

Bushall Priority Frequent bus routes

Existing frequent bus routes

Bushall Priority Frequent bus routes

Bushall Priority Frequent bus routes

Existing frequent bus routes

Bushall Priority Frequent bus routes

Existing frequent bus routes

Existing frequent bus routes

Bushall Priority Frequent bus routes

Existing freq

Figure 17: Bus Industry Taskforce recommendations for priority rapid and frequent bus routes

Excerpt from Bus Industry Taskforce Second Report, edited to add labels and legend for clarity. 36

Though these services are not committed (and service delivery is beyond the scope of the TOD rezoning), the routes were developed in conjunction with Transport for NSW and are consistent with strategic connections identified in all scales of transport policy, such as the NSW Government's *Future Transport Strategy*, *Greater Sydney Region Plan* and local and regional planning for Bankstown.<sup>37</sup>

For example, Future Transport Strategy, Transport for NSW, September 2022, p. 27 // Greater Sydney Region Plan – A Metropolis of Three Cities – Connecting People, Greater Sydney Commission, March 2018, p. 11 // Bankstown CBD and Airport Place Strategy. Greater Sydney Commission, December 2019, p. 20 // Bankstown Complete Streets – CBD Transport and Place Plan, Canterbury Bankstown Council, October 2019, p. 19



<sup>35</sup> Bus Industry Taskforce, Transport for NSW

<sup>&</sup>lt;sup>36</sup> Second Report, NSW Bus Industry Taskforce, October 2023

The NSW Government has also accepted the recommendations of the Second Report in-principle, including committing to preparing a 'Medium Term Bus Plan'.<sup>38</sup> The Medium Term Bus Plan is a 10-year roadmap that will outline service improvements across NSW and will prioritise restructuring the bus network, increasing service frequency and expanding network coverage over the next 10 years.

Improved bus services would support car-free or car-light lifestyles for residents of Bankstown CBD, improve access to Bankstown CBD and stabilise or even reduce the number of private vehicles in Bankstown CBD. Improved bus services to Paramatta and Hurstville will grow patronage on these corridors ahead of the proposed Bankstown Metro being built. The funding of these bus service improvements is critical to the successful growth of Bankstown CBD as a liveable centre.

The transport framework should safeguard and set the foundations for future frequent, reliable bus connections to other strategic centres such as Liverpool, Parramatta, Burwood, Sutherland and Hurstville/Kogarah, as identified in various transport strategies.<sup>37</sup> This includes suitable priority to enable reliable north-south movement through the Bankstown CBD.

#### Strategic Cycleway Corridors & Green Grid

In early 2023, the NSW Government published a series of 'Strategic Cycleway Corridors' for Greater Metropolitan Sydney. The Corridors show intended connections between key centres and major points of interest for collaborative delivery, with the specific routes and alignments subject to more detailed planning.<sup>39,40</sup>

Relevant to Bankstown, Strategic Cycleway Corridors are proposed to Georges Hall / Bankstown Airport and beyond to Liverpool (west), Yagoona (north-west), Regents Park and beyond to Parramatta (north), Greenacre (north-east), Punchbowl and beyond to Campsie (east) and Padstow (south).<sup>41</sup>



Figure 18: Strategic Cycleway Corridors surrounding Bankstown

<sup>41</sup> Strategic Cycleway Corridors for Greater Sydney (Map - v1.2), NSW Government, February 2023



Excerpt based on Strategic Cycleway Corridors for Greater Sydney, 41 with Bankstown highlighted in orange.

<sup>38</sup> Summary of Actions – The NSW Government response to the NSW Bus Industry Taskforce, NSW Government, February 2024

<sup>39</sup> Strategic Cycleway Corridors - Central River City Overview, NSW Government, January 2023

<sup>40</sup> Strategic Cycleway Corridors for Greater Sydney, NSW Government

The connection between Bankstown and Campsie is shown as an 'immediate opportunity' which will "fill important gaps in the network".39 It is understood that an East-West Pedestrian and Cycling Link (EWPCL) is proposed as part of the Sydney Metro Southwest project, which is expected to contribute to this connection.<sup>42</sup>

The Sydney Green Grid Plan shows similar proposed regional links from Bankstown to Yagoona (and beyond to Sefton and the Duck River corridor), Padstow (Salt Pan Creek corridor) and west to Georges Hall (Georges River corridor).<sup>43</sup>

The transport framework should set out and safeguard cycling networks which align with the intended Strategic Cycleway Corridors and Green Grid within Bankstown CBD. This includes connections within the centre (e.g., to key points of interest), as well as to surrounding neighbourhoods which form part of onward Strategic Cycleway Corridors and regional Green Grid links.

#### Upgrade of Stacey Street and Hume Highway, Bankstown

Transport for NSW is undertaking planning to widen Stacey Street in Bankstown to create a six-lane, divided road, including associated intersection upgrades and new shared pathways.

Planning and design for the project should complement the intent of the precinct, including:

- Directing private vehicle and through-freight movements away from the Bankstown CBD area.
- Providing north-south walking and cycling movement via new shared pathways.
- Facilitating east-west walking and cycling movements across the corridor, connecting the centre to surrounding suburbs.

<sup>43</sup> Sydney Green Grid – South District, Tyrrell Studio & NSW Government – Office of the Government Architect, March 2017



<sup>&</sup>lt;sup>42</sup> Bankstown Station Design and Precinct Plan, Metron T2M, September 2021

## 4.2 Summary – future transport needs, issues and opportunities

Bankstown is expected to grow significantly, with more than twice the population and three times the number of jobs compared to today.

The road network is already under pressure, with Stacey Street identified as one of the most congested corridors in Sydney, and is expected to remain so into the future. Other streets within the Bankstown CBD will face similar pressure from increasing traffic movements, which can impact on other access priorities, such as bus, urban loading and servicing, and create a more hostile environment for pedestrians and cyclists, and lower amenity.

Existing planning work envisages a future Bankstown which is vibrant and sustainable, celebrates local culture and is an attractive place to live, work and visit.

Transport plays an important role in achieving these outcomes. Policies and plans across all levels of government are consistent in their direction to reduce reliance on private car use and promote walking, cycling, public transport, and enable people-focussed places and streets to support local business and liveability.

To achieve this, Bankstown needs:

- Good walking networks within and to/from Bankstown CBD and surrounding neighbourhoods to promote local trips by foot, including to Bankstown Station and across major road corridors.
- Efficient and reliable bus movements within the city centre to avoid the impacts of traffic congestion, including bus priority on the key north-south corridor through Bankstown CBD to support future 'rapid' and 'frequent' bus services.
- High-quality bus interchange in close proximity to Bankstown Station to support an increase in access to rail and the city centre. This includes associated layover capacity and priority access arrangements.
- Dense, continuous cycling networks within Bankstown CBD, connecting destinations and points of interest. In the future, these may have an increasing role in supporting other emerging personal transport options, where permitted. They may also play a role in supporting urban deliveries, such as food delivery.
- Clear cycling connections to surrounding neighbourhoods, both to provide access to the centre for local communities and for onward connections part of Strategic Cycleway Corridors and Green Grid network.
- Preferred vehicle access routes to the precinct (including for urban loading and servicing) which are compatible with the above outcomes and discourage private vehicle access to the CBD.
- Supporting policies and measures which complement infrastructure investment, including reduced rates of car parking provision, traffic calming, placemaking and reduced speed limits.
- Relocating parking stations to the edge of the CBD along the ring road.

Road congestion will play a role in supporting mode shift and adjusting travel behaviours, including time of travel, route of travel, or need to travel at all (e.g., online delivery as an alternative).

The intent of strategic planning at the rezoning stage is to clearly articulate transport network priorities on each street within Bankstown CBD to ensure the necessary functions can be preserved and delivered consistently across state government, Council, developers/proponents and other private providers.

These priorities are set out in the framework and street plans in the following sections.

# 5. Proposed transport response

## 5.1 Transport network framework

Figure 19 shows the transport network priorities for Bankstown, responding to the needs, issues and opportunities set out in previous sections.

These network priorities are designed to align with existing planning work, such as Complete Streets and Bankstown Master Plan. They have also been planned to deliver on the intent of wider regional planning and investment in the Bankstown area, such as Bus Industry Taskforce routes, Strategic Cycleway Corridors, Green Grid and Sydney Metro.

The networks also have high-level regard for available road space and conflicts, recognising that detailed design and cross-sections will follow in subsequent stages. Design of facilities should align with contemporary practice, drawing on guidance such as the NSW Government's *Bus Priority Infrastructure Planning Toolkit* and *Cycleway Design Toolbox*.

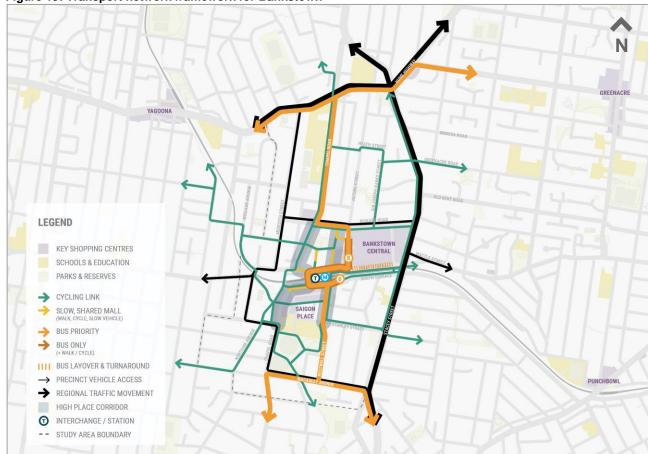


Figure 19: Transport network framework for Bankstown

Basemap: refer attribution at rear of report. Does not show local bus routes, through-site connections or minor local street changes. Walking assumed on all links. Walking, cycling and low-speed traffic is assumed on other streets shown in grey. Not to scale.

Compared to Complete Streets and the Bankstown Master Plan, this transport network framework:

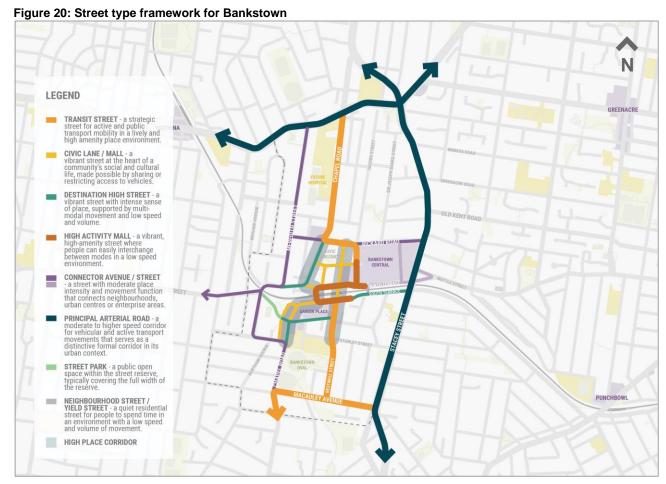
- Updates the bus network with routing (via an extension of Jacobs Street) and elevates the priority of the bus corridor through Bankstown CBD to safeguard future rapid bus routes to ensure people can reach Bankstown Station and CBD quickly and easily by bus, without delays due to traffic congestion.
- Updates the location of proposed future bus interchanges, layover facilities and bus turnaround within Bankstown CBD, including a northern interchange on Jacobs Street and southern interchange at Bankstown Station on South Terrace.
- Proposes additional cycling connections to ensure local communities can access Bankstown CBD.
- Shows the proposed walking and cycling connection on North Terrace to be delivered as part of Sydney Metro works.

These changes will have implications for the street cross-sections set out in Complete Streets. The ultimate design of streets should reflect the transport network framework, street types and Urban Design Framework.



## 5.2 Street type framework

The intended role and function of each street in Bankstown is shown in Figure 20, reflecting the networks shown in Figure 19 and wider urban and place intents. The street types and descriptions align to the NSW Government's Movement and Place<sup>44</sup> terminology.



Basemap: refer attribution at rear of report. Does not show minor lanes (e.g., service lanes) or streets beyond precinct boundary (dashed). Not to scale.

## 5.3 Strategic projects and infrastructure plan

Figure 21 and Figure 22 show the strategic projects and infrastructure to support the realisation of the transport networks and street types for Bankstown, with the associated list shown in Appendix A. The projects are predominantly based on earlier work (e.g. Complete Streets), updated to the current context and based on subsequent planning.

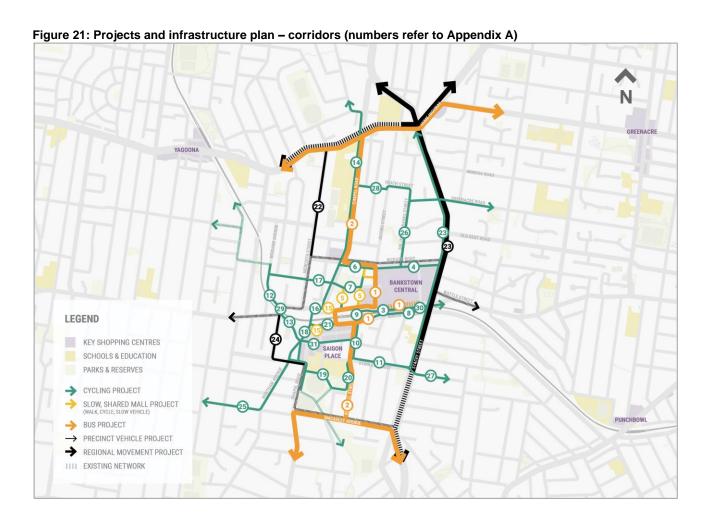
It is emphasised that this list is focussed on the most critical physical changes to align with the frameworks set out in Figure 19 and Figure 20 and is therefore not exhaustive. For example, the supporting measures such as traffic calming, streetscape improvements or wayfinding are not shown.

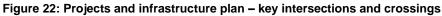
These projects would be delivered by a range of stakeholders at various stages of the precinct's evolution – inclusion in the figure below is intended to guide future planning and does not represent committed funding or timeframes.

Design and implementation of these projects will follow at later stages of planning, through Development Applications or as standalone projects for detailed planning and investment. Design of facilities should align with contemporary practice, drawing on guidance such as the NSW Government's Bus Priority Infrastructure Planning Toolkit, Freight and Servicing Last Mile Toolkit, Great Places Toolkit and Cycleway Design Toolbox.

<sup>&</sup>lt;sup>44</sup> Road and Street Types - Movement and Place, NSW Government









Basemap: refer attribution at rear of report. Figures do not show through-site connections or minor local street changes. Not to scale.

## 5.4 Supporting measures and policies

#### 5.4.1 Car parking rates

#### **Background**

Car parking policy settings are amongst the most critical tools in reducing car ownership and use, in line with the vision for Bankstown CBD. Enabling land uses to provide reduced levels of car parking provides a wide range of benefits to the precinct, including maximising space for higher uses (such as homes, workplaces or open space), shaping travel patterns and providing flexibility to mitigate other risks, such as flood zones.

Maximum car parking rates were initially proposed as part of the *Bankstown CBD and Airport Place Strategy*, and with specific maximum rates recommended in the *Bankstown and Campsie Parking*, *Loading and Servicing Study*<sup>45</sup> and *Bankstown Master Plan* within 400 metres of Bankstown Station. A combination of minimum and maximum rates were also proposed for the balance of the city centre area. These policies were developed prior to the TOD rezoning process.

#### Guide to Transport Impact Assessment (GTIA) 2024

Since these previous studies were completed, the NSW Government has published the *Guide to Transport Impact Assessment (GTIA)* which identifies Bankstown as 'Category 1' – denoting "an urban area with high alternative transport options and low car mode share". 46,47

The reference car parking rates set out in the GTIA for areas such as Bankstown are lower than those proposed in previous work for residential uses, in line with contemporary car parking rates for other progressive centres seeking sustainable mode shift. However, the reference rates are higher than previous work for office and retail uses.

The GTIA also notes that "maximum rates are particularly common in areas of high levels of access to public transport and in areas where a wide range of services and amenities are available", as envisaged for the future of Bankstown.

Managing car parking on a maximum-rates basis also enables the provision of car parking to be reduced progressively over time as alternative and improved transport options are delivered.

#### Car parking rates for residential flat buildings

Considering the aspirations for Bankstown as a high-density TOD with good quality walking, cycling and public transport access, it is recommended that the car parking rates proposed in the draft Bankstown City Centre Development Control Plan<sup>48</sup> (September 2024) support of the intent of the TOD rezoning. Options for consideration by Council include:

- Change the rates for residential uses to reflect those set out for Category 1 high-density residential dwellings in the GTIA, which are generally lower, and applied as maximum rates.
- Apply the 'Inside Bankstown City Centre' rates from the draft DCP for residential flat building / shop top housing to apply across the whole Bankstown TOD study area as maximum rates, remove having separate rates for 'Outside of Bankstown Core city' including minimum rates. This approach will provide a simplified, consistent approach to car parking across the TOD precinct and provide flexibility where ability to provide basement parking is constrained (e.g., due to flooding or potential long-term transport corridor protection). It also reflects the good walking, cycling and public transport coverage across the precinct and a willingness to walk longer distances (than 400 metres) to access high-quality public transport, such as Sydney Metro and rapid bus services.<sup>49</sup>

It is also recommended that car parking rates are reviewed over time to ensure they are meeting the strategic intent for the precinct – for example, there may be opportunity to reduce office car parking rates further as the precinct evolves.

<sup>&</sup>lt;sup>9</sup> Daniels, R. & Mulley, C., <u>Explaining walking distance to public transport: the dominance of public transport supply</u>, The Journal of Transport and Land Use, Vol. 6 No. 2, 2013, pp. 5-20 // Eady, J. & Burtt, D., <u>Walking and transport in Melbourne suburbs</u>, Victoria Walks, 2019



<sup>&</sup>lt;sup>45</sup> Bankstown and Campsie Parking, Loading and Servicing Study – Final Draft, GTA Consultants now Stantec, 23 August 2021

<sup>&</sup>lt;sup>46</sup> Guide to Transport Impact Assessment NSW Government, 2024

<sup>&</sup>lt;sup>47</sup> Guide to Transport Impact Assessment – Car Parking Categorisation, NSW Government, 2024. This work is indicative only and subject to change, but nonetheless the classification reflects the future aspirations for Bankstown CBD.

<sup>&</sup>lt;sup>48</sup> Draft Bankstown City Centre Development Control Plan, <u>Canterbury Bankstown Council</u>, <u>September 2024</u>

#### 5.4.2 Other supporting measures to deliver on wider outcomes

It is expected that various complementary policies and measures would be implemented as part of a holistic response to achieving the network priorities, such as:

- Improve public transport services over time.
- Reduced vehicle speed limits within the Bankstown CBD area.
- Traffic calming treatments to reduce vehicle speeds and volumes and achieve relevant network priorities.
- Reallocate kerbside uses (such as on-street car parking) to achieve other network priorities (such as bus or bike lanes), and in line with guidance set out in the NSW Government's *Freight and Servicing Last Mile Toolkit*.
- Broad improvements to walking facilities, such as crossings on all four arms of intersections and more crossings
  of the ring road and other arterial roads, wider footpaths, a continuous footpath liking Stacey Street to North
  Terrace, accessibility, shelters, wayfinding, reduced crossing time at lights, improved through-site permeability,
  increased perceived and actual safety to enable first and last mile journeys by walking, and limiting crossovers
  on main shopping and activity streets.
- Broad improvements to cycling facilities such as higher quality and more convenient bicycle and scooter parking, through-site permeability, and safe and accessible bicycle lanes.
- Broad improvements to place outcomes, including streetscapes, weather protection, access management (e.g., discourage crossovers on active frontages) and tree canopy planting.
- Support for shared mobility outcomes which reduce car ownership and use, such as car share or shared bicycles and e-bikes.
- Support for paid, uncoupled, consolidated and/or reduced car parking to discourage car ownership and use.
- Shift to on-site loading and servicing which is sensitive to wider placemaking and amenity outcomes, reflects contemporary needs and aligns with the NSW Government's *Freight and Servicing Last Mile Toolkit*.
- Design streets which are flexible and adaptive to technological change. Use data and technology to deliver precinct outcomes and initiatives to support behaviour change, such as Green Travel Plans.

These initiatives are detailed design matters which would be delivered incrementally and by a range of parties (e.g., by proponents as part of new development, or Council/TfNSW as part of capital works programs or projects).

# 5.5 Concluding statement

Bankstown is expected to grow significantly, with more than twice the population and three times the number of jobs compared to today.

Government policies at all levels are consistent in its direction to reduce reliance on private car use and to promote walking, cycling, public transport and enable place-focussed streets to support business and liveability.

The proposed transport network seeks to provide the road space and priority to enable walking, cycling and public transport as viable choices, delineating preferred vehicle access corridors to reduce conflict and enabling desired place outcomes through malls, lanes and street parks.

Achieving the proposed level of uplift in Bankstown will require changes to the way that people travel, which means that the role of roads and streets will change over time compared to today. Public space is limited, development needs to remain viable and in a dense, established, complex urban environment, there will necessarily be trade-offs in the use of street space and transport performance for certain modes on certain streets.

However, these initiatives will give people choices to move around Bankstown quickly and easily as the area grows and improve wider outcomes for Bankstown, including equitable access and social connection, environmental sustainability, health, air quality and local economy.

In turn, these transport outcomes will enable Bankstown to thrive as a vibrant, sustainable, cultural hub and as an attractive place to live, work and visit.

#### 5.5.1 Next steps

This Precinct Transport Statement brings together a range of relevant policy documents and previous studies, based on consultative processes, to recommend an ambitious vision to transform Bankstown City. Central to achieving this vision are the projects and policy changes aimed at generating a shift to active and public transport, creating more liveable public spaces by moving traffic away from the centre, and providing more equitable access for all.

The Precinct Transport Statement is prepared as an input to new planning controls that, once adopted, will see the area change over time as sites are developed and redeveloped. It outlines the strategic projects, infrastructure plan, and supporting changes that should be delivered as critical infrastructure to realize the TOD vision. The next step is to progress or further define projects by involving stakeholders, including local councils, state government departments, and private developers.

As the planning system leverages and enables private land development projects, while having some level of priority relating to the need (e.g., they set the foundations for sustainable travel patterns), there should be regular monitoring and evaluation of both indicators and timelines for key projects. This should ensure the strategies are on track and adjusted as necessary. Being cognisant and responsive to local conditions is critical to creating flexibility in the transport response and the development of the TOD, noting the need to adapt to changing circumstances, technological advancements, and evolving community needs.

#### Appendix A - Project and infrastructure list

The following table provides a summary of the proposed strategic projects and infrastructure necessary to support the realization of the transport networks and street types. Each project is categorised by its priority, complexity, and estimated cost, and is associated with the relevant agency responsible for its implementation. The table aims to guide future planning and ensure alignment with the overarching vision and objectives of the TOD precinct, guidance on the assessment of priorities, complexity and cost can be found after the table.

#	Project	Source / references	Agency	Priority	Complexity / Cost
1a	Bankstown Bus interchange/Jacobs Street Extension	Generally aligns with two-interchange arrangement shown in Bankstown Master Plan (noting updated	Council / TfNSW / Landowners	High	High / \$\$\$
1b	Bus layover, turnaround and associated infrastructure upgrades for access	locations).	Council/TfNSW		
2	Bus priority infrastructure to support proposed 'frequent' and 'rapid' bus routes (incl. predominantly bus only in Bankstown City Plaza)	Generally aligns with bus corridor shown in Complete Streets, Bankstown Master Plan (noting updated corridor via Jacobs Street), supports the future connections shown in Bus Industry Taskforce Second Report p. 88-89.	Council / TfNSW	High	Medium / \$\$
3	East West Pedestrian and Cycle Link (EWPCL)	Aligns with NSW Strategic Cycleway Corridors to Punchbowl and beyond, aligns with Council's Active Transport Plan route 8.	Council / TfNSW / Sydney Metro	Medium	Medium / \$\$
4	Separated bicycle facilities on Rickard Road (east of Jacobs Street)	Shown in Complete Streets and Bankstown Master Plan.	Council / TfNSW	Medium	Medium / \$\$
5	Shared zones and malls on The Appian Way and Fetherstone Street	Shown in Complete Streets, Paul Keating Park Master Plan and Bankstown Master Plan.	Council / TfNSW	High	Low/\$
6	Separated bicycle facilities on Rickard Road (west of Jacobs Street)	Shown in Paul Keating Park Masterplan and Bankstown Master Plan.	Council / TfNSW	High	Medium / \$
7	Separated bicycle facilities on The Mall	Shown in Paul Keating Park Masterplan and Bankstown Master Plan.	Council	Medium	Medium /\$
8	Separated bicycle facilities along the north side of South Terrace	Shown in Complete Streets and Bankstown Master Plan.	Council / TfNSW	Low	Medium / \$
9	New cross-corridor plaza over rail corridor, providing walking and cycling	Shown in Complete Streets, Bankstown Master Plan and Bankstown Station Design and Precinct Plan.	Council / TfNSW / Sydney Trains / Sydney Metro	High	High / \$\$\$
10	Separated bicycle facilities on Restwell Street	Shown in Bankstown Master Plan, aligns with Council's Active Transport Plan, route 3.	Council	High	Medium / \$
11	Separated bicycle facilities on Stanley Street	Shown in Complete Streets and Bankstown Master Plan.	Council	Medium	Low/\$
12	Upgrade cycling Quietway or bike lanes on Weigand Avenue,	Shown in Complete Street, Bankstown Master Plan, aligns with NSW Strategic Cycling Corridors to	Council	Medium	Low/\$

#	Project	Source / references	Agency	Priority	Complexity / Cost
	including connection to Olympic Parade.	Yagoona, aligns with Council's Active Transport Plan, route 2.			
13	Convert Olympic Parade to walking and cycling only	Shown in Complete Streets and Bankstown Master Plan.	Council	Medium	Medium / \$
14	Separated bicycle facilities on Chapel Road	Shown in Complete Streets, Bankstown Master Plan, aligns with NSW Strategic Cycling Corridors to Chullora, aligns with Council's Active Transport Plan, route 3.	Council	High	Medium/\$
15	Convert / enhance Bankstown City Plaza south and west as a shared zone.	Shown in Bankstown Master Plan and Complete Streets.	Council	High	Low/\$
16	Separated bicycle facilities Marion Street between Depot Place and Chapel Road	Shown in Complete Streets and Bankstown Master Plan.	Council	Low	Medium/\$
17	New walking and cycling facilities on Gordon Street, including extension to connect to Paul Keating Park	Shown in Complete Streets and Bankstown Master Plan.	Council	Medium	Low/\$
18	New walking and cycling connection over/under rail (Marion St car park redevelopment)	Shown in Complete Streets and Bankstown Master Plan.	Council / TfNSW / Sydney Trains	Low	High/ \$\$\$
19	New walking and cycling connection between existing shared paths in Bankstown Oval and Olympic Parade	Shown in Complete Streets and Bankstown Master Plan.	Council	Medium	Medium/\$\$
20	New cycling link on Restwell Street to Bankstown Oval	Shown in Complete Streets, Bankstown Master Plan, aligns with Council's Active Transport Plan, route 3.	Council / TfNSW	High	Medium/\$\$
21	Cycling facilities along South Terrace to Dale Parade	Shown in Complete Streets and Bankstown Master Plan.	Council / TfNSW	Medium	Medium/\$\$
22	Street and intersection reconfiguration to improve efficiency – Meredith Street	Shown in Complete Streets.	Council / TfNSW	Medium	High/\$\$
23	Stacey Street widening – three traffic lanes in each direction and new shared paths.	Shown in Complete Streets and Bankstown Master Plan, referenced in NSW Government's <u>Improvements to</u> Stacey Street, TfNSW (2019).	TfNSW	Medium	High/\$\$\$
24	Street and intersection reconfiguration to improve efficiency - Chapel Road (south), Brandon Avenue, Greenwood Avenue	Shown in Complete Streets.	Council / TfNSW	Medium	High /\$\$\$
25	Cycling connection SW suburbs to Bankstown CBD	Aligns with connections shown in Bankstown CBD and Airport Place Plan.	Council	Medium	Low/\$

#	Project	Source / references	Agency	Priority	Complexity / Cost
26	Cycling connection to NE suburbs to Bankstown CBD and northern precinct	Generally, aligns with connection shown in Bankstown CBD and Airport Place Plan, aligns with Council's Active Travel Plan, route 4.	Council / TfNSW	Medium	Low/\$
27	Cycling connection to SE suburbs to Bankstown CBD	Aligns with connection shown in Bankstown CBD and Airport Place Plan.	Council / TfNSW	Medium	Low/\$
28	Cycling connection to NE suburbs to northern precinct	Improve connectivity to/from north of precinct, esp. given proposed hospital and active frontages.	Council	Medium	Low/\$
29	Widening of Marion Street underpass to improve walking and cycling amenity	Southwest Sydney Place-based Transport Plan	Council / TfNSW	Medium	Medium/\$\$
30	New walking and cycling connection over/under rail (near Lady Cutler Ave)	Shown in Complete Streets and Bankstown Master Plan.	Council / TfNSW / Sydney Metro	Low	High/\$\$\$
31	Cycling link along Greenfield Parade	Improve connectivity between Olympic Parade and Restwell Street, connecting regional cycleways, per TfNSW.	Council / TfNSW	Medium	Low/\$

#### **Definitions for level of priority:**

- High critical to the achieving the strategic objectives of the precinct
- Medium important to the functionality and accessibility of the precinct
- Low contributes to the connectivity of the precinct

Note that this report is focussed on strategic priorities, so presents more 'high' and 'medium' priority initiatives than 'low'.

#### Definitions for level of complexity:

- High expected to be a large scale or complex project, involving significant infrastructure changes and extensive stakeholder engagement. Generally multi-year in nature.
- Medium involves some complexity, or reconfiguration of road space on complex streets. Often entailing
  reconfiguration of existing road space on busy or complex streets. Projects require detailed studies and public
  consultations to integrate with development.
- Low local-scale changes to streets e.g., bike facilities on local streets or transition to a mall environment.

  Projects in the "Low" category refer to local-scale changes aimed at enhancing neighbourhood accessibility and safety.

Complexity has been presented separately from cost. Although some projects may have lower costs, they may have a high level of complexity due to potential impacts. For example, changes to street space for new bike lanes can have significant impacts that should not be underestimated, even though the overall costs of the project are not significant.

#### **Definitions for level of cost**

- \$\$\$ Projects that involve investments greater than \$10 million require a strategic and detailed business case to justify the expenditure and outline the projected returns or benefits.
- \$\$ Projects falling within this cost range typically involve moderate to significant financial investments and may encompass a range of improvements or developments. \$250,000 \$10m
- \$ Projects costing less than \$250,000 fall into this category, generally involving smaller-scale financial commitments and could be funded out of operational budgets.



The cost estimates provided are indicative and for preliminary planning purposes only. They are based on initial evaluations and may change due to market fluctuations, regulatory changes, and other unforeseen factors. Detailed analyses will refine these estimates as the project progresses, and stakeholders should allow for budget flexibility to accommodate adjustments. The above is based on a high-level expectation and that detailed design and cost estimates are beyond the scope of this project. Cost and timing are dependent on wider factors, project scoping and market forces.

Refer also to review of intersections and crossings in Figure 22.

# Appendix B - Gap analysis

#### **Modelling note**

Strategic modelling outputs are based on Public Transport Project Model (PTPM) version 6.31, using Standard <u>Travel Zone Projection 2022 (TZP22)</u> assumptions and TfNSW Endorsed Network Assumptions (TENAs) 2022 (Visionary Standard).

These inputs align with the NSW Government's Common Planning Assumptions. However, these assumptions and projections are intended to be illustrative of a reasonable possible future scenario and should be considered as a guide and not a target or commitment.

Please note that due to the timeframes of the project, the data has been sourced from the PTPM foundation model as-is. The PTPM is calibrated to the large area GMA level – local area calibration of the PTPM has not been undertaken for this project and outputs have not been subjected to independent validation or verification of the local area performance. The outputs are to be viewed as part of an overall strategic narrative, in conjunction with a range of inputs and data sources.

V/C plots indicate midblock performance only and may not be representative of intersection approach or actual intersection performance.

#### **Data and map attributions**

General Transit Feed Specification (GTFS) and Travel Zone (TZ) data sourced from TfNSW Open Data Hub and Developer Portal under Creative Commons licence.

Road network data © State of New South Wales (Spatial Services, a business unit of the Department of Customer Service NSW).

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## **Bankstown City Centre Precinct TOD Rezoning**

Transport Assessment – Gap Analysis

May 2024

	Revision	Description	Author	Date	Approved By	Date
ſ	A-Dr	Draft	Tom Kennedy	21 March 2024	Will Fooks	21 March 2024
	A	Final	Tom Kennedy	13 May 2024	Will Fooks	22 May 2024



The Stantec Team acknowledges the First Nations peoples of this nation. We acknowledge the traditional custodians of the lands on which our offices are located and where we conduct our work. We pay our respects to ancestors and Elders, past and present. Stantec is committed to honouring First Nations peoples' unique cultural and spiritual relationships to the land, waters and seas and their rich contribution to society.

The conclusions in this Study are Stantec's professional opinion, as of the time of the Study, and concerning the scope described in the Study. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Study relates solely to the specific project for which Stantec was retained and the stated purpose for which the Study was prepared. The Study is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk. Stantec has assumed all information received from various parties in the preparation of the Study to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein. This Study is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Study may be provided to applicable authorities having jurisdiction and others for whom the Client is responsible, Stantec does not warrant the services to any third party. The report may not be relied upon by any other party without the express written consent of Stantec's discretion.

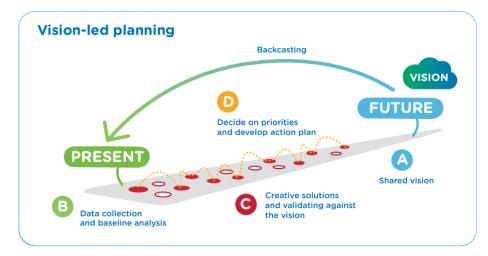


# Overview of gap analysis

The gap analysis assesses if transport issues arising from the proposed rezoning have been addressed and substantiated with fit-for-purpose evidence.

- What is the forecast land use and population / jobs growth in the precinct? What is the vision?
- B Where are people expected to travel to and from, and at what scale?
- C How are people expected to travel (in line with the vision)?
- Can the movements be supported by the proposed transport networks?
- What further policy, services and infrastructure are required to support the growth?

The gap analysis is based on relevant policy and transport planning frameworks, with a critical focus on the TfNSW 'vision-led planning' framework. This framework sets out four stages to the planning process.



Based on TfNSW Future Transport 2056



# A framework for reviewing policy and evidence to support precinct rezoning

**Trip Generation** 

# **Trip Distribution**

### **Mode Share**

# Assignment

## Response

How many?

What is the forecast land use and population / jobs growth in the precinct? What is the vision?

Where?

Where are people expected to travel to and from, and at what scale?

How?

How are people expected to travel (in line with the vision)?

Is it plausible?

Can the movements be supported by the proposed transport networks?

What else needs to be done?

What further policy, services and infrastructure are required to support the growth?

The 'four-step' terminology used as a simple, widely-known device for communicating steps in an urban transport planning assessment, however the process of establishing a scope/vision, understanding movement and place and developing solutions broadly aligns with other standard frameworks, such as <u>NSW Network Planning in Precincts Guide</u> (Movement and Place core process) and <u>Austroads'</u>

Network Operations Planning framework.



# Expectations for policy and evidence to support precinct rezoning

## **Trip Generation**

# **Trip Distribution**

## Mode Share

# Response

support the growth?

#### How many?

What is the forecast land use and population / jobs growth in the precinct? What is the vision?

#### Where?

Where are people expected to travel to and from, and at what scale?

#### How?

How are people expected to travel (in line with the vision)?

#### Is it plausible?

Can the movements be supported by the proposed transport networks?

**Assignment** 

#### What else needs to be done? What further policy, services and infrastructure are required to

#### WHAT COULD BE EXPECTED IN TERMS OF POLICY & EVIDENCE

- Order of magnitude estimate of future population / jobs
- Broad assumptions around types of land uses and densities expected, and where
- Establishment of vision for overarching transport direction

- Understanding of where people are expected to travel, esp. external to the precinct ('travel patterns')
- Order of magnitude scale of these movements ('travel demands')
- E.g., what is the scale of movement internal to the precinct, vs. surrounding suburbs vs. CBD?

- Order of magnitude breakdown of how those trips are made, by mode.
- E.g., connections to surrounding suburbs are expected to be serviced by bus and bike - what is the broad magnitude expected for these?
- Review of the policies, services and infrastructure proposed in planning material against the proposed demands.
- E.g., given road congestion, is there sufficient bus priority in place on the primary corridors to support the expected bus demand?
- What further policy, services and/or infrastructure are required to support the growth?



# **Summary of gap analysis**



Ready – covered in existing work, to be compiled in the Precinct Transport Assessment



## **Trip Generation**

# **Trip Distribution**

## **Mode Share**

# **Assignment**

# Response

#### How many?

What is the forecast land use and population / jobs growth in the precinct? What is the vision?

#### Where?

Where are people expected to travel to and from, and at what scale?

#### How?

How are people expected to travel (in line with the vision)?

#### Is it plausible?

Can the movements be supported by the proposed transport networks?

What else needs to be done? What further policy, services and infrastructure are required to

support the growth?

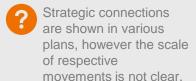
#### **POLICY**



Forecast growth and land use aspirations set out within Bankstown Masterplan.



Various visions set out across existing material.



Refer p. 7 for more.



Various mode share targets are provided for different scales and timeframes. Requires review of appropriate target for study area.

Refer p. 9 for more.

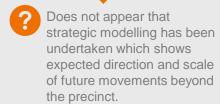


Principles-based transport networks are set out in existing material, e.g., Complete Streets and Bankstown Masterplan.



Needs to be a reconciliation of work since the Bankstown Masterplan was completed to ensure current thinking is reflected in the transport network plans. For example, in-principle agreement of location of bus interchange north of the station.

#### **EVIDENCE**



Refer p. 8 for more.



Magnitude of trips by mode have not been quantified.



Therefore, adequacy of proposed networks and infrastructure has not been fully considered against needs for the precinct.

Trip Distribution



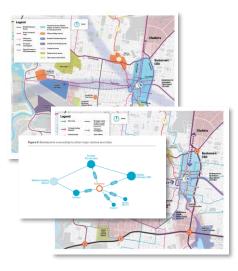
# Trip distribution – examples of current policy



Future Transport 2056, TfNSW



Bankstown Complete Streets, Canterbury-Bankstown Council



Bankstown CBD & Bankstown Airport Place Strategy, Greater Sydney Commission



A Metropolis of Three Cities, Greater Sydney Commission



Strategic connections are shown in various strategic planning documents.

The scale of movement on each connection do not appear to have been quantified.

We could expect to see estimates of the likely destinations of trips and their respective magnitudes generated to and from Bankstown. As a minimum, this would cover the work trips, but could be extended to broader trip purposes.

The intent is to give confidence that the proposed transport networks can cater for magnitudes of movement, and to validate the relative importance (or unimportance) of certain destinations.

There is also an exercise in reviewing the implications of the strategic connections and their demands to the local street network within the study area.

For example, how many people will travel between Bankstown and Parramatta (a 'city-shaping corridor'), how will these trips be served, and can proposed transport network priorities support the movements within the study area?

Trip Generation Trip Distribution Mode Share Assignment Response

# Trip distribution – current evidence

#### Strategic transport modelling

Using existing model resources (i.e. STM, PTPM and/or STFM) to identify travel demands, patterns and mode splits. Critically review the strategic modelling outputs to ensure that they adequately reflect future travel behaviours, including travel patterns and travel demands.



It does not appear that any reports have been prepared that cover strategic transport modelling. This is an important input for precinct level transport impact assessment and assurance.

#### Microsimulation transport modelling

Appropriate modelling software that considers route choice based on travel time delay and dynamic/coordinated traffic signal operations (i.e. microsimulation, hybrid model, or mesoscopic model).



Extensive microsimulation modelling was undertaken in 2017/18 for the Complete Streets project. However, future scenarios are based on potentially outdated growth factors (based on STM 2017/18).

The microsimulation modelling does not give a sense of destinations or magnitude of movements beyond the precinct, or by modes other than traffic.

It does provide a sound overview of likely traffic issues under 'existing conditions' and therefore the case in favour of mode shift per Complete Streets. Further microsimulation work is unlikely to be necessary to support rezoning.

#### Intersection modelling

Intersection modelling (incorporating network-based signal operations) - based on the flows from the above modelling exercise.



Not critical at this strategic planning stage – best deployed later to resolve specific configuration or operational issues.

Trip Generation Trip Distribution Mode Share Assignment Response

# Mode share – current policy (vision)

Source	Applies to	Walk/Cycle	Public Transport	Car
Bankstown Complete Streets (p. 81)	Bankstown CBD, 2036 (all trips)	Unknown	Unknown	60%
Canterbury- Bankstown Connective City 2036 Strategy (p. 40)	Whole of Canterbury- Bankstown LGA, journey to work, 2036	Walk: 7% Cycle: 4%	Rail: 30% Bus and light rail: 8%	30%
Sydney Metro City and South-West EIS (p. 352)	Access to Bankstown Station, 2026	Walk: 50.8% Cycle: 0.2%	Bus: 28.0%	Park & Ride: 6.3% Kiss % Ride: 14.7%



Various mode share estimates have been provided at different scales and timeframes.

Notably, the sustainable mode share set out in Complete Streets is based on a wider definition of Bankstown (SA3) and therefore does not appear aspirational for the CBD relative to other dense urban precincts, especially given the directions provided in the strategy.

Through this Transport Assessment, a suitable mode share target will be reviewed and proposed for the study area.

#### Why does this matter?

The mode share target will have implications on the adequacy of the transport networks.

For example, retaining a 60% mode share to car given high levels of growth will likely result in high levels of traffic impact.

At lower mode shares, the focus would shift to whether sufficient public transport and walk/cycle services and infrastructure are proposed to cater for the expected demands.



# What are the next steps?

# **Trip Generation**

# **Trip Distribution**

# **Mode Share**

# Assignment

# Response

#### How many?

What is the forecast land use and population / jobs growth in the precinct? What is the vision?

#### Where?

Where are people expected to travel to and from, and at what scale?

#### How?

How are people expected to travel (in line with the vision)?

#### Is it plausible?

Can the movements be supported by the proposed transport networks?

What else needs to be done? What further policy, services and infrastructure are required to support the growth?

N/A

- Source outputs from a foundation strategic (PTPM) model run to identify travel demands, patterns (destinations) and performance under given assumptions.
  - PTPM model
  - Existing and future scenario (2036)
  - PM peak as a reference point

- Review and propose a suitable mode share target for the precinct.
- Understand order of magnitude movements by mode and direction based on model outputs.
- Reconciliation of more recent planning work and projects since publication of Complete Streets and the Bankstown Masterplan.
- Review expected movements by mode and direction against the proposed policies, services and infrastructure.
- Outline any further policies, services and infrastructure to support delivery of the vision.



