



**SUBURBAN
RAIL LOOP
EAST**

SRL East Draft Structure Plan | Burwood

Transport Technical Report

Suburban Rail Loop

PREPARED FOR SUBURBAN RAIL LOOP AUTHORITY

SRL EAST DRAFT STRUCTURE PLAN – TRANSPORT TECHNICAL REPORT – BURWOOD

FEBRUARY 2025

REVISION 01



Document Control Record



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PO Box 23061 Docklands VIC 8012 Australia

DOCUMENT CONTROL

Project Title	Suburban Rail Loop East		
Document Title	SRL East Draft Structure Plan – Transport Technical Report – Burwood		
Document ID	Technical Report Q.9		
Rev	Date	Revision details/status	Author
01	February 2025	For Exhibition	C. Waingold and A. Billon
Current revision	01		

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This document should be read in full and no excerpts are to be taken as representative of the findings.

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Appendix B Peer Review Report

Abbreviations and glossary

TERM	DEFINITION
AADT	Annual average daily traffic
ABS	Australian Bureau of Statistics
AJM JV	Aurecon, Jacobs, Mott MacDonald Joint Venture – Technical Advisor to the SRLA
AM peak	The 2-hour peak period between 7am to 9am on a typical weekday
BESS	Built Environment Sustainable Scorecard
BIC	Business and Investment Case
Car free / Car light	Option for a lifestyle that does not require a car to travel in most circumstances
CBD	Central Business District of Greater Melbourne
CASBE	Council of Sustainability in the Built Environment
CPTED	Crime Prevention Through Environmental Design
CoMo UK	Collaborative Mobility UK, A UK charity organisation promoting and advocating for the public benefit of shared transport options
DDA	<i>Disability Discrimination Act 1992</i> (Cth)
DTP / DoT	Department of Transport and Planning / Department of Transport (formerly)
EES	Environment Effects Statement for SRL East Rail Project
End-of-trip facilities	Facilities available for people to shower, change clothes or otherwise transition from active transport to work or other activities.
EPR	Environmental Performance Requirements
EV	Electric vehicles
Greater Melbourne	Covers the entirety of suburban Melbourne including as yet unreleased growth areas in outer suburbs, including 31 local government areas.
GTP	Green Travel Plans
IAC	Inquiry and Advisory Committee
LGA	Local government area
LMFP	Last Mile Freight Plan
LUTI	Land Use and Transport Interaction
M&P	Movement and Place – a cross-disciplinary, place-based approach to the planning, design, delivery and operation of transport networks
Micromobility	Transport provided by very light vehicles including bicycles, scooters and skateboards. Often shared and/or electric.
Off-peak	The off-peak period between 6pm to 7am, and the inter-period between the morning and afternoon peaks between 9am to 3pm on a typical weekday
PFN	Principal Freight Network
Planning Area	The Planning Area declared within Burwood by the SRL Minister under the <i>Suburban Rail Loop Act 2021</i> (Vic) on 4 December 2023.
PM peak	The 3-hour peak period between 3 pm to 6 pm on a typical weekday
POS	Pedestrian operated signal
PPTN	Principal Public Transport Network
PSA	Planning Scheme Amendment
PTV	Public Transport Victoria
PUDO	Pick up / Drop off parking spaces
SA2	Statistical Area Level 2
SCC	Strategic cycling corridor
SCO14	Specific Controls Overlay Schedule 14

TERM	DEFINITION
SRL	Suburban Rail Loop is a new orbital rail line from Cheltenham to Werribee and associated development together with planning for the increased intensification and activation of precincts in areas connected to and around the rail line.
SRLA	Suburban Rail Loop Authority
SRL East	The south-east section of SRL from Cheltenham to Box Hill, together with a series of integrated initiatives to create value and improve the precincts around the new stations
SRL East Planning Areas	The SRL East Planning Areas are Cheltenham (CTM), Clayton (CLA), Monash (MSH), Glen Waverley (GWY), Burwood (BUW) and Box Hill (BOX)
SRL East Rail project	Construction and operation of the SRL East rail connection, including tunnels from Cheltenham to Box Hill, six stations and the Southern Stabling and Maintenance Yard
Structure Plan Area	The extent of land within the Planning Area to which the Burwood Structure Plan applies.
V/C	Volume over capacity ratio
VISTA	Victorian Integrated Survey of Travel and Activity
VITM	Victorian Integrated Transport Model

Executive summary

As part of the Suburban Rail Loop (SRL) East project, Structure Plans are being prepared for the neighbourhoods surrounding the new underground stations at Cheltenham, Clayton, Monash, Glen Waverley, Burwood and Box Hill.




The Structure Plans will set how the Vision will be delivered in the SRL East Draft Structure Plan (Structure Plan) Areas to guide growth and transformational change, while protecting the character and features that people love about those areas. As the Burwood Structure Plan Area develops it will be important to protect and enhance access to, from and within Burwood.

Building on the existing high quality arterial road links, such as Burwood Highway, with the route 75 tram service to the central city and connections to seven bus routes within Burwood, SRL East will provide high capacity and fast connections to nearby state and regional significant activity centres that are currently difficult to reach by public transport. More active and sustainable transport choices will help improve the amenity and liveability of the Structure Plan Area, and the health and wellbeing of individuals. This will help reduce traffic congestion and adverse environmental impacts and provide for more efficient use of land within Burwood.






This report sets out transport recommendations to inform the development of the Burwood Structure Plan. The recommendations consider future land use and associated population and employment growth, with the aim to support and encourage sustainable and active and public transport choices in Burwood in response to that growth, and to manage car parking, kerbside activities and freight deliveries.

The Burwood Structure Plan will identify how the five key themes of Boosting the Economy, Enriching Community, Better Connections, Enhancing Place and Empowering Sustainability will be delivered in the Structure Plan Area, and to set objectives, strategies and actions to achieve the Vision for the area.

The population, job and traffic growth demands associated with the land use changes and Structure Plan will require proactive management to realise the full potential of SRL East. The transport ambition and goals provide the foundations for managing the growth in transport in Burwood. These ambitions and goals are summarised in the Figure and Table below.

Transport Ambition for Burwood	
 <p>Managing the growing number of trips through more people choosing to walk, cycle and catch public transport as Burwood develops.</p>	
GOAL	EXPLANATION
 <p>A safe and connected walking and cycling environment</p>	Walking and cycling ¹ will serve as the most convenient, safe and enjoyable means of travel in the neighbourhoods around each SRL station.
 <p>A revitalised bus experience</p>	In line with Victoria's Bus Plan, help change people's perception of buses. Provide a passenger-focused bus service, making road-based public transport a competitive, attractive and convenient choice.

¹ Walking and cycling represent the action of moving as a pedestrian or cyclists, whether or not someone is walking or cycling unaided or using any kind of wheeled mobility aid, including cycles, scooters, wheelchairs, mobility scooters, walking frames, prams or buggies.

GOAL	EXPLANATION
 An all-inclusive transport network	Ensure transport is accessible to people of all ages, abilities and genders.
 Anchoring sustainable travel services and shared mobility to SRL East	SRL East stations are seamlessly integrated hubs, allowing quality interchanges between sustainable travel modes.
 Prioritising safe and healthy movement	In line with Victoria's Road Safety Strategy 2021-2030, the transport network becomes safer for all, particularly vulnerable users. Uptake in walking and cycling contributes to an increase in daily physical activity.
 Smart and efficient use of parking	Parking management needs for all users, with a strong emphasis on providing for the needs of bike and micromobility users. Car parking spaces will be managed and used to maximise their effectiveness while considering impacts on the urban realm.
 Enable new and emerging innovative mobility	Neighbourhoods around each SRL station will enable emerging and innovative mobility to provide more and convenient choice, especially for shorter to medium distance trips.

This report is informed by assessing the existing transport conditions in Burwood and the SRL East Rail Environment Effects Statement (EES) (2021). It sets out recommendations to support and encourage sustainable and active transport choices, and to manage parking, kerbside activities and freight deliveries.

A Precinct Parking Plan for Burwood is attached as Appendix A to this report. The SRL East Structure Plan – Transport Technical Report – Appendix A – Precinct Parking Plan – Burwood supports the justification of implementing Parking Overlays in Burwood.

The main transport challenges in Burwood are:

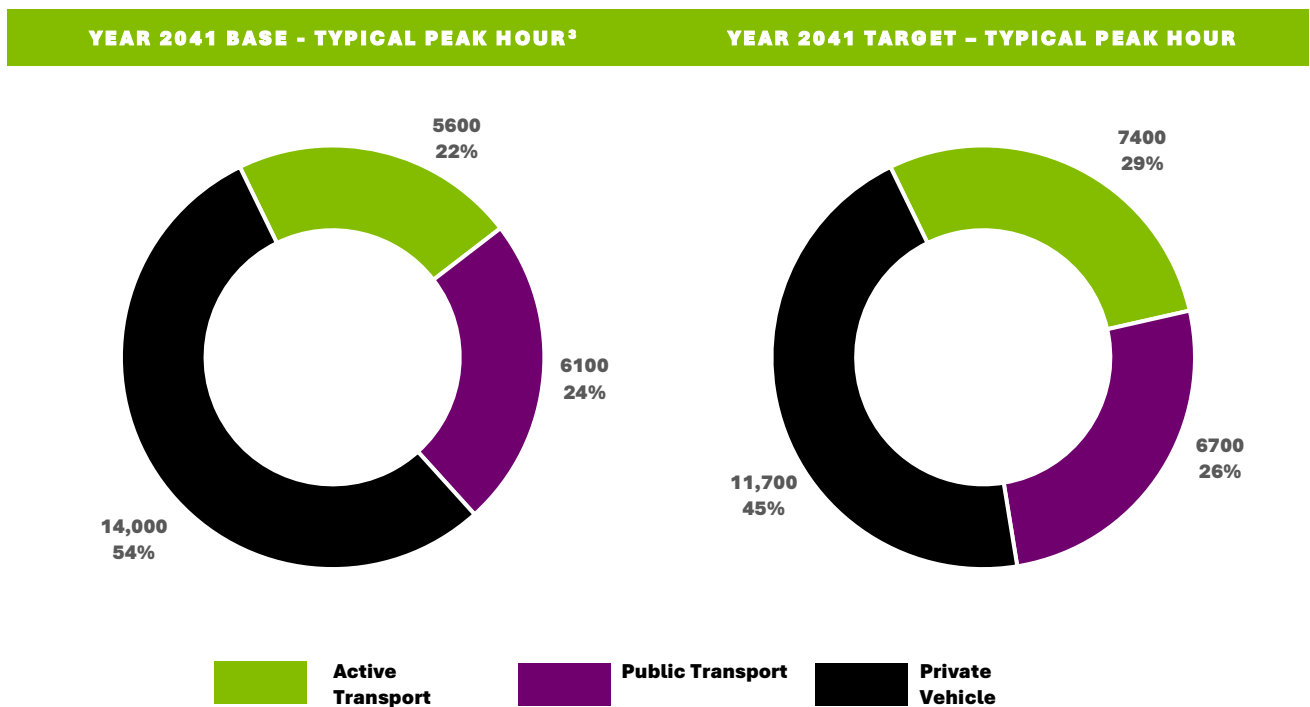
- Large urban blocks, high trafficked arterial roads, lack of crossings and many dead-end streets reduce active transport connectivity, particularly east of Deakin University campus (that is, east of Elgar Road) as well as in the south of Burwood
- There is limited cycling infrastructure, with very few separated cycling routes serving Burwood
- There is limited public transport coverage, particularly south of Highbury Road and no existing train station within the Structure Plan Area. Tram platforms on Burwood Highway are of low quality and provide poor amenity. There is also limited bus priority and infrequent bus services that result in increased journey times
- There is limited parking for cycling and for emerging modes
- Deakin University accounts for approximately 70 per cent of off-street car parking in the Structure Plan Area. Abundant university parking may make mode shift challenging as it attracts a significant number of private car trips into the Structure Plan Area, exacerbating already significant traffic congestion along Burwood Highway
- While the current private vehicle mode share is generally within the capacity of the road network other than some periods of congestion during peak hours, maintaining a similar private vehicle mode share into the future will not be sustainable (due to the forecast increase in trips) and will affect the liveability within the Structure Plan Area.

An assessment of how travel patterns within the Structure Plan Area will evolve and change was undertaken, which included setting a mode share target that reflects the broader set of transport choices. The assessment

identified that, in the future (with SRL), about 60 per cent of Burwood trips start and/or finish within 5 kilometres of Burwood or are along a corridor will be served by a direct rail service to Burwood.

The primary focus of the sustainable transport mode share increase is the growth in active transport trips supported by the future mixed land uses and the potential for improved infrastructure and facilities to support short distance trips.

The Figure below shows the future Baseline Scenario (including SRL East) and target mode shares for a typical peak hour for Burwood.² The target shows an increase in active transport mode share by 32 per cent (an increase of 1800 trips during a typical peak hour) compared to the baseline from 22 per cent to 29 per cent, with public transport mode share increasing by 9 per cent (an increase of 600 trips during a typical peak hour).



² Analysis is based on the primary mode for trips to, from and within Burwood (through trips are not included).








³ Due to limitations in VITM actual active transport mode share may be higher than the baseline (see Section 3.4) forecast due to mixed-used higher density land uses naturally favouring active transport and active transport initiatives from State Government and Local Councils which may occur from now until commencement of SRL East services.

Recommendations

Recommendations to improve transport and movement in Burwood are divided into infrastructure recommendations, and non-infrastructure recommendations:

- **Infrastructure recommendations** focus on improving strategic and local corridors, with a focus on optimising sustainable active and public transport networks to promote walking, cycling and public transport modes
- **Non-infrastructure recommendations** focus on policies, strategies, guidelines and plans to manage parking in the Structure Plan Area to promote sustainable transport choice and manage kerbside activities and freight delivery. Some recommendations are categorised as 'other opportunities' to be considered through other pathways and partnerships.

The following table summarises the types of recommendations and their alignment with the transport goals. The infrastructure and non-infrastructure recommendations will deliver a more connected network and increased travel choice by building upon existing arterial road and rail access and contributing to a shift towards sustainable travel choices across the Burwood Structure Plan Area.

TRANSPORT RECOMMENDATIONS	TRANSPORT GOALS						
	 A safe and connected walking and cycling environment	 A revitalised bus experience	 An all-inclusive transport network	 Anchoring sustainable travel services and shared mobility to SRL East	 Prioritising safe and healthy movement	 Smart and efficient use of parking	 Enable new and emerging innovative mobility
Infrastructure types							
New and Upgraded Strategic Corridors that enable the Structure Plan with a particular focus on active and public transport upgrades	✓	✓	✓		✓		
Upgraded local Green Streets, with a particular focus on active transport upgrades and support for innovative modes	✓		✓			✓	
New Key Links, focussing on creating active transport permeability and connecting transport corridors	✓		✓	✓			
New and upgraded crossings of busy roads	✓		✓		✓		
Upgrades to public transport interchanges to enhance the services, facilities, and customer experience		✓		✓			
New bicycle hubs to encourage active transport to the SRL station, existing railway station and bus interchange	✓	✓		✓			
Maintaining strategic traffic and freight corridors		✓				✓	
Designating low traffic neighbourhoods	✓		✓		✓		
Non-Infrastructure types							
Development of SRL East Structure Plan Area appropriate parking rates					✓	✓	
Partnering with Council to plan and manage streets through local freight delivery and kerbside management plans						✓	
Supporting travel choices including Green Travel Plans and encourage use of mobility hubs					✓		✓

1 Introduction

This section provides the background to the Suburban Rail Loop (SRL) East project. It sets out the scope and objectives of structure planning, and the purpose and structure of this report. The methodology for the transport technical assessment is explained. Stakeholder consultations undertaken to inform the recommendations in this report are discussed.

1.1 Background

Suburban Rail Loop (SRL) is a transformational project that will help shape Melbourne's growth in the decades ahead. It will better connect Victorians to jobs, retail, education, health services and each other – and help Melbourne evolve into a 'city of centres'.

SRL will deliver a 90-kilometre rail line linking every major train service from the Frankston Line to the Werribee Line via Melbourne Airport.

SRL East from Cheltenham to Box Hill will connect major employment, health, education and retail destinations in Melbourne's east and south east. Twin 26-kilometre tunnels will link priority growth suburbs in the municipalities of Bayside, Kingston, Monash and Whitehorse. The Minister for Planning approved the SRL East rail project in 2022.

SRL East Draft Structure Plan (Structure Plan) Areas will surround the six new underground stations at Cheltenham, Clayton, Monash, Glen Waverley, Burwood and Box Hill.

Construction of the SRL East underground stations is underway at Cheltenham, Clayton, Monash, Glen Waverley, Burwood and Box Hill. SRL East provides an opportunity to enhance the surrounding neighbourhoods.

SRL East will support thriving and sustainable neighbourhoods and communities that offer diverse and affordable housing options, with easy access to jobs, transport networks, open space, and community facilities and services.

A Vision for the Burwood SRL East neighbourhoods has been developed in consultation with the community and stakeholders that sets out the long-term aspirations for the SRL East Structure Plan Areas.

Figure 1.1 shows SRL East in the context of the entire SRL project and Melbourne's rail network.

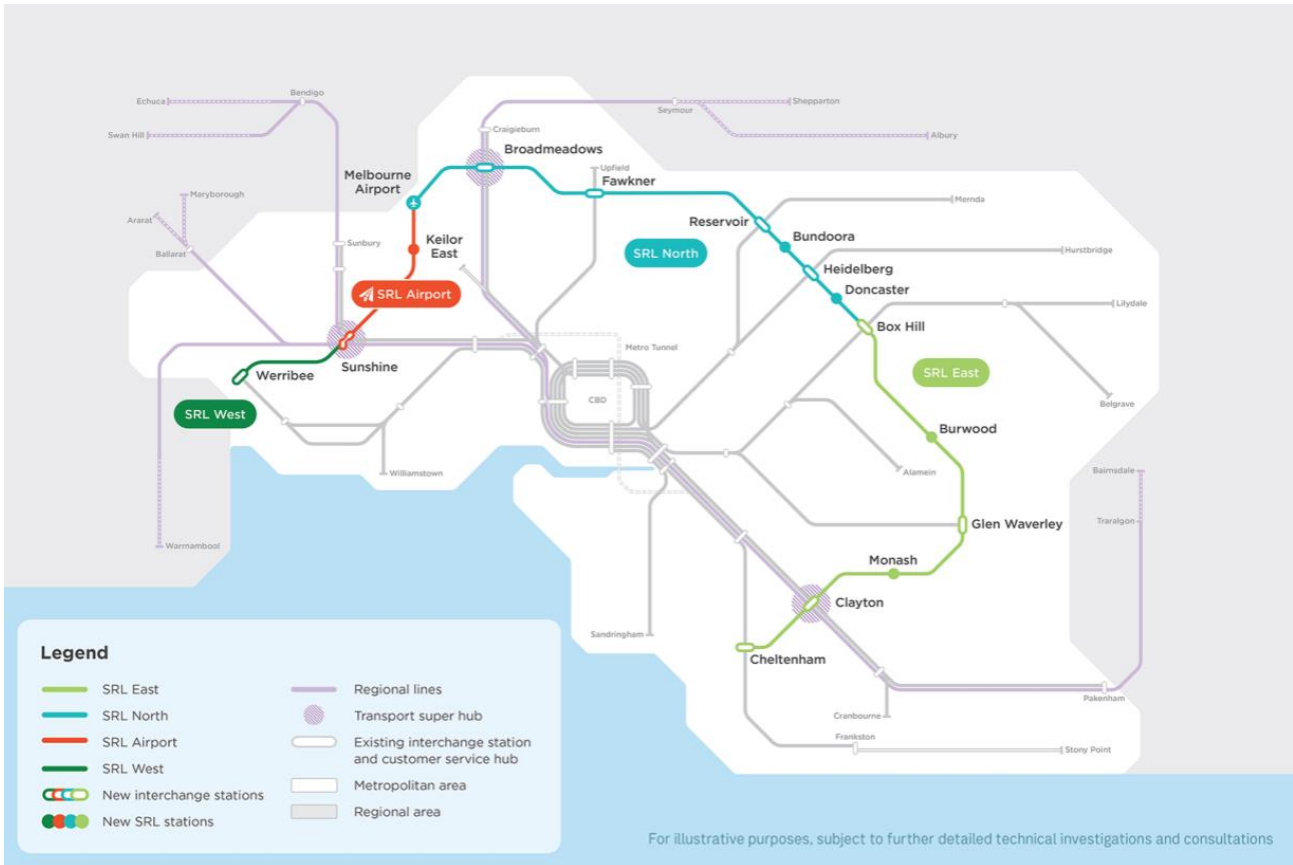


FIGURE 1.1 SRL EAST CONTEXT IN MELBOURNE'S RAIL NETWORK

1.2 Structure planning

Structure Plans are being prepared for defined areas surrounding the SRL East stations to help deliver the vision for each neighbourhood.

The Structure Plans cover defined SRL East Structure Plan Areas. These are the areas immediately surrounding the SRL stations, where the most growth and change will occur. These areas cover a walkable catchment that extends from the SRL station entrances. Additional places are included within the Structure Plan Area as required to make planning guidance more robust and effective, and to align with each community's aspirations and current and future needs.

A Structure Plan is a blueprint to guide how an area develops and changes over time. Structure Plans describe how future growth within the area will be managed in an appropriate and sustainable way to achieve social, economic and environmental objectives. Matters covered in a Structure Plan include transport connections and car parking, housing and commercial development, community infrastructure, urban design, open space, water and energy management, climate resilience and sustainability.

By tailoring planning decisions to reflect the needs of a defined area, Structure Plans give effect to the policies and objectives set for these areas and cater for changing community needs. They also provide certainty for residents, businesses and developers by identifying the preferred locations and timing of future land uses, development and infrastructure provision.

Structure Plans take a flexible and responsive approach that enables places to evolve over time.

Planning scheme amendments will be required to implement the Structure Plans into the planning schemes of the cities of Bayside, Kingston, Monash and Whitehorse across the SRL East Structure Plan Areas.

SRL East is the first stage of the wider SRL project, which is an integrated transport and land use project that will extend over 30 years. By integrating and staging transport, planning and infrastructure initiatives, SRL will support urban centres across Melbourne that offer high quality lifestyles, housing and jobs close to public transport, services and other amenities.

This Structure Plan recognises that key planning approvals for SRL East were informed by the Minister's Assessment of the SRL East Environmental Effects Statement (EES) (2021), which was supported by relevant technical documents such as the Traffic and Transport Impact Assessment. These approvals, now in place for delivering the rail infrastructure for SRL East, form the foundation for structure planning and this report.

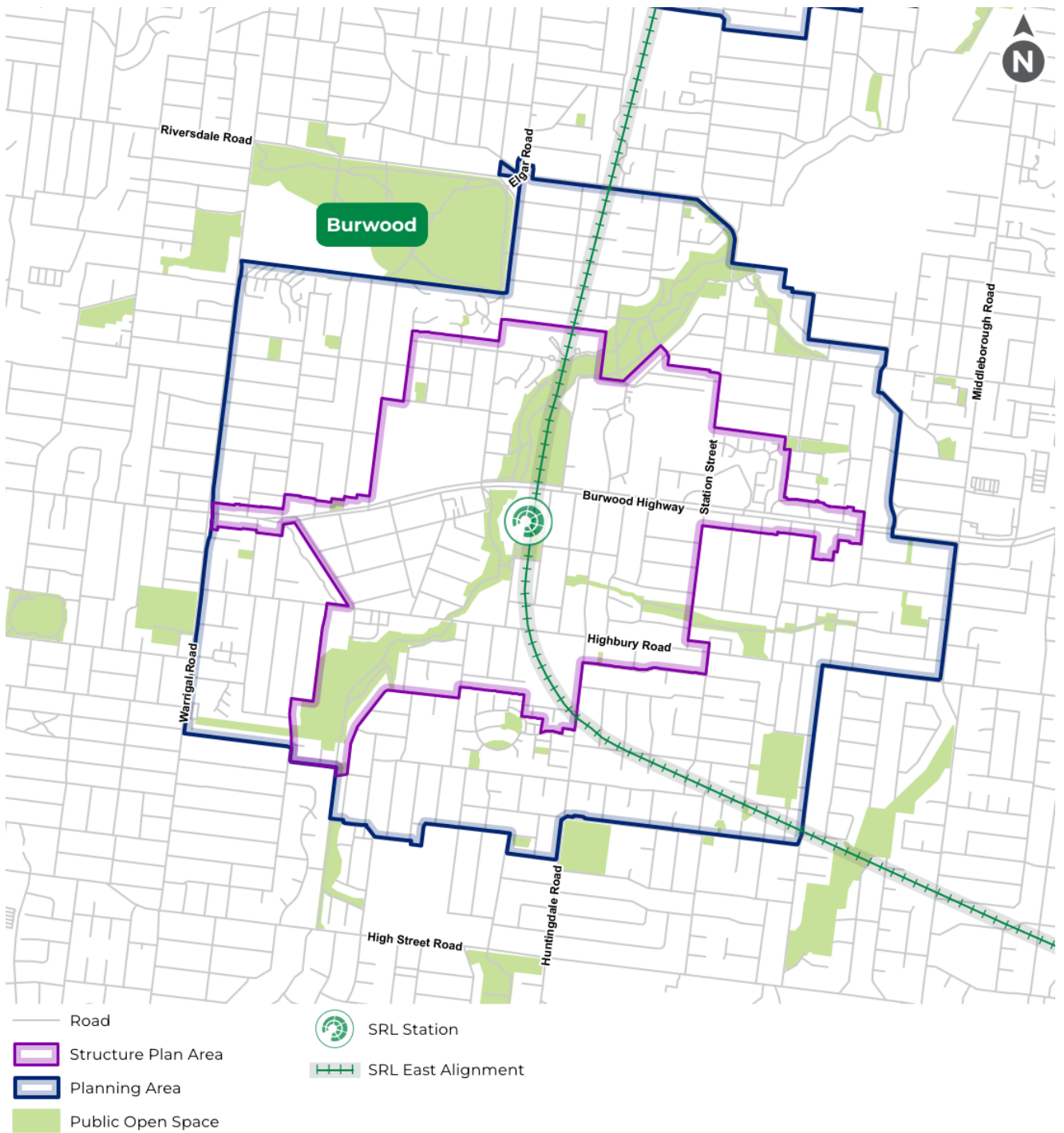
The Structure Plan is the next step towards achieving SRL's integrated transport and land use outcomes and maximising the project's benefits.

1.2.1 PLANNING AREA AND STRUCTURE PLAN AREA

This report also refers to the Planning Area. The Planning Area is a wider area that includes the Structure Plan Area. The Planning Area for Burwood was declared by the Minister for the SRL under the *Suburban Rail Loop Act 2021* (Vic) in December 2023. The declaration makes the Suburban Rail Loop Authority (SRLA) a planning authority under the *Planning and Environment Act 1987* (Vic) for the land in Burwood to which the Planning Area applies and has effect.

As transport links connect beyond the Structure Plan Area and people move through it to access activities within the wider Planning Area, this report deliberately discusses transport networks, challenges and trips in the context of the wider Planning Area before focusing in on impacts and actions within the Structure Plan Area.

The Planning Area and the Structure Plan Area for Burwood are shown in Figure 1.2.



0 1 2 km

FIGURE 1.2 THE BURWOOD PLANNING AREA AND STRUCTURE PLAN AREA

1.3 Purpose and structure of this report

This report sets out transport recommendations to inform the development of the Structure Plan for Burwood.

As the Burwood Structure Plan Area develops it will be important to support and promote more sustainable modes of transport to, from and within Burwood. This will help reduce traffic congestion and adverse environmental impacts and provide for more efficient use of land (instead of over-providing car parking). More active and sustainable transport choices will help improve the amenity and liveability of the Structure Plan Area, and the health and wellbeing of individuals.

The recommendations aim to support and encourage sustainable and active transport choices in Burwood, and manage parking, kerbside activities and freight deliveries.

The structure of this report is:

- **Section 1: Introduction** – provides the background and context of the technical assessment
- **Section 2: Existing conditions** – describes the existing transport conditions, gaps and challenges in Burwood
- **Section 3: The SRL project** – provides an overview of the project and its expected benefits, and sets out relevant aspects of the Traffic and Transport Impact Assessment delivered for the SRL East Environment Effects Statement (EES) (2021) that informed the Planning Approval
- **Section 4: Transport ambition for Burwood** – sets out the transport ambition for Burwood and anticipated land use and the implications for transport
- **Section 5: Future transport demands** – discusses travel patterns, including the trips generated and the distribution of where they are going to and from, and presents the target mode shares given the transport ambition
- **Section 6: Infrastructure recommendations** – sets out the aspirational network for each transport mode recommendations to improve transport infrastructure and encourage sustainable travel in the Structure Plan Area
- **Section 7: Non-infrastructure recommendations** – sets out the non-infrastructure recommendations to manage parking, promote active and sustainable transport choices, and manage kerbside activities and local freight deliveries
- **Section 8: Conclusion** – including the considering of the alignment between transport goals and types of recommendations.

The **SRL East Structure Plan – Transport Technical Report – Appendix A – Precinct Parking Plan – Burwood** attached in Appendix A of this report summarises the context of parking in Burwood and outlines parking management tools recommended for the Burwood Structure Plan.

1.4 Methodology

This report demonstrates how transport recommendations will cater for the growth in trips as a result of the land use changes and associated transport demand anticipated from the Burwood Structure Plan Area.

The Minister's Assessment (discussed further in Section 3.2) supported the finding of the Inquiry and Advisory Committee (IAC) convened to review the environment effects of SRL East; that the transport modelling completed for the Transport and Traffic Impact Assessment for the SRL East Environment Effects Statement (EES) 2021) was adequate for this phase of the project. This transport modelling underpinned the assessment of operational transport effects and considered land use changes and future travel patterns associated with the operation of the SRL East rail infrastructure and has formed the basis for the preparation of this Transport Technical Report.

A 'vision and validate' approach was applied to respond to the growing transport task to 2041 expected from the land use changes in the Burwood Structure Plan Area. The 'vision and validate' approach focuses on defining the desired transport network ('vision') to inform and support the Structure Plan and identifies how the transport recommendations will work towards achieving the desired 'outcome for the transport network ('validate').

The transport recommendations respond to the transport ambition and seek to encourage more sustainable transport demand and reduce car reliance and impacts, while more broadly informing the vision for the Burwood Structure Plan Area.

The steps to plan, develop and validate the transport recommendations were:

- **Step 1: Review existing conditions** involved considering the current transport conditions and identifying strengths, challenges, gaps and opportunities.
- **Step 2: Review the baseline** involved understanding the future set in the SRL East EES, including the land use development uplift and the changes to the network.
- **Step 3: Setting the transport ambition and goals** were determined to inform the Burwood Vision and the Structure Plan. This forms part of the 'vision' process of the 'vision and validate' approach. The development of the transport goals considered the transport challenges, gaps and opportunities in the Structure Plan Area. Future travel demand was assessed and a mode share target for Burwood was set and reviewed against the existing mode shares for other Melbourne suburbs.
- **Step 4: Determine the initial movement network and opportunities** to inform the structure planning process. Given the transport ambition for the Structure Plan Area, how these could be achieved beyond what was outlined in the SRL East EES to achieve the ambitions was considered.
 - » The aspirational strategic and local movement network for all modes in the Structure Plan Area was developed by SRLA in consultation with the Department of Transport and Planning (DTP) and the cities of Whitehorse and Monash. The network was developed using DTP's Movement and Place (M&P) Framework and applied SRLA's modal principles in response to land use changes proposed in the Structure Plan.
 - » The strategic M&P assessment identified gaps between the current and aspirational performance. Initial transport infrastructure recommendations were developed to address these gaps for consideration during development of the Structure Plan and stakeholder engagement.
 - » Initial non-infrastructure recommendations were developed in response to the transport ambition, including to encourage effective parking management and support sustainable travel choices.
- **Step 5: Iterate the development of the Structure Plan with transport.** Transport networks and recommendations were iteratively developed.

- **Step 6: Validate recommendations** involved checking recommendations against the transport challenges and ambition to cater for the projected changes in land use and associated transport demand in the Structure Plan Area.

Implementation of the recommendations contributes to a shift towards sustainable travel choices beyond that forecast in the SRL East EES.

1.4.1 PEER REVIEW

This technical report has been independently peer reviewed by Hilary Marshall of Ratio. The peer review report is attached as Appendix B of this report, which sets out the peer reviewer's opinion on the SRL East Draft Structure Plan –Transport Technical Report – Burwood.

1.5 Stakeholder consultation

SRLA has developed a comprehensive engagement plan for the overall structure planning program. The engagement plan is shown in Figure 1.3 and includes early engagement to inform the draft Structure Plans through to statutory steps such as exhibition and advisory committee processes. The engagement plan considers community and stakeholder engagement.

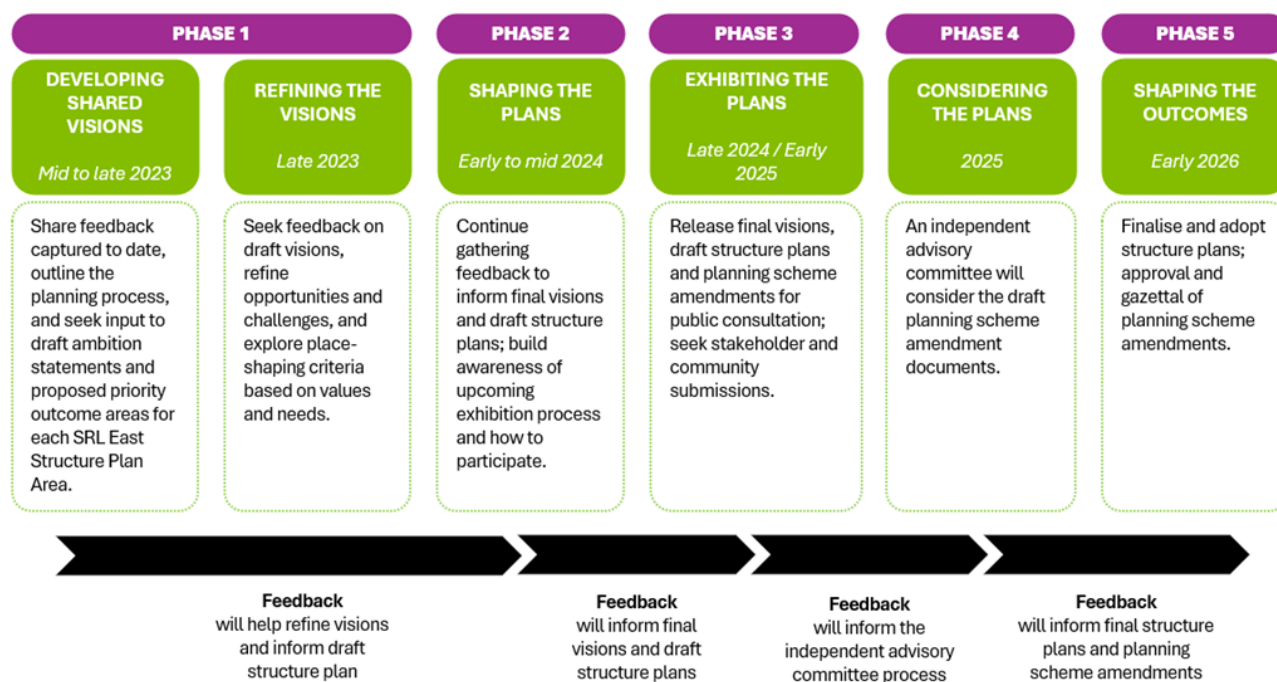


FIGURE 1.3 SRL EAST STRUCTURE PLANNING ENGAGEMENT PLAN

As part of the engagement plan and this report, SRLA engaged with the Department of Transport and Planning (DTP) and the cities of Whitehorse and Monash to inform the development of the transport recommendations.

This included working collaboratively with DTP to gain endorsement of the M&P network for the Burwood structure planning.

Workshops with officers from the cities of Whitehorse and Monash were held. A Better Connections workshop discussed emerging key directions for this transport theme. A M&P and parking workshop discussed the M&P transport network (walking, cycling and general traffic classifications) and the parking provision approach.

Feedback from the workshops included:

- Better Connections workshop:
 - » The City of Whitehorse suggested active transport improvements to several corridors including Burwood Highway, Sinnott Street, Gardiners Creek Trail at Highbury Road, Lundgren Chain Reserve, and an east-west active transport connection north of Burwood Highway. This report recommends upgrades to these corridors in line with the M&P classifications. The upgrades are discussed in Section 6. SRLA will work with the City of Whitehorse and DTP at project development stage to determine the appropriate transport solution.
- M&P and parking workshop:
 - » Aligned on the walking hierarchy and strategic cycling corridors
 - » Aligned on the walking and cycling classifications for Gardiners Creek Trail
 - » It was noted that most of the proposed cycling routes aligned with the cycling plans of the cities of Monash and Whitehorse
 - » Aligned on the general traffic classification.

More information is provided in the SRL Structure Planning Engagement Reports on the SRL website at <https://bigbuild.vic.gov.au/library/suburban-rail-loop/reports/engagement-reports/structure-planning-engagement-report>.

Consultation with the cities of Monash and Whitehorse to date is summarised in Table 1.1 and Table 1.2.

TABLE 1.1 STAKEHOLDER TRANSPORT CONSULTATIONS AND CONSULTATION TOPICS

STAKEHOLDER	CONSULTATION TOPIC	TRANSPORT CONSULTATIONS
City of Monash and City of Whitehorse	Structure planning program	<ul style="list-style-type: none"> • Workshop conducted in May 2024 • Workshop conducted in August 2024.
	SRL rail-related works	Ongoing engagement to comply with rail project environmental approvals.

TABLE 1.2 CITY OF MONASH AND CITY OF WHITEHORSE CONSULTATION DISCUSSION POINTS AND RESPONSE

CONSULTATION TOPIC	KEY ISSUES DISCUSSED	STRUCTURE PLAN RESPONSE
Structure planning program	<ul style="list-style-type: none"> • Precinct key directions • Transport 'Better Connection' themes • M&P classification for the Structure Plan Area (walking, cycling and general traffic classifications) • Development parking provision (suggested zones and rates). 	<ul style="list-style-type: none"> • SRLA has developed infrastructure recommendations to reflect the workshopped 'Better Connection' themes and M&P network classifications • SRLA will continue to work with the cities of Monash and Whitehorse at project planning and delivery stages to deliver the infrastructure recommendations that reflect the M&P classifications • SRLA has considered the comments received and reviewed and refined the development parking provision, including the Parking Overlay areas and the car parking provision rates.

2 Existing conditions

This section discusses current transport conditions and challenges in Burwood, including the context, active transport, public transport, general traffic and freight, road safety and parking. It also outlines the key national, state and local transport policies and strategies relevant to Burwood.

2.1 Context

2.1.1 KEY DESTINATIONS

The Burwood Planning Area is located around 13 kilometres east of the Melbourne Central Business District (CBD). It includes the Burwood Village Neighbourhood Activity Centre, educational establishments, community and recreation facilities (such as Gardiner Creek Reserve and Wattle Park) and some industrial uses along the main arterial roads, that provide a suburban focal point for services, employment and social interaction. These are key destinations and trip generators in Burwood and shown in Figure 2.1.

The education establishments such as Deakin University, Presbyterian Ladies' College and Mount Scopus College are located north of Burwood Highway. As major state higher and secondary private education establishments, they are major attractors for local and non-local trips to the area.

The industrial areas in Burwood are concentrated south of Burwood Highway. The Burwood Village Neighbourhood Activity Centre located on the western edge of the Planning Area boundary comprises retail, hospitality, eateries, office and civic uses.

The Burwood Heights Major Activity Centre which includes the former Brickworks Site is located to the east of Middleborough Road along Burwood Highway. Despite being located just outside the Planning Area, this Major Activity Centre is a key destination for active transport and public transport movements to and from Burwood.

The key destinations in the Burwood Structure Plan Area currently contributes to 8800 jobs⁴ and more than 26,000 tertiary student places in the Deakin University Burwood campus,⁵ generating trips to, from and within Burwood.

⁴ *AJM JV, 2025, Economic Profile – Burwood*

⁵ *Deakin University, February 2022, Deakin at a Glance, <https://www.deakin.edu.au/__data/assets/pdf_file/0011/2497115/Brochure-Deakin-at-a-Glance-AUGUST-2022_FINAL.pdf>*

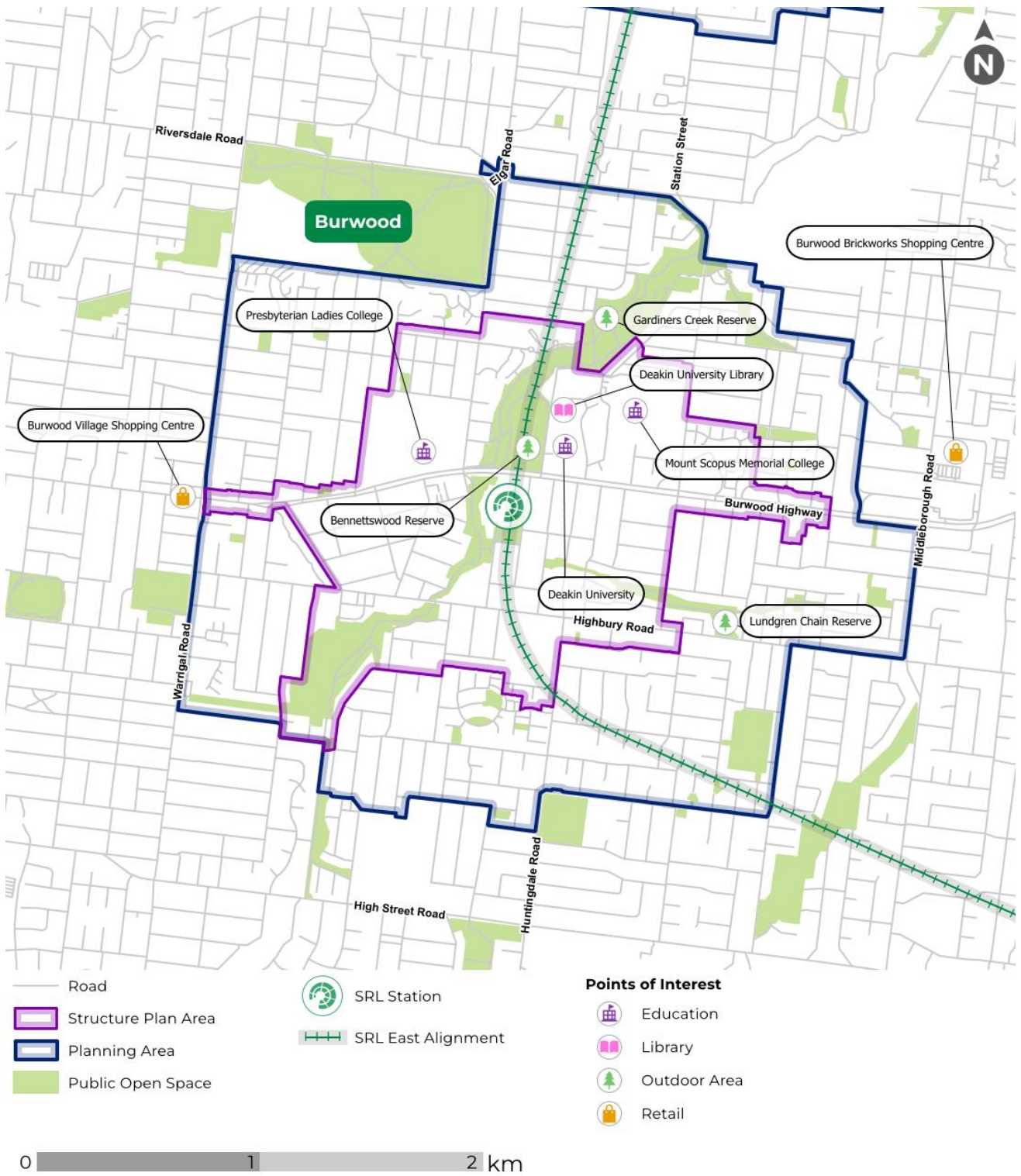


FIGURE 2.1 KEY DESTINATIONS IN BURWOOD (SOURCE: SRLA 2024)

2.1.2 PUBLIC TRANSPORT AND WALKING ACCESSIBILITY

Figure 2.2 shows the average Transit Score against the average Walk Score for the Burwood Structure Plan Area and the other SRL East Structure Plan Areas. The data included for the Burwood Structure Plan Area include individual location scores (noted within the shaded area), which make up the aggregate score for the Structure Plan Area.

The Transit Score⁶ is a 0 to 100 rating tool that measures how well a specific location is serviced by public transport, with 0 being poor public transport access and 100 being great access to public transport. Increased access to public transport service routes and service types result in higher scores.

The Walk Score⁷ is a 0 to 100 rating that measures how walkable a specific location is and how accessible it is to nearby amenities. Increased density and diversity of nearby amenities and pedestrian friendliness result in higher scores.

The Burwood Structure Plan Area has moderate to high Walk Scores with an average of 63 and a moderate Transit Score with an average of 57.

In the future, increased land use density and diversity is expected to further improve Burwood’s Walk Score, whilst the SRL East project and other future public transport upgrades are expected to increase its Transit Score (i.e. shift it to the ‘top right’ of the figure).

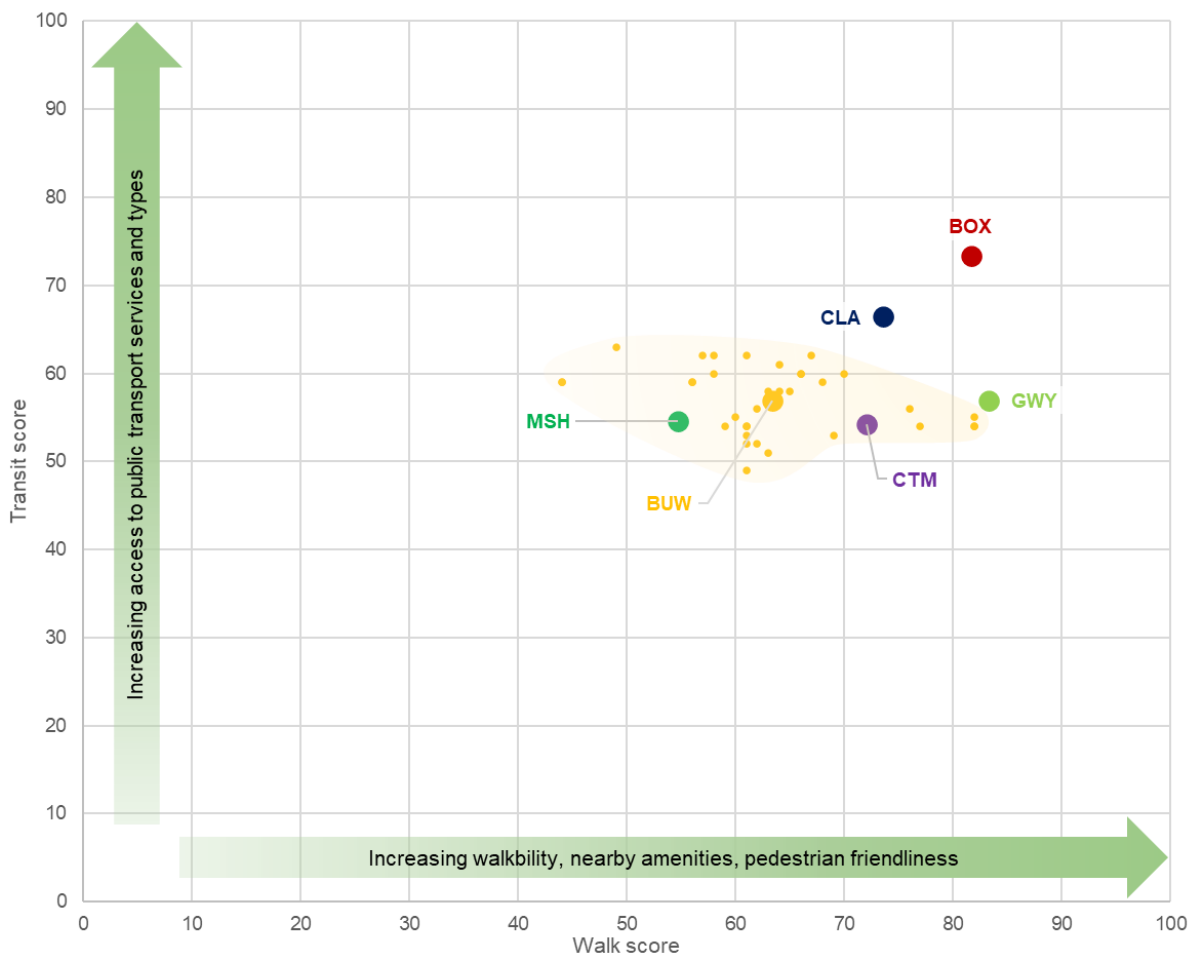


FIGURE 2.2 TRANSIT VS. WALK SCORE FOR THE BURWOOD STRUCTURE PLAN AREA

⁶ Walk Score, 2024, Transit Score® Methodology, <<https://www.walkscore.com/transit-score-methodology.shtml>>

⁷ Walk Score, 2024, Walk Score Methodology, <<https://www.walkscore.com/methodology.shtml>>

2.1.3 MODE SHARE AND TRAVEL PATTERNS

In 2018, the majority of trips in the Burwood Structure Plan Area were by private car trips (67 per cent) followed by active transport (21 per cent) and public transport (12 per cent) as shown in Figure 2.3. Trips are those travelling to, from and within Burwood, trips passing through Burwood are excluded.

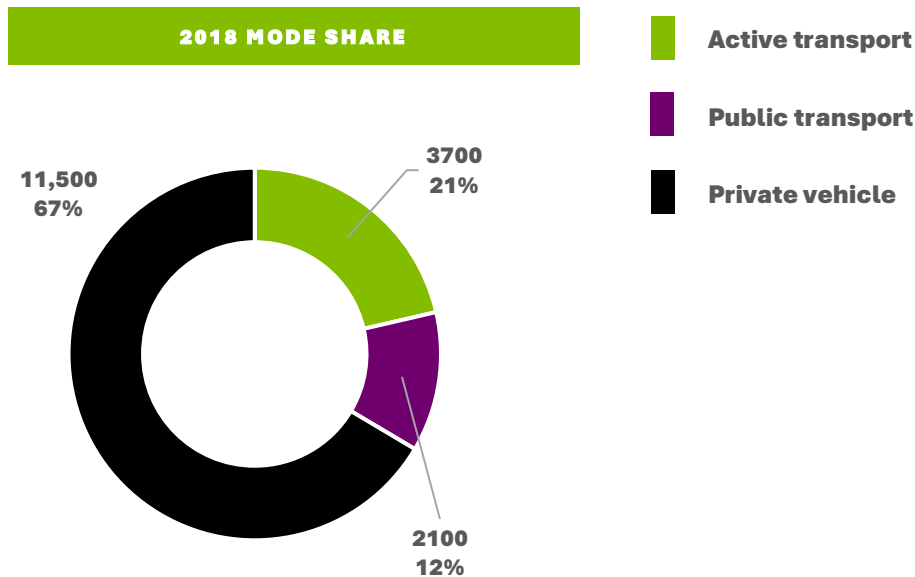


FIGURE 2.3 BURWOOD 2018 PRIMARY MODE SHARE – WEEKDAY TYPICAL PEAK HOUR (SOURCE: DTP VITM 2018)

As indicated by household travel information from the Victorian Integrated Survey of Travel and Activity (VISTA) data, mode share varies by trip purpose.⁸ The mode share is influenced by factors including the availability of effective public transport options, access to private vehicles and travel distance.

Based the ABS Statistical Area 2 (SA2) level VISTA data, the main journey purposes for trips to, from and within Burwood include:⁹

- Work (21 per cent)
- Education (17 per cent)
- Social (11 per cent)
- Picking-up or dropping-off someone (13 per cent).

The remaining trips are distributed across other journey purposes such as for recreation, personal business, accompanying someone, picking-up or delivering something and other purposes.

⁸ Includes the Burwood SA2 boundaries which extend slightly beyond the Planning Area.

⁹ The VISTA data includes data captured all day on a weekday. The data used is from 2012 – 2020.

Work trips form the predominant journey purpose from Burwood... The most common work destinations from Burwood are shown in Figure 2.4.⁹

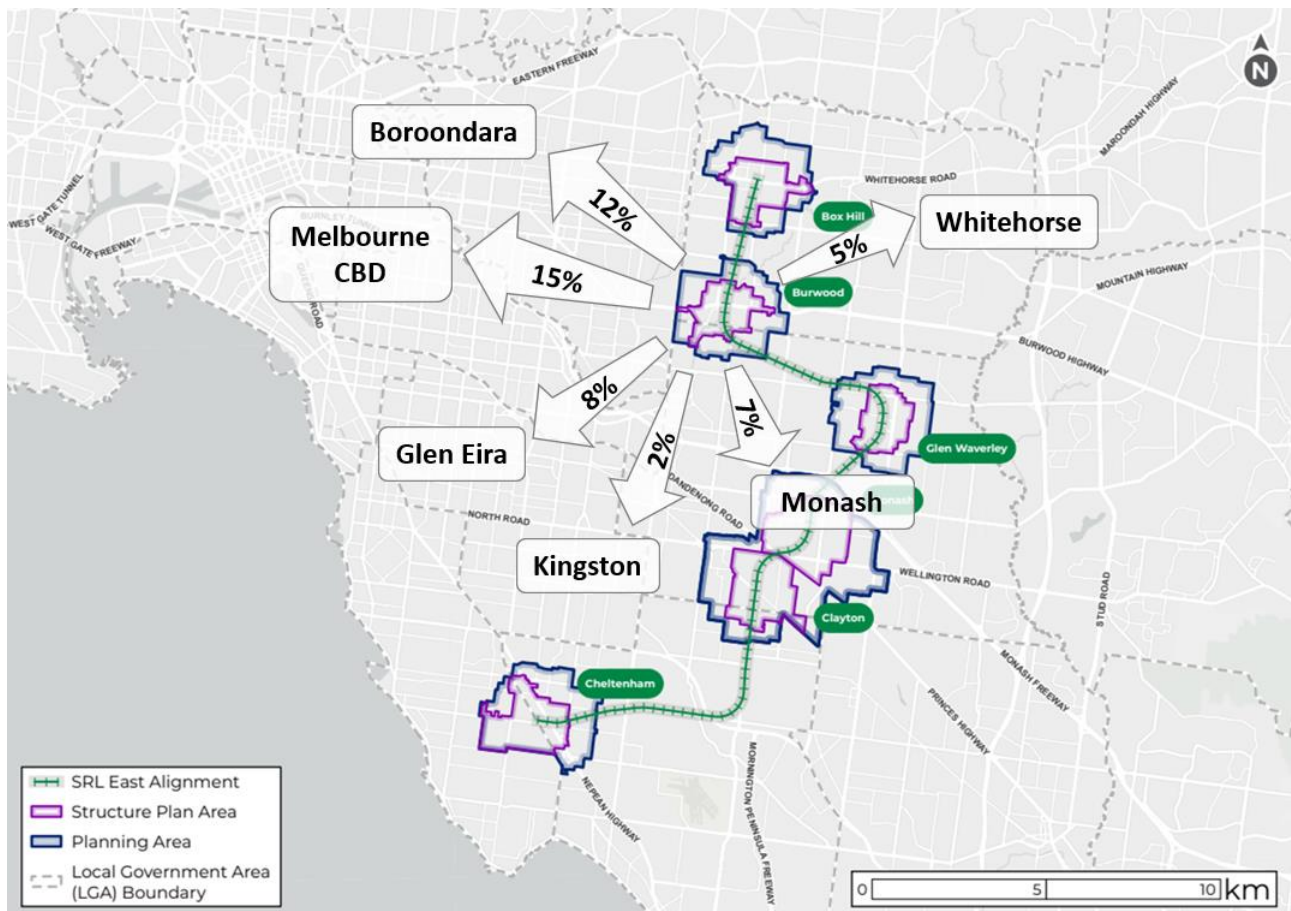


FIGURE 2.4 COMMON WORK DESTINATIONS FROM BURWOOD¹⁰

Most commuter movements out of Burwood are currently by car, with arterial road connections including Burwood Highway and Highbury Road linking to adjacent SA2 locations. The nearest rail stations are the existing Box Hill and Glen Waverley Stations which are 3 kilometres and 5.5 kilometres respectively from the centre of the Structure Plan Area. Tram route 75 operates along Burwood Highway with multiple tram stops and is a 50-minute journey to the CBD.

Melbourne CBD is the major commuter trip destination from Burwood and can be accessed by tram and bus as well as rail via the existing stations located at Box Hill (Belgrave / Lilydale Line) and Jordanville (Glen Waverley Line) located outside of the Planning Area. Commuter car parking is provided at various stations along the Glen Waverley Line including Jordanville (110 spaces), Mt Waverley (240 spaces) and Syndal (590 spaces).¹¹

Of the total education-based trips to and from Burwood, around 70 per cent are by car. This may be influenced by the presence of Deakin University and Presbyterian Ladies' College in Burwood which have large catchments that typically attract car trips due to the lack of public transport alternatives.

2.1.4 RESIDENTIAL CAR OWNERSHIP

The main household type in Burwood is 'couples with children', with the main dwelling structure a detached house. From 2016 to 2021 there was notable growth in higher-density dwellings (flats and apartments in three

¹⁰ Base map source: SRLA, 2024. Data source: VISTA (2012 – 2020) for ABS SA2 boundaries that includes the Burwood ABS SA2 boundaries which extend slightly beyond the Planning Area. Common work destinations from Burwood in the figure are SA2 locations.

¹¹ Station parking space numbers taken from Parkopedia and rounded to nearest 10 spaces.

storey and larger blocks that include four storeys or more). Local residential areas typically feature detached low-density housing although some medium-density apartment developments are located along Burwood Highway.

Car ownership levels by household type within the area around the SRL station at Burwood are shown in Figure 2.5. Comparisons with Metropolitan Melbourne, the Whitehorse local government area (LGA), Monash LGA and the Melbourne LGA are shown. Car ownership rates for apartments in Burwood (identified as BUW in Figure 2.5) and all dwelling types are also shown.

Car ownership varies by dwelling type and size, with slightly lower rates for those living in flats or apartments. Car ownership is notably higher in Burwood than inner city areas such as the Melbourne local government area (LGA), which has significantly higher levels of public transport services and mode share near major education institutions, retail and other land uses. Burwood has similar car ownership levels for all dwelling types compared to all dwellings in the Whitehorse LGA and Monash LGA, and slightly lower car ownership levels than Metropolitan Melbourne.

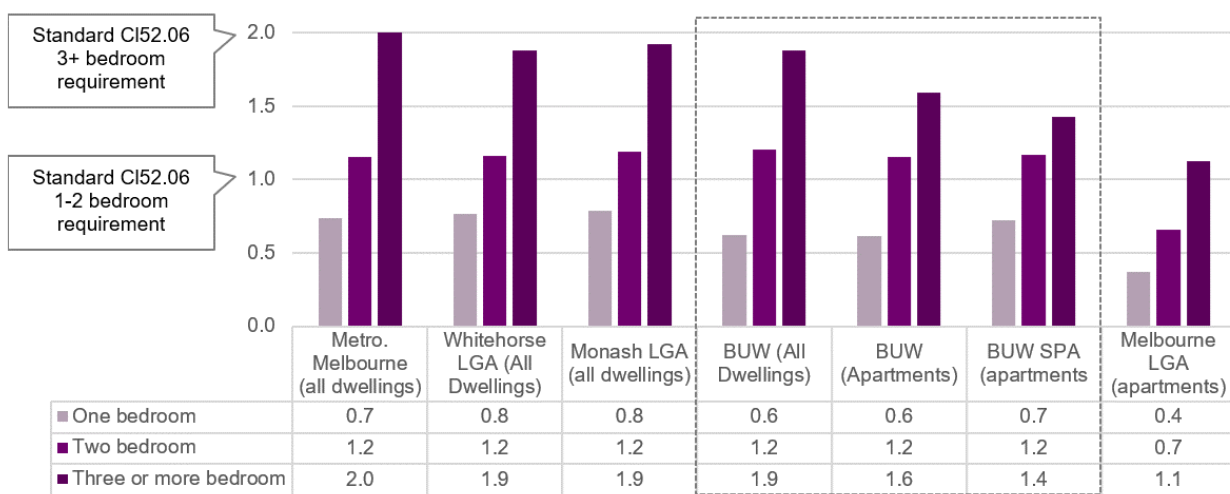


FIGURE 2.5 BURWOOD AVERAGE CAR OWNERSHIP COMPARISON BY HOUSEHOLD TYPE (SOURCE: ABS2021)

The zero car ownership levels by household type in Burwood are shown in Figure 2.6. Burwood has similar proportions of dwellings with no vehicles as the wider Whitehorse LGA, Monash LGA and Metropolitan Melbourne. However, the percentage of one-bedroom dwellings with no vehicle is around 3 to 5 per cent higher in Burwood, potentially reflecting the proximity of Deakin University.

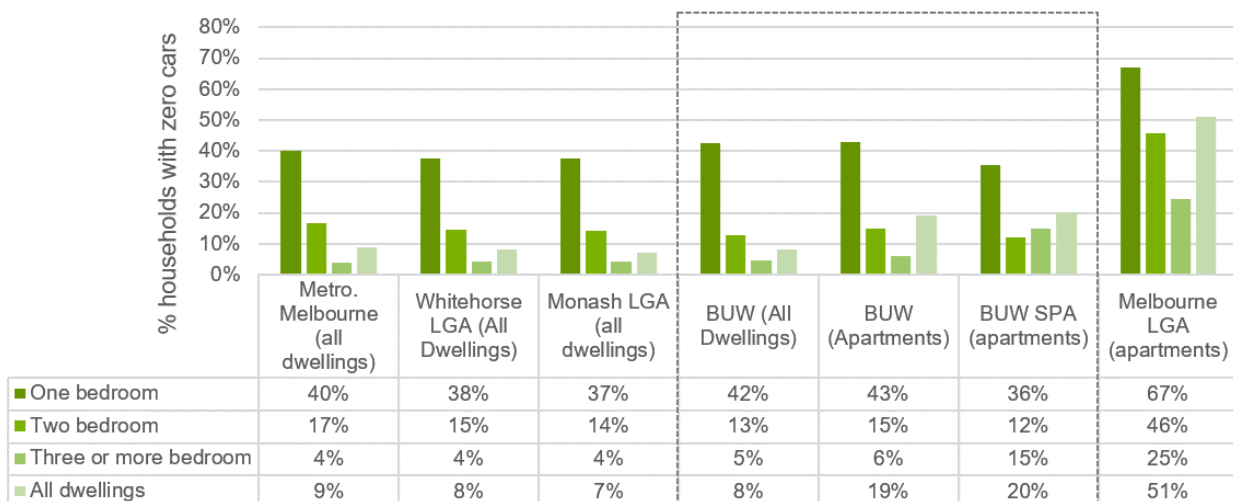


FIGURE 2.6 BURWOOD – ZERO CAR OWNERSHIP COMPARISON BY HOUSEHOLD TYPE (SOURCE: ABS2021)

2.1.5 RESIDENTIAL BICYCLE OWNERSHIP

VISTA includes bicycle ownership data for different household types and sizes.¹² While the sample size is small, the VISTA data provides an indication of bicycle ownership in the Burwood Planning Area which is summarised in Figure 2.7 and Figure 2.8.

The VISTA data indicates the Burwood Planning Area has relatively low bicycle ownership, particularly for smaller households. As household size grows, bicycle ownership increases with two or more people households on average exceeding the bicycle parking requirements suggested by the current Clause 52.34 Planning Scheme rates.

Burwood's relatively low VISTA bicycle ownership levels align with the relatively low level of cycling movements recorded in Burwood. Aside from the Gardiners Creek Trail, cycling activity surveyed in Burwood recorded up to 15 cyclists around Deakin University in weekday peak period and around Coppard Street and the Lundgren Chain Reserve in the weekend peak period.¹³

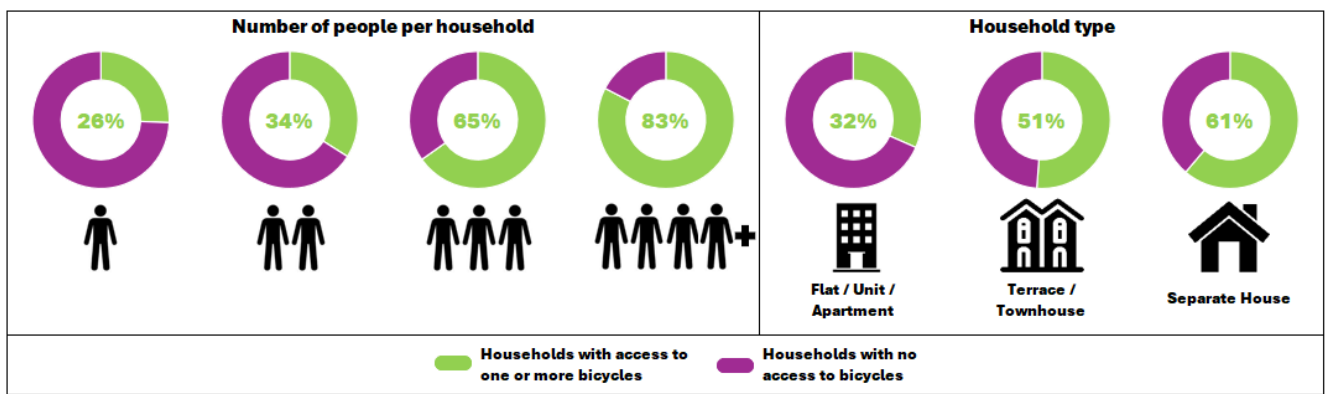


FIGURE 2.7 CURRENT HOUSEHOLDS IN THE BURWOOD PLANNING AREA WITH ACCESS TO AT LEAST ONE BICYCLE (SOURCE: VISTA 2012-2020 AND 2022)

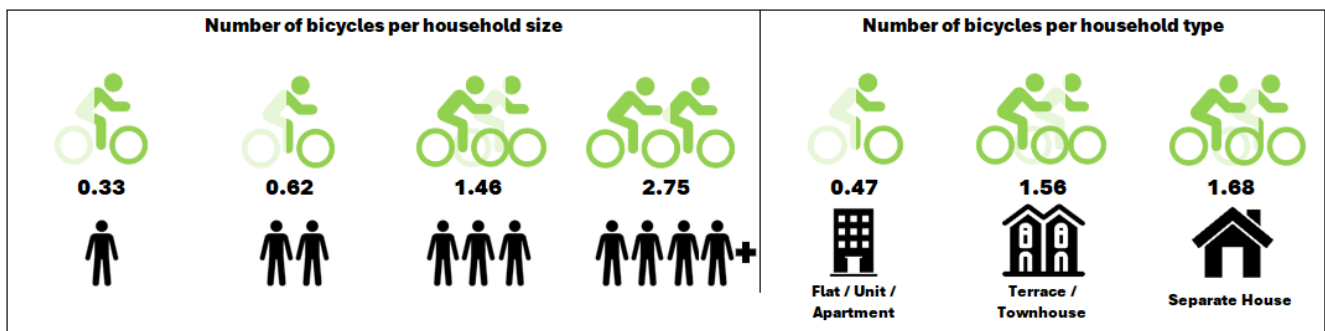


FIGURE 2.8 CURRENT BICYCLE OWNERSHIP PER HOUSEHOLD SIZE AND TYPE IN THE BURWOOD PLANNING AREA (SOURCE: VISTA 2012-2020 AND 2022)

¹² The VISTA data used is from 2012 – 2020 and 2022. Note relatively small sample data available for some SRL East Planning Areas and metrics.

¹³ Source: SRLA, 2023. Recorded weekday peak period between 8am – 9am and weekend peak period between 3pm – 4pm.

2.2 Transport network

2.2.1 WALKING

The pedestrian network of Burwood is shown in Figure 2.9, where the walkable network shown includes footpaths, shared use paths and trails. Many trips in different parts of Burwood are made by walking. Most streets in Burwood have footpaths on both sides of the road and provide pedestrian access to dwellings and key destinations such as Deakin University, tram and bus stops, Burwood Village and local shops and services. The key walking corridors to the key destinations in Burwood include Gardiners Creek Trail, Burwood Highway, Elgar Road and Station Street.

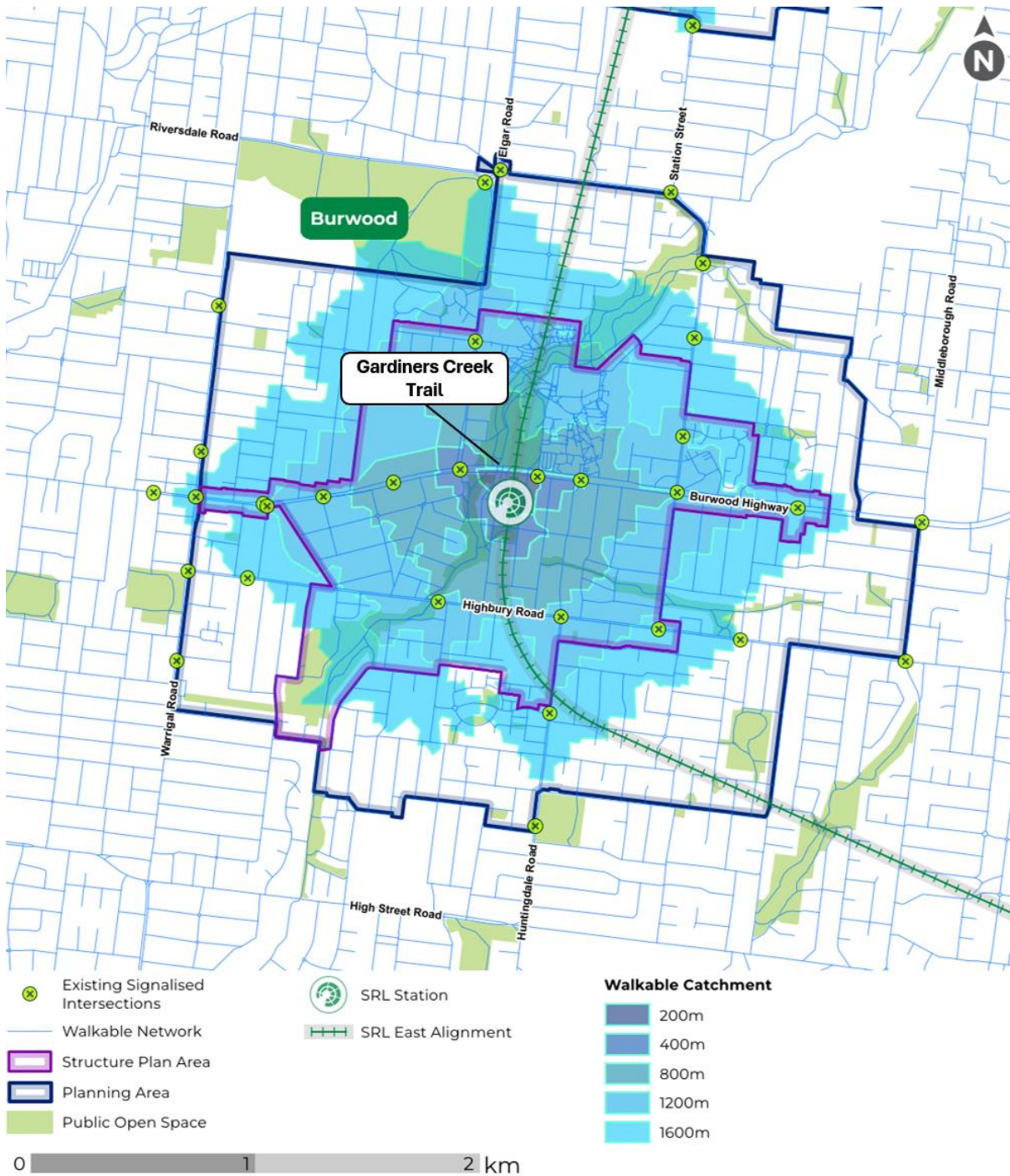


FIGURE 2.9 WALKING CATCHMENT OF THE SRL STATION AT BURWOOD (SOURCE: SRLA 2024)

Gardiners Creek Trail is a key north south active transport link in Burwood and is considered as a municipal walking link, intended to support pedestrian movements to and around activity generators. While some sections of the Gardiners Creek Trail include paths on both sides, others include a path on one side only. Several bridges have been provided with distances between crossings spanning up to 700 metres. The trail provides a pleasant and safe corridor free from vehicle conflicts for pedestrian and cycling activity.

The Morgans Walk pedestrian bridge provides a direct and safe pedestrian link for people (mostly Deakin University students and staff) who are crossing Gardiners Creek and is of sufficient height above the creek to be safe when the creek is in flood. It supports efficient walking movements across the university, connecting through to Burwood Highway and Elgar Road. The largely uninterrupted path follows the Gardiners Creek and has crossing points every 200 metres to 300 metres.



FIGURE 2.10 GARDINERS CREEK TRAIL (SOURCE: SRLA 2022)



FIGURE 2.11 MORGAN'S WALK UNIVERSITY PEDESTRIAN BRIDGE (SOURCE: SRLA 2022)

There are relatively low levels of pedestrian activity currently in Burwood. North of Burwood Highway is typically busier than the south, with trips to and from Deakin University and other educational establishments. Crossing points to trams stops are also relatively busy.

Gardiners Creek is a well-used leisure route during the weekend, especially during the morning hours (8am to 9am) with activities like the Gardiners Creek parkrun taking place around the creek. Pedestrian movement volumes along key links surveyed at midblock locations in 2023 are listed in Table 2.1.

TABLE 2.1 EXISTING PEDESTRIAN MOVEMENT VOLUMES ALONG KEY LINKS IN BURWOOD (SOURCE: SRLA 2023)















STREET	WEEKDAY PEAK 16:00 – 17:00	WEEKEND PEAK 08:00 – 09:00
Burwood Highway (near Gillard St)	45	20
Elgar Road (between Burwood Hwy and Daniel St)	30	20
Gardiners Creek Reserve (near Morgans Walk, Deakin University)	50	480

WALKING CHALLENGES

The walking challenges in the Structure Plan Area are summarised and shown in Figure 2.12.

Location-specific walking challenges:

- 1 There are some isolated sections along the Gardiners Creek Trail and at times the lack of activity and passive surveillance along the trail may result in a perceived lack of safety, particularly at night.
- 2 Heavily trafficked roads such as Burwood Highway, Elgar Road, Station Street and Highbury Road creates a barrier for pedestrian movements and exacerbates safety issues (Figure 2.13 and Figure 2.14).
- 3 Burwood Highway and the arterial roads in Burwood (such as Elgar Road and Station Street) are often characterised by relatively narrow footpaths (1.5 metres wide) and traffic signals prioritising general traffic, designed to facilitate high volumes of vehicle. Long signal phases at intersections add to pedestrian delay which can prompt pedestrians to undertake unsafe movements.
- 4 The limited crossing opportunities on Burwood Highway, Elgar Road and Station Street (with crossing opportunities located up to 500 metres apart) restricts accessibility to key destinations such as Deakin University, Presbyterian Ladies' College, Mount Scopus College and the industrial area south of Burwood Highway.
- 5 A grade-separated crossing (underpass) is provided around Deakin University. While the pedestrian underpass reduces pedestrian delays, it has a lack of amenity and passive surveillance. It does not adhere to Crime Prevention Through Environmental Design (CPTED) guidance in terms of clear sight lines of and by users.
- 6 Many dead-end streets particularly east of Deakin University campus (that is, east of Elgar Road) as well as in the south of Burwood reduce active transport connectivity. Large block sizes such as Presbyterian Ladies' College and Mount Scopus College can also contribute to longer walking times.

 Existing Signalised Intersections	Existing Land Use
 SRL Station	 Health/ Medical
 Walkable Network	 Residential
 Structure Plan Area	 Educational
 Planning Area	 Industrial/ Mixed Use
 SRL East Alignment	 Commercial
	 Open Space
	 Public Use
	 Other

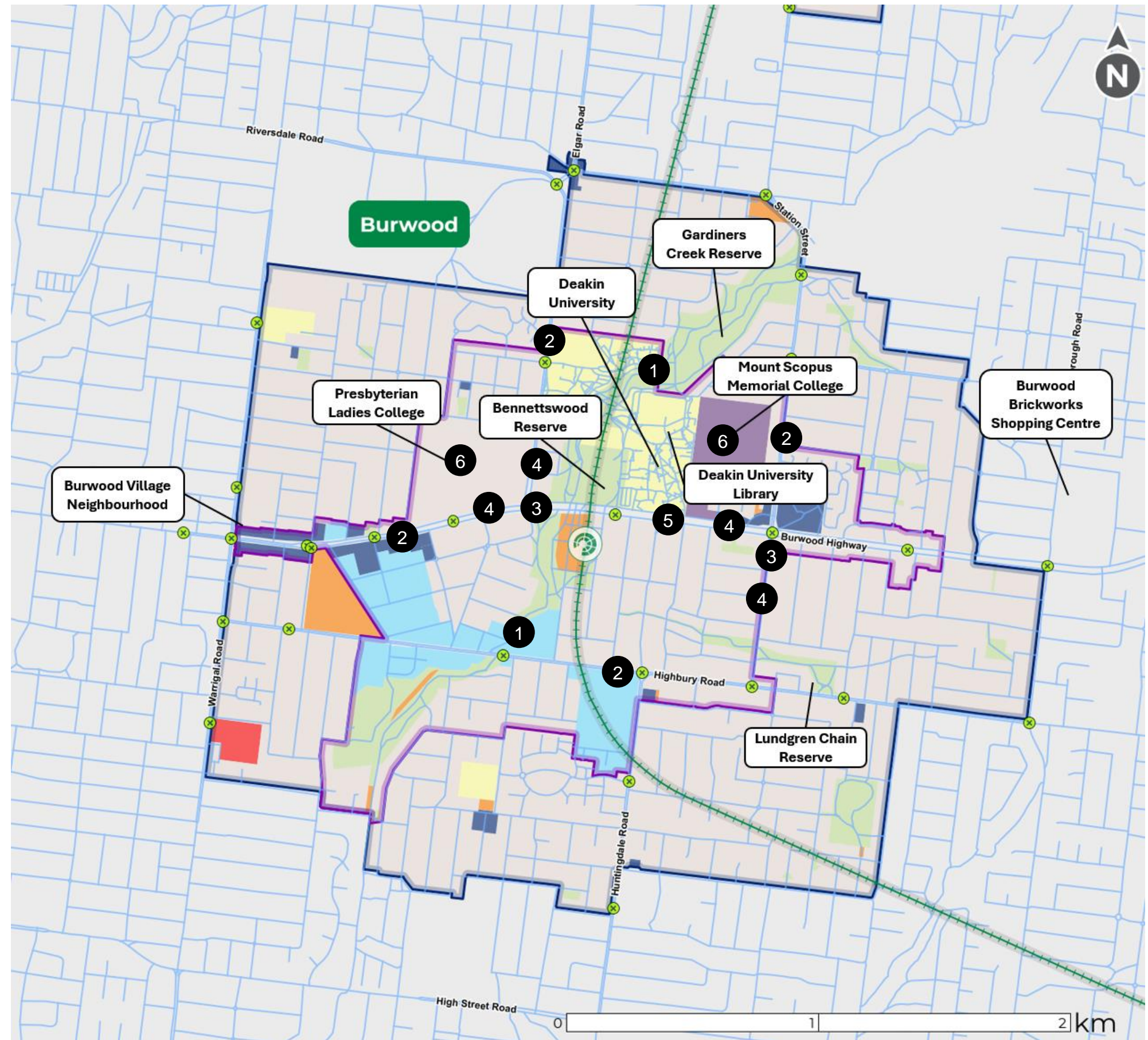


FIGURE 2.12 WALKING CHALLENGES IN THE BURWOOD STRUCTURE PLAN AREA



FIGURE 2.13 BURWOOD HIGHWAY BETWEEN ELGAR ROAD AND STATION STREET (SOURCE: SRLA 2022)



FIGURE 2.14 LACK OF CROSSING OPPORTUNITIES ACROSS ELGAR ROAD (SOURCE: SRLA 2022)

2.2.2 CYCLING, INCLUDING MICROMOBILITY

Cycling and micromobility in this section refers to bicycles, scooters and skateboards, including shared and/or electric modes. E-bikes and e-scooters (share schemes and private ownership) are also captured in this mode as they are currently limited to a maximum speed of 25 km/h and are legally allowed on public low-speed roads, shared use paths, bike paths and on-road lanes in Victoria.

Figure 2.15 shows the existing cycling infrastructure and Strategic Cycling Corridors (SCCs) in Burwood. SCCs form part of the DTP aspirational cycling network that aims to support commuter trips and link to destinations that have metropolitan and regional significance such as employment and activity centres. These corridors can be on and off road, on municipal and state roads and should be designed to provide a safe, lower-stress cycling for transport experience. However, not all SCCs currently have adequate cycling infrastructure to support a safe and low-stress cycling environment.

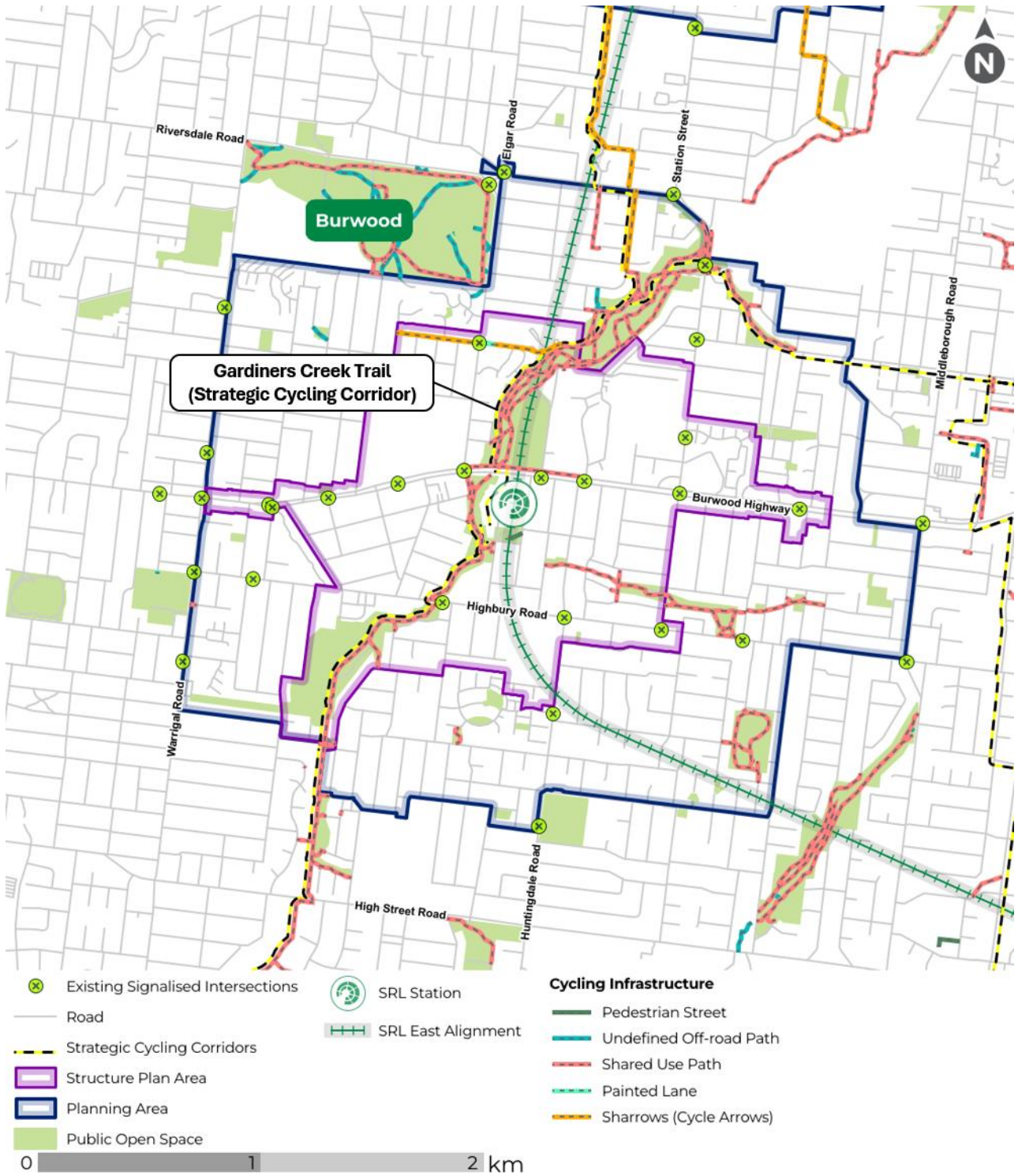


FIGURE 2.15 BURWOOD CYCLING NETWORK (SOURCE: SRLA 2024)

The Gardiners Creek Trail is the key north south SCC through Burwood. It is a mostly continuous cycling corridor that can provide connections for cyclists travelling to, from and across Burwood. It is a shared use path and intended to support the needs of commuter trips and catering well for recreational cyclists, facilitating low stress cycling journeys. This trail provides access to Deakin University, nearby industrial precincts and nearby local schools and residences. Where the trail meets Burwood Highway, cyclists are required to negotiate both a vertical and horizontal alignment change to cross the road at grade around 150 metres from the crossing desire line. Efficient movement for cyclists is further reduced where crossings are disconnected from cycle paths as legally most cyclist are required to dismount if they need to use a footpath connection to reach a controlled crossing point.

Other off-road trails are provided in public green spaces such as Lundgren Chain Reserve and Federal Reserve and are primarily for recreational cycling trips.

The remainder of the road network in Burwood has no or limited cycling infrastructure.

CYCLING AND MICROMOBILITY CHALLENGES

Given the limited cycling infrastructure in Burwood, there is opportunity to enhance the cycling and micromobility network for improved safety and better access to key destinations in the Burwood Structure Plan Area.

The cycling and micromobility challenges in the Burwood Structure Plan Area are summarised and shown in Figure 2.16.

Location-specific cycling challenges:

- 1 Heavily trafficked arterial roads (such as Burwood Highway, Elgar Road, Highbury Road and Station Street) discourage north-south and east-west cycle movements, with few crossing points and long crossing wait times.
- 2 The Gardiners Creek Trail is fragmented by a lack of safe crossings across movement barriers such as the creek and arterial roads.
- 3 There are limited cycling paths connecting key destinations such as Deakin University, Presbyterian Ladies' College, Greenwood Business Park at Station Street, and Burwood Village on Toorak Road.
- 4 Other off-road trails are provided in public green spaces such as Lundgren Chain Reserve and Federal Reserve but are not connected to the wider cycling network, limiting their use for purpose-based cycle trips such as commuting or shopping.

Structure Plan area cycling challenges:

- There is limited infrastructure such as end-of trip facilities and bicycle storage to support the continued uptake of micromobility as an emerging transport mode.
- The lack of dedicated infrastructure for cyclists and micromobility devices throughout the Structure Plan Area which limits the ability to cycle safely, and significantly lowers the use of bicycles for transport.

⊗ Existing Signalised Intersections	Existing Land Use
🚶 SRL Station	🔴 Health/ Medical
— Road	🏠 Residential
📐 Structure Plan Area	🎓 Educational
📏 Planning Area	🏭 Industrial/ Mixed Use
🚶 SRL East Alignment	🏢 Commercial
Cycling Infrastructure	🌳 Open Space
🚶 Pedestrian Street	🏢 Public Use
🚶 Undefined Off-road Path	🟪 Other
🚶 Shared Use Path	
🚶 Painted Lane	
🚶 Sharrows (Cycle Arrows)	

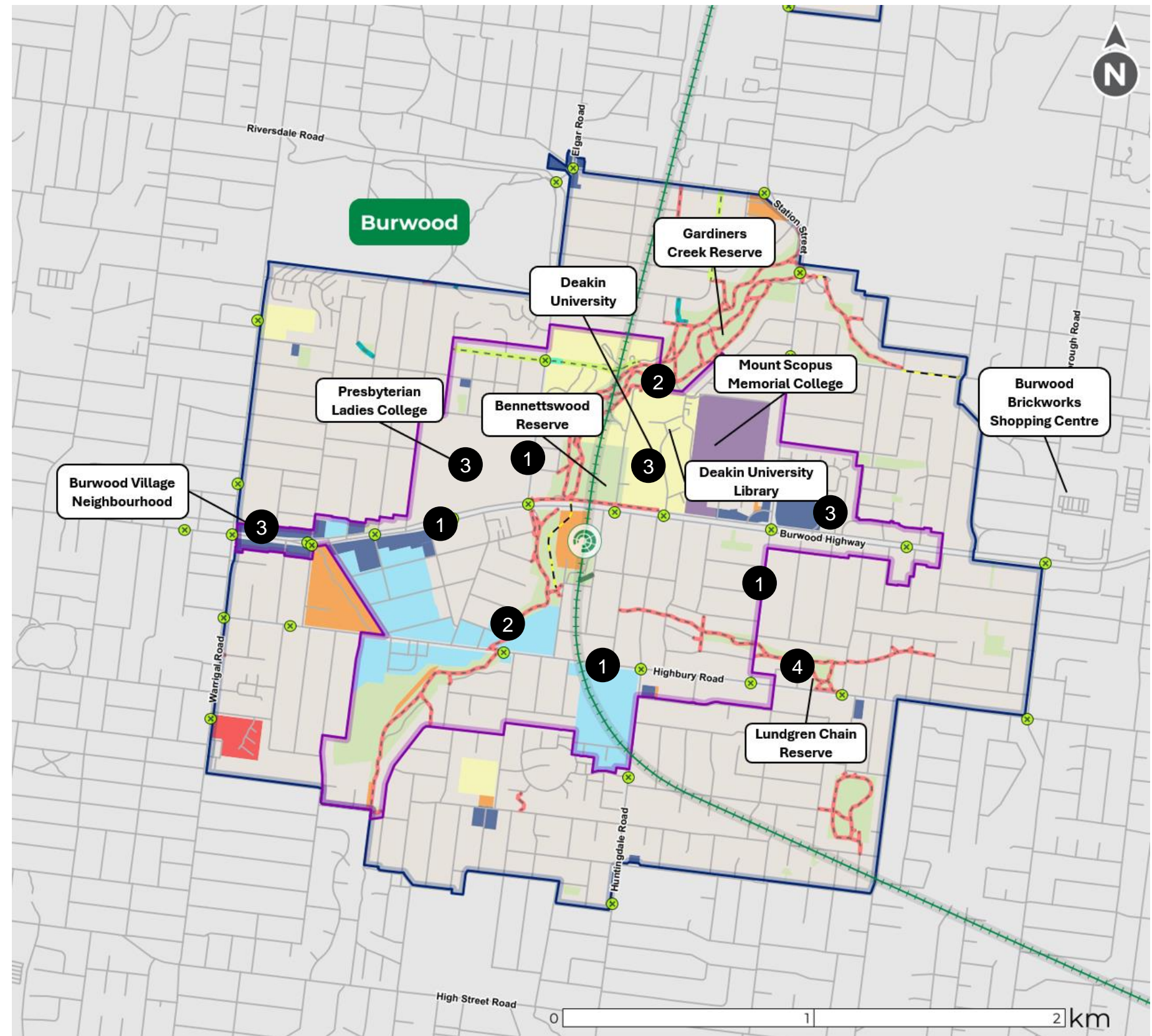


FIGURE 2.16 CYCLING CHALLENGES IN THE BURWOOD STRUCTURE PLAN AREA

2.2.3 PUBLIC TRANSPORT

The Burwood Planning Area is currently serviced by the 75-tram route along Burwood Highway, the 70-tram route along Riversdale Road and a network of bus routes with stops located along key arterial roads.

Given there is currently no railway line or station that directly services the Burwood Planning Area and Structure Plan Area, the tram network provides east-west connections to Burwood and between Melbourne CBD and Vermont South and Wattle Park. Buses support public transport connectivity across the remainder of Burwood (including Deakin University).

Figure 2.17 shows the extent of the current Principal Public Transport Network (PPTN) coverage in Burwood. This network identifies high-quality public transport service routes and the land within a 400-metre radius of the route or railway station. The current PPTN in Burwood covers around 61 per cent of the Structure Plan Area. However, it is presently limited in the south of Burwood. It should be noted the PPTN coverage as currently outlined in the planning scheme was updated in 2018 and therefore does not include SRL East.

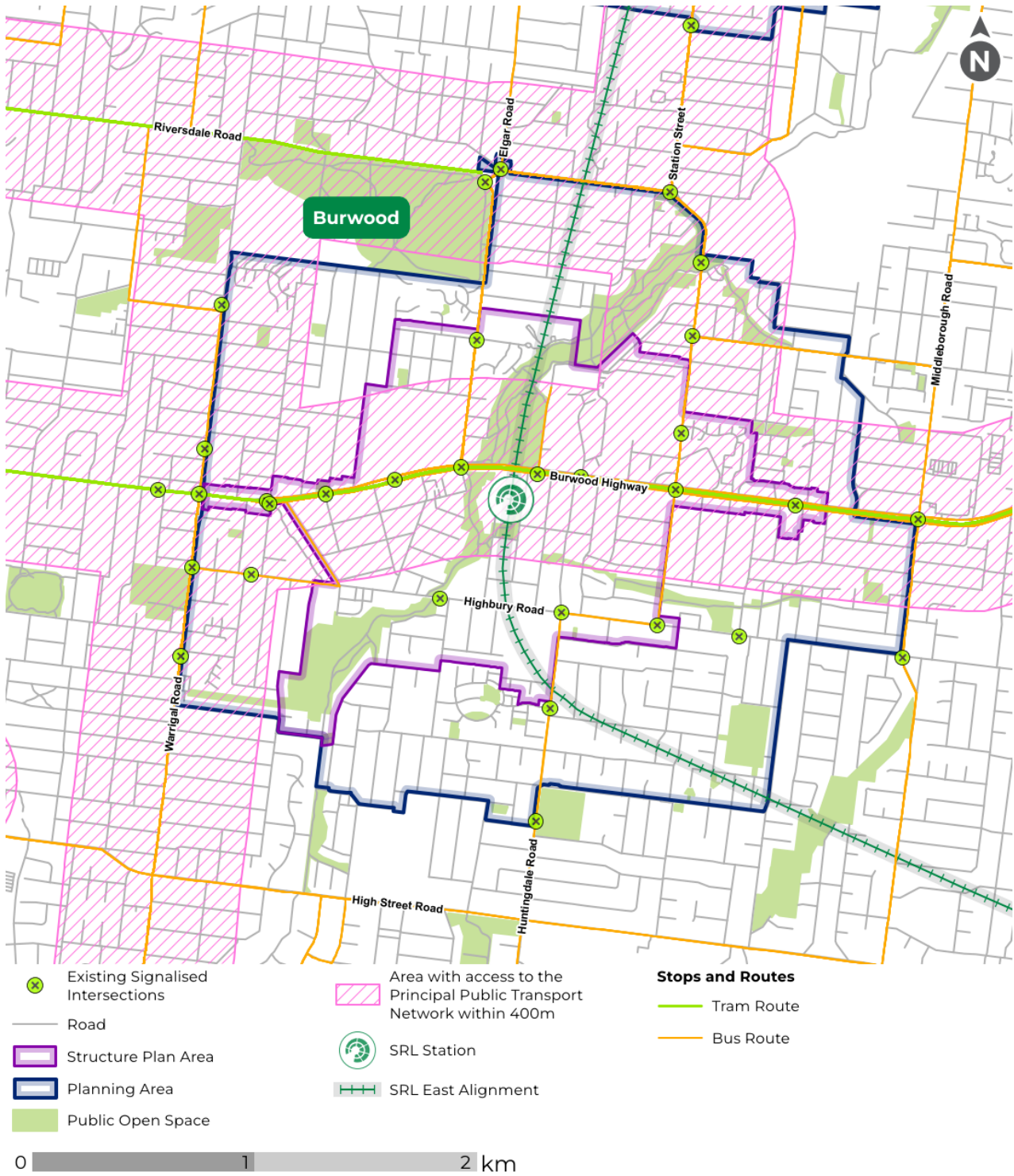


FIGURE 2.17 PUBLIC TRANSPORT NETWORK AND PRINCIPAL PUBLIC TRANSPORT NETWORK COVERAGE (SOURCE: SRLA 2024)

RAIL NETWORK

There are no stations in the Burwood Structure Plan Area. The closest existing railway stations are the existing Jordanville Station on the Glen Waverley Line and the existing Burwood Station (located outside the Structure Plan Area) on the Alamein Line, both around 2.6 kilometres from the SRL station at Burwood.

While slightly further away, existing stations along the Belgrave / Lilydale Line including the existing Box Hill Station and Union Station provide more frequent services and faster connections to wider catchment areas, including Melbourne CBD and Ringwood. Connections to these stations from the Burwood Structure Plan Area are facilitated via several bus routes.

BUS NETWORK

Burwood has an existing network of seven bus routes providing access between residential areas, railway stations (outside the Structure Plan Area), activity centres, industrial areas and educational establishments as shown in Figure 2.18.

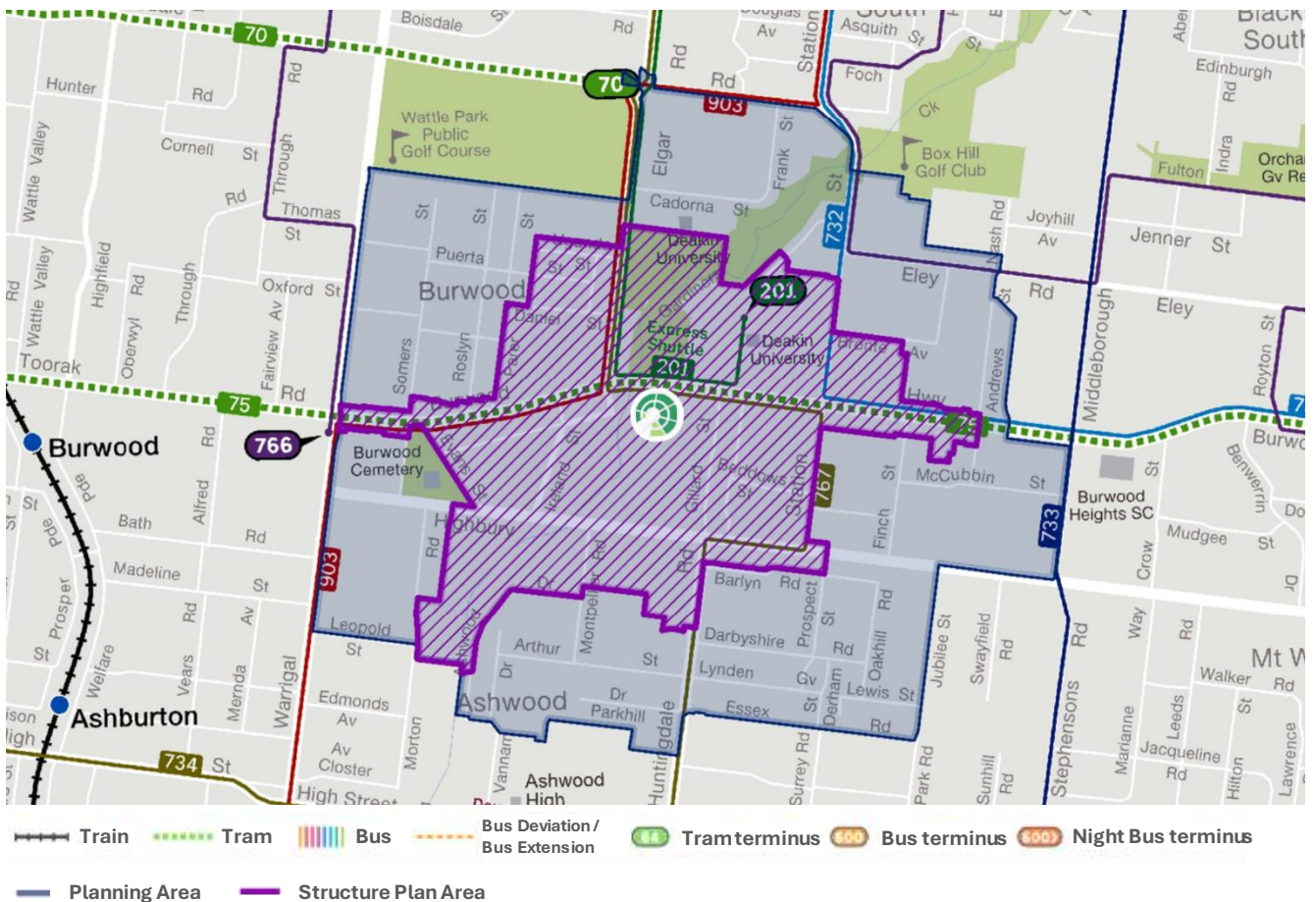


FIGURE 2.18 BUS NETWORK IN BURWOOD (BASE MAP SOURCE: PTV 2023)

The bus routes primarily follow arterial roads and provide comprehensive coverage to the north of Highbury Road including bus routes servicing Deakin University. Bus coverage in Burwood is limited south of Highbury Road, with only one east-west bus route along High Street Road and two north south bus routes along Warrigal Road and Huntingdale Road.

The Deakin University Bus Interchange is currently serviced by three bus routes. There are some service delays in the peak period because access to and from the interchange is shared with general traffic.

Bus service operation times vary. Routes 201 and 766 cease operating before 9 pm on a weekday. Route 281 does not operate on the weekends, and route 766 does not operate run on Sundays. This leaves Burwood with six bus routes operating on Saturdays and five on Sundays. The only bus route serving the Deakin University campus on weekends is route 767.

Along the western side of Burwood, the high-frequency SmartBus 903 provides a 15 to 30-minute service during peak periods, and 30 to 60-minute service during off-peak periods.

Tram and bus services are consolidated on key north-south and east-west arterial roads, with the busiest stops close to Deakin University. The busiest bus stops within the Burwood Structure Plan Area are presented in Table 2.2.

**TABLE 2.2 BUS STOP PATRONAGE STATISTICS WITHIN THE BURWOOD STRUCTURE PLAN AREA
(SOURCE: TABLEAU PUBLIC - 2018-19 BUS STOP PATRONAGE MELBOURNE)**

BUS STOP LOCATION	AVERAGE WEEKDAY BOARDINGS
Elgar Road / Uganda Street	690
Deakin University / Burwood Highway	250
Deakin University / Holland Avenue	210

TRAM NETWORK

The Burwood Planning Area is serviced by two tram routes including route 70 (along Riversdale Road up to Elgar Road) and route 75 (along Burwood Highway). Service frequency is relatively high with trams on each route around every 10 minutes across the day (in each direction). Both trams support east-west movements between Melbourne CBD and Vermont South (route 75) and Wattle Park (route 70).

Tram route 75 operates along dedicated tram lanes along Burwood Highway, including platform tram stops within the central median of Burwood Highway. These tram stops are spaced around 300 metres to 500 metres apart and generally accessible by pedestrian-operated signal (POS) crossings or via crossings near intersections.

Tram stop 63 which services route 75 is connected to the Deakin University campus by an underpass (shown in Figure 2.19 and Figure 2.20), and provides connections to the east and westbound stops as well as providing cross corridor connections. The platforms at the stop provide seating and some shelter. The tram stops do not have digital real time information displays with only static timetable information provided.

Tram route 70 terminates at the Elgar Road / Riversdale Road intersection on the northern edge of Burwood. The route shares a single travel lane with general traffic, except where there are no cars parked along the kerbside lane.

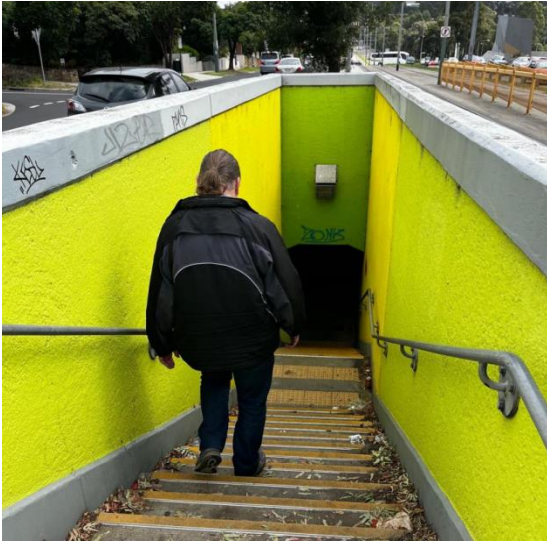


FIGURE 2.19 STAIRS TO ACCESS UNDERPASS ON BURWOOD HIGHWAY (ADJACENT TO DEAKIN UNIVERSITY) (SOURCE: SRLA 2022)



FIGURE 2.20 RAMP ACCESS FROM DEAKIN UNIVERSITY TO BURWOOD HIGHWAY TRAM STOP

PUBLIC TRANSPORT CHALLENGES

The public transport challenges in the Burwood Structure Plan Area are summarised and shown in Figure 2.21.

Location-specific public transport challenges:

- 1 The Deakin University bus interchange is not currently used by all bus routes in the area and there are service delays in the peak period because access to and from the interchange is shared with general traffic.
- 2 Bus coverage within Burwood is limited south of Highbury Road, with only one east-west bus route along High Street Road and two north-south bus routes along Warrigal Road and Huntingdale Road. Existing bus stops have limited accessibility.
- 3 There is poor access and design of tram stop platforms and bus stops particularly along Burwood Highway.

For example, the underpass access from the westbound platform of tram stop 63 is by stairs only. This means that passengers with mobility issues who cannot negotiate stairs safely are required to cross the tram tracks at grade to access the underpass from the eastbound platform. The underpasses can be perceived as unsafe at night and during the day due to poor sightlines. In addition, the 3-metre-wide platform is narrow and may become congested at busy times, leading to passenger safety issues and long tram dwell times.

Structure Plan area public transport challenges:

- Prior to the delivery of the SRL station at Burwood, there are no railway stations within a short walk of the Structure Plan Area, with the nearest railway station located approximately 2.6 kilometres outside of the Structure Plan Area.
- Bus service operation times are limited, noting that Routes 281 and 766 cease running before 9pm on a weekday. Route 281 does not operate on the weekends and route 766 does not operate on Sundays, leaving the Structure Plan Area with six bus routes operating on Saturdays and five on Sundays.
- There is limited infrastructure for bus priority along roads where bus and traffic volumes are high, resulting in higher journey times such as Elgar Road, Station Street, Highbury Road, and Warrigal Road.

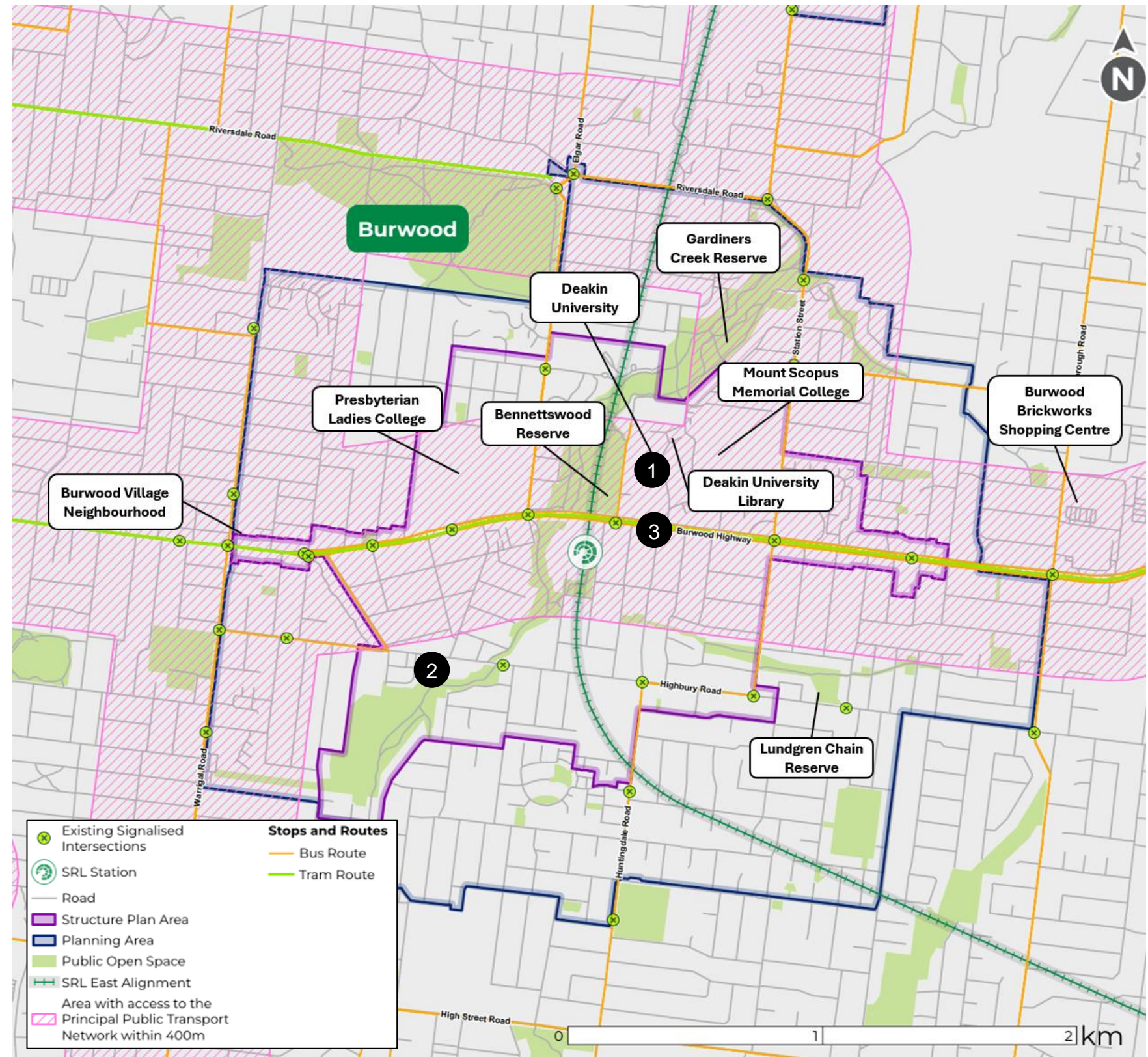


FIGURE 2.21 PUBLIC TRANSPORT CHALLENGES IN THE BURWOOD STRUCTURE PLAN AREA

2.2.4 PRIVATE VEHICLES

ROAD NETWORK CHARACTERISTICS

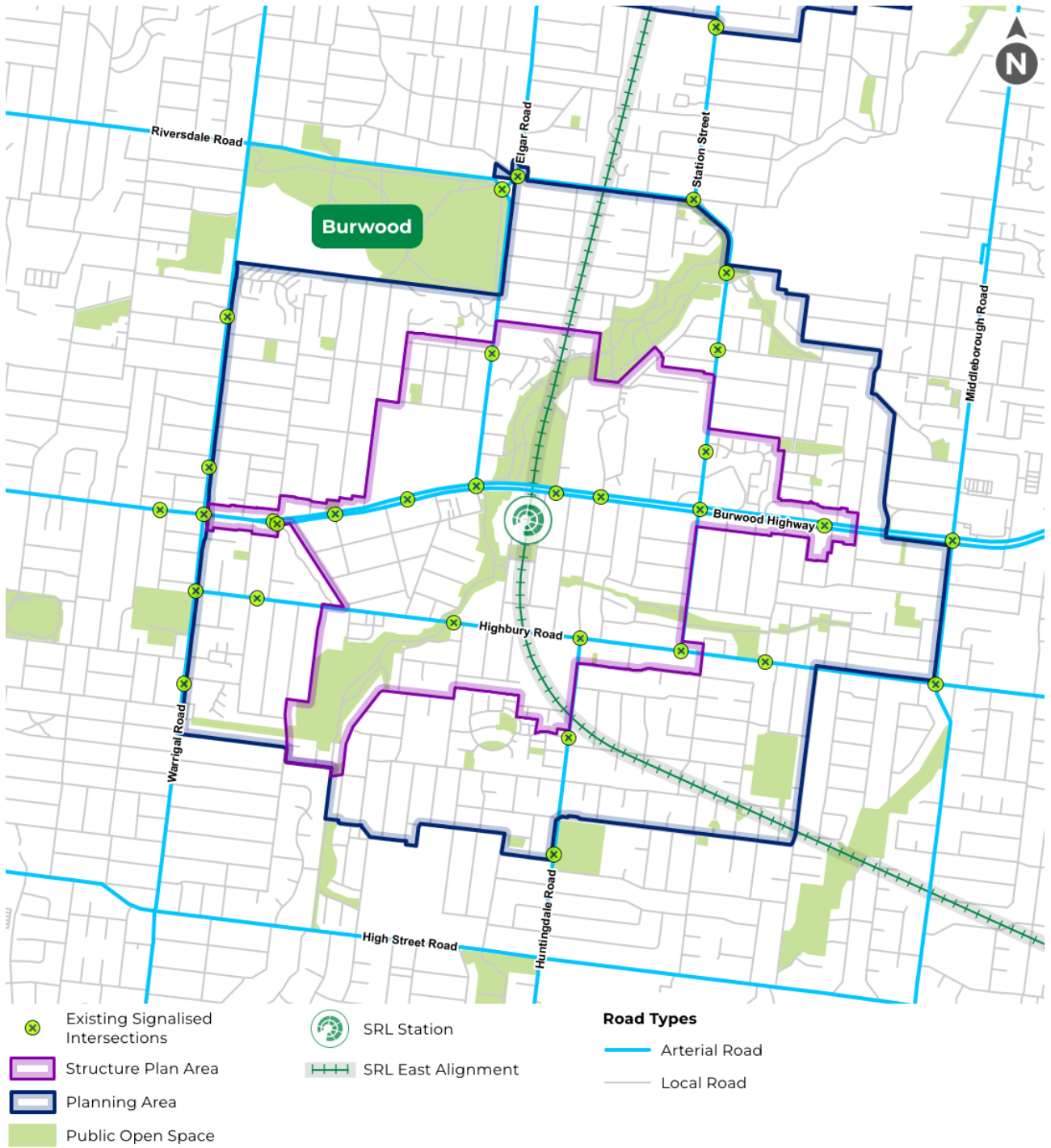
Vehicle access throughout Burwood is provided by multi-lane arterial roads and an extensive network of connector and local streets. The road network hierarchy and existing signalised intersections in Burwood is shown in Figure 2.22.

Burwood Highway is the primary east-west arterial road in Burwood while Highbury Road is a secondary east-west arterial road. Warrigal Road, Station Street and Elgar Road are the main arterial roads supporting north south movements. These arterial roads provide access (either direct or via collector roads) to key destinations such as Burwood Village, industrial and residential areas and educational establishments including Deakin University, Mount Scopus College and Presbyterian Ladies' College.

A high level of priority has been provided to private vehicles and trams, with Burwood Highway up to six lanes wide across both directions at intersections, dedicated tram lanes and signal timings set to maximise vehicle and tram throughput in line with their designation as an arterial road.

Burwood also caters to a significant level of through-traffic. Burwood Highway connects through to the EastLink and onto Ferntree Gully to the east as well as to Toorak to the west. Warrigal Road connects through to Surrey Hills to the north and Chadstone, Monash Freeway and onto Nepean Highway to the south. Similarly, Station Street and Elgar Road provide a key north south connection to Box Hill and onto the Eastern Freeway to the north.

The Principal Freight Network (PFN) does not run through the Burwood Planning Area. However, to access the area, freight traffic is primarily concentrated along Burwood Highway which acts as Burwood's key vehicle movement corridor. For example, Burwood Highway provides freight and service vehicle access to the industrial area located south of Burwood Highway and west of Ireland Street as well as to local retail and commercial land uses in Burwood Village. Similarly, the Planning Area also includes a number of small local shopping / retail areas along the arterial roads such as Highbury Road, Elgar Road and Station Street that support freight and service vehicle access to these shopping / retail areas.



0 1 2 KM
FIGURE 2.22 ROAD NETWORK (SOURCE: SRLA 2024)

ROAD NETWORK CONDITIONS

The traffic volumes for key routes in Burwood are outlined in Table 2.3.

The percentage of heavy vehicles using the road network in the peak periods is low throughout the Planning Area. On Burwood Highway, heavy vehicles comprise around 5 to 6 per cent of the total traffic volume during the peak periods per direction.

TABLE 2.3 TRAFFIC VOLUMES (SOURCE: VICROADS OPEN DATA, RETRIEVED NOVEMBER 2023)

ROAD	CLASSIFICATIONS	SPEED LIMIT	DIRECTION	LANES	AM PEAK 2023 [VEH/H]	PM PEAK 2023 [VEH/H]	AADT	% AADT HEAVY VEHICLES
Burwood Highway	Arterial Highway	60 km/h & 70 km/h (west and east of Elgar Road respectively)	Eastbound	3	1100	1500 - 2100	18,000	5%
			Westbound	3	2000	900 – 1200	18,000	5%
Elgar Road	Arterial Other	60 km/h	Northbound	2	N/A	N/A	7900	6%
			Southbound	2	N/A	N/A	8400	6%
Station Street	Arterial Other	60 km/h	Northbound	2	700	800	11,000	6%
			Southbound	2	1000	900	11,000	6%
Highbury Road	Arterial Other	60 km/h	Eastbound	2	800	1300	12,000	6%
			Westbound	2	1100	700	12,000	6%
Warrigal Road	Arterial Highway and Arterial Other (north and south of Burwood Highway respectively)	60 km/h	Northbound	2	1300	1300	16,000	5%
			Southbound	2	900	900	14,000	5%

Notes:

- AM Peak, PM Peak and AADT: A range of traffic volumes have been provided where traffic volumes vary across the road/corridor (where available). Data was last updated on DTP Open Data website on 4/5/2023 at the time of data retrieval but some data may be historic and include traffic conditions during COVID-19 lockdowns.
- 'N/A' – no data available at time of extraction
- Municipal / Local Roads are council owned, supporting slower speeds and lower traffic volumes compared to arterial roads, freeways and highways.
- Arterial Highways and Arterials (other) have similar functions as both are designed for moderate to high traffic volumes. Arterial roads and highways are typically used for inter-suburban or inter-urban journeys, often linking to freeways. Arterial Highways often support more volumes of traffic with more lanes and higher speeds compared to Arterials (other).
- Freeways are designed to move large numbers of vehicles and freight at higher speeds than arterial roads and are strategic corridors connecting state significant regions.

Figure 2.23 and Figure 2.24 show the typical road network conditions in the AM and PM peaks at a strategic level. VITM modelling of Burwood indicates that much of the local road network operates at an acceptable level of service, being either at or below a volume over capacity ratio (V/C) of 0.8. Some sections of major arterial and collector roads, including Burwood Highway and Warrigal Road have higher V/C ratios. A higher V/C ratio indicates there is more congestion on these roads, and they are nearing capacity. Note that VITM is coarse and strategic in nature and the signalisation or any detailed operational parameters of intersections that would ordinarily serve to manage traffic flows are not explicitly coded in the model. As such, actual delays experienced along some roads may differ to what is shown here. The focus of the strategic model is to provide network context.

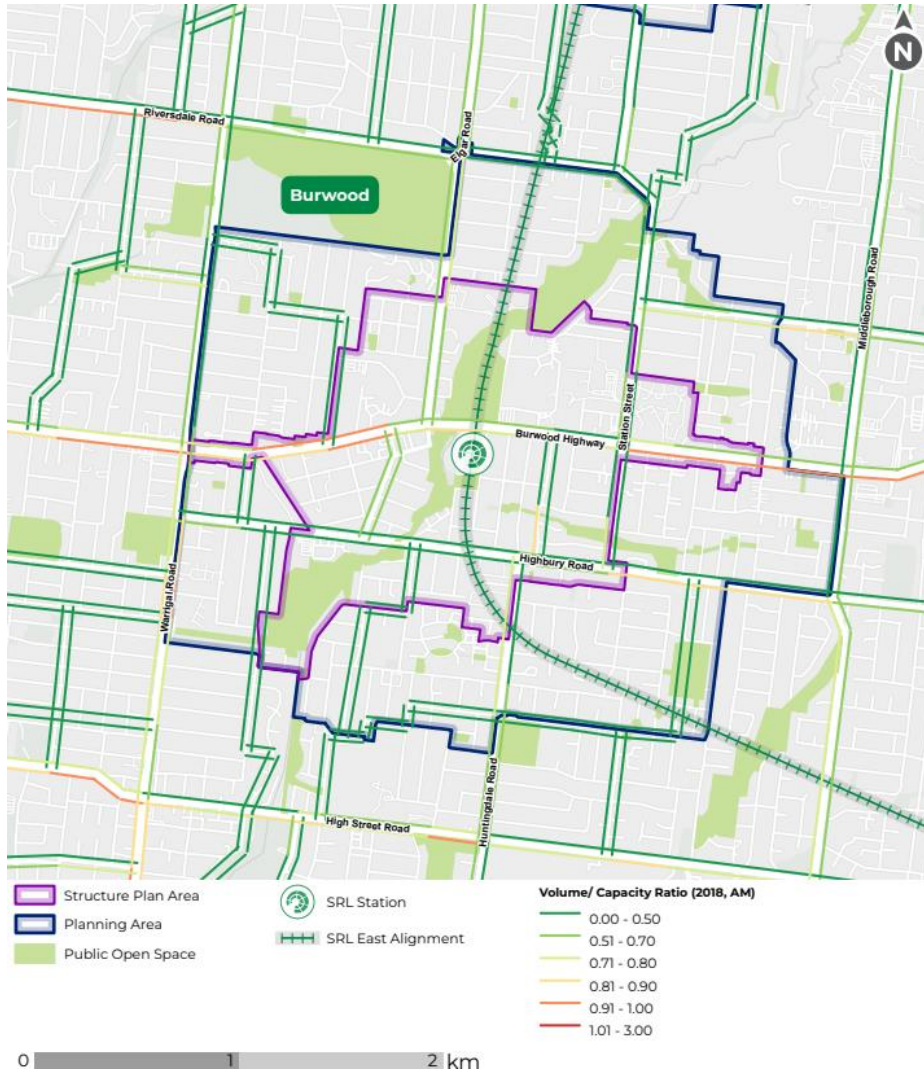


FIGURE 2.23 2018 AM PEAK VOLUME CAPACITY RATIO (7-9 AM)
(SOURCE: VITM)

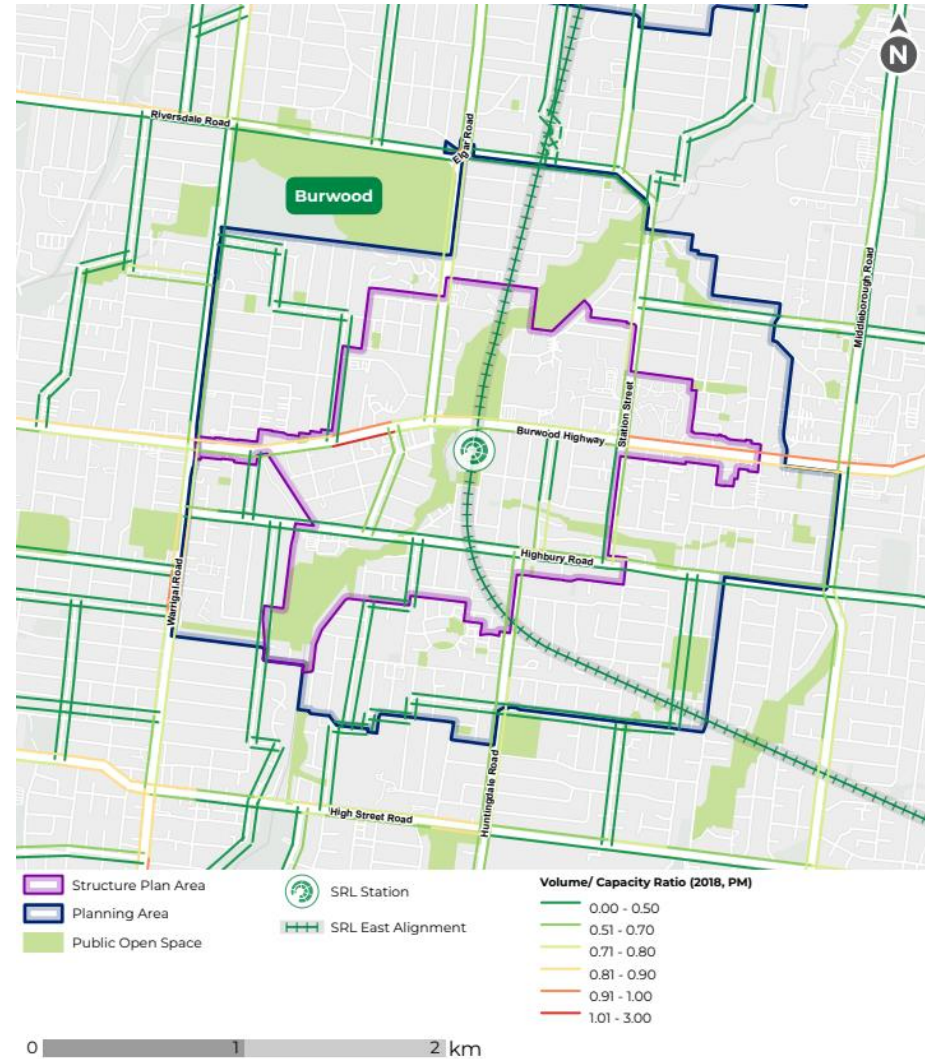


FIGURE 2.24 2018 PM PEAK VOLUME CAPACITY RATIO (3-6 PM)
(SOURCE: VITM)

ROAD SAFETY

Crash statistics from January 2019 to January 2024 there were 62 crashes in the Burwood Structure Plan Area.¹⁴ Around 20 per cent of the crashes resulted in fatal or severe injuries to road users, with the rest classified as 'other injury' accidents. There was one fatal crash in Burwood located along Burwood Highway adjacent to Renown Street.

Figure 2.25 shows the crash locations across the Structure Plan Area, where locations with a high crash density experienced around six or more crashes, and low crash density locations are where less than two crashes occurred.

Pedestrians were involved in around 18 per cent of crashes, motorcycles were involved in around 6 per cent of crashes and heavy vehicles were involved in 2 per cent of crashes. Rear-end vehicles (vehicles in same lane) were the most common incidents, each causing around 27 per cent of the crashes.

A total 50 per cent of crashes were not at intersections and 61 per cent of crashes occurred during the day. Intersections and road segments identified as accident hotspots are highlighted in Figure 2.25. The crash hot spots in Burwood with the highest number of crashes and associated injury severity are listed in Table 2.4.

TABLE 2.4 CRASH HOT SPOT STATISTICS BETWEEN JANUARY 2018 TO JUNE 2023 (SOURCE: VICROADS CRASHSTATS)

INTERSECTION / LOCATION	OTHER INJURY	SERIOUS INJURY	FATAL	TOTAL
Burwood Highway / Station Street	7	3	0	10
Burwood Highway / Elgar Road	7	1	0	8
Huntingdale Road / Leyland Road	6	1	0	7
Burwood Highway / Warrigal Road	5	1	0	6

¹⁴ Data VIC

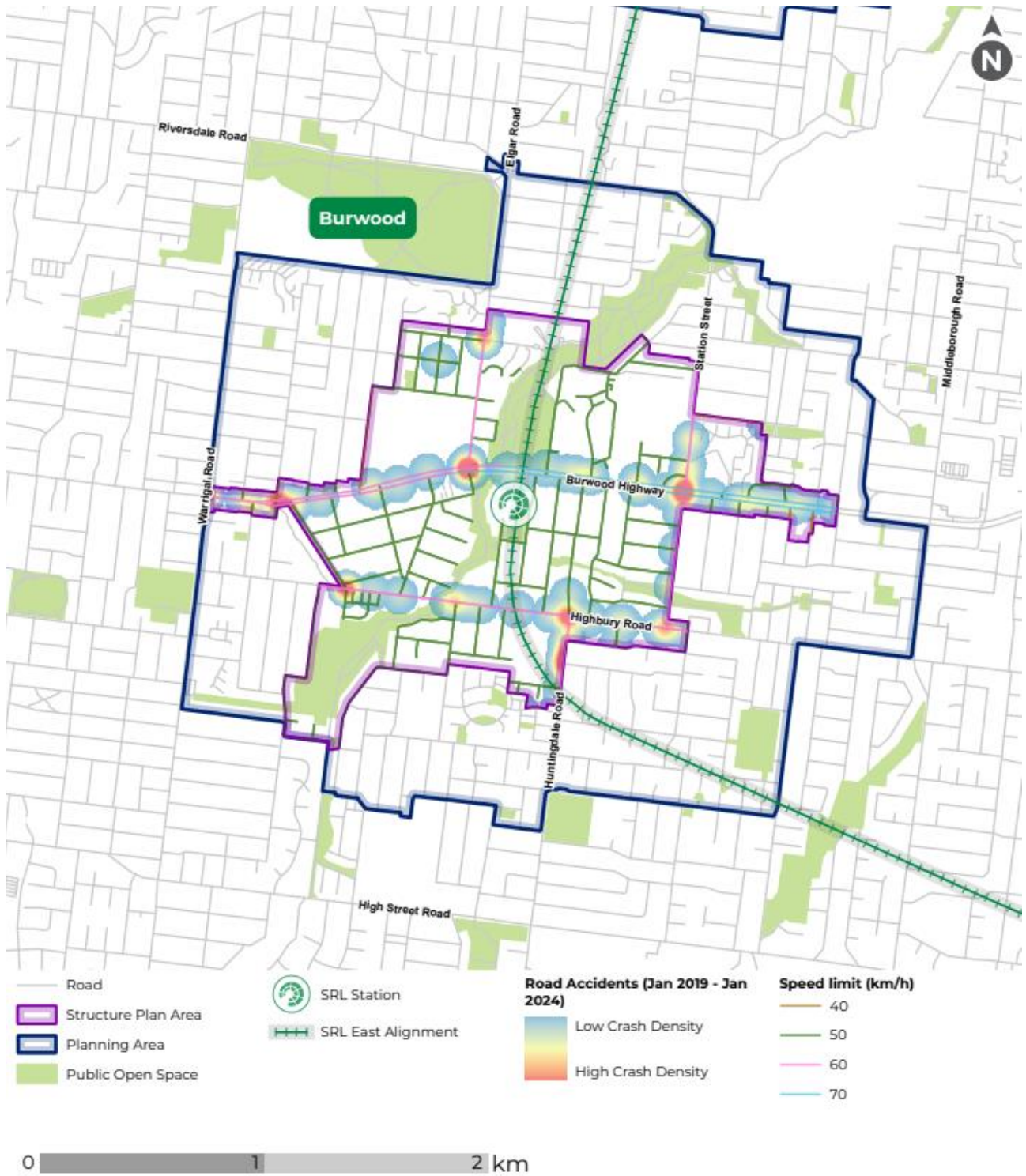


FIGURE 2.25 BURWOOD CRASH LOCATIONS AND CLUSTERS JANUARY 2018 – JUNE 2023 (SOURCE: DATA VIC)

GENERAL TRAFFIC AND FREIGHT CHALLENGES

The general traffic and freight challenges in the Structure Plan Area are summarised and shown in Figure 2.26.

Location-specific general traffic and freight challenges:

- 1 Sections of Burwood Highway and Warrigal Road experience congestion during peak periods, impacting travel times for cars and for buses and trams where these modes do not have on-road priority.
- 2 Unprotected right turn lanes along Burwood Highway that allow vehicles to cross the tram tracks can increase the risk of collision between drivers and trams.
- 3 Burwood caters for relatively high through traffic volumes which can contribute to congestion and impact on trips within Burwood.
- 4 There is a lack of arterial road connectivity between Elgar Road and Huntingdale Road which can create convoluted movements and encourages rat running.

Structure Plan area general traffic and freight challenges:

- There is a heavy reliance on private vehicles for access within, to and through the Structure Plan Area due to the arterial road network that passes through it and the availability of car parks. This is placing pressure on the local and arterial road network.

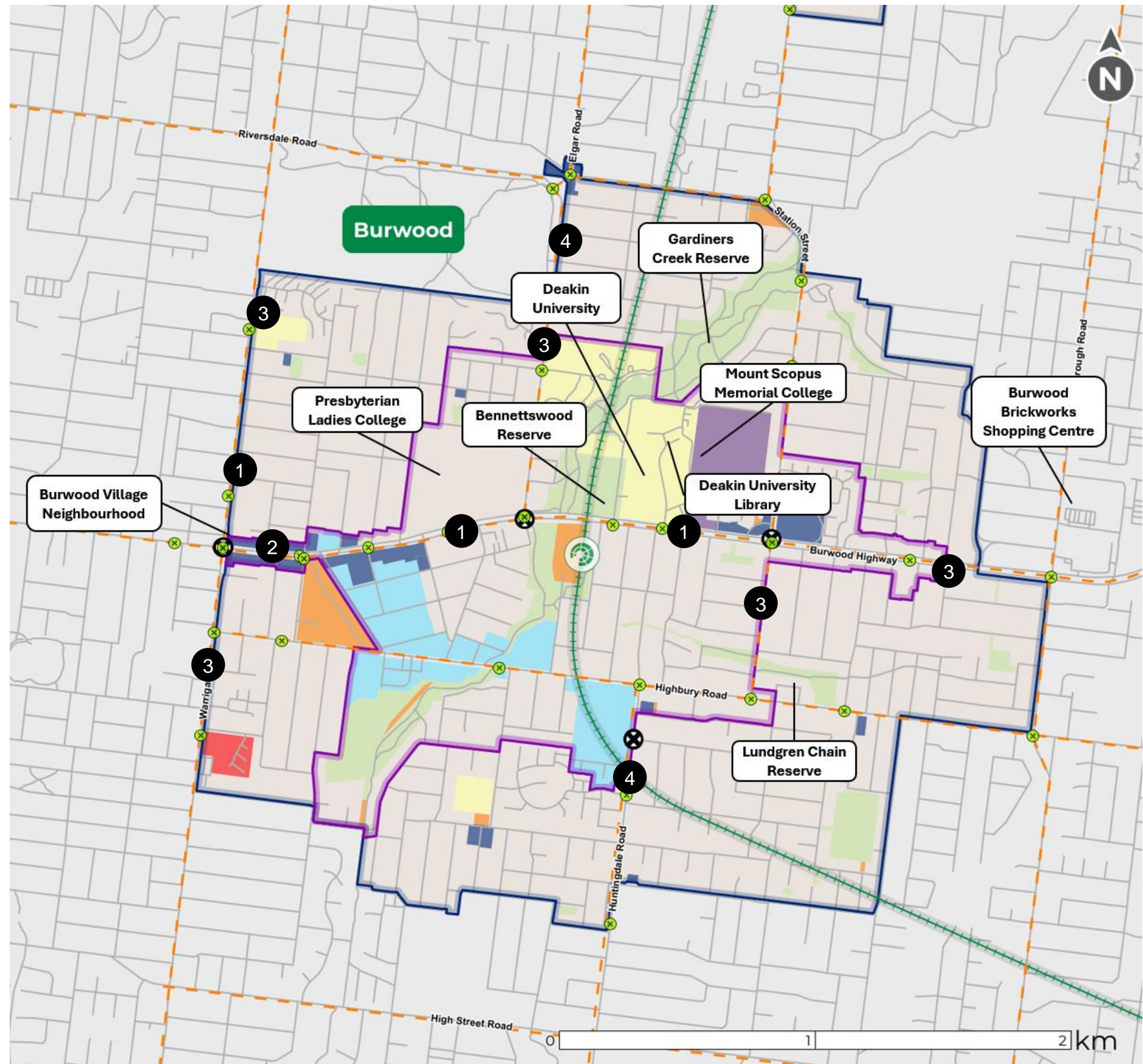


FIGURE 2.26 GENERAL TRAFFIC AND FREIGHT CHALLENGES IN THE BURWOOD STRUCTURE PLAN AREA

2.2.5 INTEGRATED PARKING

Car parking across the Burwood Structure Plan Area is available in the form of on-street and off-street car parking options at key destinations and residential and industrial areas. On-street and off-street parking is largely free although generally controlled by some form of parking restriction such as time-limited parking, permit zone or disabled parking.

OFF-STREET PARKING

There are nearly 5350 off-street car parking spaces in the Burwood Structure Plan Area, distributed across a mixture of at-grade and multi-level car parks, generally associated with specific land uses. These are shown in Figure 2.27.

Deakin University provides almost 70 per cent of the Structure Plan Area's off-street car parking which is predominately accessed along Burwood Highway at the Holland Avenue university access and at the alternative access directly east of Holland Avenue. There are two electric vehicle chargers located in Car Park 12 accessible via Elgar Road.¹⁵

While the Deakin University car parking comprises of paid parking and permit parking, there are generally no parking time restrictions. This encourages the use of private vehicles for university trips.

There is a high car parking demand for Deakin University which is nearing capacity at peak times. Car parking for the University is primarily concentrated in off-street carparks located within the campus as the surrounding on-street parking is controlled by short-term parking restrictions.

More information about off-street car parking supply and demand is provided in Section 2.2.2 of SRL East Structure Plan – Transport Technical Report – Appendix A – Precinct Parking Plan – Burwood.

¹⁵ Deakin University, *Getting to Burwood campus, Driving and parking*, <<https://www.deakin.edu.au/students/student-life-and-services/campus-information/getting-to-deakin/burwood>>



Off-street Parking	Count	Restriction Type	Paid Parking?
Commercial	629		
Greenwood Business Park	629	Visitor and Staff Parking	No
Education Institution	3645		
Deakin University Parking	3645	Varies i.e. Permit, Ticket, Staff, Timed Restrictions	Varies
Medical	72		
SIA Medical Centre	72	Unknown	No
Shopping centre	107		
Bennettswood Shopping Centre Car Park	50	1P-4P	No
Burwood Hwy and Milford Ave Retail car park	20	Unrestricted	No
Huntingdale Rd and Barlyn Rd Shopping Centre car park	37	1P-4P	No
Sports and Recreation	244		
Bennettswood Sports Ground North Parking	30	Unrestricted	No
Bennettswood Sports Ground South Parking	43	Unrestricted	No
Bennettswood Tennis Club car park	32	Unrestricted	No
Eastern Lions Soccer Club	14	Unrestricted	No
Gardiners Reserve car park	100	Unrestricted	No
Lundgren Chain Reserve Car Park	25	Unrestricted	No

FIGURE 2.27 BURWOOD OFF-STREET CAR PARKING (SOURCE: AJM JV PARKING INVENTORY)

ON-STREET PARKING

A parking inventory of the on-street parking was completed for the Burwood Structure Plan Area. Figure 2.28 shows on-street parking locations and corresponding parking restrictions in the vicinity of the SRL station at Burwood.

There are 'No Standing' restrictions during peak periods along Burwood Highway. In the immediate vicinity of the SRL station site, there are some sections of half-hour parking. There is a reasonable supply of on-street parking in the remaining area, with majority of these spaces imposing short-term parking restrictions.

Long-term parking is limited and typically located along streets on the southern and south-western edge of the Structure Plan Area. In addition, there is a clearway along Burwood Highway and Elgar Road, and no on-street taxi zones are within the Structure Plan Area.

There are currently around 1400 unrestricted on-street parking spaces within the Structure Plan Area.

More information about on-street car parking and demand is provided in Section 2.2.2 of SRL East Structure Plan – Transport Technical Report – Appendix A – Precinct Parking Plan – Burwood.

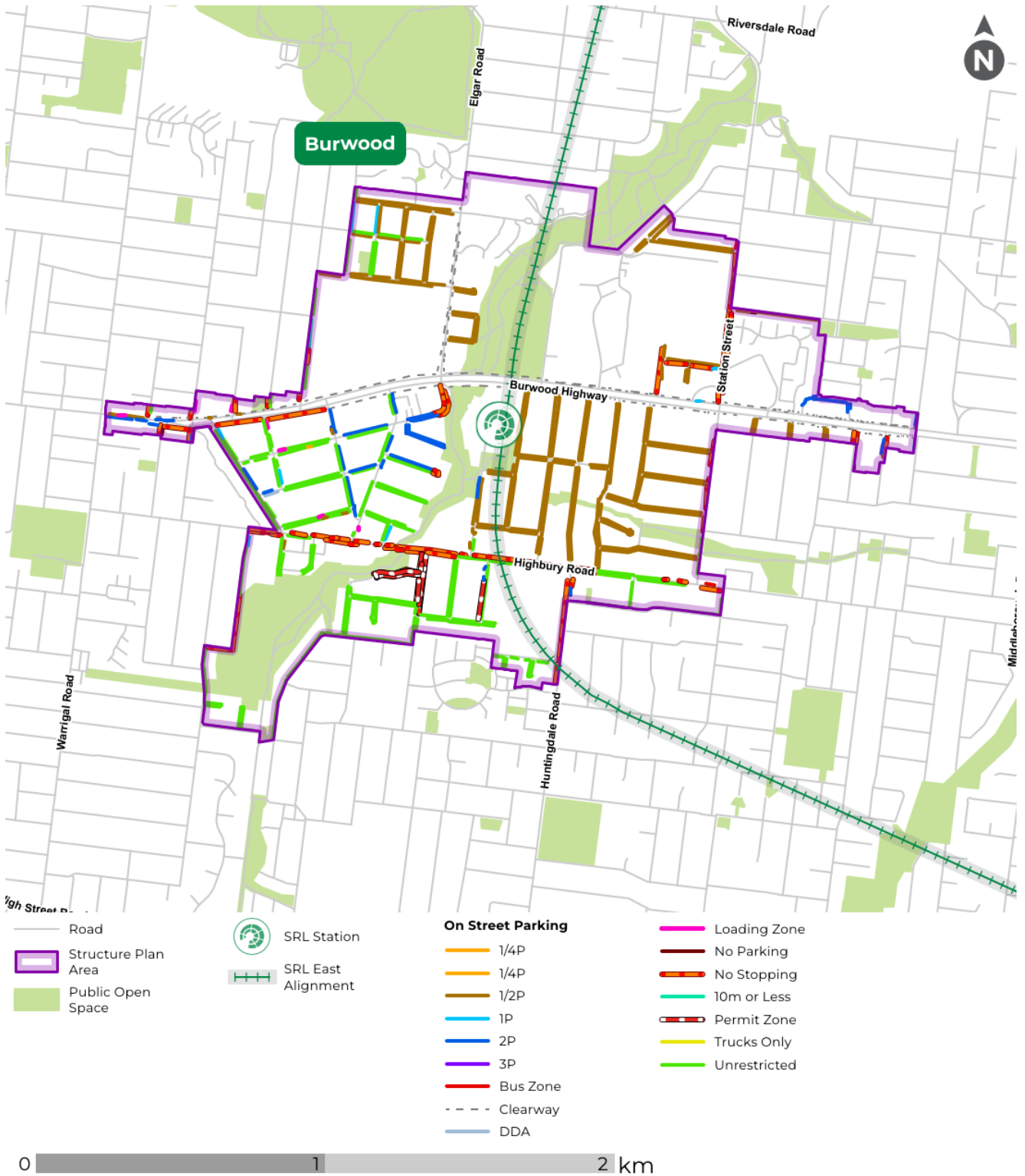


FIGURE 2.28 ON-STREET PARKING RESTRICTIONS – BURWOOD (SOURCE: AJM JV PARKING INVENTORY)

BICYCLE AND MICROMOBILITY PARKING

An inventory of public bicycle parking suggests bicycle parking is mainly provided at Deakin University, which has 80 bicycle parking spaces.¹⁶ Outside of Deakin University, public bicycle parking is only provided along minor shopping strips along Station Street, Burwood Highway and Huntingdale Road.

More information on bicycle parking locations is provided in Section 2.3 of SRL East Structure Plan – Transport Technical Report – Appendix A – Precinct Parking Plan – Burwood.

End-of-trip facilities in Burwood including secure parking, showers and lockers are only provided in newer developments and at Deakin University which are not typically accessible to the public.

INTEGRATED PARKING CHALLENGES

The parking challenges in Burwood are summarised and shown in Figure 2.29.












¹⁶ *AJM JV parking inventory*

Location-specific integrated parking challenges:

- 1 Deakin University accounts for approximately 70 per cent of off-street car parking in the Structure Plan Area. Abundant university parking may make mode shift challenging as it attracts a significant number of private car trips into the Structure Plan Area, exacerbating already significant traffic congestion, particularly during the peak periods along Burwood Highway.
- 2 On-street parking in some residential areas are short-term restricted (2 hours or less), implying a level of parking demand intrusion from non-residential land uses (such as Deakin University) into residential areas.
- 3 Significant numbers of on- and off-street car parking spaces are provided throughout the Structure Plan Area, with a high concentration within and around Deakin University, Burwood Industrial Park and the industrial area situated between Burwood Highway and Highbury Road.

Structure Plan area integrated parking challenges:

- Car parking provision, whether on or off-street, is a key factor that influences people’s decision to own and use a car. Continuing to provide car parking with developments in line with the wider area will increase congestion and the inefficient use of space.
- Limited *Disability Discrimination Act 1992* (Cth) (DDA Act)-compliant on-street car parking is provided.
- The current provision of cycling and micromobility storage and end-of-trip facilities does not support and encourage active and sustainable transport trips. Where there is public bicycle parking, it is generally ‘low’ quality in uncovered areas with varying levels of perceived security and safety.
- There is a significant level of ground-level parking provided to service existing recreational, educational, commercial and employment parking demands.

 SRL Station	Off-Street Car Parking Sites
 Road	 Commercial
 Structure Plan Area	 Education Institution
 Planning Area	 Medical
 Public Open Space	 Shopping centre
 SRL East Alignment	 Sports and Recreation

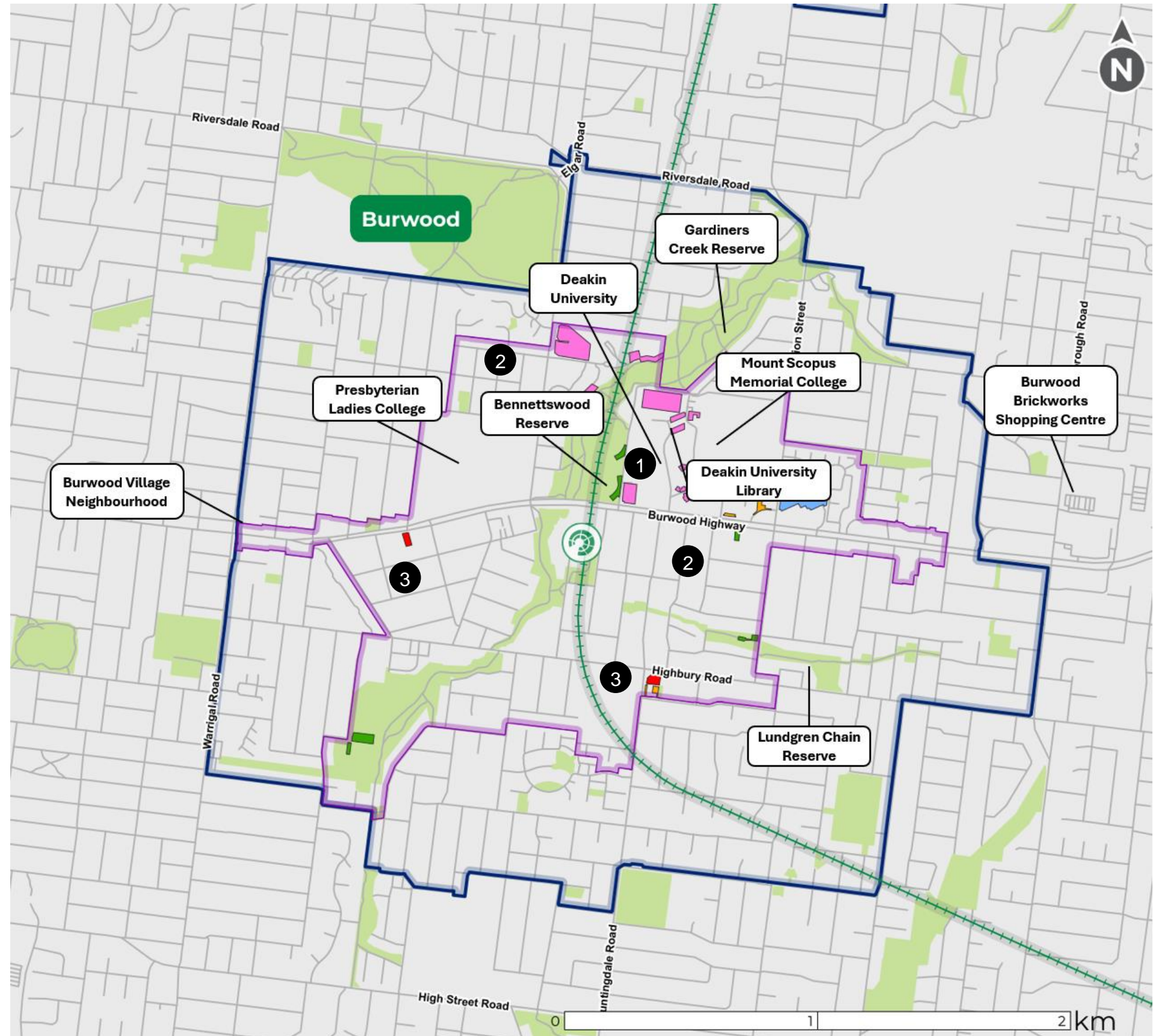


FIGURE 2.29 INTEGRATED PARKING CHALLENGES IN THE BURWOOD STRUCTURE PLAN AREA

2.3 Relevant policies and strategies

2.3.1 OVERVIEW

Victoria's legislative and policy framework sets a vision for an integrated transport system that is accessible, inclusive and safe for all Victorians.

A primary aim of the framework is to promote economic, environmental and social prosperity with integrated land use and transport networks. These networks should provide efficient and effective movement of people and goods and minimise transport costs with greater use of active and public transport modes.

2.3.2 LEGISLATION

The legislation that provides the framework for the development of the Burwood and other SRL East Structure Plan Areas is summarised in Table 2.5.

TABLE 2.5 TRANSPORT LEGISLATION

LEGISLATION	DESCRIPTION
<i>Planning and Environment Act 1987</i> (Vic)	This Act establishes Victoria's framework for land use planning, development, and protection in the present and future interests of all Victorians. Planning schemes are subordinate instruments under the Act that apply to local government areas and set out how land may be used and developed.
<i>Transport Integration Act 2010</i> (Vic)	This Act recognises that land use and transport planning are integrated and sets a vision for an integrated and sustainable transport system that contributes to an inclusive, prosperous, and environmentally responsible Victoria. The Act obligates transport planners and strategic land-use planners to have regard to the land-use impacts of decisions.
<i>Road Safety Act 1986</i> (Vic)	This Act provides for safe, efficient and equitable road use.
<i>Road Management Act 2004</i> (Vic)	This Act establishes a statutory framework for the management of the road network which facilitates the coordination of the various uses of road reserves for roadways, pathways, infrastructure and similar purposes.
<i>Local Government Act 2020</i> (Vic)	This Act gives legislative force to local government powers, including in respect or roads.
<i>Suburban Rail Loop Act 2021</i> (Vic)	This Act recognises the scale and complexity of planning and delivering a project that encompasses multiple municipalities. The Act establishes the SRLA and provides it with the power to plan, deliver and manage the operation of SRL and development associated with SRL.

2.3.3 POLICIES, STRATEGIES AND PLANS

The evolution of Melbourne from a mono-centric to a poly-centric city has been at the heart of the Victorian Government policy for many years. Strategies such as Plan Melbourne and DTP's strategic plans have been pursuing the need to consider development growth and supporting infrastructure more efficiently.

More recently, recognition of climate change and the harm of private car travel to the environment and health of our communities has led to plans and policies such as the National Electric Vehicle Strategy and Victoria's Road Map to Zero Emissions.

Policies, strategies and plans that informed the transport ambition for Burwood are summarised in Table 2.6.

TABLE 2.6 NATIONAL AND STATE POLICIES THAT INFORM THE TRANSPORT AMBITION FOR BURWOOD

PLANS AND POLICIES	DESCRIPTION
Plan Melbourne 2017–2050 and Plan Melbourne addendum 2019 (DTP, 2017 and 2019)	Sets out a long-term strategic vision for land-use and development in Victoria. Its policies include Melbourne becoming a polycentric city which is sustainable and resilient and which supports vibrant and healthy neighbourhoods where people can meet most daily needs within a 20-minute active or public transport trip from home.
Victoria Infrastructure Strategy 2021–2051 (Infrastructure Victoria, 2021) and Victorian Infrastructure Plan 2021 (Victorian State Government, 2021)	Victoria’s Infrastructure Strategy 2021–2051 provides recommendations to the Victorian Government for planned infrastructure in Victoria. The 30-year strategy seeks to address existing infrastructure pressures, demand on existing infrastructure, and assist in planning the timing and location of required and necessary new infrastructure. The Infrastructure Strategy includes strategic opportunities to improve the Victorian rail network, including SRL as an intended rail project. The Victorian Government has responded to the Strategy with the Victorian Infrastructure Plan 2021 that provides government’s response to the Strategy.
Public Transport Guidelines for Land Use Development (DTP, 2008)	<p>The Public Transport Guidelines for Land Use and Development aim to assist decision-making on statutory and strategic planning proposals for land use developments that affect public transport planning and delivery. It is intended the Guidelines will assist with site design to facilitate the delivery and use of public transport services. Good design for public transport helps ensure the provision of a sustainable transport network now and for future.</p> <p>The Guidelines assist in addressing the public transport aspects of structure plans and other strategic planning documents for SRL East.</p>
Strategic Plan 2024–28 Thriving Places and Connected Communities (DTP, 2023)	<p>The Strategic Plan sets out the visions for integrating transport and land use to create thriving places and connected communities. Key focus areas of the Strategic Plan relevant to transport and SRL include:</p> <ul style="list-style-type: none"> • Improving integration across transport, land and planning systems • Setting and implementing a strategy for support jobs, housing, and transport while building on Melbourne’s distinctiveness, liveability, and sustainability • Enhancing environmental sustainability through initiatives that create healthy and liveable communities and places • Support access to lower emission modes of transport • Improving social outcomes and liveability for all Victorians • Giving Victorians more transport options and improve access to essential services.
Future Directions (DTP, Nov 2023)	<p>Sets out the six strategic directions that will establish long-term objectives for movement. Directions considered key to SRL East structure planning include:</p> <ul style="list-style-type: none"> • Enable new travel patterns – planning transport to facilitate new travel patterns that connect more people to more jobs through local movements, public and active transport and increasing vehicle occupancy • Promote transition to environmentally sustainable transport – supports pledges and targets set out Victoria’s Climate Change Strategy • Maximise opportunities created by new and evolving technologies – micromobility and new forms of managing travel • Support the many different journeys people take every day and meet a diverse range of needs.
Movement and Place in Victoria (DTP, February 2019)	The Movement and Place (M&P) Framework brings to life the strategic objectives of transport and land use planning in Victoria in the context of road safety and environmental outcomes. The Framework provides a tool to translate the broad transport outcomes the <i>Transport Integration Act 2010</i> (Vic) aims to achieve into priority changes to improve link and place performance for communities. The M&P Framework supports how DTP plans the road and transport network, while acknowledging that each street and road will have different roles in supporting place and movement. It translates the broader transport network into a series of aspirations for individual roads, streets and interchanges based on their desired functions in the network as well as balancing the needs of people and communities.
National Electric Vehicle Strategy (Department of Climate Change, Energy, the Environment and Water, 2023)	The Electric Vehicle Strategy sets out national aims to increase electric vehicle (EV) demand through affordability and increasing infrastructure.
Victoria’s Climate Change Strategy (Department of Climate Change, Energy, the Environment and Water, 2021)	The Climate Change Strategy recognises that transport is the state’s second-biggest contributor to greenhouse gas and minimising this will be key to meeting emission targets. The Strategy recognises the role of SRL in increasing ‘clean’ public transport. It commits to 100% of all Victoria’s new buses to be zero emission from 2025; a 25% active transport mode share by 2030; and 50% of all light vehicle sales to be zero emission by 2030.
Victoria’s Zero Emissions Vehicle Road Map (Department of Environment, Land, Water and Planning, 2021)	The Zero Emissions Vehicle Road Map signals an intent for the state to transition to net zero emission in road transport by 2050, noting that it will take around 25 years to manage the transition, with a target for half of all new vehicle sales to be zero emissions by 2030.

SRL East will be crucial to achieving the objectives of these plans and strategies. It will address the imbalance between travel choices for suburb to central city trips and getting from one suburban hub to another, providing true modal choice for middle to outer Melbourne orbital movements. SRL East structure planning will adopt a 'live locally' approach based on the *Plan Melbourne* 20-minute neighbourhood principle, where every day needs can be met within a short walk, cycle, or local public transport trip from home. Residents should be able to access local facilities, learning institutions, green spaces, housing, transport interchanges, and job opportunities through a 20-minute journey. This aims to facilitate people living and working with less need to travel by private car. It is expected that appropriate structure planning and the delivery of SRL East will:

- Provide a more efficient public transport network as passengers would not need to travel into the city and then out to their ultimate destination
- Encourage local trips to be made by active and public transport, reducing reliance on private car trips
- Improve the viability of living in the outer and middle suburbs and drive growth and community around the new infrastructure
- Reduce middle to outer Melbourne orbital movements made by private car
- Enable more people to live in the SRL East Structure Plan Areas closer to jobs and activity reducing personal time spent travelling.

2.3.4 LOCAL PLANS AND POLICIES


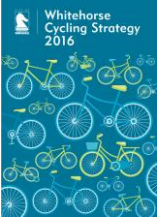

The Burwood Planning Area and Structure Plan Area is located in the City of Whitehorse and the City of Monash. The statutory framework for the Planning Area will be covered in the Whitehorse and Monash Planning Schemes.

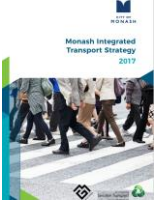
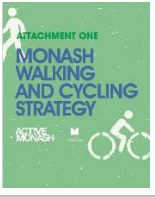
The recommendations for the Burwood Structure Plan Area are influenced by and will support Whitehorse and Monash City Council transport policies and will seek to maintain effective transport networks in Burwood and the municipalities. The key transport themes in the Whitehorse and Monash City Council policies include:

- The need to move away from private car travel to more sustainable modes of transport, with a road user hierarchy that reflects this shift
- Walking and cycling as the preferred transport choice, particularly for short local trips
- Potential for reducing car parking rates in major activity centres.

Local policies and strategies that informed this report are summarised in Table 2.7. The directions and actions that informed specific Burwood recommendations for the Structure Plan Area are identified in the relevant areas of this report.

TABLE 2.7 LOCAL PLANS AND POLICIES CONSIDERED FOR BURWOOD

DOCUMENT	DESCRIPTION	RELEVANT INSIGHTS
<p>Whitehorse Planning Scheme (last updated Jan 2024)</p>	<p>Establishes the statutory framework for land use and development in City of Whitehorse.</p> <p><i>Was SRL considered? Yes</i></p>	<ul style="list-style-type: none"> • Desire to prioritise transfers on foot between the rail services, buses and trams • Motor vehicle access (taxis, deliveries etc) will have a lower priority than active and public transport, and short and long term parking the lowest priority • Access to and from the Burwood Structure Plan Area supported by strong active transport networks. Conditions should ensure that most trips up to 1 kilometre are on foot and many trips under 5 kilometres are by bicycle or micro-mobility devices.
<p>Whitehorse Integrated Transport Strategy 2011</p> 	<p>Provides strategic direction to facilitate travel that is sustainable, convenient, accessible and safe.</p> <p><i>Was SRL considered? No</i></p>	<ul style="list-style-type: none"> • Desire to improve pedestrian facilities in activity centres to encourage walking • Desire to improve the cycling network • Encouraging increased uptake of public transport.
<p>Whitehorse Cycling Strategy 2016</p> 	<p>Identifies actions aimed at increasing cycling participation across user groups of all abilities by creating a low stress network.</p> <p><i>Was SRL considered? No</i></p>	<ul style="list-style-type: none"> • Provide a low stress cycling network • Increase cycling ridership across user groups of all abilities • Link the off-road cycling network.
<p>Whitehorse Community Road Safety Strategy 2013</p> 	<p>Identifies actions to reduce road safety risk in Whitehorse, especially for vulnerable road users, such as pedestrians, bicycle riders and people with limited mobility. Highlights that the intersection of Whitehorse Road and Station Street is the site of many pedestrian injuries and fatalities.</p> <p><i>Was SRL considered? No</i></p>	<ul style="list-style-type: none"> • Improve safety for pedestrians and cyclists of all abilities • Reduce vehicle speeds, especially in areas with higher pedestrian volumes, and high-risk areas.
<p>Monash Planning Scheme (last updated Jan 2024)</p>	<p>Establishes the statutory framework for land use and development in City of Monash.</p> <p>Includes Clause 18 to cover transport. No local policies are included under Clause 18. However, SRL is recognised in transport and settlement clauses of the scheme.</p> <p>Clause 11.01-1R recognises SRL as a key strategy in facilitating substantial growth and change in major employment, health, education and activity centre precincts.</p> <p><i>Was SRL considered? Yes</i></p>	<ul style="list-style-type: none"> • Planning to ensure a safe, integrated and sustainable transport system • Creating mixed use neighbourhoods while delivering better access to services and facilities • Planning a network of activity centres linked by transport • Support SRL to facilitate growth and change in major employment, health, activity centres and education beyond the central city.

DOCUMENT	DESCRIPTION	RELEVANT INSIGHTS
<p>Monash Integrated Transport Strategy 2017</p> 	<p>Provides strategic direction to facilitate travel that is sustainable, convenient, accessible and safe.</p> <p><i>Was SRL considered? No</i></p>	<ul style="list-style-type: none"> • A safer network – recognising issues with shared paths and public transport use • A more accessible Monash – reducing the need to travel and increase the viability of transport choice • Promote sustainable transport – improving pedestrian and bicycle network • Support productivity – minimising the impact of freight on safety, amenity and the environment, supporting freight efficiency • Manage car parking – improving the efficiency of kerb space, balancing car parking with safe and accessible street network for pedestrians and cyclists.
<p>Monash Walking and Cycling Strategy 2023</p> 	<p>Aims to establish the City of Monash as a city that is walking and bicycle friendly. Identifies the key issues of unsafe and fragmented pedestrian and cycling network and how it impacts users' likelihood of traveling via active transport modes.</p> <p><i>Was SRL considered? No</i></p>	<ul style="list-style-type: none"> • Ensure walking and cycling networks consider the needs of all people • Eliminate barriers and unsafe cycling infrastructure in the greater network • Promote cycling uptake as both, a recreational activity and transportation mode.
<p>Monash Road Management Plan 2021</p>	<p>Outlines the road infrastructure managed by Council and the shared responsibilities with other road authorities.</p> <p><i>Was SRL considered? No</i></p>	<ul style="list-style-type: none"> • Highlights Council's role in implementing the vision for Burwood, especially around road space allocation and management.

2.4 Summary

Table 2.8 summarises the key findings of the existing conditions assessment.

The review of key national, state and local transport policies and strategies relevant to Burwood informs the development of recommendations for the Burwood Structure Plan Area. The recommendations will support key transport policies and strategies and seek to maintain effective transport networks in Burwood and the municipality.

TABLE 2.8 EXISTING CONDITIONS SUMMARY BY MODE

MODE	SUMMARY
Active transport	<ul style="list-style-type: none"> • Most streets in Burwood have footpaths on both sides of the road and provide pedestrian access to dwellings and key destinations such as Deakin University, tram and bus stops, Burwood Village and local shops and services • Comfortable and safe walking journeys are catered for along Morgan's Walk pedestrian bridge in Deakin University and along Gardiners Creek Trail • There are a few separated cycle routes serving Burwood, specifically along Gardiners Creek Trail and within public green spaces such as Lundgren Chain Reserve and Federal Reserve. The remainder of the road network in Burwood has no or limited cycling infrastructure • Large urban blocks, high trafficked arterial roads, lack of crossings and many dead-end streets reduce active transport connectivity, particularly east of Deakin University campus (that is, east of Elgar Road) as well as in the south of Burwood.

MODE	SUMMARY
Public transport	<ul style="list-style-type: none"> • The Burwood Planning Area is currently serviced by tram route 75 along Burwood Highway and tram route 70 along Riversdale Road. There are also seven bus routes along key arterial roads in Burwood including three routes servicing Deakin University. There is currently no train station in the Burwood Planning Area • Tram route 75 along Burwood Highway includes poorly designed tram stop platforms that are difficult to access • Bus service frequency varies across Burwood with some infrequent services. There is also poor bus coverage south of Highbury Road • Buses do not have priority lanes or signalling on the major arterial roads, resulting in service delays during peak period for buses travelling on heavily trafficked roads, such as Elgar Road, Station Street, Highbury Road, and Warrigal Road.
Private vehicles	<ul style="list-style-type: none"> • Vehicle access throughout Burwood is provided by multi-lane arterial roads and an extensive network of connector and local streets • No Principal Freight Network (PFN) routes pass through the Planning Area. However, the arterial roads in Burwood form part of the B-Double Heavy Vehicle network catering for freight vehicles • Unprotected right turn lanes along Burwood Highway that allow vehicles to cross the tram tracks can increase the risk of collision between drivers and trams • There is a lack of arterial road connectivity between Elgar Road and Huntingdale Road which can create convoluted movements and encourages rat running • While the current private vehicle mode share is generally within the capacity of the road network other than some peak hour congestion points, maintaining a similar private vehicle mode share into the future will not be sustainable and will be detrimental to the liveability within the Structure Plan Area • Burwood caters for relatively high through traffic volumes which can contribute to congestion and impact on trips within Burwood.
Integrated parking	<ul style="list-style-type: none"> • There are approximately 5350 off-street car parking spaces in the Burwood Structure Plan Area, distributed across a mixture of at-grade and multi-level car parks • There are currently around 1400 unrestricted on-street car parking spaces within the Structure Plan Area • Bicycle parking in Burwood is mainly provided in Deakin University. Outside of Deakin University, public bicycle parking is only provided along minor shopping strips along Station Street, Burwood Highway and Huntingdale Road • Deakin University accounts for approximately 70 per cent of off-street car parking in the Structure Plan Area. Abundant university parking may make mode shift challenging as it attracts a significant number of private car trips into the Structure Plan Area, exacerbating already significant traffic congestion, particularly during the peak periods along Burwood Highway • On-street parking in some residential areas are short-term restricted (2 hours or less), implying a level of parking demand intrusion from non-residential land uses (such as Deakin University) into residential areas.

3 The SRL project

3.1 Overview

The Burwood Planning Area is one of six precincts that form part of Suburban Rail Loop (SRL) East – the first stage of the 90-kilometre orbital loop linking every major rail line between Cheltenham, Melbourne Airport and SRL West (to Werribee) as shown in Figure 3.1. The six stations include Cheltenham (located near Southland, between Cheltenham and Highett), Clayton, Monash (located in Notting Hill, between Clayton and Glen Waverley), Glen Waverley, Burwood (located between Box Hill South and Ashwood), and Box Hill.

SRL will connect major employment, health and education centres in the city’s middle suburbs and provide highly accessible nodes that can be used to support Melbourne’s growing housing and employment needs in a sustainable manner. To do this, more than just the SRL stations are required. The SRL Precincts will need to foster a new approach to travel and living in these areas.

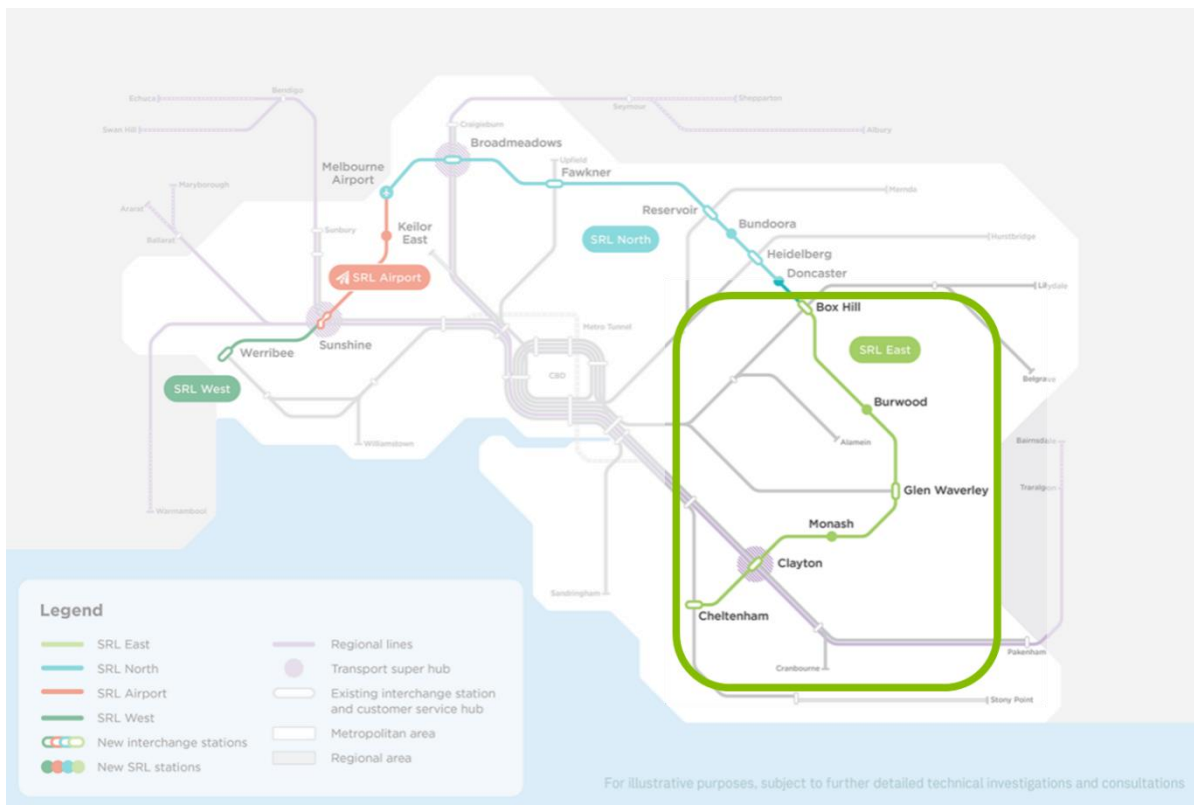


FIGURE 3.1 SRL EAST IN THE CONTEXT OF THE WIDER SRL PROJECT

High population growth on Greater Melbourne's expanding urban fringe has been driving many households further from employment centres, leading to longer commutes, increased congestion and more crowded public transport. This pattern of growth risks entrenching disadvantage, with inequitable access to good jobs, services, affordable housing, amenities and recreational opportunities. There is already significant demand for orbital travel around Melbourne, with many people travelling to work and other destinations by car because there isn't a fast rail option.

SRL addresses these challenges by delivering important cross-suburb travel connections between major employment centres, hospitals, universities and retail, shortening commutes and improving cross-suburb connectivity. While growth in SRL Precincts will give more Victorians access to employment opportunities, affordable housing and services – all within a short walk from a station.

Construction of SRL East from Cheltenham to Box Hill began in June 2022, and SRL East is expected to start operating by 2036.

3.2 SRL East Project Environment Effects Statement and planning approvals

The SRL East Project’s Environment Effects Statement (EES) was released in 2021. The EES identified the benefits and potential impacts of the SRL East Project on people and places during its construction and operation and proposed ways to avoid, minimise, offset or manage any effects.

Planning approvals for the SRL East Project were informed by the EES and were granted following the Minister’s Assessment in late 2022. These approvals included Planning Scheme Amendment (PSA) GC197 that introduced an Incorporated Document under Specific Controls Overlay Schedule 14 (SCO14) to facilitate delivery of SRL East. Amendment GC197 came into force on 30 September 2022.

A key condition of the Incorporated Document is an Environmental Management Framework containing Environmental Performance Requirements (EPRs) managing the project’s design, construction and operation impacts. These included EPRs specifically managing traffic and transport impacts associated with the SRL East Project, some of which refer to impacts on the wider precincts. The Environmental Management Framework was approved by the Minister for Planning on 17 October 2022.

The EES nominated Environmental Performance Requirements (EPR's) were contained within the SRL East Project Environmental Management Framework as approval requirements for the project. There are eight transport EPR's, EPR's T1-T5 relate to detailed project construction and delivery issues (traffic management and coordination, road reinstatement etc) and are not the focus of this section or the TTR. Rather Table 3.1 below highlights sections of EPR's T6-T8 which in addition to actions delivered by the SRL East Project could benefit from relevant commentary and actions within the TTR. The Minister's Assessment of the EES also identified some issues for further assessment which are discussed in Section 3.5 of this report.

TABLE 3.1 EPRS RELEVANT TO THIS REPORT¹⁷

SRL EAST PROJECT TRANSPORT BASED EPR	STRUCTURE PLAN TRANSPORT TECHNICAL REPORT (THIS REPORT) CONSIDERATION
T6. Road transport design and operation.	
T6-2. Develop and implement street network designs for each affected street within the Project Land in consultation with the relevant road management authorities that includes:	
a) The design of the road network should reflect the aspirational Movement and Place outcomes for each precinct as well as changed demands as a result of the Project	Movement and Place classification reviews and existing level of service gap assessments, and Recommendation to safeguard the M&P modal priorities
b) Maintaining safe operations through the precincts.	Pedestrian and cyclist safety considered in network upgrade recommendations including strategic corridors, green streets and new and upgraded signal crossings
T6-3. Develop and implement a plan for each precinct to manage reinstated parking within the Project Land, in consultation with the relevant road management authorities, that:	
a) Minimises the permanent loss of parking where possible and determine the optimal parking provision in the area, including	The Parking Precinct Plan provides recommendations with respect to parking that may be relevant in responding to this EPR

¹⁷ bigbuild.vic.gov.au/__data/assets/pdf_file/0003/717645/SRL-East-Environmental-Management-Framework.pdf

SRL EAST PROJECT TRANSPORT BASED EPR	STRUCTURE PLAN TRANSPORT TECHNICAL REPORT (THIS REPORT) CONSIDERATION
<p>prioritising meeting specialised parking needs within the precinct such as emergency services, loading and DDA compliant parking.</p> <p>b) Reduces the risk of overflow parking in local streets.</p> <p>c) Provides alternative locations for station commuter parking impacted during construction identified in consultation with relevant stakeholders. If needed this can be provided outside the Project Land.</p> <p>d) Includes recommended Pick Up / Drop Off (PuDo) locations following further assessment during the design phase.</p>	<p>requirement, however the focus of the EPR is reinstatement of parking impacted by the SRL project and will be addressed as a project not structure planning issue.</p>
<p>T6-5. Collaborate with DoT and Councils to manage the operation of the road network in the vicinity of SRL precincts for all road users. This would encourage appropriate mode of access to the station precincts and to discourage through traffic. This should include reviewing the performance of the wider network so that opportunities to re-distribute through traffic away from station precincts can be pursued and sensitivity testing of different precinct development scenarios.</p>	<p>The TTR seeks to address transport movements to, from and within the Structure Plan Area with Section 5.4 explaining the target mode share for the precinct and actions to achieve that mode share explained in Section 6 and 7.</p>
<p>T7. Public transport design and operation</p>	
<p>T7-1. Design the SRL stations and new bus interchanges to ensure integration with existing and planned future uses so they provide connections to key destinations and existing railway stations and bus interchanges and be in accordance with the Urban Design Strategy (UDS). The design should also provide adequate wayfinding to facilitate passenger transfers.</p>	<p>Infrastructure recommendation supporting the planning for new or upgraded bus interchanges</p>
<p>T7-2. Implement measures to address pedestrian congestion at and around station entrances where they interface with the precincts, to the extent practicable, in consultation with relevant road management authorities.</p>	<p>Considered in upgraded strategic corridors providing access to station entrances, to be addressed in design scope beyond the precinct Transport Technical Reports</p>
<p>T8. Active transport design and operation</p>	
<p>T8-3. Provide wayfinding information to enhance connectivity for pedestrians, cyclists and public transport users to move to, from, through and within the interchanges and precincts.</p>	<p>Considered in the SRL East Structure Plan - Urban Design Report - Burwood</p>

The remaining transport EPRs are considered to relate specifically to the construction of SRL East Project and contractors are responsible for the implementation of the measures to address these.

3.3 SRL Burwood rail and infrastructure works

This section summarises the SRL East Project's scope being delivered under the SCO14 Incorporated Document and outlined in the Surface and Tunnel Plans approved by the Minister for Planning on 18 October 2022.

The SRL station at Burwood will be located adjacent to Deakin University and close to the Gardiners Creek Trail and Burwood Highway, with a station entrance facing the university. The SRL station will integrate with local tram and bus services, including the route 75 tram. The SRL station at Burwood is expected to cater for around 15,000 passenger boardings from Burwood per weekday by 2041¹⁸ and will significantly increase accessibility to the area by public transport.

The increasing public transport accessibility of Burwood is shown in Figure 3.2. Burwood residents will be able to access education, work and services near all SRL East stations within 30-minutes. Travel times between

¹⁸ SRL East – Traffic and Transport Impact Assessment. TA R.2 Transport IA Revision 01, October 2021 (Table 5.4)

Burwood and many suburbs in the municipalities of Casey, Maroondah, Kingston, Greater Dandenong and Manningham will reduce by 15 to 30 minutes.

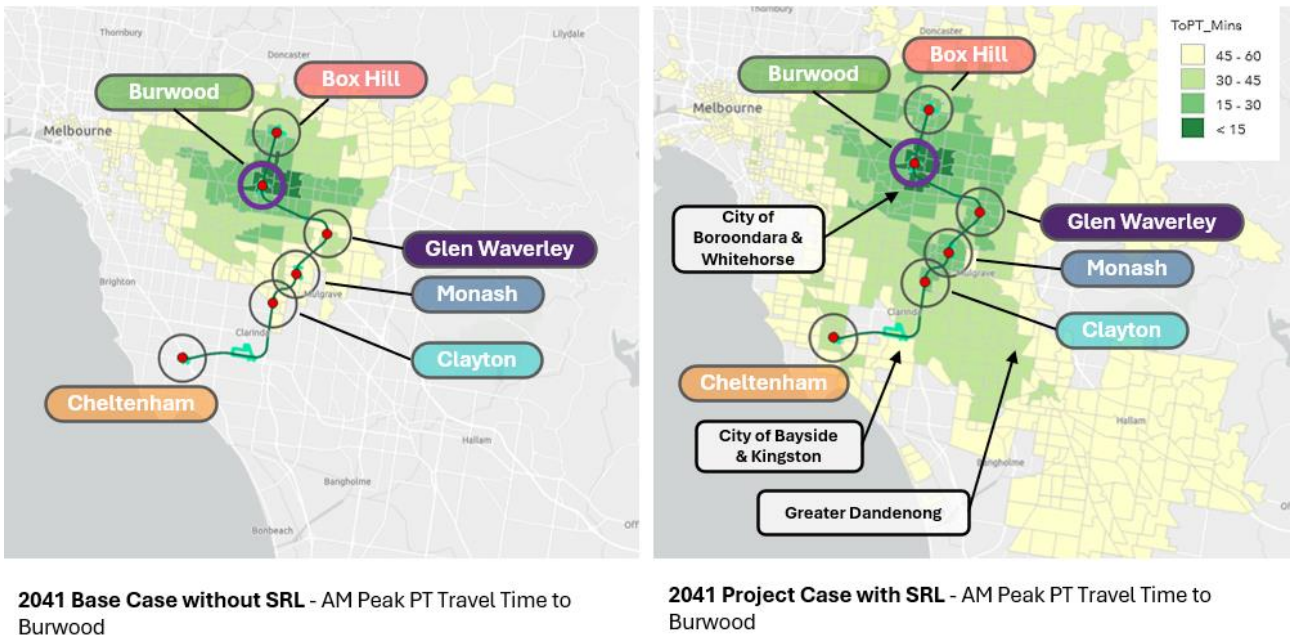


FIGURE 3.2 INCREASED PUBLIC TRANSPORT ACCESSIBILITY OF BURWOOD WITH THE SRL EAST PROJECT¹⁹

The new underground SRL station at Burwood will better connect students, deliver faster and more reliable public transport, and better connectivity to stations on the metropolitan network.

Improvements to walking and cycling, public transport and road connections and infrastructure around the SRL station will provide an accessible, safe and integrated network for travel through and within Burwood.

The SRL East Project’s scope is generally in accordance with the project’s reference design, which will be subject to minor changes during the detailed design phase.

The SRL East station at Burwood and associated surface transport infrastructure works are summarised and shown in Figure 3.3.

¹⁹ SRL East – Traffic and Transport Impact Assessment. TA R.2 Transport IA Revision 01, October 2021 (Section 8.1.3)

- 1 SRL station at Burwood located south of Burwood Highway.
- 2 A new *Disability Act Discrimination 1992* (Cth) (DDA)-compliant overpass bridge provided exclusively for pedestrians crossing Burwood Highway connecting the SRL station and Deakin University, as well as improved links to Gardiners Creek Trail and nearby schools.
- 3 A new tram stop outside the SRL station on Burwood Highway near Deakin University, providing ramps and crossings for patrons at both ends of the platform.
- 4 Extension of Sinnott Street to connect with Burwood Highway and new streets connecting Sinnott Street and McComas Grove.
- 5 A new bus interchange on Sinnott Street, including bus only access via the new signals at the intersection of Sinnott Street and Burwood Highway.
- 6 DDA compliant Accessible' pick-up / drop-off areas and taxi bays and a cycle hub adjacent to the SRL station entrance providing a total of 600 spaces.
- 7 New signalised crossings of Burwood Highway at Sinnott Street and McComas Grove, providing safe crossing opportunities for pedestrians and cyclists.
- 8 A shared user path along the north side of Burwood Highway from Holland Avenue to Gardiners Creek Trail.
- 9 Upgrade of Gardiners Creek Trail on the north side of Burwood Highway.

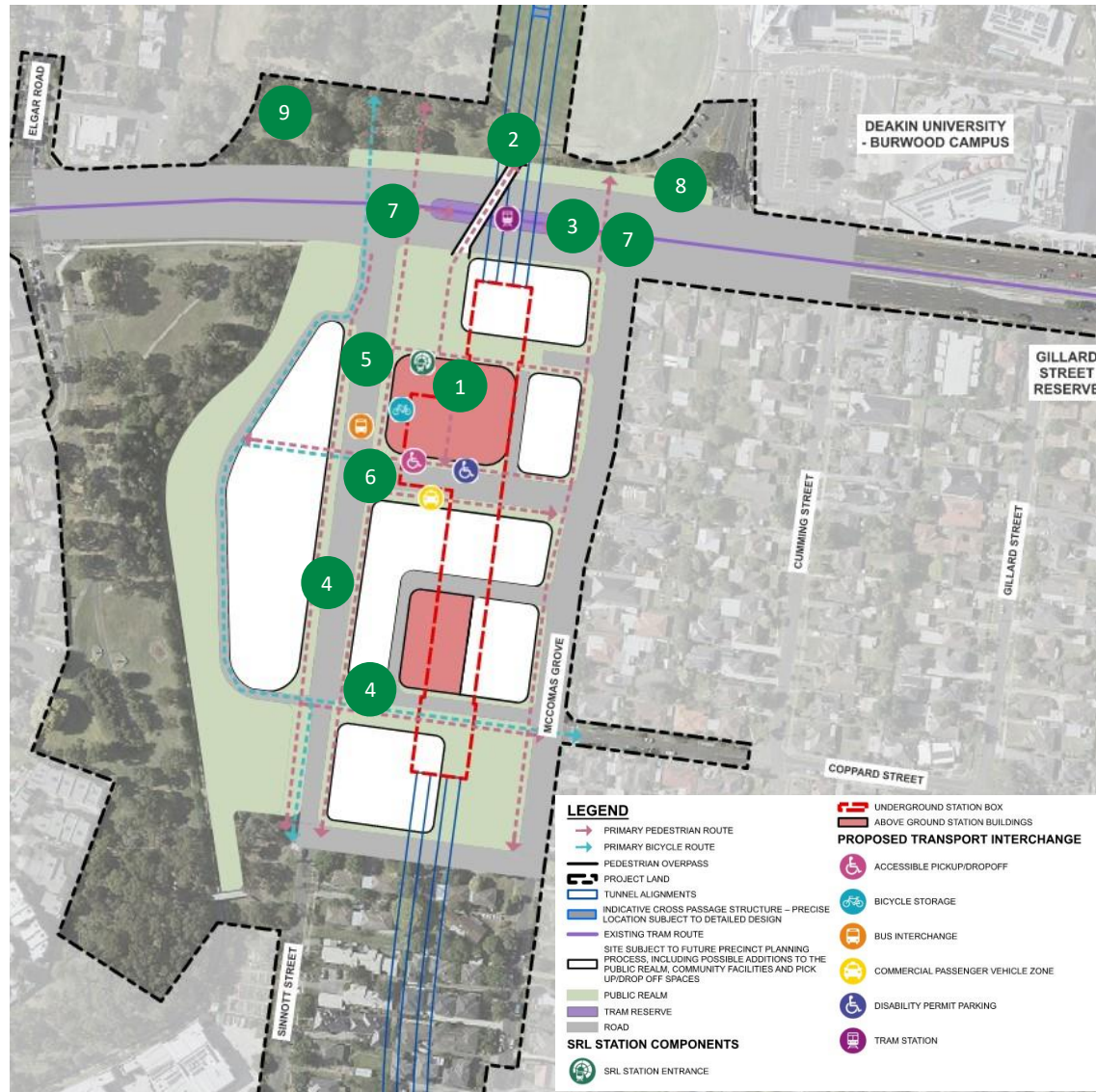


FIGURE 3.3 MAIN SRL EAST AND ASSOCIATE SURFACE TRANSPORT INFRASTRUCTURE IN BURWOOD (BACKGROUND MAP SOURCE: SURFACE AND TUNNEL PLANS ENDORSED APRIL 2024)

3.4 EES traffic and transport assessment

A Traffic and Transport Impact Assessment was prepared for the SRL East Environment Effects Statement (EES) (2021). The impact assessment outlined the proposed infrastructure to be provided as part of the SRL East station works and evaluated the associated traffic impacts and benefits on the transport network for stakeholders and the broader community.

In Burwood, the impact assessment focused on the impacts associated with construction and operation of the SRL station at Burwood. While the physical impacts were localised within the ‘SRL project land’ affected by the project works (see Figure 3.4), the impact assessment considered the wider implications on the transport network from the localised works. FIGURE 3.5 shows an extract of the broader traffic network assessed as part of the EES Traffic and Transport Impact Assessment, which includes the Burwood Structure Plan Area.



FIGURE 3.4 PROJECT LAND AREA IN BURWOOD

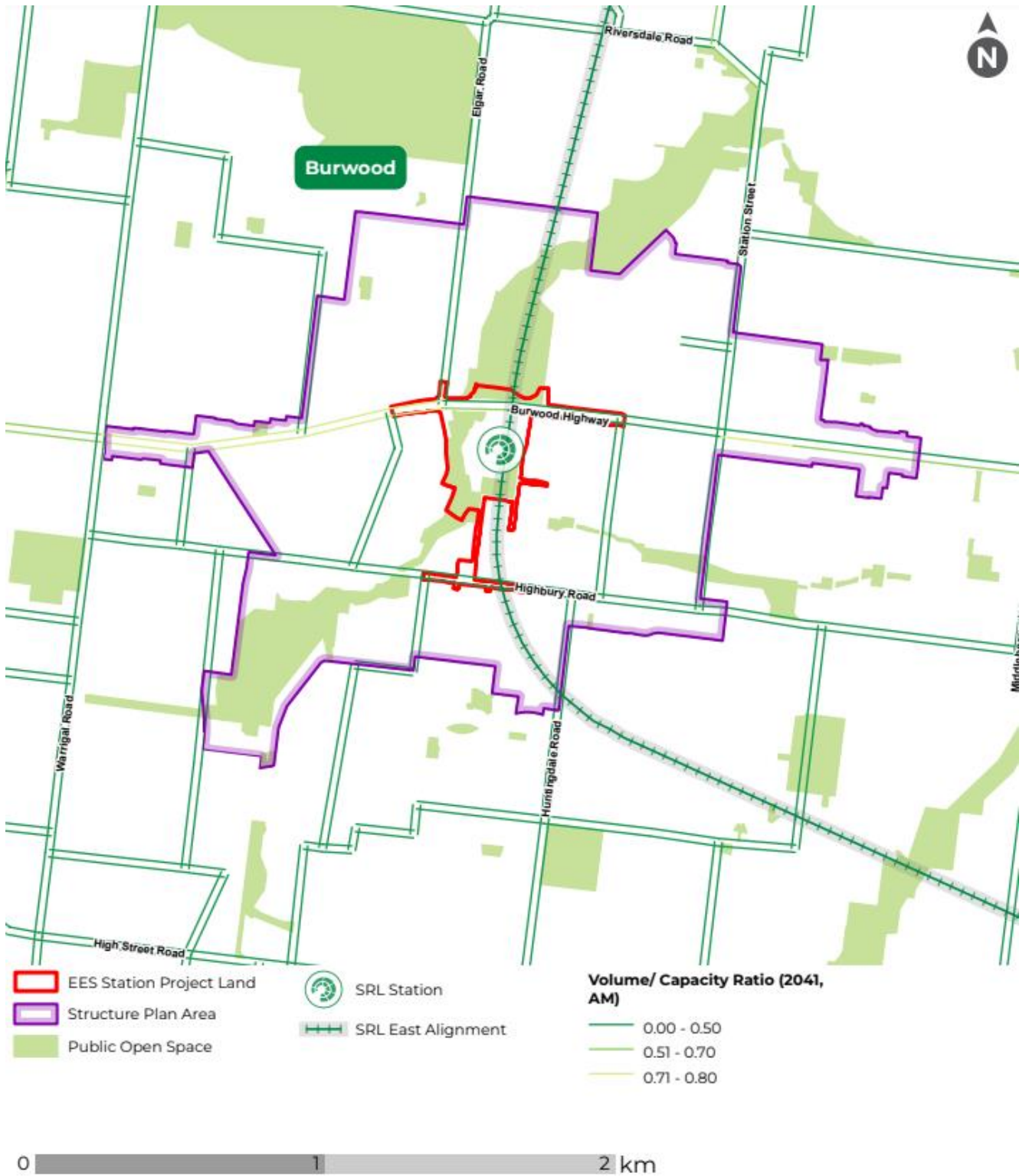


FIGURE 3.5 WIDER TRANSPORT NETWORK MODEL (BASE MAP) ASSESSED BY SRL EAST PROJECT'S EES AND BURWOOD STRUCTURE PLAN AREA

The operational assessment within the EES Traffic and Transport Impact Assessment was undertaken by comparing the future state in 2041 without SRL East (known in that report as the 'Future No Project Case') against the future state with SRL East (known in that report as the 'Project Case').

Each transport mode was assessed considering growth in population, employment and enrolments and the associated change in travel demands in the vicinity of SRL East. The *Future No Project Case* used an existing

land use forecast which did not take the SRL East Project into account. The growth in population, employment and enrolments for the *Project Case* was developed specifically for SRL East using CityPlan, a Land Use and Transport Interaction (LUTI) model for Victoria which estimates the land use impacts and shift in demographics as a result of major transport projects like SRL East.

In simplest terms, CityPlan used the existing forecast of land use growth in Victoria developed without SRL East and redistributed land use development (and associated population and employment) across Melbourne including into the SRL East precincts in response to the increased transport accessibility and development capacity proposed through the SRL East Project. The CityPlan model was peer reviewed during the development of the SRL Business and Investment Case and its use was subsequently tested through the SRL East EES Independent Advisory Committee process.

The transport modelling of the *Project Case* was subject to extensive review through the EES Traffic and Transport Impact Assessment, and the Minister's Assessment ultimately concluded that ***'I support the Independent Advisory Committee's finding that the transport modelling undertaken to underpin the assessment of operational transport effects is adequate for this phase of the project'*** (notwithstanding some areas of further assessment required, as discussed in the following section).²⁰ Given the outcome of that assessment, the SRL East EES Project Case has been adopted as the foundation or 'Baseline Scenario' for this report's assessment, and including its recommendations which inform the Burwood Structure Plan.

Further discussion of the previous EES Traffic and Transport Impact Assessment, including future growth forecasts, in comparison to, as well as their relative suitability for use as part of precinct planning is provided in Section 4.3.

3.5 EES further assessment requirements

In addition to the EPR's outlined in Section 3.2, the Minister's Assessment²¹ for the EES included additional specific matters for further assessment as part of the planning for the SRL East Project. These matters include those related to SRL East Project and some related to wider precinct matters.




The key transport planning-related matters for further assessment are summarised in Table 3.2 which identifies how these are being addressed by SRL East.

Note this report is focused on the wider precinct matters that relate to Burwood as part of structure planning, not matters related to the SRL East project scope.

²⁰ Minister for Environment and Climate Action, *SRL East Minister's Assessment under Environment Effects Act 1978 (2022)* p. 29

²¹ https://www.planning.vic.gov.au/__data/assets/pdf_file/0026/651905/SRL-East-Ministers-assessment.pdf

TABLE 3.2 MINISTER’S REQUIREMENTS FOR FURTHER CONSIDERATION – BURWOOD

MATTERS FOR CONSIDERATION	SRL EAST PROJECT SCOPE	WIDER PRECINCT PLANNING (THIS REPORT)
Parking – Burwood: <ul style="list-style-type: none"> • Potential to provide some commuter car parking should be considered for Burwood. • Consult with relevant road management authorities on reinstating parking impacted as a result of the project works. 		
Shared use path connections – Burwood: <ul style="list-style-type: none"> • Upgrade to Gardiners Creek Trail on the north side of Burwood Highway with the project boundary • Additional improvements to cycling connections required. 		

Section 1.5 provided details of the consultation and assessments completed to address the identified areas of further assessment by the Minister, required as part of future precinct planning following the EES.

4 Transport ambition for Burwood

4.1 Overview

The areas surrounding the new SRL stations will attract significant investment, creating new local employment and housing opportunities, driving population and employment growth and land use changes.

To support Burwood's future role as an attractive place to live, work and/or establish businesses, the structure planning for Burwood needs to:

- Support the delivery of housing, jobs, services, and amenities in the right locations for new and existing residents, workers and visitors
- Enable infrastructure investment across transport, education, health, open space and other amenities.

A set of transport ambitions and goals common to all SRL East Structure Plan Areas were developed to help the Vision for each Structure Plan Area and surrounds, and to inform the Structure Plans.

The SRL East Structure Plans will identify how the five key themes of Boosting the Economy, Enriching Community, Better Connections, Enhancing Place and Empowering Sustainability will be delivered in the Structure Plan Area and set objectives, strategies and actions to realise the Vision for the area.

The areas surrounding the new SRL stations will attract significant investment, creating new local employment and housing opportunities, driving population and employment growth and land use changes.

This section also compares the baseline with the Burwood Structure Plan's land use.

4.2 Transport ambition and goals

The population, job and traffic growth demands will require proactive management in order to realise the full potential of SRL East. The transport ambition provides a foundation for managing the growth in Burwood, as stated below in Figure 4.1.

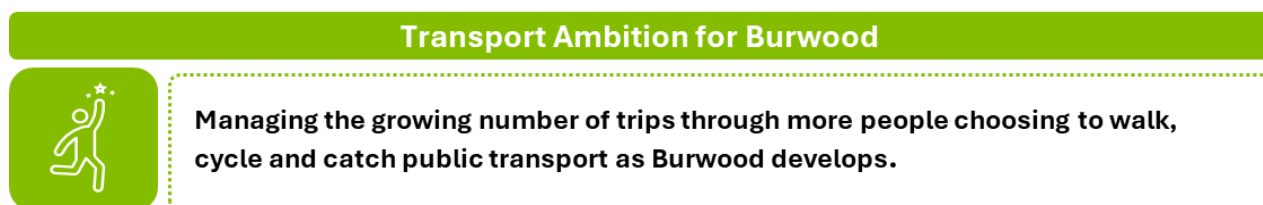


FIGURE 4.1 TRANSPORT AMBITION FOR BURWOOD

From the transport ambition, a set of transport goals and modal principles were developed to support the Vision for Burwood. The development of these goals and modal principles considered the existing transport challenges, gaps and opportunities.

The transport ambition and goals should be considered with the Vision and themes outlined in the Burwood Structure Plan, which address requirements such as those in the *Transport Integration Act 2010* (Vic). The

development of the Structure Plan and this report has collectively informed the infrastructure and non-infrastructure recommendations to achieve the transport ambition and providing better transport choices.

The transport goals are listed and explained in Table 4.1.

TABLE 4.1 TRANSPORT GOALS

GOAL	EXPLANATION
 <p>A safe and connected walking and cycling environment</p>	Walking and cycling ²² will serve as the most convenient, safe and enjoyable means of travel in the neighbourhoods around each SRL station.
 <p>A revitalised bus experience</p>	In line with Victoria's Bus Plan, help change people's perception of buses. Provide a passenger-focused bus service, making road-based public transport a competitive, attractive and convenient choice.
 <p>An all-inclusive transport network</p>	Ensure transport is accessible to people of all ages, abilities and genders.
 <p>Anchoring sustainable travel services and shared mobility to SRL East</p>	SRL stations are seamless integrated hubs, allowing quality interchanges between sustainable travel modes.
 <p>Prioritising safe and healthy movement</p>	In line with Victoria's Road Safety Strategy 2021-2030, the transport network becomes safer for all, particularly vulnerable users. Uptake in walking and cycling contributes to an increase in daily physical activity.
 <p>Smart and efficient use of parking</p>	Parking management needs for all users, with a strong emphasis on providing for the needs of bike and micromobility users. Car parking spaces will be managed and used to maximise their effectiveness while considering impacts on the urban realm.
 <p>Enable new and emerging innovative mobility</p>	Neighbourhoods around each SRL station will enable emerging and innovative mobility to provide more and convenient choice, especially for shorter to medium distance trips.

4.3 Future population and employment growth

The population and employment forecasts for the Burwood Structure Plan Area are shown in Figure 4.2. The resident population is forecast to increase from 5300 in 2021 to 11,100 residents by 2041. The worker population is forecast to increase from 9000 to 16,900.²³ With more people living and working in Burwood, the SRL station will become a focus point for movement.

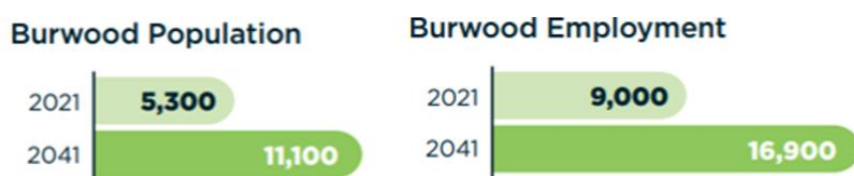


FIGURE 4.2 POPULATION AND EMPLOYMENT GROWTH WITHIN THE STRUCTURE PLAN AREA

²² Walking and cycling represents the action of moving as a pedestrian or cyclists, whether or not someone is walking or cycling unaided or using any kind of wheeled mobility aid, including cycles, scooters, wheelchairs, mobility scooters, walking frames, prams or buggies.

²³ AJM (2025), Economic Profile – Burwood.

While the development projections within the transport model for the Baseline Scenario²⁴ are consistent with the Structure Plan overall, the Structure Plan has redistributed growth within Burwood compared to the model input:

- Greater diversity of land uses adjacent to the SRL station at Burwood and along Burwood Highway, Highbury Road and Station Street – these mixed land use areas will support growing retail and commercial uses with higher density residential developments in some locations as Burwood develops
- Higher concentration of housing adjacent to the SRL station at Burwood and increased intensity of existing residential neighbourhoods in Burwood
- Transition of Burwood's industrial areas to high-amenity employment areas, particularly along Highbury Road
- Growth in employment, students and residents generated from Deakin University.

The consistency of the input scenarios for the EES and structure planning reaffirms the adoption of the Project Case in the EES Traffic and Transport Impact Assessment as the Baseline Scenario is appropriate.

4.4 Summary and implications

The transport ambition for a growing Burwood is to encourage as many of the additional trips expected to be undertaken by active transport or public transport. This includes providing a local transport network to facilitate 20-minute neighbourhoods, and the transport goals have been set towards achieving this ambition.

Burwood will need to evolve so that while its people and employment intensity increases, growth is managed through sustainable and active transport while maintaining car access via the existing arterial road network. The transport network will need to evolve so that residents, workers, and visitors have better travel options and experiences on active and public transport to manage increased movements to, from and within Burwood.

This vision has set the basis for the development of the transport recommendations as part of the 'vision and validate' approach. A comparison of the Structure Plan's land use forecasts with those in the Baseline Scenario has found it is an appropriate basis to apply the vision and validate approach. This approach allows the transport ambition and goals for Burwood to be at the centre of the recommendations in this report, enhancing connectivity and considering benefits to the economy, community, place and sustainability.

²⁴ The Baseline Scenario is based on the EES Traffic and Transport Impact Assessment (2021). See Section 3.4 for more information.

5 Future transport demands

5.1 Overview

Given the transport ambition to manage the growing number of transport trips by encouraging the use of sustainable transport modes, this section presents the approach to set an appropriate mode share target. It considers the potential for transport choices to better meet the Structure Plan and transport ambition by:

- Determining the number of trips generated given the land use
- Understanding, at a broad level, where these trips started and ended (trip distribution)
- Developing a mode share target by considering which trips could change from one mode to another given land use and travel patterns.

This mode share target was then justified through benchmarking with comparator suburbs. Using the Baseline Scenario as a starting point (see Section 3.4 for further details), this was undertaken by assessing how travel choices and the mode share may further change with improvements to sustainable modes of transport (active and public transport) that address the challenges and gaps.

Analysis is based on the primary mode²⁵ for trips to, from and within Burwood (through trips are not included).

5.2 Trip generation

The number of trips to and from Burwood is primarily influenced by the land use plans and population and employment forecasts. A resident population of 11,100 and a worker population of 16,900 people by 2041 is forecast in the Burwood Structure Plan Area. As shown in 5.1, this results in about 25,000 trips in the morning peak hour and 26,800 trips in the afternoon peak hour beginning, ending, or being entirely within Burwood.

There is a greater proportion of trips into Burwood (attraction) during the AM peak hour, which is primarily driven by employment and education land uses. Trips from Burwood (production) are lower and driven by residential land uses (see Figure 5.1). Meanwhile, in the PM peak hour, the trip production is higher than attraction, with the main source of trips being people returning home from work. The overall number of trips in the PM peak hour is higher than the AM peak hour due to increased levels of retail and leisure trips in the PM peak hour.

²⁵ Refers to the main mode of travel used by an individual traveling to/from Burwood. For example, a trip comprising of walking to/from a public transport facility and using public transport would be classed as a public transport trip.

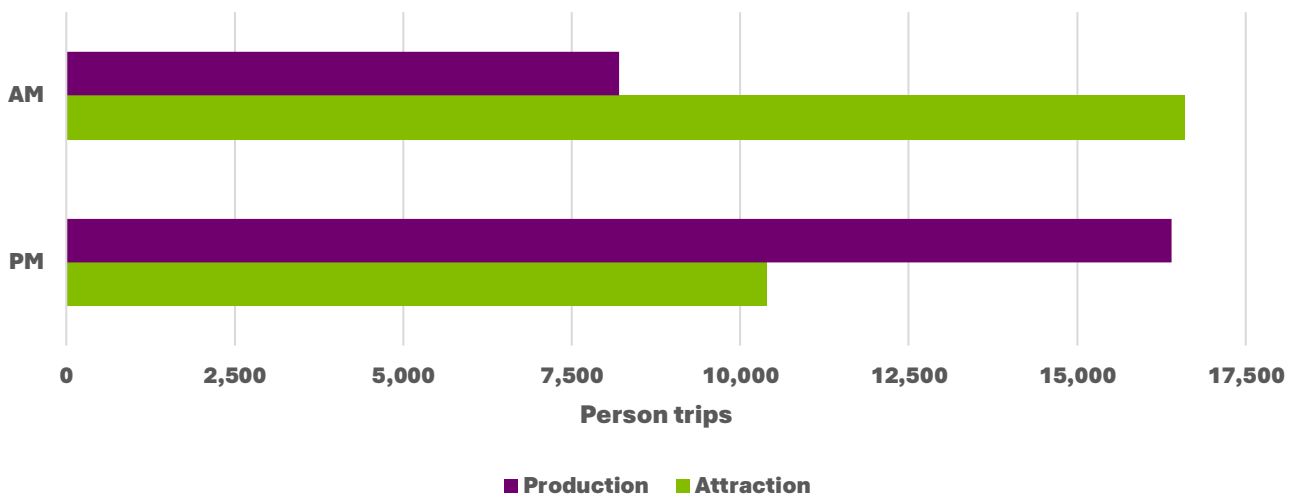


FIGURE 5.1 BURWOOD TRIP PRODUCTION AND ATTRACTION (AM AND PM PEAK HOUR 2041)(SOURCE: VITM)

5.3 Trip distribution patterns

Trip distribution patterns have been provided based on the AM peak. The general trends for the AM peak are also representative of the PM peak.

The distribution of trips shows the majority of trips to and from Burwood are located within the local area or surrounding suburbs (approximately 5 kilometres²⁶) amidst a broad catchment that spans the inner and eastern Melbourne Metropolitan area (Figure 5.2).

Surrounding areas which generate and attract notable trips include Monash University, Box Hill, Mount Waverley, and Blackburn South. However, these represent a relatively small proportion of trips compared to internal trips within Burwood. Outside Burwood and surrounding areas, areas along Burwood Highway (east of Burwood) generate and attract more trips compared to other sources of travel demand.

²⁶ Qualitative assessment of Figure 5.2 shows the majority of areas with high levels of trips occur within approximately 5 km radius of Burwood).

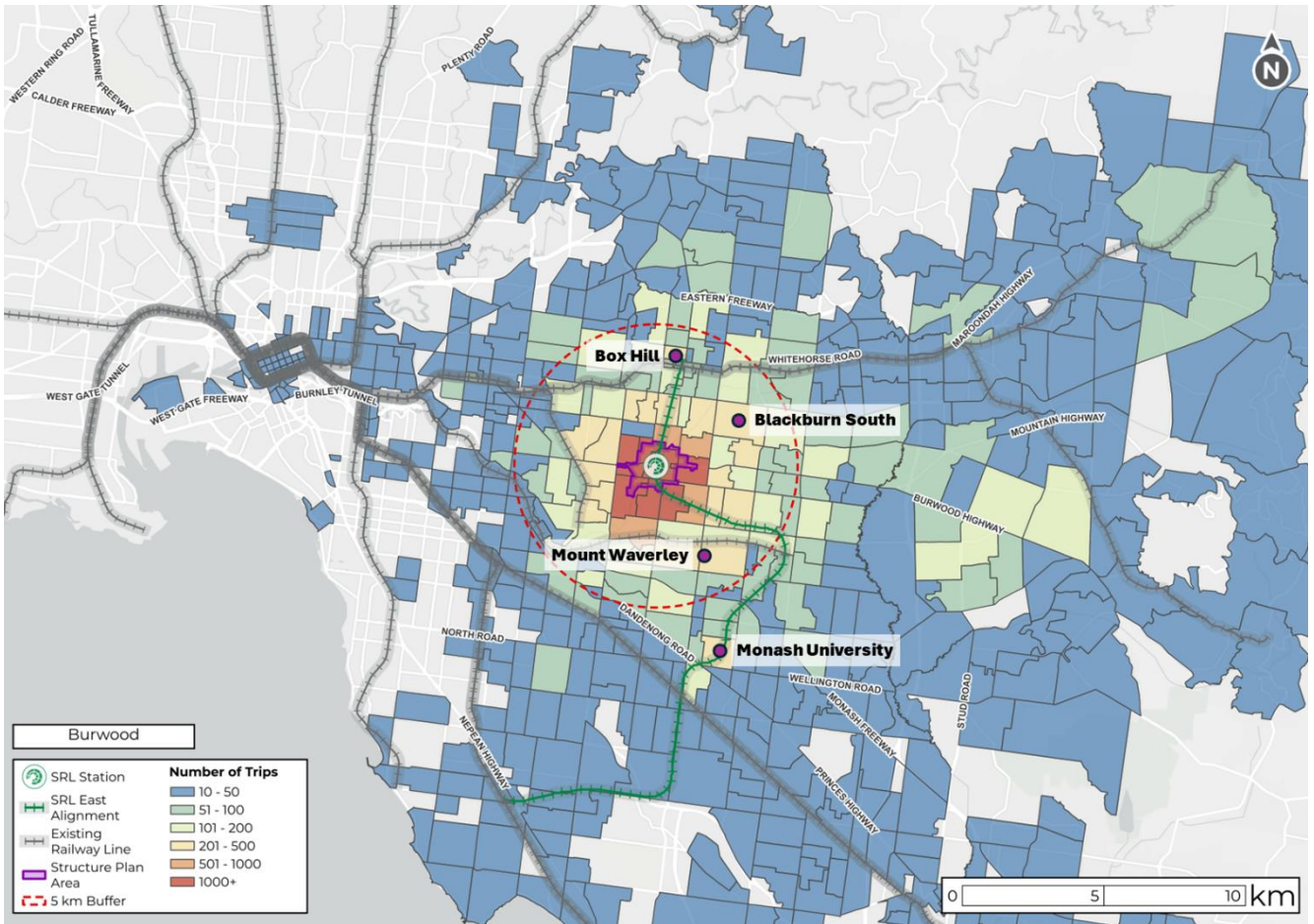


FIGURE 5.2 TRIP DISTRIBUTION – ORIGIN AND DESTINATION OF TRIPS TO AND FROM BURWOOD (AM PEAK 2041)

Based on the data in Figure 5.2, a summary of key areas and corridors (Figure 5.3) shows that approximately 55 per cent of trips to and from Burwood are from within Burwood itself and surrounding suburbs. Trips outside Burwood and surrounding suburbs which potentially could be undertaken by a single seat trip on the SRL East rail corridor account for a further 5 per cent of trips.²⁷ The remaining 40 per cent of trips are from elsewhere across Metropolitan Melbourne. The mode share assessment focuses on the 60 per cent of trips in the Structure Plan Area, surrounding suburbs, or along rail corridors as having potential to use public and active transport.

²⁷ Based on trips which are potentially within an 800 m walk of a train station. SRL East includes six stations.



FIGURE 5.3 TRIP DISTRIBUTION – KEY AREAS AND CORRIDORS FOR TRIPS TO AND FROM BURWOOD (AM PEAK 2041)²⁸

The ability to switch trips to sustainable modes will depend on improvements made to those modes, in addition to the shift achieved through increased land use density and road network congestion. For example, for public transport to be used for a wider variety of trips, such as weekend shopping trips, the frequency of services would need to be made sufficiently attractive. For cycling to be a viable option for carrying cargo, bicycle lanes and parking would need to be designed to support larger bicycles. The other 40 per cent of trips may benefit from the recommendations of this report, but have not been assumed in the mode share target given they are likely more reliant on broader public transport changes that are beyond the scope of the SRL East PSP project.

Assessment of the Baseline Scenario mode shares trips by distance (Figure 5.4) shows the opportunity to increase sustainable transport mode share through the shift of short distance private vehicle trips.

²⁸ For the purpose of understanding strategic trips all percentages have been rounded to the nearest 5 per cent. Where overlap occurs between the 5 km area and rail corridors, trips have been allocated to the 5 km area. Trips along the rail corridors do not account for trips interchanging from other lines (i.e. only direct (single seat) trips have been included).

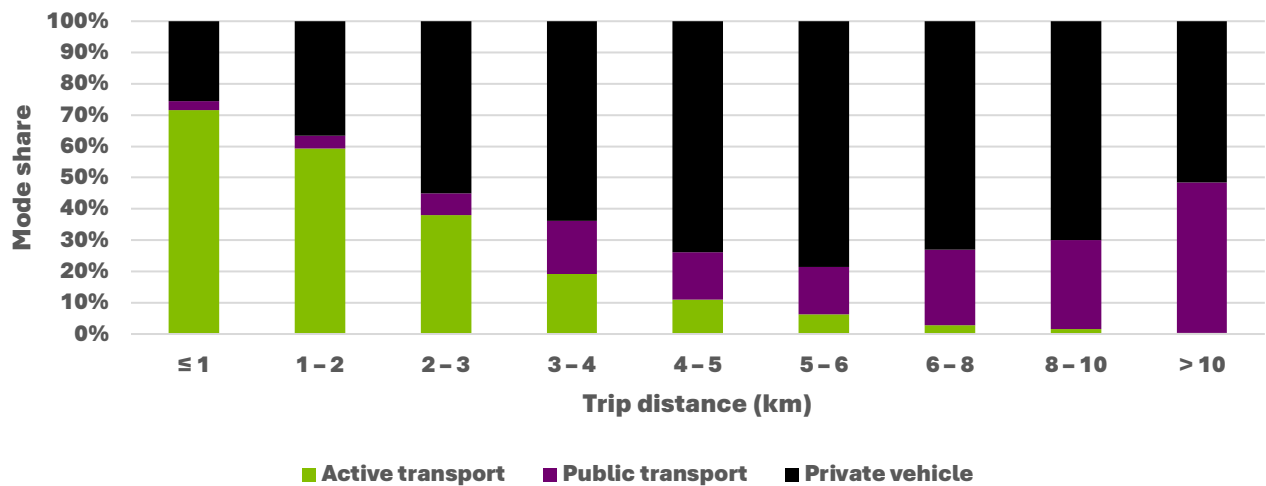


FIGURE 5.4 MODE SHARE BY DISTANCE TO BURWOOD (BASELINE AM PEAK 2041)

In particular, for trips of 1 to 2 km in distance over 35 per cent are forecast to be undertaken by private vehicle, which could readily be undertaken by active or public transport to the Structure Plan Area. There is also a significant proportion of trips to and from surrounding suburbs (less than 5 kilometres) that could switch to public and active transport.

5.4 Target mode share

Mode shares are a frequently used transport planning metric to provide a broad sense of how people choose to travel in an area. They are typically presented as the share of person trips by private car, public transport and active transport.

Mode shares provide an indication of the relative attractiveness of the transport modes available in the area. When an area with mixed land uses is served by convenient and frequent public transport and provided with safe, direct and comfortable walking and cycling infrastructure, private vehicle usage tends to be lower as people have the choice to travel in other ways.

Setting a mode share target is useful as it:

- Communicates the future vision for the way that people travel, including the level of change expected from today, and compared to the Baseline Scenario and other areas
- Informs the transport recommendations to achieve this level of change
- Can be measured and monitored through existing processes, such as the ABS census
- Suggests how well the transport system meets the travel needs of the community.

Setting a target for increased sustainable transport mode share in Burwood reflects the future higher-density, mixed use, transit-oriented development close to high-quality public transport services. In turn, this means there is greater opportunity for active and public transport compared to suburbs with more limited transport alternatives. In addition, mode share targets also consider that private vehicle trips will increase in volume over the life of the Structure Plan. Targeting increased active and public transport mode share for trips to, from or within Burwood will help maintain strategic road corridors for broader traffic functions across Melbourne.

The trip distribution patterns and trip lengths (Section 5.3) suggest there is potential to achieve a greater mode share shift to sustainable modes in Burwood than was estimated in the Baseline Scenario. This is possible due to the shifting of short distance trips to more sustainable modes which is supported by the proposed mix of land uses.

A comparison of the land use and transport characteristics of the six precincts has been undertaken to estimate an appropriate modal split target for each precinct. Burwood has similar key characteristics to Monash as they have the lowest Walk Scores with no railway stations and have little recent land use change. In contrast, Box Hill has the highest Transit Score and is served by bus, rail and tram services centred around an activity centre that has undergone the largest scale of development uplift in the last 20 years. Clayton, Cheltenham and Glen Waverley have an existing railway station and adjacent bus interchange near existing activity centres with a similar Walk Score for all three precincts.

Based on the above groupings, the following targets for have been set to increase sustainable transport mode share compared to the baseline scenario:

- Burwood and Monash have been set an increase of 20 per cent in sustainable transport mode share reflecting the significant potential for change which is expected to occur closer to the opening of the SRL Station. Of this 20 per cent, 75 per cent of those trips changing modes is allocated to active transport and the remaining 25 per cent to public transport.
- Clayton, Cheltenham, and Glen Waverley have been set the highest increase of 25 per cent in sustainable transport mode share because they have a more immediate potential for change. Of this 25 per cent, 75 per cent of those trips changing modes is allocated to active transport and the remaining 25 per cent to public transport.
- Box Hill has been set the lowest increase of 15 per cent in sustainable transport mode share as some mode shift has already occurred with development in recent years. Of this 15 per cent, 75 per cent of those trips changing modes is allocated to active transport and the remaining 25 per cent to public transport.

The primary focus of the sustainable transport mode share increase is the growth in active transport trips supported by the future land uses and short distance trips.

Figure 5.5 shows the future Baseline Scenario (including the SRL East Project) and target mode shares for a typical peak hour²⁹ for Burwood. The target shows a 20 per cent increase in sustainable transport made up of a 32 per cent increase in active transport and a 10 per cent increase in public transport. This illustrates the ability of Burwood to manage the growing number of transport trips through more people choosing to walk, cycling and catch public transport as Burwood develops.

²⁹ Typical peak hour represents the average of the AM peak hour and PM peak hour.

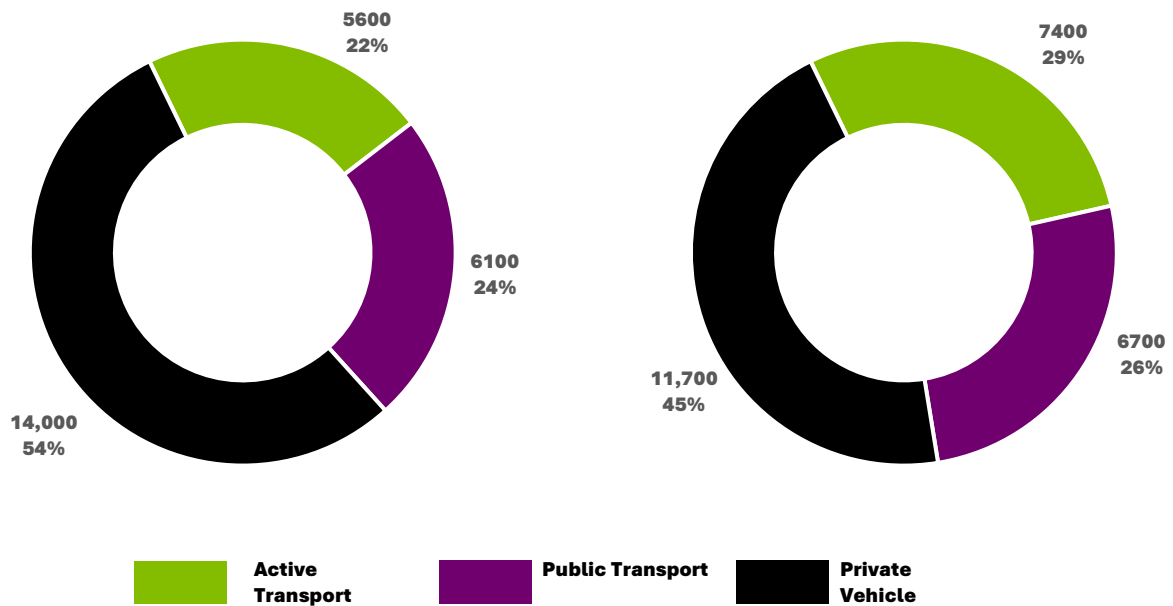


FIGURE 5.5 BURWOOD MODE SHARES

5.5 Mode share target rationale

To assess the rationale of the mode share target for Burwood the target has been compared to comparator areas in Melbourne.

Assessment of ABS 2016 census data³¹ for Greater Melbourne highlights the trend that areas with high population densities (Figure 5.6) typically have lower private vehicle mode shares, driven by factors including the spatial proximity of residential, employment and leisure land uses, as well as assumed or inferred higher degrees of access to public transport services that enable a shift to sustainable travel choices.

Plotting the 2041 Baseline Scenario and target mode share for Burwood shows the baseline and target private vehicle mode shares are within the upper and lower bounds of the general trends observed for existing areas with similar residential densities (Figure 5.6).

The mode shares for Burwood are shown in Figure 5.6:

- Baseline – upper end of the green bar
- Target – lower end of the green bar
- Purple area indicates the trendline plus the 95 per cent prediction interval.

³⁰ Due to limitations in VITM actual active transport mode share may be higher than the baseline forecast due to mixed-used higher density land uses naturally favouring active transport and active transport initiatives from State Government and Local Councils which may occur from now until commencement of SRL East services.

³¹ 2016 ABS Census data considered appropriate for mode share analysis as it is pre-COVID and 2021 is pre-COVID 'normal'. 2021 ABS Census data considered appropriate for car ownership data as on balance 2016 and 2021 data is similar.

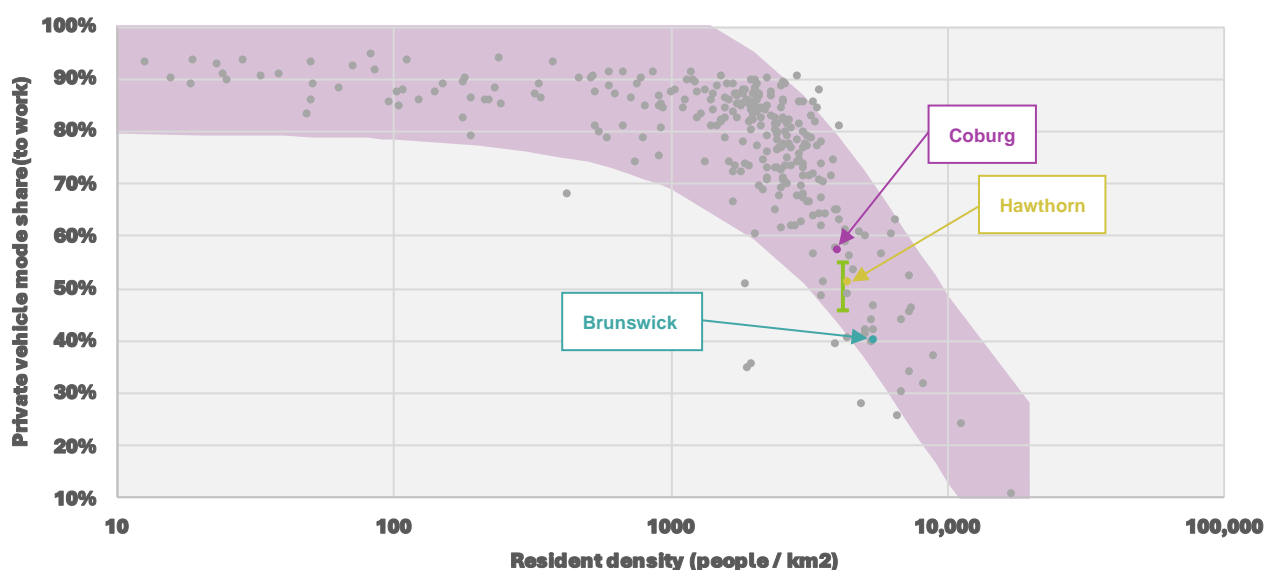


FIGURE 5.6 DISTRIBUTION OF MELBOURNE'S POPULATION DENSITY AND PRIVATE VEHICLE MODE SHARE BY SA2 LEVEL WITH BURWOOD 2041 MODE SHARE RANGES (SOURCE: ABS CENSUS 2016, JOURNEY TO WORK, PLACE OF USUAL RESIDENCE)

In addition, the future mode shares for Burwood have been reviewed against the existing mode shares for various Melbourne areas to understand how they compare against current travel patterns. Areas were selected based on their similar resident density to Burwood of the future. As shown in Figure 5.7, the private vehicle mode share target for Burwood resembles existing mode shares exhibited for these similar areas in Melbourne. These areas reflect an appropriate target given the mix of higher density land uses, range of public transport services available, and quality of the active transport network. It must be noted that the Burwood mode target is for 2041 compared to the other areas mode shares surveyed in 2016. It is expected that the comparable areas mode shares will improve by increasing the sustainable transport mode share and therefore decreasing the private car travel in the future.

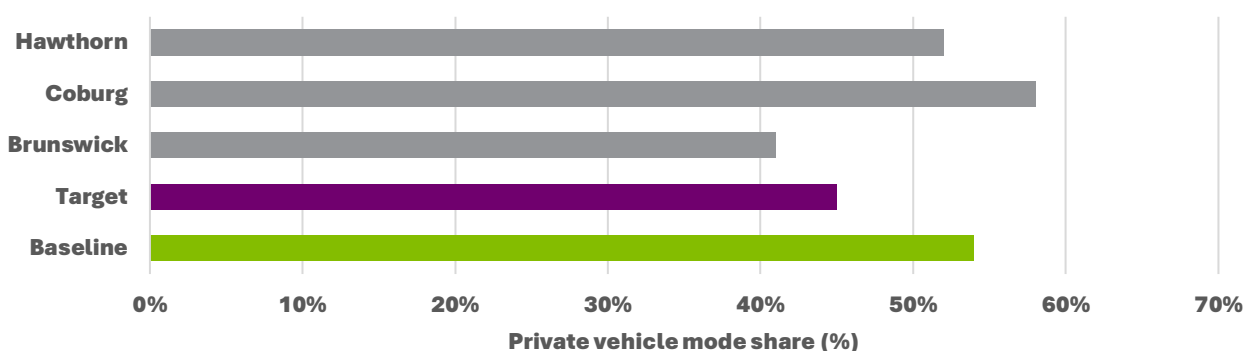


FIGURE 5.7 HIGH-LEVEL BENCHMARKING OF 2041 PRIVATE VEHICLE MODE SHARE TARGETS FOR BURWOOD (EXISTING AREAS SOURCE: ABS YEAR 2016 JOURNEY TO WORK, PLACE OF USUAL RESIDENCE)

6 Infrastructure recommendations

This section provides a summary of the modal ambitions, including the modal principles developed for SRL East Structure Plan Areas, and the corresponding strategic and local modal networks for the Glen Waverley Planning Area.

It provides the transport infrastructure recommendations for the Glen Waverley Structure Plan Area for each mode, and details how they address the identified challenges in Section 2, and how they adhere to the modal principles.

6.1 Modal principles and movement networks

6.1.1 OVERVIEW

The modal principles and transport networks that provide the strategic justification to support the future of the Structure Plan Area through the identified infrastructure recommendations are outlined in this section.

GUIDING PRINCIPLES

A set of guiding principles have been established for each mode to inform the development of the recommendations which will influence the movement experience throughout Burwood. The principles were consolidated from a broader set of network-wide transport principles, which were developed using the DTP-adopted Movement & Place (M&P) classifications. These classifications, which have been specifically applied in the context of the SRL East structure planning, are designed to encourage the use of active and public transport while balancing the competing demands of movement and access in a rapidly evolving urban landscape.

These guiding principles align with the overarching transport ambition and goals set for the Burwood Structure Plan Area. They provided a framework throughout the identification of the proposed infrastructure recommendations, so that planned developments contribute to a more connected and accessible Burwood. By adhering to these principles, the recommendations will help achieve the desired outcomes for mobility, while supporting broader urban planning objectives for Burwood. The following sections detail how these principles are applied to achieve an integrated and forward-thinking transport network.

The guiding principles for the Burwood Structure Plan Areas for each mode are provided in the following sections.

MOVEMENT NETWORKS

The DTP-adopted M&P classifications for SRL East structure planning also informed the identification of strategic and local corridors for each mode.

Strategic corridors connect to destinations with metropolitan and regional significance such as employment and designated activity centres. Strategic modal corridors will provide high-quality connections that prioritise the movement of a particular mode, while still considering the function of other modes along that corridor.

More local links will provide an attractive corridor for moving within Burwood and to the precinct core and other local destinations within and around Burwood.

The strategic and local walking, cycling, public transport, and general traffic / freight corridors across Burwood generally align with the M&P classifications in Table 6.1.

TABLE 6.1 STRATEGIC AND LOCAL CORRIDORS AND ASSOCIATED M&P CLASSIFICATIONS

MODE	STRATEGIC	LOCAL
Walking	W1-W2	W3*
Cycling	C1- C2	C3*
Public transport	B1 – B2 & T1 – T3	B3
Traffic routes	GT1 – GT3 & F1 – F3	GT4*

* Referred to as municipal links or routes in the DTP Movement & Place Technical Appendix (September 2020)

The strategic and local corridors within the Burwood Planning Area for each mode are provided in the following sections.

6.1.2 WALKING

Provide for a vibrant community where walking is the preferred way to get to wherever you need to go locally.

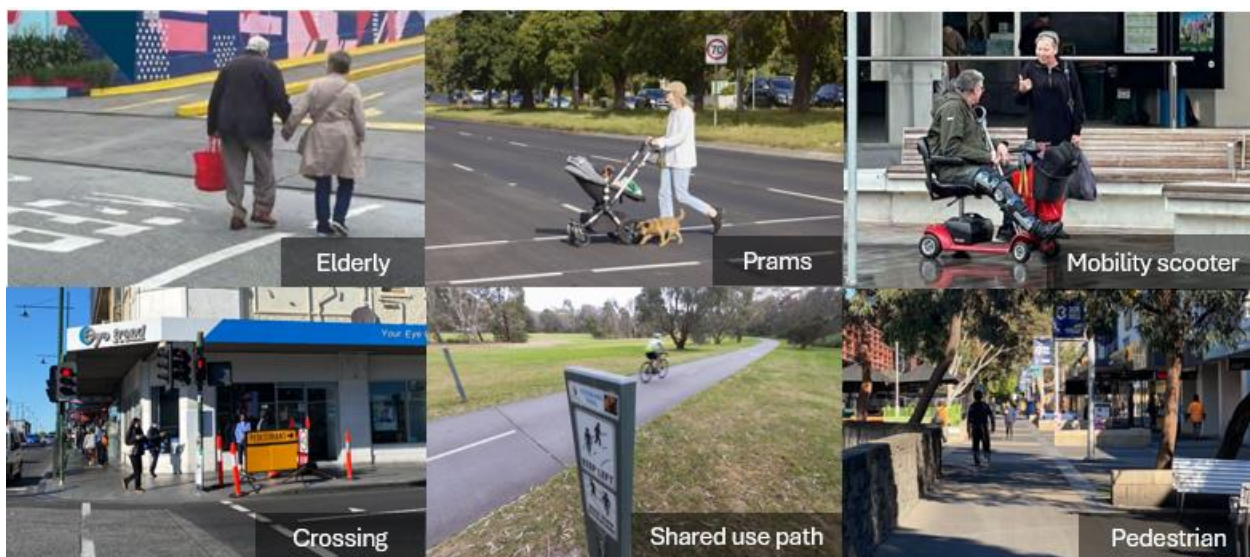


FIGURE 6.1 WALKING USER TYPES AND INFRASTRUCTURE

References to walking in this report include moving as a pedestrian unaided, or using any kind of wheeled mobility aid, such as wheelchairs, mobility scooters, walking frames, prams or buggies as shown in Figure 6.1.

Burwood caters well for pedestrians in some areas of the Structure Plan Area. The Gardiners Creek Trail facilitates pedestrian movement through its attractive natural surrounds, and the footpaths on local streets in and around Deakin University provide safe environments to walk with low traffic volumes. However, the arterial roads that sever the Structure Plan Area creates barriers for pedestrians with unattractive walking infrastructure and limited crossing opportunities.

Delivering a desirable pedestrian environment is critical to supporting the sustainability, functionality, and liveability of the Structure Plan Area, and offers significant health benefits.

Infrastructure recommendations for corridors that improve priority for walking are provided in Section 6.2.

WALKING PRINCIPLES

As outlined in Section 6.1.1, a set of guiding principles were established to inform the development of the recommendations that will influence the walking experience in Burwood. These walking principles are provided in Figure 6.2. These walking principles align with the transport ambition and goals and provided a framework throughout the development of the infrastructure recommendations so that walking formed part of the integrated transport network.



FIGURE 6.2 WALKING PRINCIPLES

WALKING CORRIDORS

Strategic walking corridors connecting destinations with metropolitan and regional significance and local walking corridors moving people around Burwood as defined in Section 6.1.1 for the Burwood Planning Area are shown in Figure 6.3.

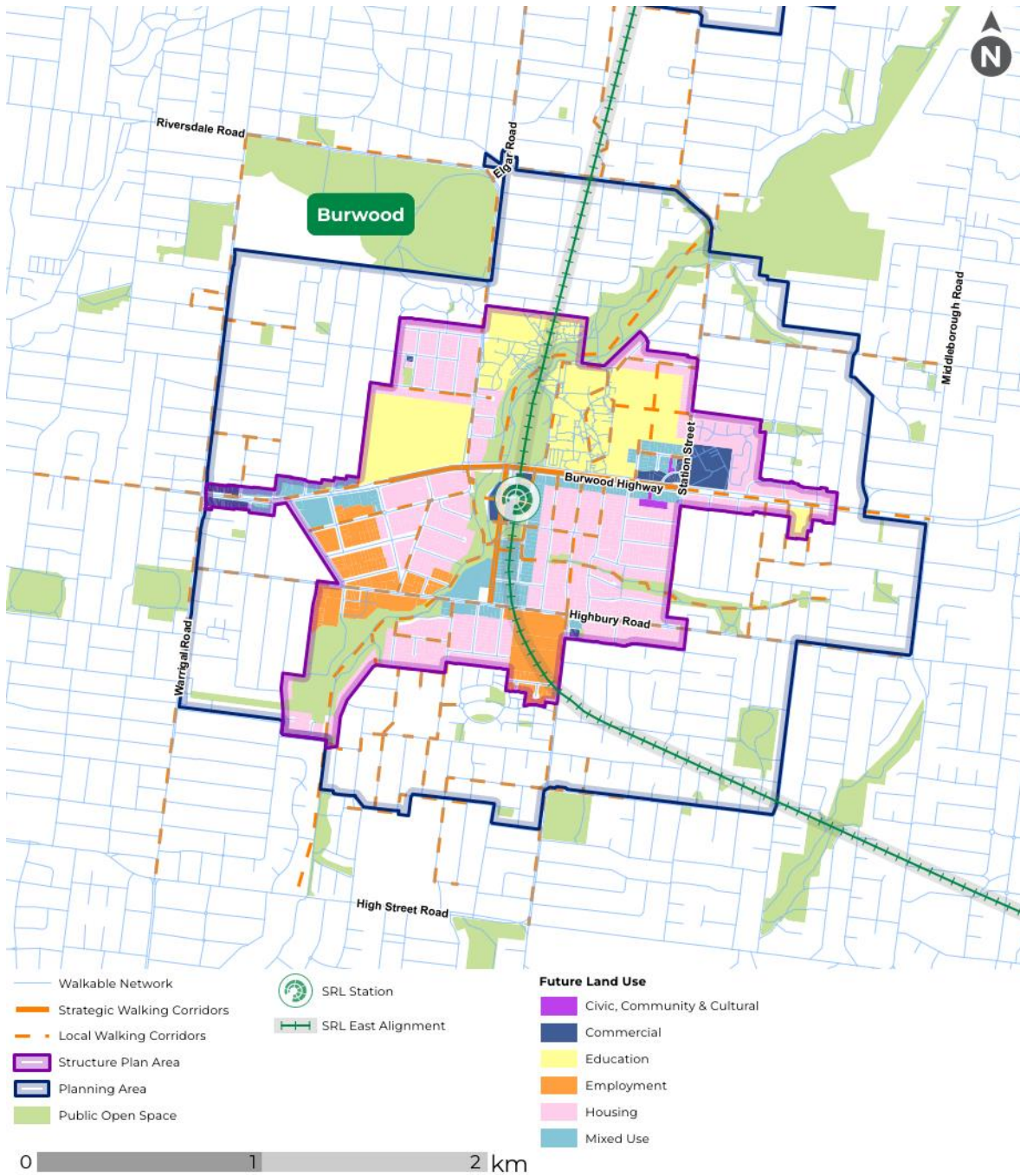


FIGURE 6.3 WALKING CORRIDORS IN THE BURWOOD PLANNING AREA

6.1.3 CYCLING AND MICROMOBILITY

The SRL East Structure Plan Areas provide world class active transport options. Bikes and other micromobility devices are some of the most attractive options for people to access local shops, schools, workplaces, and public transport facilities for longer journeys.

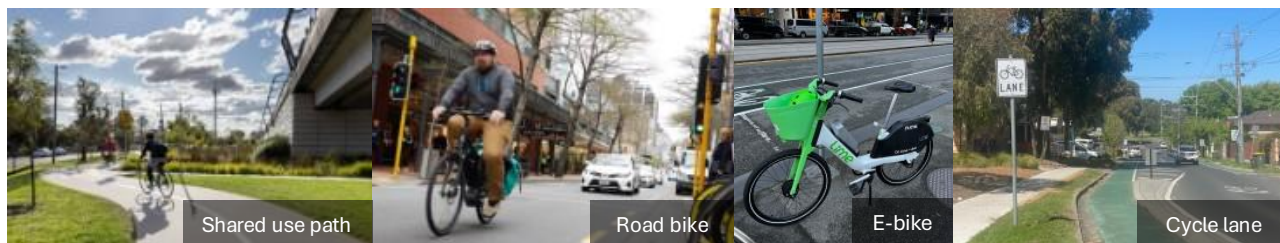


FIGURE 6.4 CYCLING AND MICROMOBILITY DEVICES

References to cycling in this report include personal mobility devices such as bicycles, scooters and cargo bikes, including electric powered devices.

Gardiners Creek is a shared user path that caters for cyclists and micromobility users. This provides direct access to Deakin University where cyclists are supported by end-of-trip facilities. High quality cycling infrastructure is limited outside of this trail and low traffic local streets. Cyclists are particularly vulnerable riding alongside fast-moving vehicles on major arterial roads in Burwood as separated cycling infrastructure is not provided.

Recommendations for cycling and micromobility aim to support the use of mobility devices of all kinds, allowing everyone to navigate the community safely and sustainably, with the associated health benefits of active transport.

Cycling in the Planning Area will be more available and safer for people of any gender, age or ability with well-planned and designed on and off-road infrastructure which may include provision for cycling separated from other traffic or providing for cyclists on streets with reduced speeds and with lower traffic volumes, supporting a wider range of devices. Cycling will support an alternative to driving for trips that may be too long for walking and facilitate quick short distance trips.

Micromobility such as e-scooters and e-bikes can also be offered as a shared service where anyone can unlock and use a device from a shared public fleet for a fee. Shared micromobility offers the flexibility and convenience of e-bikes and e-scooters without the need to pay upfront costs or securely store a private device in a home or the destination.

The shared e-scooter trials in the Melbourne, Yarra and Port Phillip municipalities (launched in 2022) have generated significant benefits for the community. The average number of trips per day per e-scooter is 4.3 to 5.5³² across each quarter of 2023, which is among the highest e-scooter use in the world. For the same 2023 period the average length of e-scooter trips in the trial area ranged from 1.66 to 1.78 kilometres, showing the potential of the mode to assist with modal shift in the 1 to 2-kilometre trip distance bracket identified in Figure 5.4.³² User surveys have found that around 28 per cent of e-scooter trips in the trial areas replaced a vehicle trip,³³ helping to reduce congestion and contribute to car light living. Despite the City of Melbourne's decision to end the trial in its municipality, other councils are considering working with the hire scheme operators in the future and private scooter uptake continues to increase in Melbourne. In October 2024, the Victorian

³² <https://public.ridereport.com/regions/australia> (Data range captured for each quarter of 2023)

³³ Williams, G. (2024, April 4). Making E-scooters Safer [Press release]. <https://www.premier.vic.gov.au/sites/default/files/2024-04/240404-Making-E-Scooters-Safer.pdf>

Government announced that share hire e-scooters will be permanently legalised across Victoria, subject to agreement with councils.³⁴

Infrastructure recommendations to improve cycling and micromobility transport in the Structure Plan Area are provided in Section 6.2.

CYCLING PRINCIPLES

As outlined in Section 6.1.1, a set of guiding principles were established to inform the development of the recommendations that will influence the cycling experience in Burwood. These cycling principles are provided in Figure 6.5. These cycling principles align with the transport ambition and goals and provided a framework throughout the development of the infrastructure recommendations to ensure walking formed part of the integrated transport network.



FIGURE 6.5 CYCLING PRINCIPLES

CYCLING CORRIDORS

Strategic cycling corridors connecting destinations with metropolitan and regional significance and local cycling corridors moving people around Burwood as defined in Section 6.1.1 for the Burwood Planning Area are shown in Figure 6.6.

³⁴ Victorian Government (2024). *Permanent E-Scooter Rules in Place Across the State*. <https://www.premier.vic.gov.au/permanent-e-scooter-rules-place-across-state>

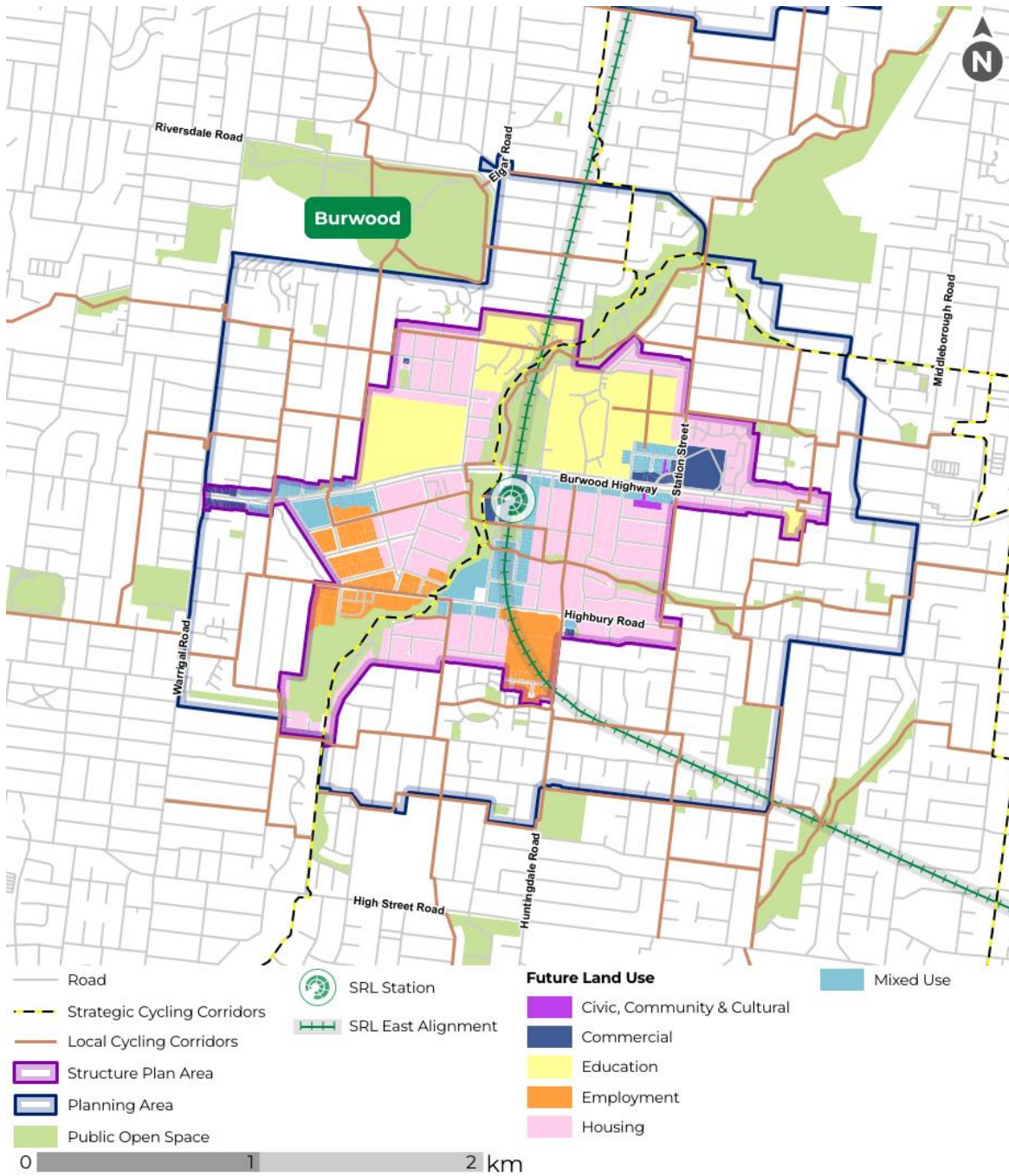


FIGURE 6.6 CYCLING CORRIDORS IN THE BURWOOD PLANNING AREA

6.1.4 PUBLIC TRANSPORT

Anchored around the new SRL interchanges, public transport is the most attractive option for people to travel distances that are too long to walk, cycle or use other micromobility devices.



FIGURE 6.7 PUBLIC TRANSPORT MODES AT BURWOOD

Burwood is currently served by the Route 70 and Route 75 trams and by buses. The frequency of public transport services can be a mixture of relatively high frequency (10 minutes) for trams (Monday to Friday, outside of early morning and late-night hours), with bus services varying from the high-frequency SmartBus 903 that runs along the western side of the Structure Plan Area, and other bus services that generally run every 15-30 minutes during peak periods, and every 30 to 60 minutes in the off-peak, night and weekend services.

Public transport will be a comfortable and reliable option for travelling when it is not within a comfortable walking distance, is too far to cycle or use micromobility devices, and is an attractive alternative to private vehicle use. In addition to the well-known environmental benefits, public transport is also a good way to increase health benefits through incidental exercise compared to private vehicles, by walking or cycling to stations and stops.

The precinct core will play a vital role for connecting people to all transport services and modes, including the SRL station. The network of quality public transport corridors will connect across the greater Melbourne metropolitan area.

Infrastructure recommendations to improve public transport corridors are provided in Section 6.2.

PUBLIC TRANSPORT PRINCIPLES

As outlined in Section 6.1.1, a set of guiding principles were established to inform the development of the recommendations that will influence the public transport experience in Burwood. These public transport principles are provided in Figure 6.8. These public transport principles align with the transport ambition and goals and provided a framework throughout the development of the infrastructure recommendations to ensure walking formed part of the integrated transport network.

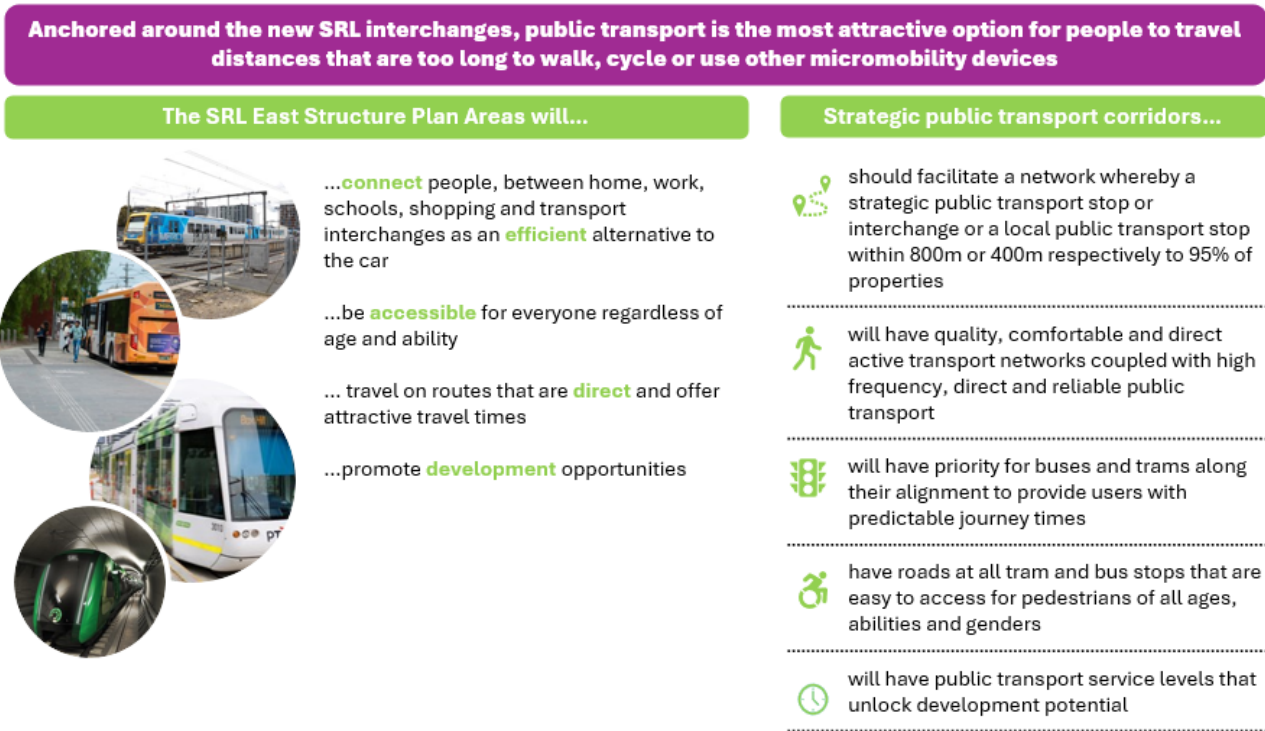


FIGURE 6.8 PUBLIC TRANSPORT PRINCIPLES

PUBLIC TRANSPORT CORRIDORS

Strategic public transport corridors connecting destinations with metropolitan and regional significance and local public transport corridors moving people around Burwood are defined in Section 6.1.1 for the Burwood Planning Area. SRLA and DTP have worked together to identify these strategic and local bus corridors taking into consideration existing bus routes and the introduction of the new SRL East Stations. While it is too early to detail specific route changes with the SRL stations expected to be delivered by 2035.

Figure 6.9 shows the most likely strategic and local corridors identified through this collaboration with DTP.

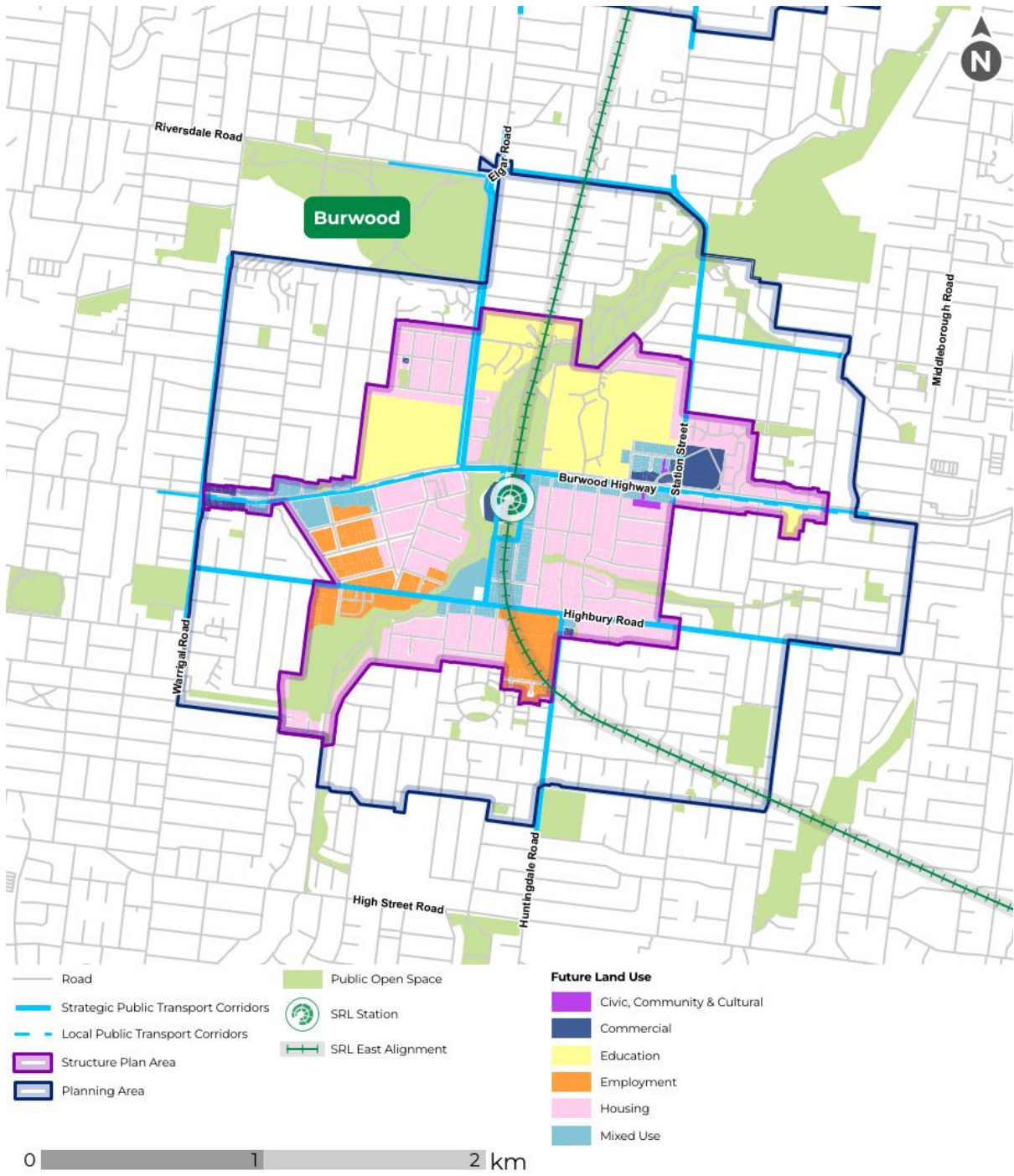


FIGURE 6.9 PUBLIC TRANSPORT CORRIDORS IN THE BURWOOD PLANNING AREA

6.1.5 GENERAL TRAFFIC AND FREIGHT

A vision of healthy, safe and sustainable communities will be delivered by well-planned strategic access and local neighbourhoods, anchored by the opportunity for people to live car free or car light.

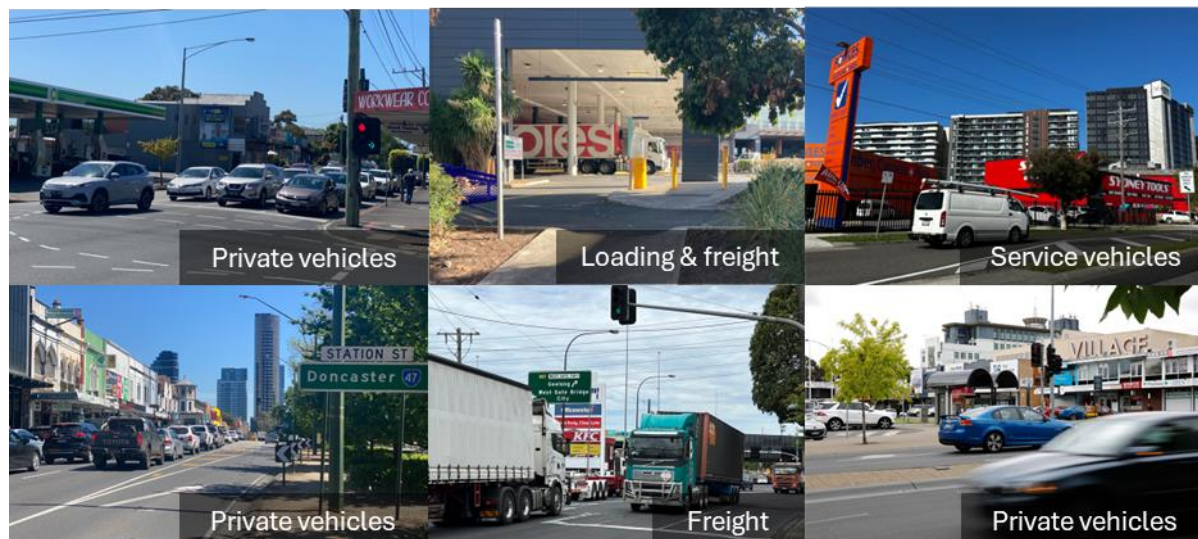


FIGURE 6.10 EXAMPLES OF GENERAL TRAFFIC AND FREIGHT VEHICLES

Burwood benefits from access to strategic road routes including Burwood Highway, Elgar Road, Station Street, Highbury Road and Warrigal Road. Protecting arterial road access while increasing priority for other modes particularly in the precinct core will support liveability in Burwood for residents, students, workers and visitors. The option of car light living will be achievable in the Structure Plan Area as access to other modes increases and denser mixed land use develops and help to manage congestion on existing road network.

Freight (including smaller parcels), service and emergency vehicles will need to be appropriately accommodated to support the future growth of Burwood. This includes maintaining important freight and emergency access to major land uses such as Deakin University.

Introducing new freight management practices for the Structure Plan Area through 'last mile' policies will impact how new freight tasks are undertaken and influence existing freight tasks for the betterment of businesses and the community.

Providing mobility hubs and implementing Last Mile Freight Plans (discussed in Section 7.2 and Section 7.3) and built form controls will provide measures for managing freight in the Structure Plan Area. Freight management policies prepared in consultation with the cities of Monash and Whitehorse and partners will introduce new freight management practices and assets to Burwood, such as parcel lockers, cargo bikes and small electric vehicle delivery vans to reduce the freight burden on the network and environment.

Infrastructure recommendations to improve freight management in Burwood are provided in Section 6.2.

GENERAL TRAFFIC AND FREIGHT PRINCIPLES

As outlined in Section 6.1.1, a set of guiding principles were established to inform the development of the recommendations that will influence the general traffic and freight experience in Burwood. These general traffic and freight principles are provided in Figure 6.11. These general traffic and freight principles align with the transport ambition and goals and provided a framework throughout the development of the infrastructure recommendations to ensure walking formed part of the integrated transport network.


A vision of healthy, safe and sustainable communities will be delivered by well-planned local precincts and anchored by the opportunity for people to live car free or car light


The SRL East Structure Plan Areas will...



- ...maintain an **inclusive** and **serviceable** road network that supports access for essential trips
- ...provide for **safe** interactions between all users on the road network
- ...have **functional** access for freight to businesses and residential locations
- ...have **low impacts** on key urban centres by allowing strategic traffic movements through and around the SRL East Structure Plan Areas

Strategic traffic corridors...

-  provide for vehicle movements through the SRL East Structure Plan Areas

-  limit the impact of cars and service vehicles on high-activity and high-value places


-  reduce conflict between vehicles and people walking and wheeling

FIGURE 6.11 GENERAL TRAFFIC AND FREIGHT PRINCIPLES

STRATEGIC AND LOCAL TRAFFIC CORRIDORS

Strategic general traffic and freight corridors connecting destinations with metropolitan and regional significance and local general traffic corridors moving people around Burwood as defined in Section 6.1.1 for the Burwood Planning Area are shown in Figure 6.12.

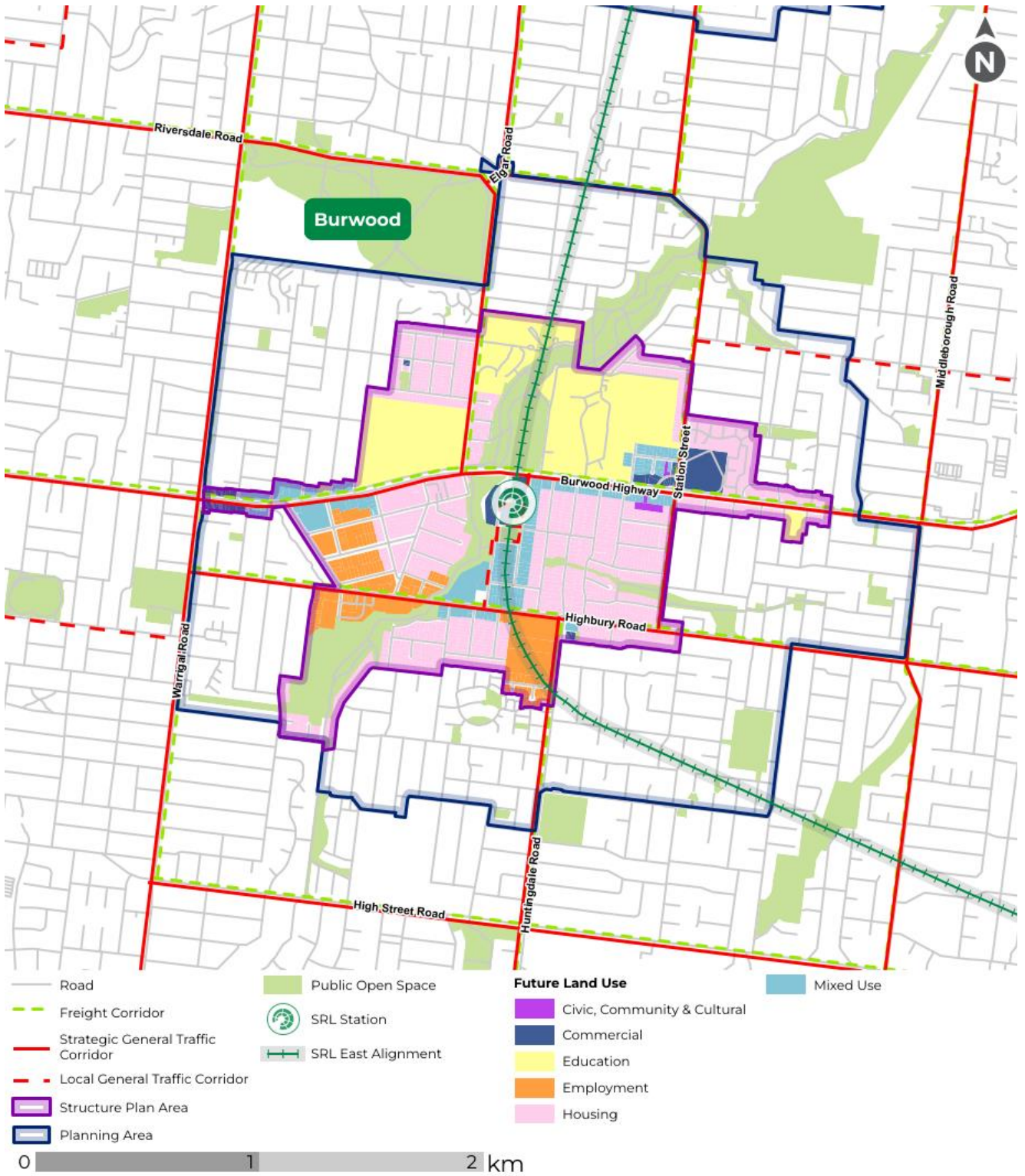


FIGURE 6.12 STRATEGIC TRAFFIC AND LOCAL ACCESS CORRIDORS IN THE BURWOOD PLANNING AREA

6.2 Infrastructure recommendations

6.2.1 OVERVIEW

Infrastructure recommendations have been developed to inform the Structure Plan and to help achieve the Burwood transport ambition. The sequencing of implementing the recommendations is based on the phases outlined in Figure 6.13 to reflect the anticipated development of the Burwood Structure Plan Area.

More details on the timeframes of the delivery of the recommendations are provided in the Burwood Structure Plan.

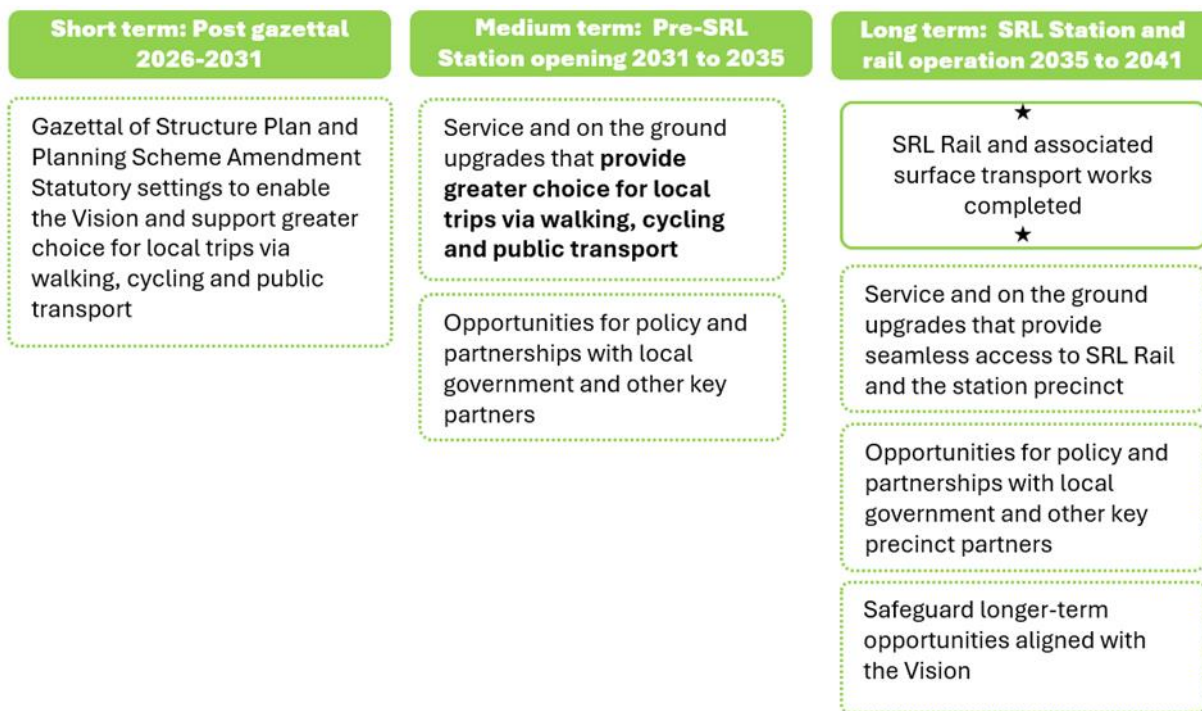


FIGURE 6.13 PHASES OF DEVELOPMENT AND TRANSPORT PLANNING

The infrastructure recommendations focus on upgrades to strategic and local movement corridors that provide the greatest opportunity to provide improvements to facilitate sustainable transport including walking, cycling, public transport and place-making, while maintaining the strategic function of general traffic and freight corridors. These recommendations can be broadly categorised into four groups with recommendation types, as summarised in Table 6.2.

TABLE 6.2 INFRASTRUCTURE RECOMMENDATION TYPES

RECOMMENDATION GROUP	INFRASTRUCTURE RECOMMENDATION TYPES
Setting the priority network	<ul style="list-style-type: none"> • New and Upgraded Strategic Corridors that help achieve the Burwood Vision with a particular focus on active and public transport upgrades • Upgraded local Green Streets, with a particular focus on general active transport upgrades and support for innovative modes.
Unlocking the priority network	<ul style="list-style-type: none"> • New Key Links, focusing on creating active transport permeability and connecting transport corridors • Existing streets that require upgrades outside existing road reserves • New and upgraded crossings of busy roads.
Hubs and interchanges integrated with the network	<ul style="list-style-type: none"> • Upgrades to public transport interchanges to enhance the services, facilities, and customer experience • New bicycle hubs to encourage active transport to the station.
Enabling the priority network	<ul style="list-style-type: none"> • Maintaining strategic traffic and freight corridors • Designating low traffic neighbourhoods • Managing integrated parking for all modes.

Figure 6.14 below identifies examples of potential treatments that could be considered when recommendations are progressed into project design and delivery by a delivery agency.

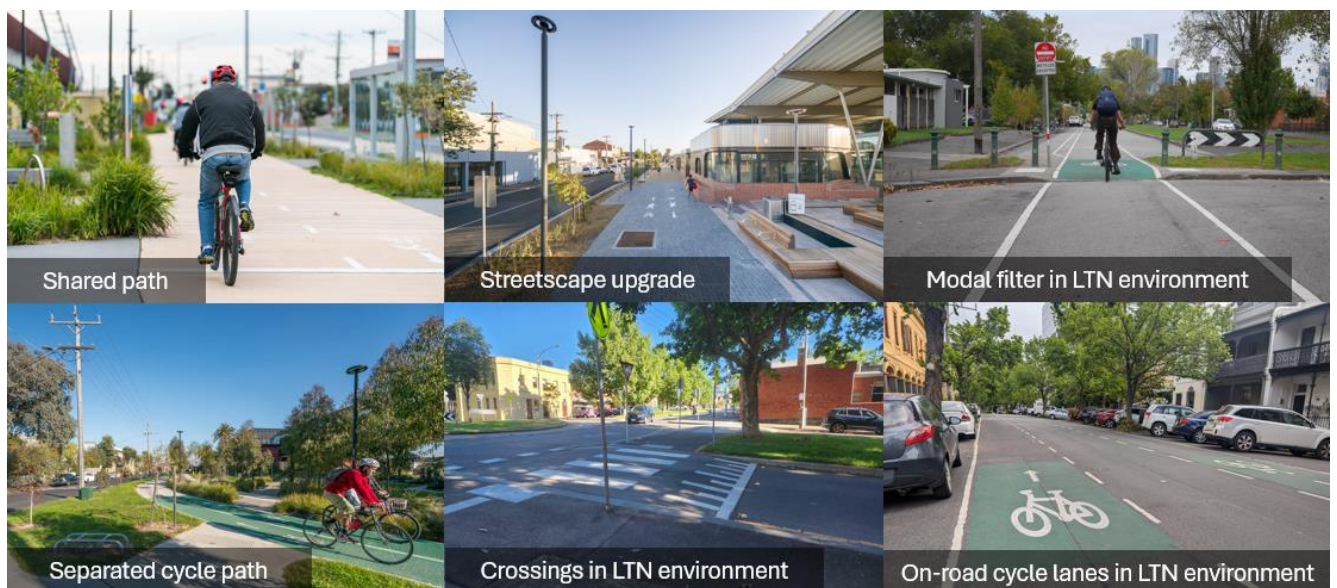


FIGURE 6.14 EXAMPLES OF POTENTIAL TREATMENTS

The infrastructure recommendations for Burwood have been developed to address the various modal challenges identified across the Structure Plan Area while adhering to the modal principles proposed in this report so the movement network continues to cater for the demand of Burwood as it evolves. While responding to some mode-specific challenges, the recommendations intend to facilitate an integrated approach to encouraging a mode shift towards public and active transport while maintaining capacity and efficiency for general traffic, particularly on the main roads through Burwood.

The infrastructure recommendations for the Burwood Structure Plan Area are provided in the following sections.

6.2.2 SETTING THE PRIORITY NETWORK

In setting the priority movement network, identifying specific Upgraded Strategic Corridors and Green Streets is important to providing a network of appropriate and integrated connections through and within Burwood to

support the transport ambition. The general nature of the Upgraded Strategic Corridors and Green Streets are described in Table 6.3.

TABLE 6.3 UPGRADED STRATEGIC CORRIDORS AND GREEN STREET RECOMMENDATION DESCRIPTIONS (SOURCE: SRLA, 2024)

RECOMMENDATION TYPE	RECOMMENDATION TYPE DESCRIPTION
Upgraded Strategic Corridors	Upgraded Strategic Corridors are street corridors that require improvements to achieve the transport goals. Changes could include an upgraded active transport corridor and streetscaping, or an upgraded public transport corridor with enhanced priority. Each Upgraded Strategic Corridor is described by an associated infrastructure recommendation that outlines the significant changes to the street cross-section and/or the adjacent land uses.
Green Streets	Green Streets are a collective network of street corridors that are proposed for upgraded pedestrian and cycling connectivity, improved access to important local destinations, and an enhanced tree canopy. The recommended upgrades to Green Streets are high-level, focussing on street typologies rather than unique cross-sections. As such, one infrastructure recommendation covers the upgraded network of Green Streets across Burwood.

The identified recommendations for Burwood intended to set the priority movement network are detailed in Table 6.4 with the identified corridors and streets in Burwood shown in Figure 6.15.

TABLE 6.4 INFRASTRUCTURE RECOMMENDATIONS – SETTING THE PRIORITY NETWORK

SRL EAST RAIL PROJECT APPROVED SCOPE		
REF	RECOMMENDATION	STRATEGIC JUSTIFICATION
1	<p><u>Deliver a high-quality station interchange</u></p> <p>Deliver a new high quality, integrated station interchange and local street network to support the core of the activity centre that prioritises walking, bike and public transport connectivity.</p> <p><i>Connected with recommendations 2, 3, 11, 12 and 13</i></p>	
2	<p><u>Enable Burwood Highway to be a high-quality Boulevard</u></p> <p>Enable Burwood Highway to be a high-quality Boulevard providing an improved streetscape and pedestrian environment. Plan for upgrades to trams including accessibility upgrades and investigating stop rationalisation opportunities.</p> <p>Note, Burwood Highway upgrades between Elgar Road and McComas Grove are to be delivered as part of the SRL East Rail Project.</p> <p><i>Connected with recommendations 1 and 3</i></p>	<p>Burwood Highway forms an important part of the strategic public network and is also a strategic general traffic and freight corridor. Whilst functionality for these modes must be maintained, proposed walking and public realm improvements will address challenges by:</p> <ul style="list-style-type: none"> • Providing a higher level of safety for pedestrian and other vulnerable street users crossing the highway and accessing tram and bus stops • Improving the amenity for pedestrians along the corridor and providing the connection to the precinct core and public transport hub • Ensure bus and tram service reliability and performance is maintained whilst not having a negative impact on the performance of general traffic and freight. <p>This recommendation also responds to identified modal principles including:</p> <ul style="list-style-type: none"> • Providing quality, comfortable and direct active transport networks coupled with high frequency, direct and reliable public transport • Providing for vehicle movements through the SRL East Precincts • Reducing conflict between vehicles and people walking and cycling • Providing priority for buses and trams along their alignment to provide users with predictable journey times • Providing access to primary walking destinations.

REF	RECOMMENDATION	STRATEGIC JUSTIFICATION
3	<p><u>Enable bus and pedestrian priority for Sinnott Street</u></p> <p>Enable enhanced priority for buses and pedestrians in Sinnott Street (south of Sinnott Street Reserve). Developing Sinnott Street to be the southern gateway to Burwood.</p> <p>Note, the Sinnott Street improvements, north of Sinnott Street Reserve, is to be delivered by SRL East Rail Project which includes a new bus interchange.</p> <p><i>Connected to recommendation 1, 2 and 3B</i></p>	<p>In addition to providing the primary pedestrian access to the SRL East station area, Sinnott Street will also provide bus only access off Burwood Highway to a new bus interchange. Enabling enhanced priority for buses and pedestrians on Sinnott Street will address existing challenges by:</p> <ul style="list-style-type: none"> Facilitating bus service connectivity to the new bus interchange with high service reliability Providing a high level amenity for pedestrians along the Sinnott Street and providing the connection to the precinct core and public transport hub. <p>This recommendation also responds to identified walking and public transport principles including:</p> <ul style="list-style-type: none"> Public transport corridors will have quality, comfortable and direct active transport networks coupled with high frequency, direct and reliable public transport Limiting the impact of cars and service vehicles on high-activity and high-value places Improving the amenity for pedestrians along the corridor and maintaining the connection to the precinct core and public transport hub Providing access to primary walking destinations Providing clear connections for pedestrians travelling between modes Reducing conflict between pedestrians and cyclists and other micromobility Walking corridors be supported by an inviting public realm, seating, lighting, and trees.
4	<p><u>Facilitate Highbury Road improvements for buses and pedestrians</u></p> <p>Facilitate a future bus corridor along Highbury Road and improved streetscape, bike and pedestrian outcomes.</p>	<p>Highbury Road provides a convenient secondary east west corridor through the southern section of Burwood that will provide bus and pedestrian access to the precinct core from the south. Proposed public and active transport improvements will address challenges by:</p> <ul style="list-style-type: none"> Improving pedestrian conditions including safety and amenity to encourage people to walk the shorter distance trips to the precinct core Improving the existing bus service frequency, bus stop waiting areas to prioritising pedestrian safety, DDA compliance, and better amenity Facilitating additional bus service connectivity to the new bus interchange within the precinct core. <p>Improving active and public transport conditions along Highbury Road also responds to identified walking and public transport principles including:</p> <ul style="list-style-type: none"> Public transport corridors will have quality, comfortable and direct active transport networks coupled with high frequency, direct and reliable public transport Facilitating the provision of a local public transport stop within 400 m of all properties Providing public transport service levels that unlock development potential Improving the amenity for pedestrians along the corridor and maintaining the connection to the precinct core and public transport hub Walking corridors be supported by an inviting public realm, seating, lighting, and trees.

REF	RECOMMENDATION	STRATEGIC JUSTIFICATION
5	<p><u>Enable Gardiners Creek improvements</u></p> <p>Enable an upgraded north-south active transport spine through the heart of Burwood along Gardiners Creek. Improve access across Burwood to Deakin University, schools, Box Hill Golf Club and the Gardiners Creek Reserve</p> <p>Note, upgrades between Burwood Highway and Sinnott Street Reserve are to be delivered as part of the SRL East Rail Project.</p>	<p>Gardiners Creek provides a strategic north south walking and cycling corridor that provides convenient access to the precinct core as well as a leisure trail through Burwood. Proposed active transport improvements along Gardiners Creek will address challenges by:</p> <ul style="list-style-type: none"> • Completing a high quality continuous active transport link along Gardiners Creek north and south of Burwood Highway • Providing a higher level of safety and amenity for pedestrians and cyclists accessing and along Gardiners Creek. <p>Improving active transport conditions along Gardiners Creek also responds to identified walking and cycling principles including:</p> <ul style="list-style-type: none"> • Providing access to primary walking destinations • Walking corridors be supported by an inviting public realm, seating, lighting, and trees • Reducing conflict between pedestrians and cyclists and other micromobility • Improving the amenity for pedestrians along the corridor and maintaining the connection to the precinct core and public transport hub.
6	<p><u>Enable a network of local Green Streets</u></p> <p>A broad classification for a collective network of local streets that should be prioritised for improvement due to their significance for sustainable travel and their ability to support pedestrian experience to key destinations (such as recreational facilities, public transport stops and stations and key employment areas), environmental outcomes, and bike and public transport routes.</p>	<p>A network of Green Streets consistent with recommendations in the SRL East Structure Plan - Urban Design Report - Burwood will facilitate a low traffic environment with a higher ability to cater for sustainable transport modes. The provision of Green Streets will address existing challenges by:</p> <ul style="list-style-type: none"> • Improving public amenity to encourage people to walk and cycle the shorter distance trips including to the strategic corridors within Burwood • Discouraging general traffic along these streets, contributing to the low traffic neighbourhoods within Burwood • Improving local bus stop amenity to be consistent throughout Burwood. <p>A network of Green Streets will respond to identified active and public transport modal principles including to:</p> <ul style="list-style-type: none"> • Reduce conflict between vehicles and people walking and cycling • Allow walking corridors to be supported by an inviting public realm, seating, lighting, and trees • Allow street space to respond to changes in use and community needs • Facilitate the provision of local cycling corridors within 200 m of 95% of properties • Facilitate the provision of a local public transport stop within 400 m or strategic public transport stop or interchange within 800 m of 95% of properties.
7	<p><u>Safeguard aspirational modal priorities as per the Movement and Place classifications</u></p>	<p>Movement and Place classifications have informed the development of the modal strategic corridors, Green Streets and Strategic Corridors informing a range of the Recommendations in this report. The classifications will also inform future transport assessments and design options as the precinct develops.</p>

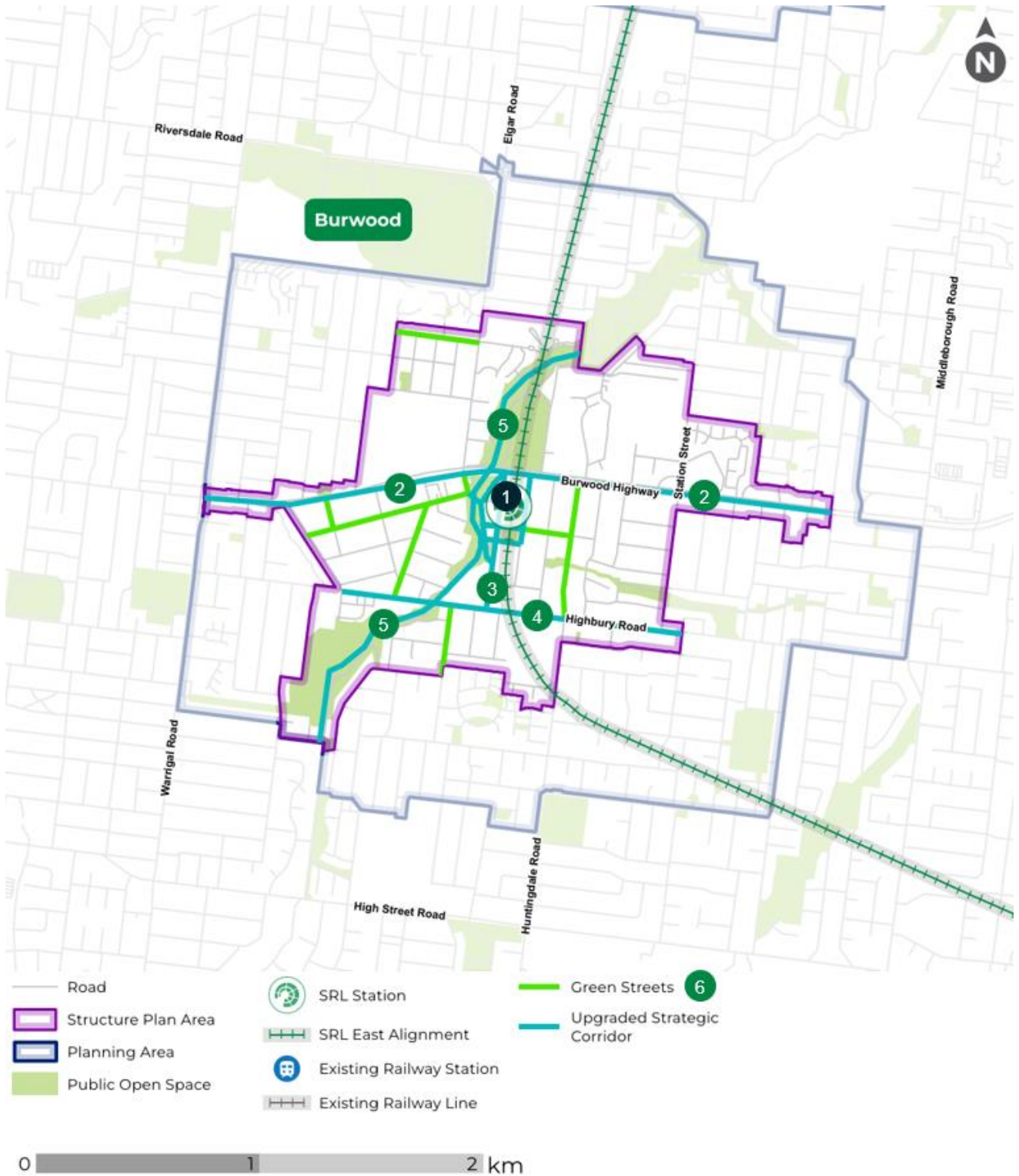


FIGURE 6.15 INFRASTRUCTURE RECOMMENDATIONS – SETTING THE PRIORITY NETWORK

6.2.3 UNLOCKING THE PRIORITY NETWORK

Connectivity through and within Burwood is generally hindered by large urban blocks, and major arterial roads. The type of recommendations that aim to address these challenges include the provision of Key Links, upgrading existing roads beyond the existing road reserve, and provision of new and upgraded crossings to enhance active transport connectivity.

KEY LINKS

The increased permeability enabled by Key Links helps to improve the attractiveness of walking by reducing travel times and creating low stress active transport routes. They also improve the place and amenity value of existing routes. Key Links can be implemented in multiple ways including:

- Fixed Key Link – specific alignment across identified parcels of land requiring access to be created during land development
- Flexible Key Link – the specific location of the Key Link is flexible and multiple parallel options may be considered. A wider area highlighting the need for increased permeability has been identified.

There are three types of Key Links varied by their importance (critical, important and local). There are only Important and Local Key Links identified in Burwood, which can be summarised as:

- **Critical Key Links** are considered essential connections to achieving the Vision for Burwood
- **Important Key Links** provide connection to or between strategic transport corridors
- **Local Key Links** aim to improve local active transport connections / permeability and place activation.

Critical Transport Projects

For Burwood, the Sinnott Street South Connection (Highbury Road to Burwood Highway) has been identified as a Critical Transport Project. With further planning and development of Burwood and bus network as part of precinct planning, Highbury Road and Sinnott Street south is planned to accommodate increased high frequency bus services to and from the new SRL station bus interchange. Sinnott Street and its connection to Highbury Road represents a significant opportunity for improved connectivity within Burwood, acting as a key gateway to the station core and new bus interchange. The assessment undertaken for the Sinnott Street South Connection has identified existing gaps in performance at the Sinnott Street and Highbury Road intersection. To address the identified shortfall in performance, the project proposes to provide critical improvement works at this intersection to accommodate forecast precinct growth and proposed bus services using the intersection as well as reduce delays for pedestrians.

Based on the outcomes of the Sinnott Street South Connection assessment, it is recommended the project is further developed and delivered:

- By SRLA and DTP
- Prior to the opening of the SRL station at Burwood, and within the current lifespan of SRL East's structure planning process.

This critical link recommendation is required such that the intersection can adequately accommodate anticipated bus operations associated with Burwood and provide the necessary pedestrian facilities. Considering this, it should be delivered prior to the commencement of rail services on SRL East.

NEW AND UPGRADED PEDESTRIAN AND CYCLE CROSSINGS

Improvements to walking and cycling crossings including new and upgraded intersections and crossings across major arterial roads such as Burwood Highway, Highbury Road and Station Street improve priority for active transport users in line with demand, reducing crossing delay. It can also help reduce the frequency of cyclists needing to dismount to cross the road.

Where there is a strong active transport desire line but no crossings across a major road, new crossings in the form of pedestrian-operated signals, cyclist-operated signals, non-signalised crossings, or signalised intersections have been identified.

Similarly, some existing intersections and/or crossings require upgrades to improve active transport connectivity where there is a strong desire line. The upgrades may include minor relocations, public transport integration, improved safety through painted markings or raised wombat crossings, or provision of bicycle lanterns.

The identified recommendations for Burwood intended to unlock the priority movement network are detailed in Table 6.5, with the identified links and intersections in Burwood shown in Figure 6.16.

TABLE 6.5 INFRASTRUCTURE RECOMMENDATIONS – UNLOCKING THE PRIORITY NETWORK

REF	SRL EAST RAIL PROJECT APPROVED SCOPE	
3A	<p>Critical – Key Link: Deliver an extension to Sinnott Street from Sinnott Street Reserve to Burwood Highway.</p> <p><i>Connected with recommendation 1</i></p>	
REF	RECOMMENDATION	STRATEGIC JUSTIFICATION
3B	<p>Critical – Key Link: Deliver enhanced priority for buses and pedestrians on Sinnott Street (south of Sinnott Street Reserve). With access being critical to/from Highbury Road, it is recommended to increase the capacity of the Sinnott Street intersection.</p> <p><i>Connected with recommendation 3</i></p>	<p>The provision of this critical link will complete a key strategic walking and bus corridor providing access to the precinct core, including the public transport interchange, with the justification detailed in Recommendation 3</p>
8	<p>Important – Key Links: Deliver the tools for the responsible authority to facilitate landholder-delivery of Important links. Refer to Figure 6.16 for Important links (new links and enhanced corridors).</p>	<p>The provision of key links at appropriate locations are primarily intended to increase permeability throughout Burwood for pedestrians and cyclists. Providing these Important key links will help to address existing challenges by:</p> <ul style="list-style-type: none"> • Providing more direct access between key destinations or transport corridors for pedestrians and cyclists through larger urban blocks where there is a higher pedestrian or cycling modal priority. • Contributing to a better amenity for pedestrians and cyclists • Widening the walkable catchments to public transport nodes and hubs. <p>The provision of Important key links will respond to identified modal principles including to:</p> <ul style="list-style-type: none"> • Improve access to primary walking destinations • Allow walking corridors to be supported by an inviting public realm, seating, lighting, and trees • Reduce conflict between vehicles and people walking and cycling • Facilitate the provision of local cycling corridors within 200 m of 95% of properties • Facilitate the provision of a local public transport stop within 400 m or strategic public transport stop or interchange within 800m of 95% of properties.
8A	<p>Critical – Key Link: Facilitate access across Gardiners Creek from McIntyre Street via a new pedestrian and cycle bridge</p> <p><i>Connected with recommendation 5</i></p>	<p>The provision of an active transport crossing of Garners Creek will provide the additional connectivity required to connect the trail to residential areas on both sides of the creek and the precinct core, with the justification detailed in Recommendation 5.</p>
9	<p>Local – Key Links: Deliver the tools for the responsible authority to investigate landholder-delivery of Local links. Refer to Figure 6.16 for Local Links (new links and enhanced corridors).</p>	<p>Local key links provide a similar function and benefit to the Important key links outlined above albeit at a local level. They may not have the strategic modal priority or demand, however they will address local gaps through the larger urban blocks and facilitate local urban realm improvements and linking open space throughout Burwood.</p> <p>The provision of Local key links will respond to the same identified modal principle as the Important key links above.</p>

REF	RECOMMENDATION	STRATEGIC JUSTIFICATION
10	<p><u>Facilitate improvements to pedestrian crossings</u></p> <p>Facilitate improved walking and cycling crossings of Station Street and Highbury Road. Facilitate improved crossings to tram stops along Burwood Highway.</p> <p>Note, some Burwood Highway crossing upgrades are to be delivered as part of the SRL East Rail Project.</p>	<p>There are five arterial roads through the Burwood Structure Plan Area that provide a high level of strategic access to, from and through Burwood, with three requiring improved pedestrian crossings. Providing new or improved crossing facilities at intersections on these corridors will help address existing challenges by:</p> <ul style="list-style-type: none"> • Reducing dwell times at crossing points on the arterial roads and hence journey times along pedestrian and cycling corridors • Providing safer pedestrian and cycle access across the busy arterial roads, including to tram stops with improved crossing infrastructure including cycle lanterns • Increasing the walkable and cycle catchments to public transport with more direct and faster access along key active transport corridors. <p>New and improved crossing infrastructure will respond to identified modal principles including to:</p> <ul style="list-style-type: none"> • Providing safe and convenient crossing locations at intersections and key destinations • Improve access to primary walking destinations • Prioritising cyclists at intersections and increased physical separation from pedestrians and traffic • Reduce conflict between vehicles and people walking and cycling • provide roads at all bus stops that are easy to access for pedestrians of all ages, abilities and genders.

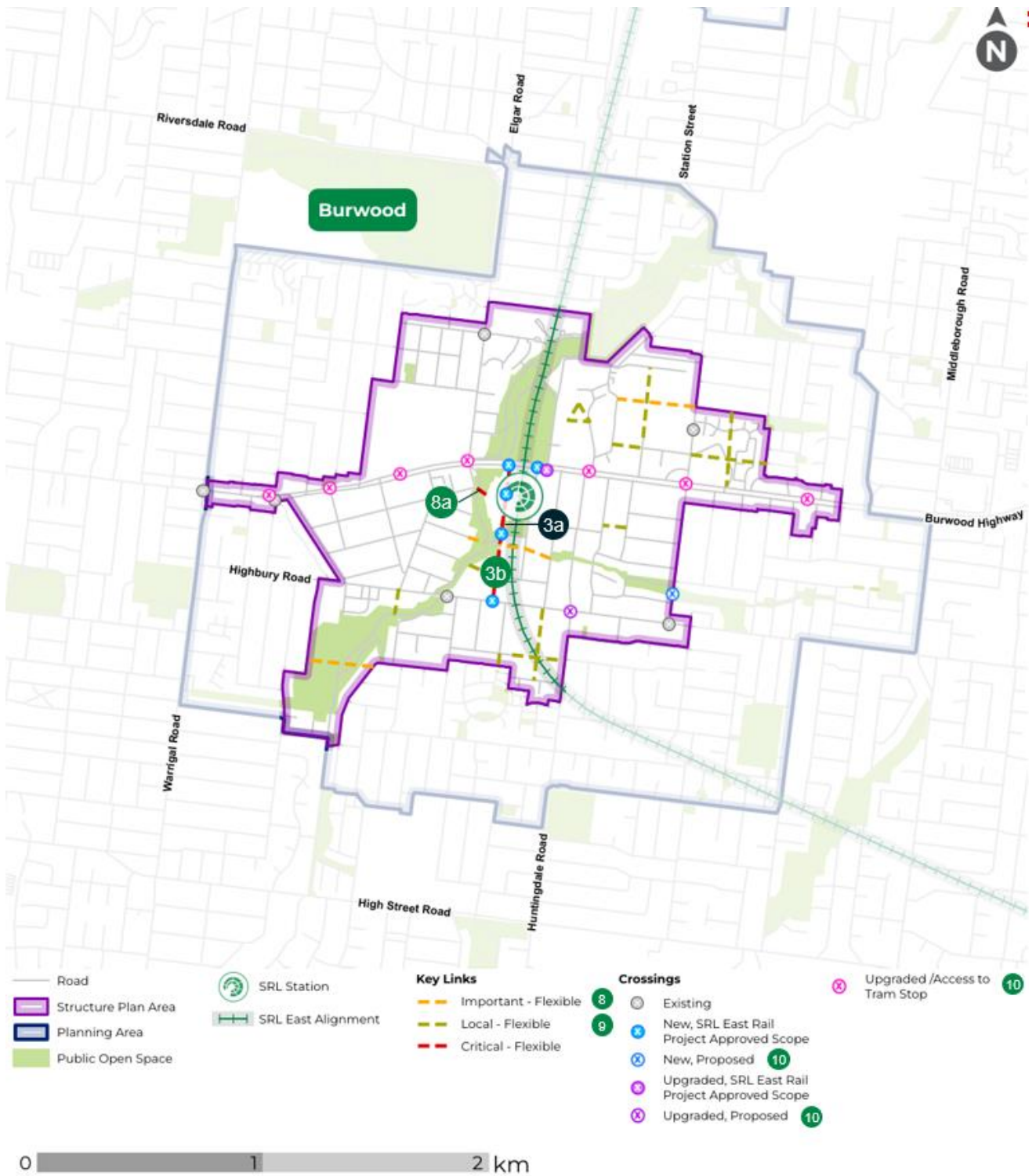


FIGURE 6.16 INFRASTRUCTURE RECOMMENDATIONS – UNLOCKING THE PRIORITY NETWORK

Note: Triangle symbolises links through significant land holding(s) to be discussed with the land owner.

6.2.4 INTEGRATED INTERCHANGES AND PUBLIC TRANSPORT

Improvements to public transport interchanges provide better accessibility to the public transport network.

In Burwood, public transport interchange improvements are the responsibility of the Victorian Government rather than precinct planning include:

- Investigating Elgar Road high-capacity public transport corridor
- Planning for improvements to tram and bus stop infrastructure
- Investigating additional bus priority corridors to support future demand.

Further recommendations that fall under the responsibility of SRL East or the precinct planning include:

- Delivering a new tram interchange at the SRL station at Burwood
- Delivering a new bus interchange at the SRL station at Burwood
- New bicycle hubs to provide users with sustainable transport mode choices for various journey types throughout Burwood.

The identified recommendations for Burwood intended to integrate hubs and interchanges into the movement network are detailed in Table 6.6, with the identified locations in Burwood shown in Figure 6.17.

TABLE 6.6 INFRASTRUCTURE RECOMMENDATIONS – HUBS AND INTERCHANGES INTEGRATED WITH THE NETWORK

SRL EAST RAIL PROJECT APPROVED SCOPE		
REF	RECOMMENDATION (OTHER STATE GOVERNMENT AGENCY)	STRATEGIC JUSTIFICATION
11	<p><u>Deliver a new tram interchange at SRL station</u> Deliver a new tram interchange along Burwood Highway at the SRL station. <i>Connected to recommendations 1, 12 and 13</i></p>	
12	<p><u>Deliver a new bus interchange at SRL station</u> Deliver a new bus interchange within Sinnott Street at the SRL station. <i>Connected to recommendations 1, 11 and 13</i></p>	
13	<p><u>Deliver a high capacity bicycle parking hub at the SRL station</u> Provide secure parking for 600 bicycles incorporated into the station building to provide convenient interchange with SRL, bus and tram services. Future proof for the bike hub to double in capacity when the demand arises. <i>Connected to recommendations 1, 11 and 12</i></p>	
14	<p><u>Investigate Elgar Road high-capacity public transport corridor</u> Investigate a potential high-capacity public transport corridor along Elgar Road, improving connectivity to Hawthorn, Richmond and the CBD.</p>	<p>The strategic nature of Elgar Road provides a significant opportunity to improve public transport connectivity and capacity connecting communities north of Burwood to existing high capacity public transport services. Provision of a future high-capacity public transport corridor along Elgar Road between Burwood Highway and Riversdale Road will address existing challenges by:</p> <ul style="list-style-type: none"> Improving accessibility to a higher capacity public transport service within the north of the Burwood Planning Area to the precinct core and the CBD Providing additional connectivity to the broader strategic transport network. <p>This recommendation also responds to identified modal principles including:</p> <ul style="list-style-type: none"> Providing public transport service levels that unlock development potential Facilitate the provision of a strategic public transport stop within 800 m or a local public transport stop within 400 m of 95% of properties.
15	<p><u>Plan for a more useable bus network</u> Plan for the upgrade of bus stop infrastructure, such as reviewing bus stop locations, provision of shelters, hardstands, real time information and wayfinding to provide a quality bus network throughout Burwood</p>	<p>Burwood is serviced by an existing bus network, and complimented by the route 75 tram. Upgrading the bus stop infrastructure to provide a high and consistent user experience will help to address existing challenges by:</p> <ul style="list-style-type: none"> Improving the existing bus stop waiting areas to prioritising pedestrian safety, DDA compliance, and better amenity Potentially improving accessibility through the review of bus stop locations and providing better wayfinding towards and at bus stops. <p>This recommendation also responds to identified modal principles including:</p> <ul style="list-style-type: none"> Reduce conflict between vehicles and people walking and cycling Facilitate the provision of a local public transport stop within 400 m of 95% of properties Providing public transport service levels that unlock development potential.

REF	RECOMMENDATION (OTHER STATE GOVERNMENT AGENCY)	STRATEGIC JUSTIFICATION
16	<p><u>Investigate future bus priority</u></p> <p>Investigate the need for future additional bus priority corridors as Burwood evolves.</p>	<p>Ongoing reviews of the bus network will help to address challenges by:</p> <ul style="list-style-type: none"> • Improving service reliability and performance on key corridors as demand increases • Identifying potential service efficiency issues with all services through the Burwood Structure Plan Area stopping via the bus interchange. <p>This recommendation also responds to identified modal principles including:</p> <ul style="list-style-type: none"> • Providing priority for buses along their alignment to provide users with predictable journey times • Providing public transport service levels that unlock development potential.

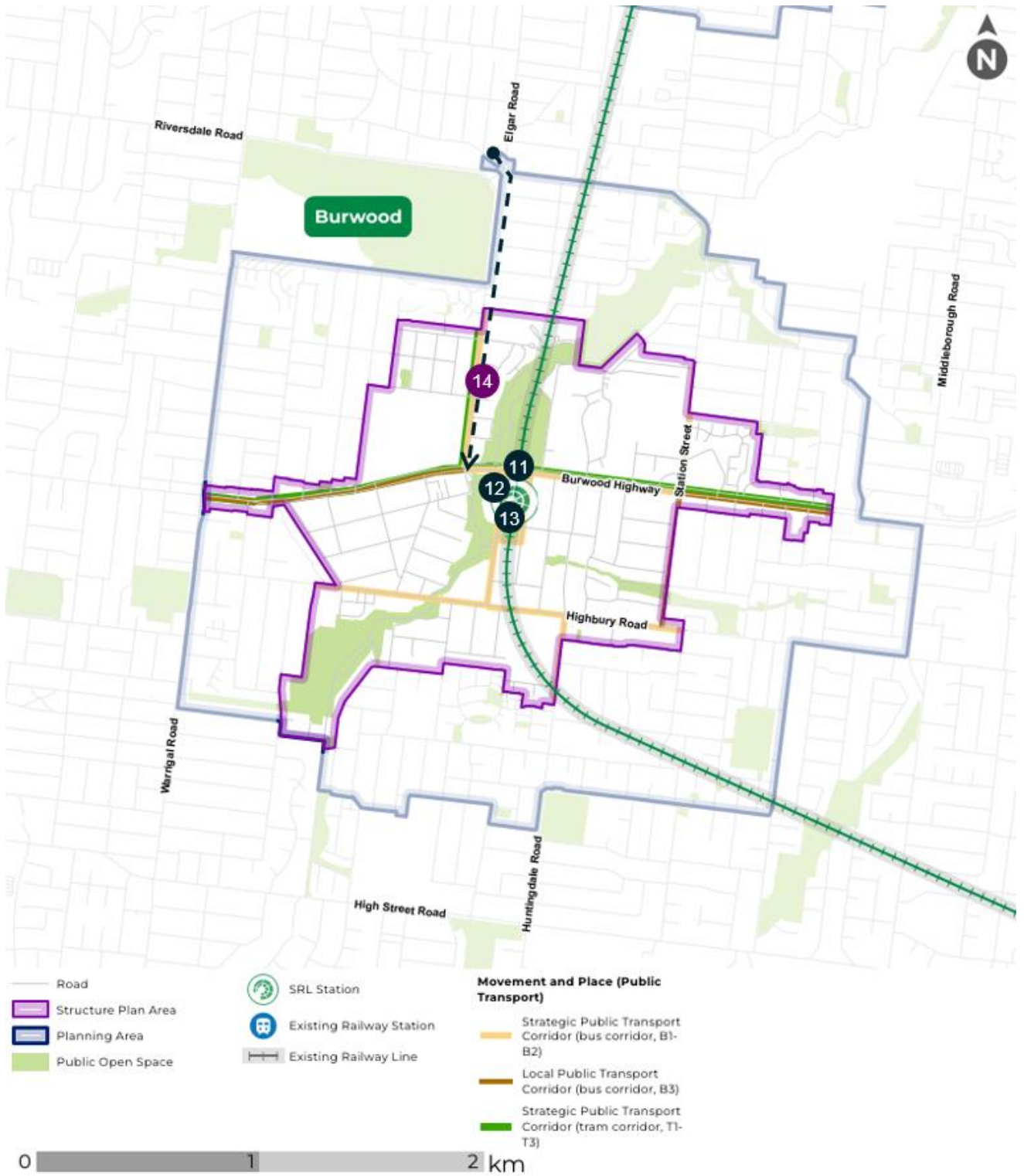


FIGURE 6.17 RECOMMENDATIONS – HUBS AND INTERCHANGES INTEGRATED WITH THE NETWORK

6.2.5 ENABLING PRIORITY MOVEMENT WHILE PROTECTING LOCAL ACCESS

The focus of recommendations which enable the priority network include maintaining existing strategic traffic corridors to allow other corridors to cater for local, more sustainable modes of transport, implementing changes to parking, and providing low-traffic neighbourhoods.

Burwood Highway, Highbury Road and Elgar Road are important traffic corridors that support key bus, general traffic and freight movements through Burwood that will be maintained.

Sustainable modes of travels will be prioritised on corridors such as local streets. This is further supported by designated low-traffic neighbourhoods in Burwood. Low-traffic neighbourhoods generally refer to a residential area usually within a boundary of arterial corridors where traffic management measures are implemented to reduce general traffic movements, particularly through-traffic. These low-traffic neighbourhoods are located in areas where collector roads and local streets are concentrated. Low-traffic neighbourhoods prioritise the use of sustainable modes of transport including walking, cycling and public transport in a safer low-speed environment where local car access is maintained.

Infrastructure recommendations have been identified and aim to reduce private vehicle trips through the precinct core such as by encouraging car park access via alternative routes off major arterial roads where higher general traffic movements are supported.

The identified recommendations for Burwood intended to unlock the priority movement network are detailed in Table 6.7 and shown in Figure 6.18.

TABLE 6.7 INFRASTRUCTURE RECOMMENDATIONS – ENABLING THE PRIORITY NETWORK

REF	RECOMMENDATION	STRATEGIC JUSTIFICATION
17	<p><u>Maintain major road functionality</u></p> <p>Maintain the strategic bus, traffic and freight function of Burwood Highway, Warrigal Road, Highbury Road, Elgar Road and Huntingdale Road to enable transformation of local streets within Burwood.</p>	<p>The strategic road network allows for a significant number of vehicles to access and pass through Burwood. Maintaining the strategic function of these roads will help address identified challenges by:</p> <ul style="list-style-type: none"> • Keeping strategic traffic, including freight vehicles, off the local roads within Burwood, and where traffic is entering the precinct core or other key destinations, ensuring it is via the most direct route to the destination as possible • Maintaining the ability to provide future bus priority measures to continue service reliability • Widening the walkable catchments to public transport nodes and hubs. <p>Maintaining major road functionality will respond to identified modal principles including to:</p> <ul style="list-style-type: none"> • Provide priority for buses and trams along their alignment to provide users with predictable journey times • Provide for vehicle movements through the SRL East Structure Plan Areas • Limit the impact of cars and service vehicles on high-activity and high-value places.
18	<p><u>Facilitate low-traffic neighbourhoods</u></p> <p>Facilitate low-traffic neighbourhoods that reduce rat running, improve safety, and make streets a quieter and more enjoyable environment for walking and chatting with neighbours.</p> <p>Low-traffic neighbourhoods to manage the role of collector roads.</p>	<p>Low traffic neighbourhoods create an environment whereby the impacts of vehicle traffic are minimised, with a higher ability to cater for sustainable transport modes. The provision of low traffic neighbourhoods throughout Burwood will address existing challenges by:</p> <ul style="list-style-type: none"> • Maintain local vehicle access on these streets, while considering safer vehicle speeds to improve safety and amenity for local walking and cycling trips. • Assist in the management of on-street parking around key destinations including commuter parking during busy periods. <p>The provision for low traffic neighbourhoods will respond to identified modal principles including to:</p> <ul style="list-style-type: none"> • Reduce conflict between vehicles and people walking and cycling • Allow street space to respond to changes in use and community needs • Facilitate the provision of local cycling corridors within 200m of 95% of properties.
19	<p><u>Support implementation of smart transport network</u></p> <p>Support implementation of smart network improvements on arterial roads to increase network resilience and facilitate diversion of vehicles to arterial roads with available capacity.</p>	<p>Transport infrastructure and traffic management within Burwood will be supported by implementing smart network improvements in order to get the most benefit. Smart transport network improvements will help address identified challenges by:</p> <ul style="list-style-type: none"> • Ensuring traffic is diverted via the appropriate routes to key destinations, including car parking within and around the precinct core • Minimising traffic congestion on both the strategic and local road network within Burwood.

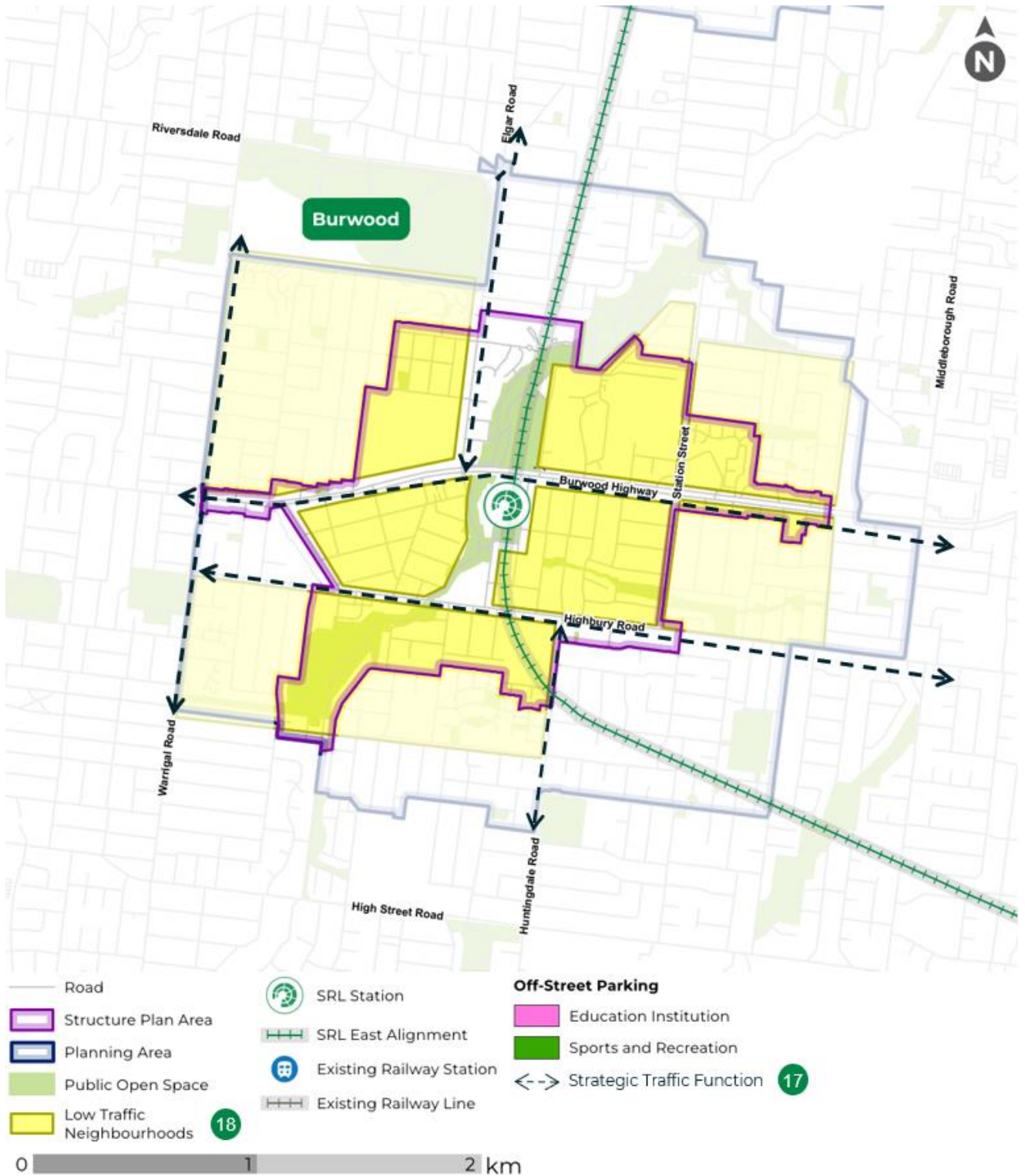


FIGURE 6.18 INFRASTRUCTURE RECOMMENDATIONS – ENABLING THE PRIORITY NETWORK

7 Non-infrastructure recommendations

This section sets out non-infrastructure tools and recommendations to help achieve the traffic and transport ambitions for the Burwood Structure Plan Area.

The recommendations may be incorporated as an amendment as appropriate to the Whitehorse and Monash planning schemes or may simply be a supporting opportunity. The non-infrastructure recommendations may be identified as mechanisms in their own right and also to support the infrastructure recommendations to encourage a mode shift to active and public transport modes for local trips to, from and within Burwood.

A Precinct Parking Plan for Burwood was developed alongside this report to inform recommendations including car parking rates and other management tools, and bicycle and micromobility parking rates. The SRL East Structure Plan – Transport Technical Report – Appendix A – Precinct Parking Plan – Burwood provides an integrated parking response for the Burwood Structure Plan Area and is attached as Appendix A to this report.

A more efficient and sustainable use of the kerbside will be important as activity increases within Burwood. Recommendations are provided to guide the management of kerbside activities, property access, waste management, last-mile freight deliveries, and the development of a Kerbside Management Framework to facilitate better use of the kerbside.

Additional recommendations are identified, including well-established initiatives such as Green Travel Plans and car share schemes, and innovative approaches such as mobility hubs are explored.

7.1 Integrated parking

A better paradigm for parking that is smarter and more efficient across all modes towards a more sustainable precinct.

Parking movements are required at the start and end of every journey for a range of travel modes including bikes, micromobility, and cars. The common parking types are shown in Figure 7.1.



FIGURE 7.1 EXAMPLES OF PARKING

This section sets out guiding principles for parking and identifies tools to manage integrated parking in Burwood. These tools also aim to promote active and sustainable transport choices in the Structure Plan Area.

7.1.1 INTEGRATED PARKING PRINCIPLES

A series of guiding principles have been established to inform the development of the integrated parking experience in the SRL East Structure Plan Areas. These integrated parking principles are shown in Figure 7.2.

These principles also align with the transport ambition and goals and provide a benchmark to which the parking related non-infrastructure recommendations can be measured in achieving the ambition.

A better paradigm for parking that is smarter and more efficient across all modes working towards a more sustainable precinct







The SRL East Structure Plan Areas will...	Parking infrastructure...
 <p>...minimise car parking, promoting a 'car light' environment to rebalance mode share toward public transport and active travel modes</p> <p>...employ smart and efficient parking to boost economic activity and housing affordability</p> <p>...encourage availability of public consolidated car parks, supporting car share to minimise private vehicle use</p>	<p> is designed to support future needs of customers with consideration of emerging trends and growth</p> <p> is minimised in high-value space areas to support development intensity</p> <p> will prioritise access for specific user groups such as people with a disability</p> <p> will provide easy and intuitive access by providing adequate wayfinding and informing people of their trip choices.</p> <p> will maximise productivity of space through flexibility of use and appropriate parking controls</p>

FIGURE 7.2 INTEGRATED PARKING PRINCIPLES

7.1.2 CAR PARKING MANAGEMENT TOOLS

The SRL East Structure Plan – Transport Technical Report – Appendix A – Precinct Parking Plan – Burwood (Precinct Parking Plan – Burwood) discusses car parking management tools to support the development of the Structure Plan Area and help achieve the transport goals and ambition for Cheltenham.

Table 7.1 provides an overview of the recommended car parking management tools proposed in the Precinct Parking Plan.

TABLE 7.1 CAR PARKING MANAGEMENT TOOLS PROPOSED IN THE PRECINCT PARKING PLAN

CAR PARKING MANAGEMENT TOOLS	DESCRIPTION	PRECINCT PARKING PLAN REFERENCE
Development parking controls – parking rates	The Precinct Parking Plan – Burwood proposes a mix of maximum and minimum-maximum parking rates for land uses, including specific nominated rates for residential (multi-dwelling developments), office and retail land uses. These maximum parking rates are based on a review of policy, standards, guidelines empirical data and examples of car parking management in other locations.	Section 5.1 of the Precinct Parking Plan – Burwood
On-street parking management	On-street parking management techniques include parking restrictions, paid parking schemes and monitoring / enforcement tailored to support various goals such as pick-up / drop-off areas, short to long-term visitor parking and residential / commuter needs, while considering pedestrian safety and place-making activities through guidance to local governments.	Section 5.4 of the Precinct Parking Plan – Burwood
Consolidated parking	Consolidated parking is shared parking that is generally provided off-site from the end destination and can reduce the total amount of parking provided in a precinct by allowing the same space to be used by different people at different times.	Section 5.5 of the Precinct Parking Plan – Burwood
Unbundled parking (decoupled parking)	Unbundled parking separates parking costs from development costs, allowing occupants to pay only for the parking they need, which may change over time, promoting efficiency and fairness.	Section 5.6 of the Precinct Parking Plan – Burwood
Repurposing car parking	Designing parking spaces with flexibility and adaptability in mind, such as with suitable heights and flat floors, enables their adaptation for other purposes, optimising space utilisation.	Section 5.8 of the Precinct Parking Plan – Burwood

7.1.3 PARKING FOR CYCLING AND MICROMOBILITY

The Precinct Parking Plan – Burwood also identifies the need for appropriate provision and range of bicycle and micromobility parking to improve the experience of cycling and micromobility trips, encouraging an increase to mode share for cycling and micromobility.

Some cycling and micromobility trips also require end-of-trip facilities, allowing users to change and shower, while offering security and weather protection for cyclists and their devices.

Section 5.2 of the Precinct Parking Plan – Burwood discusses the recommended minimum bicycle parking rates and recommended bicycle parking supporting facilities respectively.

7.2 Better use of kerbside

The kerbside is the space between the road carriageway and footpath as shown in Figure 7.3. The kerbside can be a contested space with various competing uses. These competing uses include priority lanes for buses or bikes, providing driveway access to properties and businesses and providing pick-up / drop-off space for people and goods. The kerbside also supports place making activities such as outdoor dining and landscaping such as trees to provide canopy cover.



FIGURE 7.3 KERBSIDE SPACE IN THE CONTEXT OF THE STREET CROSS SECTION

The layout of different streets can influence how people travel and influence the attractiveness of a place. Some streets will have a different balance of modes and changes to the public realm, which may require a street’s cross section to change. As travel behaviours in Burwood shift to using active and public transport, there is the opportunity to change the focus of the kerbside from primarily supporting car trips with parking and property access to a more balanced approach. These changes can range from minor enhancements to more transformative changes similar to those seen in inner Melbourne and some suburban activity centres over the last 30 years where more trees, wider footpaths, safe bike lanes and public transport priority have been implemented alongside growth in central city activity.

Ambitions for a better public realm will require better management of the kerbside space to support features such as improved landscaping, tree canopy coverage, and place making opportunities like outdoor dining. Examples of different kerbside uses are shown in Figure 7.4.

Taxi zones	Parking	Car Share	Access	Pick up Drop off	Landscape / Tree Canopy	Place making	Bicycle/ Micro-mobility	Loading	Accessible	Bus Stop	Priority Lanes

FIGURE 7.4 DIFFERENT KERBSIDE USES

7.2.1 KERBSIDE MANAGEMENT FRAMEWORK

The Burwood Structure Plan provides an opportunity to embrace a more efficient and diverse kerbside. Parking will continue to be provided depending on the street, surrounding properties, and street activity. However, other uses such as landscaping, dining, bicycle / shared micromobility parking within mobility hubs or travel lanes may be a better fit in some places. Where parking is an appropriate use, parking controls will be adopted that direct space for different users and support the wider private vehicle parking aims and ambitions.

Applying road user hierarchies and considering place to develop a Kerbside Management Framework is a transparent way of identifying when and where different users of the street have priority in the kerbside. Table 7.2 shows a suggested kerb use hierarchy for different area types include the activity centre, residential area and industrial area. These priorities will need to be further developed and aligned to key street typologies to support different goals and aspirations for Burwood.

The City of Whitehorse and the City of Monash will be encouraged to develop the Kerbside Management Framework to guide controls and restrictions across streets where proactive management of the kerbside is required.

TABLE 7.2 SUGGESTED KERB USE HIERARCHY FOR DIFFERENT AREAS

	ACTIVITY CENTRE	RESIDENTIAL AREA	INDUSTRIAL AREA
Landscaping opportunities	High	High	Medium
Public transport	High	High on bus routes	High on bus routes
Emergency services	Case by case, but if required High	Case by case, but if required High	Case by case, but if required High
Car share	High	High	Medium
Taxi & rideshare	High	Low	Low
Electric vehicle charging	Medium	Medium	Medium
Parklets	High	Medium	Low
Micromobility and bicycle parking	High	Medium	Low
Food deliveries	High	Low	Low
Deliveries	High	Low	High
Accessible	High	Medium	High
Pick up / drop off (PUDO)	High	High around schools and community activity areas	Low
Car parking for residents	Low	Medium	Low
Car parking for local workers	Low	Medium	Medium
Car parking for customers	Medium	Low	Medium
Commuter car parking	Not an acceptable kerb space use	Low	Low
Car parking for construction workers	Case by case	Case by case	Case by case

7.2.2 ACCESS TO PROPERTIES

Providing driveway access to properties is an important function of roads that requires the management of conflicts between vehicles turning into properties and other traffic such as pedestrians and cyclists. This impacts the space that can be used for place-making that can contribute to better people-focused environments.

Better outcomes can be achieved by providing access into new developments away from frontages with high movement or place-making functions (strategic walking and/or cycling corridors) to locations such as rear laneways or reducing or consolidating the number of access points. Minimising vehicle crossovers in strategic locations along Upgraded Strategic Corridors and Green Streets as well as arterial roads where significant increase in land use intensification is proposed can support safer movements and better amenity for pedestrian and cyclists.

A broad set of property access guidelines have been developed considering the M&P classifications and are listed in Table 7.3.

TABLE 7.3 BROAD SET OF PROPERTY ACCESS GUIDELINES

PROPERTY ACCESS GUIDELINES	
General considerations	<ul style="list-style-type: none"> • Consider the land use and property access requirements, whether primarily residential, commercial, and whether the property is in the Structure Plan Area core, along busy arterial corridors or within surrounding residential areas. • All new property development or redevelopment should consider the appropriate statutory and design guidance and specifications set out in: <ul style="list-style-type: none"> » AustRoads, <i>Guide to Traffic Management Part 5 – Road Management</i> » Municipal Planning Scheme requirements » Australian Standards (AS2890.1 – Parking Facilities).
Properties with multiple street frontages	<ul style="list-style-type: none"> • Where access via a laneway to the side or rear of a property is available, provide appropriate space to facilitate on-site car park access, delivery vehicle and waste removal vehicles • Properties with multiple frontages to provide car park access along the frontage that is neither an Upgraded Strategic Corridor nor Green Street, or the lesser M&P classification. Existing access crossovers should be consolidated to provide a single crossover where possible • Should both property frontages share the same street type such as a Green Street or Upgraded Strategic Corridor, and M&P classifications, consider additional factors including traffic (all modes) volumes, adjacent property characteristics and other relevant factors.
Properties with single street frontages	<ul style="list-style-type: none"> • Where the property frontage has a M&P classification of 3 or less and is neither a Green Street nor Upgraded Strategic Corridor, provide a single point of access to the property • Where the property frontage is on a street whereby the M&P classifications for general traffic, public transport, freight and cycling are 3 or less and on an Upgraded Strategic Corridor, provide a single point of access to the property • Where the property frontage is on a street whereby the M&P classifications for walking, cycling, and place are 3 or less and on a green street, provide a single point of access to the property • Where the property frontage is on a street whereby the respective M&P classifications are greater than 3, and a Green Street or Upgraded Strategic Corridor, provide a single point of access to the property. Integrate appropriate kerbside/ access management measures to minimise the impact on the street frontage.

7.2.3 WASTE MANAGEMENT

Waste management is an integral part of city life, albeit a 'back of house' function, associated with waste removal.

Large developments often have on site loading and waste facilities due to the size of land block, scale of the task, type of vehicle and/or the need to store goods on-site due to high shelf turnover.

Some shops with street frontages may lack alternative access and often cannot facilitate larger storage areas and so rely on the local street interface, generally using smaller vehicles.

Residential development has traditionally not included service areas but as density increases the need to facilitate more frequent turnover of residents, family size households and higher waste management means that these tasks are less suitable for the kerb space, as shown in Figure 7.5.



FIGURE 7.5 APARTMENT BINS BLOCKING PAVEMENT

7.2.4 LOCAL FREIGHT DELIVERIES

The *Victorian Freight Plan 2018–2050, Delivering the Goods* predicted the freight movement task for Victoria will increase two to three-fold from 2014 levels by 2050. Since this prediction, as with many aspects of daily life, the COVID pandemic has potentially changed the trajectory of freight growth and potentially the type of freight vehicle, with COVID travel restrictions introducing the benefit of online shopping to new markets. While the need to shop from home has diminished, the benefits of online shopping for customers and retailers means this market continues to grow.

While online retailing has the potential to reduce personal travel and car trips, the overall implications for the road network can be significant as more people need individual freight deliveries more frequently, particularly smaller parcels. It is not uncommon to observe multiple freight-based trips occurring on local streets associated with the delivery of orders and parcels.

There is opportunity in the SRL East Structure Plan Areas to work with developers, local governments, community and businesses to harness new practices and options for freight to reduce the impact of these trips on the local network by managing freight, so the right vehicle type is used for the right delivery.

The Victorian Freight Plan was developed in consultation with local governments and the freight industry to consider the future of freight in the state. This 'freight future' includes recognition of more personal freight delivery, and opportunities for smaller lighter and more efficient forms of freight delivery, particularly in the last mile first mile space.

The Freight Plan sets out five priorities to support the freight and logistics system to improve how goods are moved to their local, interstate, and overseas markets. How the Freight Plan should be reflected in the SRL East structure planning is summarised in Figure 7.6.

Victorian Freight Plan 2018-2050



5 Priorities

1. Manage existing and proposed freight corridors and places in conjunction with urban form changes
2. Reduce the impact of congestion on supply chain costs and communities
3. Better use of our rail freight assets
4. Plan for Victoria's future port capacity
5. Stay ahead of the technology curve

- Manage existing and proposed freight corridors and places in conjunction with urban form changes
- Reduce the impact of congestion on supply chain costs and communities
- Work with local government to remove or reduce first and last mile impediments
- Develop more freight friendly solutions for Melbourne's CBD
- Prioritise the use of technology to improve the management of network congestion on the road network

Reflections for SRL East Structure Plan Areas

- Management of on-street loading restrictions can improve efficiency of freight
- Traditional CBDs can be problematic for freight movements. There is the opportunity to proactively plan areas for more freight friendly solutions, including development controls and last / first mile freight policies
- Ensuring the local network hierarchy recognises the role of freight and freight corridors where appropriate
- Reducing the climate cost of transportation of freight – supporting increasing use of cargo bicycles and EVs

FIGURE 7.6 VICTORIAN FREIGHT PLAN AND HOW THIS CAN BE REFLECTED IN SRL EAST STRUCTURE PLANNING

Managing the 'first and last mile' of freight tasks will be key in ensuring balance between the needs of people and freight in the SRL East Structure Plan Areas. The City of Melbourne and Transport for NSW have both recognised the potential for managing this part of the freight task for network efficiency and improved urban amenity with the former releasing a Last Kilometre Freight Plan³⁵ and the latter a Last Mile Freight Toolkit.³⁶

A Last Mile Freight Plan (LMFP) is recommended to be developed for the Structure Plan Area, particularly with smaller parcels and deliveries. The Freight Plan will guide new and existing developments in adopting emerging and more sustainable modes for local deliveries.

The Freight Plan will likely include the use of cargo bikes, smaller electric delivery vehicles, and freight and mobility hubs. This could include community delivery boxes, such as the Australia Post Parcel Lockers shown in Figure 7.7 which are becoming more common and will continue to evolve. These sustainable last mile freight delivery options and parcel lockers can also be integrated into mobility hubs to improve access and reduce unnecessary trips as recipients can collect their parcels during an existing trip. There is also an opportunity to encourage alternative freight modes and approaches that improve convenience and sustainability for the delivery of take-away food and groceries.

³⁵ City of Melbourne, June 2016, Last Kilometre Freight Plan, <<https://www.melbourne.vic.gov.au/sitecollectiondocuments/last-kilometre-freight-plan-june-2016.pdf>>

³⁶ Transport for NSW, November 2020, Freight and Servicing Last Mile Toolkit – A guide to planning the urban freight task, <[https://www.mysydney.nsw.gov.au/sites/default/files/2023-05/Freight%20and%20Servicing%20Last%20Mile%20Toolkit%20Master%20Document\(1\)-compressed-1.pdf](https://www.mysydney.nsw.gov.au/sites/default/files/2023-05/Freight%20and%20Servicing%20Last%20Mile%20Toolkit%20Master%20Document(1)-compressed-1.pdf)>



FIGURE 7.7 COMMUNITY DELIVERY BOX EXAMPLE (SOURCE: AUSTRALIA POST PARCEL LOCKER³⁷)

Other potential Last Mile Freight Plan considerations are summarised in Table 7.4.

TABLE 7.4 LAST MILE FREIGHT PLAN CONSIDERATIONS

Potential for consolidating delivery and servicing facilities between different properties	Potential for the role of precinct freight consolidation hubs. Identify redundant space with the potential to support consolidation of delivery tasks. This could range from Freight Consolidation Centres (FCCs) through to community delivery parcel drop off sites that allow multiple personal deliveries in one trip rather than through multiple trips. Integration of freight into mobility hubs.
Development of a freight journey planner and freight access maps for use by businesses and logistics companies servicing properties	
Development of principles for allowing out of hours deliveries, to reduce freight traffic during peak activity periods and opportunities to use redundant out of hours space	Special loading permit zones and spaces for more efficient and low impact / low emission vehicles
Encouragement for local businesses to invest in and utilise cargo bikes to manage local delivery tasks	Monitor the use of street loading spaces so that local government can timely respond to overuse and under use of loading spaces
Stakeholder engagement including potential for the development of precinct freight portals to share and promote more efficient freight options and new and advancing technological options and experiences	Pilot studies to inform businesses of opportunities to change practices and support change
Identify opportunities to use local traffic management during construction projects to encourage more sustainable freight choices - for example, partial road closures could still allow cargo bikes and other two wheeled vehicle passage	Development of last mile toolkit to assist business, developers, and residents in understanding and implementing more sustainable last mile practices
Out of hours loading in the street scape when demands for other purpose is minimal (for example, bus lanes or pedestrian areas between midnight and 6am)	

It is recognised that some of the last mile freight initiatives are likely to be new to businesses in Burwood. As such, there may be benefits in working with existing business to develop pilot schemes that can trial and/or showcase different approaches to managing last mile freight use.

As the roll out of electric vehicles (EVs) continues it may also be prudent to plan for the potential to provide EV charging associated with loading facilities.

³⁷ <https://auspost.com.au/receiving/collection-points/use-a-247-parcel-locker>

Finally, it is recognised the period where the densification of Burwood and the delivery of the SRL station is likely to result in periods and locations of disruption. Implementing Last Mile Freight Plans may provide a tool that will help SRLA, the City of Whitehorse, the City of Monash and the local community manage deliveries during these periods. This will take advantage of the opportunities these periods produce to do things differently, which may then continue post construction if they are successful.

There is an opportunity to showcase these evolving freight management approaches in Burwood, providing a benchmark for managing freight in Melbourne's middle to outer centres.

7.3 Supporting travel choices

Enabling greater choice for how you would like to get around wherever you are in Burwood.

Approaches to supporting travel choices will complement recommendations for all transport modes and parking. Supporting travel choices will contribute to achieving the transport goals and ambitions with an integrated transport approach. These include measures such as Green Travel Plans, car share schemes, mobility hubs, and street layouts that support a greater diversity of travel choices and activity.

7.3.1 GREEN TRAVEL PLANS

A Green Travel Plan sets out ways that occupants or visitors to an existing or new commercial or residential building can adopt more sustainable transport such as walking, cycling, public transport or car-pooling.

Green Travel Plans can be a significant contributor to achieving more sustainable mode share targets. United Kingdom studies cited in a City of Sydney guideline indicate that providing Green Travel Plans can achieve significant reductions in commuter car trips, averaging 18 per cent and as high as 50 per cent.³⁸ Green Travel Plans are most effective when they include regular monitoring.

Green Travel Plans can be prepared by or on behalf of developers, tenants, owners, body corporate, businesses, education and leisure occupiers and facility / property managers. Green Travel Plans prepared by developers will be passed on to the tenants or other occupants allowing for specific business or property manager incentive commitments to be incorporated to meet the needs of the users. These incentives can range from providing towels and hairdryers as part of end-of-trip facilities, cycle-to-work incentives and supporting walking, cycling and car share groups, through to financial incentives such as travel vouchers, MYKI cards, subsidised bicycle hire, or low-interest rate loans to help purchase equipment or bicycle insurance.³⁹

When prepared at the development planning application stage, Green Travel Plans can contribute to evidence for Green Star ratings and/or Built Environment Sustainable Scorecard (BESS) alignment. A well prepared Green Travel Plan can form part of the marketing for new developments to demonstrate to potential occupiers its sustainable access and the need for less parking.

Effective Green Travel Plans include enforcement, regular monitoring and updating to understand the changing gap between aspirational mode share and actual mode share.

The need to require Green Travel Plans is being incorporated into more planning schemes across Victoria. However, the trigger for mandating these travel behaviour tools varies.

³⁸ UK Department for Transport, March 2008, *Essential Guide to Travel Planning*, < <https://webarchive.nationalarchives.gov.uk/ukgwa/20101213165120/http://www.dft.gov.uk/pgr/sustainable/travelplans/work/> >

³⁹ *Examples of incentives in existing Melbourne and international GTPs: La Trobe University Sports Park Partner Precinct GTP; Northumberland Street office development, Collingwood; Barratt and Darwin Green residential development, Cambridge UK*

Using Green Travel Plan requirements and triggers examples from Victoria and NSW as well as internationally, the Green Travel Plans triggers listed in Table 7.5 are recommended to be captured in the Whitehorse and Monash Planning Schemes by means of an appropriate Schedule to the relevant zone.

TABLE 7.5 RECOMMENDED GREEN TRAVEL PLAN TRIGGERS AND APPROACH

USE	GREEN TRAVEL PLAN TRIGGER [1]	EXCEPTIONS
Residential	≥ 10 dwellings or if not known: > 1000 m ² GFA	-
Office	> 1000 m ² GFA	-
Retail premises	> 1000 m ² GFA	-
Education	All	Except for schools where student requirements may make Green Travel Plans irrelevant
Leisure	> 1000 m ² GFA	Except where movement generated < 50 trips per hour
Industrial	> 5000 m ² GFA	Except where movement generated < 50 trips per hour

[1] Green Travel Plan development size trigger intended to ensure requirements imposed on developments over a nominated size.

For existing major uses in the SRL East Structure Plan Areas, it is recommended that SRLA should work with these land holders to develop or update Green Travel Plans to recognise the increasing accessibility of Burwood that will be delivered as part of SRL East.

7.3.2 CAR SHARE SCHEMES

Car share schemes provide access to shared vehicles, reducing the need for private car ownership optimising the utilisation of space. When integrated with high quality local public transport and active travel options, car share schemes can significantly decrease car ownership and use, with research suggesting that a single car share vehicle can replace 7 to 10 privately owned cars.⁴⁰

Car share scheme spaces should be encouraged in on-street car parking areas and within off-street development sites and supported by the development of car share policies and/or guidelines in consultation with Council and building and strengthening relationships between key stakeholders and car share operators. This is discussed in detail in Section 5.3 of the Precinct Parking Plan – Burwood.

7.3.3 MOBILITY HUBS

Mobility hubs provide a space designed specifically to offer access to various sustainable transport modes with enhanced facilities that enable integrated travel choices.⁴¹ They provide users with one location for all travel choices and facilitates investment in better facilities rather than choices and facilities spread across an area.

The hubs are often located near community services, co-working places, or an Activity Centre, and are connected to strategic cycling corridors. The hub provides space for mobility, place and logistics functions:

- The mobility function includes the co-location of transport modes, including conventional public transport, e-scooter and bike hire, car share, and sustainable private transport modes

⁴⁰ Shaheen, S.A. & Cohen, A.P. (2013), *Carsharing and Personal Vehicle Services: Worldwide Market Developments and Emerging Trends*, International Journal of Sustainable Transportation, Volume 7, (Issue 1), https://www.researchgate.net/publication/241730570_Carsharing_and_Personal_Vehicle_Services_Worldwide_Market_Developments_and_Emerging_Trends

⁴¹ Collaborative Mobility UK (CoMoUK), 2023, *What are mobility hubs?*, <<https://www.como.org.uk/mobility-hubs/overview-and-benefits>>

- The place function could include facilities to improve convenience and comfort such as bathrooms, water fountains, shaded areas, and vending machines
- The logistics function includes the integration of parcel lockers or micro-delivery centres.

The mobility hub functions and conceptual network are shown in Figure 7.8.

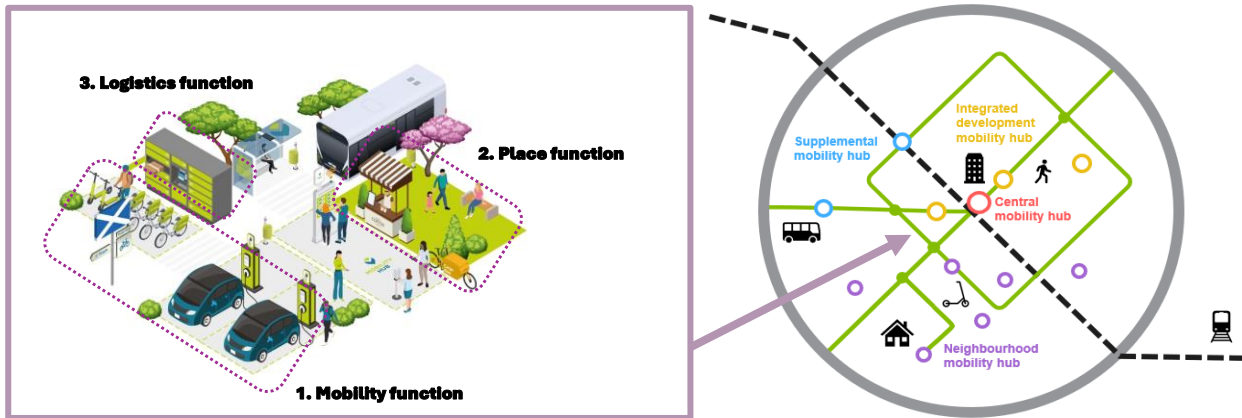


FIGURE 7.8 MOBILITY HUB FUNCTIONS AND CONCEPTUAL NETWORK (SOURCE: COMOUK⁴²)

The benefits that mobility hubs generate for the wider community include improved access to sustainable transport, especially for first and last mile trips, convenient transfer between transport modes, land use integration, improved public realm, and reduced street clutter. Mobility hubs also provide an opportunity to reduce car parking demand within Burwood.

7.4 Non-infrastructure recommendations summary

A set of non-infrastructure recommendations to manage parking and provide better active and sustainable transport choices have been developed, along with recommendations to manage kerbside activities and local freight deliveries. A pragmatic approach to car parking is adopted, recognising the growing opportunities and viability other travel options, including bicycle and micromobility, for trips to, from and within Burwood.

The full list of non-infrastructure recommendations and opportunities is provided in Table 7.6 and is based on the analysis undertaken for this report and the Precinct Parking Plan – Burwood attached as Appendix A to this report. Table 7.6 also identifies where the non-infrastructure recommendations and opportunities strongly support the infrastructure recommendations discussed in Section 6.2.

⁴² Collaborative Mobility UK (CoMoUK), 2023, What are mobility hubs? <<https://www.como.org.uk/mobility-hubs/overview-and-benefits>>

TABLE 7.6 NON-INFRASTRUCTURE RECOMMENDATIONS

REF	NON-INFRASTRUCTURE RECOMMENDATION / OTHER OPPORTUNITY		SUPPORTED INFRASTRUCTURE RECOMMENDATION(S)
INTEGRATED PARKING			
BWTP 1*	Implement increased minimum bicycle parking and end-of-trip facility requirements to support sustainable modes and reflecting the change in cycling usage within 'living locally' based neighbourhoods and over time.	Recommendation	<ul style="list-style-type: none"> Deliver a high-quality station interchange (Ref 1) Facilitate Highbury Road improvements for buses and pedestrians (Ref 4) Enable Gardiners Creek improvements (Ref. 5) Enable a network of local Green Streets (Ref. 6) Critical – Key Links (Ref 3A & 3B) Important – Key Links (Ref. 8 & 8A) Local – Key Links (Ref. 9) Deliver a high-capacity bicycle parking hub at the SRL station (Ref. 13)
BWTP 2*	Develop public realm cycling and micromobility end-of-trip policy and guidelines.	Opportunity	
BWTP 3*	Implement development parking controls, limiting new development parking provisions.	Recommendation	<ul style="list-style-type: none"> Deliver a high-quality station interchange (Ref. 1) Enable Burwood Highway to be a high-quality Boulevard (Ref. 2) Facilitate low-traffic neighbourhoods (Ref. 18)
BWTP 4*	Support major landholders to explore reducing existing parking supply and adopting alternative uses for the land as accessibility and density in the Structure Plan Area increase.	Opportunity	<ul style="list-style-type: none"> Deliver a high-quality station interchange (Ref. 1) Enable Burwood Highway to be a high-quality Boulevard (Ref. 2)
BWTP 5*	Encourage adoption of an unbundled car parking model for on-site car parking provision and management.	Recommendation	
BWTP 6*	Encourage the provision of consolidated car parking options which could be used to manage accessibility changes over time and reduce reliance on on-site parking.	Recommendation	<ul style="list-style-type: none"> Deliver a high-quality station interchange (Ref. 1) Enable Burwood Highway to be a high-quality Boulevard (Ref. 2) Facilitate low-traffic neighbourhoods (Ref. 18)
BWTP 7*	Implement adaptable building design requirements for new above-ground car parking facilities that enable their use for other purposes as parking demand reduces over time. Require developers to have an Adaptable Parking Plan which outlines future options for the use of on-site parking.	Recommendation	
BWTP 8*	Encourage Council to further develop and update the on-street parking management policy that supports the significant changes in land use density, diversity and accessibility levels in the Structure Plan Area over time.	Opportunity	<ul style="list-style-type: none"> Deliver a high-quality station interchange (Ref. 1) Enable Burwood Highway to be a high-quality Boulevard (Ref. 2) Enable a network of local Green Streets (Ref. 6) Facilitate low-traffic neighbourhoods (Ref. 18)
GREEN TRAVEL PLANS			
BWTP 9	Implement Green Travel Plan requirements for applicable new developments to help guide occupant travel behaviour, including monitoring commitment and program.	Recommendation	<ul style="list-style-type: none"> Deliver a high-quality station interchange (Ref 1) Enable Gardiners Creek improvements (Ref. 5) Enable a network of local Green Streets (Ref. 6)
BWTP 10	Encourage Council to develop an improved Green Travel Plan Framework in the short term to guide and influence travel behaviours of occupants and visitors to new and existing buildings.	Opportunity	

REF	NON-INFRASTRUCTURE RECOMMENDATION / OTHER OPPORTUNITY		SUPPORTED INFRASTRUCTURE RECOMMENDATION(S)
	This may include providing best practice templates, tools and strategies and incorporation of monitoring and review requirements.		<ul style="list-style-type: none"> Critical – Key Links (Ref 3A & 3B) Important – Key Links (Ref. 8 & 8A) Local – Key Links (Ref. 9)
BWTP 11	Support preparation of Green Travel Plans for existing major employers and land holders, including local education facilities to help influence existing travel behaviours to major destinations as accessibility increases.	Opportunity	
CAR SHARE SCHEMES			
BWTP 12*	<p>Encourage Council to develop policy and guidelines for car share schemes in public areas and new developments that include electric vehicle charging facilities, by</p> <ul style="list-style-type: none"> Facilitating stronger relationships between developers and car share operators Recognising electric vehicle charging for car share schemes in Green Travel Plans Encouraging on-site car share scheme parking with electric vehicle charge points. 	Opportunity	<ul style="list-style-type: none"> Enable Burwood Highway to be a high-quality Boulevard (Ref. 2) Facilitate low-traffic neighbourhoods (Ref. 18)
MOBILITY HUBS			
BWTP 13	Encourage the development of a network of new mobility hubs in strategic locations across the Structure Plan Area.	Recommendation	
BWTP 14	<p>Develop a mobility hub strategy and implementation framework with key stakeholders and partners, considering private and public sites, including:</p> <ul style="list-style-type: none"> Investigate partnerships with shared micromobility operators and Council and explore potential to undertake trials within the Structure Plan Area Delivery of a central mobility hub with Council and land-owners in the centre of the Structure Plan Area Facilitate or contribute to the provision of integrated development mobility hubs Consultation and delivery of supplementary mobility hubs that can be tied to other public transport interfaces and peripheral parking areas Investigate possible neighbourhood mobility hub land options and partnerships with Council. 	Opportunity	<ul style="list-style-type: none"> Deliver a high-quality station interchange (Ref 1) Enable Gardiners Creek improvements (Ref. 5) Enable a network of local Green Streets (Ref. 6) Critical – Key Links (Ref 3A & 3B) Important – Key Links (Ref. 8 & 8A) Local – Key Links (Ref. 9)
LOCAL FREIGHT DELIVERIES AND WASTE MANAGEMENT			
BWTP 15	Encourage centralisation and sharing of loading, waste and freight management facilities to reduce the number of access points and kerbside demands during peak community activity periods.	Recommendation	
BWTP 16	Support adoption of alternative freight vehicle and freight delivery models within the Structure Plan Area to reduce vehicle emissions associated with these trips, including development of a Last Mile Freight Plan in association with Council.	Opportunity	<ul style="list-style-type: none"> Maintain major road functionality (Ref. 17)
BETTER USE OF THE KERBSIDE			
BWTP 17	<p>Encourage Council to develop a suite of policies and plans with Council to manage the function and needs that interface with the kerbside, which may include:</p> <ul style="list-style-type: none"> A Kerbside and Access Management Framework based on use hierarchy principles which supports urban cooling, sustainable transport modes and reduced private car trips, and on-street parking demands A Kerbside Management Plan to inform access, freight and waste management and kerbside use in the Structure Plan Area 	Opportunity	<ul style="list-style-type: none"> Enable Burwood Highway to be a high-quality Boulevard (Ref. 2) Enable bus and pedestrian priority for Sinnott Street (Ref. 3) Facilitate Highbury Road improvements for buses and pedestrians (Ref. 4)

REF	NON-INFRASTRUCTURE RECOMMENDATION / OTHER OPPORTUNITY		SUPPORTED INFRASTRUCTURE RECOMMENDATION(S)
BWTP 18	<p>Implement controls to respond to design recommendations for:</p> <ul style="list-style-type: none"> • Access of secondary roads where possible (lane ways, side streets) • Access discouraged from Upgraded Strategic Corridors and/or Green Streets, high activity pedestrian and cyclist links • Encouraging on-site waste and freight management facilities. 	Recommendation	<ul style="list-style-type: none"> • Enable a network of local Green Streets (Ref. 6) • Investigate Elgar Road high-capacity public transport corridor (Ref. 14) • Investigate future bus priority (Ref. 16) • Facilitate low-traffic neighbourhoods (Ref. 18)
BWTP 19	Implement loading and waste management requirements for new developments including requirement for loading to be entirely on-site for key land uses (such as large residential, large retail, industrial).	Recommendation	<ul style="list-style-type: none"> • Maintain major road functionality (Ref. 17) • Facilitate low-traffic neighbourhoods (Ref. 18)
BWTP 20*	Encourage shared parking arrangements in developments to enable efficient and overall lower parking provisions.	Recommendation	<ul style="list-style-type: none"> • Facilitate low-traffic neighbourhoods (Ref. 18)
BWTP 21*	Encourage car share scheme parking spaces in developments.	Recommendation	

* Item included in the Precinct Parking Plan – Burwood.

8 Conclusion








SRL East will improve access to and from Burwood and to nearby state and regional significant activity centres.

More active and sustainable transport choices will help improve the amenity and liveability of the Structure Plan Area. Compared to the Baseline Scenario, this will reduce traffic congestion, better manage parking and provide for more efficient use of land. The mode share target shows an increase in active transport mode share by 32 per cent (an increase of 1800 trips during a typical peak hour) compared to the baseline from 22 per cent to 29 per cent, with public transport mode share increasing by nine per cent (an increase of 600 trips during a typical peak hour).

Table 8.1 summarises the types of recommendations that have been developed and their alignment with the transport goals. The infrastructure and non-infrastructure recommendations will deliver a more connected network and increased travel choice by building on existing arterial road and rail access and contributing to a modal shift towards sustainable travel choice across the Burwood Structure Plan Area.

In doing so, these recommendations will support achieving the vision for the Burwood Structure Plan Area and provide a framework to guide growth and change, while protecting and preserving the character and features that people love about them now.

TABLE 8.1 TYPES OF TRANSPORT IMPROVEMENTS AND ALIGNMENT WITH THE TRANSPORT GOALS

TRANSPORT RECOMMENDATIONS	TRANSPORT GOALS						
	 A safe and connected walking and cycling environment	 A revitalised bus experience	 An all-inclusive transport network	 Anchoring sustainable travel services and shared mobility to SRL East	 Prioritising safe and healthy movement	 Smart and efficient use of parking	 Enable new and emerging innovative mobility
Infrastructure types							
New and Upgraded Strategic Corridors that enable the Structure Plan with a particular focus on active and public transport upgrades	✓	✓	✓		✓		
Upgraded local Green Streets, with a particular focus on active transport upgrades and support for innovative modes	✓		✓			✓	
New Key Links, focussing on creating active transport permeability and connecting transport corridors	✓		✓	✓			
New and upgraded crossings of busy roads	✓		✓		✓		
Upgrades to public transport interchanges to enhance the services, facilities, and customer experience		✓		✓			
New bicycle hubs to encourage active transport to the SRL station, existing railway station and bus interchange	✓	✓		✓			
Maintaining strategic traffic and freight corridors		✓				✓	
Designating low traffic neighbourhoods	✓		✓		✓		
Non-Infrastructure types							
Development of SRL East Structure Plan Area appropriate parking rates					✓	✓	
Partnering with Council to plan and manage streets through local freight delivery and kerbside management plans						✓	
Supporting travel choices including Green Travel Plans and encourage use of mobility hubs					✓		✓

Appendix A
**SRL Draft East
Structure Plan –
Transport Technical
Report – Appendix A –
Precinct Parking Plan
– Burwood**



Appendix B

Peer Review Report



Client
Clayton Utz and White & Case on
behalf of SRLA

Date
19 February 2025

Planning

Transport

Urban Design

Waste

Transport Engineering Peer Review

Suburban Rail Loop East Burwood

ratio:

ratio.com.au

Project
Burwood SRL East Structure Plan Area

Prepared for
Clayton Utz and White & Case on behalf
of SRLA

Our reference
21802T

Directory path <https://ratioconsultants1.sharepoint.com/sites/21802T577/Shared Documents/Work/Reports/21802TREP01BUR F01 Burwood TTR Peer Review.docx>

Acknowledgement of Country

We acknowledge the Traditional Owners of the land we work, live and travel on, and appreciate the rich cultures of the Aboriginal and Torres Strait Islander Peoples and their enduring connection to country.

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1. Introduction

1.1. Background

Ratio Consultants have been engaged by Clayton Utz and White & Case lawyers on behalf of the Suburban Rail Loop Authority (SRLA), to peer review the Burwood Transport Technical Report.

The SRLA is currently in the process of preparing Structure Plans for areas around each of the new Suburban Rail Loop (SRL) East stations at Box Hill, Burwood, Glen Waverley, Clayton, Monash and Cheltenham.

The SRL East rail project and associated stations were assessed and approved as part of an Environment Effects Statement (EES) assessment process which culminated in Planning Scheme Amendment GC197 to the Whitehorse, Monash, Kingston and Bayside Planning Schemes.

AJM Joint Venture (AJM) were commissioned by SRLA to prepare Transport Technical Reports (TTR) to inform preparation of the structure plans for each of the Structure Plan Areas.

The Burwood Structure Plan Area is irregular in shape and is generally centred around the alignment of Burwood Highway and Gardiners Creek. The Burwood Structure Plan extends up to Stott Street to the north, Andrews Street to the east, Florence Street to the south and Warrigal Road to the west.

Ratio Transport team have been requested to review the traffic and transport engineering studies prepared by AJM for Box Hill, Burwood and Cheltenham.

This report summarises the peer review undertaken by Ratio Transport team of the TTR, which includes a Precinct Parking Plan for the Burwood Structure Plan Area. Separate peer review reports have been prepared in respect of the Transport Technical Reports prepared for the Box Hill and Cheltenham Structure Plan Areas.

1.2. Instructions

Instructions were received from Clayton Utz and White & Case lawyers on the 13/11/2024, requesting a peer review of the Draft *SRL East Structure Plan, Burwood, Transport Technical Report* (TTR), dated January 2025, prepared for the Burwood Structure Plan Area.

Specifically, my instructions were:

This letter sets out instructions for you to undertake a peer review of the Technical Report and prepare a peer review report.

Your peer review report should address the following matters:

- (a) The scope of your role in reviewing the Technical Report;*
- (b) The appropriateness of the methodology, assumptions and limitations in the Technical Report;*

(c) *Whether the findings, assessment outcomes and recommendations in the Technical Report are appropriate in the context of the structure plan planning process for the Burwood Structure Plan Area.*

A final version of the TTR was provided on the 12th February 2025, in order to complete this assessment.

1.3. References

While preparing this report I have reviewed and had regard to the following documents.

Table 1.1: Reference Documents

Document	Date
SRL East Structure Plan - Transport Technical Report - Burwood, prepared by AJM Joint Venture	January 2025
SRL East Structure Plan - Transport Technical Report - Burwood, prepared by AJM Joint Venture	February 2025
Suburban Rail Loop East, Inquiry and Advisory Committee Report and Appendices	23 June 2022
Suburban Rail Loop East Environment Effects Statement Summary Report	Undated
SRL East - Environmental Management Framework	Endorsed 17/10/2022
SRL Surface and Tunnel Plans	Approved 28/4/2024

In addition to the above documents, a variety of online mapping resources were used, including Melway, Google Maps, and Landchecker.

1.4. Acronyms and Abbreviations

For ease of reference, commonly used acronyms and abbreviations are summarised in Table 1.2.

Table 1.2: Acronyms and Abbreviations

Acronym	Reference	Acronym	Reference
SRLA	Suburban Rail Loop Authority	TTR	Transport Technical Report
SRL	Suburban Rail Loop	EES	Environment Effects Statement
SPA	Structure Plan Area	EPRs	Environmental Performance Requirements
AJM	AJM Joint Venture	PPP	Precinct Parking Plan
TTIA	Traffic and Transport Impact Assessment	DTP	Department of Transport and Planning

1.5. Limitations of the Peer Review

The following review is based on the content of the TTR as a background study to inform the proposed Burwood Structure Plan. The Structure Plan itself and background reports prepared by other disciplines have not been provided or considered in this review.

Likewise, the validity of the data provided in the TTR, and the conclusions reached have not been tested as part of this review other than by assessing their appropriateness against the purpose of informing a Structure Plan on transport matters.

The Structure Plan Area sits within the broader Planning Area Declaration to which the SRLA is the planning authority.

2. The Project

2.1. Overview

The Suburban Rail Loop (SRL) is a major rail project ultimately providing a 90km loop around Melbourne providing a rail corridor from Cheltenham to Werribee via Melbourne Airport.

SRL East is the first stage of the 'Project' and comprises a rail line and six new stations at Cheltenham, Clayton, Monash, Glen Waverley, Burwood and Box Hill.

2.2. Suburban Rail Loop East Environment Effects Statement

An Environment Effects Statement (EES) was prepared for the SRL East rail infrastructure including the six new SRL rail stations. The EES was the subject of inquiry by the Suburban Rail Loop East Inquiry and Advisory Committee and assessment by the Minister for Environment and Climate Action, culminating in the Minister's Assessment Report dated July 2022. The SRL East portion of the project is currently under construction.

The Environmental Performance Requirements (EPRs) for the design, construction and operation of the SRL East project are detailed in *SRL East - Environmental Management Framework*, which was approved by the Minister for Planning on the 17/10/2022.

The SRL East Environmental Management Framework includes eight Traffic and Transport related EPRs, referenced as T1 through to T8. The EPRs are divided into three indicative timing phases, being Design, Construction or Operation, with some EPR's relevant to more than one phase of the project.

The Traffic and Transport EPRs are divided into eight topics, as summarised in Table 2.1.

Table 2.1: Traffic and Transport Environmental Performance Requirement Topics

Ref.	Environmental Performance Requirement	Timing
T1	Develop and implement Transport Management Plan(s) (TMP)	Design & Construction
T2	Establish and convene a Transport Management Liaison Group (TMLG)	Design & Construction
T3	Manage road transport impact during construction	Design & Construction
T4	Manage public transport impacts during construction	Design & Construction
T5	Manage active transport impacts during construction	Design & Construction
T6	Road transport design and operation	Design & Operation

T7	Public transport design and operation	Design & Operation
T8	Active transport design and operation	Design & Operation

Each of the EPR’s have a number of subset requirements, however broadly speaking T1 through to T6 are primarily related to the design and construction phases of the project. The Burwood TTR contains a specific list of relevant EPRs at Table 3.1 and a response as to how the relevant EPR will be addressed.

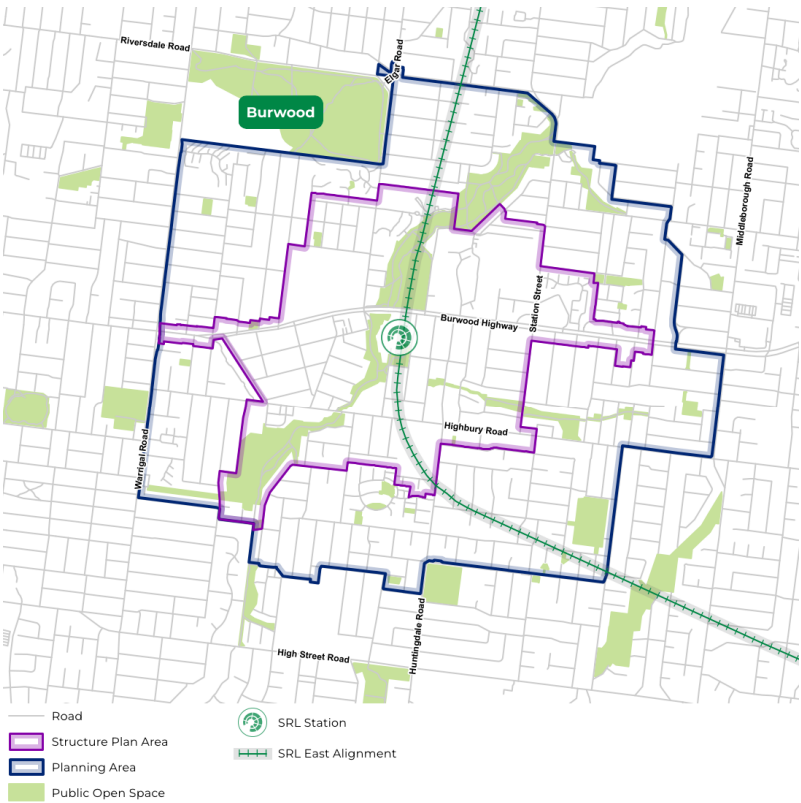
Ratio are satisfied that the TTR has been prepared having regard to the requirements of the EPRs that are relevant to the preparation of a structure plan for the Burwood Structure Plan Area.

2.3. Burwood Structure Plan Area

Two areas are identified around the future Burwood SRL Station, comprising a Structure Plan Area and a wider Planning Area. The broader Planning Area includes the Structure Plan Area and was declared in December 2023, by the Minister under the *Suburban Rail Loop Act 2021* (Vic). The declaration makes the Suburban Rail Loop Authority (SRLA) a planning authority under the *Planning and Environment Act 1987* (Vic) for the land in Burwood to which the Planning Area applies.

The Planning Area and the Structure Plan Area are shown in Figure 2.1.

Figure 2.1: Burwood Structure Plan and Planning Areas



The Burwood Structure Plan applies to the Structure Plan Area identified in pink on the preceding figure.

It is understood that the Structure Plan Area is broadly based on an 800m walking distance from the proposed Burwood SRL Station.

3. Structure Planning Process

3.1. Overview

The purpose of a Structure Plan is to define the preferred direction of future growth within an activity centre and articulate how it will be managed¹.

The City of Melbourne² provides the following summary of what should be included in a Structure Plan:

A structure plan sets out a vision for an area in the next 10 to 20 years. Structure plans provide guidance about appropriate directions and opportunities for change. They are strongly focused on sustainability, planning for change that is environmentally, socially and economically sustainable.

They include:

- *Plans to guide activities and land uses, including proposed locations for new community hubs and business clusters*
- *Plans to manage traffic, car parking, walking, cycling, public transport and freight transport route*
- *Guidance about building heights and forms*
- *Plans to enhance open space, including public gathering spaces, parks and gardens.*

Further guidelines for preparing Structure Plans are outlined within various sections of the Victorian Planning Scheme.

3.2. Planning Scheme Guidelines for Structure Plans

In preparing this Peer Review, we have referenced the transport related provisions of the Whitehorse and Monash Planning Schemes:

- Clause 18 Transport
- Clause 45.09 Parking Overlay
- Clause 52.06 Car Parking
- Clause 52.34 Bicycle Parking

The relevant considerations from a transport perspective are discussed as follows:

Clause 18 Transport

Clause 18 of the Planning Scheme states that:

Planning should ensure safe, integrated and sustainable transport system that:

¹ Department of Transport and Planning Structure Planning Guideline, dated 20/7/2023

² <https://www.melbourne.vic.gov.au/local-area-planning>

- Provides access to social and economic opportunities to support individual and community wellbeing.
- Facilitates economic prosperity.
- Actively contributes to environmental sustainability.
- Facilitates network wide efficient, coordinated and reliable movement of people and goods.
- Supports health and wellbeing.

Reference should also be given to the subclauses of Clause 18, including:

Table 3.1: Relevant Subclauses of Clause 18 of the Whitehorse & Monash Planning Schemes

Clause	Title	Clause	Title
18.01-1S	Land use and transport integration	18.02-2S & 2R	Cycling
18.01-2S	Transport System	18.02 – 3S	Public Transport
18.01-3S & 3R	Sustainable and safe transport	18.02 – 3R	Principal Public Transport Network
18.02	Movement Network	18.02 – 4S	Roads
18.02-1S	Walking	18.02 – 4L	Car Parking (Whitehorse only)
18.02-1L	Sustainable Personal Transport (Whitehorse only)	18.02 – 5S	Freight

The overarching aspiration of the various strategies under Clause 18 is to reduce reliance on the private vehicle by promoting, facilitating and planning for an increased mode share towards sustainable transport options.

3.3. Planning Scheme Practice Notes

A range of Practice Notes have been prepared to assist with implementation of the Victorian Planning Scheme. Practice notes relevant to the preparation of the SRL East Structure Plans include:

- Planning Practice Note 58: Structure planning for activity centres (PPN58)
- Planning Practice Note 57: Parking Overlays (PPN57)

PPN58 Activity Centres

Planning Practice Note 58: Activity Centres (PPN58) was prepared in September 2018 and is currently under review. At the time of preparing this assessment, the government is currently working on 10 activity centres (excluding SRL East precincts) which are expected to be approved early 2025.

A further 25 Activity Centres have also been announced by the government, with a further 25 expected later in 2025. On the basis of the work being undertaken on Activity Centres

throughout Metropolitan Melbourne, it is anticipated that new guidelines and criteria will be developed to assist in facilitating development of Activity Centres.

In terms of current guidelines informing the development of the TTR for Burwood, PPN58 provides a list of objectives the structure plan should achieve. The ones relevant to transport related matters are as follows:

- *Be consistent with regional and local transport, retail, economic, social, environmental, demographic and housing roles of the centre.*
- *Facilitate a pedestrian environment*
- *Support greater transport mode choice*
- *Provide a mobility network and traffic and carparking management that encourages and supports sustainable transport mode choices*

PPN58 outlines a six step process for preparing a structure plan. Step two of the process is Background Research. The TTR forms part of the background research prepared to inform the Structure Plan.

PPN57 Parking Overlay

The Victorian Planning Practice Note 57: Parking Overlay (PPN57) was prepared in August 2023 and provides guidance on preparing and applying a Parking Overlay.

In regard to the number of car parking spaces specified by the Schedule to the Parking Overlay, PPN57 notes the following:

A schedule to the Parking Overlay can be used to vary the standard number of car parking spaces required under clause 52.06. Specifically, it can be used to:

1. *Vary the car parking rate and measure for any use listed in Table 1 of clause 52.06-5*
2. *Specify car parking requirement for any use not listed in Table 1 of clause 52.06-5*
3. *Specify maximum and minimum car parking requirements for any use*
4. *Apply Table 1 - column B rates to any use listed in the table to clause 52.06-5*

Of particular note: *“the schedule should only be used to reduce standard number of car parking spaces specified in Table 1 of clause 52.06-5....”*

Before a Parking Overlay is implemented a Car Parking Assessment needs to be prepared that identifies the car parking needs and issues for the area to which the parking overlay will apply.

The Car Parking Assessment should set out the relevant objectives and strategies and include a review of the supply and demand, as well as any relevant social, economic and environmental considerations.

Appendix A of the TTR contains the Car Parking Assessment that has been prepared to support the preparation of a Parking Overlay for the Burwood Structure Plan Area. The Car Parking Assessment attached to the TTR has been titled Precinct Parking Plan.

PPN57 states that:

A car parking plan must include the following content:

- *the objectives of the plan*
- *the area to which the plan applies*
- *findings from research and surveys that provide factual material to support the plan*
- *an assessment of car parking demand and supply*

- *car parking strategies proposed to facilitate the plan's objectives*
- *any locational, financial, design or other actions necessary to implement the objectives and strategies.*

PPN57 recommends that Parking Overlays are regularly monitored and reviewed to reflect the changing nature of a precinct.

3.4. Other Considerations

In my opinion, in addition to the Planning Scheme and associated Practice Notes, consideration should be given to existing activity centre structure plans, particularly those recently approved that respond to the sustainable transport ambitions set out in Clause 18 of the Planning Scheme.

4. Burwood Transport Technical Report (TTR)

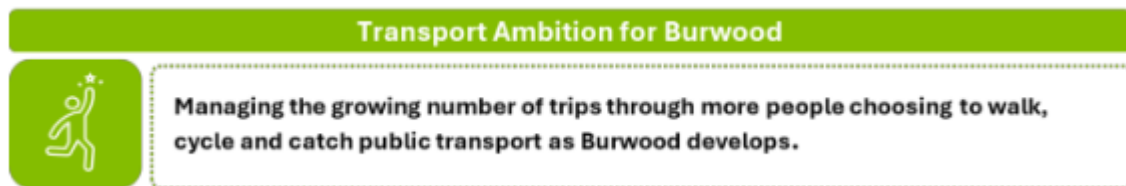
4.1. Purpose

The purpose of the TTR is to inform the preparation of the Burwood Structure Plan in terms of managing relevant transport considerations, such as traffic, car parking, walking, cycling, public transport and freight movements.

The following Peer Review is based on the report titled *SRL East Structure Plan – Transport Technical Report – Burwood*, dated February 2025.

4.2. Methodology

The TTR states that each of the Structure Plans will be prepared using a Vision and Validate methodology. The TTR outlines the overarching Transport Ambition for Burwood to support the Structure Plan Vision as follows:



A set of Transport Goals are outlined in the TTR that expand on the preceding ambition. The goals broadly address walking, cycling, safety, public transport, inclusivity, sustainability, parking and emerging mobility modes.

The Burwood TTR (Section 1.4) states that the following steps were taken to reach the recommendations for the Burwood Structure Plan.

- Step 1: Review existing conditions
- Step 2: Review the baseline
- Step 3: Setting the transport ambition and goals
- Step 4: Determine the initial movement network and opportunities
- Step 5: Iterate the development of the Structure Plan with transport
- Step 6: Validate the recommendations

AJM have also outlined a five phase stakeholder engagement process that at the time of preparing this review, was up to Phase 2 labelled 'Shaping the Plans'. The TTR states that engagement with Whitehorse City Council, Monash City Council and Department of Transport and Planning (DTP) had occurred prior to completion of the TTR.

4.3. Investigation

The TTR includes an investigation and discussion on the following existing transport infrastructure items:

- Road network and operating conditions
- Pedestrian and cycle networks and connectivity
- Public transport services and routes
- Accident history
- Freight routes and demand
- Parking supply, location and type including both on-street and off-street spaces.
- Car park demand
- Mode share characteristics
- Car ownership
- Bicycle ownership

Once AJM had established existing conditions for various metrics including car and bike ownership, walk score, transit score, travel mode etc, they benchmarked the metric against other locations within Melbourne.

The TTR also includes an assessment of how the transport infrastructure listed above and current mode share can be encouraged to become more sustainable and less reliant on private vehicles, with the introduction of the Burwood SRL Station, associated Structure Plan and recommended infrastructure improvements.

4.4. Findings

Existing Conditions

The TTR provides a robust description of existing conditions and transport characteristics more broadly, the key findings of the existing conditions assessment are detailed in Table 2.8 of the TTR and summarised as follows:

- The precinct has a comprehensive footpath network, which has been assessed as generally safe and comfortable, although it is noted that the level of amenity decreases outside the centre of Burwood.
- The cycling network is generally restricted to a few main high quality routes through the precinct.
- There are a number of existing barriers for pedestrians and cyclists including busy roads, the train line and in some places large blocks.
- Burwood is served by tram and bus services, however infrastructure quality, service frequency and coverage impact operations.
- Bus and tram services are at risk of being delayed at peak times as they don't have priority over passenger vehicles.
- Burwood is served by the Burwood Highway arterial road corridor which caters for high through volumes.
- Burwood Highway is the only defined arterial road in the area.
- The roads within the Burwood Structure Plan Area are not part of the Principal Freight Network.

- There are in the order of 5,350 off street parking spaces publicly available and a further 1,400 on-street parking spaces.
- Approximately 70% of the off-street car parking is provided within the Deakin University campus.
- There are limited bicycle parking opportunities beyond those provided within Deakin University.

Car Parking

The key finding outlined in Appendix A –Precinct Parking Plan, is that the same parking rates should not be applied to the entire Structure Plan Area at this stage, given the delay in the completion of the SRL East Stations.

The proposed areas for initial parking rates within the parking overlay are defined as Area A and Area B as shown in Figure 4.1.

Figure 4.1: Proposed Areas for Parking Overlay Zones – Area A and Area B



The TTR confirms that parking overlays are a common tool to use in Activity Centres to manage car parking provision.

In regard to parking provision, the TTR quotes a study undertaken by DTP³, which found that minimum car parking rates, such as those included in Clause 52.06 of the Planning Scheme,

³ Modernising car parking and bicycle facilities requirements, discussion paper, DTP, October 2023

can encourage an oversupply of car parking, which results in increased traffic, noise and emissions and a poorer quality urban environment.

The DTP study proposes to change the statutory parking requirements for both cars and bicycles based on a sites proximity to public transport, which will include removal or refinement of minimum parking rates and application of maximum rates.

The TTR proposes to adopt maximum parking rates for Area A and both minimum and maximum rates for Area B. The proposed parking rates for Area A and Area B are reproduced as Table 4.1 and compared to the existing minimum Clause 52.06 rates and the existing Box Hill Parking Overlay (PO1).

Table 4.1: Proposed Burwood Parking Overlay Rates

USE	EXISTING MINIMUM RATES [1]	AREA A (MAXIMUM)	AREA B	UNIT/ MEASURE
Dwelling	1	0.7	0.5 min – 1 max	1 bedroom/studio
		1.0	0.7 min – 1 max	2 bedrooms
	2	1.4	1.4 min – 2 max	3+ bedrooms
Residential building (student accommodation)	0.1-0.25 [2] 0.3-0.4[3]	0.3	[2][3]	bed
Supermarket	5	3.5	3.5 min	100 m ² LFA
Retail premises, including Shop	4	3	Retail – N/A Shop – Clause 52.06 'Column B' rates (minimum)	100 m ² LFA
Office	3.5	3		100 m ² NFA
Other		Clause 52.06 'Column B' rates (maximum)		

[1] Clause 52.06-5 Table 1 Column A rates. [2] Whitehorse Clause 16.01-1L-01. [3] Monash Clause 16.01-1L-02

The TTR states that all proposed rates will be discretionary, with the ability to modify the rates to the satisfaction of the Responsible Authority. This inclusion will allow greater flexibility for development within the Structure Plan Area than the Area A / Area B may initially imply. This is considered an appropriate response to a developing area such as that proposed within the Burwood Structure Plan Area.

We have undertaken a review of the proposed parking rates and make the following comments:

The Area A residential rates are based on setting the existing status quo of average car ownership as recorded by the ABS Census or policy requirements as the maximum rate. The proposed maximum rates allow residential development parking provision as per existing demand or with reduced parking provision, including zero parking, within the core Area A. This is considered an appropriate approach to provide flexible parking controls for residential developments that allows car parking provision to align with the status quo, as well as the evolving transport infrastructure within the Structure Plan Area.

A more conservative approach has been taken for Area B, with the current Clause 52.06 rates adopted as maximums, and rates slightly less than the existing ABS Census data adopted as minimums. This is considered a reasonable approach to encourage lower parking provision in the wider Structure Plan Area.

A maximum rate of 0.3 spaces per bed is proposed for student accommodation in Area A, defaulting to the status quo for Area B, which includes local policies for both Whitehorse and Monash City Councils. Based on our experience, 0.3 spaces / bed is a relatively high rate of

parking provision, with many student accommodation facilities providing very limited to no parking. The use of this rate as a maximum, with no minimum will allow future student accommodation facilities to provide an appropriate level of parking based on their location within the Structure Plan Area.

Office parking demand is typically a product of supply, such that if an office has a generous rate of parking then employees are more likely to opt to use private vehicles. The proposed rate of 3.0 spaces / 100sqm as a maximum within Area A is considered appropriate and allows for the car parking provision to respond to the evolving transport infrastructure within the Structure Plan Area. The office rate of 3.5 spaces / 100sqm as a minimum in Area B (as per status quo) is considered appropriate for the interim period before the station is open, but is likely to be too high in some locations within Area B. The ability for development to seek a reduction to this minimum rate is noted and should allow an appropriate level of parking to be provided.

The proposed rates for retail and supermarket over Area A and Area B are considered appropriate given that future retail offerings through the wider Structure Plan Area are likely to be smaller local activity centres serving the immediate residential catchment.

For all other uses, the existing Column B rates within Clause 52.06 have been adopted as maximums with no minimums for Area A and as minimum rates for Area B. This approach is considered consistent with the aspirations to facilitate mode shift and promote sustainable transport choices.

Bicycle Parking

Consistent with the findings of other Activity Centres, AJM identified that the bicycle parking rates within the Whitehorse and Monash Planning Schemes do not represent best practice for bicycle provision. Particularly in the context of supporting more sustainable and active transport options. The Burwood PPP therefore includes a recommendation for bicycle parking provision rates, which is considered appropriate and desirable.

Supporting Mode Share and Managing Car Parking

In addition to car and bicycle parking rates, the TTR found that a range of initiatives are beneficial in supporting mode shift towards reduced reliance on private vehicle and managing car parking supply. The TTR found that the following initiatives could include:

- Car share
- Mobility Hubs
- On-street parking management
- Consolidation of parking
- Unbundled parking
- Adaptable buildings

In our opinion, supporting mode shift requires a holistic approach, and as such it is appropriate to consider a wide variety of initiatives that can support and encourage a reduction in the use of private vehicles.

4.5. Assumptions

General

The TTR is based on a number of assumptions, the most significant being the ability of the implementation of planning controls and actions to give effect to the Structure Plan in advance of commencement of operation of SRL East, which is projected to occur in 2035. This assumption has impacted various aspects of the TTR, with project completion, traffic impacts and mode shift discussed as follows:

Structure Plan Commencement

In transport terms the Burwood Structure Plan Area is considered to have a moderate level of existing sustainable transport infrastructure, including but not limited to trams on Burwood Highway and an arterial road bus network through the Structure Plan Area. The area is also served by existing walking and bicycle infrastructure, particularly along Gardiners Creek, and is likely to see increased usage of micromobility modes as their usage continues to grow.

The TTR refers to 'Walk Score' and 'Transit Score' of the Burwood Structure Plan Area. Walk Score is an online program that calculates how well served an area is with amenities, such as shops, parks and other services within convenient walking distance. The higher the score the easier it is to undertaken daily tasks by walking.

Transit Score is a similar metric that measures how well served a particular location is by public transport, taking into consideration distance to nearest stop, route frequency and type of transit available.

The TTR notes that the existing walk score of the Burwood Structure Plan Area is an average of 63 with an average transit score of 57, noting this is an average across the entire Structure Plan Area and that walk and transit scores will vary for specific locations.

A walkscore of 63 is considered 'somewhat walkable' with some errands able to be achieved on foot.

A transit score of 57 is considered 'good' with many nearby transport options being available.

For reference the walk and transit score categories are shown in Figure 4.2.

Figure 4.2: Walk Score and Transit Score Definitions⁴

Transit Score measures how well a location is served by public transit based on the distance and type of nearby transit lines.		Walk Score measures the walkability of any address based on the distance to nearby places and pedestrian friendliness.	
90-100	Rider's Paradise World-class public transportation	90-100	Walker's Paradise Daily errands do not require a car
70-89	Excellent Transit Transit is convenient for most trips	70-89	Very Walkable Most errands can be accomplished on foot
50-69	Good Transit Many nearby public transportation options	50-69	Somewhat Walkable Some errands can be accomplished on foot
25-49	Some Transit A few nearby public transportation options	25-49	Car-Dependent Most errands require a car
0-24	Minimal Transit It is possible to get on a bus	0-24	Car-Dependent Almost all errands require a car

Adopting an aggregate average for both walk and transit scores across the entire Burwood Structure Plan Area is considered a very conservative assumption, noting that the Structure

⁴ <https://www.walkscore.com/transit-score-methodology.shtml> & <https://www.walkscore.com/methodology.shtml>

Plan Area is generally based on an 800m walking distance from the future Burwood SRL Station and as such there is expected to be a reasonable variation across the Structure Plan Area.

In our opinion a more refined review of the walk and transit scores for any development proposal within Area A or B at the planning permit application stage, would be beneficial and help assess the appropriateness of the proposed car parking provision.

It is reasonable to assume that the transport planning for any future permit application would take the particular scores of the site into account, noting that the scores will also change as development progresses and more goods and services and/or sustainable transport options become available.

From a transport perspective, the introduction of a Structure Plan with reduced parking rates, for Area A, can be supported and is consistent with various activity centre structure plans.

The proposal to have different parking rates between Area A and Area B, responds appropriately to the proposed implementation of the Structure Plan before the commencement of operation of SRL East and the new SRL Station at Burwood.

Traffic Assumptions

The TTR refers to the SRL East Rail Environment Effects Statement (EES) (2021), which was supported by a Traffic and Transport Impact Assessment (TTIA). The EES TTIA included traffic modelling implications of the SRL East project.

The TTR states that the work undertaken by AJM, builds on the Traffic and Transport Impact Assessment prepared for the SRL East Environment Effects Statement (EES). The transport modelling prepared for the EES process by AJM, included future land use and travel pattern changes anticipated as a result of the SRL East project.

This assumption is considered reasonable given the traffic modelling by AJM was accepted during the EES hearing.

Parking Demand Assessment

The Precinct Parking Plan (PPP) includes two future scenarios, labelled 'Business as Usual' and 'Mode Shift'. The assumption between the two scenarios relates to the ability to increase mode shift by limiting the potential provision of car parking through car parking rates for new development, as well as a range of proposed improvements to increase the use of sustainable transport modes.

In our view, providing a comparison of business as usual and the potential reduction in parking with a targeted strategy to facilitate mode shift, is an appropriate way to demonstrate the benefits of the proposed parking rates and the risk (or lost opportunity) of over supplying car parking.

Parking

The PPP proposes to split the Burwood Structure Plan Area into Area A and Area B and adopt different parking rates for each of the two areas. It is our opinion that this is an appropriate response to the delayed timing of the Burwood SRL station itself and also to the variation that exists and will continue to exist, over the larger Structure Plan Area.

It is anticipated that any Parking Overlay applied to the Structure Plan Area will need to be reviewed and modified over time as development in the area progresses. It is also likely that the wider Area B could be divided further, to respond to the variation through the Structure Plan Area.

At the time of preparing this assessment, Ratio have not undertaken a review of the proposed parking rates, the appropriateness of Area A vs Area B or the specific implications on any particular site within either area.

Nonetheless, the proposal to provide different parking rates for Area A vs the remainder of the Structure Plan Area (Area B) is considered appropriate and consistent with managing car parking in Activity Centres.

4.6. Limitations

One of the most significant limitations to this study is the expected timing of the SRL East construction. The anticipated operation of the SRL East rail corridor is projected for commencement of operation in 2035, and as such the Structure Plan needs to respond to both the ultimate outcomes of the SRL East project and the interim conditions before the new stations are in operation. Given that redevelopment of an area takes a considerable amount of time including design, approval and construction, there also needs to be consideration for the transition period that will occur in the years immediately prior to the Burwood SRL Station opening.

Other limitations of the TTR study include:

VITM TRAFFIC MODELLING PROGRAM

- Traffic analysis program VITM has been relied upon, which like most transport software programs has limitations. One noted by AJM⁵ is that VITM lacks sensitivity to active transport modes in favour of assuming vehicle movements instead, resulting in potentially lower active transport usage than that shown on the mode shift graphic.

DATA COLLECTION






- AJM note that the bicycle parking assessment was undertaken using a desktop review of the Structure Plan Area and as such is likely to contain discrepancies.
- The report relies on VISTA data for bicycle ownership from 2012-2020 and 2022. Bicycle ownership levels have generally increased over the past decade, suggesting that historical data may not reflect future ownership levels. Furthermore, the data period is potentially impacted by Covid-19.
- The occupancy of the car parking both on-street and off-street has not been surveyed over an extended period of time, with observations used to determine the current level of business.

4.7. Recommendations

The TTR outlines a table of recommendations defined as either Infrastructure Recommendations or Non-infrastructure Recommendations. The table is reproduced as Table 4.2.

⁵ TTR Executive Summary Recommendations (footnote 3, pdf pg 9)

Table 4.2: TTR Summary of Recommendations

TRANSPORT RECOMMENDATIONS	TRANSPORT GOALS						
	 A safe and connected walking and cycling environment	 A revitalised bus experience	 An all-inclusive transport network	 Anchoring sustainable travel services and shared mobility to SRL East	 Prioritising safe and healthy movement	 Smart and efficient use of parking	 Enable new and emerging innovative mobility
Infrastructure types							
New and Upgraded Strategic Corridors that enable the Structure Plan with a particular focus on active and public transport upgrades	✓	✓	✓		✓		
Upgraded local Green Streets, with a particular focus on active transport upgrades and support for innovative modes	✓		✓			✓	
New Key Links, focussing on creating active transport permeability and connecting transport corridors	✓		✓	✓			
New and upgraded crossings of busy roads	✓		✓		✓		
Upgrades to public transport interchanges to enhance the services, facilities, and customer experience		✓		✓			
New bicycle hubs to encourage active transport to the SRL station, existing railway station and bus interchange	✓	✓		✓			
Maintaining strategic traffic and freight corridors		✓				✓	
Designating low traffic neighbourhoods	✓		✓		✓		
Non-Infrastructure types							
Development of SRL East Structure Plan Area appropriate parking rates					✓	✓	
Partnering with Council to plan and manage streets through local freight delivery and kerbside management plans						✓	
Supporting travel choices including Green Travel Plans and encourage use of mobility hubs					✓		✓

The preceding recommendations are considered to be high level aspirations, that provide an appropriate overview of how both infrastructure and non-infrastructure changes can be used to support the development of the Structure Plan.

It is understood that a more detailed Implementation Plan will be created to expand on the above recommendations including a timeframe and responsibility for delivery.

5. Response to Instructions

5.1. Instructions

Clayton Utz and White & Case lawyers provided the following instructions on the 13/11/2024, requesting a peer review of the Transport Technical Report (TTR) prepared for the Burwood Structure Plan Area.

Specifically, the instructions were:

This letter sets out instructions for you to undertake a peer review of the Technical Report and prepare a peer review report.

Your peer review report should address the following matters:

- (d) The scope of your role in reviewing the Technical Report;*
- (e) The appropriateness of the methodology, assumptions and limitations in the Technical Report;*
- (f) Whether the findings, assessment outcomes and recommendations in the Technical Report are appropriate in the context of the structure plan planning process for the Burwood Structure Plan Area.*

5.2. Scope of Involvement to Date

The Ratio Transport team were engaged by Clayton Utz on behalf of SRLA, in August 2024, to undertake a peer review of the Transport Technical Report (TTR) prepared to inform preparation of the SRL East structure plans.

Of the six SRL East Structure Plan Areas, the Ratio Transport team have been requested to peer review three Transport Technical Reports including Box Hill, Burwood and Cheltenham.

Since being engaged in August 2024, Ratio Transport have been provided with drafts of the Burwood TTR and associated PPP for review and discussion, attended workshops, sought to understand the intent and conclusions reached in the TTR and PPP.

Ratio were provided with a final draft TTR and PPP in January 2025 in order to commence this peer review. An updated version with minor editorial changes was provided 12th February 2025, that has been referenced to finalise the opinions in this peer review.

This peer review seeks to respond to the instructions provided, which largely seek an opinion on whether the TTR prepared by AJM has responded to the relevant guidelines and provides sufficient detail to enable preparation of a Draft Structure Plan, suitable for exhibition.

This peer review does not attempt to assess the validity of the data collected, or the analysis of the data supporting that supports the recommendations. This peer review is limited to an assessment of the methodology, assumptions and scope of investigation, to determine if the outcomes and recommendations are appropriate to inform the transport related issues required to prepare a Structure Plan.

This review has been prepared by Hilary Marshall, Director of Ratio Consultants assisted by Peter Malley, Senior Associate and Ana Lee, Senior Transport Engineer also from Ratio.

During the course of the peer review I have liaised with Tim De Young, Director of Eukai, who has been engaged by White & Case lawyers on behalf of SRLA, to review the Glen Waverley, Monash and Clayton Precinct Structure Plan areas.

5.3. Appropriateness of Methodology, Assumptions and Limitations

The methodology adopted by AJM to prepare the TTR is considered to be a relatively standard approach to undertaking an investigation and preparing recommendations for a large precinct like the proposed Burwood Structure Plan.

Existing conditions data was collected, then reviewed and calibrated to establish a baseline. AJM then prepared the transport goals and ambitions to inform the Vision for the Burwood Structure Plan. A detailed review of the road network throughout the Structure Plan Area was undertaken using the DTP Movement and Place Framework. AJM then determined the transport network improvements required to support the Structure Plan and finally validated the recommendations to ensure they aligned with the identified goals and ambitions.

In terms of transport infrastructure, the TTR includes an investigation and discussion on all relevant aspects of transport in our view.

The reliance on the traffic modelling undertaken and accepted as part of the SRL East EES process by AJM, is considered appropriate.

In our experience, any large scale study will have some limitations. The limitations identified earlier included the traffic modelling program VITM and data collection.

VITM is the Victorian Integrated Transport Model and the adopted software package for the majority of large precinct assessments prepared by or on behalf of the State Government, to determine the appropriate road network. VITM is used throughout Metropolitan Melbourne on a variety of land sizes and uses and is considered appropriate for the SRL East precincts. Furthermore, the modelling for the SRL East EES TTIA used VITM, which was accepted for use and approval of the SRL East Project.

Data collection of traffic and/or parking conditions poses a limitation on any project. The data is typically collected on a particular day at a particular time of the day and year, and as such is subject to variations, errors and statistical anomalies. AJM have used large data sets from the ABS Census data, which will help reduce the potential for errors, bias and anomalies.

In our view, the exact utilisation of car parking throughout the Structure Plan Area is not required at this stage of the structure plan process. As outlined above, any data collected would represent a small snap shot in time and would be most likely considered out of date by the time planning applications are sought post approval of the structure plan.

Therefore, in our view the detailed summary of parking types, locations and quantity is sufficient to prepare the Precinct Parking Plan and provide appropriate recommendations on managing car parking resources as the precinct develops.

5.4. Appropriateness of Findings and Recommendations

In our view, the findings, assessment outcomes and recommendations of the TTR contain sufficient depth of understanding and analysis to prepare recommendations to inform the preparation of the Structure Plan suitable to be exhibited for public consultation.

Specifically, the adoption of a parking overlay with rates for two separate areas, is considered a reasonable response to planning in the interim period between when the Structure Plan will take effect and when the Burwood SRL East Stations will be open.

5.5. Summary

In our opinion the purpose of the Transport Technical Report (TTR) is to determine the potential transport implications of the proposed Structure Plan which proposes to significantly increase both population and employment within the identified Structure Plan Area. The TTR then needs to provide clear strategies on how to manage the increase in activity.

The TTR needs to respond to the relevant Transport Environmental Performance Requirements (EPRs) included in the SRL East Environmental Management Framework document.

Based on our review of the TTR, we are satisfied that a sufficient level of investigation for all relevant transport related matters, including parking, has been addressed and that the SRL East EPRs relevant to this stage of the project have been considered.

In summary, the TTR provides guidance on the key transport issues that should be addressed in a Structure Plan including:

- Traffic management
- Car parking
- Public transport
- Walking
- Cycling
- Freight movements

The TTR includes recommendations related to all of the above transport matters.

In summary, the TTR and the attached Precinct Parking Plan (PPP) in our view have appropriately investigated the various transport and parking related matters to inform the preparation of a Structure Plan.



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