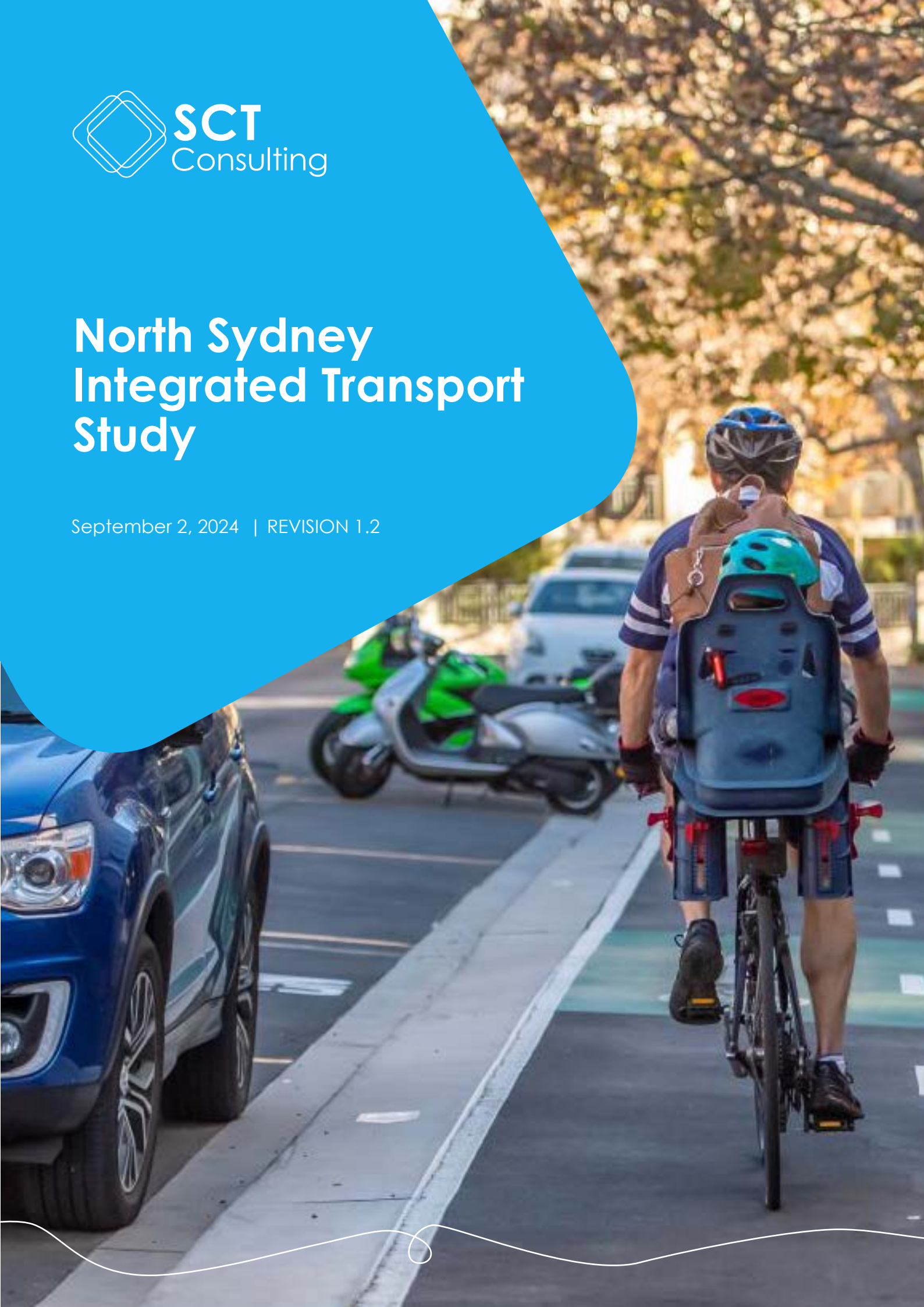




# North Sydney Integrated Transport Study

September 2, 2024 | REVISION 1.2



## Quality Assurance

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Appendix A	Integrated Transport Strategy Discussion Paper
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# Executive Summary

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The message from the community is clear: over two-thirds want greater access to sustainable transport options in the next decade. In particular, they are calling for better public transport, inclusive active transport for pedestrians and cyclists, improved mobility, and a reduction in car usage.

North Sydney continues to grow in population (both residential and employment). The Local Government Area (LGA) serves the local community and the people of Greater Sydney as home to the second CBD. The North Shore Train line, Sydney Metro and Warringah Freeway running through North Sydney also provide a critical north-south movement function for those making long journeys across NSW.

The North Sydney community say that North Sydney is congested and we know first-hand that widening roads won't solve this problem (as evidenced by the recent challenges faced at the Rozelle Interchange). The traditional approach of road widening will also have serious consequences including tree loss and impacts on the quantity and quality of public space. Building our way out of congestion is not sustainable; we must get more from our existing assets.

We need to act now to plan a transport future which creates a North Sydney we all enjoy.

Beliefs and attitudes shape our transport choices.

The transport landscape in North Sydney is poised for change. The LGA's population is projected to grow to 79,442 by 2036. In addition to this, Crows Nest has been included in the NSW Government's Transit Oriented Development (TOD) program as an accelerated precinct with capacity for up to 3,255 new homes and 2,600 new jobs. North Sydney's bustling CBD is also set to accommodate up to 21,000 new jobs by 2036. Combined with the Warringah Freeway Upgrade and the Western Harbour Tunnel, North Sydney will have even busier roads.

We need to be smarter about the way we approach all aspects of life, including rethinking the way we move, reallocating the road space and changing our past learned behaviours.

Transport has to adjust to changing demands to mitigate disruptions and keep North Sydney moving forward.

The introduction of Sydney Metro stations at Crows Nest and North Sydney (Victoria Cross) will support North Sydney's growth and will function as pivotal connection points bringing more people to North Sydney and beyond.

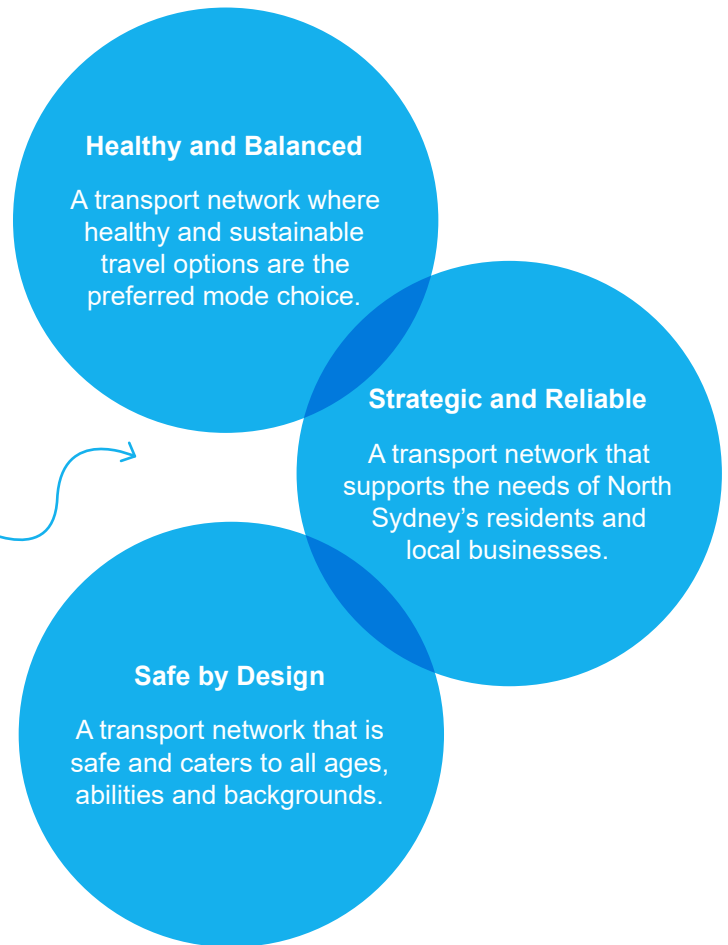
The multi-modal transport system available to North Sydney is crucial to ensure its resilience. In addition, inter-modal hubs and efficient transfer points enhance connectivity and reduce the environmental footprint of transport activities. North Sydney must prioritise a robust transport network that accommodates diverse modes of travel and adjusts to changing demands to mitigate disruptions. This ensures accessibility for all users to keep North Sydney moving forward.

This Study proposes the adoption of three key outcomes, each supported by a set of measurable targets and a range of actions for Council to work toward achieving over the next ten years.

Targets have been developed in alignment with the evidence base and aligned with what we heard from the community during the consultation period. They include increasing walking and cycling mode share, reducing car ownership and increasing car share opportunities with a view to reducing the number of cars on our roads and targeting zero fatalities in line with NSW Government policy.

To achieve these targets, actions for Council to consider have been recommended including upgrades to and new active transport infrastructure to encourage walking and cycling and improve disability standards, review of bus services to improve accessibility and behaviour change programs to encourage a mode shift and educate the community on the benefits of change.

#### Key outcomes of the North Sydney's Integrated Transport Study



# 1 Introduction



# 1 Introduction

## 1.1 Purpose of this report

North Sydney Council is committed to providing a sustainable, connected, and safe transport network for residents, workers, and visitors of the North Sydney Local Government Area (LGA). This Integrated Transport Study (the Study) provides the evidence base, desired outcomes and recommended actions from which Council will develop a 10-year Integrated Transport Strategy.

The Study will be one of eight informing strategies prepared by Council that together will consider needs and priorities in the following key areas:

- Culture and creativity
- Economic development
- Environment
- Governance
- Housing
- Open space and recreation
- Social Inclusion

These strategies will be combined to form Council's 2025-2035 Community Strategic Plan, Delivery Programs and Operational Plans which will guide the use of Council resources to deliver outcomes needed and desired by the local community.

This Study highlights the current strengths, challenges and strategic opportunities within the North Sydney LGA and sets the framework for where North Sydney wants to be in 10 years time and actions to guide how to get there.

The Study references and takes evidence from a collection of specialised reports that Council have commissioned over the last 5 years and is supplemented by travel data from the Australian Bureau of Statistics (ABS) and Household Travel Survey (TfNSW) to indicate trends in movement modes and resident choices.

Community feedback collated during an extensive consultation program has been critical in identifying the needs and aspirations of the North Sydney community and has been referenced closely in the formation of outcomes and actions that conclude this Study.

### What is integrated transport?

Integrated transport is a cohesive, interconnected and balanced system that seamlessly connects various modes of transportation, such as rail, metro, buses, ferries, cycling, walking and other forms of micromobility, as well as private vehicles. An integrated transport system is resilient to disruptions and provides travellers with efficient, convenient and varied options for reaching destinations, delivering freight and accessing services.





## 2 Where are we now?

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## 2 Where are we now?

Residents and visitors to the North Sydney LGA have access to a variety of transport options that facilitate movement within the LGA and across Sydney.

This section provides an overview of:

- Features of the North Sydney community profile that are relevant in planning for future transport
- Existing and planned transport infrastructure
- The contextual policy and strategic planning setting to which this Study has reference
- Current strengths and weaknesses of the transport network across the North Sydney LGA

### 2.1 The community

In 2023 the Estimated Resident Population of North Sydney LGA was 72,014<sup>1</sup>, growing by 3.81% since 2022.

As shown in **Figure 2-1**, 37% of the population live alone, followed by couples without children at 29% and couples/one parent families at 24%<sup>2</sup>. This data suggests that the majority of people living in North Sydney do so without children.

While there are a number of reasons for this, it is likely that many choose to reside in North Sydney for the convenience of proximity to employment or, for the older generations, continue to live in family homes once children have grown up and moved away.

Mapping of service age groups<sup>3</sup> indicates that older residents tend to live closer to the foreshore, likely in single dwellings rather than apartments, and in areas that are not close to public transport.

In 2021, the largest age group in North Sydney Council area was 30 to 34 year olds (**Figure 2-2**). School aged children attributed close to 10% of the population - a relatively low number given there are 14 schools in the LGA.

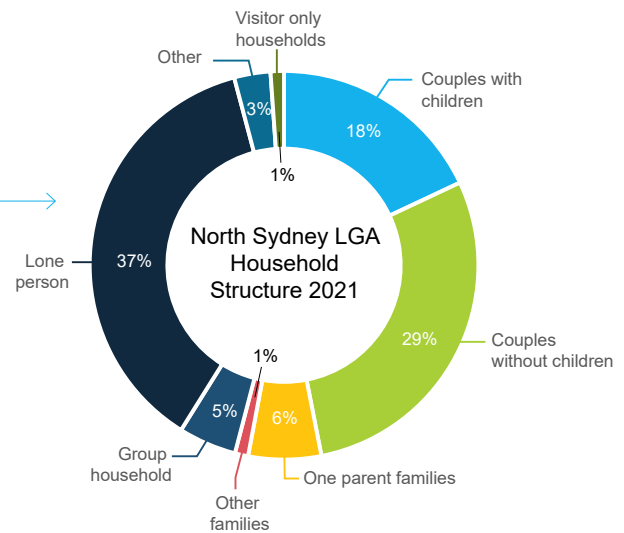
34% of the North Sydney population were aged over 50 at the 2021 census while the majority of residents (51%) were aged between 18 and 49.

The residential population of North Sydney LGA is ageing, with the number of people aged over 55 increasing by 6% over the last two decades.

#### How is North Sydney's community changing?

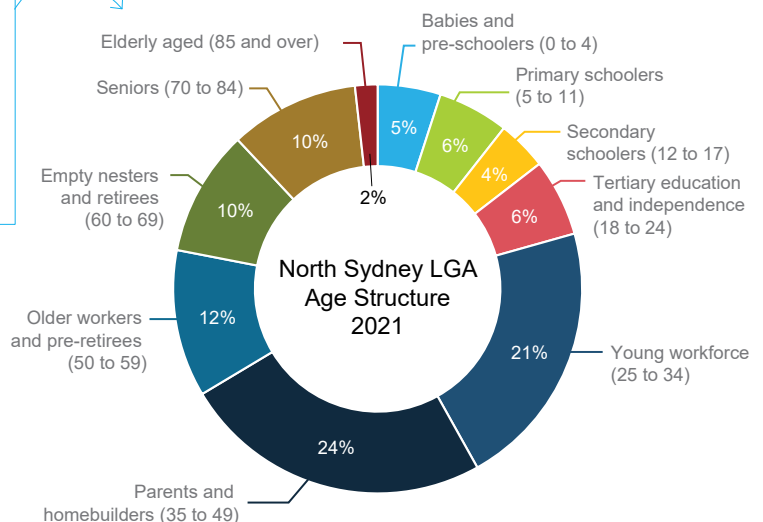
The North Sydney community continues to grow in population, for both residential and employment which means more demand on our transport network within and to/from the LGA. The majority of the residential population are employment aged (18-49) and likely to be residing in North Sydney due to its CBD and proximity to the Sydney CBD. The population is getting older which suggests we need to plan the transport system accordingly to provide appropriate movement options for those who are less able.

Figure 2-1 North Sydney LGA household types at 2021



Source: <https://profile.id.com.au/north-sydney/households>

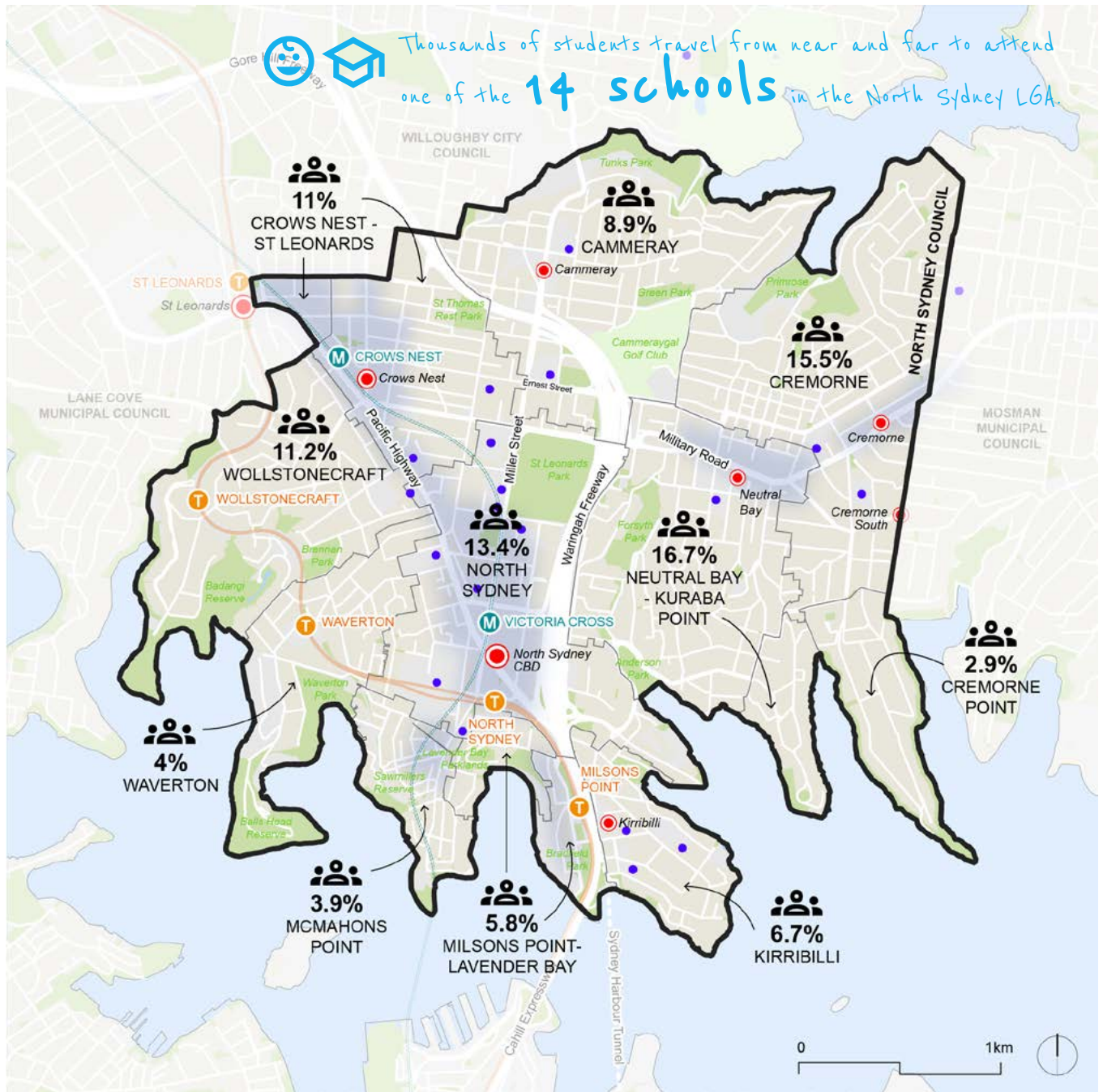
Figure 2-2 North Sydney LGA age structure at 2021



Source: <https://profile.id.com.au/north-sydney/service-age-groups>

<sup>1</sup> <https://profile.id.com.au/north-sydney/population-estimate>  
<sup>2</sup> <https://profile.id.com.au/north-sydney/service-age-groups>  
<sup>3</sup> available at <https://atlas.id.com.au/north-sydney/maps/>

Figure 2-3 The community of the North Sydney LGA



**KEY**

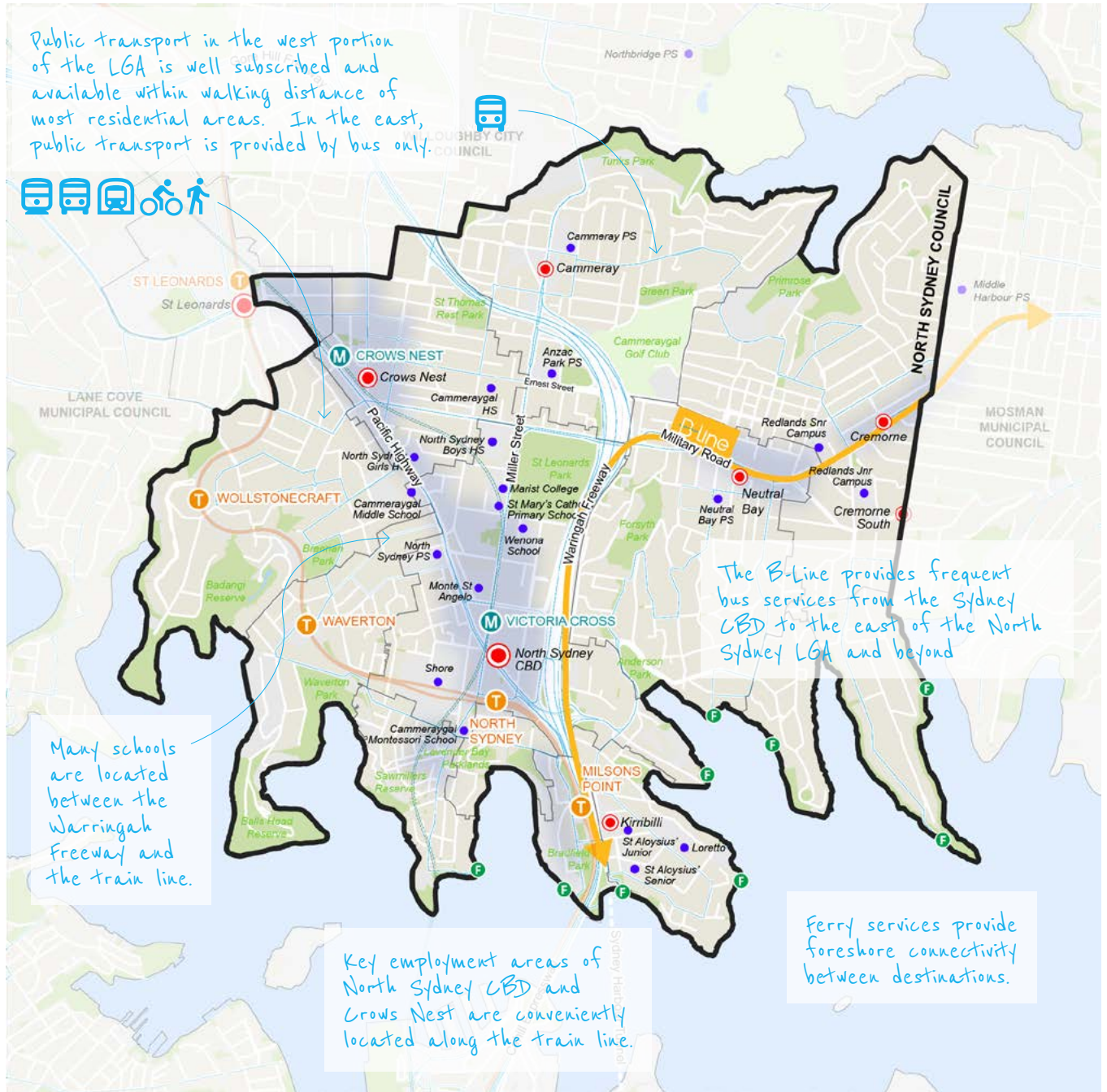
- Railway + station
- Future metro + station
- Local centres
- School
- Employment areas
- % of total LGA population by suburb 2021 (Source: Population and household forecasts, 2021)

In addition to the residential population, North Sydney attracts over 80,000 people to employment opportunities across the LGA and thousands of school students who attend one of the 14 schools offered. This creates a complex movement pattern of 'coming and going' as 71% of North Sydney's working residents commute outside of the LGA for employment, and students from all over Sydney travel to schools within the LGA.

Over **80,000** people work in the North Sydney LGA

**71%** of working residents of North Sydney LGA travelled outside the LGA to work [39% to the Sydney LGA]

Figure 2-4 The transport network across the North Sydney LGA



## Transport needs in North Sydney

The transport network for North Sydney must balance the needs of residents and visitors (particularly those visiting for the purpose of employment or education). It is important that linked trips between employment/schools and public transport are suitably serviced while recreational movements (such as to the park or shops) by residents are also prioritised.

## 2.2 The existing transport network

**Figure 2-4** demonstrates the existing road and public transport network within North Sydney LGA. It also locates town centres, employment areas, open space and schools which are key destinations to and from which people move.

Trains offer frequent services to the Sydney CBD, North Shore suburbs and beyond, while a comprehensive bus network connects residential areas, commercial precincts, and other local destinations. Ferry services operate from various points along the harbour foreshore, including McMahon's Point Ferry Wharf and Milsons Point Ferry Wharf, providing convenient links to Circular Quay in the Sydney CBD and other harbourside destinations.

There is a growing uptake of healthy and sustainable travel modes promoted by provision of bike lanes, pedestrian-friendly infrastructure, and shared paths that connect public transport hubs with residential and commercial areas. Most residents in the LGA are located within walking or cycling distance to mass transit options (particularly in the western portion of the LGA).

The eastern side of the North Sydney LGA relies on buses for public transport. Residents may choose to drive due to the limited public transport alternatives in these areas, leading to increased travel time for both bus passengers and car drivers during peak hours.

The Warringah Freeway, the Pacific Highway and Military Road facilitate mass vehicular movement across the region, serving as some of Sydney's busiest and congested road corridors. While the function they serve for vehicles is integral to the success of the wider transport network, they create barriers for walking and cycling from east to west across the LGA. The cost of construction of such infrastructure is high and timelines for implementation stretch over many years. In addition, major road projects often result in loss of trees and open space.

## Options for travel in North Sydney

Residents and visitors to the North Sydney LGA have access to a variety of transport options that facilitate movement within the LGA and across Sydney more broadly.

### 2.2.1 Movement and place - where are people moving to and from?

As discussed in **Section 2.1**, North Sydney LGA presents a complex arrangement of movement needs due to the residential, employment and educational land uses that each have their own requirements based on user needs.

Employment opportunities provided by the CBD, Crows Nest and smaller centres including Neutral Bay and Cremorne draw people from across Sydney. The train network provides efficient and convenient access for people traveling from the north and south, soon to be supported by the Metro line which opened mid 2024. Bus services provide connectivity with train and Metro stations, and offer transport within local areas and to/from employment areas for those local residents who work within the LGA.

Many of the schools within the LGA are located along the alignment of the Pacific Highway between North Sydney CBD and Crows Nest. This area is not well serviced by public transport as the train line swings to the west, increasing the walking distance for students who may wish to commute via train. While the Metro line may improve access to public transport for schools, the areas which the Metro connects to are limited and school students are traveling from home in all directions.

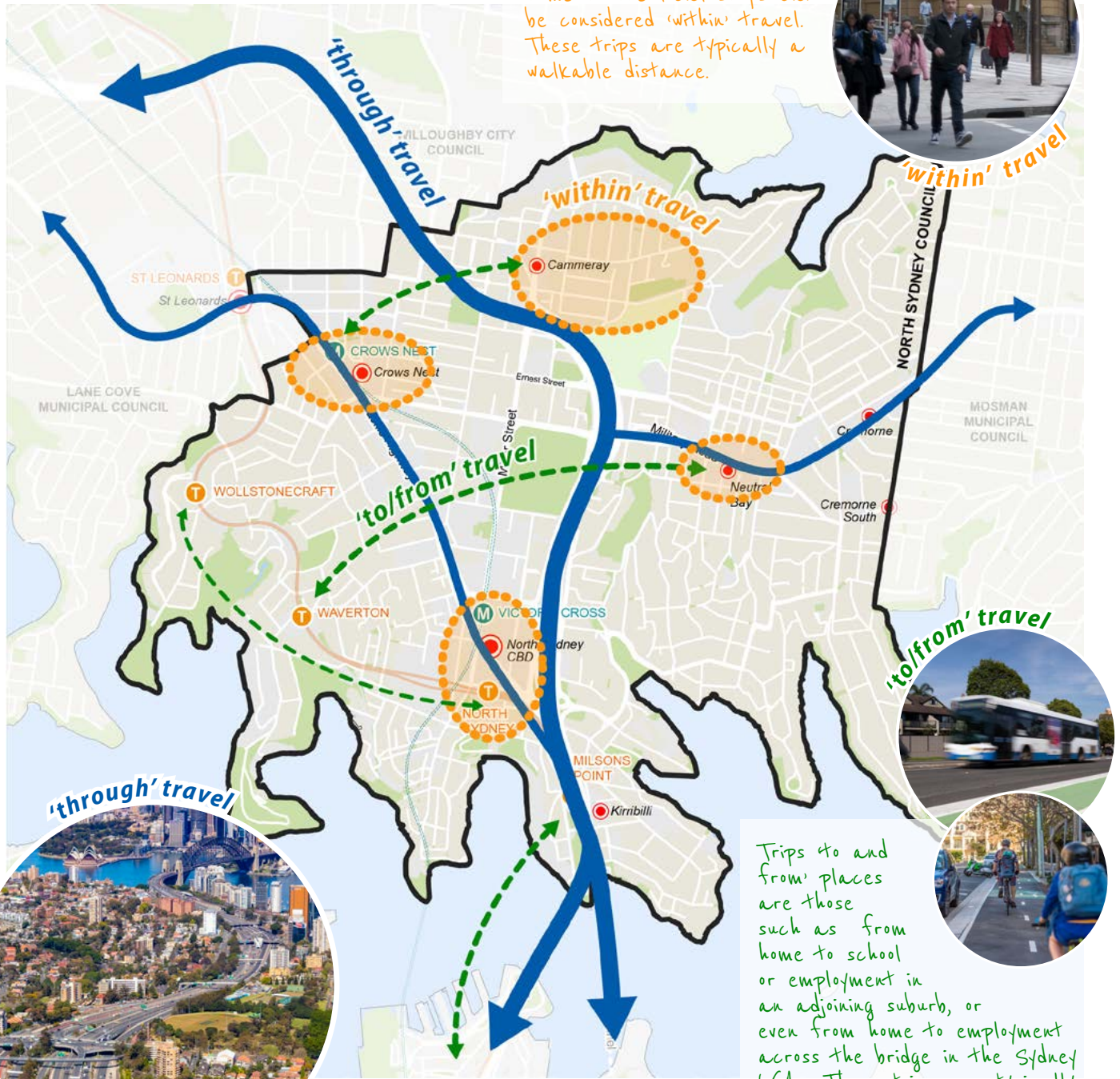
Ferry services provide an additional option for accessing foreshore destinations and offer recreational access to the spectacular Sydney Harbour. Ferry stops are located at the waters edge, and are often also at the bottom of a hill, making it uncomfortable for people to walk/cycle to and from.

The Warringah Freeway, Pacific Highway and Military Road provide vehicular access through and into North Sydney for vehicles as well as freight that service businesses and ensure economic viability of local centres.

Local residents require access to shops, education and services. Some of these trips may be undertaken by active transport (walking and cycling) and bus, but some require the convenience of a car to transport goods.

Figure 2-5 Travel types across the North Sydney LGA

Shorter trips from the train station to the office or from home to the local shops can be considered 'within' travel. These trips are typically a walkable distance.



Trips 'to and from' places are those such as from home to school or employment in an adjoining suburb, or even from home to employment across the bridge in the Sydney LGA. These trips are typically a cycleable distance, or may include a short ride on public transport.

North Sydney LGA is divided by the Warringah Freeway, the Pacific Highway and Military Road which provide an essential 'through' travel function for vehicles making longer journeys across the LGA or wider Sydney. They also act as vehicle gateways to suburbs across the LGA.

## 2.2.2 How do people move?

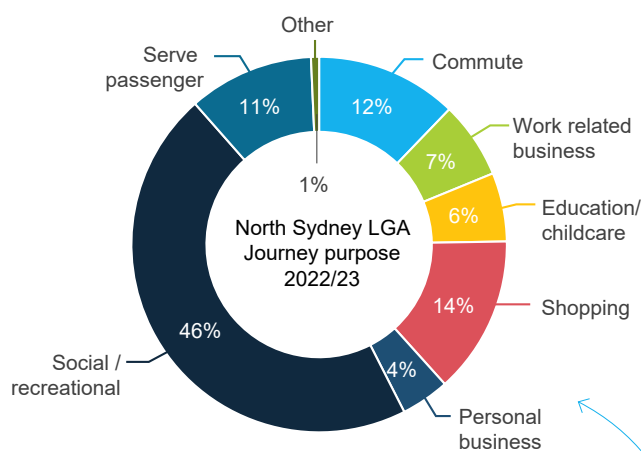
While tracking how every person chooses to move and for what purpose is an impossible task, there are various data sets that provide some insight.

The Household Travel Survey (TfNSW) provides data on the travel patterns of residents across the LGA on an average weekday. This data is based on the survey responses and covers trips for a range of purposes.

**Figure 2-7** presents an overview of Household Travel Survey data as a year on year comparison (2016-2023) of travel by mode. While the sample size changes from year to year (as does the population and demographic profile), it appears that travel mode choice has remained relatively consistent across the period. This is until COVID-19, when lockdowns restricted movement, and many people were working from home - a trend that is yet to completely revert to previous ways of working.

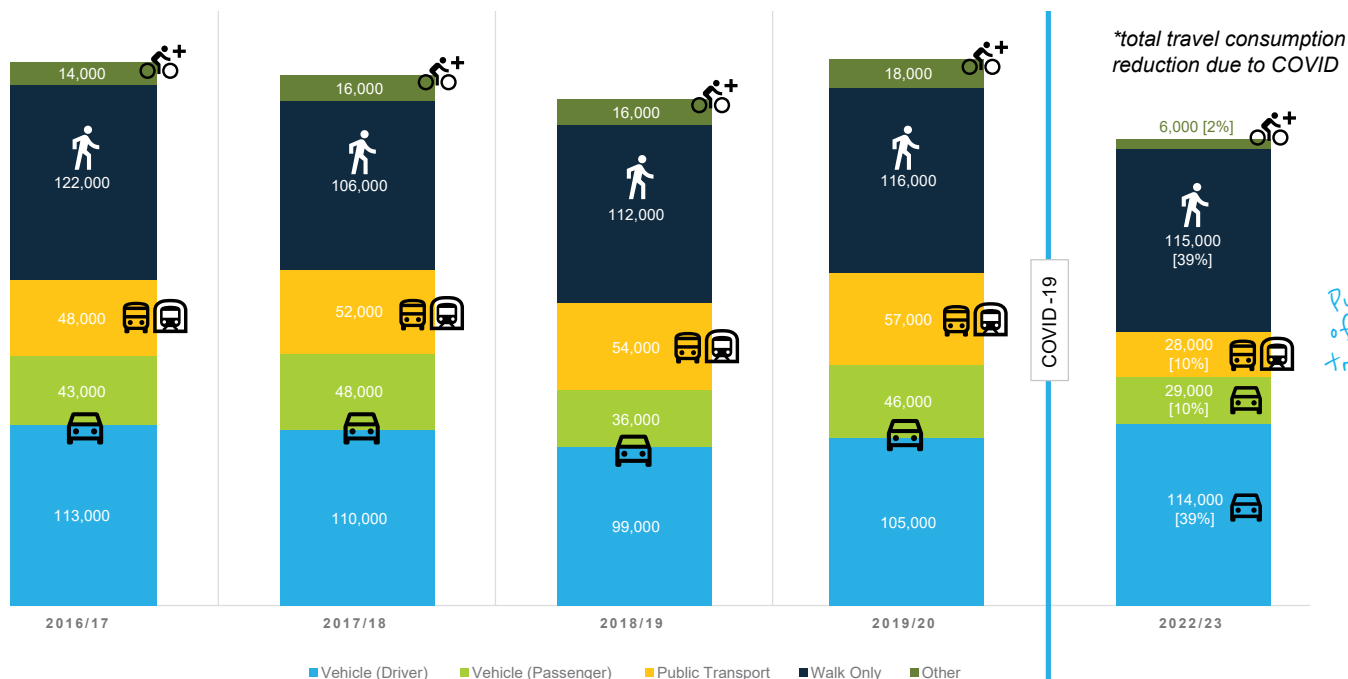
The data indicates that active travel was a popular choice for residents with 39% of trips taken being by walking in 2022/2023 while close to half of respondents chose a private vehicle. Further analysis of this data demonstrates that the main purpose of all trips surveyed was for social/recreational (30%), followed by commute to work (20%) as shown in **Figure 2-6**.

**Figure 2-6** Journey purpose 2022/23



Source: Household travel survey, TfNSW, <https://www.transport.nsw.gov.au/data-by-lga>

**Figure 2-7** Year on year comparison for travel by mode



Source: Household travel survey, TfNSW, <https://www.transport.nsw.gov.au/data-by-lga>

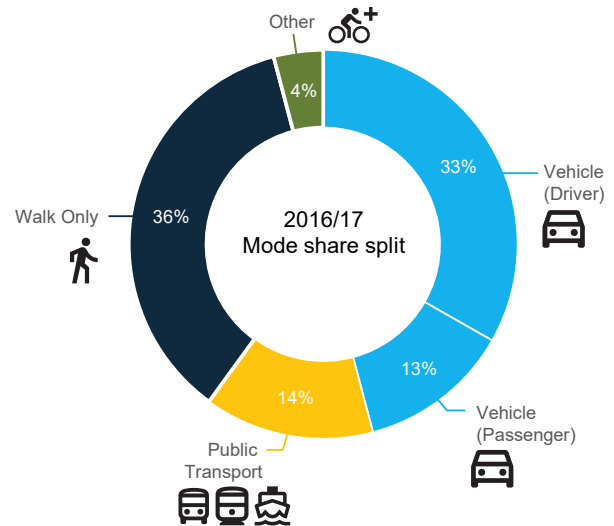
When compared with Journey to Work data collected by the ABS for the year of 2016<sup>4</sup>, Household Travel Survey data demonstrates a much higher percentage of walking trips (refer to **Figure 2-8**) likely due to the survey capturing all types of trips, not just those to work.

As illustrated in **Figure 2-8** trip purpose is spread across a number of types including social/recreation, commute and shopping. 2016/17 journeys by purpose data shows over 33% of trips were for the purpose of social/recreation which correlates with the high number of walking trips within the mode share split.

Journey to Work data (2016) demonstrates that 41% of working residents of the North Sydney LGA choose to utilise public transport to commute, while another 34% choose to drive or be driven. Very few (11%) choose to walk to work and even less choose to cycle (less than 9%).

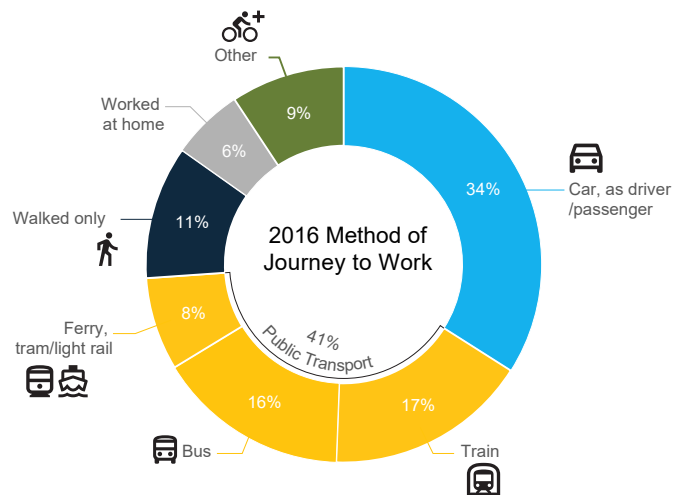
This analysis demonstrates there is opportunity to improve public and active transport across North Sydney. Despite most North Sydney residents being well-positioned with access to key services and facilities, and in close proximity to public transport, a significant proportion of the community still choose to drive.

**Figure 2-8 Comparison of 2016/17 Household Travel Survey data and 2016 Census data for Journey to work**



**2016/17 Mode Share Split based on Household Travel Survey data**

Source: <https://www.transport.nsw.gov.au/data-by-lga>



**2016 Mode Share Split based on ABS Census Journey to Work data**

Source: <https://www.abs.gov.au/census/find-census-data/quickstats/2016/LGA15950>

<sup>4</sup> Due to the impact of COVID-19 on travel patterns, 2021 census data is skewed as over 60% of North Sydney residents were working from home





## 2.3 Policy setting

Key documents that provide the strategic planning and policy framework for this Integrated Transport Study are shown in **Figure 2-9** and relevant objectives and recommendations of key documents to which this Study makes reference are outlined below.

### 2.3.1 State plans and strategies

#### 2.3.1.1 Staying Ahead: State Infrastructure Strategy 2022-2042, NSW Government (2022)

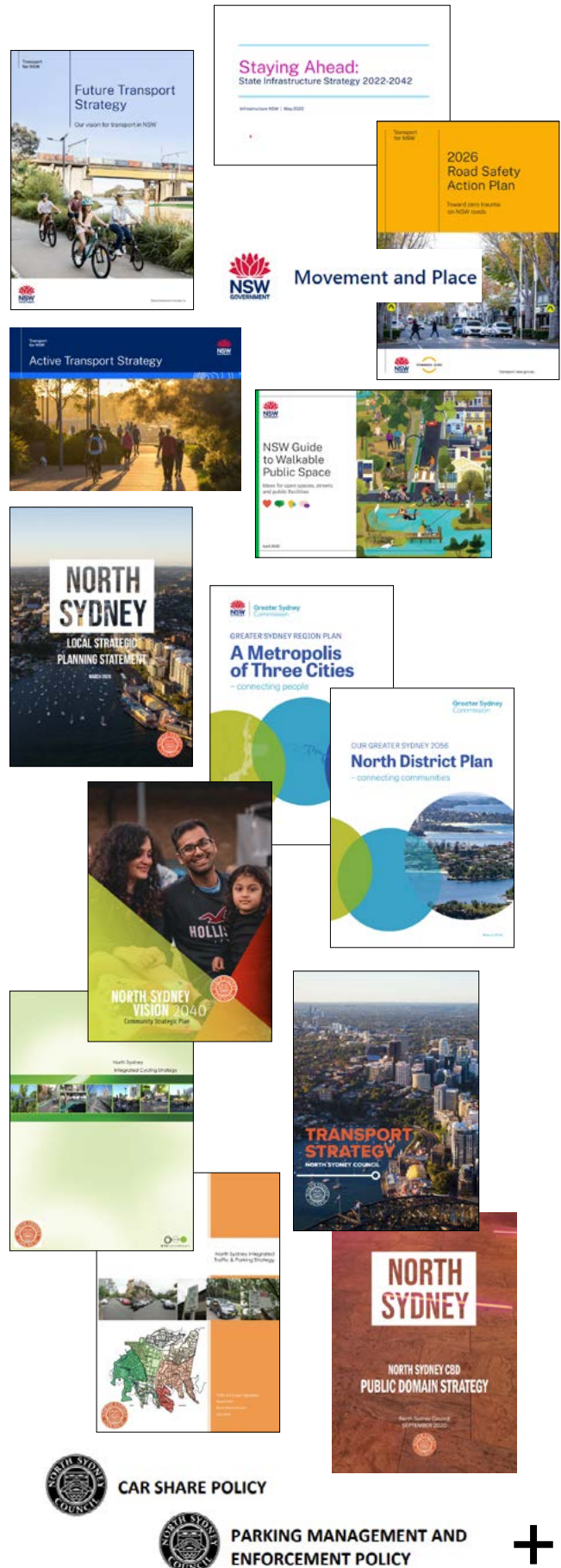
The State Infrastructure Strategy (SIS) is framed around 9 long-term objectives including two which are directly related to transport:

- Service growing communities - delivering quality infrastructure to match population growth and the evolving needs of the community
- Integrate infrastructure, land use and service planning - coordinating infrastructure, land use and service planning to meet future housing employment, industry and community needs

The SIS provides a range of high level recommendations to guide planning and development of transport networks including:

- Invest in public transport networks to support the growth of Greater Sydney
- Plan and deliver projects to increase the efficiency and reliability of freight networks in regional NSW
- Fund and deliver a prioritised active transport infrastructure program to support liveability and 15-minute neighbourhoods including a connected Metropolitan cycling network for Greater Sydney and major regional centres
- Improve transport network response and recovery performance through service continuity planning, investment in evacuation and alternative routes, and infrastructure upgrades, guided by place based strategies

**Figure 2-9** Strategic planning and policy framework that guides this Integrated Transport Study

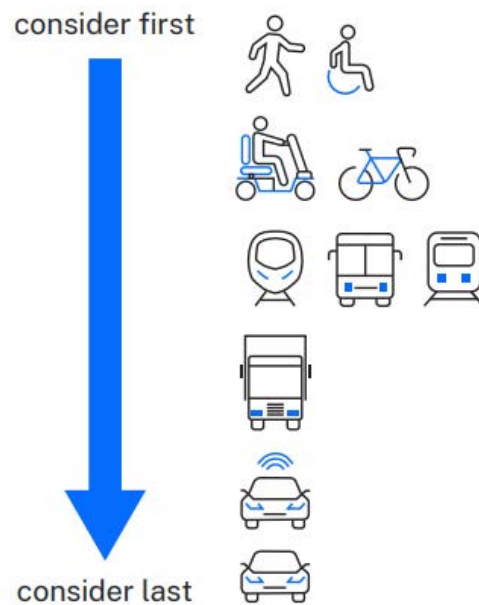


### 2.3.1.2 Future Transport Strategy, TfNSW (2022)

As shown in **Figure 2-10**, the *Future Transport Strategy* (NSW Government) prioritises a shift towards sustainable and active modes of transportation, emphasising walking, cycling, and public transit over private vehicles. This approach responds to the need to ‘do more with what we have’ in planning for a transport system that continues to meet the needs of its users as the population of North Sydney grows. It is also consistent with North Sydney’s Local Strategic Planning Statement, strategic directions within the Community Strategic Plan and the previous Transport Strategy (last updated in 2016).


The *Active Transport Strategy* (TfNSW) provides a focus on doubling the number of active transport trips in NSW by 2042, by focusing on and supporting industry in a range of initiatives shown in **Figure 2-11**.

**Figure 2-10** The NSW Government transport priorities



**Figure 2-11** Ambitions and priority moves for active transport

### Our ambitions and priority moves

Focus areas				
Enable 15-minute neighbourhoods	Deliver connected and continuous cycling networks	Provide safer and better precincts and main streets	Promote walking and riding and encourage behaviour change	Support our partners and accelerate change
Ambitions				
Create walkable and connected 15-minute neighbourhoods across all six cities and in regional centres across NSW to increase the percentage of short trips made on foot.	Deliver more than 1,000 kilometres of new cycleways and supporting infrastructure for continuous and connected cycling networks across key cities in NSW to increase the number of trips made by bike.	Help halve fatalities and reduce serious injuries by 30 per cent for pedestrians and bike riders through safer speeds and networks while increasing people walking and riding <sup>1</sup> .	Double the number of children walking or riding to school in all six cities and major centres across NSW, through behaviour change interventions.	Accelerate delivery of active transport projects by cutting red tape, providing resources and measuring success.
Priority moves (0-5 years)				
 <p>Trial over 20 Neighbourhood Deals across NSW by 2028.</p>	<p>Partner with councils to deliver more than 100 kilometres of new strategic cycleways that contribute towards a connected cycleway network by 2028.</p> <p>Investigate reusing non-operational assets to support the visitor economy through initiatives such as rail trails.</p>	<p>Prioritise a program that delivers 50 kilometres of successful place outcomes in and around main street sections of State Roads in urban, regional and rural settings by 2028.</p> <p>Pilot Safer Cities Program across NSW to improve perceptions of safety when walking and cycling to, through and within public spaces for women and girls by 2024.</p>	<p>Trial Active Travel to School Program in collaboration with Health and Education in more than 50 schools by 2028.</p> <p>Trial behaviour change interventions including campaigns that encourage sustainable mode shift by 2028.</p>	<p>Coordinate funding across government by 2028 to ensure safe walking and riding outcomes are achieved in a holistic way for government funded projects.</p> <p>Update legislation, guidelines and processes along with skill development to enable efficient delivery by 2028.</p> <p>Use open data advanced technology to capture walking and riding data and movement patterns by 2028.</p>

Source: TfNSW Active Transport Strategy, 2022

### 2.3.1.3 2026 Road Safety Action Plan, TfNSW

The 2026 Road Safety Action Plan focuses on '...enhancing education and local engagement, transforming the safety of the road network and accelerating safety features in vehicles.'

Figure 2-12 2026 Road Safety Action Plan targets

The 2026 Road Safety Action Plan seeks to build on the success of the Road Safety Plan 2021 with new road trauma reduction targets for 2030, setting NSW on a path towards zero road trauma by 2050.

Reduce fatalities by

**50%**

(≤ 164 fatalities by 2030)

Reduce serious injuries by

**30%**

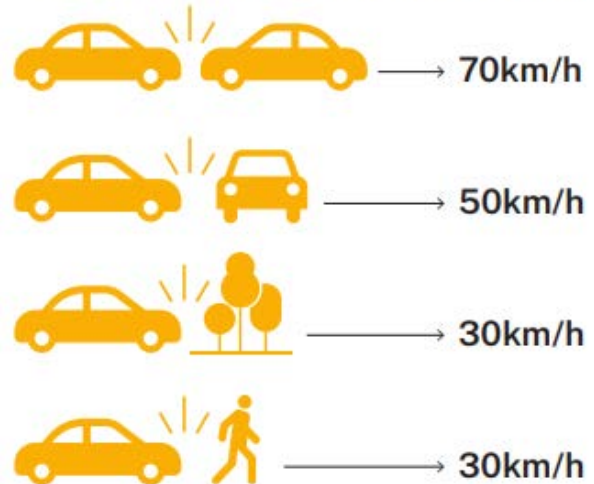
(≤ 7,796 serious injuries by 2030)

The Plan notes that while over half of fatalities and serious injuries on NSW's roads are vehicle occupants, vulnerable road users such as pedestrians, bicycle riders and motorcyclists have a higher risk of being killed or seriously injured given their lack of protection in a crash. It also flags the importance of speed in crash survivability for different crash types as shown in **Figure 2-13**.

To make North Sydney's roads safer, and work towards to goal of zero fatalities, it is important to consider changes to speed zones, particularly in high pedestrian and cyclist activity areas.

Figure 2-13 Crash impact speeds

**Up to crash impact speeds shown in the following crash types you have approximately a 90% chance of surviving and avoiding serious injury**



Source: 2026 Road Safety Action Plan, TfNSW

### 2.3.2 Local plans and strategies

#### 2.3.2.4 North Sydney Local Planning Statement, 2020

The *North Sydney Local Strategic Planning Statement (LSPS) 2020* sets out Council's land use vision, planning principles, priorities, and actions. It also outlines the desired future direction for transport, housing, employment, recreation, environment and infrastructure for the North Sydney LGA.

The LSPS notes the importance of delivering new Metro stations at Crows Nest and North Sydney, which will have a transformative impact on the LGA.

'It is estimated that over 15,000 people will access Victoria Cross station and 10,000 people will access Crows Nest station during the morning peak hour by 2056.'<sup>5</sup>

However, challenges such as narrow footpaths, extended intersection wait times, safety concerns, and the lack of cycling infrastructure across the LGA have been identified. Additionally, there is a need to enhance walking and cycling facilities within the catchment areas of local centres to encourage a shift from private vehicle use to more sustainable transport options.

5 North Sydney Local Planning Statement, 2020 and Transport for NSW, 2016, Sydney Metro City & southwest – Chatswood to Sydenham Environmental Impact Statement

## 2.3.3 Local plans and strategies

### 2.3.3.1 North Sydney Vision 2040 Community Strategic Plan, North Sydney Council

The North Sydney Vision 2040 Community Strategic Plan sets the community vision for North Sydney:

*'North Sydney is a welcoming, connected and resourceful community which acknowledges its past, enjoys the present and plans for our future.'*

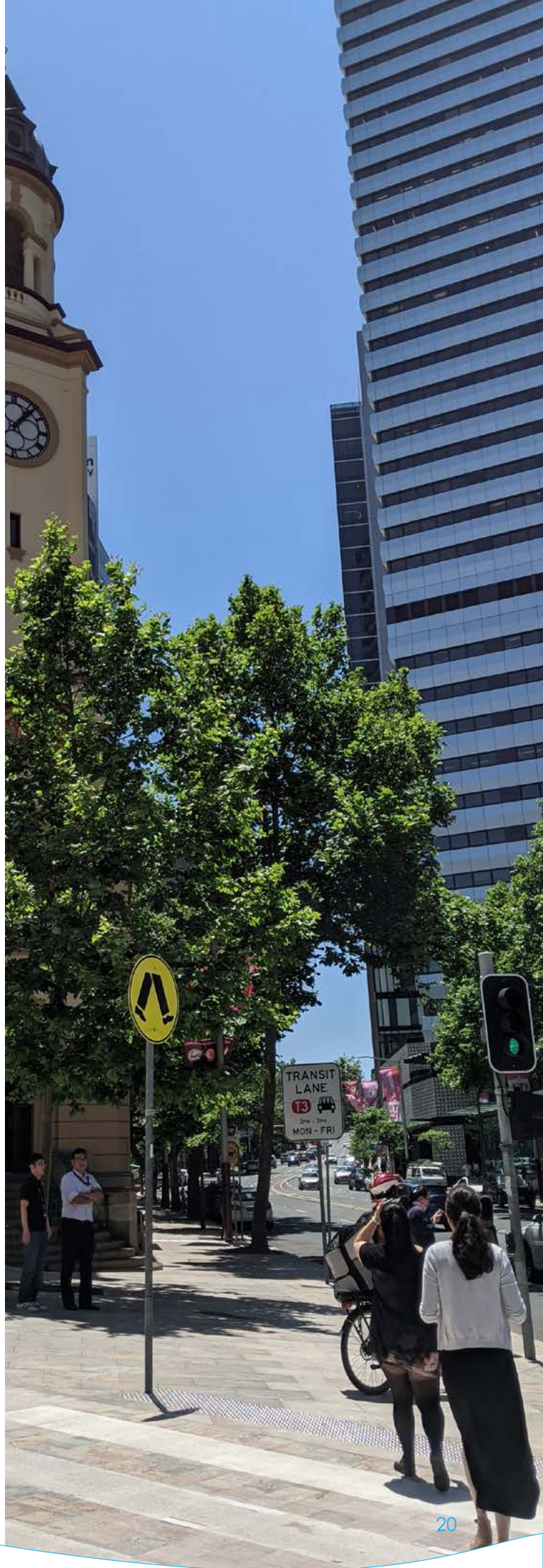
*'We respect our beautiful harbourside locale, its unique villages and much valued bushland and open spaces. We lead the way in sustainability.'*

It focuses on three guiding principles of Sustainability, Integrity and Inclusivity and sets a number of Strategic Directions for achieving the vision.

Direction 2 references the desire for an integrated transport network, noting that *'Our community prioritises walking, cycling and public transport and people of all ages are comfortable riding in the area. Vehicle transport is supported by an effective and integrated transport and parking system.'*

The Plan also includes a range of actions related to transport which have been considered in the development of outcomes and actions recommended by this Study:

- Prioritise sustainable and active transport
  - Incentivise use of sustainable and innovative public transport
  - Provide infrastructure to support sustainable, innovative and active transport
  - Provide a connected walking and cycling network for people of all ages and abilities
- Efficient traffic mobility and parking
  - Reduce traffic through improved active and public transport
  - Integrate on-street and off-street parking options in residential and commercial areas
  - Better integrate major transport infrastructure into the local built environment



## 2.3.4 Planned projects

Future plans to ensure an integrated transport solution must consider the following major projects in North Sydney.

### 2.3.4.1 Projects in planning/design stage

#### **The North Sydney Integrated Cycling Strategy 2014**

The Integrated Cycling Strategy 2014 identified five priority routes to encourage cycling in the LGA, including the West Street Cycleway. Currently in Concept Design Stage, Stage 2 of the project will extend the cycleway for 1.1km between Ridge Street and Amhurst Street, which will provide people with a safe separated cycle route from Cammeray to North Sydney.

#### **North Sydney Public Domain Strategy, 2020**

The strategy addresses how public domain works can support changes to North Sydney's growing commercial hub. North Sydney CBD is envisioned as a 'place for people' with improved pedestrian priority, safety and connectivity through traffic calmed streets. This will support the 21,000 extra jobs expected by 2036 and the additional 16,000 people per hour Metro foot traffic during the morning peak hour.

Key projects include:

- Miller Place: A new 7,450m<sup>2</sup> public plaza outside the Victoria Cross Metro Station achieved through the closure of Miller Street between Berry Street and the Pacific Highway
- Post Office Square: An intimate, new 1,675m<sup>2</sup> plaza outside the iconic North Sydney Post Office
- Tramway Park: Converting the underutilised deck of the tramway viaduct near North Sydney Train Station into a 4,650m<sup>2</sup> active recreation space
- Central Laneways: Turning Denison, Mount, Hill, Spring and Little Spring Streets into pedestrian areas or shared zones

### 2.3.4.2 Under construction & recently completed projects

#### **Sydney Metro**

The Metro will provide a direct connection from Crows Nest and North Sydney to the Sydney CBD within 5 minutes. Apart from improving public domain and safety opportunities around the stations, the new public transport connection will offer local residents and commuters increased mode choice.

#### **Warringah Freeway Upgrade and Western Harbour Tunnel**

The Western Harbour Tunnel and Warringah Freeway Upgrade is a major transport infrastructure project intended to make it easier, faster and safer to get around Sydney by vehicle. By creating a western bypass of the Sydney CBD, the Western Harbour Tunnel will take pressure off the Sydney Harbour Bridge, Sydney Harbour Tunnel, Anzac Bridge and Western Distributor corridors to improve transport capacity in and around Sydney Harbour.

(source: <https://caportal.com.au/rms/wfu/about-the-project>)

The new connection between Cammeray and Rozelle tunnelled under Sydney Harbour, will provide Sydney's third travel route across the harbour and is intended to alleviate existing north-south traffic conditions, however will result in extra traffic in and around North Sydney.

#### **Sydney Harbour Bridge Cycleway Access Program**

Sydney Harbour Bridge is the busiest cycleway link in the Metro network with 2,000 trips taken every weekday. The proposed bike ramp on the northern end of the Sydney Harbour Bridge cycleway closes the accessibility gap in the network. Providing seamless connectivity for cyclists removes a major cycling deterrent on the route and encourages an uptake in cycling.

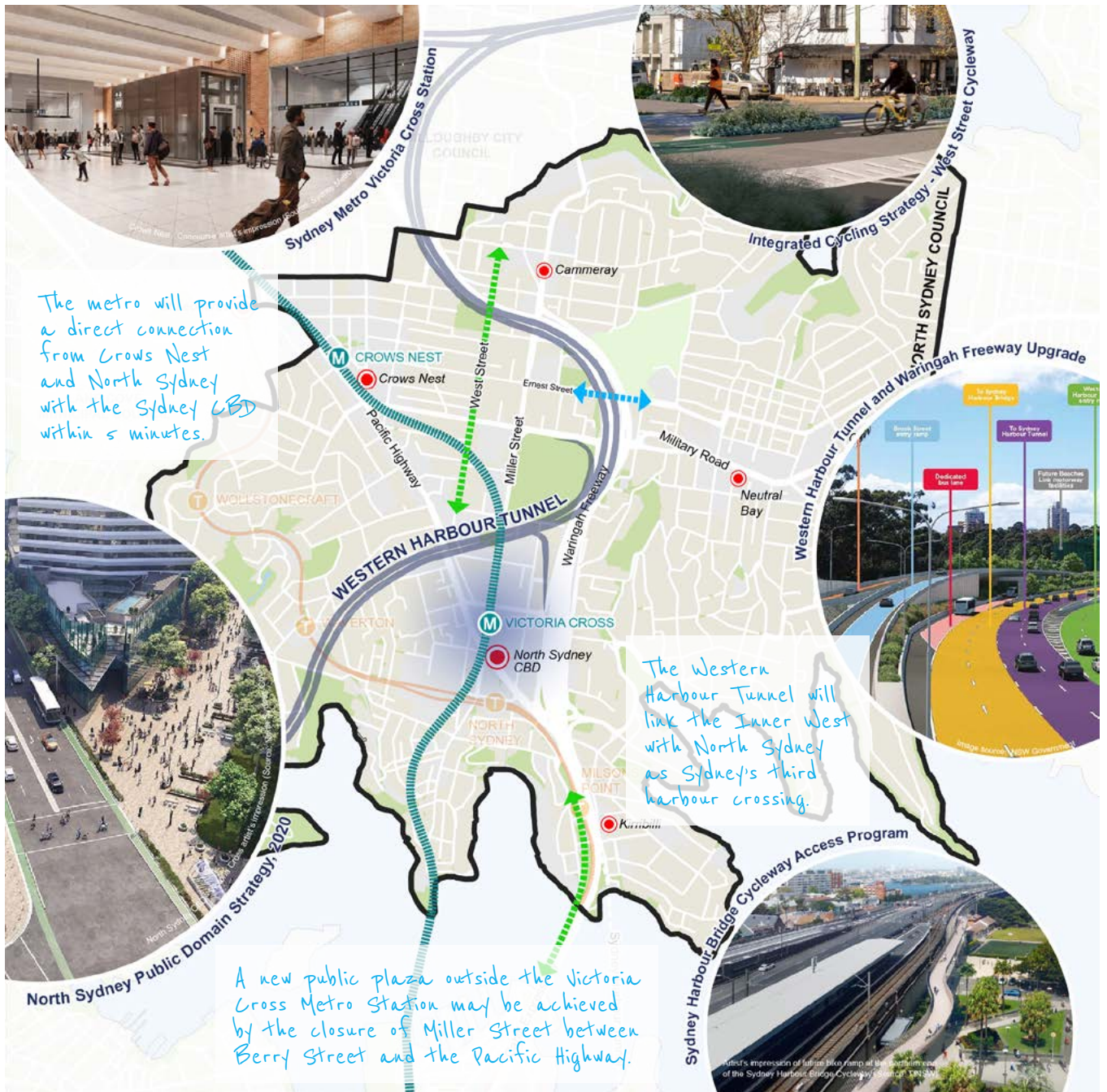
## 2.3.5 Future transport trends

TfNSW's *Future Transport 2056* highlights key transport trends that should be considered in the preparation of plans for the next 10 years and beyond, including:

- Advancing transport technology: road upgrades to accommodate Connected and Automatic Vehicles (CAV), charging of electric cars, and implementation of intelligent transport systems (ITS)
- Addressing climate change: focus on more sustainable transport modes like cycling, walking and active transport, and electrification of the bus fleet (re-imagining depot facilities and bus changeovers)
- Changing travel patterns: reliance on shared mobility services and more flexible working arrangements

Figure 2-14 Planned projects for the North Sydney LGA

West Street Cycleway will provide a safe connection for cyclists travelling between Cammeray and North Sydney, and will improve walking connections and amenity improvements



- KEY
- Cycling upgrades
  - Walking upgrades
  - Public domain upgrades
  - M Future metro + station
  - Local centres

The Sydney Harbour Bridge Cycleway Access Program will provide continuous access for cyclists travelling through North Sydney.

## 2.4 Summary of the strengths and challenges for movement

This section presents a high level summary of the strengths and weaknesses of the movement network and physical layout of North Sydney that contribute to and limit the ways in which people choose to move.

### 2.4.1 Strengths

- The LGA provides many opportunities to live, work, recreate and learn within a 15-minute commute
- Based on ABS and Household Travel Survey data, it is evident that walking, cycling and public transport demand is growing at a significantly higher rate than private vehicle travel demand
- The suburbs of North Sydney and Crows Nest have the highest residential population and forecast population growth in the LGA, and are well located near to public transport and amenities. Walking and cycling to these destinations is also a viable option for many residents
- North Sydney provides great access to railway stations and bus services in the western portion of the LGA where the majority of employment is located
- The Metro will improve transport choice, offering another accessible and affordable option for commuters within, and to and from North Sydney
- Public domain at the interface with the new Metro stations represents a significant opportunity to boost the appeal of North Sydney as a vibrant destination and provide new gathering spaces with amenity to promote active transport such as bicycle storage and other end-of-trip facilities
- The diversity of transport options provides resilience in the network, especially in areas west of the Warringah Freeway
- Car share options are provided across the LGA to support ad-hoc trips for those who do not own a car

### 2.4.2 Challenges

- There is very little surplus space in North Sydney LGA. Adding new infrastructure (such as parking) means taking other elements away
- The Warringah Freeway divides east and west, making it difficult for people living in the south-eastern suburbs of the LGA to access employment at North Sydney CBD, Crows Nest and St Leonards, particularly by walking and cycling

- The Western Harbour Tunnel, while improving capacity in and around Sydney Harbour, is expected to alter traffic patterns in and around North Sydney. While it may divert some traffic away from certain areas, it will increase congestion through the North Sydney CBD
- Town centres are typically located at high points in the landscape, meaning access from residential areas is often an uphill journey. Flatter land is generally utilised by major roads (that run along ridgelines) which present an uncomfortable environment for walking and cycling
- The number of people choosing to cycle to and from work is low. This is despite a large percentage of residents of the North Sydney LGA also working within its boundaries<sup>6</sup>
- The Pacific Highway and Military Road are key vehicle corridors and present an environment that is vehicle dominated and not designed for walking and cycling comfort
- Over 80,000 people<sup>7</sup> work in the LGA, the majority of whom live outside of the LGA and commute to North Sydney CBD during the week
- Over 70% of working residents of the North Sydney LGA are employed in jobs located outside of the LGA<sup>8</sup> and commute to other areas of Sydney. This is a complex arrangement with many 'coming and going' movements occurring at peak times
- Students come from across Sydney to access education. While most independent schools provide school bus services, they are not always convenient due to sparse service times and limited route options
- Traffic congestion is a commonly reported issue, leading to delays, productivity losses, increased pollution, and heightened frustration among commuters
- Public transport options to and from low-density areas (particularly in the east of the LGA) are limited, with buses providing connectivity along key corridors only
- Car ownership varies across suburbs within the LGA. Given the provision of public transport, and in comparison to the Sydney LGA, car ownership is high
- There is a high demand for parking, driven by a growing population, increasing car ownership, and commercial activities, as well as a desire for convenience

6 Source: ABS Method of travel to work data, 2021

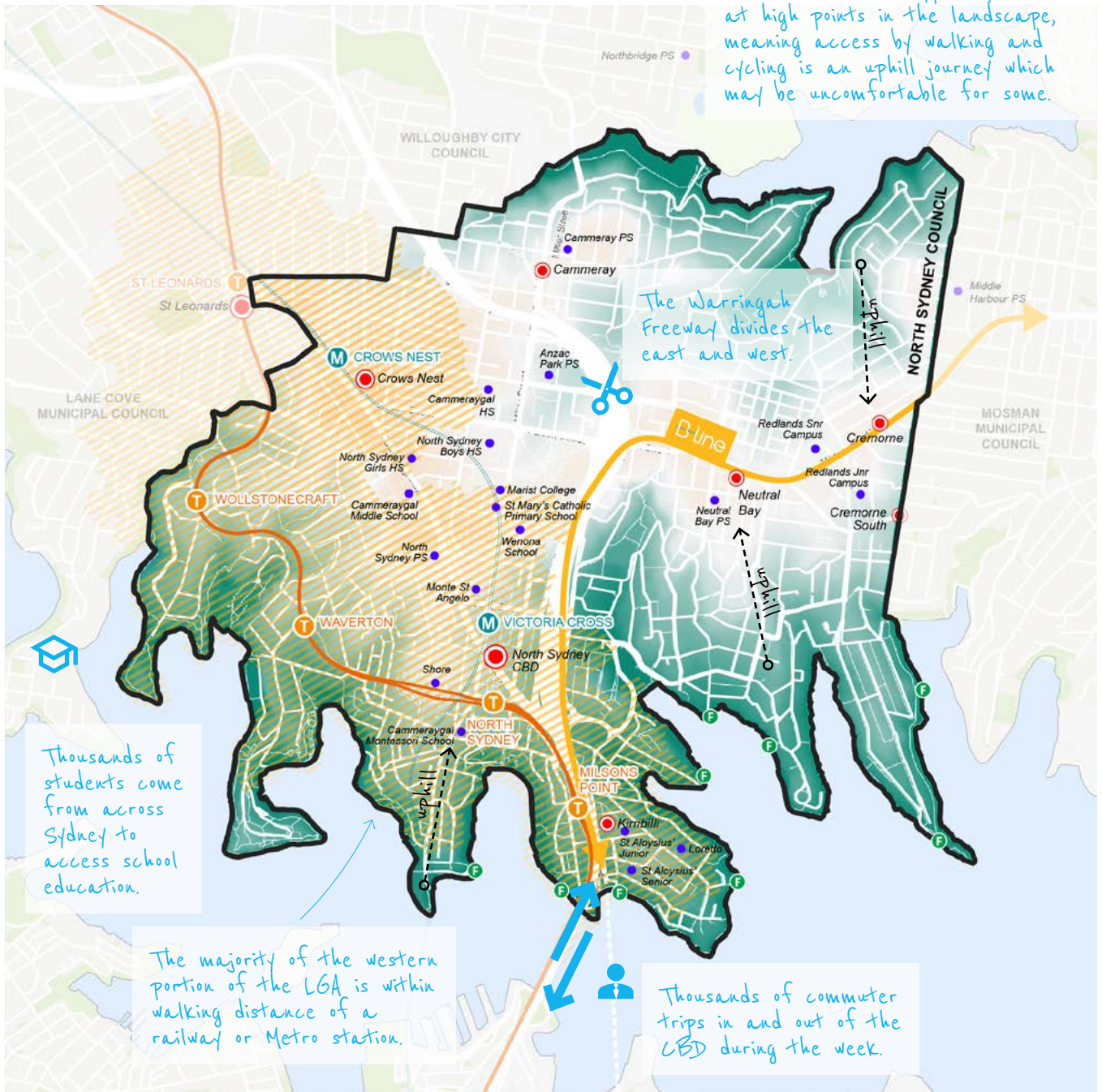
7 Source: <https://profile.id.com.au/north-sydney/workers>

8 Source: <https://profile.id.com.au/north-sydney/workers>

Figure 2-15 Strengths and challenges across the North Sydney LGA



Town centres are typically located at high points in the landscape, meaning access by walking and cycling is an uphill journey which may be uncomfortable for some.



KEY	
Railway + station	B-Line bus route
Future metro + station	Local centres
Ferry stop	School
Areas within a 10 minute walk from railway/metro station	High topographical points
	Low topographical points



### 3 The next 10 years



### 3.1 North Sydney continues to grow and change

The population for North Sydney LGA is forecast to grow to 79,442 by 2036 - an increase of over 7,400 residents from 2023. Crows Nest and St Leonards have been identified as accelerated precincts under the TOD Program with key features of the rezoning proposal including capacity for up to 3,255 new homes and 2,600 new jobs. **Figure 3-1** demonstrates the key residential growth areas which are well-located in close proximity to public transport stations.

Population growth fuels movement demand and the need for improved and additional transport infrastructure. Building our way out of congestion is not sustainable; we must get more from our existing assets.

As NSW's population grows, congestion on our networks will continue to be a challenge, affecting productivity and the wellbeing of customers and communities.

*- Future Transport Strategy, NSW Government*

The North Sydney community says that roads are congested and we know first-hand that road widening won't solve this problem (as evidenced by the recent challenges faced at the Rozelle Interchange). Widening roads also has serious consequences including tree loss and impact on public space. It is important to plan for a transport future that provides the required infrastructure that is convenient, safe and enjoyable for all ages, genders, cultures and abilities.

The focus must be on reallocating road space and optimising the system through managing demand and performance before providing additional supply or capacity on local roads. Feedback from the community as part of the development of this Study overwhelmingly points to active and public transport modes as a focus for improving the transport network over the next 10 years.

### 3.2 Guiding outcomes for the next 10 years

The following outcomes will guide planning for new and upgraded transport infrastructure over the next 10 years.



A transport network where healthy and sustainable travel options are the preferred mode choice.

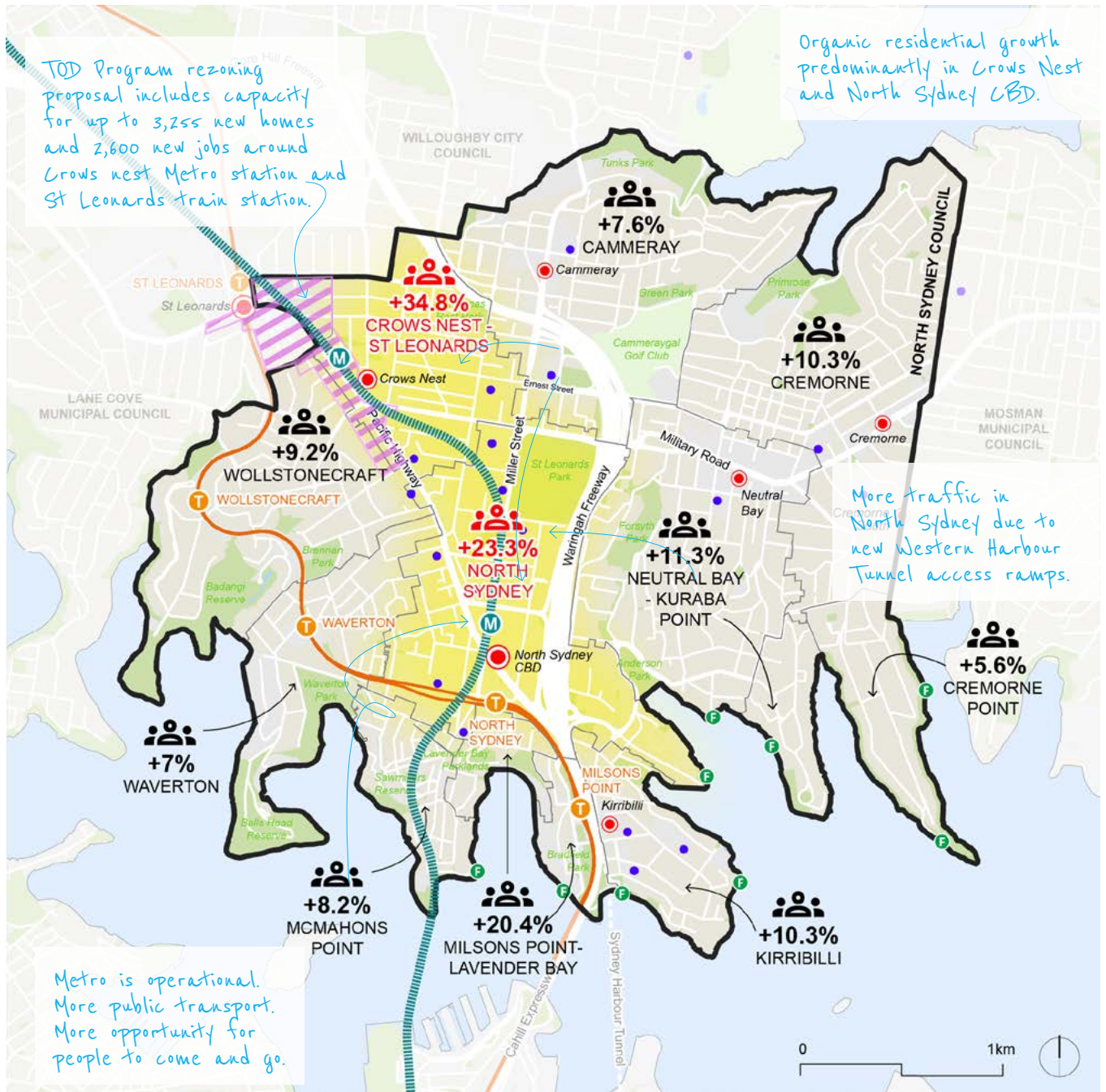


A transport network that supports the needs of North Sydney's residents and local businesses.



A transport network that is safe and caters to all ages, abilities and backgrounds.

Figure 3-1 Future growth and change in North Sydney LGA



KEY

- North Sydney LGA
- Suburb boundary
- Western Harbour Tunnel
- T- Railway station/line
- M Metro station/line
- F Ferry stop
- Local centres
- Key residential growth areas
- TOD Program rezoning proposal
- 👤 Forecast % increase in population by suburb 2021-2036  
(Source: Population and household forecasts, 2021 to 2036, prepared by at (informed decisions), March 2024)

## 4 Evidence for change



## 4 Evidence for change

### 4.1 Active transport

Active transport via walking, cycling, scooting and other forms of wheeling is a sustainable, healthy, and cost-effective means of travel that benefits individuals and society as a whole. By promoting and investing in infrastructure and policies that support these modes of transport, North Sydney provides its community and visitors with the opportunity for improved personal health and benefits the economy, whilst also reducing environmental impact. The NSW *Active Transport Strategy* and *Guide to Walkable Public Space* provide the following evidence:

- CO<sup>2</sup> emissions are reduced by approximately 177g per kilometre when vehicle trips are substituted by active travel<sup>1</sup>
- The following financial benefits are derived by per kilometre travelled by an individual in urban areas:
  - Walking: \$6.52 (urban) to \$6.52
  - Cycling: \$2.25 (urban) to \$2.25
  - E-bike: \$2.11 (urban) to \$2.11<sup>2</sup>
- A daily 20-minute walk could reduce the risk of early death by 22%<sup>3</sup>
- With only 15% of primary students and 14% of secondary school students traveling to school by active transport, there is considerable scope to grow the benefits of active transport for younger people<sup>4</sup>

It is important to remember that pedestrians and cyclists are particularly vulnerable to injuries when involved in car accidents and ensure that we design our roads with this in mind.

Between 2018 to 2022, there were 110 recorded car accidents in the North Sydney LGA that involved pedestrians and cyclists with a majority (54%) resulting in fatal (4%) or serious injuries (50%). Of the total number of incidents, there were more pedestrians (62%) than cyclists (37%) involved which is consistent with a higher proportion of people walking than cycling<sup>5</sup>.

Crashes also tend to be concentrated along road links that have high vehicle, pedestrian and cyclist activity such as the Pacific Highway, Military Road and Miller Street. Unsurprisingly, these road links connect key local centres including North Sydney, Crows Nest, Cremorne and Neutral Bay (**Figure 4-2**), resulting in many points of conflict.

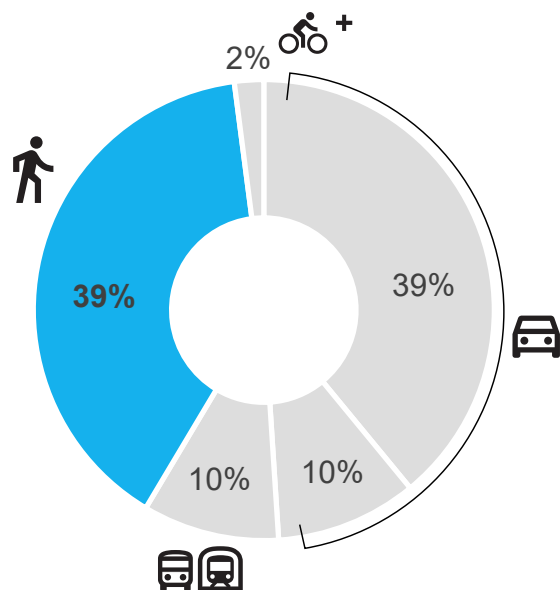
#### 4.1.1 Evidence on walking

##### When does the community walk?

Evidence suggests that the residential community of North Sydney enjoy active travel such as walking and choose this mode for daily trips, particularly for the purpose of recreation or social activity.

Household Travel Survey data for the period of 2022/23 indicates that 39% of all daily trips made by North Sydney residents were by walking as shown in **Figure 4-1**.

Figure 4-1 2022/2023 Walking mode share

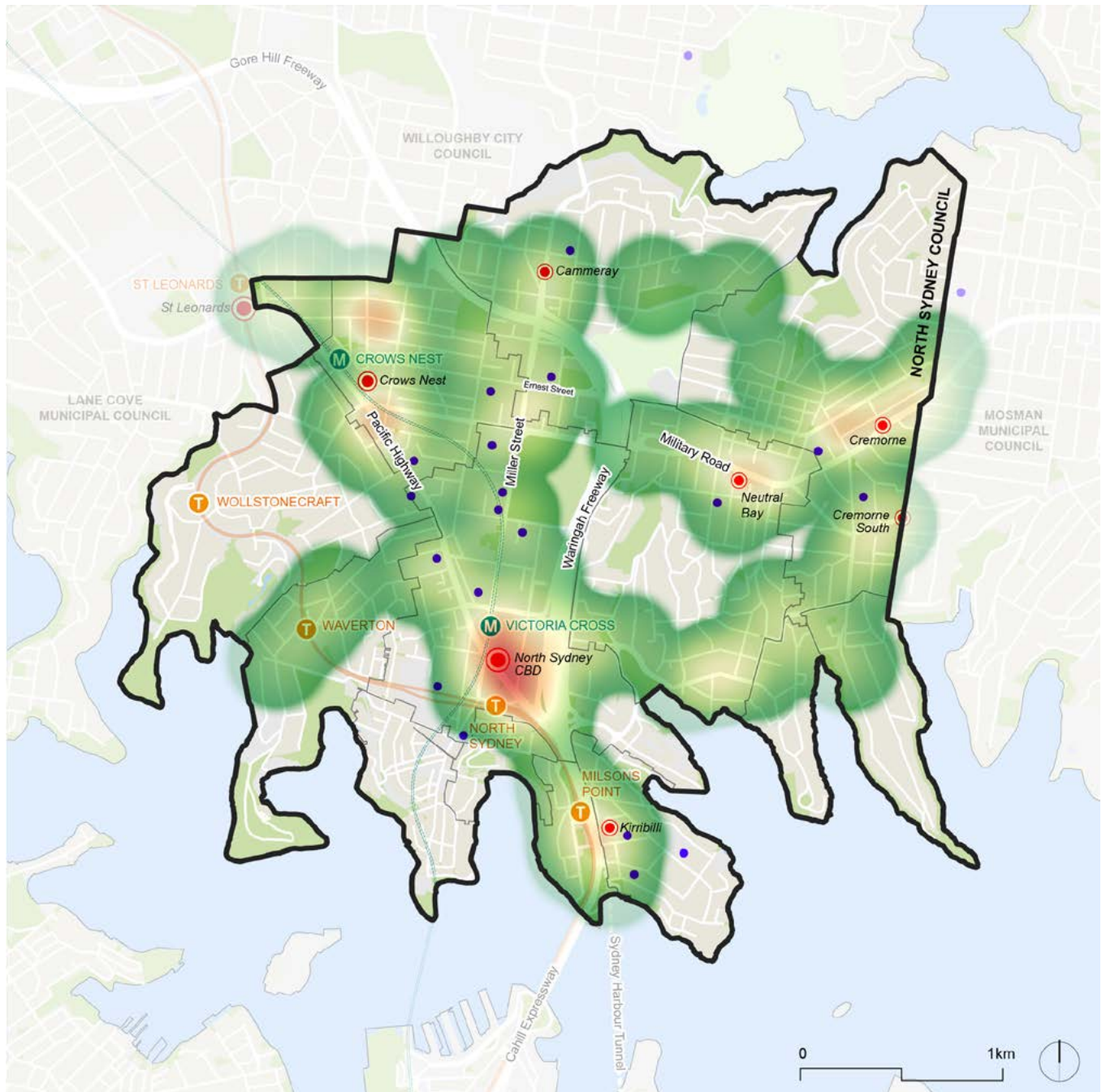


Source: Household Travel Survey, 2022/23

Household Travel Survey data for the period of 2022/23 also indicates that 30% of trips made were for the purpose of recreation/social activity, 20% were commute trips to employment, 17% for shopping and 6% to education as shown in **Figure 2-6**.

1 TNSW Active Transport Strategy, 2022  
2 TNSW Active Transport Strategy, 2022  
3 NSW Guide to Walkable Public Space, 2022  
4 NSW School Physical Activity and Nutrition Survey, NSW Health and TNSW Active Transport Strategy, 2022  
5 TNSW <https://www.transport.nsw.gov.au/roadsafety/statistics/interactive-crash-statistics/crashes-by-type-and-region>

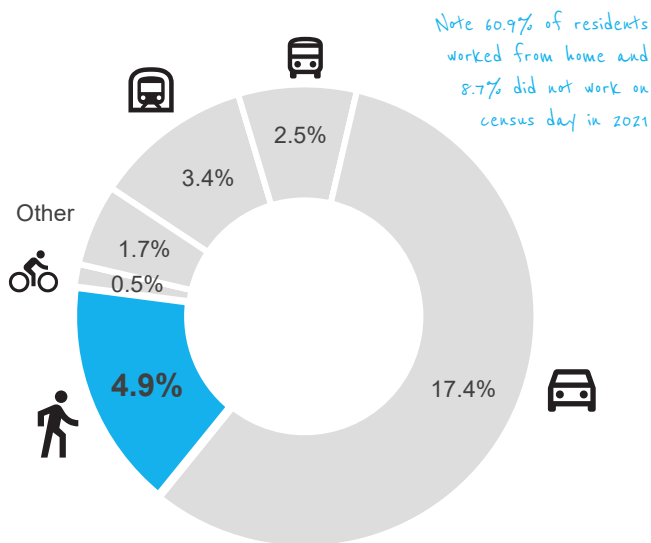
Figure 4-2 Concentration of pedestrian and cycle crashes in North Sydney between 2018 to 2022



Crashes with pedestrians and cyclists appear to occur in centres/area of high activity such as North Sydney CBD, Neutral Bay and Cremorne.

Census data for 2021 (**Figure 4-3**) demonstrates only 5% of commuters chose to walk to work, down from 11% in 2016 likely due to the rise in the number of people working from home post COVID-19.

**Figure 4-3** 2021 Method of travel to work data - walking mode share



Source: <https://profile.id.com.au/north-sydney/travel-to-work>

### It is convenient to walk?

Evidence shows that the urban layout of North Sydney provides residents with access to public transport, education and retail amenity (amongst other uses) within walking distance of a large proportion of residential dwellings.

**Figure 4-5** demonstrates the walking catchments from local centres and schools in the North Sydney LGA. The concentration of schools and local centres west of the Freeway reflects a more walkable network. On the eastern side of the freeway, local centres and schools are more dispersed. With the exception of many residential areas along the foreshore, most areas within the LGA are provided with the opportunity of a school and/or local centre within a 10 minute walk. This is consistent with trip purpose data and walking mode share demonstrated in **Figure 4-3**.

It is likely that people are walking to key destinations (predominantly for recreation) as there is a good spread of places to walk to quickly within the LGA.

By 2056 it is estimated that over 15,000 people and 10,000 people will access Victoria Cross station and Crows Nest station respectively during the morning peak hour. This is likely to mean a similar number of new walking trips in the immediate vicinity of the Metro stations, as people move between public transport modes or walk from home to the station.

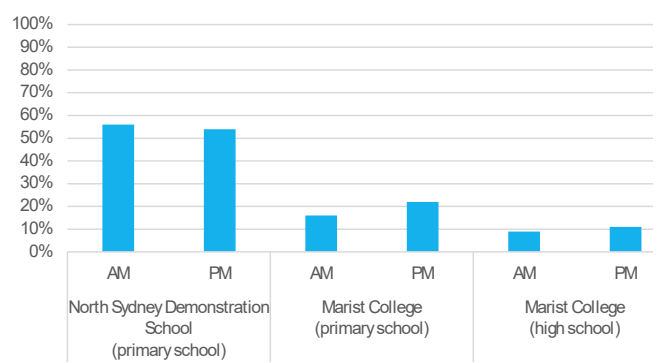
**Figure 4-6** demonstrates the walking catchments from public transport stations (railway, metro and 'turn up and go' bus services) in the North Sydney LGA. This analysis includes the B-Line bus, a turn up and go service every 5 to 10 minutes in peak times. Ferry stops have been included in the analysis to demonstrate the small walking catchments to and from areas along the foreshore. It should be noted that in these areas, the topography is generally steep and may not be conducive to or encourage walking to and from.

**Figure 4-7** demonstrates the areas of high walking demand are typically aligned with the Pacific Highway and Military Road based on 5 and 10 minute walking catchment to schools, retail/employment areas (centres) and public transport stops. Walking infrastructure and the pedestrian environment along these key vehicular corridors however is not ideal due to heavy traffic that generates noise and safety concerns.

Public transport accessibility levels across most of the east portion of the LGA are high as shown in **Figure 4-8** and **Figure 4-9**. Given the excellent access to public transport across the LGA within walking distance of residential areas (with the exception of the north east corner), the level of car dependency can be viewed as an opportunity for improvement.

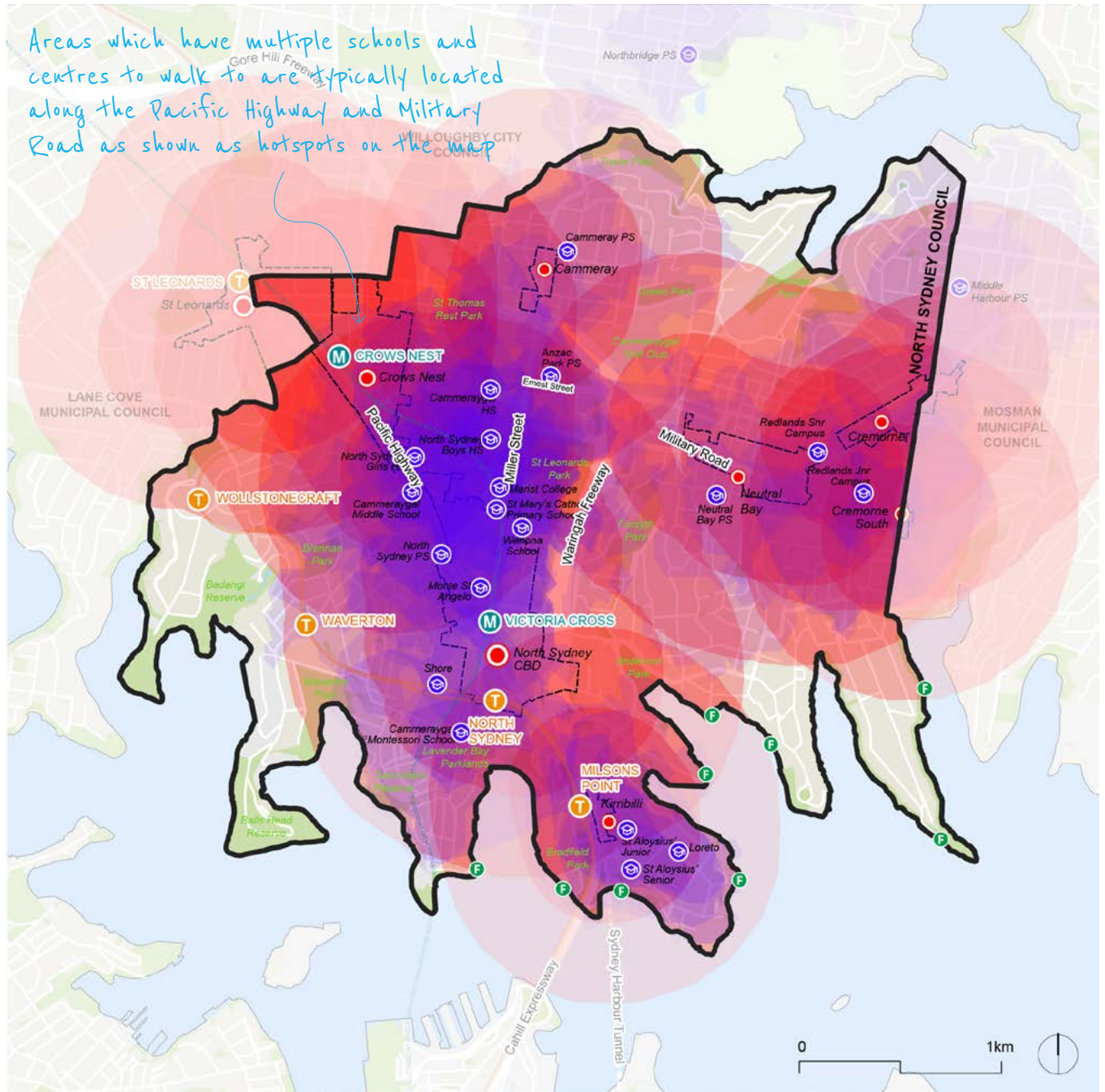
Walking mode share data of North Sydney Demonstration School (primary school) and Marist College (primary/high school) is summarised in **Figure 4-4**, with a sample size 12%, 79% and 29% respectively. Being a public school, North Sydney Demonstration School students live within the school catchment and have significantly higher walking mode shares (>50%) than Marist College (<25%). This suggests that students are able to walk to school if they live within walking distance.

**Figure 4-4** Walk mode share across select schools



Source: Green Travel Plans for North Sydney Demonstration and Marist College

Figure 4-5 Walking catchments to schools and local centres



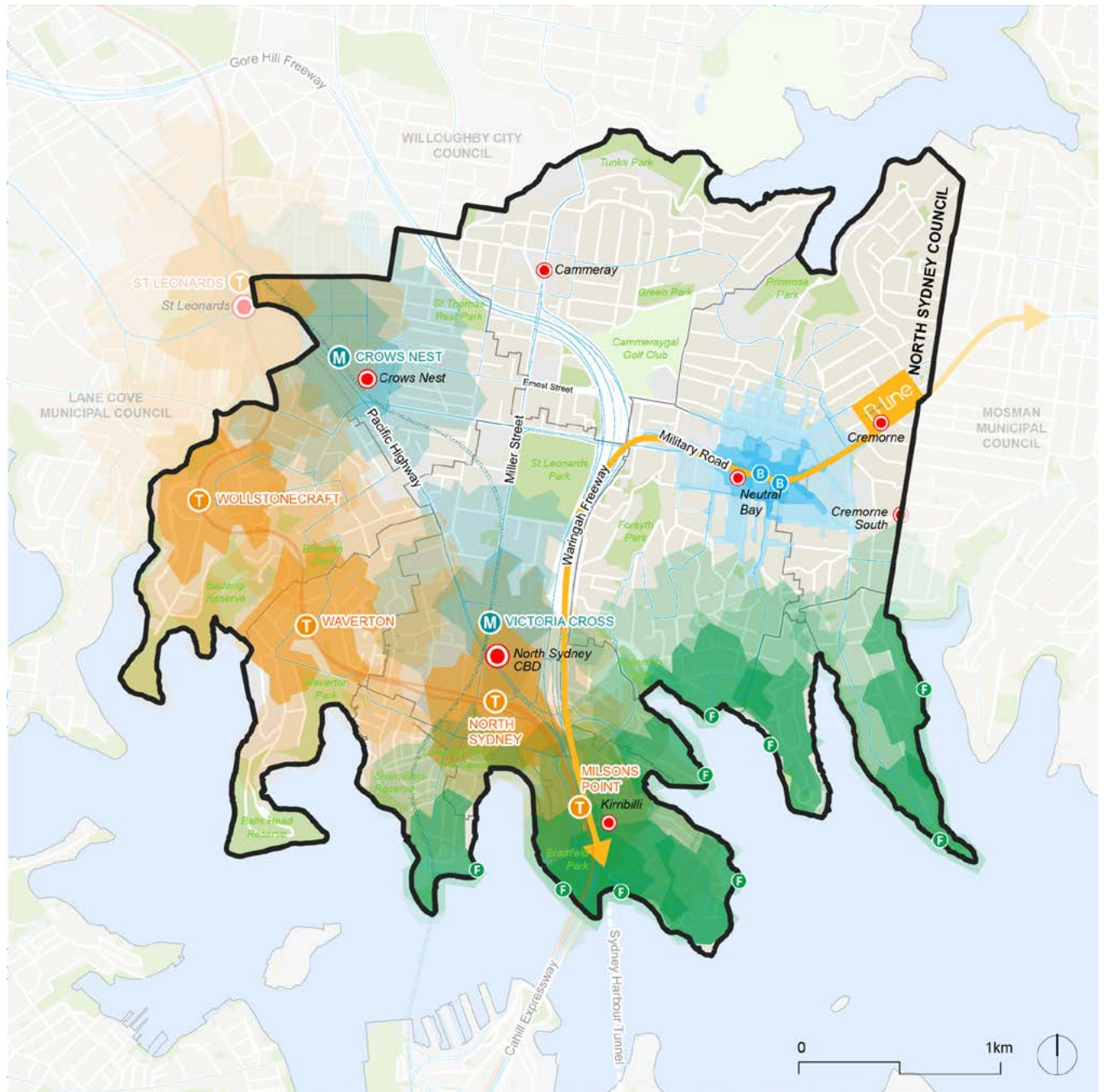
KEY			
Railway station	School	400m buffer from local centre	5 minute walk from school
Metro station	Local centres	800m buffer from local centre	10 minute walk from school

Source: SCT Consulting and Open source contributors





Figure 4-6 Walking catchments to public transport



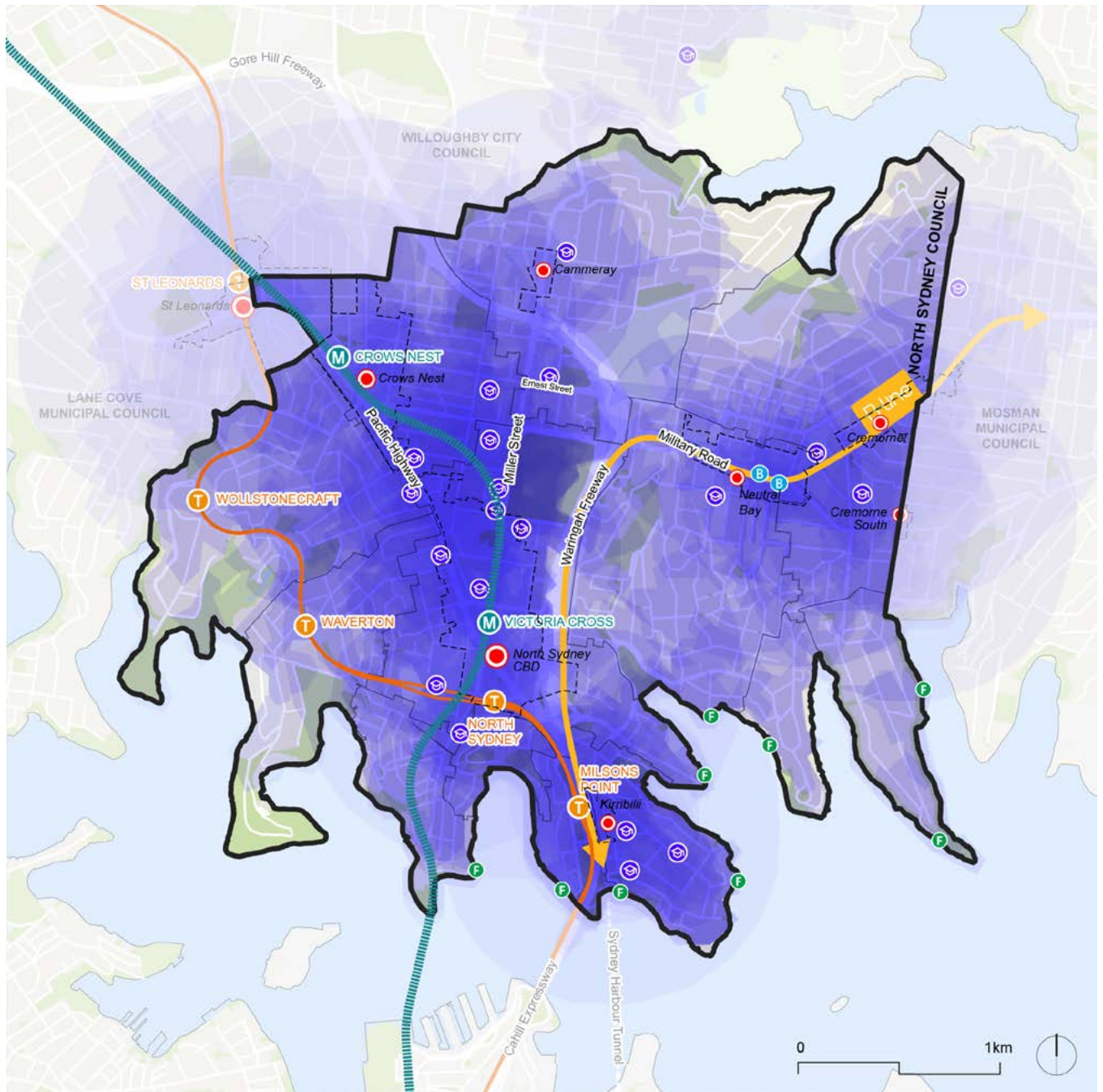
KEY

- |                      |               |                                     |                                   |                                |                                 |
|----------------------|---------------|-------------------------------------|-----------------------------------|--------------------------------|---------------------------------|
| Railway station      | Bus routes    | 5 minute walk from railway station  | 5 minute walk from metro station  | 5 minute walk from ferry stop  | 5 minute walk from B-line stop  |
| Future metro station | Local centres | 10 minute walk from railway station | 10 minute walk from metro station | 10 minute walk from ferry stop | 10 minute walk from B-line stop |
| Ferry stop           |               |                                     |                                   |                                |                                 |

Source: SCT Consulting and Open source contributors



Figure 4-7 Areas of high walking demand



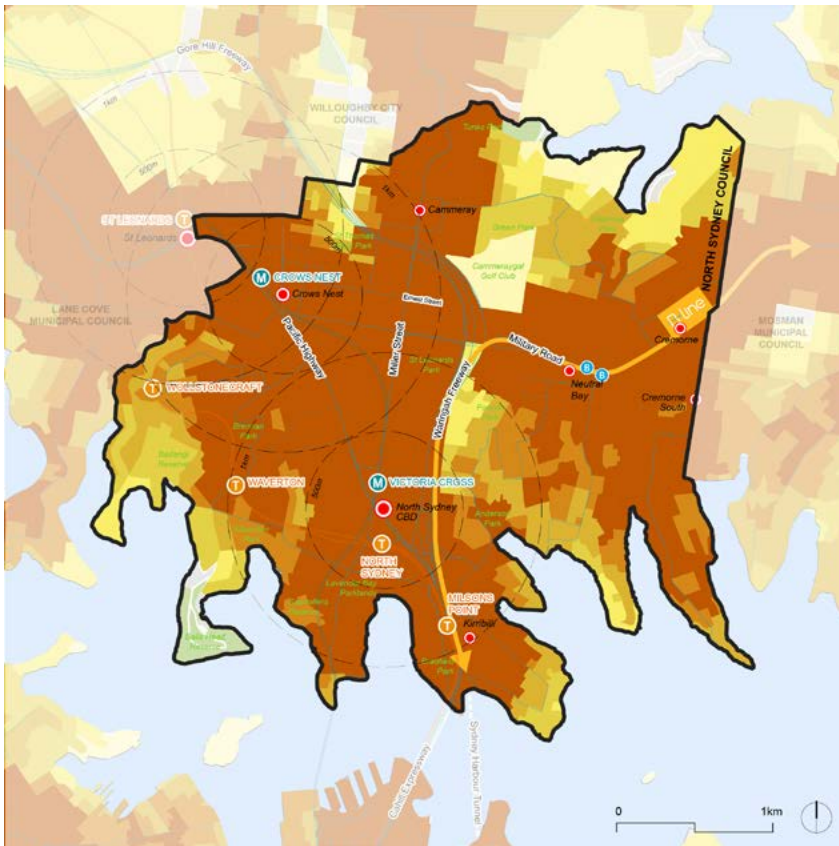
- KEY
- T Railway + station
  - M Metro + station
  - F Ferry stop
  - B-Line
  - Local centres
  - Ⓜ School
  - Areas of high walking demand
  - Areas of low walking demand

Source: SCT Consulting and TfNSW Open Source data, 2020

Heat map showing the 5 and 10 minute walking catchments to schools, employment/retail areas and public transport stations overlaid.



Figure 4-8 Public transport accessibility levels (PTAL) 2020 - AM Peak



PTAL suggests how well the place is connected to public transport services.

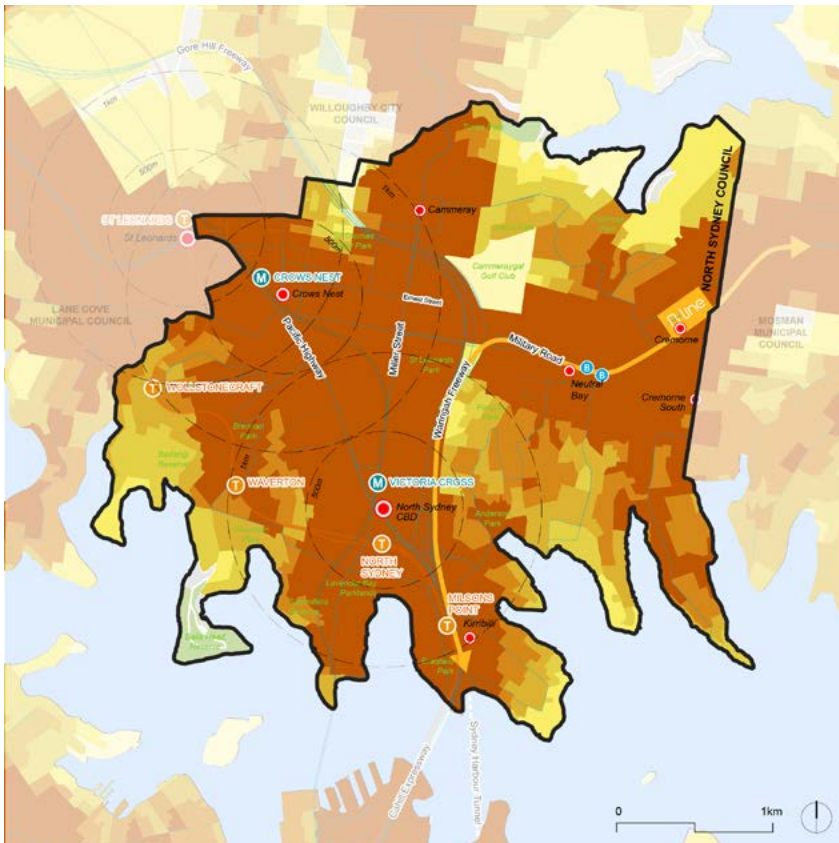
**KEY**

- Railway + station
- Metro + station
- Ferry stop
- Bus routes
- B-Line
- Local centres

**Public Transport Accessibility Level (PTAL)**


Source: SCT Consulting and TfNSW Open Source data, 2020

Figure 4-9 Public transport accessibility levels (PTAL) 2020 - PM Peak



**KEY**

- Railway + station
- Metro + station
- Ferry stop
- Bus routes
- B-Line
- Local centres

**Public Transport Accessibility Level (PTAL)**




Source: SCT Consulting and TfNSW Open Source data, 2020

### 4.1.1.3 What the community said about walking

#### How, where and why we walk

The majority of people surveyed said they choose walking as their preferred mode of transport to local shops and other places within the LGA. A small percentage choose to walk to work whilst walking to places outside of the LGA was not a popular choice.

13% of people surveyed noted that they had children who attended a school within the LGA, with over half choosing to walk to school. Key responses when asked if there was anything preventing parents/ caregivers allowing children to walk (or cycle) to school independently included a lack of safe pathways and crossing points, as well as feeling that their child was too young.

When asked what areas of North Sydney are the most desirable for walking and cycling, responders mentioned Berry Island, the Coal Loader, Balls Head, St Leonard's Park, Lavender Bay, Kirribilli, Milsons Point, Flat Rock Gully, Crowns Nest, Primrose Par, West Street, Neutral Bay, Cremorne Point, McMahons Point, Waverton, Wendy's Secret Garden, Cammeray. The main reasons for these choices included good tree canopy, a variety of shops and restaurants, wide footpaths with dedicated cycleways (so that cyclists don't conflict with pedestrians and visa versa), low-traffic and noise, safe pedestrian crossings, well lit, smooth pavements and a lack of obstacles along the street (i.e. phone booths, advertising signage etc.).

#### Changing behaviours

A popular response when asked what can we do to change behaviour and encourage drivers to choose other transport modes, was to make sustainable transport more convenient and cars less convenient, as well as improving active transport infrastructure.

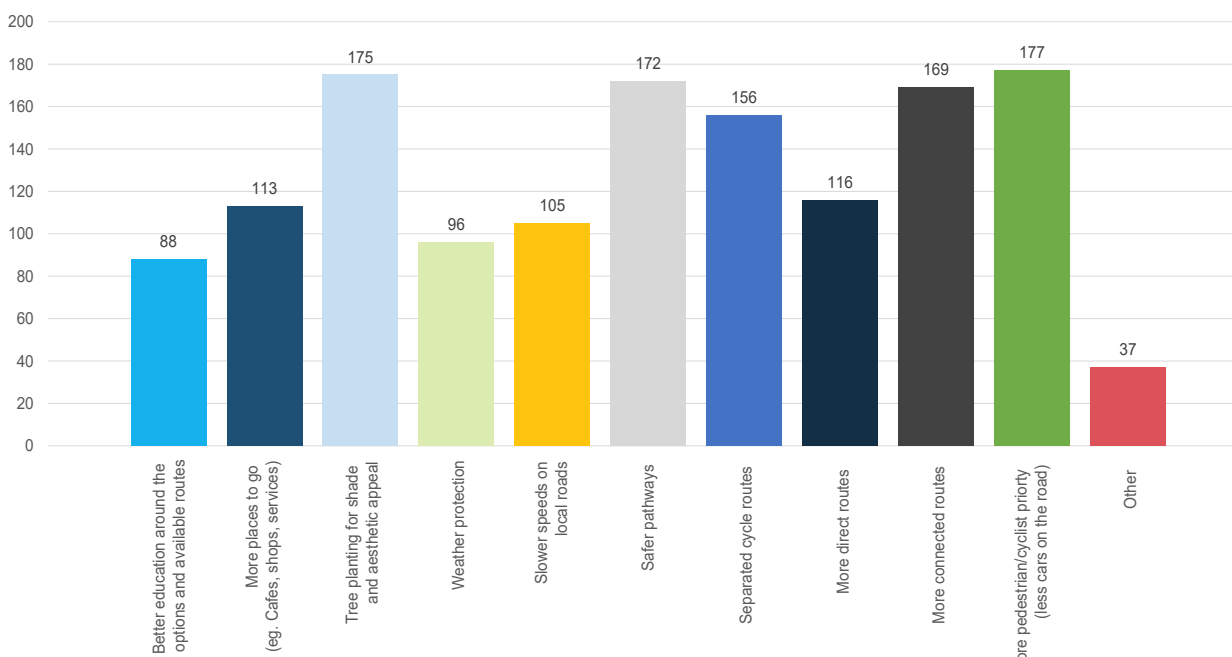
As shown in **Figure 4-10**, top responses when asked what improvements to the North Sydney LGA would encourage people to walk and cycle more included provision of more connected routes, tree planting for shade and aesthetic appeal, safer pathways and having more places to go such as cafes, shops and services.

When asked what the community wanted transport in North Sydney to be like in 10 years time the top responses included having more active transport that is inclusive for bike riders and pedestrians, a reduction in car use and more pedestrian mobility around our streets.

#### Safety

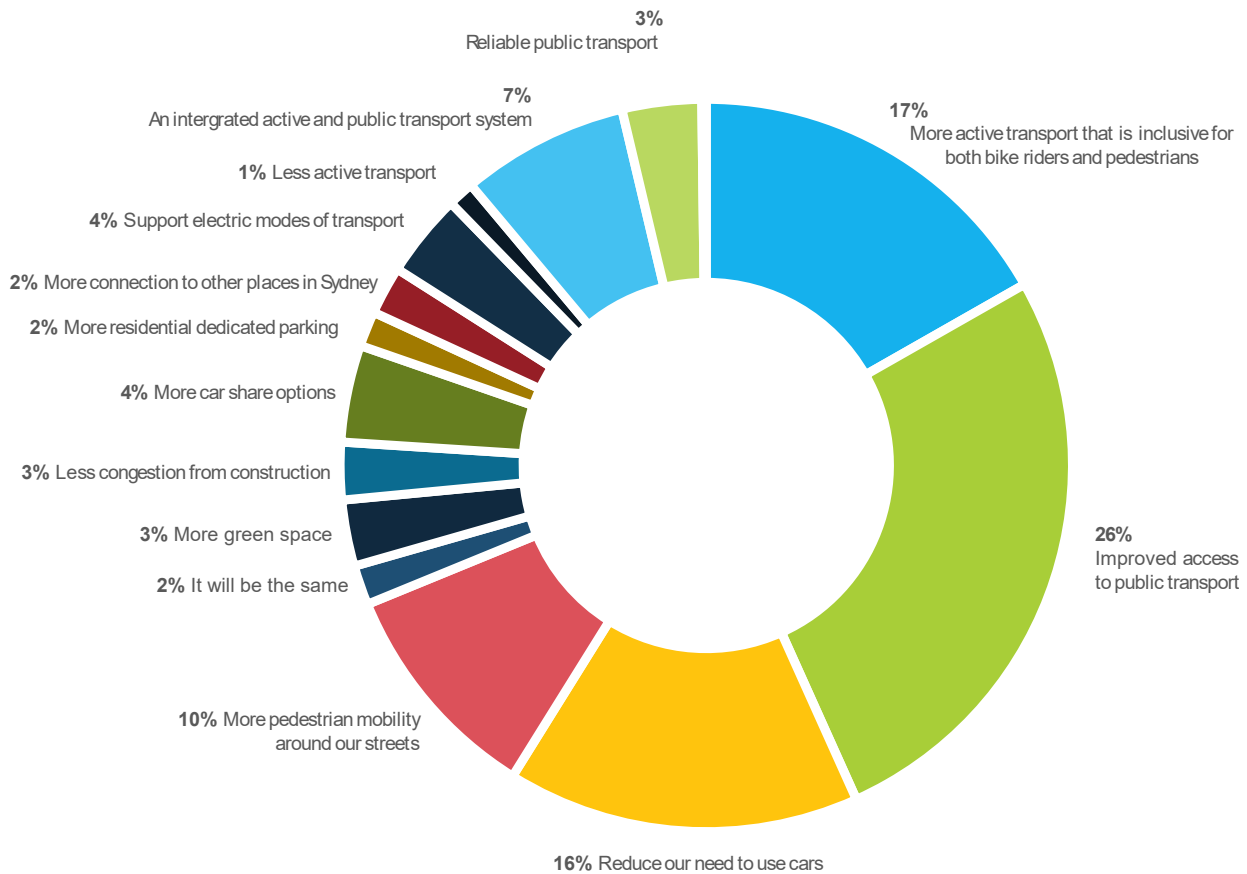
Most people told us that they feel safe when utilising sustainable transport modes within the LGA (including walking) whilst some flagged the need for wider footpaths and lower speed limits to improve feelings of safety.

**Figure 4-10** Improvements to the North Sydney LGA that would encourage walking and cycling



Source: Online survey responses from community consultation period, 2024

**Figure 4-11** What the community would like transport in North Sydney to be like in 10 years time



Source: Online survey responses from community consultation period, 2024

"With better pedestrian priority, more people will walk and leave the car at home." - North Sydney visitor, 35-49 years old, Female

"Integrating pedestrian safety with cycling safety is of paramount importance in areas like Crows Nest with the growth of eBikes and food delivery vehicles."  
- Wollstonecraft residents

#### 4.1.1.4 Key takeaways for walking

Walking is a popular and desirable method of travel for local (short) trips within the LGA. Based on the evidence above, interventions that may encourage more people and more trips to be taken by walking include:

- Upgrading footpaths (widening and quality of pavement)
- Providing new footpaths that improve connections in the network
- Upgrading footpath network to improved integration with the new Metro stations
- Installing new safe crossing points (particularly around schools)
- Lowering speed limits on roads which serve as key walking connections
- Planting trees for shade and landscaping to improve aesthetic appeal

Planning for new places to walk to and from as well as educating the community on the benefits of walking may also be considered as part of the plan for increasing walking mode share.

#### 4.1.1.5 Strategic goals for walking

Based on the evidence presented, it is recommended that Council focus on the following strategic goals/targets to continue to service and improve walking networks:

- Target an increase in walking mode share generally to 50% by 2034 (baseline of 39% - Household Travel Survey 2021),
- Increase the walking mode share to:
  - Work - to 20% from 10.9% (2016 Census)
  - School - a 10% increase from 2024 baseline
- As reflected by the community, improve pedestrian amenity between and in proximity to key destinations in the LGA, with a focus on ensuring inclusive environments for all ages and abilities
- Accommodate growth in the LGA by providing walking infrastructure that is suitably designed to accommodate expanding communities and increasing visitation (for employment or recreation)
- Schools should be encouraged to promote walking to school as a healthy travel choice, and work towards improving safety with new pedestrian crossings and pathways to instill confidence
- Target zero fatalities and 35% reduction in serious injuries rate between vehicles and pedestrians by reducing speed limits in key pedestrian areas and improving pedestrian priority, crossing infrastructure and footpaths



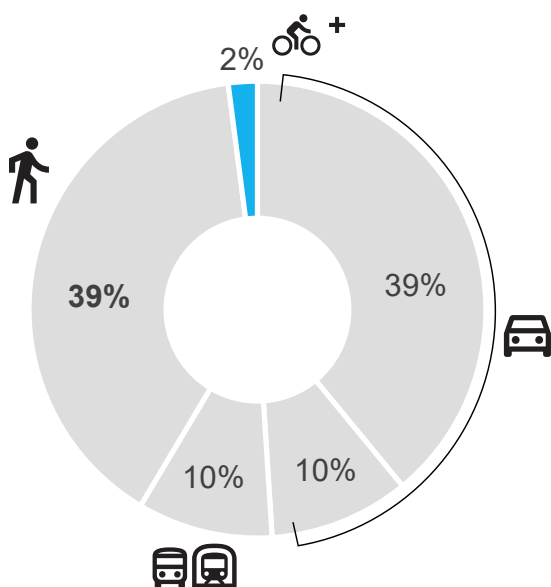
## 4.1.2 Evidence on cycling

### When does the community cycle?

Low cycle mode share indicates that North Sydney residents are not motivated to cycle even for recreational or social trips. The evidence suggests that people are more likely to cycle as a way to commute to work, however the numbers remain low.

As summarised in **Figure 4-12**, very few people from households North Sydney chose to cycle in 2022/23 (2% including other minor mode shares). A comparison of Pre-COVID (2019/20) and 2022/23 Household Travel Survey data suggests that cycling trips are likely undertaken for commute purpose. Post-COVID, social/recreational trips have grown (+35%). However, commuter trips have halved, which aligns with the reduction of cycling trips and other minor travel modes post-COVID.

**Figure 4-12** 2022/2023 Cycling mode share

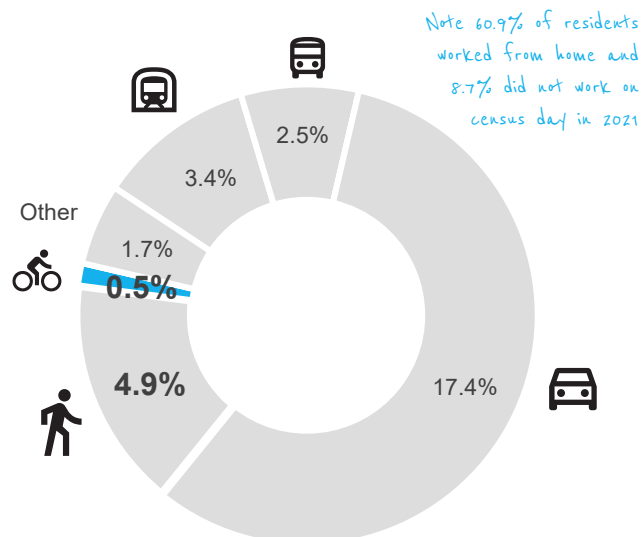


Source: Household Travel Survey, 2022/23

Similarly, Journey to Work cycle mode share (0.5%) for North Sydney residents is very low as shown in **Figure 4-13**. This has halved in comparison to 2016 cycle mode share of 1.1% and is likely due to the impact of COVID-19 working from home arrangements.

Assessment of selected school mode share data shows that cycling is not a common mode of transport for students.

**Figure 4-13** 2021 Method of travel to work data - cycle mode share



Source: <https://profile.id.com.au/north-sydney/travel-to-work>

### Is cycling accessible in North Sydney?

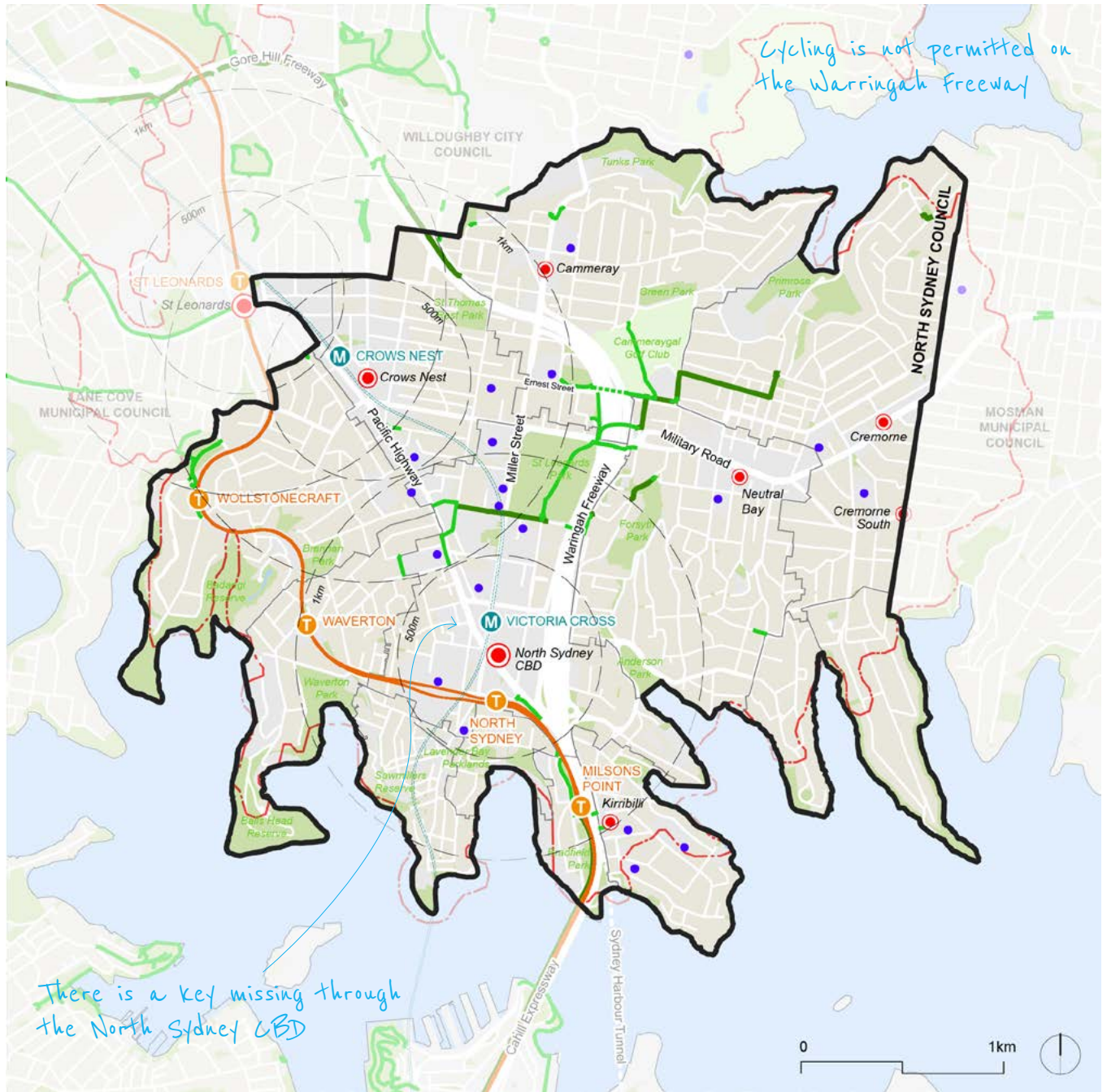
Despite North Sydney's proximity to Sydney's CBD and its identity as a secondary CBD, bicycle commuting remains remarkably low in the LGA. This suggests that the existing bicycle network is insufficient in addressing safety and connectivity needs of North Sydney's residents, employees and visitors.

**Figure 4-14** shows the existing cycle network and the 15-minute cycle catchment from North Sydney CBD. Although residents are largely within a 15-minute cycle to a local centre, the bicycle network consists predominantly of a mixed traffic cycling environment with minimal shared path and separated cycleway infrastructure. The paths are generally discontinuous and only services limited road corridors. Opportunities for cyclists to cross high speed roads (Warringah Freeway, Pacific Highway) are also minimal.

Mixed traffic cycling conditions are undesirable for less confident cyclists who feel unsafe cycling in unprotected cycling infrastructure. This is an issue especially on heavy traffic roads with higher posted speed limits like Pacific Highway and Military Road.

In addition, a significant proportion of North Sydney's residents (38.7%) work in Sydney's CBD. However, a gap in the cycle network connecting the Harbour Bridge Cycleway to North Sydney makes it difficult to access the CBD by bicycle, which is reflected in the cycle catchment in **Figure 4-14**. The Sydney Harbour Bridge Cycleway Northern Access Project aims to install a ramp on the northern end of the Sydney Harbour Bridge cycleway to target this issue.

Figure 4-14 Cycle infrastructure and catchment from North Sydney CBD



KEY

- T Railway + station
- M Future metro + station
- Local centres
- School
- Separated cycle lane
- Shared path
- Quiet street
- On-road cycle lane
- 15-minute cycle catchment from North Sydney CBD



Existing research has highlighted that up to 70% more people would cycle if it was made a safer and more convenient option<sup>6</sup>. Given North Sydney's prime location, there is great opportunity to improve cycle mode share if safety and connectivity is improved.

#### 4.1.2.6 What the community said about cycling

##### How, where and why we cycle

As summarised in **Figure 4-15**, those surveyed have shared that cycling trips is not a common mode choice for a majority of their trips. They are more likely to cycle for their work commute (11%) or to places within the LGA (9%).

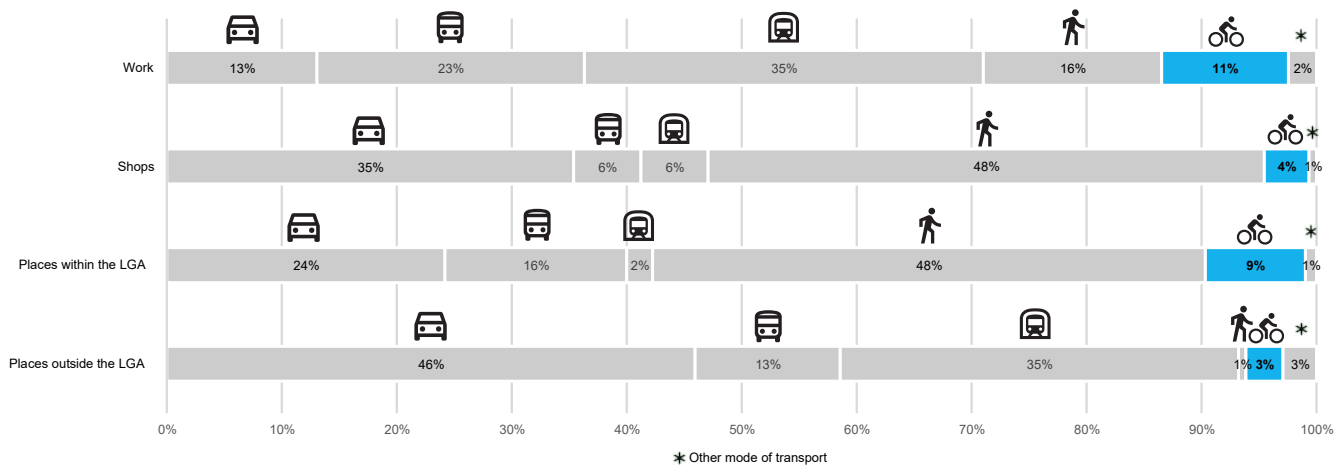
Notably, responses from the workshop (consisting of 50 demographically-selected residents and employees of North Sydney) noted that none of the attendees currently cycle as a mode of transport. However, when asked how they would prefer to move, 6 attendees indicated that they would like to cycle either as a primary mode, or as a first or last-mile connection. This suggests that there is latent demand for cycling as a transport choice within the community.

For students studying within North Sydney, only 7% cycle. Parents expressed concerns over safety as a key reason why they do not allow their children to cycle or walk to school. This included concerns around the lack of safe pathways (22%), their children being too young (21%), lack of safe crossing points (21%) and children having a general lack of road safety education (3%).

Survey respondents also identified areas desirable for walking and cycling which included Milsons Point. A notable reason identified for the appeal to cycle is the availability of wide footpaths with dedicated cycleways, which prevents conflicts between cyclists and pedestrians.

6 North Sydney Cycling Strategy AMR Interactive (2009). Research into Barriers to Cycling in NSW. Prepared for NSW Roads and Traffic Authority, July 2009. and Taverner Research (2009). Sydney Cycling Research. Prepared for City of Sydney, November 2009.

**Figure 4-15** Transport modes used for the majority of trips



Source: Online survey responses from community consultation period, 2024

Source: Online survey responses from community consultation, 2024

## Changing behaviours

Key problems identified on North Sydney streets included:

- Need for greater investment in active transport (20%)
- Cyclists make pedestrians feel unsafe on shared paths (2%)

When asked what would encourage them to cycle more, survey respondents mainly identified changes targeted around safety and connectivity (64%) as summarised in **Figure 4-16**.

Additional feedback obtained during the engagement sessions also noted the need for:

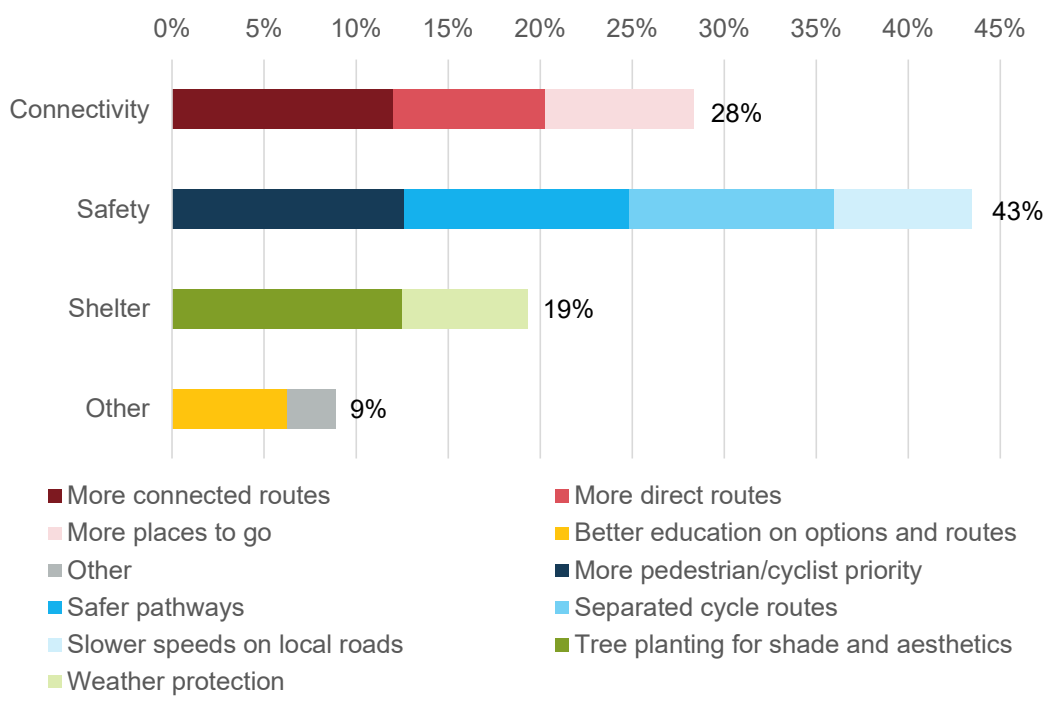
- Additional bike parking facilities
- Education to increase awareness on the benefits of active transport
- Separated cycleways instead of shared paths to support the safety of both cyclists and pedestrians

The community was also asked where they would like to see transport in North Sydney in the next 10 years (refer **Figure 4-11**). A significant proportion identified wanting more active transport that is inclusive for both bike riders and pedestrians, with a minority noting a desire to have less active transport. A desire to have an integrated active and public transport system was also identified.

## Safety

Although survey respondents generally felt safe (48%) using sustainable transport modes, there was feedback that cyclists on shared paths made pedestrians feel unsafe (7%), with concerns over high speed limits (<1%).

**Figure 4-16** Improvements to encourage walking and cycling



Source: Online survey responses from community consultation period, 2024

#### 4.1.2.7 Key takeaways for cycling

Whilst existing cycling mode shares across all trip purposes are low, the engagement responses reflects the community's desire for more cycling opportunities. There is significant potential to increase cycling mode shares especially since North Sydney is serviced by well-distributed local centres and is conveniently located close to a major employment hub - the Sydney CBD.

The following interventions are suggested to improve cycling provisions within North Sydney:

- Explore opportunities to upgrade North Sydney's cycle network. Separated cycle infrastructure should be prioritised in areas of high vehicle and pedestrian traffic
- Investigate the upgrade of existing shared paths to separated cycle infrastructure
- Improve cycle route connections to local centres, parks, and leading to Sydney CBD
- Lowering speed limits on roads that are key cycle links
- Upgrading safe cycle links and crossings around schools

These interventions should also be supported by increased wayfinding for cycle routes, raising awareness about the benefits of cycling and education on safe cycling routes in the LGA, especially for students.

"Please stop shared pedestrian and cyclist paths - have separate bike paths. It is too dangerous for pedestrians to have to be on the lookout for cyclists."

- North Sydney resident, 70-84 years old, female

#### 4.1.2.8 Strategic goals for cycling

Based on the evidence presented, the following strategic goals are recommended for Council's consideration:

- Target an increase of household cycle mode share to 5% by 2034 (from a baseline of <2% - Household Travel Survey 2022/23)
- Target an increase cycle mode share to:
  - Work - to 5% from 1.1% (2016 ABS Census)
  - School - a 10% increase from 2024 baseline
- Work with schools to advocate for more students to cycle to school by providing road safety training, identifying safe cycle routes, and working to upgrade cycle connections around schools.
- Accommodate growth in the LGA by improving bicycle network connectivity between key destinations in North Sydney (local centres and parks), and towards Sydney CBD. This includes upgrading shared paths and identifying opportunities for separated cycleways, which is a key need identified by the community
- Improve end-of-trip amenity as requested by the community, by providing safe bicycle parking spaces that are easy to use across the LGA



## 4.2 Public transport

Public transport in North Sydney includes bus, train, Metro, and ferry services that provide different level of connections within the LGA and beyond. It is often the primary alternative to private vehicle use, especially during peak hours when public transport services are more frequent.

When people choose to take public transport instead of driving, it reduces the number of cars on the road and significantly alleviates traffic congestion in busy areas like North Sydney. The reduction in vehicles on the road also leads to shorter travel times and less frustration for people that need to drive, such as people living with a disability or freight delivery.

Promoting and enhancing public transport use provides the community with numerous additional benefits. It offers convenient travel options for individuals who do not drive and encourages walking between transport stops, contributing to overall health and well-being. Moreover, increased public transport use supports environmental sustainability by lowering carbon emissions and reducing air pollution.

### 4.2.1 Evidence on public transport

#### Is public transport accessible in North Sydney?

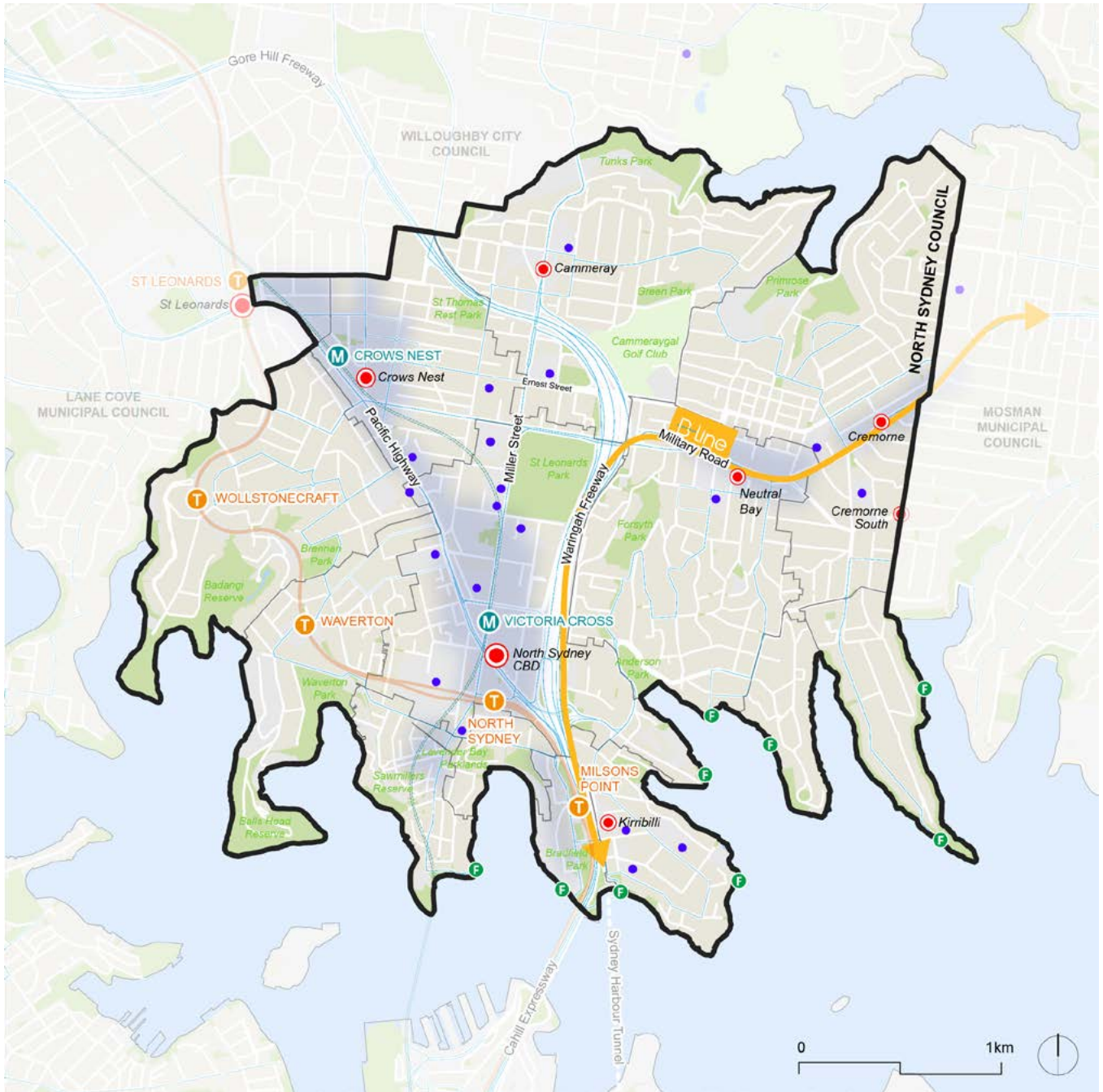
The evidence shows that North Sydney has multiple public transport options and can service a large proportion of the community to and from the LGA.

**Figure 4-17** demonstrates the existing public transport network in the LGA. The LGA generally has good access to multiple forms of transport with the west of Warringah Freeway and the southern periphery along the waterfront generally within 5-minutes to a train or a ferry station.

The north-eastern parts of the LGA (Cammeray, Cremorne, Neutral Bay) only have access to the bus network, which can be unreliable during peak hours and other periods of congestion. However, in recognition of the busy road corridors between the City and the Northern Beaches, high frequency and limited stop B-Line services run on Military Road to combat issues relating to reliability.



Figure 4-17 Existing public transport network



- KEY
- T Railway + station
  - M Future metro + station
  - F Ferry stop
  - Bus routes
  - Local centres
  - School
  - Employment areas

Access to good public transport is essential within the LGA, in particular given the role of North Sydney CBD as an extension of Sydney's CBD. As shown in **Figure 4-18** and **Figure 4-19** respectively, 2016 census data indicates that 41% of North Sydney residents traveled to work via public transport, while 49% of North Sydney employees utilised public transport to travel to the LGA for work.

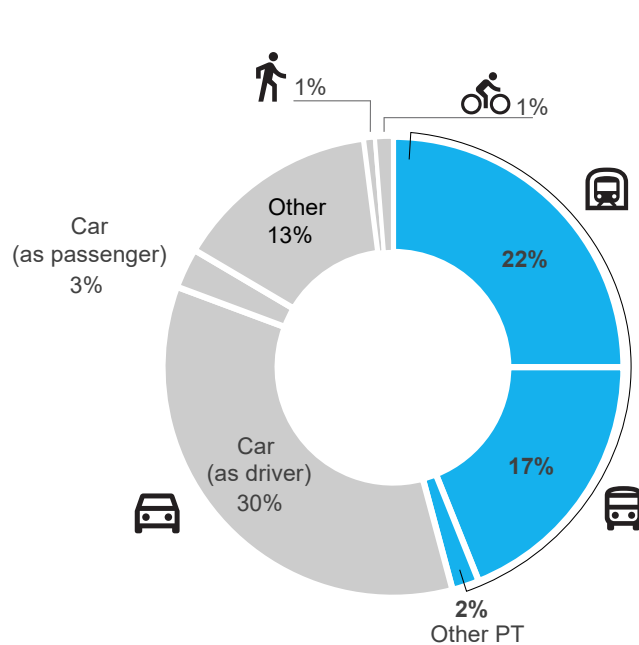
Due to the impacts of COVID on travel patterns and the subsequent inclination of working from home, the 2021 Census indicates only 6% of North Sydney residents and 7% of North Sydney employees traveled to work by public transport.

North Sydney will also benefit from additional travel options with the new Metro (city & southwest project) stations at Crows Nest and Victoria Cross. One Metro service is expected every four minutes (15 trains an hour) during the peak hours, which will result in an additional 10,000 and 15,000 people accessing Crows Nest and Victoria Cross station respectively.

**Why does the community take public transport?**

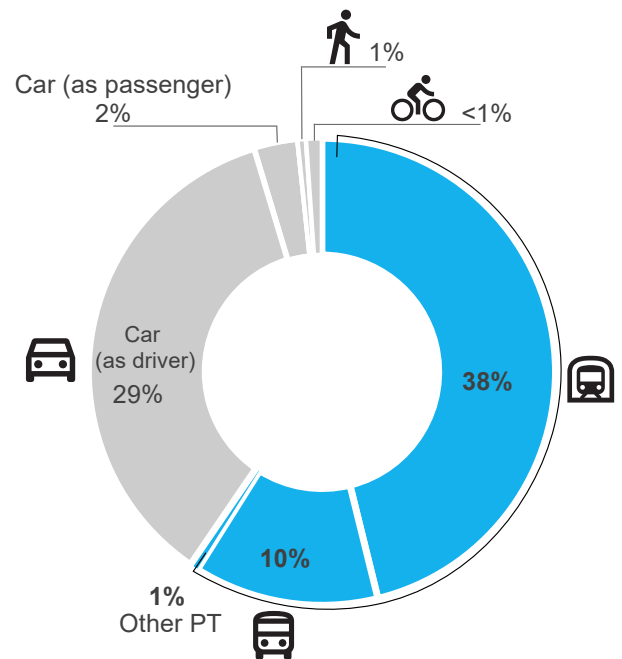
Public transport is a primary travel mode for commute trips to and from North Sydney. However, it is commonly utilised for other daily trip purposes.

**Figure 4-18** 2016 Method of travel to work data - public transport mode share for usual residents of North Sydney



Source: ABS Census, 2016

**Figure 4-19** 2016 Method of travel to work data - public transport mode share for place of work

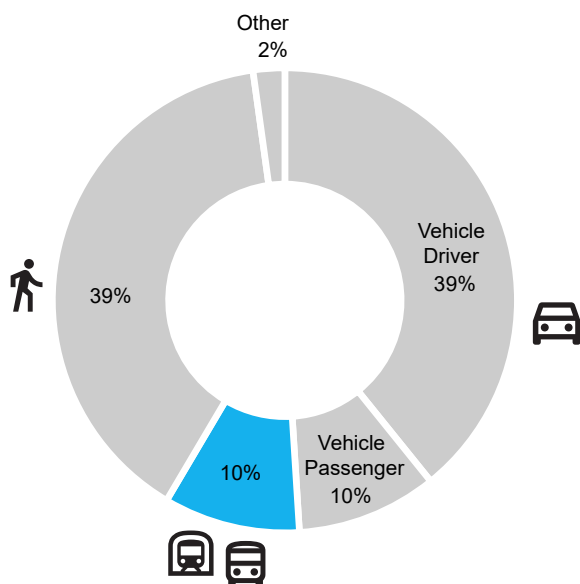


Source: ABS Census, 2016

Public transport use across all North Sydney household trips by purpose are relatively low as indicated by the 2022/23 Household Travel Survey (**Figure 4-20**). Around 10% of travellers utilised public transport in 2022/23 compared to 17% pre-COVID. This decrease in public transport mode share is proportionate to the decrease in commute trips due to COVID, which indicates that most people do not travel by public transport outside of meeting commuting needs. This could be attributed to the following reasons:

- Distribution of land uses across the LGA ensures that residents and visitors have convenient walking access to essential services and shops
- Greater convenience of driving for local trips
- A high proportion of primary school aged children being driven to school

**Figure 4-20** 2022/2023 public transport mode share



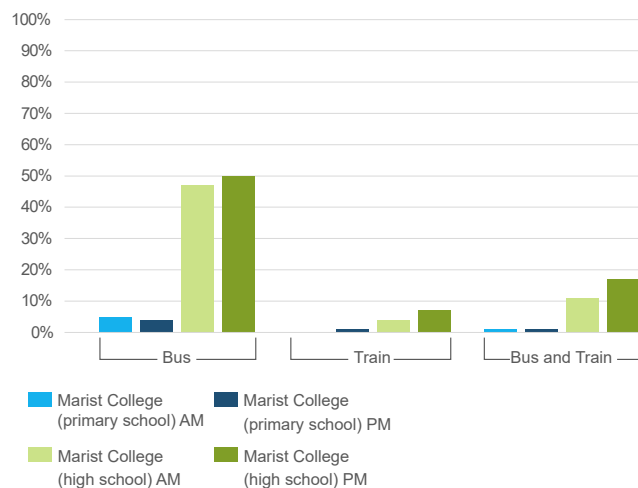
Source: Household Travel Survey, 2022/23

"Many parts of the LGA are serviced only by buses but these can often be unreliable and it's a persistent problem with certain bus routes e.g. 230, 320 which run late virtually from their departure point."

- North Sydney resident, 35-49 years old, Female

Public transport can be a popular mode choice especially for high school students in North Sydney. Comparison of public transport mode share of students in Marist high school and primary school show that public transport is a less common mode choice for younger students than high school students (**Figure 4-21**).

**Figure 4-21** Marist College public transport mode share



Source: Green Travel Plans for Marist College

#### 4.2.1.9 What the community said about public transport

##### How, where and why we take public transport

As summarised in **Figure 4-22**, public transport is mostly used by the community for longer trips like commuting (58% by public transport) or trips outside of the LGA (48% by public transport).

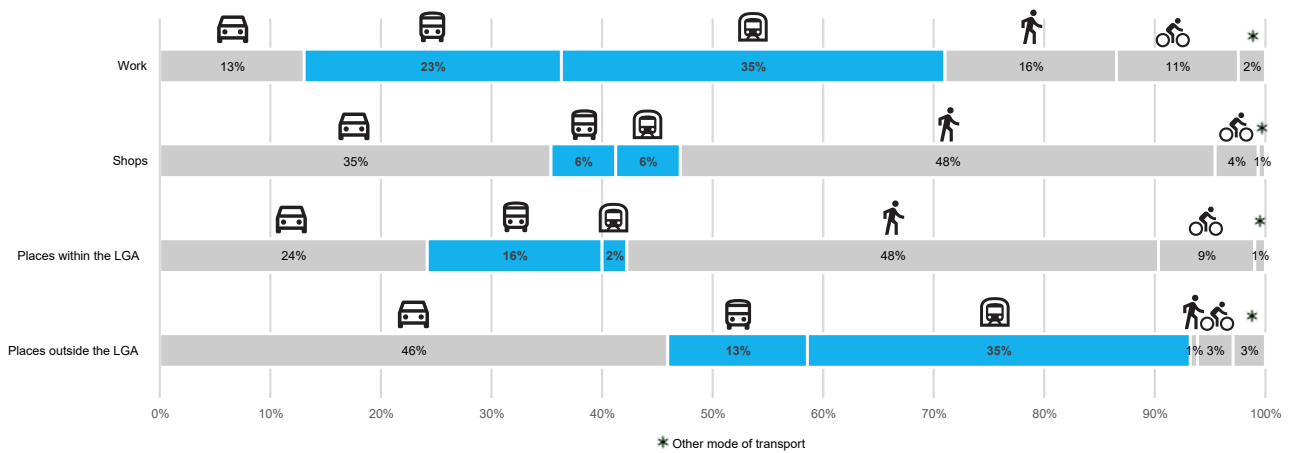
Trains are the preferred public transport type for longer trips with about 50% and 70% more people taking the train than bus for commute trips and trips outside the LGA respectively. However, when public transport is used for shorter trips within the LGA, buses are six times more commonly taken than train by the community, reflecting the local nature of bus services. Ferry services are the least used service with 2% or less mode share across all trip types.

##### Changing behaviours

When the community was asked how the needs of the community should be balanced to ensure a sustainable future for the LGA, the following needs were prioritised by the community:

- improve bus infrastructure, routes and service frequency (second priority)
- Improve transport interchanges to make transferring from one mode to another easier (third priority)

Figure 4-22 Main public transport mode currently used



Source: Online survey responses from community consultation, 2024

Further feedback on what can be done to change behaviours included:

- Improve bus frequency and coverage
- More public transport options
- Make sustainable transport more convenient and cars less convenient
- Mini buses/shuttle buses that serviced internal LGA trips
- Integration between the Metro and other forms of transport
- Improving accessibility to public transport for the older population who are less mobile

The community also felt that the efficiency and affordability of public transport impacted the high levels of car ownership in the LGA.

Looking to the future, the community expressed a strong desire to have more access to public transport in the next 10 years (26% of responses).

### Safety

Although the community mostly felt safe on public transport, there were some concerns around night-time use of public transport and a lack of street activation.

"Bear in mind that many transport users are old people who have given up their cars. Many are forced to stay home as a result of lack of accessibility to transport routes"

- North Sydney resident, 70-84 years old, Female



#### 4.2.1.10 Key takeaways for public transport

It is apparent that the local community has a strong desire to take public transport, especially on longer journeys to and from areas outside the LGA. However, the community would also like the option of being able to take public transport for local trips. The new metro service will certainly assist with this. There is further potential to increase public transport use by exploring the following interventions:

- Investigate opportunities to improve bus journey time reliability, especially on the north-eastern section of the LGA
- As the community has communicated difficulty in accessing public transport from their homes, to investigate first and last mile integration with public transport especially in hilly terrain
- Improve the integration between different public transport modes as requested by the community
- Explore public domain improvements to improve public transport amenity, especially at night

#### 4.2.1.11 Strategic goals for public transport

The following strategic goals have been identified as an outcome of the evidence presented above:

- Increase public transport mode share to 20% from 9.5% baseline in 2022/23 Household Travel Survey
- Improve first and last mile connectivity between destinations and public transport stops
- Accommodate the new Metro station by improving integration across different public transport modes
- Accommodate growth in the LGA by improving connectivity and efficiency of the public transport network



### 4.3 General vehicles

Although driving may seem like a convenient option, it is challenging in North Sydney. As a major business district, North Sydney CBD is accessed by multiple vehicles including cars, freight, taxis and ride share, which contribute to significant traffic congestion, especially during peak commuter hours. Parking is also difficult with expensive parking fees and on-street parking spaces having strict time restrictions.

Research has explored the difficulties of accommodating more parking or cars on the road with a number of findings relative to the North Sydney LGA as follows:

- Increasing road capacity alone is insufficient to address congestion issues as traffic will increase to meet any addition road space especially during peak hours (*The Lewis-Mogridge Position*)
- Providing additional parking is expensive. Construction costs of off-street parking spaces range from \$15,000 to \$45,000 per car space (*North Sydney Parking & Traffic Background Report, SCT Consulting 2022*) in some cases, adding \$300k to the sale price of apartments
- Prioritising the needs of private vehicles reduces road space for other alternative transport modes or productive uses (e.g. public domain, outdoor dining areas)

With high trip demands across North Sydney, vehicle use must be supported by an accessible and convenient public and active transport network.

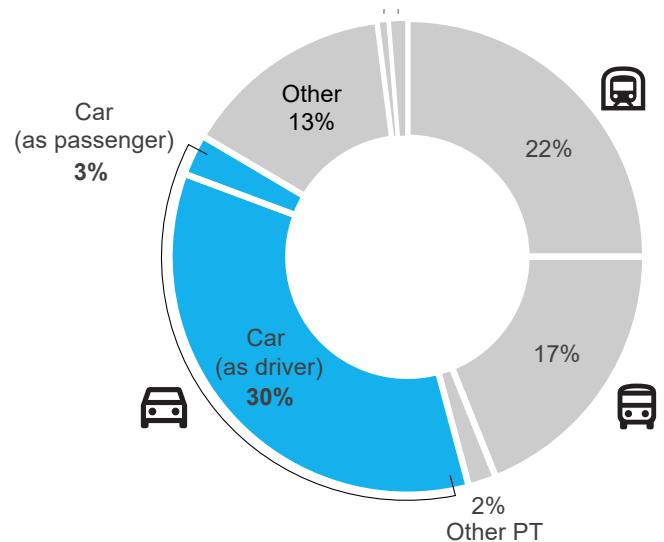
#### 4.3.1 Evidence on private vehicles

##### Why does the community drive?

Evidence suggests that North Sydney's optimised land use distribution, coupled with good public transportation, enables its community to access key services without a car.

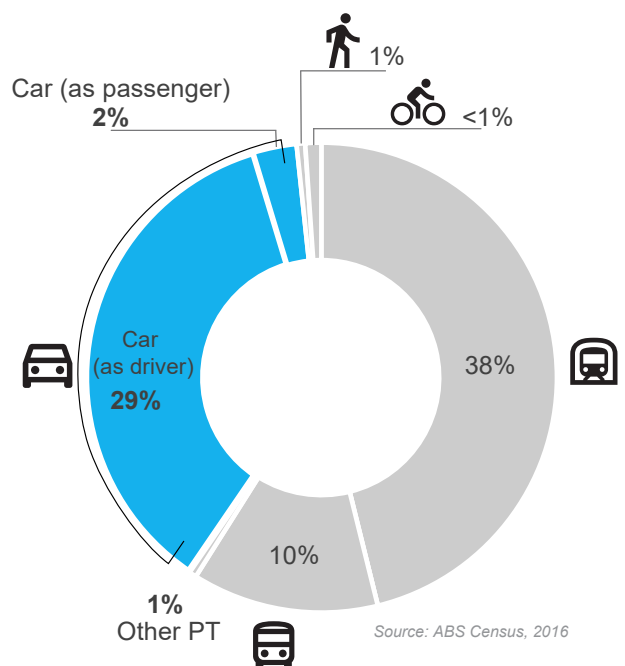
2016 Journey to Work data for residents (**Figure 4-23**) and employees (**Figure 4-24**) in North Sydney showed that only around 30% of people drove to work with a majority of people choosing to take public transport instead. Comparing to Greater Sydney, more than 50% drove to work.

Figure 4-23 2016 Method of travel to work data - car mode share for Usual Residents



Source: ABS Census, 2016

Figure 4-24 2016 Method of travel to work data - car mode share for Place of Work



Source: ABS Census, 2016

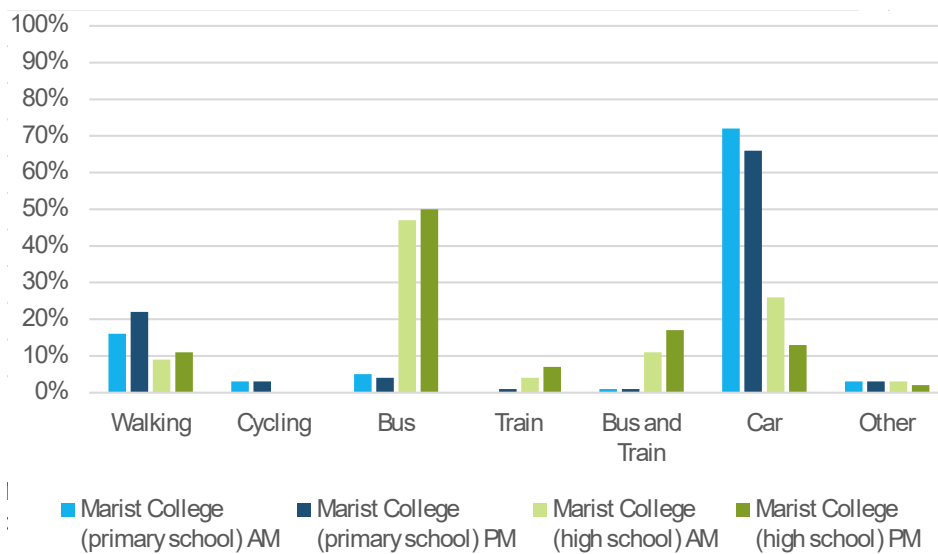
There is also a higher proportion of households that do not own a car in North Sydney (18%) compared to Greater Sydney (11%). Average car ownership rates have remained relatively steady at 0.5 cars per resident from 2001 to 2021. Particularly within development precincts like Crows Nest and St Leonards, car ownership rates are lower (average of 0.44 cars per resident in 2016).

This is likely due to the high-density residential development and better public transport access in the area. With additional amenity arising from the new Metro stations, the need for cars are likely to be further reduced.

Comparison of Marist high school and primary school car mode share highlights that younger students or more likely to be sent to school via car (>60% for primary students compared to <30% for high school students for Marist College as shown in **Figure 4-25**). However, as independent schools typically do not restrict enrolments to a confined catchment boundary, students may live further from school. For North Sydney Demonstration School, students live within the school catchment and have relatively low car mode share (<30% as shown in **Figure 4-26**).

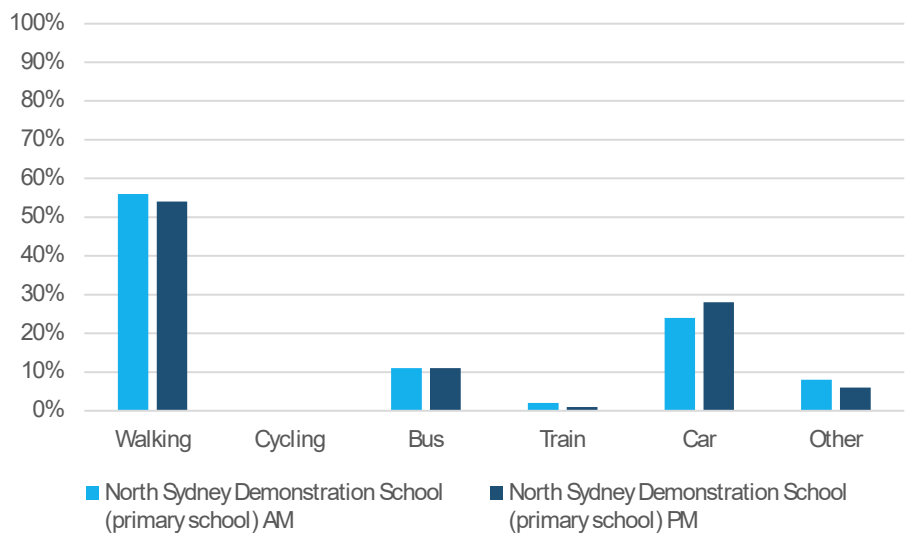
In addition, assessment of car mode share for Marist College indicates that students are more likely to travel by car in the morning than the afternoon (**Figure 4-25**). The resultant effect is an increase in walking trips for primary school students and public transport trips for high school students in the afternoon. This suggests that parents drop their kids off to school on the way to work as part of a linked-trip.

**Figure 4-25** Marist College mode share



Source: Green Travel Plans for Marist College

**Figure 4-26** North Sydney Demonstration School mode share



Source: Green Travel Plans for Marist College

### Why does the community drive?

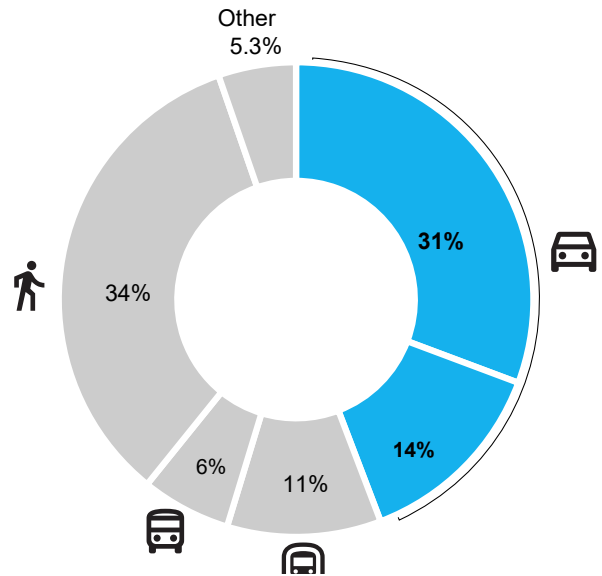
Residents of North Sydney value convenience and will travel by car whenever it is made more accessible to them.

Comparison of pre (2019/20) and post (2022/23) COVID-19 Household Travel Survey data highlighted that private vehicle mode share use has increased by 5% despite a decrease in overall number of trips by 9% (**Figure 4-27** and **Figure 4-28**). Investigation of trip purposes further highlight that other than work related business and social/recreational trips, travel for every other trip purpose has decreased. This indicates that more people are choosing to use cars across all trip types.

Although car ownership rates per resident remain relatively steady over the years, North Sydney's population has been steadily growing. In 2021, there were about 68,000 residents (10% growth from 2011) with further growth expected by 2036 to more than 79,000 residents (ABS Census, 2021). The constant car ownership rate with a growing population means that the total number of cars owned in North Sydney have increased (**Figure 4-29**) which will have an implication on the number of cars on the road. Existing research highlights a strong correlation between car ownership and car use which means that households with higher car ownership are more likely to drive as a primary mode choice<sup>7</sup>.

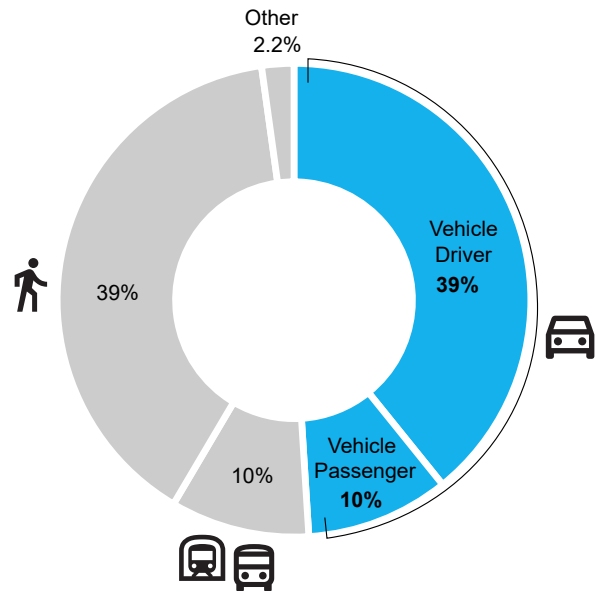
Comparing the location of households without a car (**Figure 4-30**) and households with three or more cars (**Figure 4-31**), it is apparent that the availability of public transport influences or is influenced by car ownership. Households with no cars are more commonly found close to train stations or along the high frequency B-line route on Military Road. Households with three or more vehicles are more commonly found in the northeast corner of the North Sydney LGA boundary, where there is poorer public transport access.

Figure 4-27 2019/2020 vehicle mode share



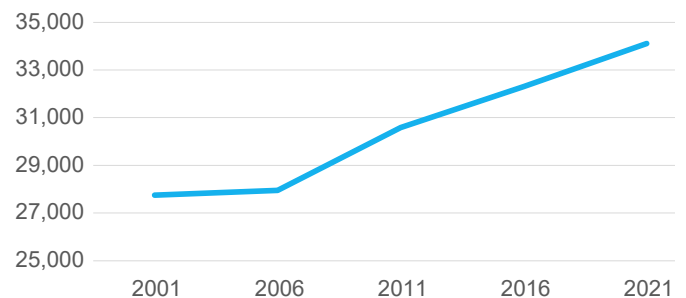
Source: Household Travel Survey, 2019/20

Figure 4-28 2022/2023 vehicle mode share



Source: Household Travel Survey, 2022/23

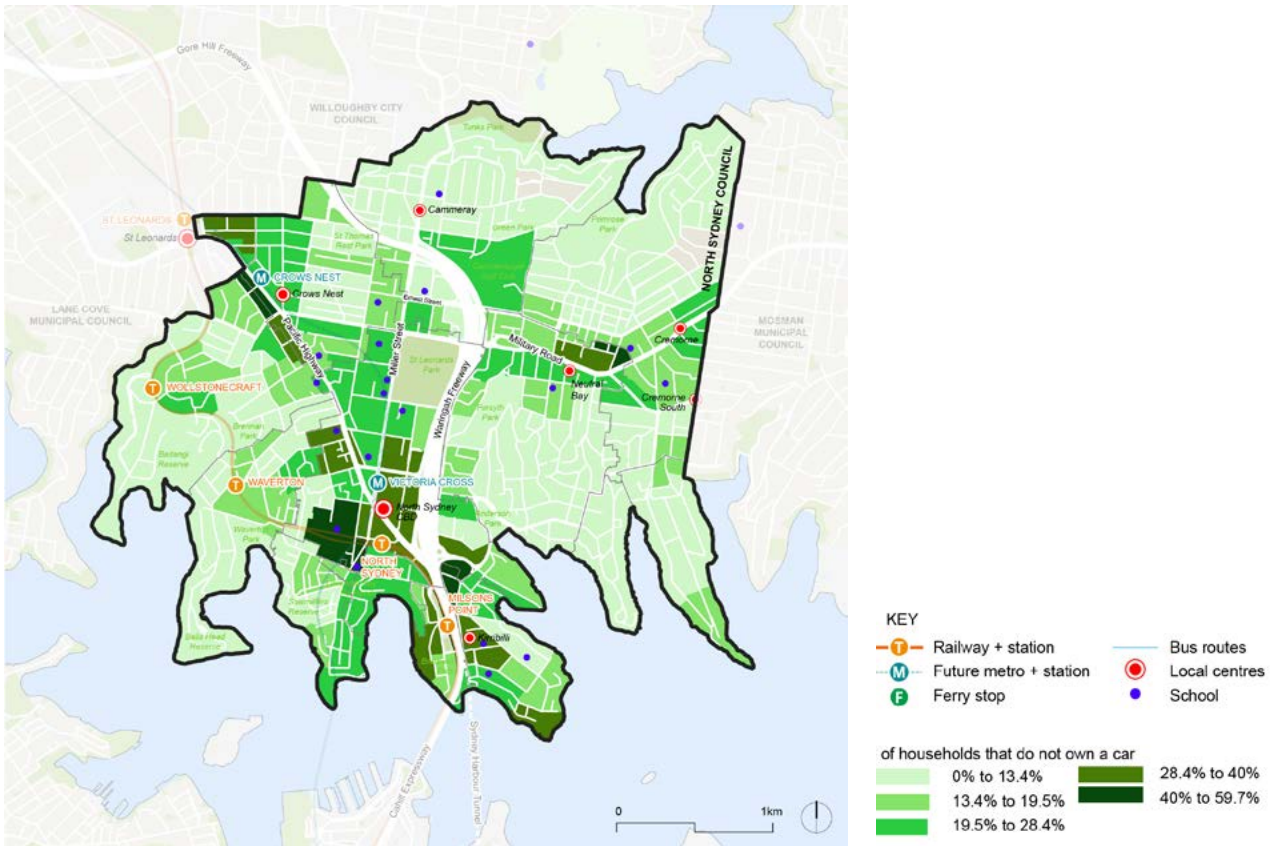
Figure 4-29 Number of cars owned by North Sydney households from 2001 to 2021



Source: ABS Census data

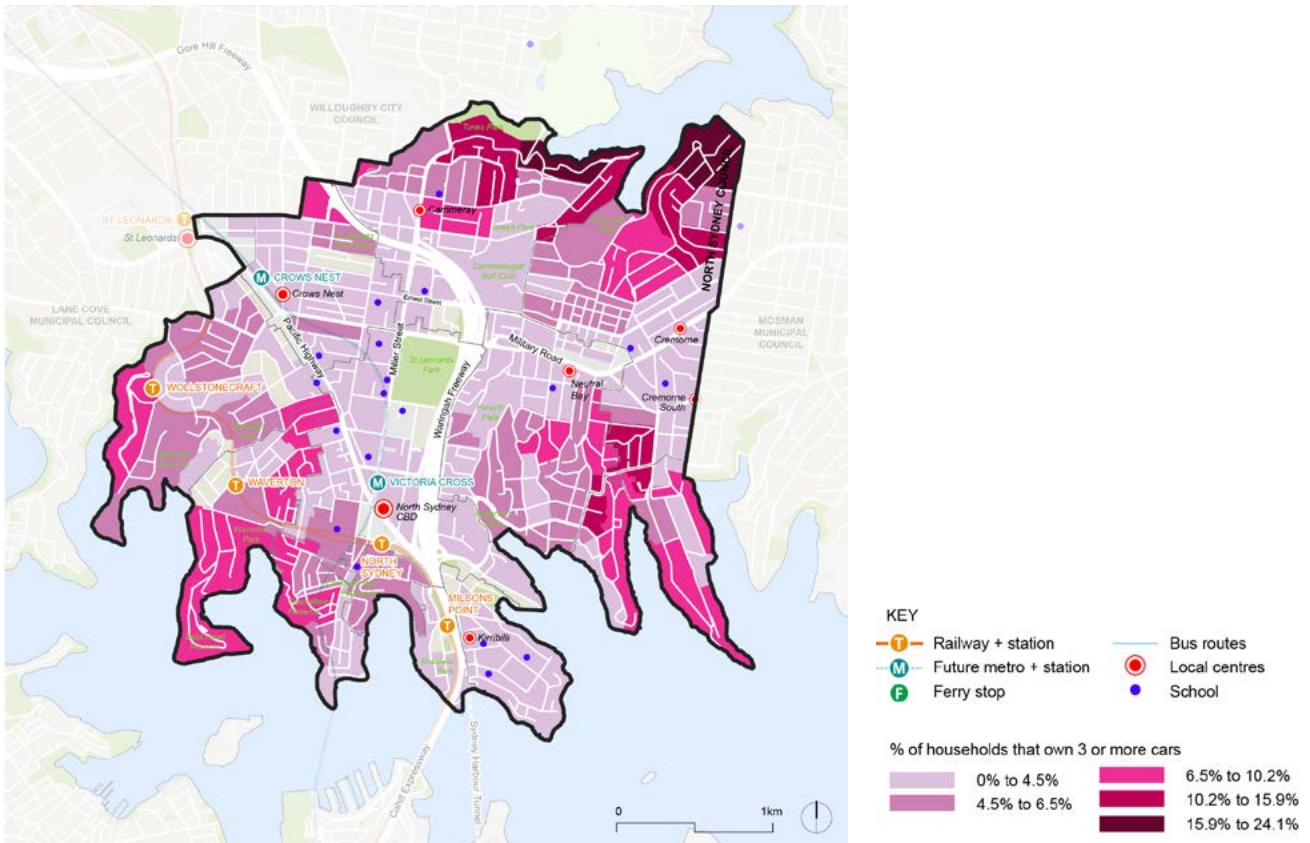
<sup>7</sup> McKibbin M (2011), The influence of the built environment on mode choice - evidence from the journey to work in Sydney. Australasian Transport Research Forum 2011 Proceedings, 28 - 30 September 2011, Adelaide, Australia

Figure 4-30 Proportion of households with no cars (2021)



Source: ABS Census data, [www.atlas.id.com.au/north-sydney/maps](http://www.atlas.id.com.au/north-sydney/maps)

Figure 4-31 Proportion of households with 3 or more cars (2021)



Source: ABS Census data, [www.atlas.id.com.au/north-sydney/maps](http://www.atlas.id.com.au/north-sydney/maps)

In addition to car ownership, North Sydney is a fairly affluent LGA with a median household income 22% above Greater Sydney's median. Hence, they are less likely to be deterred by costs (incurred by parking and tolls) when traveling.

With more cars on the road, a key concern of all road users is safety. 2018 to 2022 crash data indicates that crashes are spread across the LGA, with a concentration of crashes around Neutral Bay and North Sydney. Crashes tend to be concentrated along higher order and higher speed roads.

### Parking in North Sydney

The *North Sydney Parking & Traffic Background Report* (SCT Consulting, 2022) explains that the availability of parking does not align with where the community wants to park.

The previous *North Sydney Parking & Traffic Background Report* (2022) undertaken for North Sydney highlights the following issues with parking:

- Affordable resident parking permits (\$70 a year/\$0.20 a day) in comparison to casual on and off-street parking (\$8 and \$6 respectively) enables car ownership and encourages residents to apply for a residential parking permit for on-street parking
- Too many on-street residential parking permits are issued in high parking occupancy areas like Crows Nest/St Leonards, Kirribilli and McMahons Point. In addition to competition from other surrounding trip attractors, residents find it difficult to find a parking space

- Existing parking restrictions are not calibrated by place attributes (and its likely use), resulting in on-street parking not being optimised
- Council car park assets are underutilised especially at night (**Figure 4-32**). During peak occupancy hours, about 20% of car parks are not utilised (breakdown per car park in **Table 4-1**)

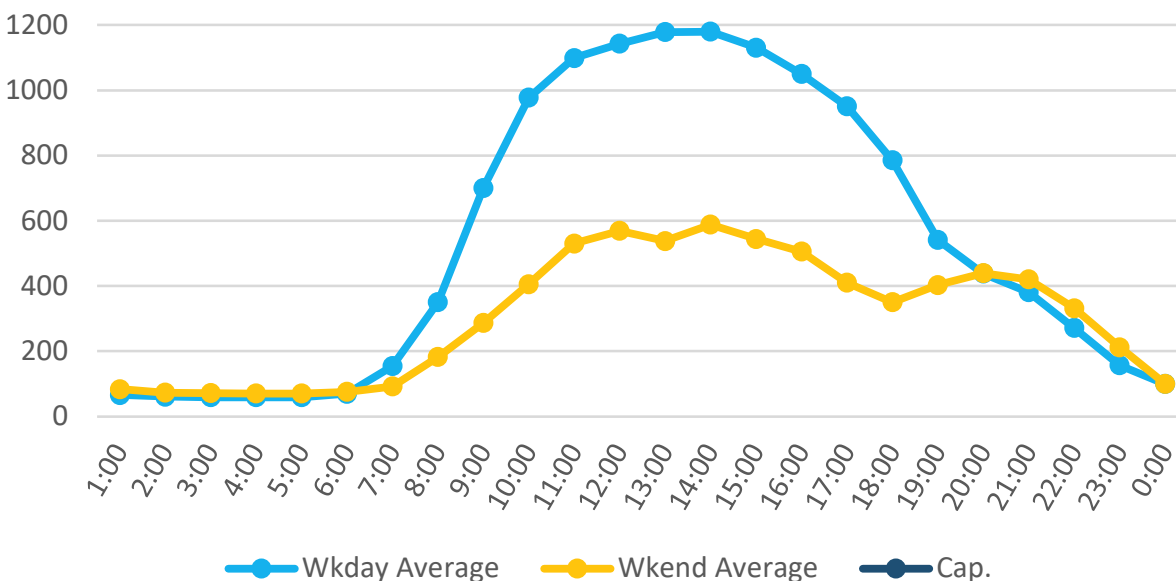
Table 4-1 Council car park occupancy

Carpark	Peak Occupancy	Max Capacity	Peak Occupancy Rate
Alexander Street	250	275	91%
Holtermann Street	167	207	81%
Hume Street	249	351	71%
Nicholson Street	53	116	46%
Ridge Street	176	195	90%
Ward Street	487	542	90%
<b>Total</b>	<b>1382</b>	<b>1686</b>	<b>82%</b>

"I do not own a car, there are so many excellent alternatives. If a car is needed I use car share. When I explain how this can work people are often very pleasantly surprised"

- North Sydney resident, 60-69 years old, Female

Figure 4-32 Council car park occupancy over 24 hours



Source: North Sydney Parking & Traffic Background Report (SCT Consulting, 2022)

### 4.3.1.1 What the community said about private vehicles

#### How, where and why they drive

As summarised in **Figure 4-33**, the community are more likely to drive when going to the shops (35%) and for longer trips outside of the LGA (46%). Similar to evidence discussed above, the community values convenience, especially for longer trips or shopping trips where bulky goods needs to be transported.

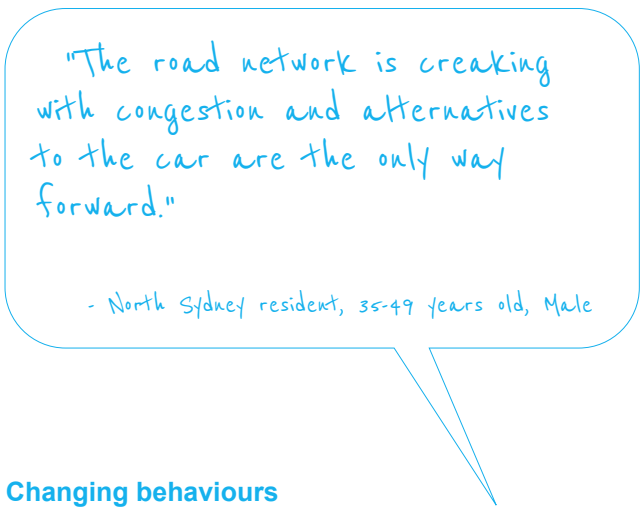
Most North Sydney residents work outside the LGA and most North Sydney employees travel from outside the LGA. However, very few people (13%) drove for commuting purposes. This could be due to the high cost of parking at work and the accessibility of work by public transport.

The community survey noted that very few children are driven to school. In comparison, schools travel surveys referenced earlier provided different results likely due to the proximity of students homes to the school they attend.

As a high proportion of those who completed the survey lived within the LGA, their children are likely able to walk to school. Parents who drive their children to school are likely to do so as part of a linked-trip where they drop their children off on the way to work.

When the community was asked why car ownership was high, key findings included:

- Private cars make it easy to get around (highest ranked comment)
- Car share is not readily available or affordable
- Alternative transport modes are not convenient or safe with vehicles prioritised on the road



#### Changing behaviours

When asked how behaviour can be changed to support a more sustainable future, the community ranked 'increase parking' as the lowest priority to encourage sustainability out of all the options. The community also agreed that sustainable transport needs to be made more convenient while cars need to be less convenient.

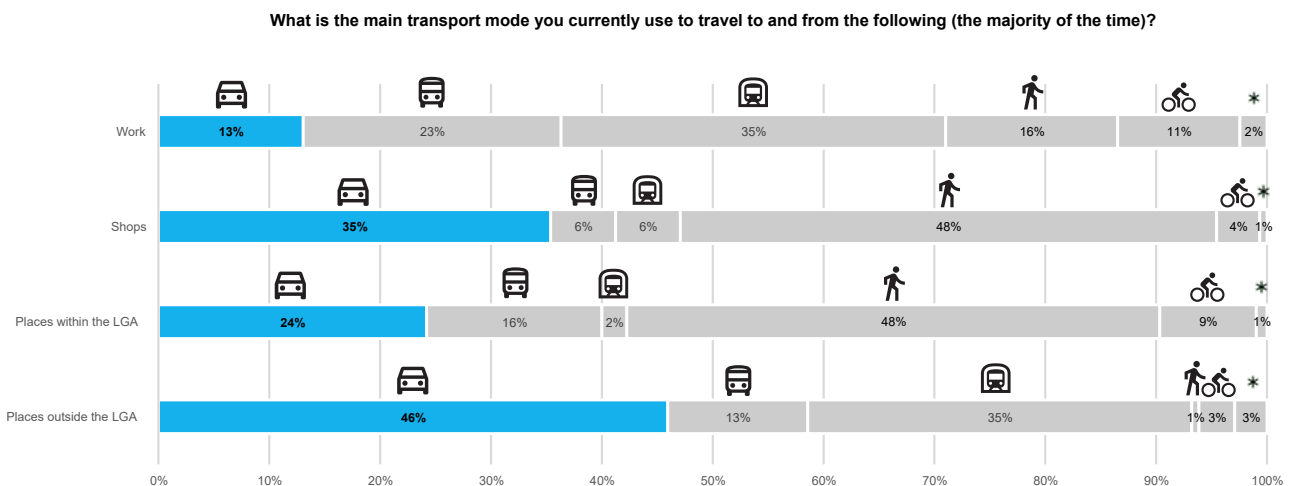
In addition to wanting a transport system that is supported by good active and public transport access, the community has expressed that in 10 years, they would like transport in North Sydney to have:

- A reduced need to use cars
- More car share options
- More dedicated parking areas for residents of North Sydney

#### Safety

Safety concerns from the community mostly revolve around driver behaviour and high road speed limits increasing points of conflict between vehicles and pedestrian and cyclists.

Figure 4-33 North Sydney community car mode share



Source: Online survey responses from community consultation, 2024

#### 4.3.1.2 Key takeaways for private vehicles

Existing evidence has highlighted that it is not practical for all trips to be undertaken by active or public transport alone. Cars serve to bridge the gap for longer trips outside of the LGA and when convenient access, like shopping trips, is preferred.

However, there is still opportunity to reduce car dependency especially since North Sydney is supported by such an extensive public transport network. Moreover, road capacities cannot keep increasing infinitely. North Sydney's population is still expected to grow, and with the Western Harbour Tunnel's scheduled 2028 completion, North Sydney's traffic, associated congestion and safety concerns will only worsen if nothing is done.

The following interventions can be considered to alleviate car use and to make North Sydney roads safer for other road users:

- Advocate to state government to improve alternatives for sustainable travel options by:
  - Investigating and improve public and active transport integration
  - Making car share more accessible for a broader group of the population
- Investigate road speed limit reductions on local roads prioritising areas with significant crash history
- Review existing on-road parking management policy and the resident parking permit scheme to ensure that parking provision is proportionate to demand
- Explore how impacts of Western Harbour Tunnel on local roads can be mitigated
- Council car parks are currently underutilised, with excess capacity available at peak times. This space should be utilised for other purposes that encourage mode shifts toward sustainable transport

#### 4.3.1.3 Strategic goals for private vehicles

Accordingly, the following strategic goals have been identified for private vehicles:

- Target 85% on-street parking occupancy by 2034 at oversubscribed areas like Crows Nest/St Leonards, Kirribilli and McMahons Point
- No fatal crashes and a reduction of serious crashes by 35% (baseline of 38 crashes in 2018) by 2034
- Manage flow-on impacts from the Western Harbour Tunnel
- Reduce car ownership by 2034:
  - 45% owning one car (from 56% in 2021)
  - 15% owning 2 cars (from 20% in 2021)
  - <1% owning three or more cars (from 4% in 2021)
- The road network should enhance North Sydney's public spaces and contribute to its identity as a vibrant place to live, work, and play

"Our roads, streets and centres have all been designed to make driving the fastest and most convenient option. Unless we get serious about reducing traffic speeds, reducing parking, and prioritising people walking and cycling we'll just get more cars and more traffic."

- North Sydney employee, 35-49 years old, Male



## 4.3.2 Evidence on freight, taxi, ride share and car share vehicles

### Access for freight, taxi, ride share and car share

There is limited road space to accommodate all the competing road demands.

*NSW Freight and Ports Plan (2018)* highlights that avoidable congestion has cost freight movement in Sydney an extra \$6.1 billion in 2015 and is projected to increase up to \$12.6 billion by 2030. Especially in busy centres like North Sydney CBD, this impact is felt more strongly. The *North Sydney CBD Transport Masterplan (2018)* notes that about 500m of kerbside space is distributed across the CBD as loading zones. Apart from the on-street posted loading zone restrictions, there are no other restrictions on delivery times within the CBD. As a result, both low and high priority freight compete for limited loading zone space.

*North Sydney Taxi and Ride Sourcing Strategy and Action Plan (2020)* also found that there are a lack of safe pick up and drop off facilities (loading zones, taxi zones), especially in high demand areas like the CBD and Crows Nest. Taxi and ride share vehicles often stop illegally to let passengers on and off or use parking spaces as illegal taxi ranks.

### How can taxi, ride share and car share vehicles support sustainable travel?

Taxi, ride share and car share vehicles offer a viable alternative to driving for ad-hoc trips in networks with good active and public transport networks.

Existing research has identified a strong correlation between ride share and reduced vehicle ownership levels in London and Germany<sup>8</sup>. In areas that are well-supported by good sustainable transport modes like active and public transport, regular day-to-day trips can be sufficiently supported.

Ride share and car share is not meant to replace a main travel mode but instead, serves to fill a mobility gap for more ad-hoc trips. When traveling with heavy items for example, one can conveniently hire a share vehicle. This contributes to a reduction in the overall car mode share as reduced car ownership levels correspond with lower incidental car use.

### 4.3.2.1 What the community said about freight, taxi, ride share and car share vehicles

The community did not provide feedback on freight and taxi use. However, the community has expressed a desire to make car share more accessible and affordable. Suggestions to improve car share include:

- Expanding car share areas
- More car share spaces
- Providing car share incentives
- Providing dedicated car share parking

This acknowledges existing evidence that not all trips can be completed on active or public transport and that car share can fill the gap for ad-hoc trips.

"I find having my own car to be expensive but convenient. I would use ride share more often if they were a bit cheaper and closer to me."

-North Sydney resident, 50-59 years old, Female

"More car sharing, especially hybrids and EVs. I know of only one hybrid GoGet and it's hard to book as other people also want it.."

-North Sydney resident, 60-69 years old, Female

8 Bilgin, P., Maltoli, G., Morgan, M., Wadud, Z. (2023), The effects of ridesourcing services on vehicle ownership: The case of Great Britain. *Transportation Research Part D: Transport and Environment*, 117.

#### 4.3.2.2 Key takeaways for freight, taxi, ride share and car share vehicles

Based on existing evidence and feedback from the community, the following interventions can be considered:

- Advocate for car share by:
  - Working with car share companies to expand car share provision in North Sydney
  - Incentivise car share use (for example, priority parking, subsidised parking)
  - Explore opportunities to provide dedicated car share parking spaces
  - Provide community more communication regarding the benefits of car share (for example dollar-savings, environmental benefits, etc)
- Explore opportunities to reallocate kerbspace for freight and taxi use within local centres

#### 4.3.2.3 Strategic goals for freight, taxi, ride share and car share vehicles

The following strategic goals have been identified:

- As requested by the community, advocate for car share and increase car share parking spaces in areas of demand
- The road network should enhance North Sydney's public spaces and contribute to its identity as a vibrant place to live, work, and play
- Implement a mode and parking hierarchy for residential streets and commercial centres



## 5 Measuring success



## 5 Measuring success

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### 5.1 Summary of strategic goals and actions for achievement

The following section summarises each of the strategic goals outlined in Section 4 and groups them according to which of the guiding outcomes (introduced in Section 3) they seek to inform.

It also provides a list of actions / projects for Council to consider in the formation of the Integrated Transport Strategy and achievement of the goals and outcomes within this Study.



## Strategic goal

# 1

### Healthy and balanced

**A transport network where healthy and sustainable travel options are the preferred mode choice.**

Walking and cycling are key indicators for a healthy and sustainable transport network. The following targets focus on how people travel to work and to school. Encouraging young people to walk and cycle to school is important as it sets up healthy behaviour early in life. North Sydney is home to many schools who service students living all over Sydney. It is important to provide a safe active transport network that supports students and staff to choose healthy movement options to and from school and limit the number of cars on the surrounding streets who also require space to park/pull up to pick up/drop off.



### Measurable targets...

TARGETS		Baseline	Interim (5 year)	Target (10 year)
Increase walking mode share <i>*Household Travel Survey 2022/23</i>	<i>for all trip purposes</i>	39%*	43%	50%
Walk to work <i>^ABS 2016</i>		10.9%^	15%	20%
Walk to school		TBD based on school travel surveys to be undertaken by Council	Baseline + 5% shift	Baseline + 10% shift
Increase cycling mode share <i>*Household Travel Survey 2022/23</i>	<i>for all trip purposes</i>	<2%*	3%	5%
Cycle to work <i>^ABS 2016</i>		1.1%^	3%	5%
Cycle to school		TBD based on school travel surveys to be undertaken by Council	Baseline + 5% shift	Baseline + 10% shift
Increase public transport mode share <i>*Household Travel Survey 2022/23</i>	<i>for all trip purposes</i>	9.5%*	15%	20%
Public transport to work <i>^ABS 2016 (Train, bus and ferry)</i>		39.8%	42%	45%
Public transport to school		TBD based on school travel surveys to be undertaken by Council	Baseline + 5% shift	Baseline + 10% shift



### A note on data sets and the impact of COVID on travel patterns...

The above journey to work targets are based on 2016 ABS Census data which presents a more accurate representation of travel patterns than the 2021 data which was impacted by lockdowns. Whilst the 2022/2023 Household Travel Survey for North Sydney LGA indicates that public transport use is still yet to return to pre-COVID levels which were 14-17% between 2016-2019. Targets have been set with the vision to encourage the community to increase choice of sustainable transport modes, including walking, cycling and public transport. The recent opening of the metro line may serve as a trigger for this, supported by improvements in active transport infrastructure.



Actions to achieve the targets...

ACTIONS		Short (1-2 years)	Medium (3-6 years)	Long (7-10 years)
<b>1.1</b>	<b>Support schools to encourage use of active and public transport</b>			
1.1.1	Develop a travel behaviour shift incentive program that encourages schools to implement projects and programs that promote active transport.			
1.1.2	Support school travel behaviour change by implementing the travel behaviour change incentive program and conduct yearly reviews.		ONGOING	
	<b>Perceptions and behaviour</b>			
<b>1.2</b>	<b>Provide infrastructure and programs that support walking</b>			
1.2.1	Develop a North Sydney Walking Plan. This shall include: <ul style="list-style-type: none"> <li>- Reviewing existing walking infrastructure across the LGA</li> <li>- Identifying barriers to walking and determine actions to overcome including: improvements to infrastructure safety, completing missing links in key connections and educating the community on the benefits of walking</li> <li>- Developing a prioritised list of upgrades/new pathways for implementation</li> </ul>			
1.2.2	Complete concept designs and undertake consultation on 10% of walking infrastructure identified in the North Sydney Walking Action Plan each year, ready for grant applications.			
1.2.3	Review and implement the Local Area Traffic Management (LATM) projects for Zones 1 to 7, focusing on highly walkable areas (refer to <b>Figure 4-7</b> ) to widen footpaths, enhance the place experience, and install 40 raised pedestrian crossings, including: <ul style="list-style-type: none"> <li>- Rosiland Street at Miller Street</li> <li>- Young Street at Grosvenor Street</li> <li>- Fitzroy Street at Jeffreys Street</li> <li>- Russell Street at Smoothy Park</li> </ul>			
1.2.4	Investigate opportunities around transport interchanges to temporarily or permanently close roads to vehicles to improve the walkability.			

ACTIONS		Short (1-2 years)	Medium (3-6 years)	Long (7-10 years)
1.2.5	Advocate for NSW Government partnerships to increase open space and active transport links by reallocating road space, including on Miller Street and Willoughby Road.			
1.2.6	Continue negotiation with NSW Government agencies and relevant land owners to deliver the Miller Place public domain improvement project.			
1.2.7	Deliver tactile street markings at signalised pedestrian crossings and decision points in town centres to improve accessibility, safety and confidence of people using the walking network.			
1.2.8	Deliver a new continuous accessible path of travel between key features of the Coal Loader site, in coordination with an accessible Aboriginal Heritage Trail.			
1.2.9	Deliver North Sydney CBD laneways upgrades including Denison and Spring Streets, Little Walker Street, Hill Street, Gas Lane and links to St Leonards Park.			
1.2.10	Review and upgrade the North Sydney LGA foreshore walk (identified as a priority project in the North District Green Grid strategy), with a view to improving accessibility.			
1.2.11	Develop and deliver a behaviour change program to educate the community on the infrastructure available, safe walking routes and the overall benefits of walking.	DEVELOP + DELIVER	DELIVER	DELIVER
	<b>Perceptions and behaviour</b>			

### 1.3 Provide infrastructure and programs that support cycling

1.3.1	Finalise the North Sydney Cycling Plan			
1.3.2	Complete concept designs and undertake consultation on 10% of cycling infrastructure identified in the North Sydney Cycling Plan each year, ready for grant applications.			
1.3.3	Deliver upgrades and new separated cycleways to create a connected cycling network between key destinations in LGA and linking with cycling paths outside of the LGA (refer <b>Figure 4-14</b> ). <ul style="list-style-type: none"> <li>- Deliver 2.2kms of cycleway between St Leonards Train Station and Victoria Cross Metro, including West Street</li> <li>- Deliver 1.2 kms cycleway between Mosman and St Leonards Park</li> <li>- Upgrade the share path through St Leonards Park to a separated pedestrian and cyclist path to reduce conflicts between people that walk and ride a bike</li> <li>- Deliver a safe cycling connection between St Leonards Park and the Sydney Harbour Bridge</li> </ul>			

ACTIONS		Short (1-2 years)	Medium (3-6 years)	Long (7-10 years)
1.3.4	Deliver an E-Bike rebate program for the community and local businesses to subsidise the cost of purchasing an E-Bike.		ONGOING	
1.3.5	Review North Sydney Council's Development Control Plan and standard conditions of consent to establish whether the requirements are effective in encouraging and promoting walking and cycling. Review the provisions related to end of trip facilities and number of bicycle spaces by engaging with end users.			
1.3.6	Investigate approaches to bike share that reduce clutter on the streets and promote higher usage rates.			
1.3.7	Ensure that Council's internal policies set the standard for sustainable transport, including staff E-bike rebates, promoting use of the E-Bike fleet and a 'new starter' onboarding procedure that encourages sustainable travel to work.		ONGOING	
1.3.8	Develop and deliver a behaviour change program to educate the community on the infrastructure available, safe cycling techniques and the overall benefits of cycling.	DEVELOP + DELIVER	DELIVER	DELIVER
	<b>Perceptions and behaviour</b>			
<b>1.4</b>	<b>Increase tree canopy cover</b>			
1.4.1	Develop a program of tree planting (aligned with the Walking and Cycling Plans) that seeks to achieve North Sydney Urban Forest Strategy 35% urban tree canopy cover target.			
1.4.2	Reallocate road space along key walking and cycling routes for additional trees and landscaping that provide shade, reduce the urban heat island effect and create an aesthetically pleasing place that encourages active transport.		ONGOING	
1.4.3	Apply for funding for tree planting via the Greener Neighbourhoods grant program.		ONGOING	



Strategic goal

2

Reliable and strategic

**A reliable and cohesive transport network that supports North Sydney’s residents and the local economy.**

Our roads cannot continue to accommodate a network where private vehicle use continues to increase. We must facilitate a mode shift (for those who are able) whilst ensuring that those who need to drive remain able to access the services they need.

Continual improvements in the public transport network provide options for the community that make it easy to move around without owning a car.



Measurable targets...

TARGETS	Baseline	Interim (5 year)	Target (10 year)
<b>Parking occupancy rates</b>			
Maintain parking occupancy rates in commercial centres of North Sydney CBD and Crows Nest <i>*North Sydney Parking &amp; Traffic Background Report</i>	85%*	85%*	85%*
<b>Reduce car ownership</b>			
0 car households <i>^ABS 2021</i>	19%^	22%	25%
1 car households <i>^ABS 2021</i>	56%^	50%	45%
2 car households <i>^ABS 2021</i>	20%^	18%	15%
3 car households <i>^ABS 2021</i>	4%^	2%	<1%
<b>Car Share</b>			
Dedicated car share bays	150	+20%	+40%
Car share membership	9,260	+20%	+40%



Actions to achieve the targets...

ACTIONS		Short (1-2 years)	Medium (3-6 years)	Long (7-10 years)
<b>2.1</b>	<b>Work with Transport for NSW to improve bus services</b>			
2.1.1	Review bus network service coverage and frequency on the eastern side of the freeway to improve local connectivity and links to rail and metro services, advocating to TfNSW for bus service improvements for any gaps.			
2.1.2	Investigate the provision of an on-demand or local hop-on hop-off loop service from less accessible residential areas to key destinations in North Sydney.			
<b>2.2</b>	<b>Update existing parking policies and parking permit schemes</b>			
2.2.1	Review the existing on-road parking management policy, Disability Parking Policy and the residential parking permit scheme as well as pricing of permits by 2028 (prior to Western Harbour Tunnel opening) to ensure that parking provision is proportionate to demand, and resident permit allocations are not issued beyond available capacity.			
2.2.2	Develop a 'parking space hierarchy' for commercial and residential streets to ensure that space is available for those that need it, such as disability parking, loading zones and outdoor dining.			
2.2.3	Maintain existing parking patrols and enforcement activities to ensure compliance with parking and road rules.		ONGOING	
<b>2.3</b>	<b>Mitigate Impacts from the Western Harbour Tunnel</b>			
2.3.1	Review and update modelling for the impacts of the Western Harbour Tunnel on movement and place within North Sydney LGA, with consideration given to the discontinuation of the Northern Beaches Link.			
2.3.2	Develop an action plan to mitigate the change in traffic patterns and demand on local streets.			
2.3.3	Implement key actions in a staged approach, reviewing the need for further action once the tunnel becomes operational in 2028.			
2.3.4	Advocate to Transport for NSW for changes to major road corridors so that all transport modes are considered along routes such as Military Road, Pacific Highway, Falcon Street and Ernest Street.		ONGOING	

ACTIONS		Short (1-2 years)	Medium (3-6 years)	Long (7-10 years)
<b>2.4</b>	<b>Improve local delivery and freight management</b>			
2.4.1	Develop a set of principles to guide local delivery and freight management.			
2.4.2	Consult with local businesses and delivery companies (including bicycle couriers) to understand pinch points, safety concerns and areas for improvement across the network.			
2.4.3	Develop and implement a plan to improve local delivery and freight management in the LGA			
<b>2.5</b>	<b>Monitoring and evaluation</b>			
2.5.1	Conduct a community transport survey to establish baseline travel behaviour, and a 5 and 10 year follow up to measure progress.		ONGOING	
2.5.2	Review available crime statistics and offence locations within outdoor/public spaces, recreational areas and car parks.		ONGOING	
2.5.3	Monitor changes in the provision of car share offer, uptake and car ownership patterns across the LGA		ONGOING	
2.5.4	Conduct an annual school travel behaviour survey to monitor student and staff travel patterns, mode choice and challenges to be overcome, producing a public report and action plan.		ONGOING	
<b>2.6</b>	<b>Promote car share</b>			
2.6.1	Promote the financial, environmental and on-street parking efficiency benefits of car share and encourage the community to choose car share over private vehicle ownership.		ONGOING	
1.5.2	Work with car share companies to increase the number of car share opportunities across the LGA.		ONGOING	
1.5.3	Develop a yearly proposal system for car share providers to plan and commit to car share expansion for residents and businesses.			
<b>2.7</b>	<b>Consider adaptive use of parking assets</b>			
2.7.1	Investigate adaptive use of Council owned car parks that encourages a shift towards more sustainable modes of transport and/or broader community uses. This may include (but not be limited to) potential reuse for micromobility freight services, end of trip facilities and car share.			
2.7.2	Investigate adaptive use of parking meters that encourages car share, such as reduced cost or free period for car share users.			

## Strategic goal

# 3

### Safe by Design

**A safe and inclusive transport network that caters to all ages, abilities and backgrounds.**

A safe transport system is crucial for minimising risk, ensuring equitable access and improving perceptions of safety. We must prioritise the needs of vulnerable groups and consider physical accessibility, safety, affordability, gender equity, and community engagement.



### Measurable targets...

TARGETS	Baseline	Interim (5 year)	Target (10 year)
Reduce the fatal and serious road accidents on all local streets <i>*TfNSW, 2018-2022</i>	32 crashes*	25 crashes	20 crashes
Fatal crashes <i>*TfNSW, 2018-2022</i>	1 fatality / yr*	0 fatalities / yr	0 fatalities / yr
Serious crashes <i>*TfNSW, 2018-2022</i>	31 serious injuries / yr*	25 serious injuries / yr	20 serious injuries / yr



### Actions to achieve the targets...

ACTIONS	Short (1-2 years)	Medium (3-6 years)	Long (7-10 years)
<b>3.1 Improve safety in the public domain</b>			
3.1.1 Consider the Safer Cities Survey Report (TfNSW, 2023) in the design of movement corridors and public spaces to ensure the community (particularly women) feel safe and are encouraged to use active and public transport.			
3.1.2 Review crime hotspots and consider improvements to place that conform with the principles of Crime Prevention Through Environmental Design (CPTED) such as improved lighting and removal of 'blind spots'.			
3.1.3 Work with TfNSW to develop a public education campaign that focuses on safety and reducing street harassment to complement infrastructure improvements.			
<b>Perceptions and behaviour</b>			

ACTIONS		Short (1-2 years)	Medium (3-6 years)	Long (7-10 years)
<b>3.2</b>	<b>Improve road safety</b>			
3.2.1	Identify opportunities, plan and implement community road safety initiatives in accordance with the NSW State Government's Road Safety Action Plan and Toward Zero initiative.			
3.2.2	Advocate for lower speed limits and improved pedestrian and cyclist priority on state roads through the LGA.		ONGOING	
3.2.3	Consult with residents, plan and implement suburb wide infrastructure, such as affordable pop-up kerb extensions and cycleways, to accelerate road safety improvements and transition local streets to lower speed limits (10km/h, 30km/h and 40km/h). Target for one suburb per year prioritised by crash history and school student population			
3.2.4	Deliver road safety campaigns, workshops and seminars to increase knowledge and encourage safer behaviour for all road users in accordance with North Sydney Council's Road Safety Action Plan.  Perceptions and behaviour		ONGOING	
3.2.5	Deliver free cycling courses for residents (adults and children over 12 years old), covering bicycle care, riding skills, riding safety and guided bicycle tours of the LGA.  Perceptions and behaviour		ONGOING	
3.2.6	Develop resources to promote safety around schools, such as Transport Access Guides and clear Kiss 'n drop signage.  Perceptions and behaviour		ONGOING	
<b>3.3</b>	<b>Improve wayfinding</b>			
3.3.1	Implement a suite of signage across the LGA that improves awareness of safe, convenient and accessible walking and cycling routes between key destinations.			
3.3.2	Explore the development of an online application that provides advice on sustainable travel options based on the users' current location. This may include display of safe cycle routes, most efficient/flattest/most scenic walking routes, car share locations and the like.  Perceptions and behaviour			
3.3.3	Upgrade wayfinding and signage across the Coal Loader site to improve accessibility.			

# APPENDIX A

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Integrated Transport Strategy Discussion Paper

# APPENDIX B

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Community consultation outcomes report

