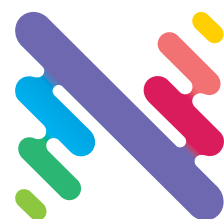


# On the Path

Our plan for safe and accessible walking and rolling in the Newcastle LGA



[newcastle.nsw.gov.au](http://newcastle.nsw.gov.au)



City of  
Newcastle

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## Acknowledgement

City of Newcastle acknowledges that we operate on the grounds of the traditional country of the Awabakal and Worimi peoples. We recognise and respect their cultural heritage, beliefs and continuing relationship with the land and waters, and that they are the proud survivors of more than two hundred years of dispossession. City of Newcastle reiterates its commitment to address disadvantages and attain justice for Aboriginal and Torres Strait Islander peoples of this community.



We are committed to contributing towards achievement of the United Nations' Sustainable Development Goals (SDGs). We have adopted the SDGs and New Urban Agenda as cornerstones for our planning.

In September 2015, Australia was one of 193 countries to commit to the SDGs. These goals provide a global roadmap for all countries to work towards a better world for current and future generations.



## A message from our Lord Mayor

City of Newcastle is striving to be a liveable, sustainable, creative, and inclusive city. Embracing active transport is a big part of the shift to help Newcastle reach its potential as an amazing place to live, work, and grow.

Walking (and other human scale mobility) is a crucial part of life in a city. It brings us together and gives us opportunities to be a positive part of our community, because we know that it is the human presence that makes a city alive.

Newcastle has a long way to go to become a walking city, but it does have unique opportunities. Its pleasant climate and terrain make it comfortable for walking all year round. From our beaches and harbour foreshore, to Blackbutt and the Hexham Wetlands, we have spectacular places to walk in Newcastle. Our city is rich in indigenous and non-indigenous heritage that can be appreciated as we walk in our everyday life, or as an attraction for visitors from far and wide.

Our plan to improve the walkability of our city will help make walking a better experience for everyone, including those of us who have always defaulted to driving when we could easily and effectively make the trip on foot, on a bike, or by connecting with our public transport services.

This Plan confirms our commitment to ensuring the city achieves more to enable all residents and visitors to make walking part of their every day. I am looking forward to the opportunities that this Plan will create to help us all move towards a more sustainable, healthy, and community-oriented lifestyle.

I want to thank everyone who walks through our city. You make it a special place, and you contribute to the character of the city more than you know.

**Councillor Dr Ross Kerridge**  
Lord Mayor of Newcastle



## A message from our CEO

The preference for many people to work from home is widely considered to be the most significant structural change to our lives resulting from the COVID-19 driven lockdowns in 2020 and 2021. However, another equally significant change from the lockdowns has been people's expectation that they can enjoy walking as a passive form of exercise within the immediate vicinity of their family home.

The development and popularity of smart watches that count our daily steps has also made us more aware of how active, or inactive, we are. While there are mixed views of the need to hit 10,000 steps daily, few people would argue that having a daily goal to walk more is anything other than a good thing.

As a child, I recall Sunday afternoon walks with my family which inevitably involved piling into a car and driving to a location. Today I'm sure my children would observe the irony of spending as much time sitting in the car driving as the actual time spent walking at our destination. It's clear that in Australia today our community no longer considers it acceptable to have to drive to a suitable location such as a regional park or, in the case of Newcastle, perhaps the Bathers Way or the Newcastle Foreshore, to enjoy a casual stroll in the name of exercise or sound mental health.

Newcastle, in part due to its largely flat terrain, has always been a city that rates high in terms of walkability. Fortuitously, consultation for the Newcastle

2040 Community Strategic Plan was done during the lockdowns of 2020 and 2021, meaning it reflects the community's newfound expectation that walking should be a key element in creating a liveable, sustainable city built around enriched neighbourhoods and connected communities.

Urban streets and roads are where the majority of our transport happens and comprise a large percentage of our public space. The way in which our streetscapes have been designed and built affects our decisions about how we choose to move around, how easily we can integrate physical activity into our daily routine, the quality of the air we breathe, our exposure to risk and conflict, our ability to interact with others, and our general health and wellbeing.

There is no doubt that we still have a way to go to achieving our goal of creating a city for walking. We have regular requests for improvements and construction of footpaths. This shows the need for a clear strategic plan that ensures we can approach this issue in a prioritised manner, to ensure we don't miss opportunities to improve the lives of people who would like to walk more.

Today we are seeing an increasing emphasis in State and local government on improving the public space through the prioritisation of walking and cycling in our street environments. The City of Newcastle is aligned with this strategic direction to achieve the outcome of having active transport to be the preferred method of travel for short trips. This confirms and supports the opportunity for City of Newcastle to take the bold forward-thinking decisions that this plan paves the way for in terms of reimagining our street scapes in the support of car free, active, sustainable transport options.

We need to accelerate our footpath program through effective and efficient planning, while also exploring how road environments can be improved to ensure safety and prioritisation of pedestrians. In some situations, this may include reallocation of road spaces, reducing speeds and volumes, while continuing to work towards improving how drivers consider pedestrians.

A holistic approach – which optimises our potential and the opportunities for our streetscapes, whilst recognising and addressing the challenges – is how we will align with our strategic intent and flip from a perspective focused on cars, to a broader future perspective focused on people.

**Jeremy Bath**  
CEO of City of Newcastle

# Why "walking"?

Creating choice for people to move around our city at a human scale and speed is at the heart of this plan. When we refer to walking, we are including all pedestrian movements within our city, including skating, moving on a wheelchair, or motor scooter, and pushing prams. For us, walking is an active word that embraces opportunity for people from all sectors of our community.

## 1. The benefits of a walking city

As such an integral part of life, walking has a broad range of benefits, providing solutions to many issues which currently exist in our cities, communities, and the broader environment. Planning for walking provides benefits through the following interrelated outcomes:

- Improved access and conditions for walking
- Increased levels of walking
- Reduced car dependence
- Improved outcomes for the broader community

It is essential that the fundamental role that walking plays in how our health, society, and eco-systems function is recognised and realised. By deepening our understanding of the benefits of walking we can ensure that our planning maximises these benefits.



Figure 1 Benefits of a Walking City

## Healthier and happier people

Walking is the most common way to stay active, and this keeps us healthy and happy: from reducing rates of heart disease, diabetes, cancer, arthritis; improving our immunity and the fitness of our heart, lungs, muscles and bones; and reducing our stress, improving our mood and creativity. Walking is low impact, rhythmic, and symmetric exercise, which is a great way for Australians to achieve the recommended physical activity required to stay healthy<sup>1</sup>. In May 2022 a survey was completed by 660 people in Newcastle. The importance of Health as a benefit of walking was extremely or very important to 85% of the respondents as shown in Figure 2.

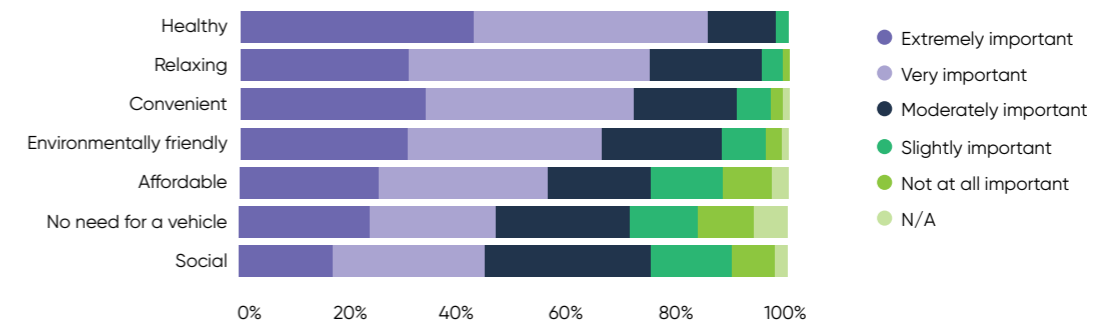


Figure 2 Importance of the benefits of walking to people in Newcastle

Walkable neighbourhoods have been shown to have improved health outcomes<sup>2</sup>. Walking has additional benefits when it replaces a car trip, with improved wellbeing and no contribution to air pollution. Walking in nature further stimulates our senses and improves concentration, cognition, and co-operation<sup>3</sup>.

Current challenges	Role of Walking
Lack of physical fitness and an aging community	Walking is low impact and accessible and improves physical fitness, sleep, immunity and bone density.
High rates of non-communicable illness and other health issues	Walking reduces rates of obesity and numerous diseases, including heart disease, diabetes, cancer, arthritis.
High rates of mental illness, including anxiety and depression	Walking stabilises mood, reduces stress, with further benefits when we walk in nature and instead of driving
Noise and air pollution from motor vehicle traffic causing heart and lung disease, and sleep issues.	Walking reduces car dependence, which is a major contributor to noise and air pollution, and we are exposed to less pollution when we walk on quiet streets and paths.

## Equitable and inclusive communities

Walking is affordable and accessible to most people in our community and can help build more equitable and inclusive communities: from fostering connection, care and safety on our streets, to enabling people to access opportunities and services. Walking brings people of all ages and abilities together on the street. In creating great places for walking, we also create inclusive places for diverse people to linger, observe, interact, and socialise.

**“Regardless of the purpose, a walking city space is a “forum” for the social activities that take place along the way as an integral part of pedestrian activities. Heads move from side to side, walkers turn or stop to see everything, or to greet or talk with others. Walking is a form of transport, but it is also a potential beginning or an occasion for many other activities.”**

(Jan Gehl 2011)<sup>4</sup>

Walking strengthens social networks and trust in the community. It can also improve economic and social opportunities<sup>5</sup> and independence of some of our more vulnerable citizens. When walking replaces car trips, it also reduces the dangers related to motor vehicles. Walking and public transport trips can reduce the need for friends and relatives to drive passengers that are unable to drive.

Current challenges	Role of Walking
Loneliness epidemic in Australia	Walking gives us opportunities to see and understand one another, and build social bonds in our community
Growing disparity in living standards, and access to opportunities for some socio-demographic groups	Walking offers an option for affordable access (which may include multiple modes) for people of all abilities and diverse social groups and does not require owning and maintaining a vehicle
Many car trips in Newcastle are made to drive passengers to places	Walking increases independence of people who cannot drive and reduces time spent taxiing
Dangerous transport system which results in fear, injury and death.	Walking improves the safety of our streets by reducing car dependence, and providing human presence and natural surveillance

## Attractive and prosperous city

Walking allows us to appreciate our city, while also contributing to its beauty and energy: from making places feel more vibrant and welcoming, to being able to observe closer and at a slower pace. Walking reduces the financial burden on our economy through enhanced health and communities.

**“...increasingly it is understood that the walker makes and becomes the city he or she walks. It is conceded that walking plays an indispensable role in restoring neighbourhoods, luring tourists and shoppers, designing beautiful streets, and adding vitality to an entire city.”**

(Amato, 2004)<sup>6</sup>

Newcastle is currently undergoing rapid development and is planning for further economic and population growth, as well as an increase in tourism. Improved walkability helps attract and retain talented people for our creative and knowledge sectors, while walking also improves creativity and productivity<sup>7</sup>. Newcastle also has the potential to present itself as a walkable city for tourism, renowned as a city which embraces walking and public transport as a way to visit the city and its surrounds.

When walking replaces car trips, we reduce the expenses associated with car use and storage, including the provision of infrastructure, coordination, and regulation. This can improve the affordability, functionality and attractiveness of the city<sup>8</sup>. Furthermore, it is important that these benefits are equitable and accessible to the most vulnerable people in our communities.

Current challenges	Role of Walking
City with rapid development and economic and population growth	Walking improves vibrancy and productivity of the population, and is attractive to existing and new residents
Underappreciated places and culture	Walking enhances connection to place and culture, with opportunities for enhanced walking experience through celebrating culture and placemaking
Growing tourism industry and access to more parts of the city	Walking can be an experience and a tool for tourists and residents to access and explore different parts of the city
Cost of living pressures	Walking for individual or multi-modal trips can reduce the price of access, including the need to upgrade, maintain, and coordinate infrastructure and systems to support car use

## A sustainable and resilient world

Walking creates more resilient and sustainable people, communities, and environments: from reducing our dependence on resources and institutions, to improving our fitness, strengthening communities, and allowing more space for natural and water sensitive cities. The simplicity of walking is a key strength in building resilience.

Transport is often required for people to participate in their communities, but can cause major problems for our environment, including climate change, biodiversity loss, resource depletion, local pollution, other waste streams and the clearing of natural spaces<sup>9</sup>. These global and local challenges require a move towards more appropriate behaviours, institutions, infrastructure, and land use to avoid further damage, suffering and vulnerability. Moving from car dependence and car use to walkability and walking is key to reducing our negative impact on the environment.

Walking brings us closer to our surrounds, including our communities and nature. This proximity can create a greater appreciation and care for our environment and other people. Walking also exposes people directly to some of the effects of climate change. Providing shade and shelter as part of planning for walking is important. Reducing overexposure to sun, heat, as well as exposure to rain and cold will only become more important as our climate changes.

Our city's rapid development increases the heat island effect which can increase air temperature by 2-4 degrees during the day, and more during the night<sup>10</sup>. Tree planting not only provides shade but also reduces air pollution, improves water flows and provides an opportunity for people walking to connect with nature.

Current challenges	Role of Walking
Car dependency, vulnerable to need for ongoing escalation of resourcing	Walking increases the diversity of transport and land use options and reduces car dependence.
Environmental damage and the need to reduce emissions and maintain natural spaces	Walking is carbon neutral, requiring less land and resources than car ownership and use
Lack of connection with nature	Walking gives people the opportunity to appreciate their surrounds, with paths that follow natural trails (e.g. creek lines) augmenting this benefit
Increased urban areas, planning controls, areas of rapid densification, and requirements to cater for car use and storage	Walkable neighbourhoods allow planners, developers, and residents to reduce the need to cater for cars, allowing for more compact, green and sustainable development



## 2. Newcastle: Strategic Context

### Global Level

#### Sustainable Development Goals and New Urban Agenda

Newcastle is a United Nations City and has adopted the Sustainable Development Goals (SDGs) and the New Urban Agenda as cornerstones for planning. The Walking and Mobility Plan aligns with and contributes to the realisation of the following SDGs.



### State Level

The NSW Government has committed to walking and bike riding, known as active transport, to be the preferred way to make short trips and a viable, safe, and efficient option for longer trips. It has been estimated that more than 1.5 billion walking and bike riding trips are taken per year across New South Wales, with a target to double this number by 2042.

In support of this goal, Transport for NSW have released a range of complementary and supporting strategies, including the Future Transport Strategy and the Active Transport Strategy. Key actions identified under the NSW Future Transport Strategy include:

<b>More choices, better access</b>	<i>Improving transport solutions</i>
	<ul style="list-style-type: none"> <li>- Supporting car-free, active sustainable transport options</li> <li>- More connections to improve 30-minute cities</li> </ul>
<b>Thriving places</b>	<i>Enhancing liveability for communities</i>
	<ul style="list-style-type: none"> <li>- Thriving 15-minute neighbourhoods</li> <li>- Street space as public space</li> <li>- Build well-designed transport infrastructure</li> <li>- Improving the amenity of state roads</li> </ul>
<b>Maximising the use of our network</b>	<i>Releasing the potential of our infrastructure</i>
	<ul style="list-style-type: none"> <li>- Reallocating road space</li> <li>- More space for walking and cycling</li> </ul>
<b>Resilient communities</b>	<i>Building resilience and economic growth</i>
	<ul style="list-style-type: none"> <li>- Considering climate change in all our decisions</li> </ul>

### Local Level

#### Newcastle 2040 Community Strategic Plan (CSP)

City of Newcastle (CN) has a clear directive from the community for a more walkable city. Several objectives in CN's Community Strategic Plan align with the Walking and Mobility Plan, particularly those in the "Liveable" theme. However, walking has multiple benefits across a range of issues, and therefore can contribute in some way to almost every objective within the CSP.

	1.1 Enriched neighbourhoods and places	1.1.1 Well-designed places
		1.2.2 Inclusive communities
	1.2 Connection and fair communities	1.2.3 Equitable communities
		1.2.4 Healthy communities
<b>Liveable</b>		1.3.1 Connected cycleways and pedestrian networks
	1.3 Safe, active and linked movement across the city	1.3.4 Effective public transport
<b>Sustainable</b>	2.1 Action on climate change	2.1.1 Towards net zero emissions
		2.1.3 Resilient urban and natural areas
<b>Creative</b>	3.1 Vibrant and creative city	3.1.3 Tourism and visitor economy
	3.2 Opportunities in jobs, learning and innovation	3.2.1 Inclusive opportunities
	3.3 Celebrating culture	3.3.1 Culture in everyday life

Walking is relevant to a vast number of strategies and plans across CN as shown in Figure 3.

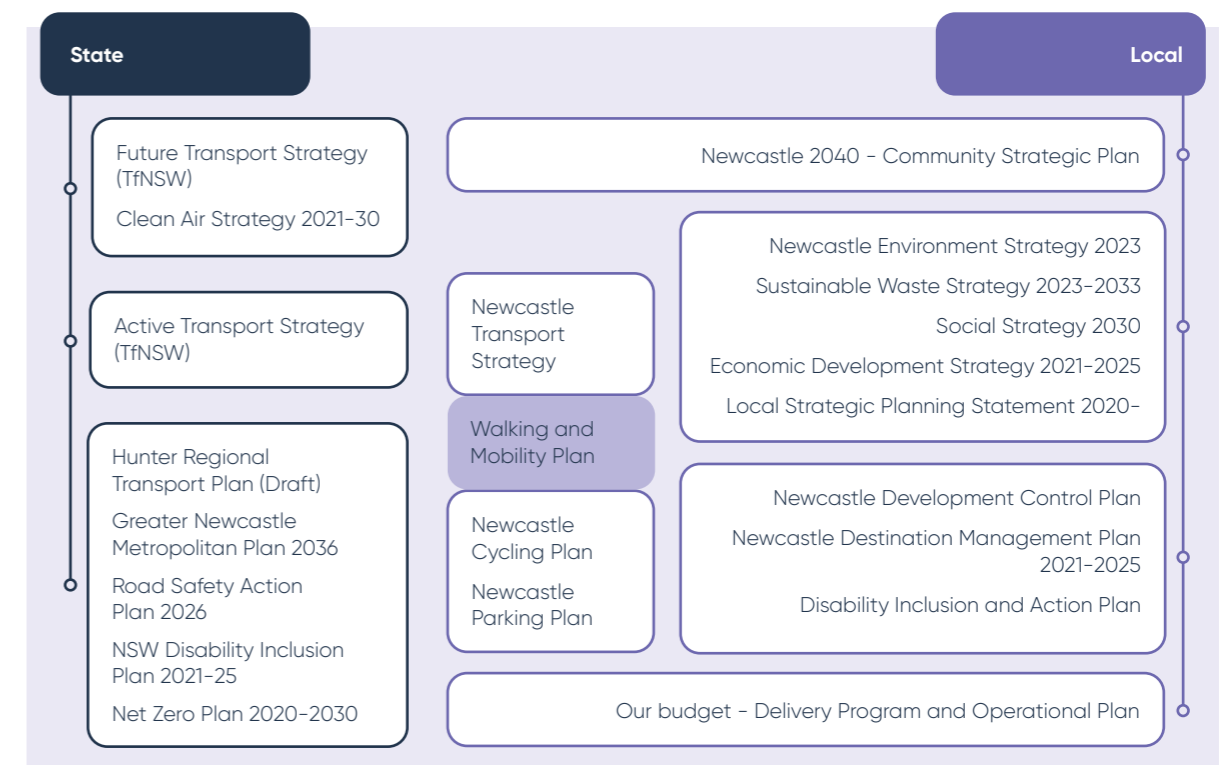


Figure 3 Alignment with Local and State Strategies and Plan

### 3. Newcastle as a place for walking

Walking has been an integral part of the culture of Newcastle for thousands of years. However, over the last century walking has lost its central place in society, and while it's still a natural part of life, it has lost its priority in planning and culture.

The dominance of car travel and the increasing distance to destinations has focused infrastructure efforts on catering for car drivers, particularly their travel time and safety. This has come at the expense of active transport users and public transport riders.

Both the global and local benefits of walking, along with the problems associated with a dependency on car use, have brought the need to support walking back into the spotlight. The COVID-19 pandemic and associated public health measures highlighted the importance of walking, for health, recreation, access, and community. Planning for walking is an opportunity to make the most of the beauty and life of the city, and at the same time improve its vibrancy, economy, social equity, and sustainability.

Walking can represent different things for people in our community, from a chosen recreational activity to a challenging but necessary journey to access basic needs. Newcastle could be a place for walking, where the gaps between these different types of walks are bridged, to ensure that people can access the positive benefits of walking as part of their everyday life, no matter their wealth, location, age, or ability.

Amongst Australia's major cities, Newcastle has unique opportunities for walking. Not only does it have weather and topography that is generally suitable for walking, but it is also situated on a peninsula, with no major highways cutting through the city centre. This reduces the barriers to walking and gives it spectacular surrounds, as it spans between the ocean and the river. It is important we embrace this potential to create a truly walkable city.



Kauma Park, overlooking Burreghihnbihng (Hexham Wetlands), Fletcher

### Stepping into the history of walking in Newcastle

The Traditional Custodians of Newcastle area are the Awabakal and Worimi people. Walking was the predominant form of travel traditionally and continues to be an important part of Aboriginal culture today.

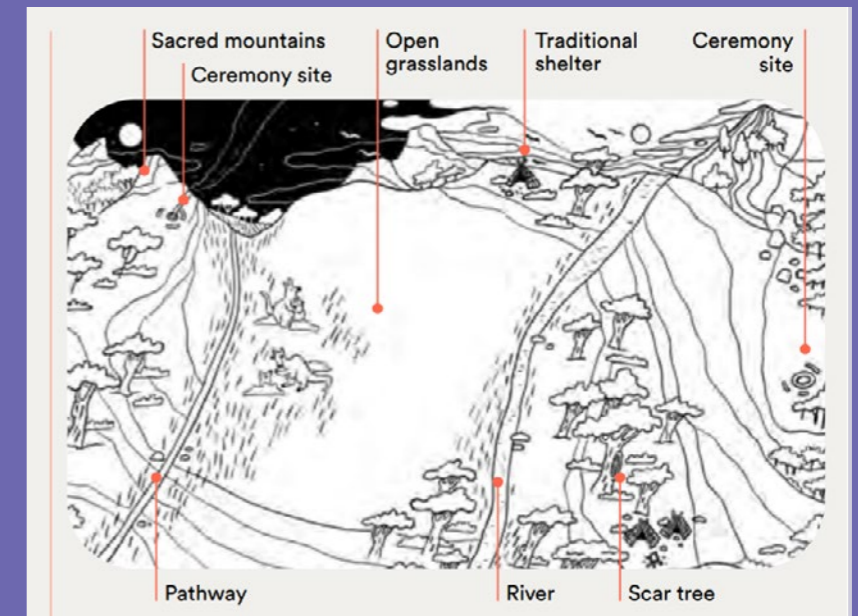


Figure 4 Pathway identified as "in-between space" in Connecting with Country report

There is much that can be learned from the wisdom of walking tracks, and how Aboriginal people navigated through Country. Navigation occurred through working with the landscape to create natural navigable paths, with appropriate sightlines to help orientation and through song lines which are oral maps of the land and sky<sup>11</sup>.

Knowledge about the movements of the Awabakal people is limited. However, it's likely that early roads were carved through paths that were once movement corridors for Aboriginal people<sup>12</sup>. Adjacent to Burreghihnbihng (Hexham Wetlands), it is likely that there was a walking route along the ridge line that Kauma Park in Fletcher is situated on, which would have connected what is now the Hunter Wetlands National Park to the high country of the Sugarloaf range<sup>13</sup>.

Since colonisation, our relationship to walking and movement has changed. The city centre was designed by Henry Dangar in 1823 to be human scaled and walkable, while separate mining villages sprung up in the mid-19th Century and were connected either by roads, rail, or rivers to Newcastle. Suburbs that originated as mining villages include Merewether, Waratah, Minmi, Wallsend, Plattsburg, Lambton, and New Lambton. The original design of streets in these villages would have assumed people walked on the street because they were built before the age of the motor vehicle.

Trams were introduced in 1887, bringing crowds into the city centre which was a vibrant hub of street life in the early and mid-20th Century. However, post-war suburban developments, such as Kotara, Adamstown Heights, Merewether Heights, Rankin Park and New Lambton Heights along with the invention of the suburban shopping mall, cemented the role of cars in Newcastle and footpaths were not a requirement in these suburbs. Hunter Street was turned into a pedestrian mall in the 1970s, and it originally did attract shoppers enjoying being away from the noise and pollution of cars. However, cars were reintroduced in 2009, and it is now being transformed again into a traditional road space, with separated provision for westbound vehicles, parking, pedestrians, and a bi-directional cycleway.

More recent housing estate developments have been required to provide a footpath on at least one side of all new streets and roads, such as in parts of Fletcher. However, walkability extends beyond walking paths, and innovative planning is needed to improve the walkability and reduce the car dependency of newer peri-urban suburbs.



## Walking in Newcastle

Walking is already an important part of life in Newcastle, with recent surveys showing 70% of survey participants walking at least 30 minutes every day. People in Newcastle take almost 4 walking trips per day on average totalling 107,000 kilometres of walking across our local government area (LGA)<sup>14</sup>. However, our walking is mainly for recreation purposes, as shown under Figure 5.

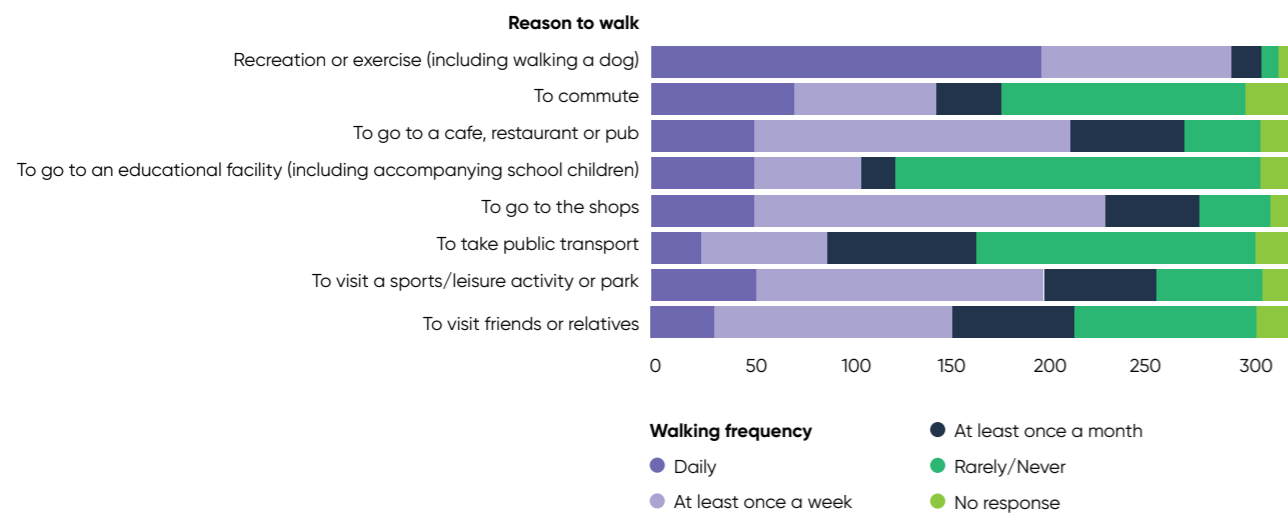


Figure 5 Frequency of people walking for different purposes

The main reasons people travel in Newcastle are for commuting (19%), shopping (19%), recreation/social (26%) and providing transport for a passenger (15%). All these trip purposes, except shopping, have a high potential to shift towards a combination of walking and public transport.

Currently, people who commute by walking or public transport are concentrated in only a few suburbs as seen in Figure 6 and Figure 7. The suburbs with the highest numbers of people walking to work are near the centre of Newcastle (~14%) and near the university (~7%) and highest public transport use were in Islington (8.8%) and Hamilton (8.4), while Maryland, Fletcher, and Merewether Heights have very low rates of public transport use or walking.

Note that these figures were last taken prior to the COVID-19 pandemic, and approaches to transportation and commuting have shifted since this data was captured as the community's movement patterns have changed. However, it is seen as a more accurate depiction of movement data than information gathered during the pandemic period where movements were restricted for some.

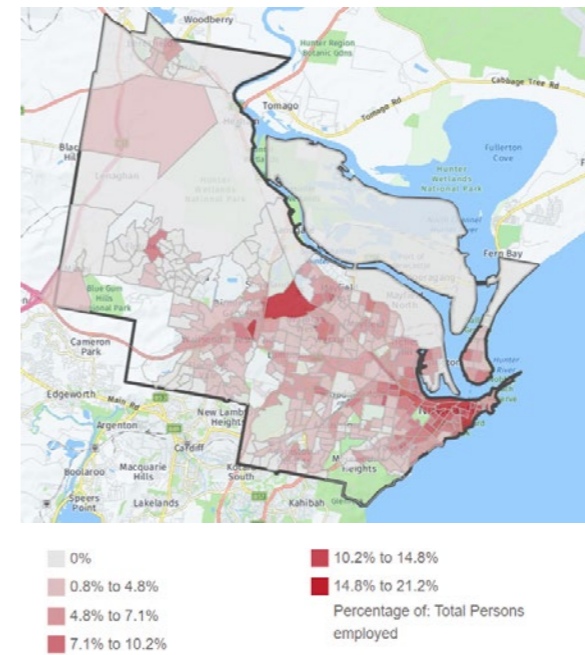


Figure 6 Proportion of employed population who walked to work in 2016 (Social Atlas)

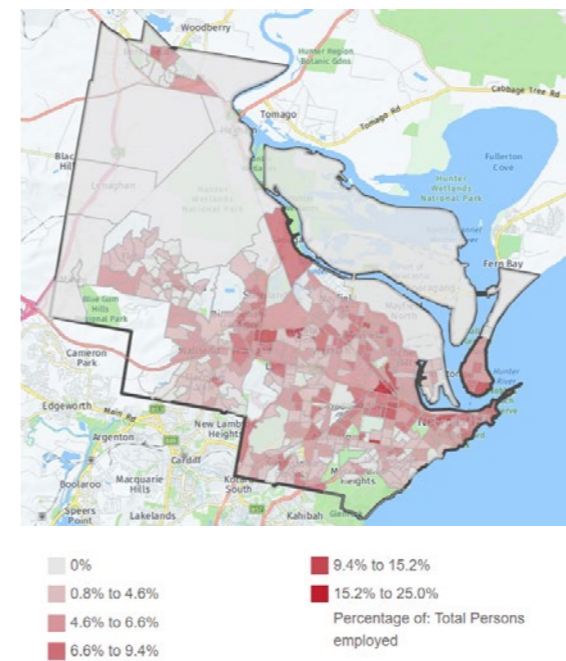


Figure 7 Proportion of employed population who took public transport to work in 2016 (Social Atlas)



Key enablers, and barriers to walking were identified in the 2022 survey. The features that were very or extremely important in making walking attractive from the survey are shown in Figure 8.

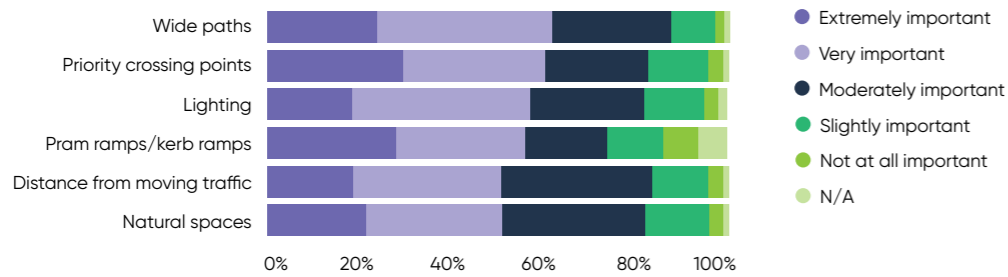


Figure 8 Importance of features in making walking attractive

Potential barriers to walking, as seen in Figure 9, most frequently experienced by survey respondents included:

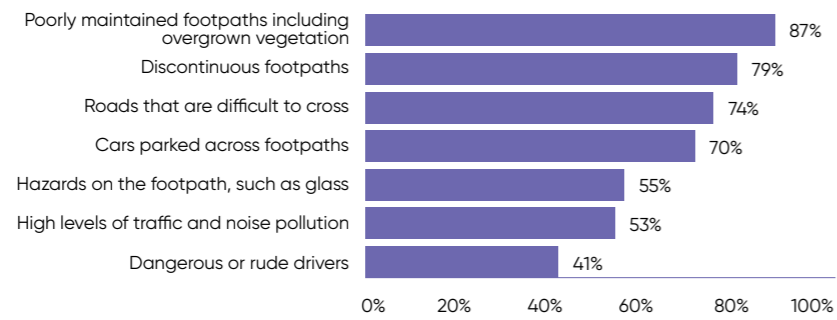


Figure 9 Barriers to walking

Lack of infrastructure was a key barrier to walking, as noted by nearly 30% of people who said they walked less than they did last year. It was also very common for people to walk on the road where there is no footpath, with 80% of respondents noting they sometimes do this. Almost 90% of respondents stated that better pedestrian facilities would increase their likelihood to walk more often as seen in Figure 10.

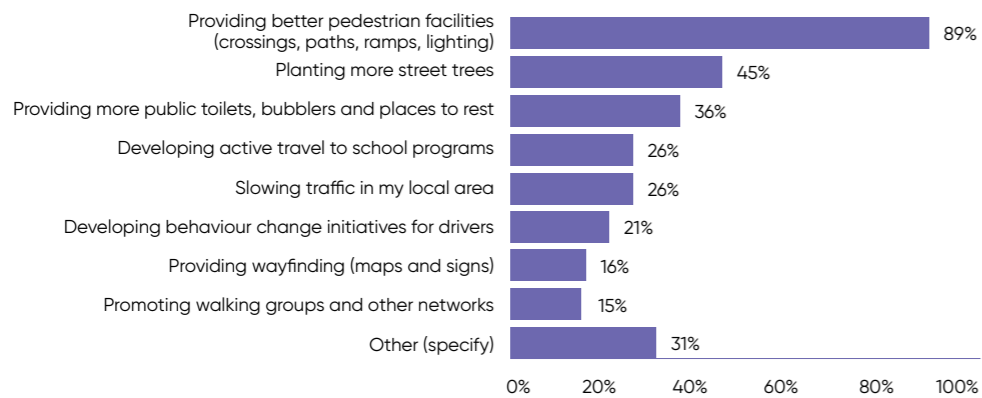


Figure 10 How City of Newcastle can help you walk more



## 4. Planning for walking

While in many ways a pedestrian requires less infrastructure than other travellers, planning for walkability does require thorough consideration of how walking can be a supported, attractive, and positive experience for people of all ages and abilities. Walking involves stronger connections with our surroundings, our bodies, and our time than other ways we travel. Therefore, each person and each trip require different facilities and features to contribute to their:

- ability to walk
- motivation to walk
- benefits of walking and of planning for walking.

The walkability of a city is defined through the infrastructure provision<sup>15</sup>, and the experience of walking within a city. By combining these aspects of walkability, we can define the interrelated building blocks of a walkable city as:

- the path (places to walk through)
- the destinations (places to walk to)
- the culture (a way of life to walk in)

Figure 11 shows all the elements that need to be considered for a city to promote walking and its potential benefits. The centre ring of the diagram focuses on the fundamentals needed to make walking possible for people. The middle ring considers what motivates people to walk, while the outer ring encompasses how the city can ensure the benefits of walking are realised. It is important to note the ability and motivation to walk varies greatly across Newcastle, with people of different ages, abilities, attitudes, locations, and ambitions.

To improve paths, destinations, and cultures to make all places and neighbourhoods in Newcastle more walkable, we need to examine what factors contribute to supporting walking and its benefits.

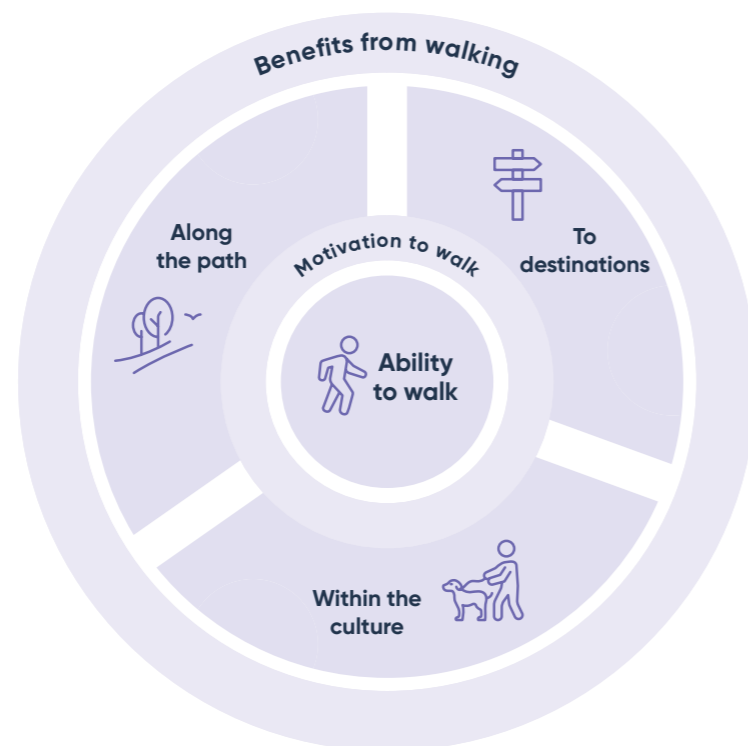


Figure 11 Elements of a walkable city

### The path

Paths not only need to be accessible and safe, but they also need to be comfortable, direct, and engaging, particularly if we want to maximise our benefits of walking.

- **Infrastructure** – Verges, footpath (on direct routes), width, function (e.g. shared pathways), utilities (energy, water), signals, crossings, ramps, surface condition
- **Motorised traffic** – volumes and speeds, and noise and air pollution
- **Supporting facilities** – lighting, trees and shade structures, shelter, seating, water fountains, toilets, wayfinding, waste bins
- **Other social and environmental factors** – gradients, temperature, environment, art, places to rest or stop, stormwater flows, verge activity, other people walking or interacting with the street, interaction with nature, personal safety

### The destination

Destinations need to be within a distance that people are willing to walk or the combination of walking and public transport. This requires density, mixed land use and the potential to have other destinations along the way to encourage extended walking trips. These destinations also need to be accessible and welcoming for pedestrians and cater for any requirements that a pedestrian might have upon arrival and while they are at the destination.

- **Distance to destinations** – Higher density areas, different functions/activities/uses, linked destinations along the way
- **Built environment** – architecture, safe and welcoming environment, active frontage
- **Facilities** – seating, bathrooms, end of trip facilities for multi-modal trips (e.g. showers, changerooms lockers)

### The culture

Culture needs to embrace and facilitate walking as a key part of life in the city. The key to a walkable city is that it both motivates and facilitates all sorts of people to walk in it, and that people take the opportunity to walk, particularly as part of their everyday life.

- **Allowances for travel** – Time schedules, types and location of residences, cultural habits
- **Motivations for travel choice** – Time and effort of walking versus other transport options, values of outcomes such as enjoyment, health, costs, environmental and social connection, and associations with walking or other transport modes
- **Capabilities** – How easy and accessible it is to walk, availability of routes, connected multi-modal options, removal of perceived barriers

### Vision-led planning

To plan for the future, it is important to have a vision of what it might be like, to overcome assumptions from our current situation that may hold us back from believing we can work towards better infrastructure, support, and connectivity for walking. Transport for NSW's Future Transport Plan emphasises creating visions and providing validated pathways to achieve the required outcomes. While it is not possible to know precisely what life will be like in 10 years-time, we have considered and illustrated a taste of life in 2034.

## A step into a morning in 2034

It's early in the morning and the suburban streets are bustling with people going for a morning walk around their neighbourhood, or through one of the beautiful reserves within walking distance of their homes. Some stop to pick up the bread and milk at the local shops and have a chat with neighbours about last weekend's footy game. The weather is also good this morning, and hundreds of people keen to get active have jumped on bikes, buses, trams, and trains to get down to local reserves, parks, pools, or head for a surf. The lockers at parks, pools and beaches mean you don't need to lug everything, knowing you have a safe place to store it.

Some keen commuters have decided the day is too good to catch the bus, so have decided to run to work. Luckily the route includes mainly priority crossings and plenty of shade, so they won't lose their momentum or get too hot on the way. The birds are enjoying the abundant trees throughout the streets and today this runner has decided to put away his earphones and listen to the sounds on the street. There is a shower and lockers at work so they can freshen up. And for those that don't have them, the local library has end of trip facilities that can be used by the public. The bus home is an option that will allow legs to be rested and it'll be time to enjoy the world passing by.

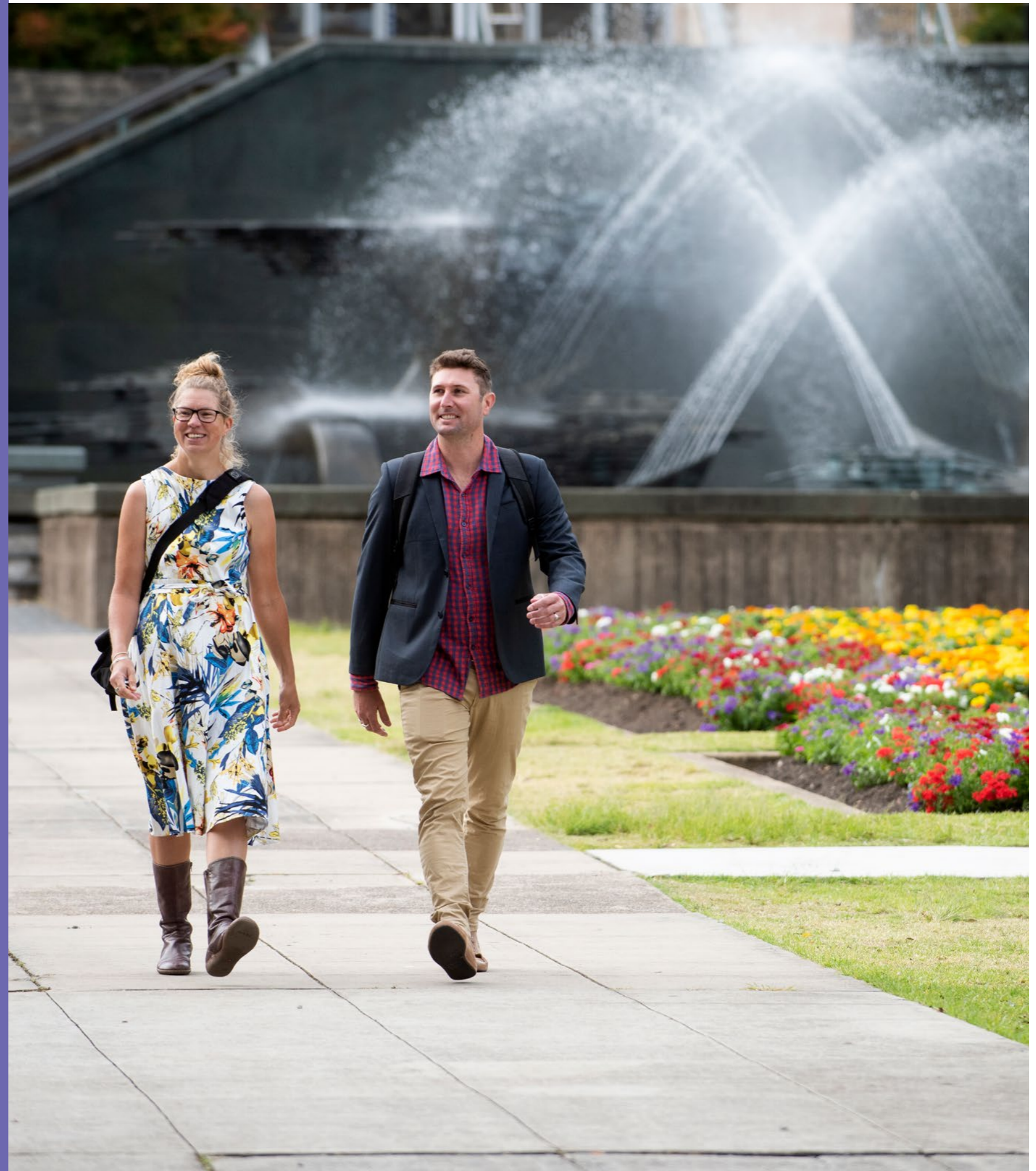
Meanwhile, kids are running out the door to join their friends who are walking and scooting to school together. They all meet in the local park and then head along the well-trodden path towards school, where more and more kids join from other side streets. It's along a quiet road, and the only cars that do venture along here are driven slowly and drivers are always considerate of pedestrians in the area. Some parents accompany their young children, and then catch up at the café nearby before heading off to work by bus or bike share. Others have younger children to care for and are keen to walk them to some local activities – maybe the library, a playgroup at the park, or even a short bushwalk.

Prams, wheelchairs, and scooters converge at the park, where the young and old both have plenty of spaces and equipment for play, exercise, and socialising. The elderly love getting to know the young children they regularly run into on the way to the park. It reminds them of their own grandchildren, and they sometimes tell them stories along the way. The paths are wide to let them do this comfortably.

In another part of the city, a thirty-year-old is preparing for a job interview. Luckily, he knows exactly how to get there without worrying about the heat, pollution, or accessibility issues. The company has provided information which complements City of Newcastle's tools to arrive there with consideration of his vision impairment. He is really hoping to get this job because this company has a strong focus on inclusive design within their building and has prioritised access by active and public transport.

At the shops, backpacks, shopping carts, panniers, and prams are "must haves" to get your shopping home. Some supermarkets even have a place to store your shopping carts while you do your shopping. One supermarket has also introduced some great initiatives, like a loan of a shopping cart or cargo bike for those occasional times when active shoppers walk to the shop but overload their trolley and are stuck with no way to get everything home.

Towards the end of the morning, people emerge from their workplaces to grab a bit of lunch. There are some great squares and parks that have popped up since road space started to be converted into places for people. The trees in the main square have started to grow and provide a great hint of nature in the centre of the city.



## 5. Approaches and tools for a walking city

Cities around the world have been moving towards being places for walking. Researchers and planners have investigated effective solutions to encourage more walking, including in medium sized cities with similar attributes to Newcastle.

Transport is not only embedded within the infrastructure and layout of Newcastle, but also the expectations of different institutions, within the mindset of the citizens, and the way governments regulate and support the population. Therefore, to move towards genuine prioritisation of walking requires multiple changes, which need to be coordinated to ensure the benefits of walking are realised across the community.

### Walkability scoring

Walkscore is a widely used measure of walkability, used in research and planning to establish the level of walkability in different places. Other walkability scoring has also been developed, including the Place Analysis and Walkability Scoring framework (PAWS) which was developed in Sydney. Recognising the complexity of how environments and populations influence levels of walking, machine learning was used to identify the contribution of different structural, environmental, adaptable, and demographic factors in influencing walking. The type of housing and employment as well as points of interest were found to be the most important factors, followed by public transport provision, age, network connectivity (intersections per km<sup>2</sup>), total population, family composition, trees, and education level. This shows that walkability extends beyond the realm of transport planning with good urban planning and environmental planning required to create walkable environments. It also highlights the link between walking and public transport provision.

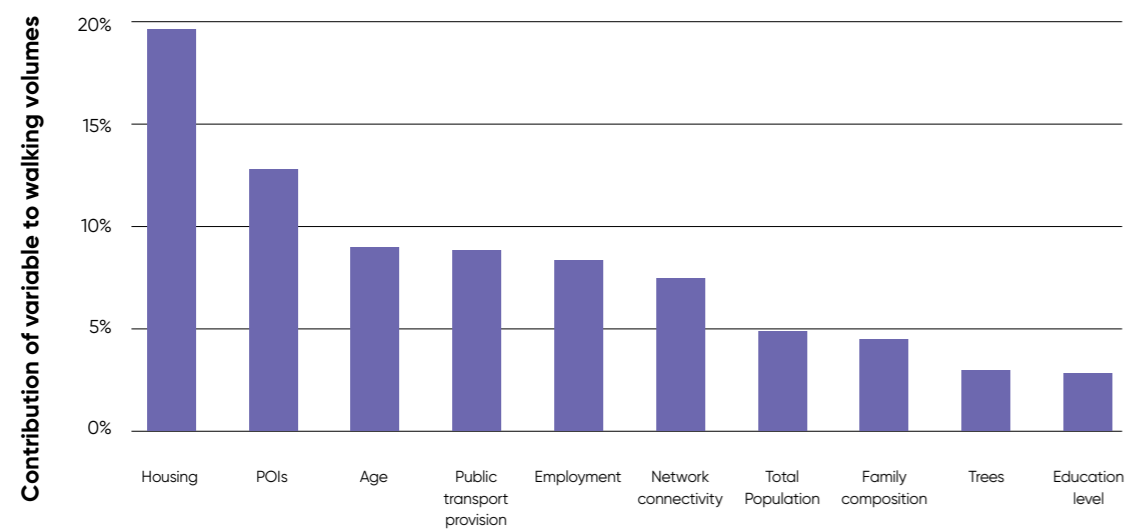


Figure 12 Factors influencing walkability in Sydney (Fletcher 2024)

### Walking Space Guide

The Walking Space Guide gives an indication of how much space we should provide for people walking, including those who may require more space than others such as people with a disability, older people, people with injuries, young families, and people with dogs. The guide recognises the importance of trees for shade and other amenity, and recommends they are protected where possible.

Pedestrian projects should aim to provide the space recommended by the Walking Space Guide. However, space allocation is restricted in some places by the need to maintain tree canopy, avoiding excessive imperviable surfaces and keeping costs reasonable to allow for the delivery of more walking projects through our capital works program. Currently our pedestrian infrastructure has lower levels of service for pedestrians than what is recommended by the Walking Space Guide. Upgrading existing footpath sections needs to be balanced with construction of new infrastructure to address the lack of footpaths along many existing streets and roads.

### Movement and Place Framework

The NSW Government Movement and Place Framework seeks to balance different needs and opportunities within a space by providing a common language and understandings between different planners and stakeholders. People use and appreciate different spaces in the city as places to be in, or for movements (where movement can be through a place, to/from a place or within a place). Place qualities can be considered through the lenses of physical form, meaning, and activity.

Pedestrians rely on good quality movement and place functions of a space. While walking, people are immersed in their environment more than any other way of travelling, and therefore need good quality places to be, as well as places that are easy to walk through. The attributes to consider in the movement and place framework are shown in the Figure 13.

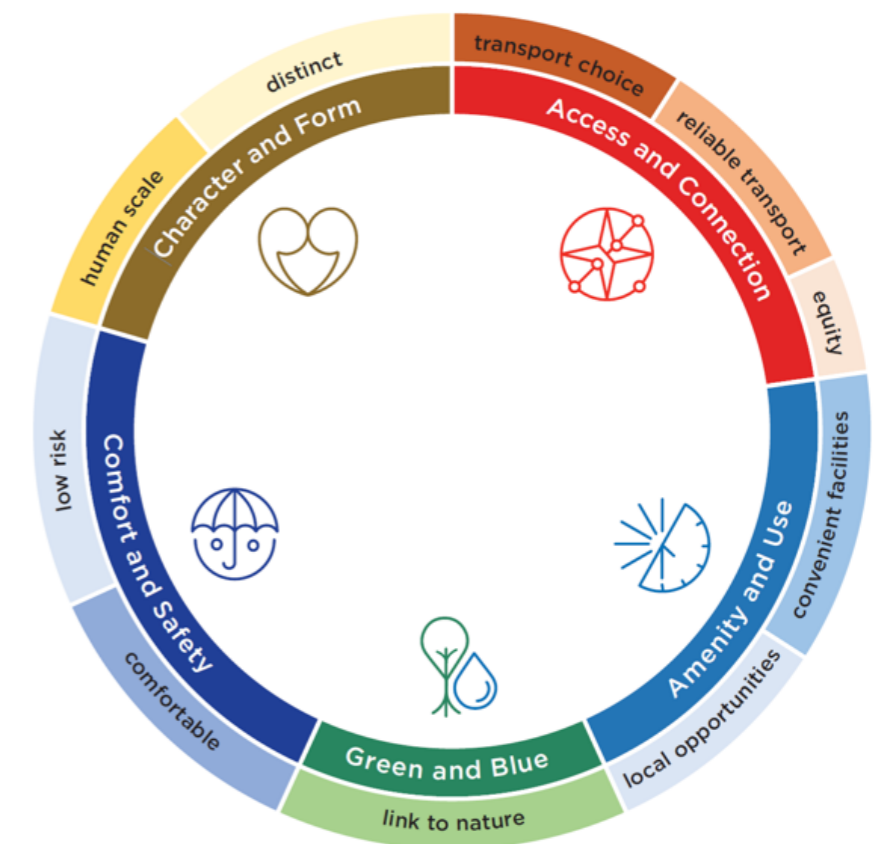


Figure 13 Attributes to consider in Movement and Place Framework

The movement and place framework can help inform pedestrian provision with the outlined core process of:

- **Discover** – Visioning with an understanding of strategic context, and the existing movement and place functions.
- **Create** – Identifying issues and opportunities
- **Deliver** – Identify and validate options and refine to a proven concept
- **Manage** – Implementation, monitoring and improvements

## Healthy Streets Approach

Healthy Streets Approach focuses on the quality of the human experience of streets. It includes a range of assessment tools, including prompting questions, which are simple and related to easily observable properties of the street. The ten healthy streets indicators are shown in the diagram below.



Figure 14 Healthy Streets Approach Indicators

The Healthy Streets Approach includes a design check tool that can be used in planning and evaluating projects, particularly in high pedestrian areas. This approach recognises the importance of consultation and making incremental changes that can make a big difference to people’s lives and the life of the street. This tool will form a key approach of future planning and design outcomes for pedestrian projects throughout the city, to ensure conformity with best practice outcomes for the community.

## Universal Design

People of all ages and abilities need to be able to use streets. Universal design encapsulates the notion that all people have equal rights and deserve equitable opportunities. Hence, new pedestrian projects should be designed with this in mind, ensuring inclusivity throughout the process. There are seven guiding principles of universal design, and these can apply to spaces for people walking<sup>16</sup>:

- Equitable use
- Flexibility in use
- Simple and intuitive
- Perceptible information
- Tolerance for error
- Low physical effort
- Size and space for approach and use

The universal design process encapsulates some key steps to ensure design is appropriately considering all users:

- Identify what you are designing and who you are designing for.
- Involve consumers in all phases of development.
- Adopt and apply guidelines or standards from existing or create new guidelines.
- Plan for requests for those that design doesn’t automatically provide access.
- Train and support ongoing use to ensure welcoming, accessible and inclusive experience for everyone.
- Include universal design measures in evaluation, including input from users.

Adopting these principles and processes improves project delivery for pedestrian infrastructure projects as well as ensures we consider the broad array of abilities and needs of people using the facilities and the support that they need for effective use.

## Connecting with country

“Connecting with country” is a framework developed by the NSW Government. It aims to bring the knowledge from Aboriginal people’s relationship with country to guide planning, design and management of our built environments. This framework highlights the importance of Country for Aboriginal people, which provides new understandings beyond western concepts of place. It honours the continuing connection to country over thousands of years, and that country is a core part of identity and culture. The framework emphasises appropriate process and consultation in working towards the following outcomes:

- Healthy Country
- Healthy community
- Protecting Aboriginal cultural heritage
- Cultural competency
- Better places

Insights from cultural practices can enrich how we consider behaviour change systems (Figure 15), and project delivery stages can gain insights from different relationships people have with Country (Figure 16).

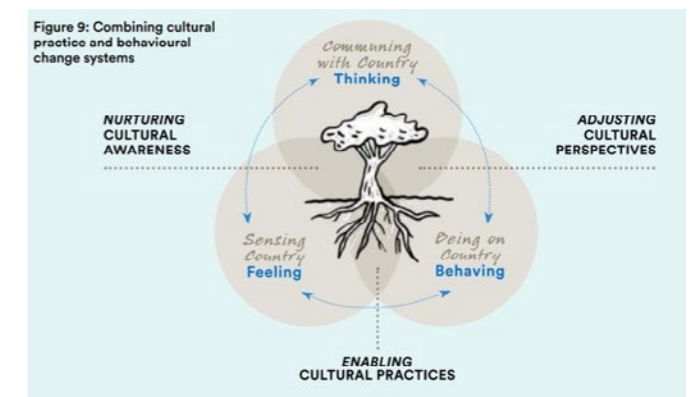


Figure 15 Combining cultural practice and behavioural change systems

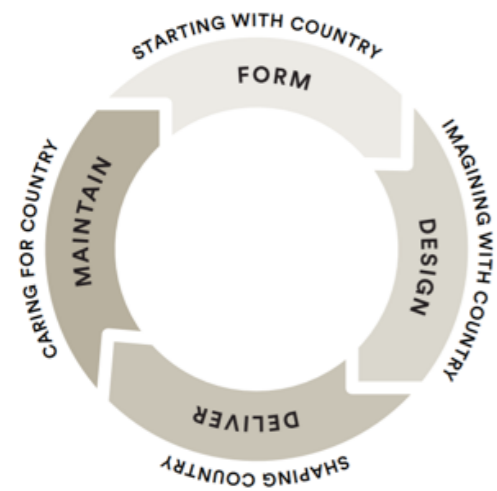


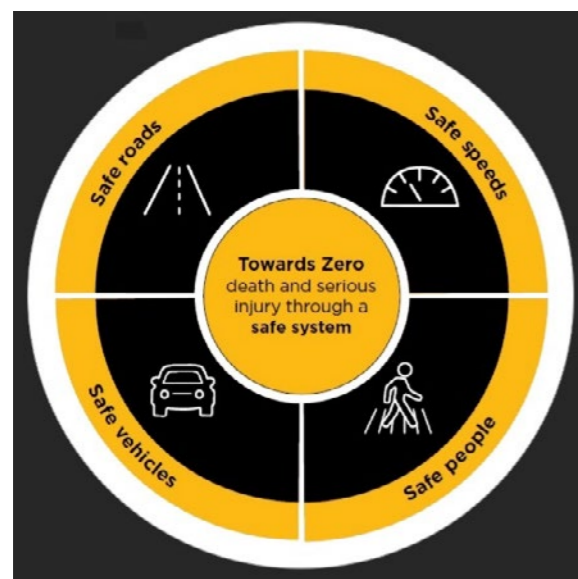
Figure 16 Insights from connecting with country for project delivery

The importance of Walking Country is appreciated as “a visceral practice that activates feeling and engages all senses”. There is also recognition of how walking facilitates knowledge sharing and strengthens interpersonal relationships with the potential for this practice to help project teams.

### Safe System Approach

The Safe System Approach acknowledges that responsibility for road safety is distributed across a range of factors in a system. It aims to create a forgiving system where it is understood that road users will make mistakes but that the system should be designed to limit the damage, particularly respecting the human body<sup>7</sup>.

To achieve this, it moves away from a driver-centric approach by focusing on four elements of the road system called ‘cornerstones’ in Australia’s National Road Safety Strategy<sup>18</sup> that need to become safer: roads and roadsides; vehicles; road users; and speeds. In this way, the Safe System Approach focuses on the immediate road environment and the flows and control of vehicles through it.



Planning for walking plays a critical role in an effective Safe System Approach, where a focus on the pedestrian allows us to move beyond the traditional emphasis on vehicle occupants and protective features. Preventing collisions on streets in cities becomes more critical, and more equitable approaches to harm minimisation needs to be considered.

Figure 17 Pillars of Safe System approach

### Crime prevention through environmental design

Crime prevention through environmental design (CPTED) is the analysis of risks within the built environment to better design, manage and use the space to reduce crime and increase quality of life and sustainability. Improving walkability can also improve the crime prevention of places. The places that people want to walk through often also provide the features that reduce the motivation and opportunity for crime to take place.

There are four key principles of CPTED which are important to consider when planning for pedestrians:

- **Surveillance** – people walking become the eyes on the street, but it’s also important that people feel safe when walking, with appropriate activity nearby, including at night.
- **Access control and movement** – ensuring ease of movement through public spaces.
- **Territorial Reinforcement, Ownership and Activity**– avoid ambiguous spaces with a focus on community pride and a sense of place.
- **Environmental management and maintenance** – clean, well-managed spaces project a positive image and encourage activity and people to linger longer.

Lighting should be designed for inclusive environments to foster positive behaviours such as walking. Lighting can be used to reinforce the principles of CPTED within a space. Lighting also reduces other risks to safety including falling and traffic crashes.



## COM-B and other approaches to behaviour change

Understanding the role of factors such as emotions, norms, attitudes, and self-efficacy (ability to successfully complete the task) provides insights into what we need to change to incite more walking and maximise the benefits from walking.

COM-B<sup>19</sup> is a framework to study the capability, opportunity and motivation that underlies people's behaviour. The capability of an individual incorporates both the physical ability to walk but also the belief in their ability, with appropriate knowledge and skills. One also needs appropriate opportunity to incorporate walking into their life through appropriate schedules and facilities, as well as social acceptance of walking. Motivations to walk can come from considerations of the outcomes gained through walking, and through the emotional responses, and through the automation that comes with habit formation.

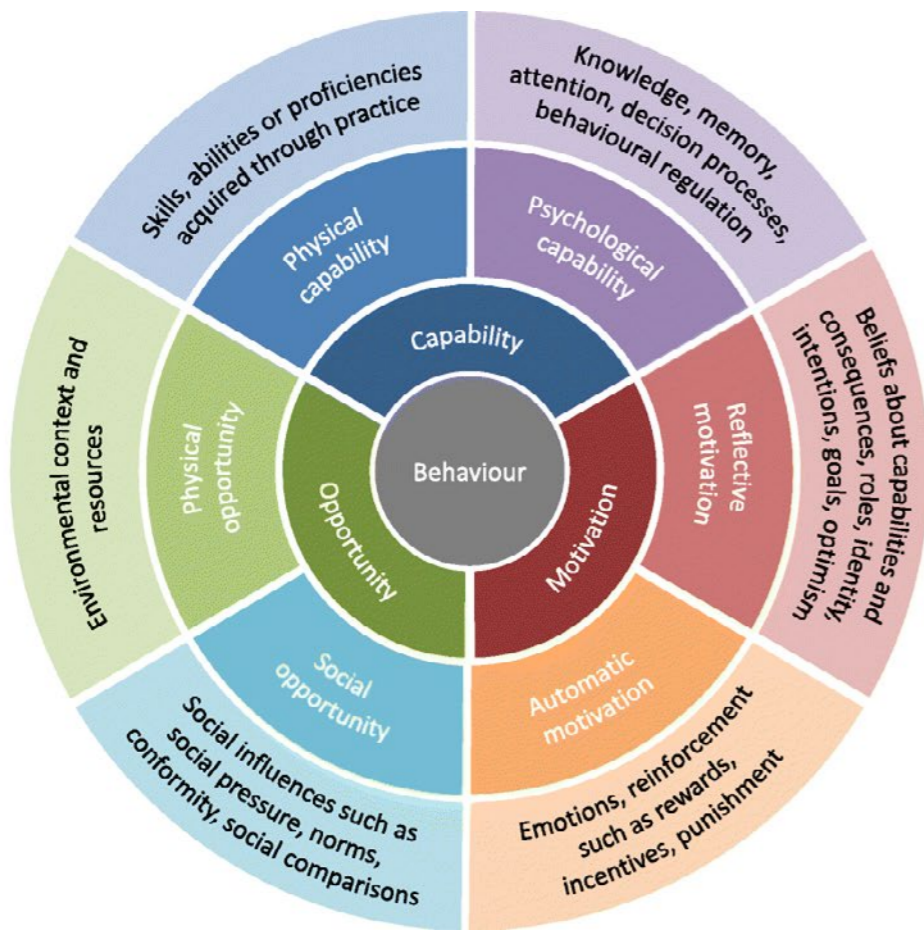


Figure 18 COM B framework

Understanding these behavioural determinants is only one part of understanding how planning for walking affects behaviour. It will be important to consider how we adapt the broader social and physical context to encourage walking. This includes understanding how people receive messages about walking and transport options more broadly. It will therefore be important to consider how we present our urban environment and frame broader messages to make walking welcoming, normal and associated with positive emotions.





# 6. Objectives for Newcastle's Walking and Mobility Plan

## Goal

By 2034, Newcastle will have streets, places and cultures that promote walking (i.e. all pedestrian activity) particularly at and to major destinations such as local centres, employment hubs, schools, parks, and transport stops. Walking and other active transport, as appropriate for their abilities, will be the natural choice for short trips for all members of our community.

## Principles underlying this plan

Based on the benefits, challenges, and approaches to active transport planning, we have developed principles that ensure we holistically realise the potential benefits of walking. These are fundamental in guiding every objective and action in this plan:

### Walking (human scale movement) is a human need

– Walking (human scale movement) is a part of being human. The ability to move at a speed and in a way where appreciation and interaction with the surrounds is enhanced is not only essential for our survival but also our happiness. Therefore, this plan works towards opportunities for walking being an integral part of people's lives.

### Walking is interrelated with many aspects of life

– With walking being such a fundamental part of life in cities, there are complex relationships between different opportunities, issues, and outcomes related to walking. A simple example is that more people walking creates a more walkable environment. This Plan acknowledges these relationships, and explores options to leverage these, to ensure the effectiveness of actions.

**Social equity and inclusive design** – Transport planning which focuses on people that are already active in our community, and who may already have privilege and a strong voice can reduce social equity. However, well targeted walking provisions and programs have a strong potential to improve social equity and inclusivity. An understanding of various structural issues that affect social equity and the need to be inclusive is at the heart of this Plan, to ensure the benefits of walking are able to be enjoyed and realised across the community. These priorities and objectives are consistent with CN's Social Strategy, to support an equitable, inclusive, connected, and healthy Newcastle.

**Walking can reduce car dependence** – Walking should not be seen as ancillary to a car dependent life, but part of the ambition to reduce car dependence across Newcastle while supporting population growth in the city. While recreational walking has benefits for health and wellbeing, this plan explores how walking for transport, as a whole or part of a trip for a range of purposes, can reduce the need to own and use cars in Newcastle. Additionally, because a less car dependent city becomes a walking city, effective and accessible public transport, cycling, car sharing, ride sharing and micromobility options are also essential in becoming a walking, pedestrian-focused city.

## Key themes

To achieve this goal, the Walking and Mobility Plan is structured around four key themes for the Newcastle LGA:

1. Promote safety and prioritisation of pedestrians
2. Build and maintain walkable neighbourhoods
3. Support walking trips and destinations
4. Foster and celebrate walking in our communities

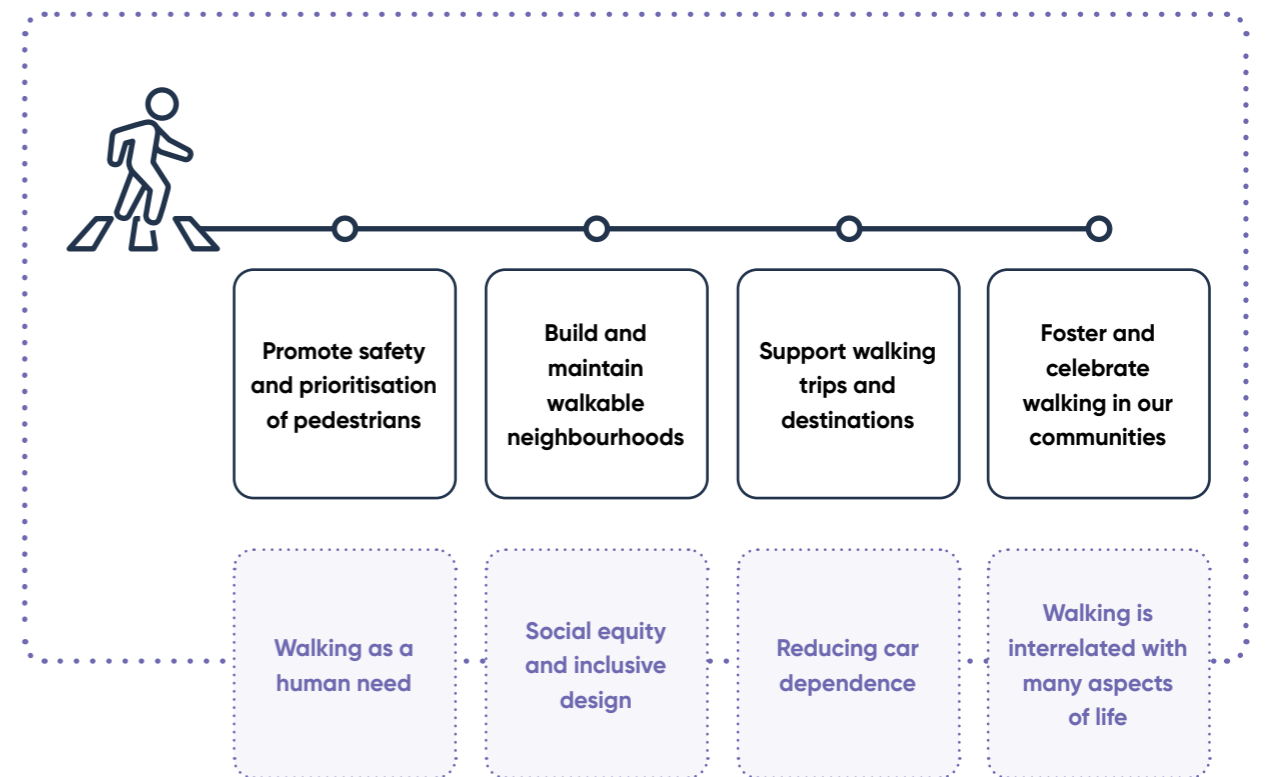


Figure 19 Objectives and Principles of Walking and Mobility Plan

## Promote safety and prioritisation of pedestrians

Both actual and perceived levels of safety and prioritisation are important for the uptake and experience of walking. Reducing road trauma and situations where a pedestrian is forced into unsafe situations are key considerations. To feel legitimate and accepted in our community, pedestrians need to feel that their safety, wellbeing, and time is being taken as seriously as all other road users. Both physical and cultural environments contribute to the landscape of safety and prioritisation for pedestrians.

The Road User Allocation Policy, as adopted by Transport for NSW, has stated that pedestrians should be prioritised when allocating public space for travelling in and through the city. Currently, many vehicle lanes and roads in Newcastle are wider than recommended, often at the expense of pedestrian space allocations.

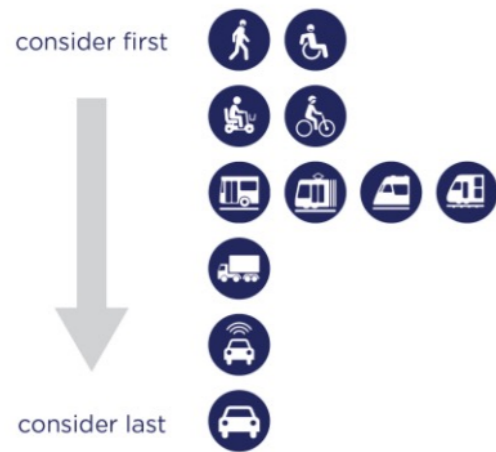


Figure 20 Road User Allocation Policy

Along connective routes a pedestrian should be prioritised through continuity of accessible and predictable paths. People with different abilities have unique experiences when infrastructure gaps or defects. Coherent infrastructure for pedestrians can help emphasise road rules that do prioritise pedestrians but are often forgotten due to the historical dominant focus on motorised vehicles.

This is particularly relevant to situations where people enter the road space to cross. Issues with compliance of drivers at pedestrian crossings reduce their desirability, particularly in locations where there isn't consistent high pedestrian activity. It is therefore important to take a holistic approach to crossings and traffic calming within an area, and to explore options to promote pedestrian prioritisation while maintaining safety. This can encourage more pedestrian activity, which will in turn increase the awareness and safety of pedestrians in the area.

While road reconstruction to deliver more space to pedestrians is expensive, taking opportunities such as reclaiming road space, locating tree pits in the road, and narrowing road pavements during planned reconstruction can create more space for pedestrians. This can then welcome pedestrians into spaces that have been traditionally dominated by cars.

Promoting pedestrian prioritisation in conjunction with safety, brings into focus the issues with street environments where the pedestrian needs to be constantly vigilant and giving way to motorists to maintain their safety. By increasing the responsibility of the drivers with appropriate road environments, supported by education and messaging, pedestrians can have a more enjoyable and relaxed walking experience, knowing that other road users are watching out for them.

## Repurposing road space for people

Much of our city's public spaces is asphalted over for road space. Appreciating that roads play an important role in our communities in accommodating many diverse activities and functions, it has been recognised that there is often too much road space allocated to private vehicles on our roads. This compromises the ability for streets to be a place for people, biodiversity, and water-sensitive design options.

There is a growing trend for cities to consider how they can repurpose road space to make improvements for their communities. In 2022 CN participated in Transport for NSW's Streets as Shared Spaces Program, which allowed the city to trial widening the footpath on Darby Street, with the installation of Darby Courtyard with seating, and a moveable parklet. This not only improved people's dining experience on the street, but also gave people more space to move along the street, which had previously been crowded with alfresco dining furniture.



Many other cities are also exploring how they can repurpose road space to make improvements to their communities with 41 Councils across New South Wales participating in the Streets as Shared Spaces Program. George Street in Sydney has been converted from a busy road to a pedestrian focused boulevard, with a light rail running along its spine, and trees planted along its length. This isn't novel, with streets around the world being considered for active travel. Another example is the Spanish city Pontevedra which created a pedestrianised city centre in 1999 and the city has thrived, with increased population and economic growth, improved air quality and safer streets.

By 2034, CN aims to be a place where all pedestrians traveling through streets and paths in the LGA feel safe and prioritised within the public road space.

**Actions**

- 1.1 Set standards for footpaths and shared paths** - taking the Walking Space Guide as a benchmark to work towards, achieve standard allocations for paths to be 1.5 m wide for footpaths and 3.0 m wide for shared paths for new works.
- 1.2 Develop guidelines and recommendations for road crossings** - including utilisation of appropriate crossing infrastructure and traffic calming for identified crossing locations, and advocate for improved signal phasing.
- 1.3 Encourage pedestrian friendly drivers, speeds, and vehicles** - plan for traffic calming for local roads to reduce speeds and volumes (such as modal filters, narrow streets, sharper kerb return radius), and advocate to the relevant authorities for lower speed limits, improved driver training and education, and safer vehicles.
- 1.4 Plan for people within the existing road space** - increase space for walking, plantings, and recreation by converting road space, including laneways, where appropriate and avoid increasing road widths (unless for public transport). Consider potential inner-city locations where streets can be converted to spaces for people.
- 1.5 Guide development to consider pedestrians** - continue to improve pedestrian connectivity considerations during private developments, and the interaction with existing and planned public infrastructure. Review standard drawings for all sections of public infrastructure to ensure clarity of priority for pedestrian pathways (e.g. across driveways).
- 1.6 Develop guidelines to promote personal safety and crime prevention** - ensure appropriate risk identification and design considerations when identifying, planning, and designing pedestrian projects across the city.

**Build and maintain walkable neighbourhoods**

Local neighbourhoods should be developed and adapted to be places for walking, with appropriate infrastructure, facilities, street design, density, and destinations. An action from the Newcastle Transport Strategy to develop a Walking & Mobility Plan (2016) identified:

**“Newcastle’s suburbs have developed over many years, with variations in standards and development requirements over time, resulting in significant differences in urban form and levels of accessibility. Footpaths, for example, may be provided on both sides of the street, one side, or not at all. A systematic process to assess and map pedestrian infrastructure and identify a pedestrian network, has not been undertaken to date.”**

Feeling confident about your ability to walk to the places you are going should be normal across Newcastle. This is not the case in many parts of Newcastle, with some suburbs having a distinct lack of footpaths. Therefore, it is essential that projects to deliver footpaths across the city are well-funded, prioritised, and effectively and efficiently delivered. Other CN plans have also emphasised the importance of strategic footpath delivery.

To address the issue of incomplete walking infrastructure across the city, and provide a systematic, data-based approach to pedestrian infrastructure a dedicated program review is required. This has been undertaken through the Principal Pedestrian Network, with complementary factors applied as outlined under “The Prioritisation Framework” in Section 7.

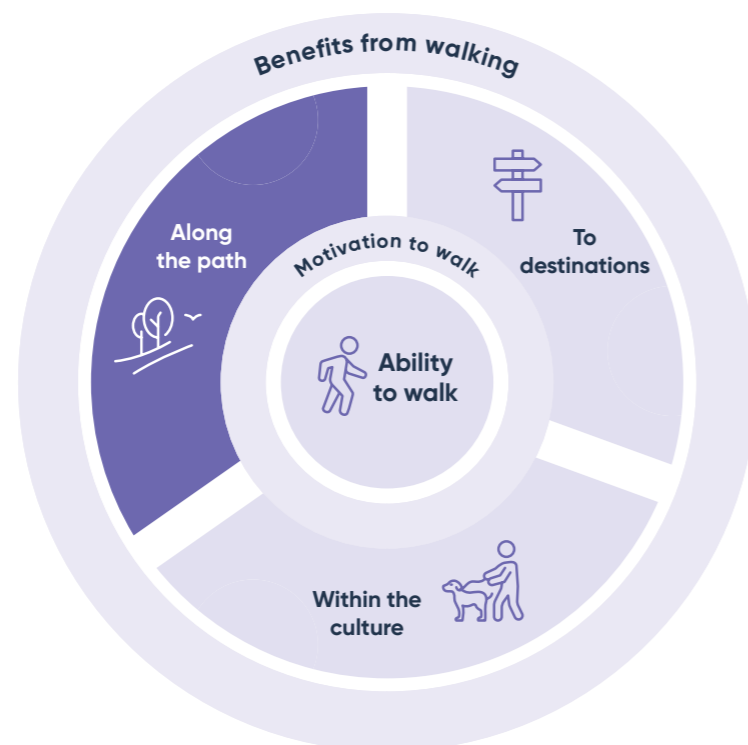


Figure 21 Elements of walkability targeted by actions to “Promote safety and prioritisation of pedestrians”



## Principal Pedestrian Network

The Principal Pedestrian Network (PPN) shows the routes that would be frequently used to get to key destinations by people taking the shortest path from home. This helps identify priority connections to support people accessing the places they need to get to, including local shops, schools, parks, and transport stops.

The first step in developing the PPN required the mapping of:

- The paths people can take throughout our city
- Residential locations
- The destinations people could walk to

The PPN included over 3,000 destinations that people could walk to in Newcastle. These destinations were categorised by type such as bus stops, other transport facilities, education, parks, community services and retail.

By estimating the distance people are willing to walk to different destinations (based on responses to the 2022 pedestrian survey), shortest paths were mapped for all people within that 'walkable' distance. The number of people on trips that would pass a segment of path, based on these shortest paths, were then calculated, and colour-coded on the map.

The outcomes as shown through the PPN are then filtered through a range of objective contextual factors to determine the location of greatest need for new footpath infrastructure, utilising the Prioritisation Framework (see Section 7 for more details).

Beyond being able to traverse pedestrian networks, the places people want to go to, and places people may want to stop along the way, need to be within walking distance. The NSW Government Future Transport Strategy is planning for "15-minute neighbourhoods, where car dependence is reduced through greater access to our daily needs through walking and cycling". Therefore, an important element of building a walkable neighbourhood is identifying and locating potential destinations appropriately.

Projects can be delivered more effectively by building continual improvement into program delivery, and building a framework to ensure that projects effectively address and resolve any stakeholder interactions. Integrating plans for walking infrastructure with other CN projects and within the overall transport planning of an area, also improves the effectiveness of the planning process.



## Actions

### 2.1. Establish a prioritised program of new works

– using the PPN and a range of identified factors, including road use, constructability, and community need for all pedestrian infrastructure, including footpaths, kerb ramps and crossings.

### 2.2. Establish project delivery improvements

– internal project delivery structure to include evaluations and insights into user experience to measure the outcomes of projects, and identify potential improvements for future projects.

### 2.3. Develop a framework to balance environmental, infrastructure and accessibility needs

– to improve integration of existing tree interactions, stormwater flows and asset lifespan, while limiting compromises to pedestrian accessibility, appreciating that flexibility in outcomes will be required.

### 2.4. Prioritise resourcing and budget for maintenance and renewal

– ensuring the pedestrian networks remain accessible, and that ongoing maintenance requirements do not prohibit innovative design solutions.

### 2.5. Develop an integrated planning approach

– through precinct transport planning, development guidelines, alignment with other programs, including tree planting, and consideration of walkability to and through CN destinations, particularly when upgrades or other changes are planned.

### 2.6. Explore options for pedestrian focused neighbourhoods

– through researching best-practice planning for sustainable precincts, identifying potential future development locations, and considering how barriers can be responsibly overcome.

### 2.7. Facilitate identification of potential new destinations

– using the PPN as a guide, identify where there is a need for new parks, local centres, and community facilities. Provide advice to inform other CN strategies and plans, and to other external authorities to assist with potential locations for new schools and other services.

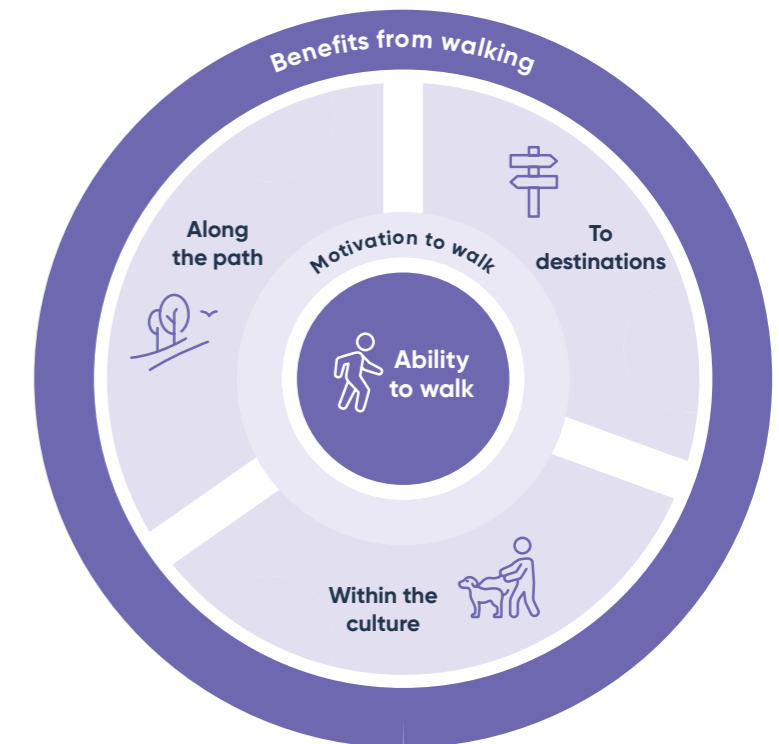


Figure 23 Elements of walkability targeted by actions to "Build and maintain walkable neighbourhood"

## Support walking trips and destinations

Every trip is unique. Its characteristics affect the requirements of the pedestrian, their environment, and their destinations. It is important that we build up our community's capacity to accomplish different trips by ensuring they are supported along their whole journey, including before they leave and when they arrive. This involves an appreciation of the different opportunities, challenges, and expectations of a walking trip in comparison to trips by other modes, such as cars. This can guide appropriate shifts in places, institutions, and cultures to orient them towards the needs of a pedestrian.

Giving pedestrians tools to empower their decision-making along the journey can both reduce the stress of walking, and potentially improve the way one chooses to travel. Tools can be both present in the environment or in the possession of pedestrians. It is important to ensure a combination of tools to avoid the reliance on the pedestrian to have access to certain technologies, while also appreciating the benefits of mobile applications, maps, and other tools that could be accessed.

Wayfinding is a key consideration for pedestrians. A person walking experiences their environment and the time and effort to arrive at a destination more intensely than traveling by other modes. Therefore, effective wayfinding can guide a pedestrian through the most appropriate paths, which can limit the effort, the inaccessibility, or exposure to the elements and pollution to ensure the trip is as pleasant as possible.

Destinations also need to be set up to arrive by walking. The access and facilities are key features for a destination to be walkable. However, other factors are also important from a user experience perspective. For example, someone who arrives at a park by walking doesn't have the option to shelter in the car if it starts raining, or quickly go to another park if it's too sunny or hot.

CN is in a great position to provide walkable destinations, with many CN managed destinations and facilities, and opportunities to set an example in how we encourage walking and other sustainable mobility across our organisation.

### Actions

- 3.1. Develop wayfinding strategy** – includes naming paths (that are away from the road), mapping accessible/shaded/quiet streets, directional signage including walking times to places, work with the local Aboriginal community to understand how wayfinding can incorporate appreciation of Aboriginal heritage.
- 3.2. Cater for pedestrians at/through destinations** – focus on CN locations, essential services, tourism locations, recreation facilities, and schools, with universal access and appropriate information provision to customers/visitors, and research user experience issues to understand all the leverage points to encourage walking, considering secure storage, water, places for prams etc.
- 3.3. Set an example** - develop and implement a green travel plan for CN staff and consider how more walking and public transport can be incorporated into work for both commuting and operational needs (site visits, walking meetings etc.)

- 3.4. Make streets more pleasant and comfortable** – shade, shelter, appropriate lighting, places to rest, connection to nature and culture along paths, and at destinations along the way.
- 3.5. Establish quality accessible public transport stops** – with potential for maps and other wayfinding, identify hubs which require additional amenity and consider co-locating with other places and facilities. Advocate for improved public transport infrastructure and services.
- 3.6. Develop and maintain pedestrian count program** – using existing and new data sources and devices, and explore options for future data collection, management, and visualisation

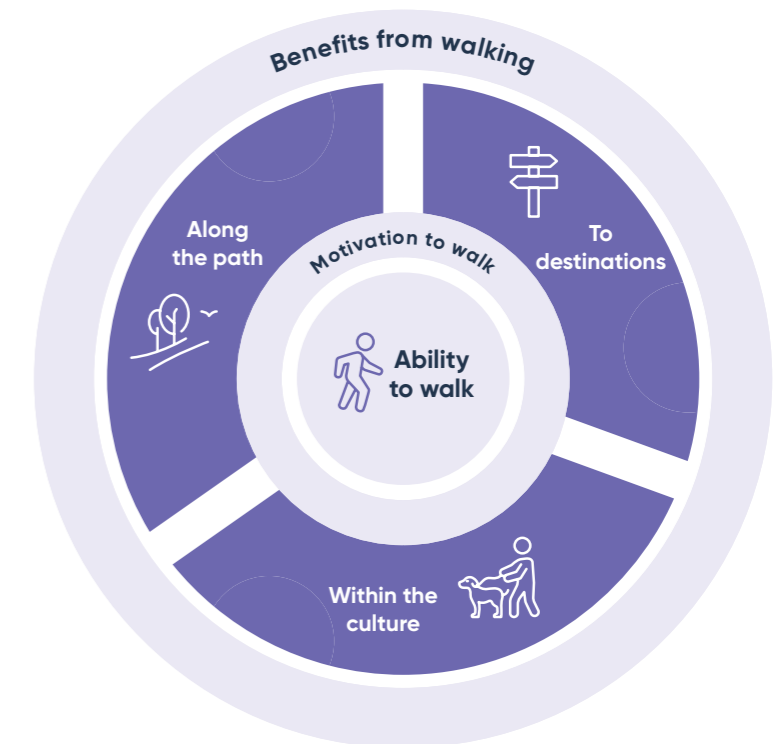


Figure 24 Elements of walkability targeted by actions to "Support walking trips and destinations"

## Foster and celebrate walking in our communities

Beyond physically enabling people to walk in their community, positive reinforcement through resources and initiatives is important to both encourage more people to walk and appreciate the importance of walking in our cities. The fundamental nature of walking within life and throughout history, gives it a special place in connecting with our past and with others. By working with communities to celebrate this, it can play a role in helping bridge various gaps.

To foster walking in our communities it is essential to identify appropriate channels to create cultural change and target audiences that will benefit. Communication campaigns can engage the community with walking, with messages through health, art and through high-profile community members.

Understanding when people are more likely to consider changing their behaviour or benefit the most from messages and initiatives also produces more effective campaigns. This can be done by targeting people at times when their routines and travel habits are changing, such as when they start school, university, a new job, move house, through parenthood or retirement.

Ensuring that people have access to great walking, as well as social, economic, cultural, and environmental opportunities throughout Newcastle, moves us from basic provision for pedestrians towards pride of place, and a closer connection to significant sites and the unique beauty of our diverse LGA. Enhancing places and paths, promoting them, and ensuring there is adequate access by public transport and connections to other active transport paths, creates an opportunity to celebrate them, and for them to become an attraction of our city.

For example, the shared paths in Fletcher provide an opportunity to appreciate the beauty of the adjacent Hunter Wetlands and to celebrate Aboriginal culture through significant sites such as Kauma Park. This plan will assist with promoting and improving accessibility by public transport and active transport to these kinds of recreational opportunities.

### Actions

- 4.1. Develop communication campaign** – walking promotion through opportunities such as health, art, and high-profile community members and leveraging life changes, such as moving house, having children, or starting university or work.
- 4.2. Support the coordination of community walking groups, events, and education** – focus on target groups that would benefit from increased walking access, such as new parents, children, and school communities.
- 4.3. Engage with Awabakal and Worimi communities** – to explore options to acknowledge the history and culture of walking in this area.
- 4.4. Promote walking as an experience and tool for tourists** – with online resources and tourist guide to accompany existing walking tour promotions.
- 4.5. Preserve, enhance, and improve access to places people want to walk recreationally** – within walking distance of their homes or public transport nodes, this also reduces car dependency through improved access to walking opportunities.

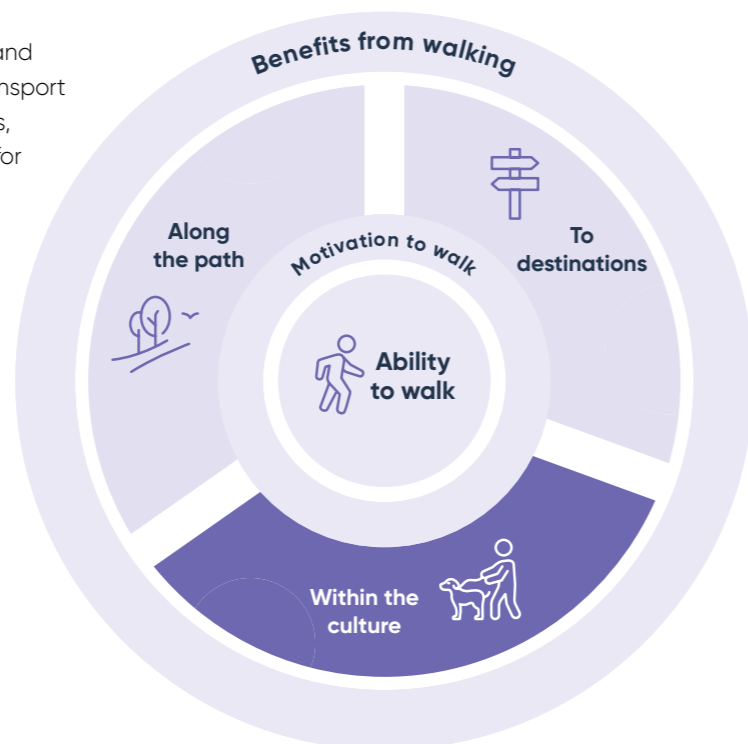


Figure 25 Elements of walkability targeted by actions to "Foster and Celebrate Walking in our communities"



## 7. Delivering the Plan

A key aspect of delivering this plan is the need for a high level of consideration towards the prioritised program of works. The prioritisation framework has been developed to guide the implementation of the program of infrastructure works.

The Walking and Mobility Working Party, which was established in 2023 as a recommendation from the Access and Inclusion Advisory Committee, was pivotal in the development of this framework. Through the breadth of stakeholders, expertise, and lived experience of people of different ages, abilities and mobilities, this group discussed how different factors should be considered to determine how projects are identified, prioritised and scheduled for delivery. This included recognising the need for adaptability in the pedestrian program to cater for changes in the city.

It is also important to ensure that the delivery of infrastructure is in line with expected level of service across the city. Determining the scope of the project will include the assessment of the level of service required for local streets that are relatively easy to cross, where provision of footpaths on one side of the road provides adequate connectivity. Contributing factors such as width and suitability of verges, and providing accessible and safe connections to destinations and services, such as public transport, will also determine the project scope.

## The Prioritisation Framework

Footpath projects will be identified by taking the PPN output along with the map of existing footpath distribution, and the identified indicators to assess project priority as developed by the CN Walking Mobility Working Party.

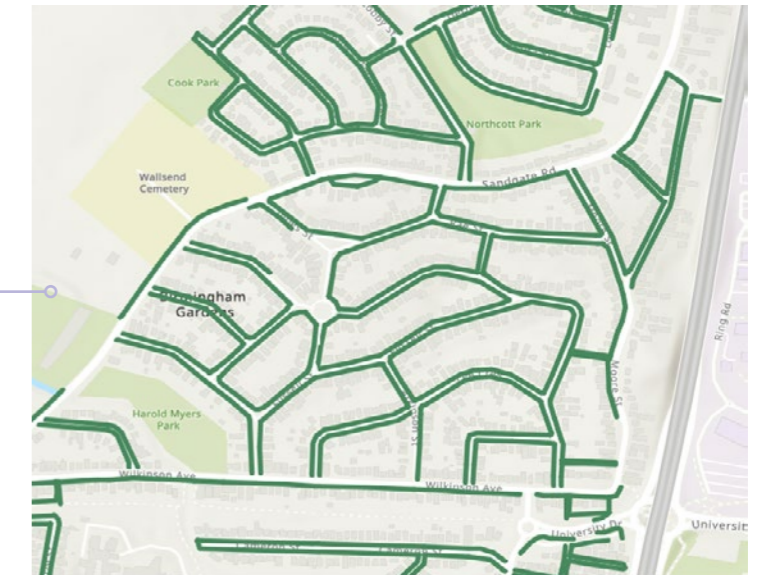
Noting that some projects will provide missing links, others will be extensive route connections, which include new routes of travel and new crossing infrastructure, and some will update and expand existing pathways. The projects will be prioritised based on the following factors:

- Area planning outcomes (which complements the PPN output)
- Classify road/street type and use (including bus routes)
- Constructability rating including location in road corridor
- Environmental considerations (bushland corridors, water courses, flooding and water sensitivity)
- Community feedback/requests for infrastructure
- Socio-demographic indicators (e.g. age, disability, Socio-Economic Index for Areas (SEIFA) score)
- Footpath density in area
- Accessibility – gradients and bus stops
- Additional benefits – alternative to busy street, nature

Based on these factors a program is developed with diversity in project types and locations. The prioritisation is adaptable based on new developments, new knowledge, and improved data processing capabilities.

### Birmingham gardens – factors affecting project type and prioritisation.

- ↑ Footpath: verge ratio – less than 28% (low) → route connection
- ↑ Low SEIFA score – 919 (2nd lowest in LGA)
- ↓ Need assistance due to disability 3.3% (3rd lowest)



Green shows verges without footpaths in 2023

### Project scoping – route choice

- PPN output
- Street use – bus routes
- Gradients
- Constructability



PPN output with red showing highest potential demand

### Project planning

- Project size and complexity
- Potential for staging
- Risks and stakeholders
- Survey and initial costing



Figure 26 Example of project prioritisation, scoping, and planning

## 8. Measuring success

Systematic and regular reporting on the progression of the Walking and Mobility Plan will be integral in monitoring the success of delivery. This requires a comprehensive suite of indicators to ensure all facets of the plan are being implemented effectively and objectives are being realised. This needs to be balanced with the efforts to acquire relevant data. Our targets by 2034 we will:

- Double the proportion of people walking or taking public transport to work and school in all residential zones across the LGA.
- Increase the length of new footpath in our LGA by 50km.
- Consistently improve accessibility and connectivity of the existing network.
- Increase walkability scores, including the social infrastructure index score across the LGA.

Progress will be tracked and demonstrated using reports and updated network maps on CN's website. We will measure our progress towards our desired outcomes through a range of indicators covering:

- Expanded and equitable network,
- Safety and prioritisation of pedestrians,
- Increased walking and modal shift to active transport,
- Motivations, capabilities, and benefits of walking for the community.

A range of qualitative and quantitative measures are proposed, using available data sources including the Australian Bureau of Statistics (ABS) Census, Household Travel Survey and Centre for Road Safety statistics, supplemented by CN commissioned surveys, counters and other efforts to source data demonstrating our progress with the plan.

### Annual Walking and Mobility Infrastructure Delivery Report including:

- Projects in design: Project type, location, road classification, output in kms of footpath, number/type of crossings, total expenditure (including any grant funding).
- Projects constructed: Project type, locations, road classification, output in kms of footpath, number/type of crossings, total expenditure (including any grant funding).
- Further project information from wider Transport Program, and all CN works involving pedestrian infrastructure components.
- Bus stop upgrades and kerb ramp locations (detailing locations and expenditure).
- Pedestrian counter data, including location of counters, plus annual data summaries.
- Review of recorded pedestrian accidents across the city as per NSW Government's Centre of Road Safety statistics.
- Running data totals for each year of report delivery.
- Updated public facing maps resolved from PPN outputs to outline current identified projects.
- Reports to be reviewed by delegated Committee of Council to review performance and delivery outcomes.

### Pedestrian Survey - conducted every three years

The Survey will be based on the 2022 survey conducted during the development of the plan, however questions to be reviewed and refined. Key questions will inform the following indicators and determine if attitudes and behaviours are trending towards a more walkable Newcastle, and will be reviewed each survey to ensure results are effective and usable to assist future planning.

An overall increase in people walking with focused increases walking rates for:

- People with lived experience of a disability
- People who are older
- People accessing employment
- People accessing education
- People accessing community services and facilities

A reduction in barriers to walking with the following indicators:

- Increase in people feeling safe while walking
- Increase in percentage of women feeling safe while walking at night
- Reduction in people identifying infrastructure barriers to walking
- Improvement in people's attitudes and awareness of opportunities to walk for transport
- Levels of participation in walking activities and events

### External Data Reporting

Key data capture sources conducted at a national and state level are to be gathered when data is made available. Information of these surveys will be collated, in collaboration with other transport outcomes (e.g. cycling) and a report provided through to CN, as well as provided online for public information. Noting that the available information is determined by external bodies, the current available sources are as follows:

- ABS Census Data (every 5 years) including:
  - Increase % of journeys to work by walking or public transport by suburb
  - Decrease % of journeys to work by car by suburb
- NSW Household Travel Survey (annual) including:
  - Increase % in total trips and kms by walking or public transport
  - Decrease % in total trips and kms by vehicle driver and passenger
- NSW Schools Infrastructure Reports:
  - Increase in children actively travelling to school





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