ITEM 8.1 CCL 25/06/24 – DRAFT WALKING AND MOBILITY PLAN -

PUBLIC EXHIBITION

REPORT BY: PLANNING, TRANSPORT AND REGULATION

CONTACT: EXECUTIVE DIRECTOR PLANNING AND ENVIRONMENT /

INTERIM EXECUTIVE MANAGER TRANSPORT AND

REGULATION

PURPOSE

To place the draft Walking and Mobility Plan on public exhibition.

RECOMMENDATION

That Council:

Place the draft Walking and Mobility Plan (Attachment A) on public exhibition for a period of a minimum of 42 days.

KEY ISSUES

- 2 As per a Notice of Motion supported in March 2018, a plan for walking and mobility in Newcastle has been drafted. This is the first plan developed by CN with a specific focus on walking and pedestrian infrastructure.
- The draft Walking and Mobility Plan (the Plan) is a 10-year framework which sets out the vision, objectives, and actions, that if implemented as planned will support the realisation of the community's desire for Newcastle to be a city where walking is a safe, accessible, convenient, and enjoyable part of people's lives.
- The Plan has been developed with consultation with the community and other relevant stakeholders, through surveys, interactive maps, and the establishment and coordination of the Walking and Mobility Working Party. The Working Party was established by the Access and Inclusion Advisory Committee to assist with the development of the Plan.
- The Principal Pedestrian Network (PPN) and Prioritisation Framework has been developed with the input of the Walking and Mobility Working Party. The PPN will be the initial stage of multiple factors considered as part of the prioritisation for works. These stages utilise GIS mapping of a range of parameters as outlined in the Plan, with key area mappings developed along the lifecycle of the 10 year Plan. Key case studies have been undertaken for inclusion in the Plan, utilising potential high priority projects identified based on the Framework.
- The Plan addresses several of the United Nations' Sustainable Development Goals including good health and wellbeing, reduced inequalities, sustainable cities and communities, and climate action.

FINANCIAL IMPACT

- 7 Costs associated with the exhibition process will be met within existing budgets.
- Significant investment over a sustained period of more than ten years will be required to achieve an accessible, safe and convenient pedestrian network. The actions in the Plan will be delivered over multiple financial years as a component of CN's Transport Program, and via a range of complimentary programs associated with pedestrian infrastructure, and operational delivery of the Traffic and Transport team. Actions that require funding will be identified in CN's four year Delivery Programs and annual Operational Plans.

NEWCASTLE 2040 ALIGNMENT

9 The Plan is consistent with the strategic directions of the Newcastle 2040 Community Strategic Plan.

Liveable

- 1.1 Enriched neighbourhoods and places
- 1.1.1 Well-designed places
- 1.2 Connection and fair communities
- 1.2.2 Inclusive communities
- 1.2.3 Equitable communities
- 1.2.4 Healthy communities
- 1.3 Safe, active and linked movement across the city
- 1.3.1 Connected cycleways and pedestrian networks
- 1.3.4 Effective public transport

Sustainable

- 2.1 Action on climate change
- 2.1.3 Resilient urban and natural areas

Creative

- 3.1 Vibrant and creative city
- 3.1.3 Tourism and visitor economy
- 3.2 Opportunity in jobs, learning and innovation
- 3.2.1 Inclusive opportunities
- 3.3 Celebrating culture
- 3.3.1 Culture in every life

IMPLEMENTATION PLAN/IMPLICATIONS

10 Actions that require funding will be identified in CN's Delivery Program and Operational Plans, allowing CN to undertake the actions as funding / resources allow. All actions from the Plan will formalise current operations and be incorporated as ongoing standard operational delivery for CN.

RISK ASSESSMENT AND MITIGATION

- 11 The Plan commits CN to work towards the provision of a safe, accessible, and convenient pedestrian facilities across the Newcastle local government area based on an evidence-based approach reflecting best practice and community aspirations.
- Risks associated with insufficient funding or resources to achieve the Plan's vision could lead to a continuation of historic issues associated with pedestrian infrastructure across the city. This will perpetuate the dependence of vehicles, having ongoing impacts on safety and public health.

RELATED PREVIOUS DECISIONS

13 At the Ordinary Council meeting on 27 March 2018 Council adopted a Notice of Motion related to Footpath Delivery. Part four of the motion stated that Council:

Prepares a proactive Footpath Strategy to guide investment in the delivery of new footpaths across the city over the duration of the next Community Strategic Plan based on the principles of the PAMP hierarchy, and considers the opportunities available to further expedite the delivery of footpaths across the Local Government Area.

14 At the Ordinary Council Meeting held on 23 February 2021, Council adopted the Parking Plan and Cycling Plan as two plans underpinning CN's Transport Strategy. The Cycling Plan included vision statements for walking, along with objectives related to walking.

CONSULTATION

- 15 CN conducted a survey in 2022, in which 660 participants provided feedback related to their current walking behaviour, as well as the barriers and enablers for them to walk more. The survey included questions related to the distance people were willing to walk to different destinations and this data was used to estimate walking catchments for different destinations in the PPN.
- At the end of 2022, a workshop was held with the community to explore issues with planning walkable neighbourhoods in the western corridor.
- 17 CN conducted another engagement activity with the community in 2023, which involved an interactive mapping exercise based on the first iteration of the PPN model. Over 888 comments were provided and the accompanying survey was completed by 312 people.
- 18 In November 2023 the Newcastle Walking and Mobility Working Party was established by the Access and Inclusion Advisory Committee with representatives from relevant stakeholder groups and the community. The

- Working Party has informed the drafting of the Plan and comments received have been incorporated into the Plan.
- 19 CN has set up a registration form, so that people interested in the Plan can stay informed of any consultation or updates in relation to pedestrian projects or actions delivered by CN. There are 73 community members registered, and they will be sent a link to the draft Plan once should it be placed on public exhibition.
- There is currently a Pedestrian Crossing Survey being conducted by the Traffic and Transport Team. This is complementary to the Plan and will assist with the ongoing development of information and public education in relation to pedestrian facilities in Newcastle.
- 21 The draft Plan has also been provided to the Liveable Cities Advisory Committee, and the Access & Inclusion Advisory Committee for review and comment. Presentations on the Plan were made to both committees to enable further information and discussion on the Plan. Comments received have generally been incorporated into the Plan. A presentation has been scheduled for the Infrastructure Advisory Committee during the public exhibition period.

BACKGROUND

- The benefits of walking are a key parameter covered under the draft Plan. It is one of the most sustainable forms of transport, producing negligible carbon emissions. Walking and riding are efficient ways to travel short distances, reduce congestion, lower emissions, pollutants, and increase the vibrancy of local places. Significant health benefits accrue from more active lifestyles, both for the individual and society collectively.
- Walking can play a pivotal role in achieving strategic objectives across CN's existing strategic actions. It is important that improving the walkability and the culture of walking is given the consideration, resources, and funding required to realise these benefits through the Plan.
- 24 The Plan, with the PPN and Prioritisation Framework, identifies projects strategically. This is critical in how pedestrian infrastructure will be planned and delivered.
- In 2023, targeted consultation was undertaken to ensure that the proposed wording for the Plan was suitably inclusive, in line with current community expectations and best practice for local government. Consultation included key subject matter experts within Government and advisory groups, with the matter tabled to the Access and Inclusion Advisory Committee to resolve that the Plan would be called the "Walking and Mobility Plan".

OPTIONS

Option 1

26 The recommendation as at Paragraph 1. This is the recommended option.

Option 2

27 Council resolves not to place the draft Walking and Mobility Plan on public exhibition. This is not the recommended option.

REFERENCES

ATTACHMENTS

Attachment A: Draft Walking and Mobility Plan

Attachment B: Pedestrian Survey Summary Report

Attachments A - B Distributed under separate cover

ATTACHMENTS DISTRIBUTED UNDER SEPARATE COVER

DAC - 25/06/2024 - Draft Walking and Mobility Plan - Public Exhibition

8.1 Attachment A: Draft Walking and Mobility Plan

8.1 Attachment B: Pedestrian Survey Summary Report

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City of Newcastle

On the Path

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



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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.

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A message from our Lord Mayor

Embracing active transport plays a critical role in empowering Newcastle to reach its potential as a liveable, sustainable and inclusive city. Having worked tirelessly to deliver the Bathers Way shared pathway, Fernleigh Track, and record investment into active transport across the city, I have witnessed firsthand the pivotal lifestyle changes our community has embraced.

Focussing on our Richmond Vale Rail Trail project, which connects the whole Hunter, together with how we deliver the missing links across our city is the next challenge.

Walking, and other human scale mobility is not just a means of transportation; it's a fundamental aspect of city life that brings us closer together and strengthens our sense of community. City of Newcastle understands that the presence of people is what truly animates our streets and neighbourhoods, it is what makes Newcastle a lively, inviting and safe place for all.

Newcastle has the groundwork to be the walking capital of Australia. We boast a wealth of natural beauty and cultural heritage. From our stunning beaches and harbour foreshore to

Blackbutt and the Hexham Wetlands, to the rich tapestry of Indigenous and non-Indigenous history, Newcastle is encompassed by spectacular places to explore and appreciate on foot.

Our plan to improve the walkability of our city will help make walking a better experience for everyone. Our aim is to build infrastructure that encourages

Novocastrians to make their trip on foot, on bike, or by public transport services. We want to connect those who have always defaulted to driving with convenient alternative transport mechanisms.

This plan confirms our commitment to ensuring Newcastle hosts the pathways required to foster a culture of walking and other human scale mobility. It is our guide towards securing enjoyable and accessible walking experiences for residents and visitors alike.

I want to extend my warmest thanks to all those who choose to travel our great city on foot. Your decision plays an integral part in shaping the uniqueness of Newcastle and is pivotal in forming our shared sense of community.

Councillor Nuatali Nelmes

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

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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 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, societies, 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.

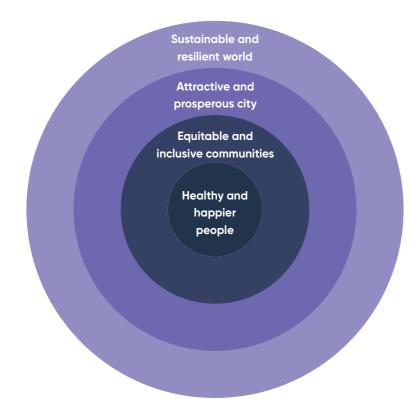
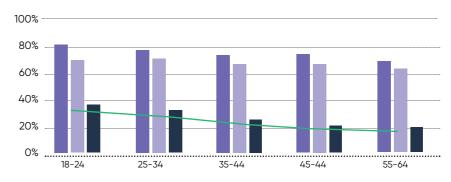


Figure 1 Benefits of a Walking City

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 and improving our immunity and the fitness of our heart, lungs, muscles and bones, to 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 as seen in Figure 2.

Proportion of adults aged 18-64 years by whether met physical activity guidelines and age, 2002



- Did 150 minutes or more of physical activity in the week prior to the survey
- Did physical activity on five or more daya in the week prior to the survey
- Did strenth and toning activities on two or more days in the week prior to the survey
- Met guidelines

Source: Australian Bureau of Statistics, Physical activity 2022

Figure 2 Proportion of Australians meeting the recommended physical activity guidelines in 2022

Walkable neighbourhoods have been shown to have improved health outcomes. Walking has additional benefits when we walk instead of drive to places, with improved wellbeing and less contribution to air pollution, and when we take the opportunity to walk in nature which stimulates our senses and improves concentration, cognition, and co-operation.

Current situation	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 can reduce 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 and care, to enabling people to access opportunities and services, to increasing the safety of our streets. Walking brings people of all ages and abilities together on the street. In creating great places for walking, we also create 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)

Walking strengthens social networks and trust in the community and can also improve economic and social opportunities 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 also reduce the need for friends and relatives to drive passengers that are unable to drive.

Current situation	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 sociodemographic groups	Walking can offer 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, death, and injury	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 place. Walking reduces the financial burdens 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)

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. Newcastle also has the potential to present itself as a walkable city for tourism, which can be expanded on to be 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, co-ordination, and regulation. This can improve the affordability, functionality and attractiveness of the city. Furthermore, it is important that these benefits are equitable and accessible to the most vulnerable people in our communities.

Current situation	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 enhance 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	Choosing walking for individual or multi-modal trips can reduce the price of access and reduces the need to upgrade, maintain and co-ordinate infrastructure and systems to support car use	

A sustainable and resilient world

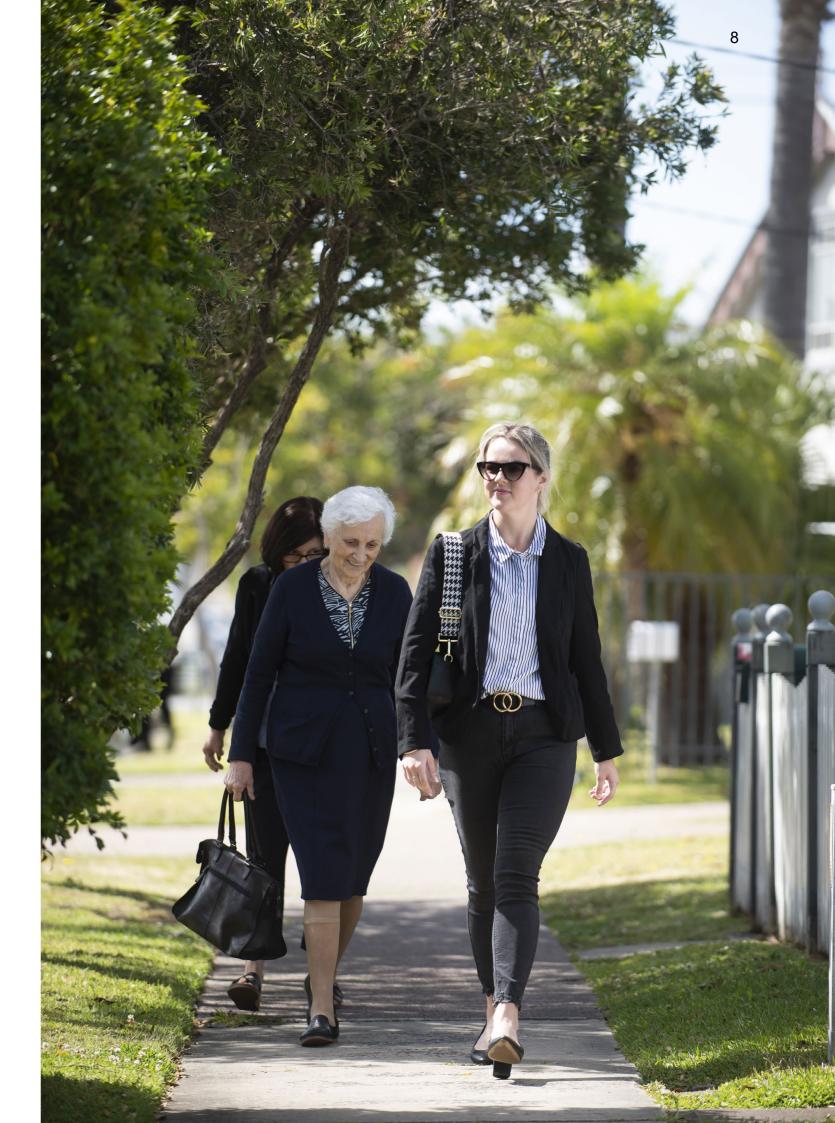
Walking creates more resilient and sustainable people, communities, and environments: from reducing our dependence on resources and complex institutions, to improving our fitness, strengthening communities, and allowing more space for natural and water sensitive cities. The simplicity of walking is a 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. 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 and managing shade and shelter as part of planning for walking is already important, reducing over exposure to sun, heat, as well as exposure to rain and cold and this 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. 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 situation	Role of Walking
Car dependency, vulnerable to supply and management issues	Walking increases the diversity of transport and land use options and reduces car dependence.
Environmental damage and the need to reduce emissions, waste, and land use	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
Rapid densification planning Walkable neighbourhoods allow planners, developers, and residents to recontrols, increased urban the need to cater for cars, allowing for more compact, green and sustained development development	



of Newcastle

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. Achieving the SDGs and the New Urban Agenda requires partnerships between stakeholders, including all levels of government, community and the private sector. 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 in 20 years.

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 identified action under the NSW Future Transport Strategy include:

More choices, better access

Improving transport solutions

- Supporting car-free, active sustainable transport options
- More connections to improve 30-minute cities

Thriving places

Enhancing liveability for communities

- Thriving 15-minute neighbourhoods
- Street space as public space
- Build well-designed transport infrastructure
- Improving the amenity of state roads

Maximising the use of our network

Releasing the potential of our infrastructure

- Reallocating road space
- More space for walking and cycling

Resilient communities

Building resilience and economic growth

- Considering climate change in all our decisions

These documents are supported by a range of standards, policies, and guides discussed later in the plan.

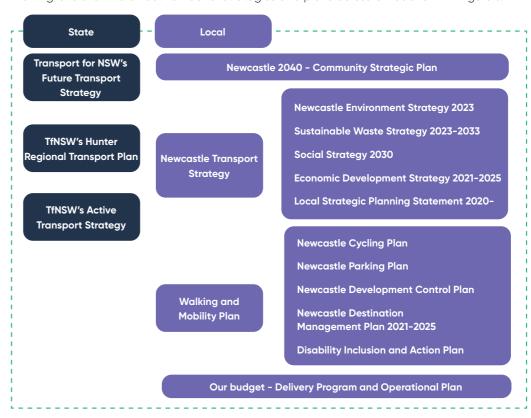
Local Level

Newcastle 2040 Community Strategic Plan (CSP)

City of Newcastle (CN) has a clear mandate from the community for a more walkable city. A number of clear 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.

Liveable	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
	1.3 Safe, active and linked movement across the city	1.3.1 Connected cycleways and pedestrian networks
		1.3.4 Effective public transport
Sustainable	2.1 Action on climate change	2.1.1 Towards net zero emissions
		2.1.3 Resilient urban and natural areas
Creative	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.



City of Newcastle

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.

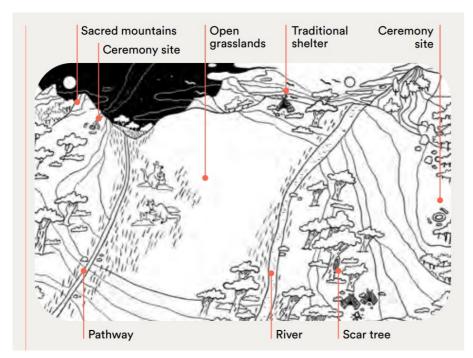
Both the global and local benefits of walking, along with the problems associated with a dependency on car use, have brought the need to support walking back into the spotlight. The COVID-19 pandemic and associated public health measures highlighted the importance of walking, for health, recreation, 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 not only gives it spectacular surrounds, as it spans between the ocean and the river, it also means there are less barriers to walking. It is important we embrace this potential to create a truly walkable city.

Stepping into the history of walking in Newcastle

The traditional owners of Newcastle are the Worimi and Awabakal people. Walking was not only the predominant form of travel, but it also was (and still is) an important part of the culture. Walking tracks were part of "in-between places", which can be seen as places of transformation where individuals could connect and communicate with others and strengthen their understanding of themselves, their community, and places.



There is much that can be learned by this wisdom about walking tracks, and we can also learn a great deal from how indigenous 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.

"For Aboriginal people, the past infuses the present in many ways, but it is through walking, and specifically walking 'in country', with all the complexities and cultural nuances that term implies in Aboriginal English, that the echoes of the past are most urgent, and the light they shine toward a better future particularly insistent."

There is little continuing knowledge about the movements of the Awabakal people, with Newcastle's early colonisation reducing the potential for preservation of knowledge. However, it's likely that early roads carved through paths that were once movement corridors for indigenous people and there are some theories about where walking routes would have been.

Adjacent to Burraghihnbihng (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.

Since colonisation, our relationship to walking and movement has changed. The city centre was designed by Henry Dangar in 1923 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 from such mining villages include Merewether, Waratah, Minmi, Wallsend (formerly Plattsburg), Lambton, and New Lambton. The original design of streets in these villages would have assumed people walked on the street, with motorised transport being introduced as a later function.

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 dependency in Newcastle's culture. And while Hunter St 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, cars were reintroduced in 2009, and it is now being transformed again into a road space with a defined corridor for vehicles.

Many gaps in our footpath network were created with these suburbs not requiring footpaths as part of the urban development. More recent housing estate developments were required to provide a footpath on at least one side of all new streets and roads, such as in parts of Fletcher. This means there are many gaps and disparities in this type of social infrastructure across the city as identified in the City's Social Strategy. However, walkability extends beyond walking paths, and improved planning is needed to improve the walkability and reduce the car dependency of newer peri urban suburbs.

City of Newcastle

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 totaling 107,000 kilometres of walking across our LGA.

However, our walking is mainly for recreation purposes, as over 60% of people walk every day for recreation with far fewer people walking for transport purposes, as shown under Figure 5.

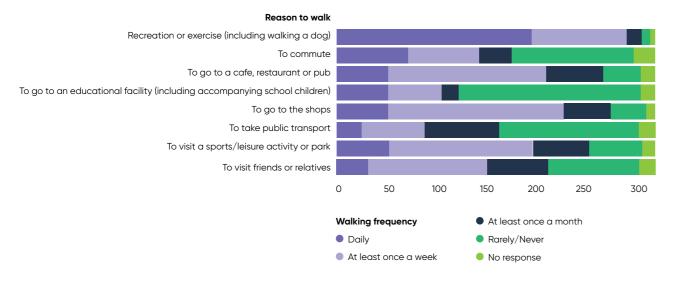
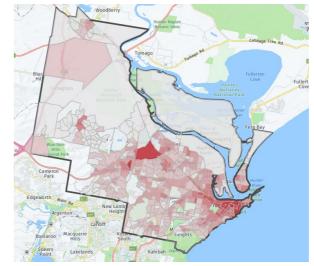


Figure 5 Frequency of people walking for different purposes

In exploring the potential to encourage more walking for transport in Newcastle, it is of interest to note the main reasons people travel in Newcastle are for commuting (19%), shopping (19%), recreation/social (26%) and providing transport for a passenger (15%). Trips which are recreational/social or serving a passenger have the greatest potential for walking, while there is significant potential to support commuters making a shift to the combination of public transport and walking with a corresponding improvement to public transport connections in the city.

People who walk for all or part of their journey to work are concentrated in only a few suburbs. Below shows the proportion of people who walked all the way (left) or took public transport (right) to work. The suburbs with the highest numbers of people walking to work are near the centre of Newcastle (~14%) and near the university (~7%), while suburbs such as Maryland and Fletcher, as well as Merewether Heights and Kotara, had almost no one walking to work.

Newcastle lags compared to other parts of NSW in using public transport (which usually involves walking for the first and/or last leg of the commute to work), with approximately 4% of employed people taking public transport to work in 2016. Suburbs with higher walking rates (for commuting) also take public transport more, with Islington and Hamilton being the suburbs that use public transport the most to get to work (8.8% and 8.4% respectively). It is important to note these suburbs are also well serviced by State Government public transport services and infrastructure.



Woodberry

Hugas Regen

Galdage Tree. Red

Fullerton

Cove

Wetlands

Varional Park

Common Park

Cameron

Park

Figure 6 Proportion of employed population who walked to work in 2016 (ABS Census)

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

In May 2022 a survey was completed by 660 people in Newcastle. They identified benefits (Figure 8), enablers (Figure 9), and barriers (Figure 10) to walking, along with indicating their propensity to walk to get places. People saw the benefits of walking as important to them:

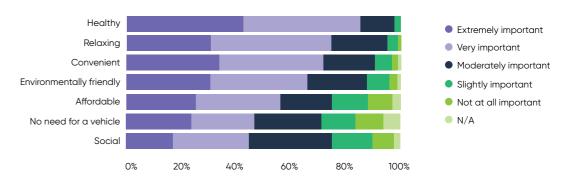


Figure 8 Importance of benefits of walking

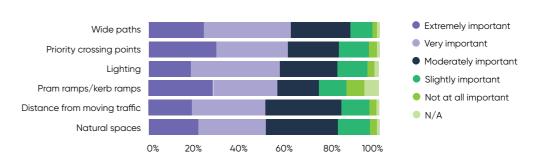


Figure 9 Importance of features in making walking attractive

Potential barriers to walking most frequently experienced by survey respondents included:

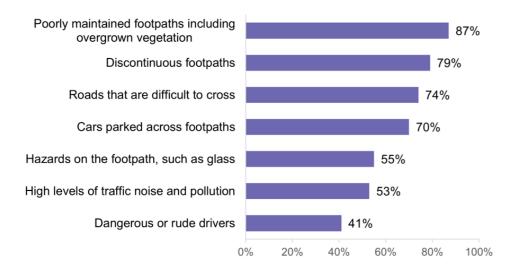


Figure 10 Barriers to walking

Lack of infrastructure was a key barrier to walking, noting that nearly 30% of people who said they walked less than they did last year. Some of this decrease was attributed to unsuitable infrastructure related to the noted barriers in Figure 10. 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. The majority of respondents stated that better pedestrian facilities would increase their likelihood to walk more often.

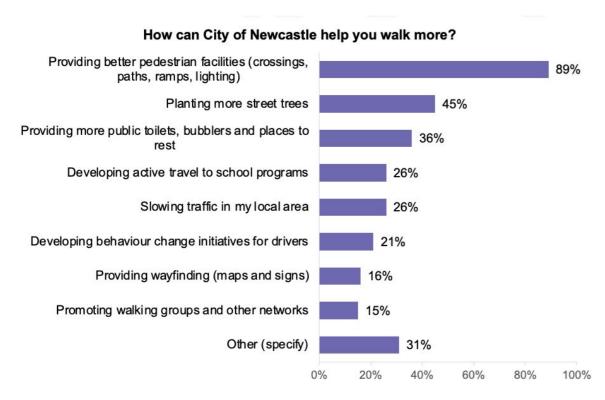


Figure 11 How City of Newcastle can help you walk more



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 has been defined through the infrastructure provision, and also the experience. By combining these definitions, 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 12 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 12 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 other shade, 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 multimodal 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 waves are also good this morning, and hundreds of keen surfers have jumped on bikes, buses, trams, and trains to get down to the surf. The lockers at the beach mean you don't need to lug everything, knowing

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 just 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.

It's early in the morning and the suburban activities – maybe the library, a playgroup streets are bustling with people at the park, or even a short bushwalk.

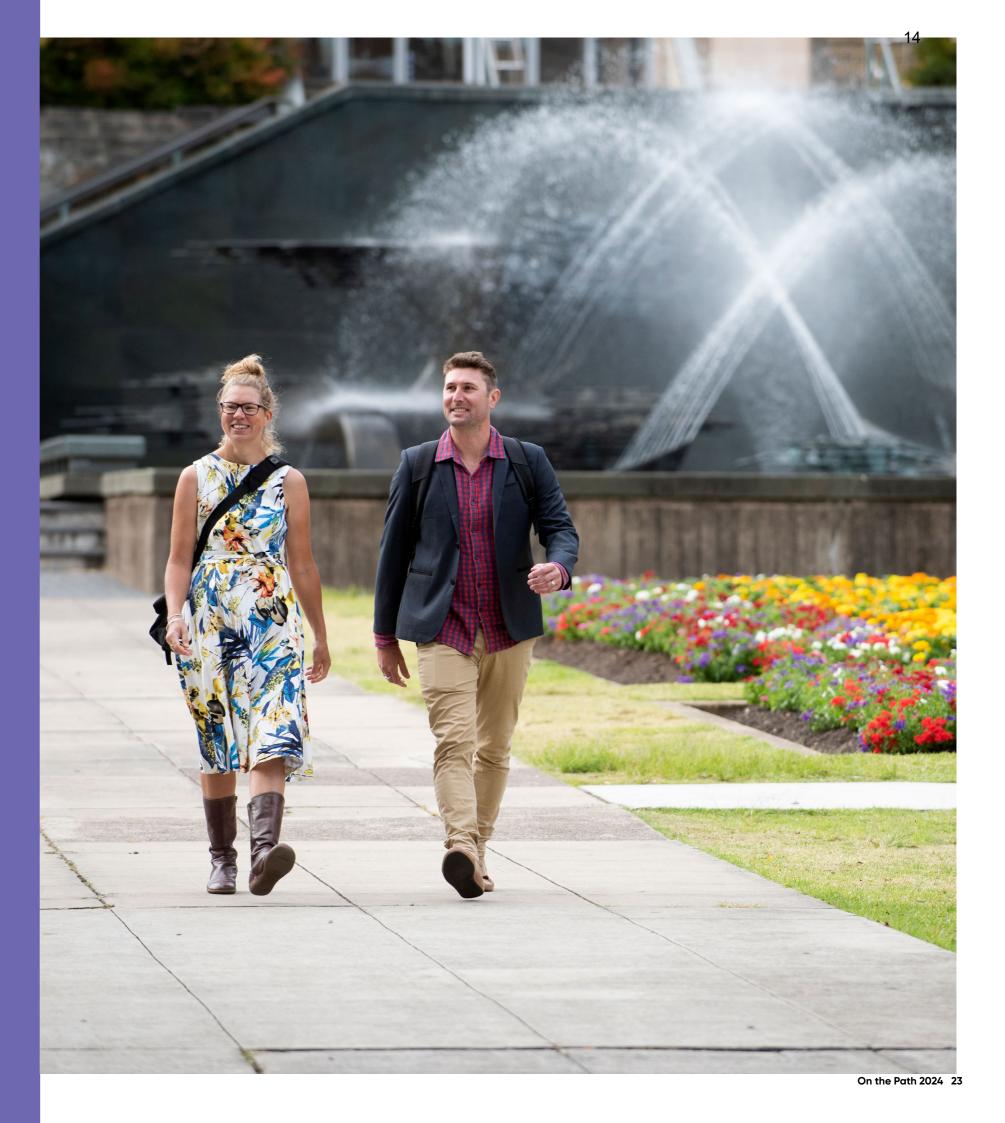
Prams, wheelchairs, and scooters converge at the park, where the young and old both have plenty of spaces and equipment for play, exercise, and socialising. The elderly love getting to know the young children they regularly run into on the way to the park. It reminds them of their own grandchildren, 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 thirtyyear-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.



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. To move towards genuine prioritisation of walking therefore requires multiple changes, which need to be coordinated to ensure the benefits of walking are realised across the community.

Walkscore and other indices

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 km2), 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 in creating walkable environments. It also highlights the link between walking and public transport provision.

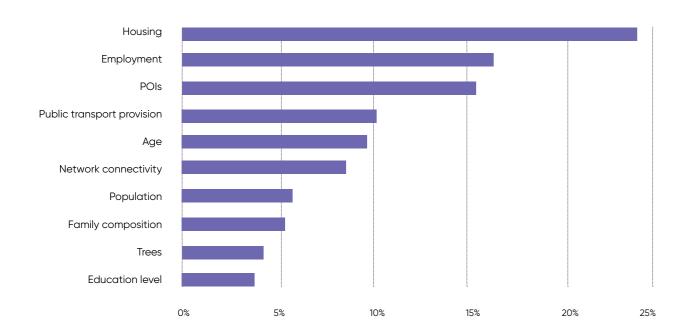


Figure 13 Factors influencing walkability in Sydney (Fletcher 202x)

Walking Space Guide

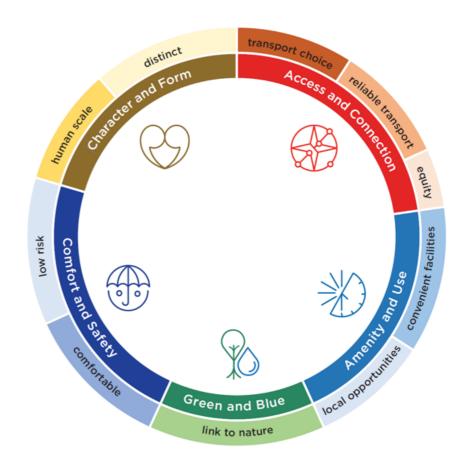
The Walking Space Guide gives an indication of how much space we should provide for people walking, including those that may require more space than others such as people with a disability, older people, people with injuries, young families, and people with dogs. The guide recognises the importance of 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 by the need to maintain tree canopy, avoiding excessive imperviable surfaces and keeping costs reasonable to allow for the delivery of more walking projects with our capital works program. Currently infrastructure has much lower levels of service for pedestrians than those recommended by the Walking Space Guide, and upgrading existing footpath sections needs to be balanced construction of new infrastructure to address the lack of footpaths along many sections of road.

Movement and Place Framework

The NSW State 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 permeable for pedestrians. The attributes to consider in the movement and place framework are shown in the figure below.



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.



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 when resolving pedestrian projects through 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:

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 brings wisdom from indigenous people's relationship with country to guide planning, design and management of our built environments. This framework highlights the importance of Country for indigenous people, which provides new understandings beyond Western concepts of place, through the continuing connection over thousands of years, Country has become a core part of identity and culture. The framework emphasises appropriate process and consultation in working towards the following outcomes: Healthy Country

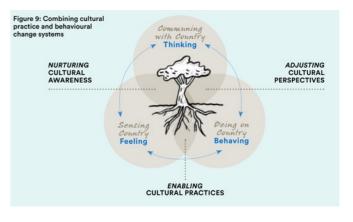
Healthy community

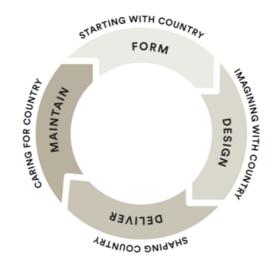
Protecting Aboriginal cultural heritage

Cultural competency

Better places

nsights from cultural practices can enrich how we consider behaviour change systems (Figure 16), and project delivery stages can gain insights from different relationships people have with Country (Figure 17).



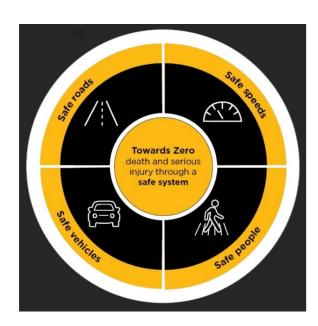


The importance of Walking Country is appreciated as "a visceral practice that activates feeling and engages all senses". There is also recognition of how walking facilitates knowledge sharing and strengthens interpersonal relationships with the potential for this practice to help project teams.

Safe systems approach

The safe systems 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.

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 that need to become safer: roads and roadsides; vehicles; road users; and speeds. In this way, the safe systems 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 systems 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.

Crime prevention throughenvironmental 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:

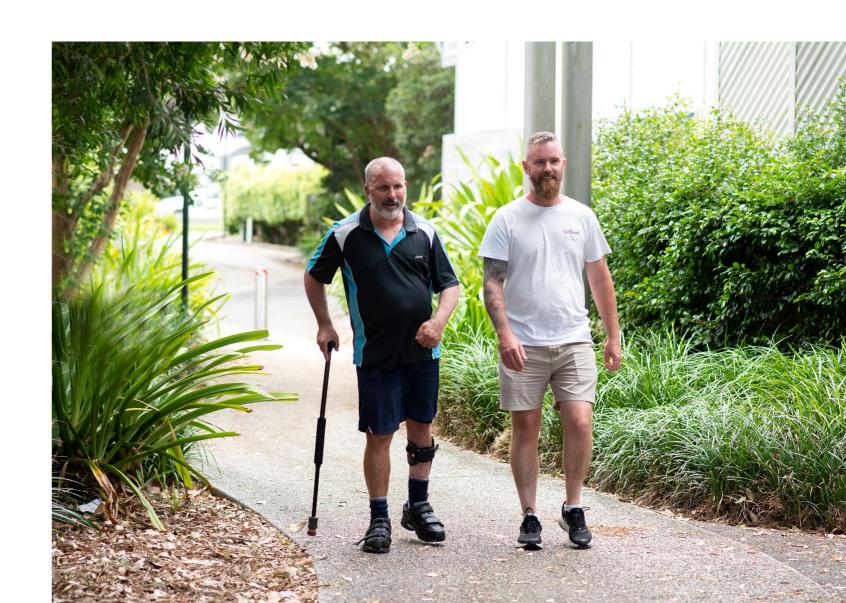
Surveillance - people walking become the eyes on the street, but it's also important that people feel safe when walking, with appropriate activity nearby, including at night.

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.

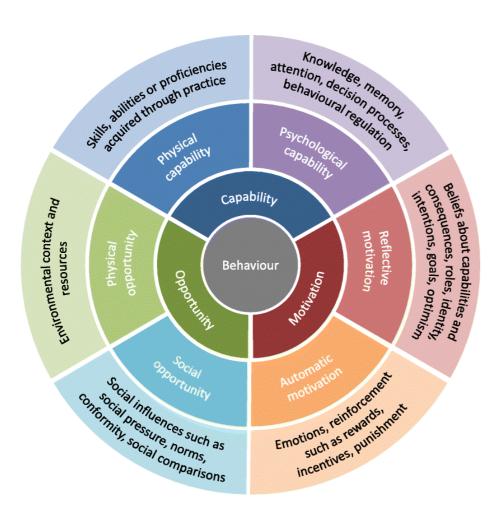
Lighting should be designed for inclusive environments to foster positive behaviours such as walking.
Lighting can be used to reinforce the principles of CPTED within a space. Lighting also reduces other risks to safety including falling and traffic crashes.



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 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.



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 will be the natural choices for short trips, as able, for all members of our community.

Principles underlying this plan

Based on the benefits, challenges, and approaches to active transport planning, we have developed principals that ensure we are holistically realising 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

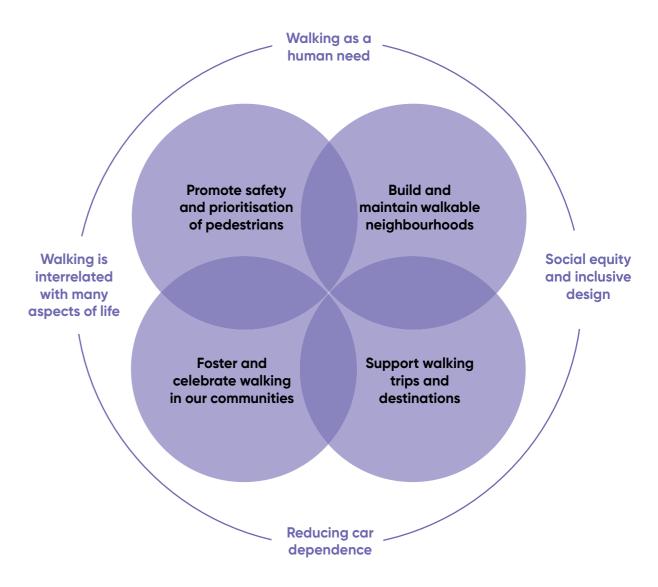


Figure 20 Objectives and Principles of Walking and Mobility Plan

City of Newcas

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, well-being, 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.



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 traffic 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 Council's 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.

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 for footpaths and 3.0 m for shared paths for new works, while acknowledging localised capacity and existing provisions which may require specific flexibility in application. Ensure pathways have consistent treatments along the whole route, with minimal compromises made to pedestrian outcomes.

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, where identified as possible.

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.

Plan for people within the existing road space -

increase space for walking, plantings, and recreation by converting road space while avoiding increasing number or width of lanes (unless for public transport). Consider potential inner-city locations where streets can be converted to spaces for people.

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).

Develop guidelines for CN to promote personal safety and crime prevention – ensure appropriate risk identification and design considerations when identifying, planning, and designing pedestrian projects across the city.

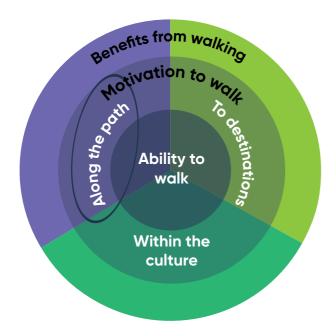


Figure 22 Elements of walkability targeted by "Promote safety and prioritisation of pedestrians

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:

"substantial challenges to increased participation in active transport. 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. Planning for cycling has been approached differently"

Additionally, a range of complimentary strategic plans, notably CN's Disability Inclusion Access Plan (2021-2025) (DIAP) and draft CN Social Infrastructure Strategy (2022) (SIS), identify as a priority achieving equity in the distribution and allocation of resources for public infrastructure like footpaths and connected mobility routes.

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, well-prioritised, and effectively and efficiently delivered. This is being done through the Principal Pedestrian Network map to identify projects, along with layers of other factors which influence how projects are prioritised and delivered.

In the SIS an audit was conducted on existing public infrastructure which identified deficits in continuous pathways of travel, noting the differential impacts of gender, mobility, age, socio-economic status,

geography, and so on, in disproportionately impacting equitable access to public infrastructure. The DIAP identifies a focus on ensuring equitable distribution of infrastructure and resourcing to overcome constructed barriers in the built environment (such as a missing footpath) in order to achieve the creation of continuous pathways of travel and street furniture and to provide opportunities for people of all ages, ability levels and backgrounds to engage fully in civic, economic, and social life and achieve respect, dignity, and recognition of our diverse communities.

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 "Delivery: The Prioritisation Framework" shown below/over page

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 those who responded to the pedestrian survey conducted in 2022), 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 8 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.

Prioritised program of works – utilising the PPN overlaid with a range of identified factors, including road use, constructability, and community requests, through a prioritisation program outlined under the Plan

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

Balance environmental and maintenance issues – through planned alignment with street tree planning programs, improved approaches to existing tree interactions, management of stormwater flows, and support for maintenance budgets reflective of the expanding asset base, to provide a high level

and support for maintenance budgets reflective of the expanding asset base, to provide a high level of service for pedestrian infrastructure to maintain universal accessibility pedestrian infrastructure.

Develop integrated planning approach - through Precinct Transport Planning, development guidelines, and consideration of walkability to and through CN destinations, particularly when upgrades or other changes are planned, including major infrastructure projects.

Explore options for pedestrian focused

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

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 planning, and to other external authorities to assist with potential location for new schools and other services.

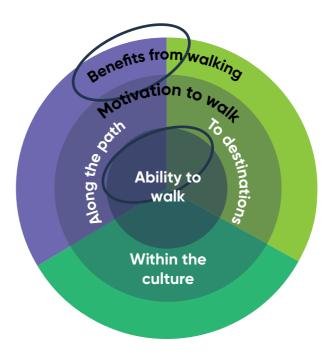


Figure 24 Elements of walkability targeted by "Build and Maintain Walkable Neighbourhoods"

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 apps, 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 set an example in how we encourage walking and other sustainable mobility across our organisation.

Develop wayfinding strategy – includes naming paths (that are away from the road), mapping accessible/shaded/quiet streets, directional signage including times to places, work with indigenous community to understand how wayfinding can incorporate appreciation of aboriginal heritage.

focus on CN locations, essential services, tourism locations, and schools, with 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.

Cater for pedestrians at/through destinations –

CN to 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.)

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.

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.

Develop and maintain pedestrian count program - using existing and new devices,
and exploring option for future data

collection, management and visualisation



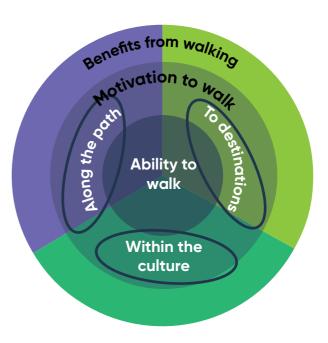


Figure 25 Elements of walkability targeted by "Support walking trips and destinations"

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.

Identifying appropriate channels to create cultural change and target audiences that will benefit is essential to fostering walking in our communities. 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 be able 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 connected 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 indigenous 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.

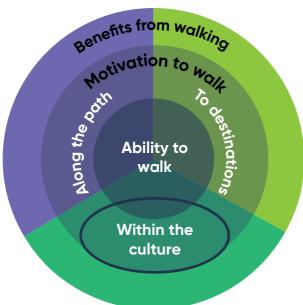
Develop communication campaign – walking promotion through opportunities such as health, art, and high-profile community members and leveraging life changes, such as moving house, having children, or starting university or work.

Support the co-ordination of community walking groups, events, and education – focus on target groups that would benefits from increased walking access, such as new parents, children, and school communities.

Engage with Awabakal and Worimi communities - to explore options to acknowledge the history and culture of walking in this area.

Promote walking as an experience and tool for tourists - with online resources and tourist guide to accompany existing walking tour promotions.

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.





Delivering the Plan

As outlined above in the Plan, CN is committed to ensuring public infrastructure is developed according to actions guided by:

- 1. An alignment with the United Nations SDG #10 - Reduced Inequalities via actions that aim to reduce inequality by providing equal or equivalent access to employment, services, facilities, infrastructure and programs,
- 2. delivering services in a more inclusive way,
- 3. building more liveable places and spaces, accessible buildings, amenities and other infrastructure that caters to an ageing and diverse population, and
- 4. ensuring widespread access and usability to the community as a whole.

To achieve this, it is essential that projects and programs are delivered in a timely and effective manner. A key aspect of this delivery if 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 working towards 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 in determining how projects are identified, prioritised and scheduled for delivery. A key aspect was the confirmation that adaptability within our infrastructure is important in ensuring our program is inline with our changing city, which must be provided through a flexible and adaptive program across the lifespan of the Plan.

The social and technical dimensions of 'usability' of pathways include equity, usability, volume, condition, gap analysis, predicted volume, socio-demographics, and availability. Mapping these layers to determine priority need will allow CN to refine decisions over the allocation of resources to footpaths; including new, refurbished or reconditioned, and to 'close gaps'. Another important consideration in achieving continuous pathways of travel in the city, is the intersection of footpaths with other functions of the city that affect pathways for walking (e.g. local centre upgrades, infrastructure works, shared pathways, multi-modal active and public transport connections, verge use, tree planting, driveways, etc).

It is also important to ensure that the delivery of infrastructure is in line with the demand across the city. The determination of project scope will also include assessment as to the infrastructure provided in relation to the level of service provided for local streets that are relatively easy to cross. This may include areas where footpaths on one side of the road are be appropriate to provide connectivity, noting contributing factors such as clearance and suitability of verges, and providing suitable connections to associated infrastructure such as public transport.

The Prioritisation Framework

Taking the PPN output along with the map of existing footpaths distribution, and the identified indicators to assess project priority as developed by the CN

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

Area planning outcomes (which

Classify road/street type and use (including bus routes)

Constructability rating – decide which side(s)

Community feedback/requests for infrastructure

Socio-demographic indicators (e.g. age, disability)

Accessibility - gradients & bus stop

Based on these factors a program is developed 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.



Blue shows bus routes

Project planning

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



City of Newcast

8. Measuring success

Measuring the success of the Walking and Mobility Plan needs to take a holistic approach to the many objectives outlined, and to ensure the benefits associated with walking are being realised. This needs to be balanced with the efforts to acquire available relevant data, and integration into the ongoing operational delivery of pedestrian infrastructure for the city. Systematic and regular reporting on the progression of the Plan will be integral in monitoring the success of delivery.

A range of qualitative and quantitative measures are proposed, using available data sources including that 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.

Our targets are that by 2034 we will:

- Increase the proportion of people walking or taking public transport to work in each suburb across the LGA.
- Achieve consistent delivery of upward trends through improvement of:
 - Percentage of modal share for walking as transport,
 - · Walkability scores for the city,
 - Accessibility connectivity for all pedestrian infrastructure,
 - Social infrastructure index score for all residents regardless of age or ability, and
 - Overall quality of life for residents of Newcastle.

We will be able to measure how we are making progress on achieving 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

Data reports will be prepared based on the information source, covering projects adopted and delivered, project status, activities undertaken and issues. Network maps will be regularly updated on CN's website with the progression of the works program, according to prioritisation, and with regular updates to ensure the community has the ability to understand the plan for works across the city.

Annual W&M 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

Survey to be conducted every three years. Survey basis to be built from previous survey under W&MP development, but questions to be reviewed and refined each year. Survey to show development of data for each iteration, with key identifier questions as follows:

Increase in people feeling safe while walking

Increase in percentage of women feeling safe while walking at night

Increase in percentage of people with a disability walking regularly

Increase in percentage of elderly people walking regularly

Increase in people walking and taking public transport to commute

Increase in people walking and taking public transport for education

Increase in people walking and taking public transport to community facilities

Improvement in community attitude towards walking for transport

Improvement in community education and knowledge of walking opportunities

Increase in participation in organised walking activities and events

Reduction in % of people who identify infrastructure as a barrier to walking

Reduction in % of people who identify cultural barriers to walking

Survey responses to be reviewed to ensure ongoing positive outcomes across all fields identified in the survey, measured back to the metrics outlined under the 2022 pedestrian survey.

External Data Reporting

Key data capture sources conducted at a national and state level are to be gathered each year on completion of the surveys by external parties. Information of these surveys will be collated, in collaboration with other Transport outcomes (eg cycling) and a report provided through to ELT/Council/Committee as determined, 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 including:

Increase % of journeys to work by walking or public transport by suburb

Decrease % of journeys to work by car

NSW Schools Infrastructure Reports:

Increase in children actively travelling to school

City of Newcastle

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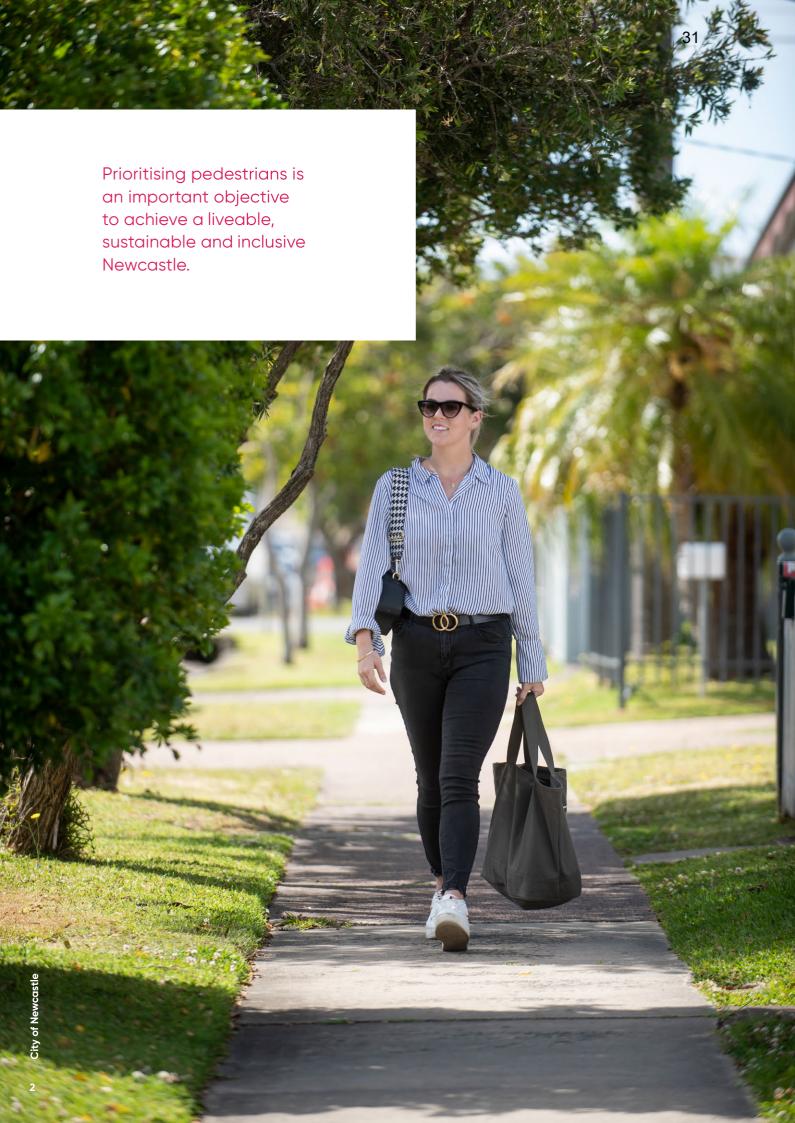
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Summary report

Principal Pedestrian Network Walking Behavioural Survey





Project Background

City of Newcastle (CN) is developing a strategic approach in response to:

increased participation in walking or other pedestrian activities

addressing barriers to walking and other pedestrian activities

improving the experience and safety of pedestrians across the city

A key component of this strategic Plan for walking and mobility is the 'Principal Pedestrian Network' – a mapped network of routes which support pedestrian activity into and around key destinations such as shops, schools, parks and transport stops.

What we did

To better understand pedestrian access and walkability of our city, CN conducted an online survey from 12 May to 30 June 2022. The purpose of the survey was to:

understand walking patterns and behaviours

explore current distances and willingness to walk to various facilities/locations

understand the benefits of walking and features that are important for making streets accessible

identify potential barriers and/or hazards that limit the accessibility of walking

learn how CN can encourage people to walk more

Information from this survey will be combined with our existing project database and other insights to guide the identification, prioritisation and development of pedestrian projects across the city.

Who we heard from

A total of 660 people responded to the survey, with responses from across all four wards. There was a strong response from females (69%) and couples/families with children (57%). 12% of respondents reported having lived experience with a disability.



660 people responded



were female



57% were couple/ families with children



had lived experience with disability

What we heard

Usage of public streets, parks and other public spaces

Walking and other pedestrian activities include:



walking alone, with others, with children, prams or pets



jogging



using bicycles, scooters, skateboards



using walking/mobility aids such as wheelchairs, mobility scooters, walking frames or walking sticks

Walking enables us to get places and has important health and social benefits

Walking activity

When asked the number of days in a typical week that they spend more than 5 minutes walking: more than 99% of respondents participated in some level of walking activity

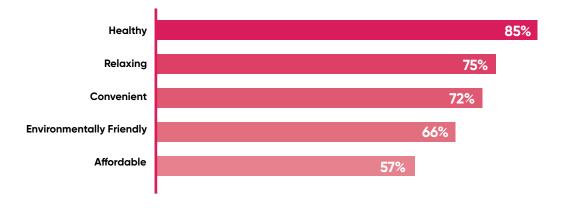
78% of respondents said they walked nearly everyday (5 or more days in a typical week)

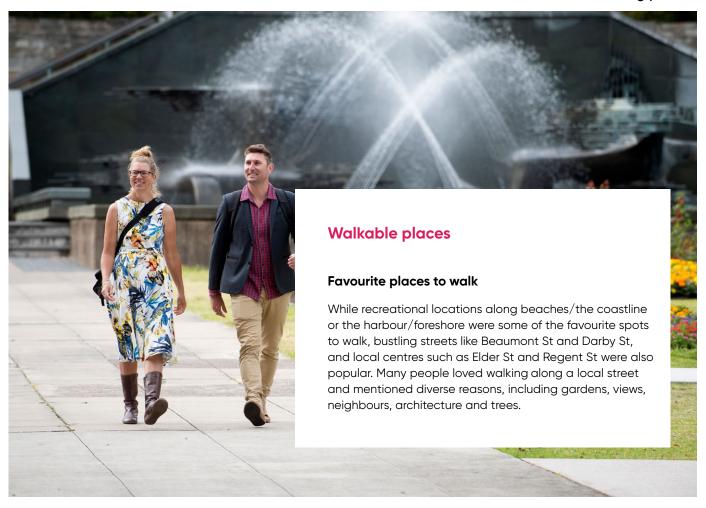
more than half (52%) of respondents walked everyday during a typical week

Without prompting, people associated walking with a range of important moments and activities – from exercise and socialising, to relaxing, thinking, and enjoying the fresh air and surrounds.

Benefits of walking

We asked how important specific benefits of walking were to respondents and the top 5 most important identified were:





Ensuring people can walk to the places they are willing to walk

Respondents were asked about their willingness to walk to various destinations and how long it would currently take them to walk there.

A majority of respondents were willing to walk the current distance to:

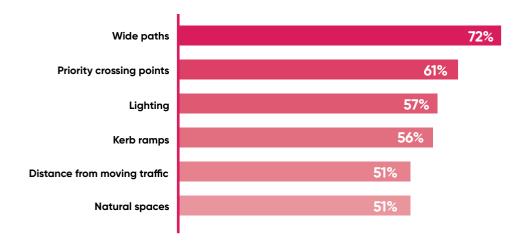


Ensuring that the right infrastructure is in place, will likely encourage more frequent pedestrian activity to and from these destinations.

Experience and safety of pedestrians

Features that make walking attractive to you

Six features were very or extremely important to more than 50% of respondents. These were:



Barriers to walking and other pedestrian activities

Potential barriers most frequently experienced include:



Lack of footpaths/inaccessible footpaths result in risks to pedestrian safety

More than

4 out of 5

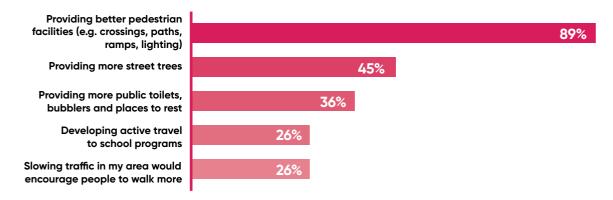
people have had to walk on the road because there wasn't a footpath

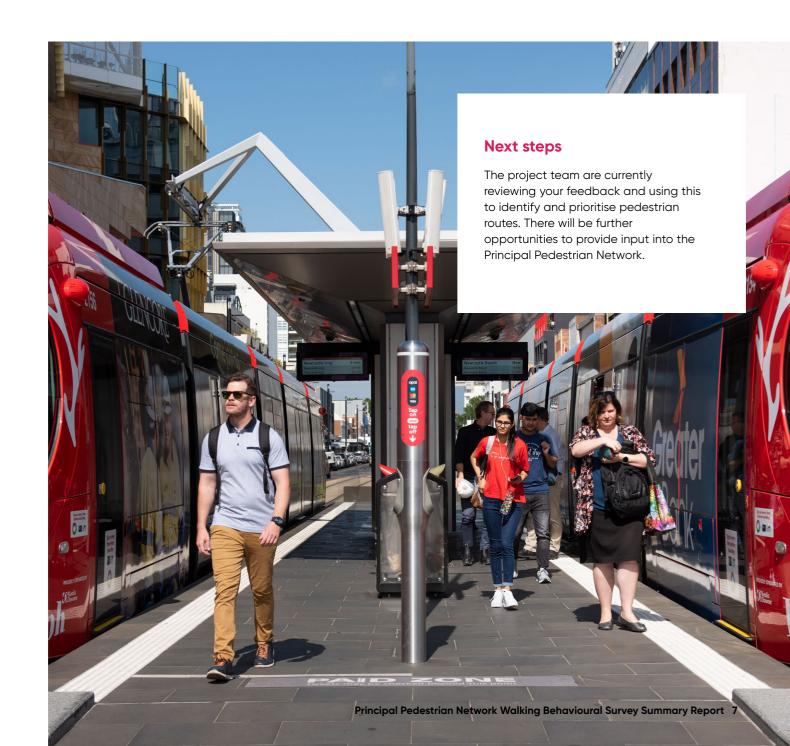
People walk less because of poor infrastructure

29% of people

who claimed to walk less frequently now than they did a year ago, stated it was because of poor pedestrian infrastructure (no footpaths/footpaths not safe or accessible)

How City of Newcastle can help you walk more





newcastle.nsw.gov.au