City of Newcastle

On the road

Our plan for safe and pleasant local streets in Newcastle

Enquiries

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Contents

Acknowledgement of Country

The City of Newcastle (CN) acknowledges the Traditional Custodians of the Local Government Area (LGA). We acknowledge that Country for Aboriginal peoples is an interconnected set of ancient relationships. We acknowledge the custodianship of the Traditional Custodians of this land and the care and stewardship they have performed in this place since time immemorial.

"Wunyibu wunyibu warra wunyibu wunyibu gkuuba Aboriginal burrai."
Always was, always will be Aboriginal land.

In recognition of Aboriginal cultural heritage, eight Newcastle landmarks are officially dual-named with their traditional Aboriginal names. These are based on Aboriginal references to the landmarks documented in maps, sketches and geological descriptions dating back as early as 1798:

- Nobbys Head – Whibayganba
- Flagstaff Hill – Tahlbihn
- Pirate Point – Burrabihngarn
- Port Hunter – Yohaaba
- Hunter River (South Channel) – Coquun
- Shepherds Hill – Khanterin
- Ironbark Creek – Toohrnbing
- Hexham Swamp – Burraghihnbihng

Image Caption XX

A message from our Deputy Lord Mayor

City of Newcastle is striving to be a liveable, sustainable, creative, and inclusive city. What better place to start than on our local streets. Local streets make up a large proportion of our public space, they are places we all spend time and crucially, they're places that bring our community together.

We have had the chance to witness how neighbourhoods flourish with the help of improved street design and entry treatments for the neighbourhood. These have been established in suburbs such as Cooks Hill, Hamilton South, and Mayfield East for decades. Through this plan we will extend these benefits across the city, ensuring everyone has a chance to feel the sense of belonging to a neighbourhood no matter where you live in Newcastle.

It is essential in this age of increased isolation that our local streets become a place of community, where neighbours can connect with one another. Creating carefully designed streets and supporting initiatives to encourage these interactions is essential, not only to build resilience, but also to build trust and care back into our world.

Planning for our local streets to become safer, while providing more space for greening, accessibility, and connection will help Newcastle become more financially sustainable as well as environmentally and socially responsible. This plan will ensure that asset renewal results in the best outcomes for the street and long-term infrastructure management. For streets that aren't up for renewal, appropriate interim solutions will be installed on a faster approval pathway, ensuring that safety issues are addressed in a consistent and timely manner.

I look forward to seeing the vision of this Local Street Plan come into fruition and watching our streets come to life through improved safety and connectivity for all the many and varied ways that we use our streets in all stages of life.

Councillor Charlotte McCabe - Deputy Lord Mayor of Newcastle

A message from our Chief Executive Officer

Local streets are the bread and butter of a local council. To start with they are where our rubbish gets collected and how we access our homes. But just as importantly, they are where community happens, they are potential corridors of greenery, shade and biodiversity, they are the channels that move the stormwater towards the sea, and they are where we go quickly for some fresh air and exercise. This plan integrates not only the important movement functions of local streets but also recognises the importance of people and place in working towards quality local streets.

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. Delivering improvements on our local streets is critical to so many aspects of our lives and realising the potential synergies with programs across City of Newcastle will strengthen our Capital Works Program. This ensures we are not only managing a large capital works spend, but that every dollar spent in our local streets is achieving a range of objectives from our Community Strategic Plan and asset management goals in a financially responsible way.

Working in alignment with NSW Government's Movement and Place Framework, Newcastle is in a position to map out the existing categories of our streets and our aspirations for them. We can also start to take advantage of emerging data collection platforms to inform our processes, ensuring that our decisions are well-informed without data collection being a resource intensive and costly process.

This Plan paves the way for giving the city a realised planning framework to support our ongoing growth and resolve how we will continue to deliver our public domain projects into the future. It also considers the importance of safer speeds and more connected communities and the role of programs and advocacy to realise these. 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

The benefits of improving our local street network

Newcastle's local street network plays a key role in connecting communities and constitutes a major part of our public space. While the road network also includes major roads, or streets that are part of local, neighbourhood or strategic centres, the focus of this plan is the local street networks in our residential neighbourhoods. These make up approximately 75% of Newcastle's road network. Connectivity in and out of residential neighbourhoods will be considered, noting that intersections on major roads are typically addressed in response to identified issues (e.g. safety assessments or crash history) or as part of larger corridor studies.

The layout and characteristics of local streets play a fundamental role in defining Newcastle and the expectations of the people living and traveling through it. City of Newcastle (CN) has recognised this and has been a pioneer in proactive improvements to our local streets. Local Area Traffic Management (LATM) studies and treatments have been undertaken in Newcastle for over 40 years.

Purpose of local streets

A local street can mean very different things to different people. While for residents, it can be an extension of people's sense of home, for others it is just a way to get to different destinations for different purposes, or just as a place to enjoy and get fresh air. Some of the main functions of a local street include:

- supports movement of people through their use of vehicles, active transport, public transport, or other forms of community transport. This includes transport stops and spaces for parking.
- provides frontages and access to properties
- supports ecological systems and the liveability benefits of nature, including shading, biodiversity, and water management (including floodway conveyance and Water Sensitive Urban Design (WSUD))
- allows for movement of goods and services, including waste collection
- provides space for utilities including stormwater systems
- creates public amenity through places for social interaction, contemplation and recreation
- provides access and/or escape in an emergency, including passage for emergency services

Consideration of these functions, including the safety, accessibility, and wellbeing of all the people who use the street, is essential to inform how streets are managed and transformed. Understanding the needs and desires of the local community and transport users can improve how we plan and shape our streets, as well as forming the overall vision we have of our future local street networks.

Management of local streets

Local streets are expensive and resource intensive to build, maintain, repair and transform. Therefore, asset management plays a key role in the planning of local streets. Improving the financial sustainability and resilience of local street assets allows us to achieve better short-term and long-term outcomes for our local communities and transport users. This may involve aligning asset management and strategic planning, or programming temporary interventions as part of staged solutions. This allows strategic-led changes to be tested or built (i.e. interim solutions) before asset renewal leads to permanent, and more holistic changes.

Issues and opportunities of local streets

Since the late 1940s, planning for local streets has predominantly focused on access and connectivity for privately-owned motor vehicles. This creates opportunities for people who own a car to conveniently reach most destinations within Newcastle. This accessibility for private vehicles also provides access for logistics, emergency services and other essential services.

In recent years, community attitudes and expectations of our local streets have shifted1. There is a need to reduce car dependence and ensure our streets promote the safety, accessibility and wellbeing of all users. The prioritisation of privately owned motor vehicles, in accounting for their speed, size, and mass, along with the air and noise pollution they emit, directly impact the amenity of a street. The pavement area used to cater for privately owned motor vehicles increases the heat absorbance and retention of the street, and reduces the space for people and nature, the water permeability of the ground and the potential shade and biodiversity.

Changes to our streets are initiated by various factors; some are initiated from an identified need in our operational or strategic directions (planned changes), some due to asset renewal (opportunistic changes), and others due to new development (reactive changes). This plan guides these changes by developing principles and actions to improve processes, project identification, scoping, and prioritisation, while also ensuring we have the resources and supporting actions to make the most of our local streets.

Newcastle's Local Context

Strategic Context

Newcastle is striving to be a sustainable, liveable, creative and inclusive city and this vision is underpinned by strategic directions at a global, state and local level. The Local Streets Plan is aligned with the vision and objectives of relevant strategies and plans.

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 (*UN 2015) as cornerstones for planning. The Local Streets Plan aligns with and contributes to the realisation of the following SDGs.

SDG		Relation to Local Streets Plan
3.	**Good Health and Wellbeing**	Streets affect people's health directly and can promote healthy lifestyles, and sense of place and community.
10.	**Reduced inequalities**	Streets are public spaces that can provide opportunities.
11.	**Sustainable cities and communities**	Streets can promote more sustainable ways of traveling through the city, and provide space for ecosystems
13.	**Climate action**	Streets are fundamental in mitigating emissions and the effect of climate change.

State Level - Future Transport Strategy

The New South Wales (NSW) Future Transport Strategy encompasses all transport related visions, objectives and actions for the state of NSW. Beyond alignment with specific actions within the Future Transport Strategy, the Local Streets Plan also embraces the visioning and planning ethos.

NSW Future Transport Strategy Actions	Relation to Local Streets Plan
Enhancing liveability for communities - Supporting car-free, active sustainable transport options.	Well-designed local streets can be inviting and safe for active sustainable transport options which support key active transport corridors.
Releasing the potential of our infrastructure - **Thriving 15-minute neighbourhoods** **• Reallocating road space** **• Street space as public space** **• Build well-designed transport infrastructure**	The Local Streets Plan directly addresses how we reallocate road space and balance movement and place functions of local streets. Through identification of street typologies, it will also contribute towards well-designed transport infrastructure that supports local neighbourhoods.
Building resilience and economic growth – **• Considering climate change in all our decisions** **• Resilient communities**	Resilience and future maintenance consideration are part of planning for well-designed local streets.


40

Local Level - Newcastle 2040 Community Strategic Plan (CSP)

The Local Streets Plan has a key role in making our city more liveable and sustainable and aligns with several objectives in CN's CSP. It also has overlapping objectives and actions with other CN strategies and plans, due to the fundamental roles local streets have in our communities.

CSP Action		Direction for Local Streets Plan
1.	**Liveable**	
1.1	**Enriched neighbourhoods and places**	
1.1.1	**Create and maintain vibrant, inclusive and well-designed public spaces**	Streets need to be inclusive for diverse populations and designed to ensure they can be easily maintained
1.1.2	**Promote sustainable and accessible urban design**	Accessibility and sustainability need to be key factors in how we plan and deliver street changes
1.1.5	**Enhance and protect public safety**	Public safety for diverse populations (including different genders, ages and travel choices) should be considered in street design
1.	**Liveable**	
1.2	**Safe, active and linked movement across the city**	
1.2.2	**Maintain safe and efficient road networks**	Local street networks and their interaction with main roads will be considered for safety, stress and efficiency for all modes of transport
1.2.4	**Strengthen active and public transport connections and services**	Local streets that serve buses need to cater for bus turning movements, bus stops, and accessibility, and local streets need to support active travel
2.	**Sustainable**	
2.1	**Action on climate change**	
2.1.1	**Support the transition to net zero emissions**	Local streets need to support lifestyles and travel choices that reduce emissions and use design and construction solutions that are less emissions intensive
2.1.3	**Support climate change adaption by building resilient communities and urban and natural areas**	Local streets need to reduce risks related to climate events and other disasters, including access and escape in emergencies
2.	**Sustainable**	
2.2	**Nature-based solutions**	
2.2.2	**Protect and expand the urban forest**	Local streets need to support the protection of mature trees and the space for future trees and plantings where possible, working towards a cooler city that supports biodiversity and liveability
2.2.3	**Support the transition to a water-sensitive city**	Local streets need to support the protection of mature trees and the space for future trees and plantings where possible, working towards a cooler city that supports biodiversity and liveability
3.	**Creative**	
3.3	**Connected and fair communities**	
3.3.1	**Support strong social and cultural connections**	Local street will promote social connections through communal spaces with potential to explore street designs that provide cultural connections to the land and communities
3.3.3	**Promote and support active and healthy communities**	Local streets will promote health and physical activity both through enabling attractive and accessible active travel choices and the nature and amenity that allows spaces for relaxation, reflection, and recreation

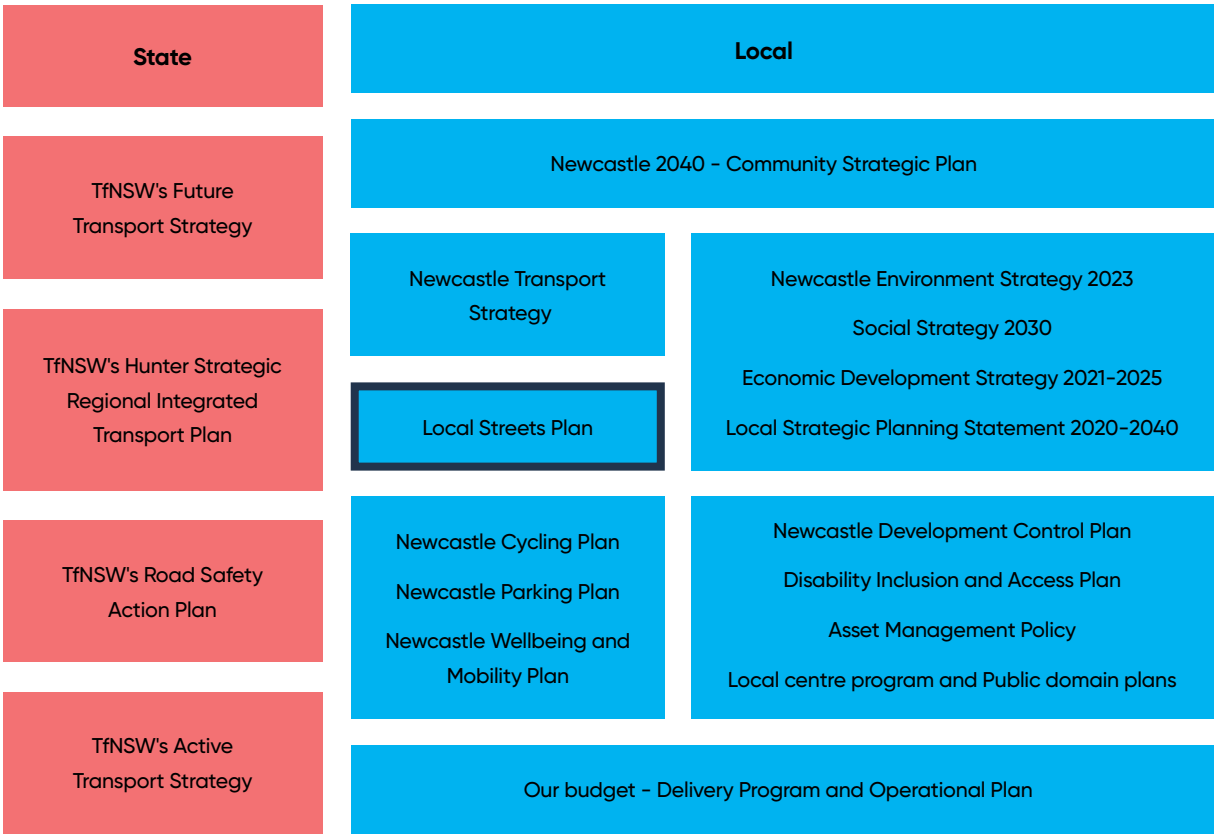


Figure 1 Strategic Alignment at Local Level

Relevant Actions from Newcastle Transport Strategy

There are several actions in CN's Newcastle Transport Strategy that will be integrated into how we develop and deliver actions of the Local Streets Plan:

Newcastle Transport Strategy Action	
Develop and implement a road management framework	Developing framework for identification, design and approvals of road management projects
Review and revise procedures for undertaking local area studies	Processes and tools are being developed to guide how local area studies are undertaken
Investigate and consider implementation of extension to, and provision of new 40km/h local traffic areas	Safer speeds are being considered across the local street network in line with TfNSW Speed Zone Standards
Review the warrant systems for local area traffic management and pedestrian works	Developing systematic approaches to local area traffic management including crossings

The local context

Newcastle has a well-established street network, with opportunities for infill development (such as Broadmeadow and identified urban renewal corridors) and limited opportunities for greenfield development. Therefore, modification of existing streets is the main way we can effect change and create the local street networks that meets our strategic goals. It is therefore important to understand the context of existing streets in Newcastle. Planning for local streets is influenced by the existing layout, the environment of the street, the role of the street in the transport network, how these streets are managed, and the identified drivers for changes.

The existing street layout

There are a variety of local street layouts in Newcastle. Early suburbs typically have streets in a grid network with wide roadways (greater than 12m) and narrow verges (less than 4m). This has led to issues with high vehicle speeds, large crossing distances for pedestrians, high road maintenance costs, poor water permeability, high temperatures in the street, and lack of space for vegetation (including trees), footpaths and social or restorative spaces. Some of these streets are also prone to flooding which means changes to the streets need careful consideration of water management to ensure effective stormwater management and that the flood risk (risk to life and property) is not exacerbated (including downstream risks).

Other streets are narrower, but the verge is narrow or has a steep crossfall, which can make it tricky to have both footpaths and trees, especially when driveways are also needed to access homes. Some of these streets may be near schools where the narrow streets get blocked during pick up and drop off times, and children walking and cycling can feel unsafe or unwelcome. There are streets that can be problematic for waste collection and emergency services because they are narrow, have uncontrolled parking, or are closed to through traffic and have turning heads that are difficult to negotiate.

Meanwhile there are streets in Newcastle with wider verges and narrower streets, which may have issues with vehicles being parked on the verge, reducing amenity for other the local community and people walking, cycling or using a mobility device. Some suburbs are hilly, hot, or lack trees, footpaths, safe cycling routes, or community spaces, making the street feel hostile to people.

While appreciating the challenges of existing street layouts, there are also some great examples of thriving streets in Newcastle. People make do with what they have, and beautiful communities, activity and natural spaces have grown within existing local streets in Newcastle. A range of streets were chosen across Newcastle as favourite streets to walk on with a sample shown below. Mature trees, interesting architecture and streets close to home were important factors in people's choice of streets.

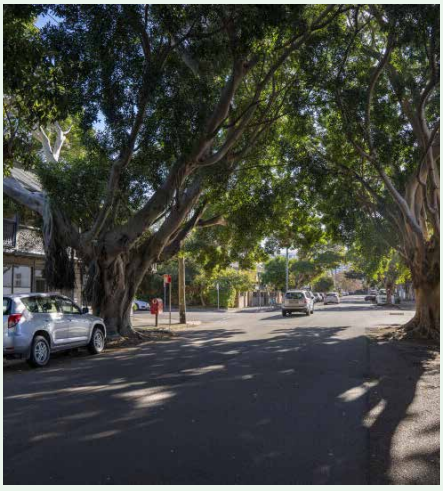


Figure 2 Pictures of local streets people like to walk down

The role of the street in transport networks

Local streets are essential for most of our transport choices. While some local streets are only used by the people who live there, other streets can be critical in providing a way to, though, or within the suburb. This may be for people to get to and from their homes in the broader area, or as an alternative to main roads (especially for people walking and cycling) for moving through broader Newcastle. Other local streets are important to get to key destinations like schools, parks, or commercial areas. Many local streets in Newcastle have low traffic volumes, which makes them conducive to active transport options away from busier roads in the network.

In addition to providing through connectivity, direct access to homes and other destination also needs to be provided in streets. This means people need to be able to park either on or off the street, get off the bus safely at a bus stop, and have accessible ways of getting from the street to the destination. Properties also need to be accessible for various services, including waste collection, delivery trucks, and emergency vehicles.

Ensuring vehicles can safely manoeuvre through local streets is critical. While waste collection often happens early in the mornings, deliveries can occur at all hours of the day, and streets need to maintain an ongoing level of access for emergency and service vehicles.

The maintenance of the street

Local streets are generally maintained by local government, as well as resident/owners within the street. While regulation of local streets is managed by council through delegation from the NSW government, the maintenance is undertaken predominantly by council, with residents taking responsibility for maintaining the frontage of their property. The sense of stewardship and pride of the residence and community is vital in good maintenance of the street.

The ability to implement change

Beyond the strategic imperative for improvements to our local streets, other factors also affect the ability for changes to be implemented. This includes the budget allocated for asset renewal, local traffic management, and other transport programs. The willingness to innovate is also an important factor. Many cities around the world trialled changes to their street through the need for safe active transport options during the COVID pandemic. There are options for improved road safety through innovations in temporary and permanent street design, speed limits, and other regulation. A deciding factor is the aspirations of the local community in each neighbourhood, and these are reflected through community engagement for projects and area wide plans.

Current use of our local streets

Metrics for use of our streets have mainly focused on movement. While construction, weather events, or community activities, can temporarily change the road environments, streets in Newcastle are in general open for movement. The dominant movements in Newcastle are currently made with private vehicles making up 75% of total trips made in Newcastle and 90% of kilometres travelled. However, walking and cycling do make up 22% of all trips made in Newcastle, and those trips are more likely to be undertaken on local streets as they offer a more attractive place to ride/walk.

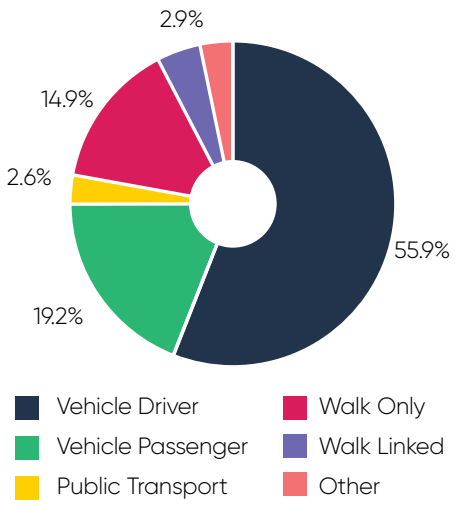


Figure 3 Percentage of total trips by mode - Household Travel Survey 2024

Appreciating that most vehicle traffic in local street neighbourhoods is generated by local people, the number of cars per household can help understand how important car movements and parking are in that neighbourhood. Figure 4 shows that southern and western suburbs have the highest rates of households with three or more cars, due to a range of factors including limited public transport options, size of residential lots, and number of share houses. Other factors that contribute to parking and traffic pressures include density and non-residential trip generators.

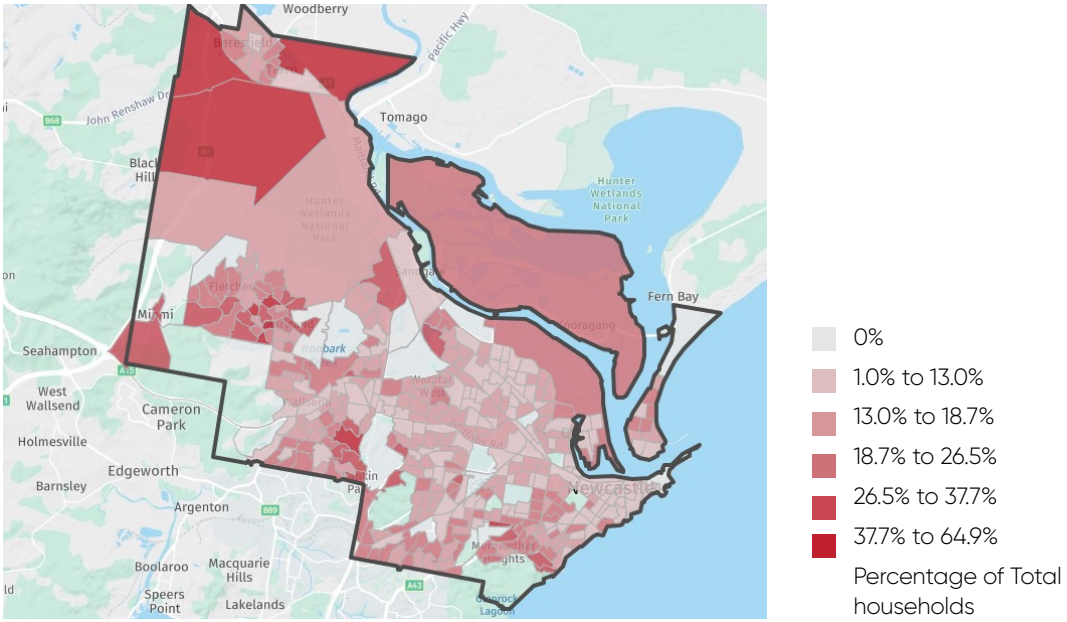


Figure 4 Proportion of households with 3 or more vehicles

Traffic counts are not available for all streets in Newcastle, but where they are available, they can provide a picture of typical vehicle movements in various types of local streets. Speed (colour) and volume (size) data in Figure 5 indicate that there are many local streets with very low traffic volumes across Newcastle, with larger volumes expected along collector streets, major connections, and in streets closer to local centres, commercial areas, and the inner city.

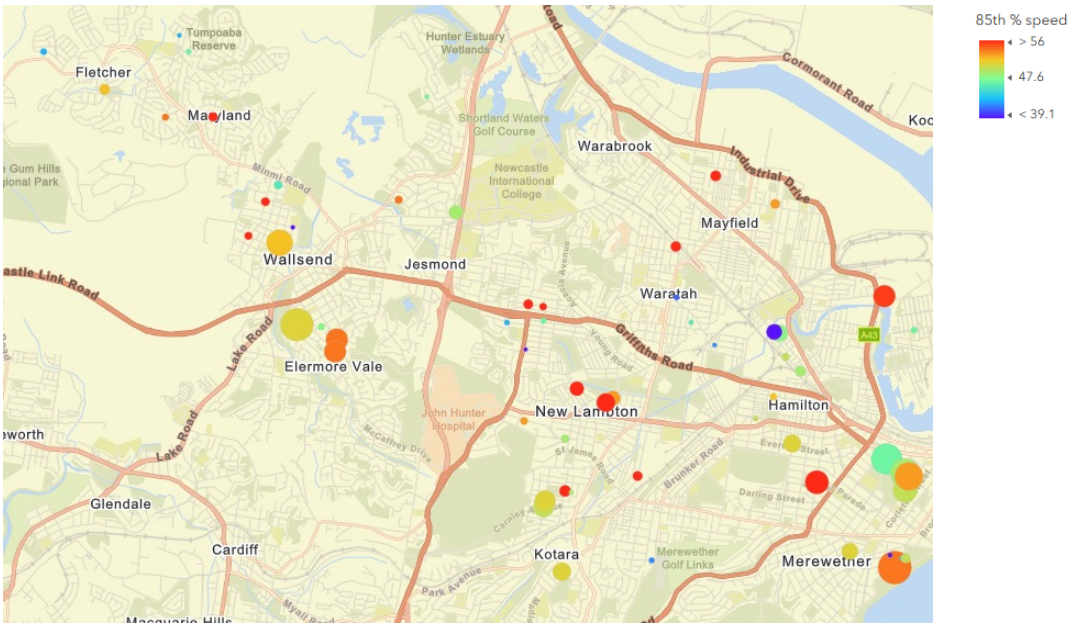


Figure 5 Traffic count data from local streets


TYRRELL ST
PERKINS ST
50


JOSLIN STREET
QUALITY
MEATS
TEXAN CHILLI SAUSAGES ARE BACK

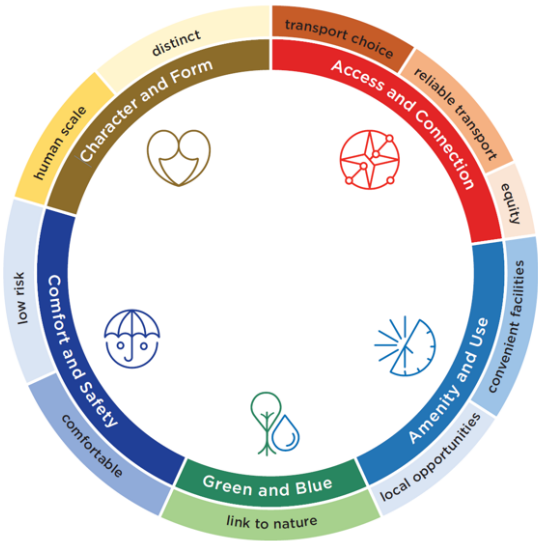
Approaches and tools for better roads and streets

The NSW Government Movement and Place Framework and the Safe Systems approach are critical in planning for people and addressing the management of our roads. Other tools address different issues and perspective and can also form part of the planning of local streets.

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. The functions of a street are divided between movement and place functions.

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). Movement includes different types of movement for various purposes and by various modes of transport. Place qualities can be considered through the lenses of physical form, meaning, and activity. In the case of local streets this includes the places people access (such as homes), the nature, architecture and infrastructure that make the physical form (such as street trees), and the amenity and activity they bring (such as spending time with neighbours and children playing).

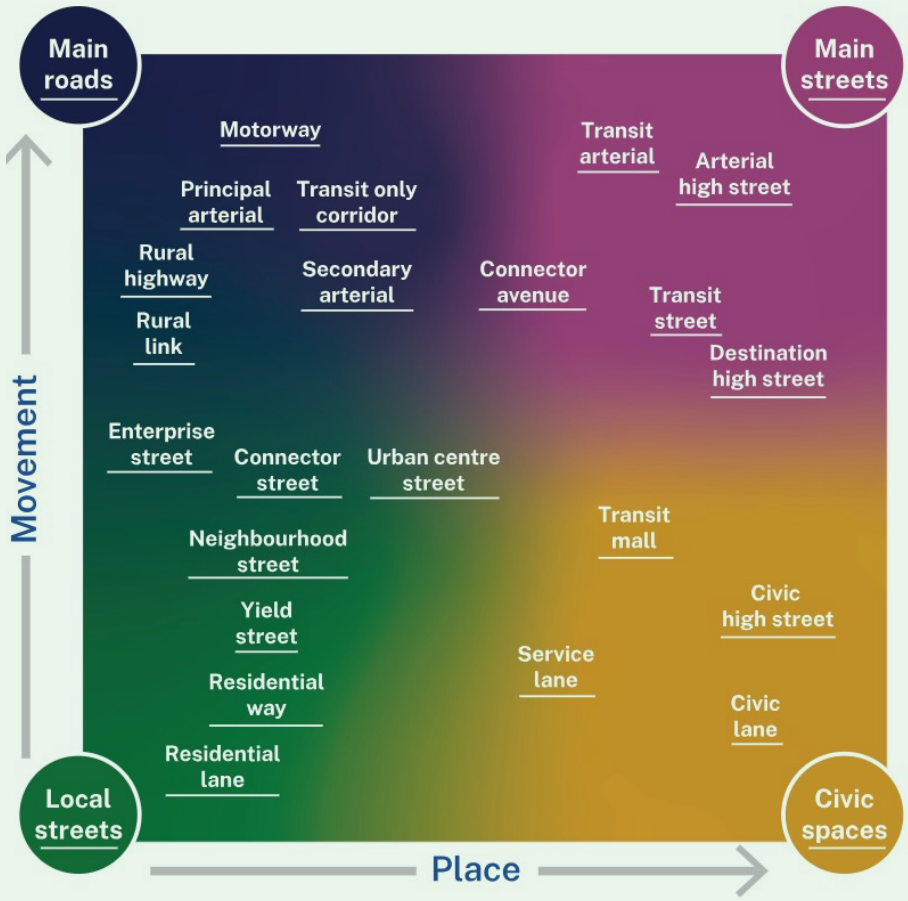


The Movement and Place Framework can help inform how we develop street changes with the outlined core process of:

- 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

Designs of Roads and Streets (DORAS) have set out different typologies roads and streets based on the movement and place functions.

Figure 6 Place attributes to consider in Movement and Place Framework



Safe Systems Approach

The safe systems approach acknowledges that responsibility for road safety is distributed across a range of factors and actors in the road 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 fragility of the human body.

To achieve this, it focuses 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.

Safe roads and speeds are the cornerstones that are the focus of the Local Streets Plan. This involves exploring options for safe speeds through speed limits, traffic calming treatments, or a combination of both. Beyond speed, local streets should have easy to navigate intersections, safe crossing facilities, and consideration should be made for safe active transport use and reducing vehicle volumes where it is unsafe. Safe vehicles and safe people are also important for local streets, and some of our community projects will work towards these cornerstones.

Complementary tools and approaches

Connecting with country framework developed by NSW government provides insights for processes, consultation and consideration in designing our streets and the cultures we wish to promote.

Travel demand management is the strategic implementation of initiatives to change demand on the transport network by influencing the choice of mode, time of day, routes or need to take a journey. Data driven decision-making and evaluations play a key role in effective travel demand management. This can be critical in determining the leverage points for behaviour change and how this can be supported by infrastructure and institutional changes.

Healthy Street approach provides assessments tools and prompting questions with a focus on 10 indicators of quality streets. These could be used in determining desirable local street outcomes as well as identifying opportunities for incremental change.

Universal Design sets out principles and processes to ensure that consideration of how local streets can ensure equal rights and opportunities for people of all ages and abilities.

Crime prevention through environmental design sets out principles to ensure the built environment reduces risks to people personal safety and provides people with inviting, safe and inclusive spaces.

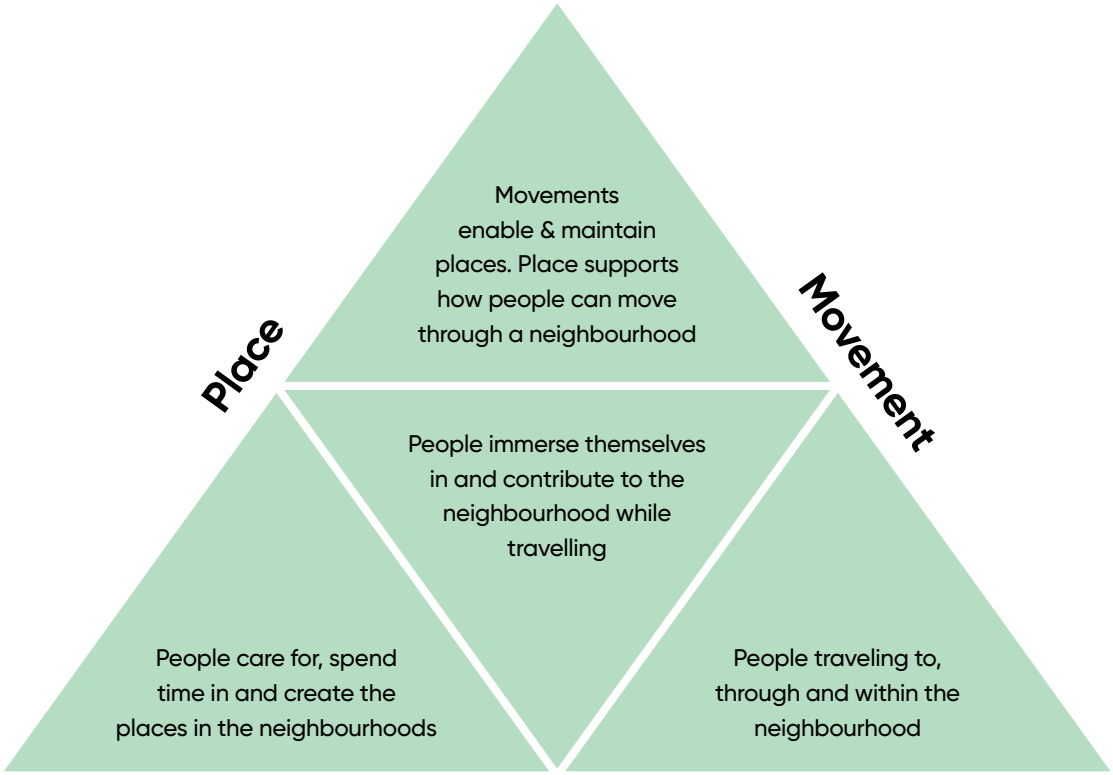
Planning our local streets

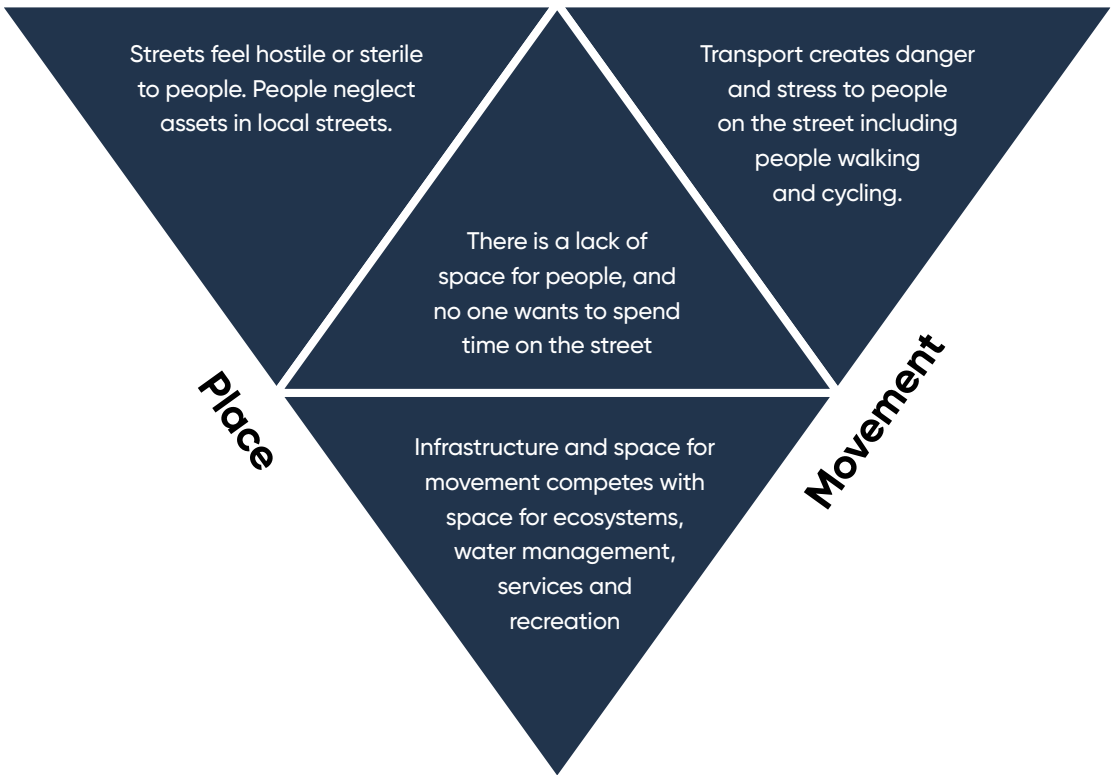
While local streets typically have less intense movement and place functions, they can have a major impact on people's lives and people's relationship with their local street environment can either be quite intimate or it can feel intimidating and isolating. Your local street can be the first place you walk with your newborn baby, the place you can wheel your elderly grandmother to brighten up her day, your first taste of the weather each morning, or maybe the only place you get a wave and a smile on an otherwise gloomy day.

Good local street planning will not only focus on movement and place, but also how people respond to them, contribute to them and become better for it. It is important to keep in mind how people, place and movement can interact in either synergistic or completing ways.

- People – everyone who spends time and/or has a relationship to the street including residents, visitors, service providers, people passing through, people who choose to walk or ride through the street for recreation.
- Place – all the attributes and functions of the street that are not devoted to movement including the ecosystems, services, communal, restorative or recreational spaces, frontages, buildings, access to properties or other public spaces.
- Movement – everything required to support movement through transport systems, including infrastructure, space, systems, vehicles and regulation.

Synergies to promote





Competing issues to address

Figure 7 Synergies and competing issues for movement and place functions and how the community responds to them

Vision-led planning

To plan effectively, it is important to have a vision for our future local streets, how they are used and managed, as Transport for NSW's emphasises with the vision and validate approach. The following is a taste of our local streets in 2036.

In 2036, local streets are places that support people from all walks of life, particularly residents and visitors to neighbourhoods, in how they choose to travel, to spend time in their streets and to connect with others and the environment. They are pleasant, safe and accessible places to travel through, especially by walking and cycling. The increased presence of people on the street, adds to the sense of safety, with people looking out for each other. Speeds are lower where needed to create peaceful streets that children feel comfortable to play, ride and walk along.

We haven't had resources or the asset renewal to change every street, and we recognise that not all streets need to be changed. However, there is a system in place to ensure that the most pressing issues and locations in the city have been prioritised, and projects have improved safety in a systematic way. Interim solutions have been introduced where needs have been identified and prioritised to modify the street, but where assets and trees are not ready to be replaced. While there aren't footpaths on every local street, we have made good use of the road pavement, protecting sections for pedestrians to use, by reducing the width dedicated to vehicle traffic in quiet street.

Data collection and analysis have been crucial in proactively addressing local street safety issues, ensuring prioritisation is not only focused in areas where residents are vocal. Modelling is also used to identify network effects of major changes to local streets, including new developments.

Some streets, such as those in front of schools eager to promote safe, active and sustainable travel, will be dedicated to people playing, walking, cycling and scooting. These will be incrementally delivered with trials and high involvement from the community. More generally, community will feel like effective stakeholders in the planning process and clearly see how streets are being planned and upgraded efficiently and responsibly.

Design solutions for Connector Street - Sample from the Design of Roads and Streets manual

1. mid-block crossings
2. bicycle Paths
3. narrowed lanes
4. continuous footpath treatment
5. trees in the verge
6. kerb extensions or build outs
7. short-term last mile freight and servicing access

Objectives for the Local Streets Plan

Goal

By 2036, Newcastle will have welcoming local streets that are safe for all forms of movements and local activities, with improved outcomes for road users, residents, the environment, and our local assets.

Principles underlying this plan

Based on the opportunities, challenges, and approaches to planning for our streets, we have developed principals that ensure we are holistically realising the potential benefits of high-quality local streets. These are fundamental in guiding every objective and action in this plan:

- **Streets are pleasant places for everyone** – while people have different expectations for local streets, it's important that everyone feels welcome, comfortable and able to enjoy the street in their own way, while not impeding on other people's experience of the street.
- **Street design encourages safer behaviours** – the layout and feel of the street should discourage unsafe driving and facilitate safe manoeuvring of service vehicles, to ensure everyone in the street, especially people dwelling, playing, walking and cycling, are safe.
- **Streets effectively coordinate movements** – street design and regulation (with support from appropriate education) clarify how people are meant to navigate local streets, and that appropriate space is always provided for services, emergency vehicles, and accessibility.
- **Streets are ecosystems and social, active places** – there should be opportunities to gather and to move in our streets, with shade and amenity provided by established ecosystems, which also promote biodiversity and water management
- **Streets can change** – while some streets may not change significantly over the next decade, others will be transformed because of development, asset renewal, changes in culture and technology, along with strategic directions to improve streets. It is essential that we react appropriately to these changes to ensure they benefit the community, and any adverse effects are minimal.

Key themes

To achieve this goal, the Local Streets Plan is structured around four key themes:

- Well defined streets and networks
- Make our streets safe and attractive for all
- Manage travel demand on our street network
- Promote collaboration for better streets

Figure 8 Objectives and Principles of Local Streets Plan

Work towards well defined streets and networks

To work towards better street networks, it's important to understand the functions, constraints and opportunities of the local streets and neighbourhoods. By using the Movement and Place Framework and Design of Roads and Streets (DORAS) we can define all the streets in Newcastle according to their current and desired functions, then contrast their current size and features, with those needed for the functions they serve. Streets can also be defined by the ecological functions they provide, including biodiversity corridors and water management.

CN has a long history of developing LATM systems in areas across Newcastle. Taking this as the starting point, Newcastle will be mapped into local street neighbourhoods. These will be studied based on the specific needs and opportunities in the neighbourhood, ensuring that problems are addressed and opportunities realised with appropriate planning and prioritising.

By characterising neighbourhoods and the individual streets within them, decisions on how to change streets and what treatments to use are well-informed and potentially streamlined, as we can lean on existing resources such as the parameters and design solutions incorporated in DORAS and other guidelines.

Strategic Planning for Transport Oriented Development (TOD) Areas

The NSW Government introduced TOD areas to rezone precincts close to train stations. The allowance for high density in these areas is designed to promote more active and public transport usage and living locally.

In developing a nuanced approach to this density uplift, CN is ensuring that this development will lead to more walkable communities and sustainable streets. The categorisation of existing streets and aspirations for a street, along with access needs in these areas, facilitates planning through consideration of what movement and place functions are possible and desirable along different corridors.

Clarifying how streets are now and what our vision is for them, improves how we communicate with the community and stakeholder. It can help facilitate explanations of how people should use various streets (e.g. Yield Streets), and how people can constructively contribute to improvements in their street.

1.1. **Map all streets with well-defined functional categories** – by using DORAS as a base, classification can be applied to all local roads. This will provide clarity through identifing aspirations and requirements for the functions of all streets.

1.2. **Set up tools and processes to improve traffic management projects on local streets** – by mapping local street neighbourhoods, relevant attributes for prioritisation and development of future infrastructure projects are to be developed. This will include identifying appropriate treatment options, noting their suitability for different conditions and needs, as well as required engagement, reviews, and approval.

1.3. **Review road tables for the Development Control Plans (DCP)** - to align with this plan and Design of Roads and Streets, to ensure that there is clarity on CNs strategic direction for the future planning of all our current and future development areas.

Make our streets safe and attractive for all

In local streets, where formal movement and place functions are low, there is the potential to provide for more casual and peaceful moments if the street setting is right. Local streets and intersections should not be stressful to move through and negotiate, regardless of the mode of travel. Improvements are needed on some of our local streets to realise their potential as safe and attractive places. These improvements include advocating for safer speed limits where appropriate, as well as delivering projects with street, intersection, and crossing designs that promote safer speeds while serving all the functions required of the street.

For this work to be effective, there needs to be a consistent approach across the city to identify and prioritise projects. This will involve data driven processes that ensure local street neighbourhood studies are conducted and ready when they are required, and that infrastructure is installed systematically to ensure the most needed projects are undertaken first and provide high-quality cost-effective changes for the streets. This work includes understanding the interaction between local street networks and arterial roads and the effects of different treatments on the wider network.

The community plays a key role in the safety of local streets. By taking a consistent approach to issues raised through community feedback and providing useful resources about common issues in local streets, we can ensure solutions are being applied appropriately, appreciating that not every problem is solved by major changes to street design.

Strong evidence and guidance for safer speeds on local streets

Many cities around Australia and the world have implemented area-wide reductions in speed limits. This has been backed by evidence demonstrating the benefits of safer speeds, which improves:

- crash risk – through broadening vision for drivers and reducing the distance travelled during reaction and braking times.
- crash severity – through reducing the kinetic energy transferred and transformed during a crash (Yannis 2024).
- amenity of the street – through reduced noise and air pollution, easier roads to cross and more people travelling actively in the street including school children (Jafari 2025)
- equity and sustainability – through reduced emission and fuel efficiency, and more safety for vulnerable populations, such as elderly, who walk slower and suffer more from injuries (Jasiūnienė 2020).

Noting these benefits, there has been a strong push for more flexibility to allow lower speed limits in recent years, and there have been positive outcomes in cities throughout Europe, the UK, Canada and Australia (Yannis 2024). This has also been further supported under TfNSW NSW Speed Zoning Standards released in September 2025.

2.1. **Work towards safer speeds on local streets** – – by providing supporting infrastructure to reduce actual vehicle speeds and by working with Transport for NSW towards providing appropriate reduced speed limits in local areas as may be informed by the Movement and Place framework and the NSW Speed Zoning Standards.

2.2. **Build a prioritised program of treatments for local streets** –using interim options and staged approaches for street design to enhance safety and accessibility, while continually improving treatment options through evidence built from research of best practice and evaluations of projects.

2.3. **Develop consistent approaches to safety issues** – by undertaking mapping of all identified locations for improvements (including input from community feedback) and developing useful resources including fact sheets and libraries of relevant terms and treatment options available to suit relevant locations and conditions.

Manage travel demand on our street network

Many local streets are quiet most of the time, but there are streets that get busy for short bursts during peak periods, whether that's for school pick up/drop off, community sport, or when people may be attempting to avoid congestion on main roads. Managing the demand during these times of peak use is critical for safety and efficiency, as well as keeping the street's design appropriately scaled for the predominant low movement function.

Understanding the constraints and user experiences of the people involved in these peak movements is critical to reducing the demand on local streets. Travel demand management, which focuses on data, people, and opportunities to shift behaviour, provides a key approach to systematically explore options for trips on local streets to be re-timed (to a less busy time), re-located (to an arterial road), removed (by avoiding the need for travel), or re-moded (shifting away from private vehicle use to active and public transport).

Beyond these peak movements, there are also movements that clash with other uses of the streets. It is critical that we limit potential interactions between heavy vehicles and active travel, and this can be through managing times that heavy vehicles travel on local streets or the route choices they make through local street networks.

3.1. **Build capabilities through data capture (including user experience) and consider modelling tools** - to better understand movement trends and leverage points for reducing traffic issues. Tools can also be implemented to model potential network effects of changes and ensure active and public transport movements are not adversely affected.

3.2. **Support large trip generators to reduce the burden on our local streets associated with their operation** – by working with these destinations and events, such as schools and parks to identify opportunities to reduce vehicle traffic and increase safety, including trialling and implementing school streets (also known as open streets).

3.3. **Review and assess how different uses of local streets are managed at key locations** – by identifying locations in proximity to commercial and service areas with conflicting connectivity and access requirements (including logistics, services, accessibility, commuting, visitors) and researching options to minimise the conflicting movements, manoeuvring, and vehicle storage while maximising access for key priority users.

Promote collaboration for better streets

Due to the many functions of local streets and their importance in people's daily lives, gaining the perspectives, objectives, expertise and know-how of different stakeholders is essential to enabling the best outcomes for streets. Effective information management and stakeholder engagement is required to identify projects and ensure all impacts of proposed changes in a neighbourhood are given appropriate consideration. Information sharing is also essential to holistically planning for an area. Appropriate sharing of mapping layers, project information, and identified constraints helps to coordinate our program with private development, NSW government projects, utility providers, and internal CN programs.

People should feel that they have a voice, and that community engagement isn't a burden or tokenistic effort. Providing appropriate levels of information and other resources upfront can limit unnecessary concerns within the community and grow support and understanding for the efforts CN takes to deliver projects that support our local neighbourhoods.

Harnessing a sense of stewardship, pride and community amongst residents in local streets is critical to building safe, resilient and pleasant neighbourhoods. Organised events and programs to connect neighbours as well as casual encounters can all contribute to more cohesive and caring communities.

4.1. **Develop and refine a community engagement and approvals process for projects in local streets** – with consideration of project complexity and resourcing, stakeholder interest, and potential impact to ensure engagement while providing improved pathways to reduce delays on low impact projects.

4.2. **Optimise assets and planning integration with other programs** – by integrating geospatial mapping tools and layers relevant to asset management, city-wide planning, resilience requirements, and consider future infrastructure requirements. Precinct transport plans will be developed from this work.

4.3. **Support people to work in ways to enhance their streets and community** – including facilitating people to establish and maintain street gardens and organise and participate in events and programs to connect neighbours, such as Neighbour Day.

Delivering the Plan – tools and guidance

To deliver the plan, we are building up the tools and mapping capabilities required to ensure systematic evaluations of neighbourhoods, streets and particular locations, with consideration of suitable treatment options. The flow of processes with the associated tools and outputs is shown in Figure 9.

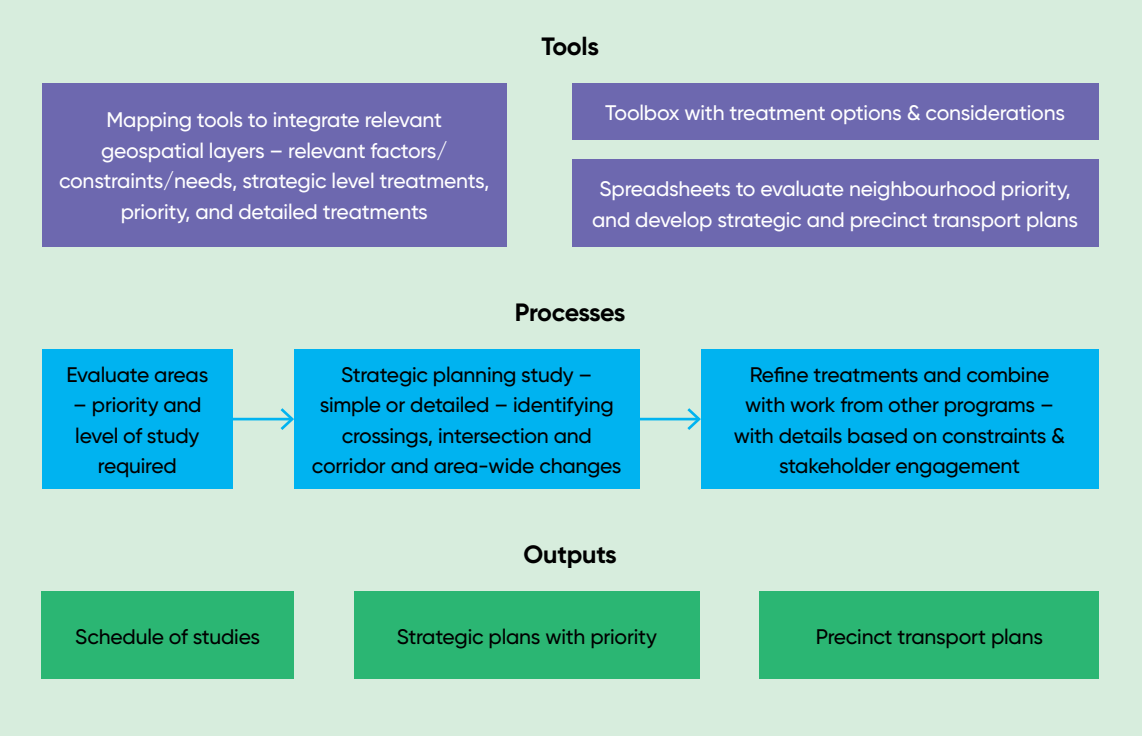


Figure 6 – Processes for developing program of works on local streets

Evaluation of areas for priority and level of study required

A coordinated approach across all connecting local streets will be more effective at creating a sense of a neighbourhood, while reducing the potential for adverse effects based on insufficient planning review. Given the sheer number of neighbourhoods in Newcastle, the detailed investigation and planning of local street neighbourhoods need to be prioritised.

As an action item of the Plan, all local street neighbourhoods are to be reviewed, mapped, and will be given initial prioritisation ratings and recommendations for the level of study required based on:

- Speeds – either existing speed limits or 85% speeds if survey data exists
- Volumes – average daily traffic, and vehicle class data if survey has been completed
- Through movements – people using local street neighbourhoods as an alternative to main roads
- Safety issues – official NSW data from 5-year reporting, or official data from NSW Police
- Schools and other destinations – location of high traffic generators, with priority given to those with higher needs
- Development potential and momentum – aligned with known development corridors and precincts, and in areas with confirmed planned developments

- Customer feedback – historic data on identified projects including crossing facilities, traffic calming, intersection upgrades
- Biodiversity corridors or other ecological need – as outlined in CN's supporting strategies and plans
- Geometry of the roads - road width, crossfalls, longitudinal grades and verge width issues in the area
- Scheduled significant asset renewal in the area – as outlined in CN asset plans
- Heightened accessibility demand – due to properties within the nearby street network and the socio-economic status of residents
- Logistical requirements – adjacent properties with higher service vehicle demands

Strategic Planning Study

Two levels of study will be considered:

- Detailed study - for areas with known demand for future change, or with complex safety, traffic, or place issues, a detailed study will be required. This may involve dedicated traffic and pedestrian counts, modelling, community engagement and stakeholder consultation, safety assessments and audits.
- A simple study - for less complex areas. This will rely predominantly on standard treatments which are appropriate for different corridors, intersections, and crossings in alignment with the Movement and Place framework.

The toolkit to establish the standard treatments will involve consideration of factors, such as:

- Street typologies
- Transport demand (pedestrian/cyclist/vehicle)
- Existing treatments/infrastructure
- Relevant speed, volume, and safety data

From this work, a layer of treatments will be produced, along with an initial prioritisation, noting that other factors (discussed later) will also affect treatment options and schedules.

The types of treatments for different locations are listed in the table below.

Type	Factors considered	Treatment classes considered
Crossing	Street typologies, pedestrian demand, destinations	Priority, Staged, Shorter, Accessible
Intersection	Street typologies, safety issues identified, speeds	Transformed, reordered, slowed
Corridor	Street typologies, traffic volumes, speeds, safety issues identified	Continual, slow points, yields points, limit movements
Neighbourhood	Street typologies, speed and volume of through movements	Entry treatments

Precinct Transport Plans with refinement of treatments

Using the mapping layer of high-level treatments, along with a set of conditions and needs associated with the location of each treatment (which may be mapped or require further investigation), more detailed treatment plans are developed which would go into the precinct transport plan. An example of how crossing treatments would be refined is shown in the table below.

Crossing Treatments	Conditions and needs	Treatments considered	Options considered
Priority	– Street typologies – Cycleway connections – Speeds – Safety – Road width – Drainage – Verge constraints – Existing infrastructure – Driving environment – Sightline issues – Parking demand	at grade crossing (zebra), raised crossing (wombat), signals, priority path crossing, combined crossing, continuous footpath	Kerb extensions, kerb blisters with ramps or gutter bridges, vertical deflection on approach
Staged		Refuge, median with path	Kerb extensions, kerb blisters with ramps or gutter bridges, vertical deflection on approach
Shorter		Kerb extensions, kerb blisters with ramps or gutter bridges, refuge	Entry treatments
Accessible		Kerb ramps, kerb extensions, kerb blisters with gutter bridges, lowered footpath	Entry treatments

Many of the projects in local streets will come from other programs, such as asset renewal, cycling, or pedestrian programs. Ideally the area-wide study should be completed first, independently of the program the works is being delivered under. This will ensure that the changes to the street do not adversely impact the broader neighbourhood and that work in other streets is complementary.

Community engagement parameters

CN provides a balanced approach to community engagement and approvals for local street projects that:

- Ensures we gain appropriate insights from the community
- Leaves the community with a clear understanding of proposed projects
- Appropriately scales the resources used in engagement to the impact of the project
- Ensures that engagement time frames are in context to the extent of the project

The extent of engagement and the channels used for engagement is governed by Newcastle's Community Engagement Strategy 2023-26 and the regulatory approval requirements for engagement. Beyond the public exhibition of this plan, points of engagement to inform the identified project and specific program will occur in the following ways:

- Engagement during strategic planning
  - typically where detailed studies are warranted
- Involvement during project development
  - typically where potential projects could reshape streets or make compromises for an interim solution
- Consultation during project delivery of a period between 14 to 28 days:
  - for all projects that limit movements
  - typically for larger, more complex projects
  - where engagement with internal subject matter experts identifies the need for input from the community

- General information provided on our website
  - for all infrastructure projects
- Informing the immediate community of projects
  - where people will be affected by construction
  - where we cannot make modification, but the community will be affected by the project

Statutory Approval Process

The approval requirements of any local traffic management project will be dependent on the statutory considerations of the project, specifically in relation to the NSW Roads Act (1993) and the NSW Road Transport Act (2013), as well as the NSW Delegation to Councils. This statutory approval is separate to the planning approval pathway under the Environmental Planning and Assessment Act 1979; and approvals required to fund and proceed with the works under CN's Project Portfolio Management Policy.

The specifics of the project will determine the appropriate approval pathway. This may be provided through delegation provided to Council officers or through the elected Council.

The community engagement and approvals process for local streets will be developed and refined as necessary throughout the duration of this Plan. This process ensures that each project has a clearly communicated approval pathway that meets the statutory requirements, is in alignment with the delegated authority for the approval and is consistent with the size and impact of the project.

Measuring success

Systematic and regular reporting on the progression of the Local Streets Plan will be integral in monitoring the success of delivery. Due to the nature of the plan, this has been viewed as a set of 5-year goals for the initial phase of delivery on the identified actions of the plan. Our targets by 2031 will be to:

- Complete the categorisation and mapping of all streets in context to the Movement and Place framework.
- Define all transport precincts & local street neighbourhoods across Newcastle
- Resolve delivery schedule of local traffic management projects
- Complete and maintain a 3-year forward plan for LATM projects under Transport Program in Civil Works Program Budget
- Produce and maintain a Blackspot identification and treatment schedule for applicable projects under the federal grants program
- Facilitate an accelerated small project review/approval process

In relation to the content of the infrastructure projects to be delivered in context to the Plan, these will be dependent on the provision of resources under CN's adopted Civil Works Program Budget. However there will continue to be consideration given to the application of the outcomes of the Plan with multiple other CN programs, including local centres, coastal revitalisation and Bathers Way, road rehabilitation, and strategic development and public domain planning. Further private development will also contribute to upgrades on the local streets network dependant on the extent of impact that the development may have on the surrounding public infrastructure. The Plan will continue to assist with the strategic alignment with these changes to ensure outcomes that are consistent with CN's identified strategic direction.

Glossary of terms in Transport Planning and Traffic Engineering

- **Access:** The way people or vehicles can arrive at a place.
- **Accessible:** The ability for everyone, regardless of disability, personal circumstances or where they live, to use and benefit from the transport system.
- **Amenity:** The 'liveability' of a place. For example, a street's amenity is affected by its design, adjacent land uses, and access to facilities and services. Expectations of amenity and comfort change over time.
- **Blue Green Grid:** an urban and environmental planning concept that integrates natural features like waterways (blue elements) and vegetation (green elements) with the urban infrastructure we use every day (grey elements). This grid creates a network of interconnected natural spaces, designed to enhance both environmental sustainability and liveability.
- **Comfortable:** A place, street or transport option that provides physical and emotional ease and wellbeing for its people.
- **Connected:** A network that establishes links with its surroundings, allowing people to move about freely and sustainably.
- **Corridor:** A broad, linear geographic area between places. This could be a street.
- **Direct:** The shortest connection with limited, if any, detours. In a bus network context, the directness ratio refers to the length of the bus route divided by the shortest road distance.
- **Development:** An initiating process. It implements methods and actions required to improve cities, precincts, buildings, places or spaces with a socio-economic impact.
- **DCP (Development Control Plans)**: a plan which provides guidelines for development within a local government area
- **Emission:** The production and discharge of something. In a transport context, this often refers to carbon and tailpipe emissions generated by vehicles with internal combustion engines.
- **Filtered permeability:** A tool to filter out private vehicle traffic on selected streets to create a more attractive environment for walking, cycling and public transport.
- **Fit for purpose:** A place or street that works according to its intended use.
- **Integrated transport network:** A network that combines different transport modes to maximise ease and efficiency for people and goods movements in terms of time, cost, comfort, safety, accessibility, and convenience.
- **Last-mile:** The last leg of people and goods movements from a hub to a final destination.
- **LATM (Local Area Traffic Management):** changes made to local streets to improve how they operate and cater for all road users, with a focus on enhanced safety and amenity.
- **Liveable:** A built environment that supports and responds to people's patterns of living, and is suitable and appropriate for habitation, promoting enjoyment, wellbeing, safety, and prosperity.
- **Local Streets Neighbourhood:** Areas of local streets that have been designate as a neighbourhood that can be prioritised, studied, planned and managed as a relatively autonomous area. They are typically surrounded by major roads or barriers such as creek lines or train lines.
- **Mobility:** The ability to move through an area
- **Movement:** The movement of people and goods using the transport network.
- **Movement and Place:** A multidisciplinary and cross-government 'place-based' approach to the planning, design, delivery, and operation of transport networks.
- **Pedestrian Access and Mobility Plans (PAMPs):** The program through which our footpaths and some of our crossings are delivered at CN

- **Permeable:** The extent to which a network permits (or restricts) people and goods movements in different directions.
- **Place:** A social and a physical concept – a physical setting, point, or area in space conceived and designated by people and communities. In this sense, place can describe different scales of the built environment – for example, a town is a place and a building can be a place.
- **Place-based:** A planning approach that requires collaboration and understanding of the physical, environmental, social and cultural attributes of a location. It requires analysing the dynamic conditions of a place that make it unique and recognising this change will continue.
- **Point-to-point:** Transport services that go directly from a user's origin to their destination. Taxis and ridesharing services are the most common point-to-point transport modes.
- **Precinct:** A designated area within real or perceived boundaries of a specific area. A precinct can be of different scales and usually relates to a study area of a particular place.
- **Quietway:** A high-quality mixed traffic treatment where bicycle riders travel in a mixed traffic environment with motorised traffic, and are positioned in the centre of the traffic lane. The key design philosophy of a quietway is the safe integration of people cycling as equal road users to motor vehicles – they are environments where the motor vehicle is a guest on the roadway. This requires drivers to reduce travelling speeds to 30km/h or lower, and discourages them from overtaking through effective design treatments that send visual cues to road users about appropriate speeds and behaviours.
- **Road reserve:** A legally defined area of land within which facilities such as roads, footpaths and associated features may be constructed for public travel.
- **Safe System:** An approach to achieve the ultimate goal of zero deaths and serious injuries on NSW roads, underpinned by safe roads, safe speeds, safe people and safe vehicles.
- **State environmental planning policy (SEPP):** A statutory plan, typically prepared by the Department of Planning and Environment and endorsed by the Minister for Planning. It can be a spatial plan for particular land in NSW, or it can set policy that applies to particular land or all land in NSW.
- **Sustainable:** Relates to the endurance of systems, buildings, spaces, and processes – their ability to be maintained at a certain rate or level, which contributes positively to environmental, economic, and social outcomes.
- **Land uses:** The purpose to which the land cover is committed. Sometimes used interchangeably with 'places', 'destinations' and 'trip generators' in a transport planning context.
- **Transport oriented development (TOD):** Development around transport nodes with a focus on active and public transport use and living locally.
- **Walkable:** Measures that support safe, comfortable, and direct walking to destinations such as footpaths, crossings, shading, protection from traffic, connected paths along desire lines and proximity.
- **Water sensitive urban design:** The integration of water cycle management into planning, design and construction of the built environment
- **Vision-led planning:** Also known as 'vision and validate', a planning concept centred on a co-design approach based on a partnership between TfNSW, communities, local councils and stakeholders. It starts with co-developing shared visions for places founded in a rich understanding of what people want and need, and validating the visions through scenario testing, stakeholder engagement and policy alignment.

References

1. McCrindle Research (2025). What Australia wants - Neighbourhood design. Prepared for Heart Foundation, Healthy Active by Design
2. United Nations (2015). Transforming our world: the 2030 Agenda for Sustainable Development, Sustainable Development Goals (resolution 70/1)
3. Jafari, A., Pemberton, S., Tiwari, S., Saghapour, T., Chand, N., Zapata-Diomedi, B., & Giles-Corti, B. (2025). Modelling the impact of lower speed limits on residential streets for cyclist level of traffic stress and car travel time in Greater Melbourne (No. np64v_v1). Center for Open Science.
4. Jasiūnienė, V., & Čygas, D. (2020). Analysis of older pedestrian accidents: A case study of Lithuania.
5. Monfort, S. S., & Mueller, B. C. (2025). A modern injury risk curve for pedestrian injury in the United States: The combined effects of impact speed and vehicle front-end height. Journal of Safety Research, 94, 235-241.
6. Yannis, G., & Michelaraki, E. (2024). Review of city-wide 30 km/h speed limit benefits in Europe.

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