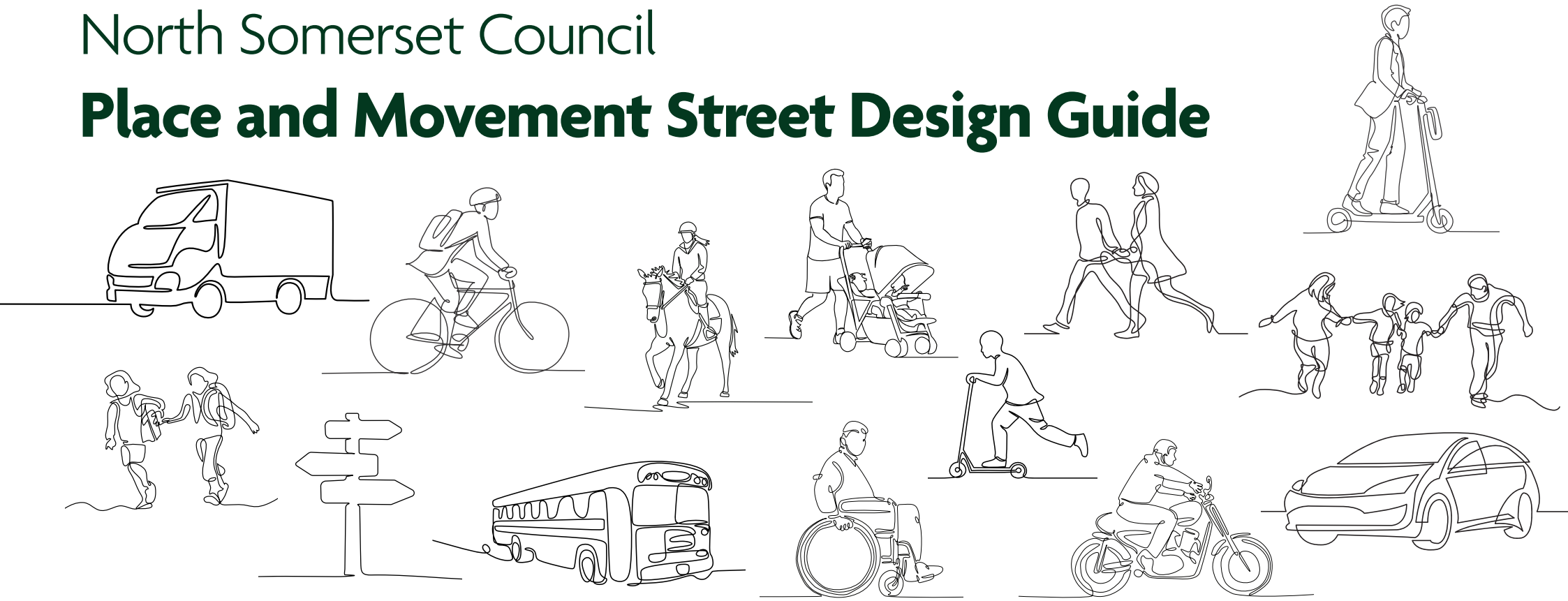
North Somerset Council

Open, Fair, Green

North Somerset Council

Place and Movement Street Design Guide



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Place and Movement – Street Design Guide

Introduction

In North Somerset, we want streets that are welcoming, safe and attractive for all to access and enjoy. This Street Design Guide provides a practical resource for ensuring every road, street, and lane across our district aligns with the principles of the **Place and Movement Framework** and supports both movement and placemaking.

Given the diversity of the local highway network, from narrow rural lanes to busy urban distributor roads, this guide sets out key design interventions tailored to each road type and its primary function. It serves as a toolkit for Council Officers, Town and Parish Councils, Developers and Highway Designers, helping to deliver streets that are accessible, sustainable and well-balanced.

The guide supports the **North Somerset Active Travel Strategy**, and its **Action Plans** which promote a consistent, user-focused approach to highways design. It also aligns with national guidance

- **Cycle Infrastructure Design** LTN 1/20
- **Bus User Priority –** LTN 1/24
- **Manual for Streets 1** guidance for local access roads in residential areas
- **Manual for Streets 2** principles for wider street types
- **Design Manual for Roads and Bridges (DMRB)** for rural primary roads
- **DfT Inclusive Mobility** and emphasises the prioritisation of vulnerable road users.

Top Tip! **The Active Travel England resources page** compiles all the relevant national guidance and includes a range of design and review tools, including master planning and site-wide considerations for new developments.

Active travel policy framework components

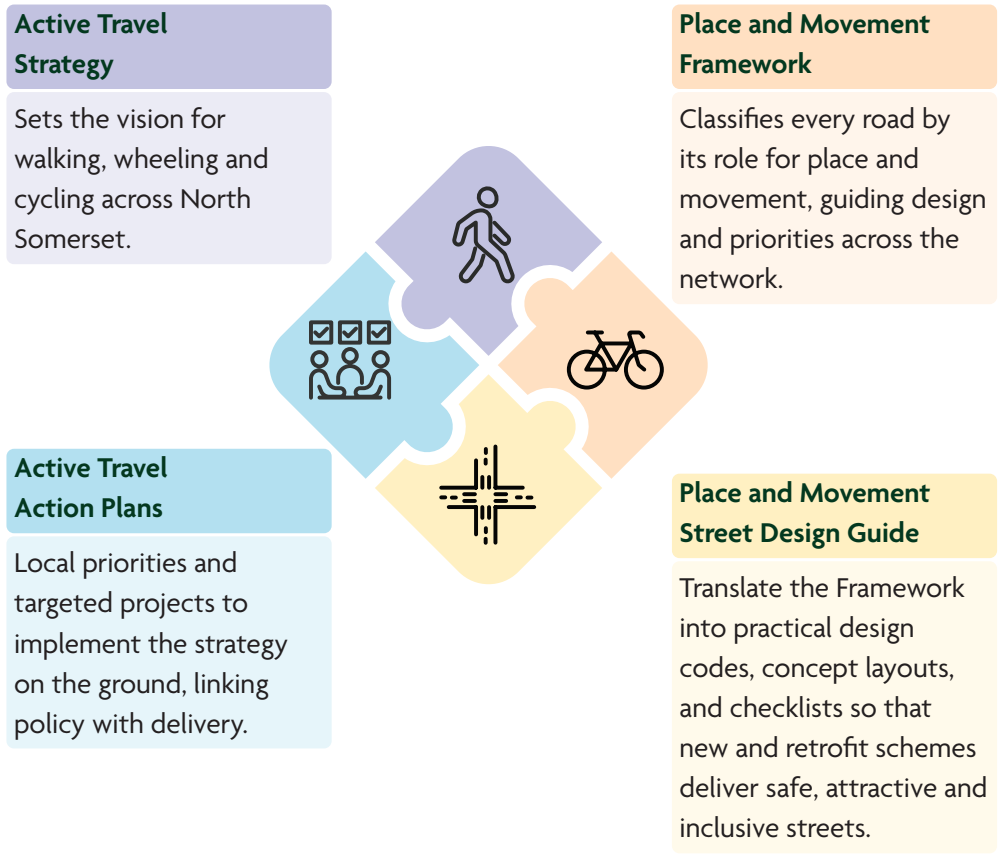


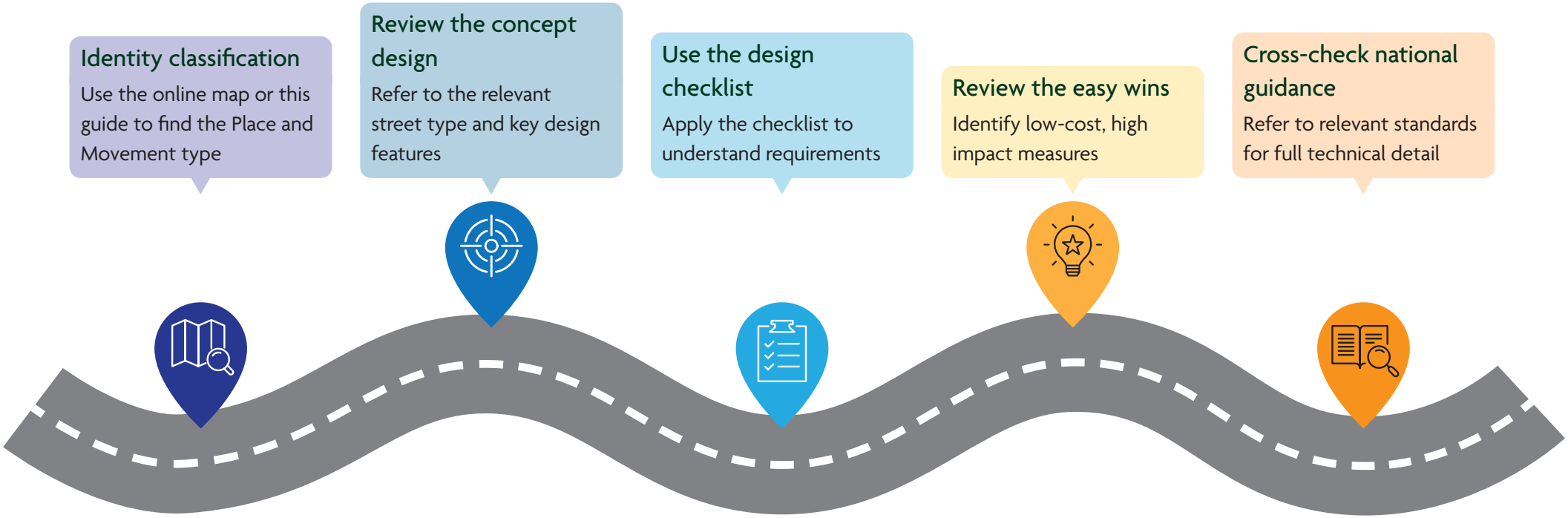
Figure 1: Active Travel Strategy framework components

How to use this guide

Each street type in this guide is presented with:

- **Place and Movement classification:** categorises roads and streets by their primary function, shaping the design priorities.
- **Concept design:** illustrates the core design vision, showing typical features and layouts for new and existing highway space.
- **Design checklist:** summarises key considerations across all elements of street design, including, carriageways, footways, cycling and public transport facilities, accessibility, placemaking and environmental features.
- **Easy wins:** highlights low-cost, high impact measures that can be delivered through routine maintenance or small-scale projects.

This guide applies to both new developments and retrofit schemes. Where full compliance is not feasible (for example, in constrained retrofit settings), designs must still follow the core principles of reducing vehicle speeds, prioritising vulnerable users, and enhancing the quality of place. For detailed measurements and technical standards, always refer to national guidance (such as MfS, LTN 1/20 and 1/24 and DMBR) and the North Somerset Highway Development Guide.



Place and Movement Street Classification

To ensure consistent street design, all roads in North Somerset are classified by both Place and Movement. This combination determines each street's role, how it functions, the design priorities and how it contributes to its local setting while shaping design decision.

A map of the North Somerset Council road network, classified by Place and Movement, is **available here**. This should be your first step when applying this guide.

- use the map to identify the correct classification for the street you are designing or assessing
- if using a printed copy, use the descriptions in the section or consult a North Somerset Council highways officer

Place classification

Rural roads: Typically located outside settlement boundaries, often bordered by hedgerows or open countryside. Design aligns with **Manual for Streets 2** and **DMRB** standards. Where traffic volumes are low, Local Access roads may reflect the **Quiet Lanes and Home Zone** (England) Regulations 2006, encouraging shared, considerate use by all users.

Urban roads: Located within built-up areas, these streets are designed in line with **Manual for Streets** 1

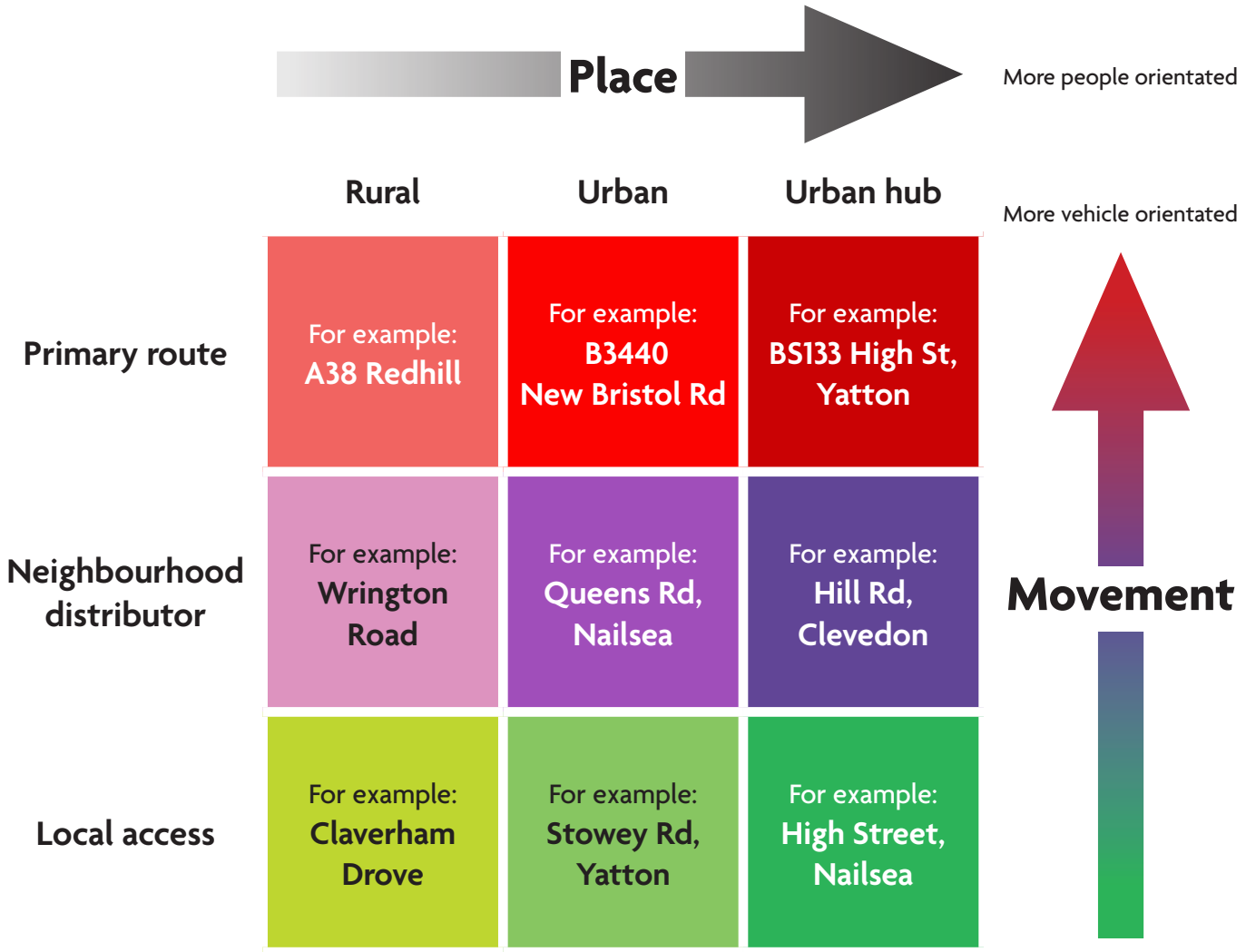


Figure 2: The nine road classifications

and 2, and **LTN 1/20**. Emphasis is placed on creating a safe, accessible environment for walking, wheeling and cycling, with infrastructure that allows users to travel side by side including families and children.

Urban hub: High-activity streets typically found in town or neighbourhood centres, or around schools and transport interchanges. Design prioritises pedestrian walking and wheeling comfort with widened footways, seating, green infrastructure and frequent crossing points. Lower speeds (20mph) and placemaking features support inclusive spaces.

Movement classification

Primary route: Strategic roads that facilitate longer-distance travel and access to major trip attractors. Design must accommodate high traffic volumes while prioritising the safety of vulnerable users through segregated walking and cycling facilities, particularly in high-speed or rural contexts.

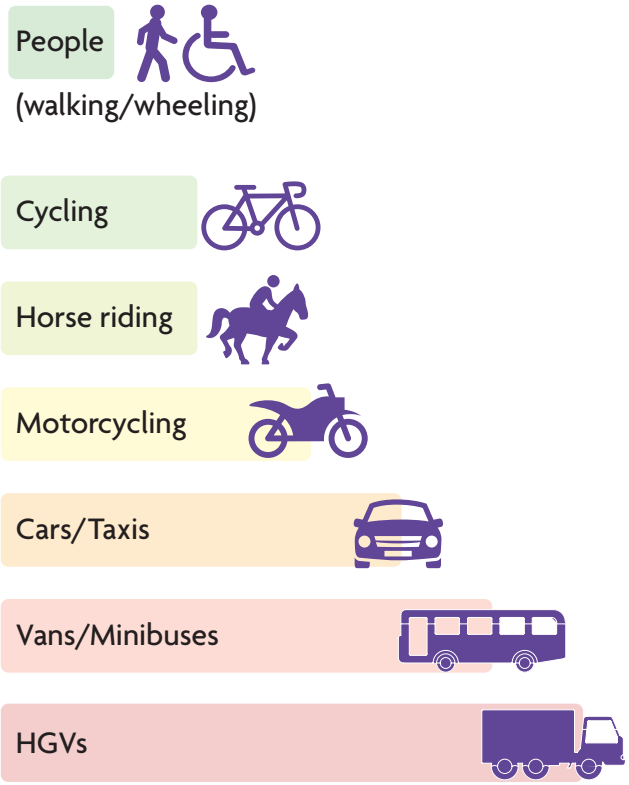
Neighbourhood distributor: Streets that connect residential areas to local services and the wider road network. Design must support active travel and bus movement, while balancing traffic flow with the need for safe crossings, cycle infrastructure and access to schools, shops and parks for example.

Local access: Streets that provide direct access to homes, businesses and community facilities. Designed for low-speed, low-traffic environments that discourage through movement. Emphasis is placed on placemaking, inclusivity and supporting day-to-day local activity through active travel and green infrastructure.

Reclassification of streets

The Place and Movement Framework is not static. Future-proofing classifications is essential, as new developments, bypasses or housing allocations can alter both the place character and the movement function of a route. Classifications must therefore be reviewed to reflect the future context. Examples include:

- **Movement changes:** The introduction of the Banwell Bypass will create a new Primary Route, allowing existing A-routes through Banwell to be downgraded to Neighbourhood Distributors. This shift would support traffic-calming measures and reduce through-traffic in the village, with design expectations adjusted accordingly.
- **Place changes:** Where development spreads into rural areas, adjoining roads may need to be reclassified from "rural" to "urban" to ensure designs provide safe, sustainable and inclusive access.



Road users with the potential to cause the most harm – such as those in large vehicles – have more responsibility to reduce the threat to others (in line with updated Highway Code, January 2022).

Figure 3: Hierarchy of road users by vulnerability

Design integration

Across all classifications, design must follow the highway user hierarchy, giving priority to the most vulnerable users first – people walking and wheeling, followed by cyclists, public transport, and finally private motor traffic. This approach ensures safety, accessibility, and alignment with the Highway Code and national policy (LTN 1/20, Inclusive Mobility).

The classifications must be considered together. The combination determines design priorities, including which users take precedence, what speeds are appropriate, and how space should be allocated. For example:

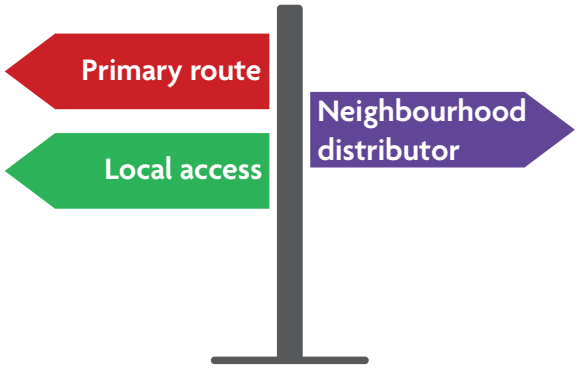
- A **Primary route** in a **rural** setting prioritises through traffic but must also provide segregated pedestrian and cycle facilities to protect vulnerable users.
- A **Neighbourhood distributor** through an **urban hub** will reduce speeds and enhance crossing opportunities and public realm.
- A **Local access road** in a **rural** setting may function as a shared "Quiet Lane", encouraging walking, cycling, and horse riding with slower traffic.

Where classifications intersect or competing priorities exist (for example, a busy distributor through an urban hub), designers may need to create hybrid or transitional layouts. The accompanying design checklists and concept designs in this guide provide a framework for balancing these needs.

Design checklists

The design checklists turn each street's Place and Movement classification into a practical tool for decision making. They summarise the key features every scheme should consider from carriageways and footways to cycling infrastructure, accessibility, public transport, green infrastructure and placemaking – enabling engineers and designers to balance user needs with safety, function, and local context.

Checklists are provided for the Primary routes, Neighbourhood distributors and Local access road Movement types:



Each is subdivided into rural, urban, and urban hub settings to reflect different environments and operational needs. To support quick reference, each checklist appears directly after its corresponding section within this guide.

While the checklists promote consistency, they are not exhaustive. Where streets serve additional functions, such as bus corridors, diversion routes, or HGV access – these roles should be identified early and reflected in the design, for example:

- LTN 1/20 – fully compliant cycling infrastructure where Local Cycling and Walking Infrastructure Plan (LCWIP) routes or National Cycle Network routes are present and appropriate protection from motor traffic.
- LTN 1/24 – provision for bus geometry, stops and laybys.
- Additional carriageway width or turning space to accommodate HGV's, refuse vehicles or winter gritting routes.
- Enhanced carriageway standards where the road is designated as a strategic diversion route.

Early engagement with North Somerset Council Officers is strongly recommended to confirm requirements and ensure schemes align with current policies, operational needs, and local priorities.

Each checklist is supported by a separate summary of "easy wins", cost-effective measures such as vegetation clearance, speed reduction, wayfinding or seating. These are highlighted in dedicated tables for each movement type, showing interventions

that can typically be delivered through routine maintenance or small-scale works, particularly in retrofit settings.

For new developments, the checklists ensure mandatory standards are met in line with national guidance and local policies.

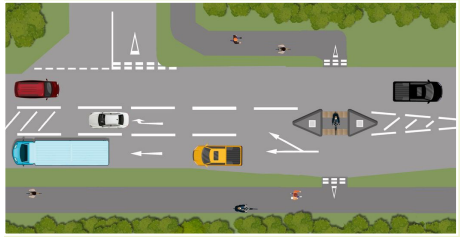
For retrofit schemes, they help identify where designs can adapt to site constraints while maintaining safety, inclusivity, and quality of place.

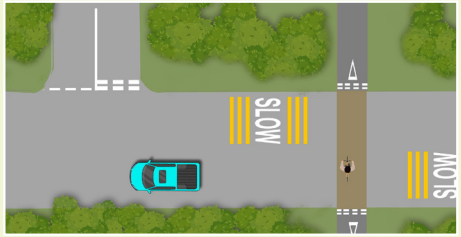
Note: These checklists summarise key design principles and draw on current national guidance. They are intended as a helpful reference and not a substitute for full technical documents. Designers must always refer to the relevant statutory guidance and the North Somerset Highway Development Guide, particularly where adoptable standards apply. While the checklist items represent preferred approaches, not all interventions will be appropriate or feasible in every context. Final designs should be tailored to the specific context, constraints, and objectives of each scheme.

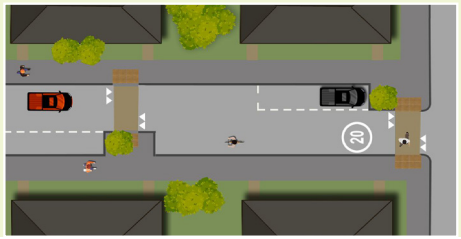
Concept designs

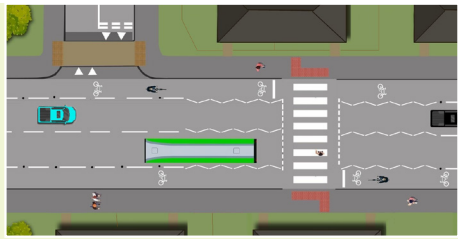
The concept designs in this guide provide a visual illustration of how streets might look when designed in line with the Place and Movement framework. They are intended to show typical features, relationships between users, and the balance of movement and place.

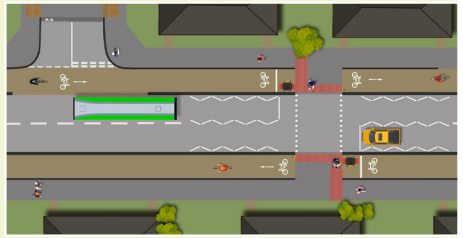
Designs are not to scale and do not represent adoptable layouts or minimum dimensions. For example, illustrated footways may appear narrower than the standards set out in the checklists and national guidance. Final designs must always be developed using the relevant technical standards and the North Somerset Highway Development Guide. The concept designs should therefore be read as a tool for inspiration and to demonstrate principles.

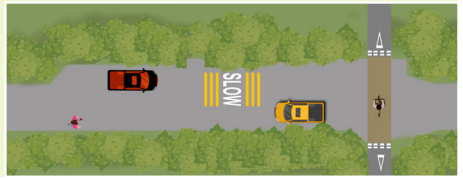












Primary route concept designs

Primary route – Rural

For example: A371, Locking Parklands

Primary use:
Through movement
Suggested design speed 40-60mph

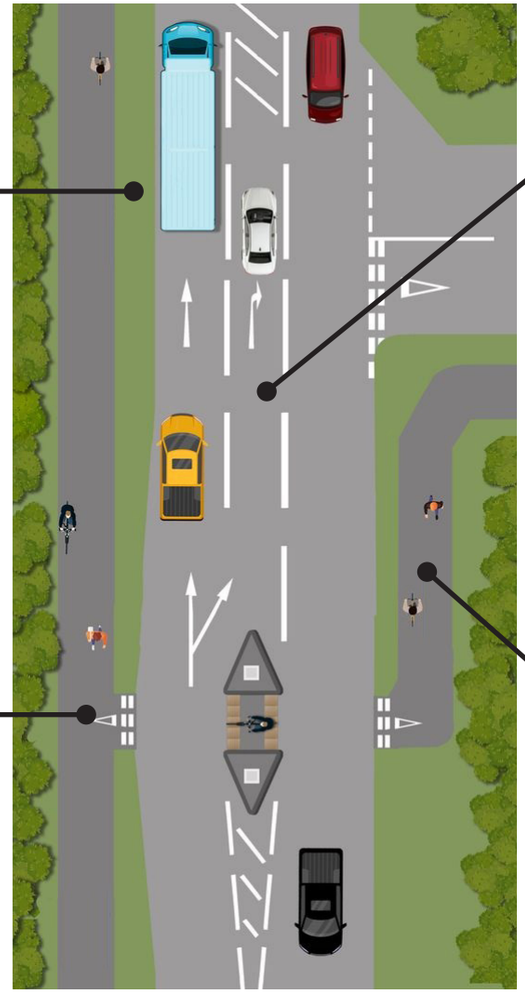
Rural primary routes carry the highest traffic speeds and flows, dominated by longer-distance journeys. Carriageways are wide, well-marked, often with reflective studs and hatch-marked central areas for right turns or refuges. Street lighting is generally minimal, limited to safety-critical points, bus stop facilities are often basic due to space and accessibility constraints, but should be considered for upgrading based on potential demand and where feasible.

Historic lack of footpaths and cycle facilities makes these routes unsafe for active travel, so segregated pedestrian and cycle routes must be provided, buffered from the carriageway. Pedestrian crossings should use central islands at desire lines. In retrofit schemes, shared paths may be acceptable if they meet standards, but verge widths must comply with DMRB to protect vulnerable users.

This approach supports efficient through-traffic while enabling safe walking, wheeling, and cycling.

Wide **verge/buffer** between the carriageway and active travel route. It provides separation from high-speed traffic, contributes to perceived safety, and creates space for green infrastructure, drainage or lighting

Formal or informal **crossings** should be provided at side roads and desire lines, protected by a central island



Right-turn lanes protect right turning traffic from potential rear-end (shunt) collisions and prevents queuing vehicles from obstructing through movement

Figure 4: A371 Locking Parklands

Given the low numbers of vulnerable users, **a shared-use facility** (minimum of one side) may be acceptable only where flows are very low and minimum standards can't be met, with regular access points, dropped kerbs and breaks in the verge at crossings and access routes

Primary route – Urban

For example: B3440 New Bristol Rd, Worle

Primary use:
Through movement and neighbourhood access
Suggested design speed 30mph

Primary routes in urban areas connect town centres, workplaces, and neighbourhoods, carrying heavy traffic alongside buses, cyclists, and pedestrians. Space is often limited, with junctions, bus stops and street furniture competing for room, so design must balance efficiency with the safety of all users in line with the hierarchy of vulnerable road users.

Cycling should be encouraged as a key mode of transport, with facilities that ensure safety and accessibility. Where space is constrained in retrofit scenarios, shared use should only be considered as a last resort and only where pedestrian and cycle flows are very low and no alternative is feasible. The preferred approach is to reallocate carriageway space. Where full segregation (for example, kerbed tracks) is not achievable, light segregation such as flexible bollards, stepped cycle tracks, or raised line markings must be used to protect cyclists from high traffic volumes, HGVs, and buses.

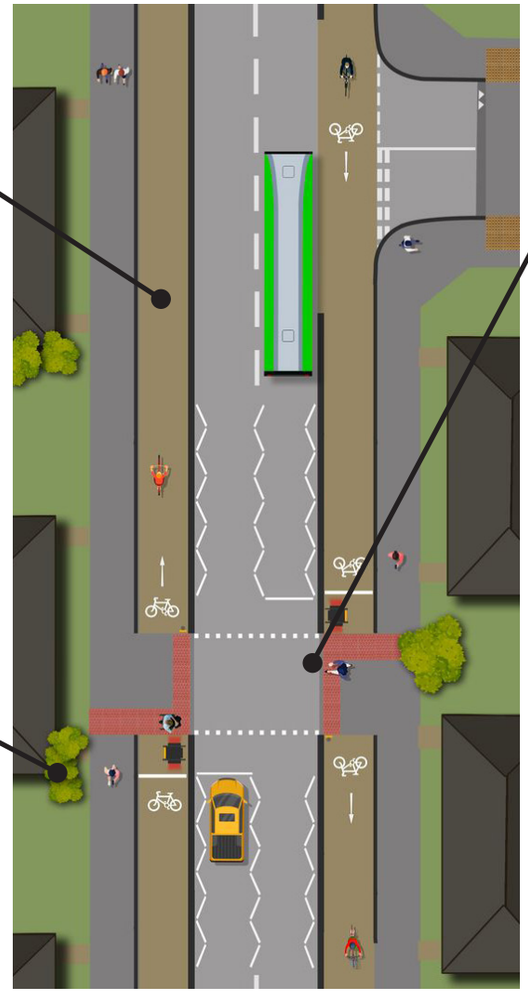
To reduce conflicts, frontage access should be limited. Traffic speeds should be managed, typically 30mph for through movement, with 20mph used where space is constrained or vulnerable users are at higher risk.

This approach ensures safe, efficient movement while prioritising sustainable transport in urban areas.

Cycling provision should be segregated due to high traffic volumes. Lane width can be reduced at key locations to slow cycles down

Figure 5: Upper Bristol Road, Bath

Kerbside **trees** are recommended to mitigate highway microclimate



Pedestrian crossings on side roads could be set back if high volumes of turning traffic are expected. Pavements should be widened at the corners to align with pedestrian desire lines

Off road **parking** should be encouraged (at appropriate nearby locations) to reduce conflicts with active travel users

Primary route – Urban hub

For example: B133 High St, Yatton

Primary use:
Access to services and through traffic
Suggested design speed 20mph

Where a primary route passes through an urban hub, competing needs for space can be high, so people walking, wheeling and cycling should be prioritised. These stretches, typically up to 1km long, serve areas with high trip attractors and residential density.

Carriageways should be kept to a minimum width, with wider pavements (especially on key attractors side), high-quality lighting and frequent crossings to support group movement and dwell time. Public transport provision is high, matching demand, so bus stops with shelters, real-time information (RTI) with an accessible boarding space. Parking and loading controls are essential, prioritising disabled bays and delivery/loading zones over general on-street parking to free space for movement and placemaking. Surface colours and textures can be considered as part of a wider placemaking scheme.

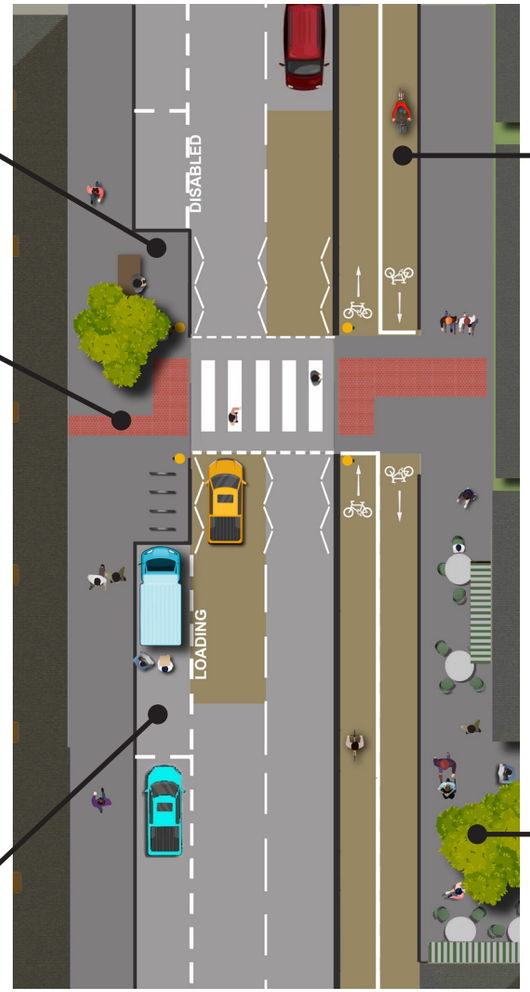
A 20mph design speed enables safe mixing of cyclists and vehicles, creating a calmer, more attractive environment even with high traffic volumes.

Pavement builtouts should be provided at crossings to improve visibility and provide space for greening, street furniture and cycle parking

Zebra or Tiger crossing should be preferred to highlight the presence of pedestrians

Figure 6: College Green, Bristol

Loading and disabled bays should be provided on the attractors side of the carriageway



If space allows, **segregated cycling provision** should be incorporated. Otherwise, an alternative parallel cycle link should be provided in line with LTN 1/20

Continuous crossings at side roads should be provided in all urban hubs to prioritise pedestrian movement

Greening and placemaking should be encouraged to enhance biodiversity

Primary route design checklist

Primary routes facilitate long-distance travel and major trip attractors.

Primary route – Rural
A38 Redhill

Carriageways

- Design speed 40-60mph
- 3.65m per lane generally, for more detail refer to DMRB CD127
- Consider right turn facility, signals, roundabouts (see DMRB)
- Consideration to gritting routes

Footways

- Footway on one side with suitable verge buffer compliant with DMRB and LTN 1/20
- Minimum 2.0m footway width
- Minimum 3.0m width where shared with cyclists

Accessibility

- Limited frontage access
- Suitable pedestrian crossing, for example, signalised, refuge, in line with relevant standards
- Dropped kerbs with tactile paving
- Wayfinding and signage
- Warning signs at Public Rights of Way (PROW) crossings
- Surface treatment at uncontrolled crossing

Cycling

- Fully kerbed facility, refer to LTN 1/20 in cases of shared provision

Public transport

- Bus shelter
- Bus access kerbs
- Dropped kerb and pedestrian refuge island
- Where segregated bus lanes proposed, bus lane width 3.0m absolute minimum. Where bus lanes are shared with cyclists minimum width of 4.5m (refer to LTN 1/24)

Green infrastructure and street furniture

- Verge buffer between footway and carriageway (refer to DMRB)
- Planting lines and vegetation set back a minimum of 1.0m from footway/carriageway and 3.0m from visibility spays
- Sustainable drainage systems
- Passive crash-friendly street furniture
- Street lighting where required for safety (for example, junctions, crossings, bus stops), to minimise impact on rural character and ecology.
- Cycle parking at key attractors

Parking

- None on carriageway
- Avoid informal verge parking by providing formal lay-bys where demand exists

Primary route – Urban

New Bristol Road

Carriageways

- Design speed 30mph carriageways. Segregate modes where possible
- 3.65m per lane as a general rule (not including cycle facilities)

Footways

- Footways on both sides with suitable verge buffer compliant with DMRB and LTN 1/20
- Minimum 2.0m width – increased width in areas of high pedestrian footfall

Accessibility

- Limited frontage access
- Suitable pedestrian crossings at desire lines for example, signalised, refuge, parallel.
- Continuous footways at minor road junctions with surface treatment and tactiles
- Dropped kerbs with tactile paving
- Wayfinding and signage

Cycling

- Minimum of light segregation (kerbed preferred), refer to LTN 1/20
- Colour buff surface

Public transport

- Bus shelter with e-ink
- Bus access kerbs
- Dropped kerb and pedestrian crossing
- Where segregated bus lanes proposed, bus lane width 3.0m absolute minimum. Where bus lanes are shared with cyclists minimum width of 4.5m (refer to LTN 1/24)

Green infrastructure and street furniture

- Seating and resting points
- Street trees (verge separation where required)
- Planting lines and vegetation set back a minimum of 1.0m from footway/carriageway and 3.0m from visibility spays
- Sustainable drainage systems
- Streetlighting provision along key corridors
- Cycle parking at local centres, bus stops and schools in overlooked, well-lit locations clear of footways

Parking

- On-street parking generally not permitted.
- Provide lay-bys only where essential, with priority for disabled bays or servicing
- Permit schemes in high-demand areas

Primary route – Urban hub

High Street, Yatton

Carriageways

- Design speed 20mph
- Minimum carriageway width 5.5m (minimum of 6.7 when served by buses)
- Remove centreline
- Build out kerb for crossings
- Gateway features

Footways

- Footways on both sides
- Minimum 3.0m width or as wide as practically possible (2.5m+ if retrofit)

Accessibility

- Minimal frontage access
- Suitable pedestrian crossings at desire lines for example, zebra, signalised, parallel
- Continuous footways at minor road junctions with surface treatment and tactiles
- Footway buildouts at crossings
- Dropped kerbs with tactile paving
- Wayfinding and signage
- Transport (mobility) hub

Cycling

- Light segregation, refer to LTN 1/20
- Colour buff surface

Public transport

- Bus shelter with e-ink
- Bus access kerbs
- Dropped kerb and pedestrian crossing
- Where segregated bus lanes proposed, bus lane width 3.0m absolute minimum. Where bus lanes are shared with cyclists minimum width of 4.5m (refer to LTN 1/24)

Green infrastructure and street furniture

- Seating and rest points
- Pocket parks and parklets
- Street trees and planting
- Decluttering
- Planting lines and vegetation set back a minimum of 1.0m from footway/carriageway and 3.0m from visibility spays
- Sustainable drainage systems
- High quality lighting
- Cycle parking in prominent accessible locations near schools, shops and transport hubs

Parking

- Parking limited to disabled bays, loading and EV charging
- General parking relocated off-street or managed under permit schemes/timed restrictions
- Timed restrictions or shared zones

Neighbourhood distributor concept designs

Neighbourhood distributor – Rural

For example: Wrington Road

Primary use:
Connects villages and hamlets to towns and primary distributors
Suggested design speed 40mph

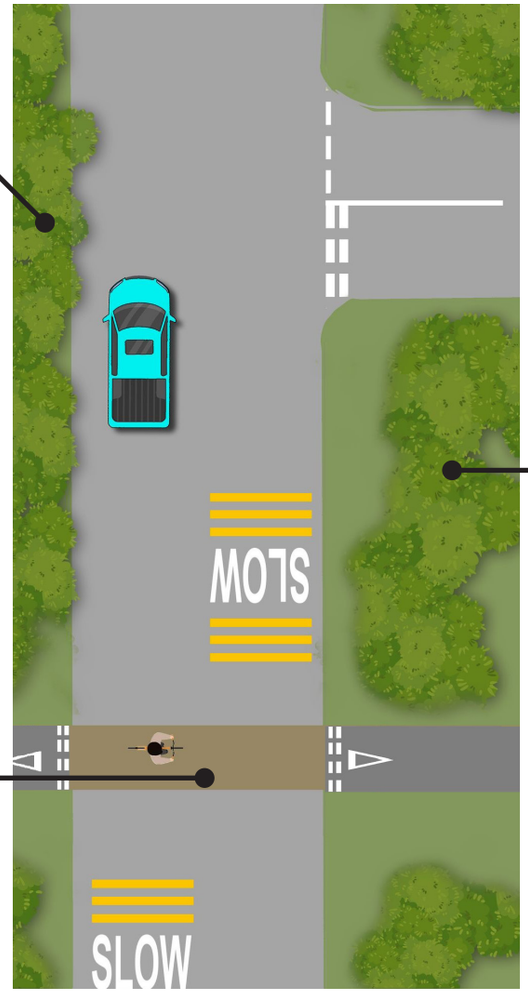
Rural neighbourhood distributors carry through traffic at relatively high speeds, though forward visibility, narrow carriageways, and pinch-points often limit actual speeds despite higher posted limits. Streetlighting is minimal, road markings are typically restricted to hazard areas, and motor vehicles dominate.

Active travel facilities are scarce due to historic low demand, making these routes unattractive for most people walking or wheeling. However, safe pedestrian crossings should be provided at key desire lines, such as Public Rights of Way, and the routes remain useful for confident cyclists, equestrians, and walkers linking quieter lanes and communities.

Public transport stops are limited to near attractors, often with basic infrastructure. Direct frontage access should be avoided to maintain safety and flow.

Rural character maintained by hedgerows, ditches and soft verges with minimal hard urban features

Cycle or footpath crossings should be highlighted by a different colour material with wayfinding



Shared carriageway (dependent on LTN criteria) for cyclists and equestrians. New build should consider active travel demands and design appropriate facilities

Vegetation management set back at every junction and crossing to optimise visibility

Minimise lining reinforces rural character and narrows visual width; markings limited to hazard areas or junctions

Figure 7: crossing, Festival Way

Neighbourhood distributor – Urban

For example: Queens Rd, Nailsea

Primary use:
Access to neighbourhoods with limited through movement
Suggested design sped 30mph (reduced to 20mph where space is limited or risks to vulnerable users are high)

Urban neighbourhood distributors connect homes to schools, town centres, and employment areas, often carrying local traffic and bus services. These streets often face competing demands for space, with pinch-points created by junctions, parking, frontage access and street infrastructure.

These are key corridors for active travel, so walking, wheeling, and cycling must be prioritised. Cycle provision should be continuous, using segregated or minimum-standard lanes, with frequent crossings linking people to local attractors. Bus stops should be integrated with shelters, real-time information (RTI) and accessible boarding areas without obstructing footways. Frontage access should be limited.

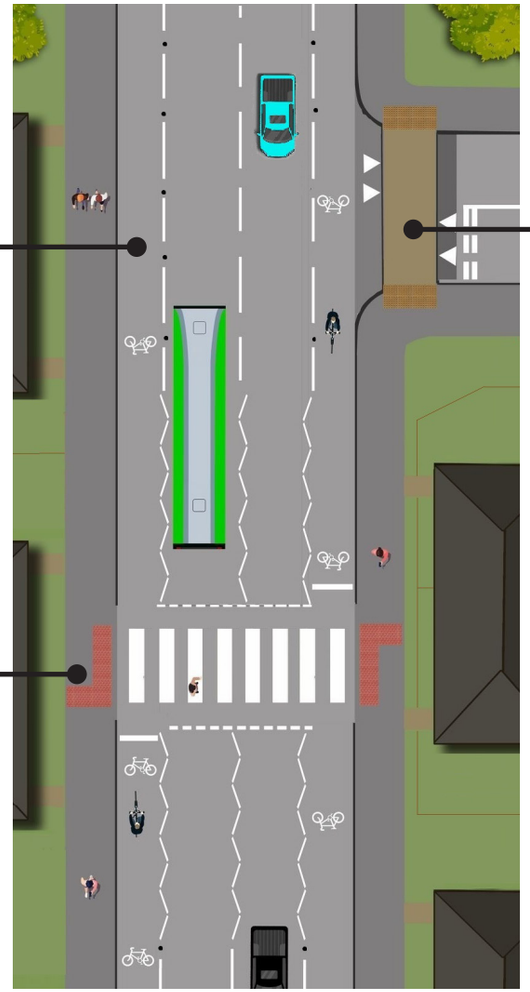
Where space allows, incorporate street trees, planting, and SuDS features (for example, rain gardens) to manage surface water and support placemaking. To manage competing space needs, consider controlled parking zones to reduce congestion and prioritise disabled bays or delivery access. Clearly defined areas for bin storage are also important to keep pedestrian routes clear.

The default design speed is 30mph, reducing to 20mph where space is limited or risks to vulnerable users are high. This approach supports active, safe, and connected neighbourhoods while maintaining the distributor function of the route.

These roads are key cycle routes. **Cycle lanes** should be provided on the carriageway where space allows (LTN 1/20 compliant) or via shared paths where space is constrained

Figure 8: Light segregation, Gerard Road

Footways on both sides with frequent **pedestrian crossings** at desire lines



Side roads are expected to be local access; **continuous crossings** create a gateway into calmer, low speed environments. These features reinforce the transition from distributor roads to residential areas

Figure 9: Local access gateway, Swiss Road

Off road parking should be encouraged and if required, one-way restrictions should be considered to provide cycle lanes

Neighbourhood distributor – Urban hub

For example: Hill Rd, Clevedon

Primary use:
Access to local services and local traffic distribution
Suggested design speed 20mph

Urban hubs along neighbourhood distributors are vibrant, high activity areas often serving local shops, services, and community destinations. They experience high footfall and a mix of local and through traffic, with 20mph design speeds supporting safer movement.

Design must prioritise people walking, wheeling and cycling, with wider footways, frequent high quality crossings and cycle facilities where space permits. Where space is constrained, options include one-way traffic with a contraflow cycle lane and footway widening focused on key attractors side. Consideration should be given to removal of the centre line to act as a visual narrowing to make drivers more cautious and reduce speeds, particularly on quieter roads. Surface colours and textures can be considered as part of a wider placemaking scheme.

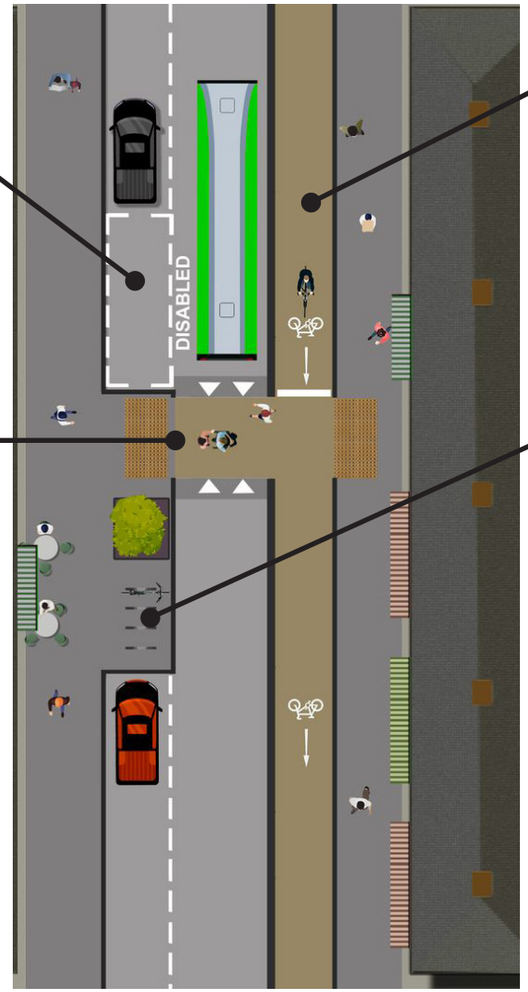
Streetlighting should be high-quality to support safety and dwell time, and the public realm should include placemaking features such as seating and notice boards. Bus stops should be integrated with shelters and real-time information (RTI), ensuring accessibility without obstructing pedestrian movement.

This approach ensures safe, inclusive, and people-friendly urban hubs, balancing accessibility, active travel, and local traffic flow.

Parking and loading restrictions are essential to maximise space. Bays should be generous to allow safe door opening. Disabled bays should be adjacent to buildouts

Pedestrian crossings should be in a different material to highlight pedestrian presence and slow traffic down

Figure 10: Pedestrian Crossing, Hill Road



Cycle contraflow lanes on one-way streets

Pavement buildouts should be provided at crossings and key attractor areas to provide space for seating, greening, street furniture and cycle parking

Carriageway widths should be minimised allowing for space for vulnerable users. Use of visual narrowing's to ensure slow speeds

Neighbourhood distributor road design checklist

Connecting residential areas to local services and the primary network.

Neighbourhood distributor – Rural

Wrington Road

Carriageways

- Suggested design speed 40mph
- Design alignment to reduce speeds
- 3.65m per lane as a general rule for more detail refer to DMRB CD127

Footways

- Footway on one side with suitable verge buffer compliant with DMRB and LTN 1/20
- Minimum 2.0m footway width

Accessibility

- Limited frontage access
- Dropped kerbs with tactile paving
- Suitable pedestrian crossings at desire lines for example, signalised, refuge
- Warning signs at Public Rights of Way (PROW) crossings
- Wayfinding and signage

Cycling

- Provision dependent on traffic flows, refer to LTN 1/20 for specific design requirements

Public transport

- Bus shelter
- Bus access kerbs
- Dropped kerb and pedestrian refuge island

Green infrastructure and street furniture

- Verge buffer between footway and carriageway
- Set back planting and vegetation a minimum of 1.0m from footway/carriageway and 3.0m from visibility spays
- Sustainable drainage systems
- Minimal streetlighting restricted to hazard areas and junctions
- Cycle parking at community attractors

Parking

- None on carriageway
- Provide formal lay-bys only where required for safety or rest

Neighbourhood distributor – Urban

Queens Road, Nailsea

Carriageways

- Suggested design speed 30mph
- Traffic calming features
- 3.65 per lane as a general rule. For more detail, refer to DMRB CD127

Footways

- Footways on both sides with suitable verge buffer compliant with DMRB and LTN 1/20
- Minimum 2m footways – upgrade to 3m if shared use with cycles

Accessibility

- Limited frontage access
- Dropped kerbs with tactile paving
- Suitable pedestrian crossings at desire lines for example, signalised, refuge, parallel
- Continuous footways at minor road junctions with surface treatment and tactiles
- Wayfinding and signage

Cycling

- Minimum of light segregation, refer to LTN 1/20

Public transport

- Bus shelter with e-ink
- Bus access kerbs
- Dropped kerb and pedestrian crossing

Green infrastructure and street furniture

- Placemaking features
- Seating and parklets
- Street trees (verge separation where required)
- Sustainable drainage systems
- Streetlighting provision along key corridors
- Decluttering to maintain clear footways
- Secure cycle parking at schools, shops and local centres

Parking

- On-street parking kept to a minimum and managed to avoid obstructing cycle lanes, bus stops, or crossings
- Permit schemes in high-demand areas

Neighbourhood distributor – Urban Hub

Hill Road, Clevedon

Carriageways

- Suggested design speed 20mph
- Build out kerb for crossings
- Traffic calming features
- Centreline removal if appropriate
- Minimum carriageway width 5.5m (minimum of 6.2 when served by buses)
- Gateway features

Footways

- Footways on both sides
- Minimum 3.0m width or as wide as wide as practically possible (2.5m+ if retrofit)

Accessibility

- Minimal frontage access
- Dropped kerbs with tactile paving
- Suitable pedestrian crossings at desire lines for example, zebra, signalised, parallel
- Continuous footways at minor road junctions with surface treatment and tactiles
- Footway buildouts at crossings
- Wayfinding and signage
- Transport (mobility) hub

Cycling

- Light segregation/cycle lanes (refer to LTN 1/20)

Public transport

- Bus shelter with e-ink
- Bus access kerbs
- Dropped kerb and pedestrian crossing

Green infrastructure and street furniture

- Placemaking features, for example, noticeboards
- Seating and parklets
- Street trees and planting
- Decluttering
- Active frontages
- Sustainable drainage systems
- Street dining (licence required)
- High quality streetlighting
- Cycle parking highly visible and integrated into buildouts

Parking

- Parking restricted to disabled bays, short-stay loading, and EV charging
- General parking relocated off-street or time-restricted to prioritise space for pedestrians and cycles

Local access concept designs

Local access – Rural

For example: Claverham Drove

Primary use:
Access to dwellings, agricultural land and recreation
Suggested design speed 20-30mph

Rural local access roads are typically narrow, enclosed by hedgerows, stone walls, or ditches, and serve a mix of low-density housing, farms, and countryside destinations. These lanes are vital for local access but also form a network used by active travel users, including horse riding for recreation, tourism and commuting.

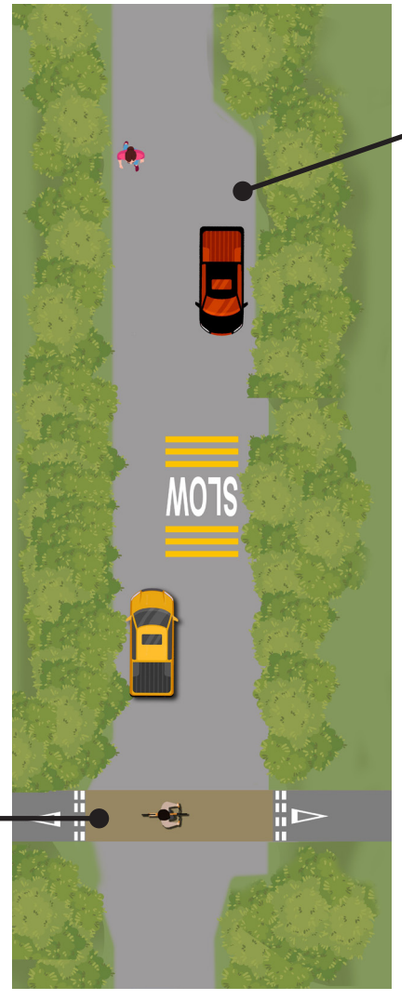
With no streetlighting, minimal footpaths, and low traffic volumes, vehicle speeds are generally reduced by constrained geometry – though many roads remain subject to the national speed limit. The rural lanes network also links to Public Rights of Way, bridleways, and national/ local cycle routes, providing short active travel connections between settlements and the wider countryside.

North Somerset's **Rural Lanes Action Plan** promotes a network of 'rural quiet lanes', reinforcing the need to 'share with care', reduce inappropriate through traffic and protect vulnerable users. Targeted measures may include speed reduction, improved visibility and surface treatments that preserve the rural character while improving safety.

This approach supports safer, more enjoyable local journeys, enhances rural tourism and strengthens links between communities and the natural environment.

Clear signage to reinforce share with care on rural quiet lanes

Figure 11: Festival way shared use



Occasional informal **passing places** should be to manage two-way movement

No centreline reinforces rural feel and narrows driver perception and speeds

Cycle or footpath crossings should be made visible with a change of surface, trimmed vegetation and wayfinding

Local access – Urban

For example: Stowey Rd, Yatton

Primary use:
Access to homes and local services
Suggested design speed 20mph

Local access roads are home to the majority of North Somerset residents. They provide the first and last part of most journeys, connecting homes to schools, parks, and the wider road network. Speeds are typically low (20mph), and traffic is limited to private vehicles and light goods, with minimal need for through access.

These streets offer high-quality footways, frequent informal crossings, and standard streetlighting. People cycling can usually share the carriageway comfortably without the need for dedicated infrastructure, especially where traffic volumes are low.

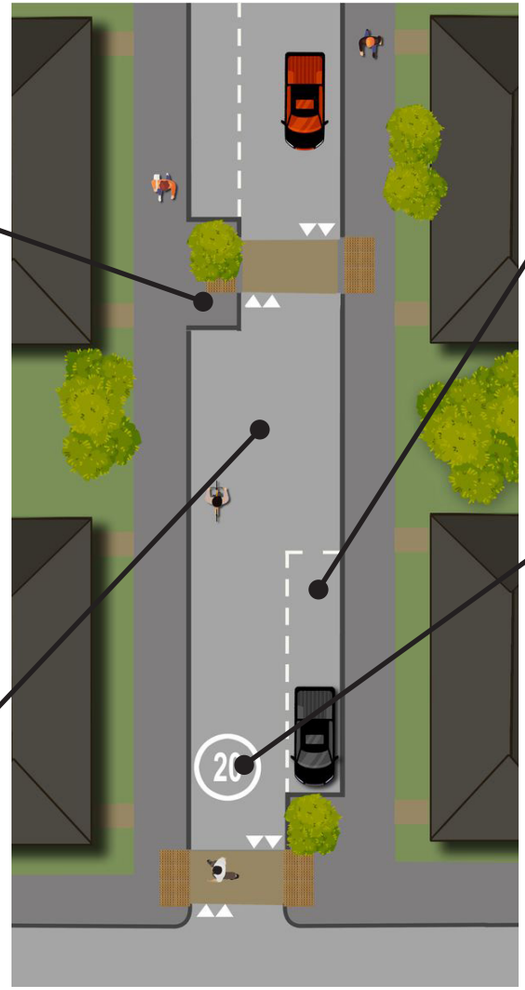
To discourage through-traffic and prioritise local movement, layouts may use modal filters or one-way streets. While traffic volumes are low, parking pressure can be high, particularly in more dense areas or near town and village centres.

Small, targeted improvements such as greening, street trees, and placemaking features can significantly enhance the residential character, reduce car dominance, and support safe walking, wheeling, and community life. All designs must also ensure unimpeded access for emergency services.

Pavement buildouts should be provided at crossings and key attractors to provide space for seating, greening, street furniture and cycle parking

No centreline to visually narrow the carriageway (where appropriate)

Figure 13: no centreline, Lodge Lane



On-street parking should be clearly marked and staggered on both sides of the road to provide traffic calming

If the road width is not sufficient for two vehicles to pass, **passing places** should be allocated at regular intervals

Local access urban hubs should be clearly marked by a **gateway** with a 20mph speed limit

Figure 12: layouts could also include a **modal filter**

Local access – Urban hub

For example: High Street, Nailsea

Primary use:
Access to local services
Suggested design speed 20mph

Urban hub streets on local access roads are key community spaces, often supporting schools, shops, cafés, and local services. They are typically low-speed environments with limited through-traffic, but high activity levels and competing demands for space.

Design should prioritise people walking, wheeling, and cycling, with wider footways, high-quality lighting, and placemaking features to support lingering and social interaction. Where space is constrained, footways should be widened on the side of key attractors.

On-street parking must be carefully managed, with priority given to disabled bays, loading zones, and residents. Where appropriate, modal filters, one-way systems (with consideration for contraflow cycles), or access restrictions (TROs) should be used to reduce traffic and improve safety.

To maintain access, passing places should be spaced to allow emergency and refuse vehicles to move safely. Pocket parks, seating, and greening help support community ownership, reduce car dominance and create inviting, walkable streets. Surface colours and textures can be considered as part of a wider placemaking scheme.

This approach enhances community life, supports local businesses and ensures a welcoming, accessible urban space.

Wider footways allow for safer pedestrian movement and supports social spaces by addition of street furniture

Greening and urban planting such as trees, planters, and green spaces improve air quality, reduce urban heat, and enhance the public realm

Space for **active frontages** encouraging spill-out spaces for cafés, shops, and markets to foster local vibrancy

Traffic calming features such as planters, continuous footways and buildouts

Figure 14: George Street

Local access roads design checklist

Proving direct access to properties, with minimal through traffic

Local access – Rural

Claverham Drove

Carriageways

- Suggested design speed 20-30mph
- Minimum carriageway width 5.5m, where not possible passing places must be provided where narrower
- Consider filtered permeability
- Centreline removal if appropriate
- Gateway features

Footways

- Warning signs and buff coloured surface at Public Rights of Way (PROW) crossings
- Suitable verge buffer compliant with DMRB and LTN 1/20
- Implied footways (virtual footway)

Accessibility

- Dropped kerbs with tactile paving
- Wayfinding and signage such as Quiet Lanes, Pedestrians in road ahead and Pedestrian and Cycle markings

Cycling

- Cycle route signage where appropriate

Public transport

- To be considered on a case-by-case basis

Green infrastructure and street furniture

- Sustainable drainage systems
- Planting lines and vegetation set back a minimum of 1.0m from footway/ carriageway and 3.0m from visibility spays
- Cycle parking at PROW links and community facilities

Parking

- Informal on-carriageway parking may be tolerated where volumes are low
- “Residents parking zones’ considered in villages with pressure

Local access – Urban

Stowey Rd, Yatton

Carriageways

- Suggested design speed 20mph
- Traffic calming for example, buildouts
- Consider filtered permeability
- Gateway features

Footways

- Footways on both sides
- Minimum 2m footways

Accessibility

- High levels of direct access
- Dropped kerbs with tactile paving
- Continuous footways on side roads with surface treatment and tactiles
- Wayfinding and signage

Cycling

- Cycling facilities dependent on traffic flows (Refer to LTN 1/20)

Public transport

- Where on a bus route, bus shelter with e-ink, bus access kerbs, dropped kerb and pedestrian crossing

Green infrastructure and street furniture

- Placemaking features
- Seating and parklets
- Street trees
- Sustainable drainage systems
- Lighting provision in line with residential safety needs
- Cycle parking in safe, overlooked locations, not obstructing footways

Parking

- Consider residents parking zones
- Stagger parking on both sides to act as traffic calming

Local access – Urban hub

High Street, Nailsea

Carriageways

- Suggested design speed 20mph
- Traffic calming with buildouts
- Minimum carriageway width 5.5m (minimum of 6.7 when served by buses)
- Consider filtered permeability
- Gateway features

Footways

- Footways on both sides
- Minimum 3.0m width or as wide as wide as practically possible (2.5m+ if retrofit)
- Pavement buildouts

Accessibility

- Minimal frontage access
- Dropped kerbs with tactile paving
- Frequent suitable pedestrian crossings at desire lines for example, zebra, signalised, parallel
- Continuous footways with tactiles
- Wayfinding and signage

Cycling

- Cycling facilities dependent on traffic flows (refer to LTN 1/20)

Public transport

- Where on a bus route, bus shelter with e-ink, bus access kerbs, dropped kerb and pedestrian crossing

Green Infrastructure and street furniture

- Active frontages
- Placemaking features
- Buildouts for example, kerbed street tree
- Seating/planting/parklets
- Street dining (licence required)
- Decluttering space
- High quality lighting
- Secure cycle parking located near shops, schools and cafes on buildouts or squares

Parking

- Parking carefully managed–priority for disabled, loading and EV charging
- General parking relocated or time restricted. Where permitted, bays must be staggered and designed not to obstruct crossings or footways

Easy wins

Primary routes

- **Decluttering** – remove redundant signage to improve driver awareness and visibility for pedestrians/cyclists.
- **Vegetation cut back** – ensures full width of footways/cycle tracks is usable and improves sightlines at junctions.
- **Crossings highlighted by contrasting surfacing** – simple colour tarmac (buff gold/green) makes priority clearer and brings routes up to LTN 1/20 standards.
- **Gateway features** – entry treatments (surface change, signage, village/town nameplates) to reinforce context and speed expectations.
- **Speed management** – simple traffic calming such as humps (urban) or visual narrowing (rural).
- **Bus stop upgrades** – raised kerbs, shelters, real-time info where feasible.

Neighbourhood distributor

- **Traffic calming** – raised tables, speed cushions, chicanes where needed to reduce vehicle dominance.
- **Wayfinding** – low-cost signage/markings to highlight connections to schools, shops, bus stops, and cycle routes.
- **Cycle or footpath crossings with coloured surfacing** – especially effective at side roads and school approaches.
- **Buildouts at bus stops** – allows direct boarding without narrowing footways.
- **Dropped kerb packages** – tackle missing links on walking routes systematically.

Local access

- **Seating** – benches, parklets or resting points especially near community facilities, schools and bus stops.
- **Cycle parking** – secure hangars or Sheffield stands
- **Decluttering/vegetation cut back** – improves accessibility for disabled users and people with pushchairs in tight residential streets.
- **Modal filters/planters** – simple way to create filtered permeability and reduce through-traffic.
- **Pocket parks/parklets** – convert parking bays into seating or greening.
- **Cycle hangars** – low-cost secure on-street cycle parking.
- **Raised tables at junctions** – doubles as traffic calming and accessible crossing.
- **Street tree or planter programme** – visual calming and placemaking with minimal engineering.

Design principles

Street design must prioritise inclusive mobility, ensuring people walking, wheeling, cycling and using public transport can move safely, comfortably, and independently. Layouts must maintain access for emergency services, refuse collection, freight, buses and residents.

This section sets out the core design principles that underpin the checklists and concept designs. They cover the essential building blocks of functional streets – from footways and cycle provision to placemaking, crossings, lighting and public transport.

The principles are aligned with national guidance (for example, LTN 1/20, LTN 1/24, Manual for Streets, DMRB, Inclusive Mobility) and North Somerset's design standards (for example, Highway Development Guide). They provide a quick-reference toolkit to ensure designs are safe, sustainable and consistent across new developments and retrofit schemes.

Designers should also be aware of emerging Active Travel England Rural Guidance, which includes indicative noise thresholds for comfort. These may be adopted in future updates.

Design principle and supporting information

Bus infrastructure

NSC Highways Development Design Guide, LTN 1/24 Bus User Priority, Manual for Streets 2, Inclusive Mobility, CIHT Buses in Urban Developments, Traffic Signs Regulations and General Directions (TSRGD)

Well-designed bus infrastructure, such as stop and corridors and supporting facilities, is essential for delivering reliable, accessible, and attractive public transport. Infrastructure must enable safe bus operations while ensuring stops are convenient, comfortable, and integrated with walking, cycling, and wider street environment.

Key design principles:

- Stop location: Close to key destinations and pedestrian desire lines; within 400m of dwellings (200-300m desirable in urban areas).
- Accessible boarding: Minimum 3m footways, level access (for example, Kassel kerbs), and tactile paving for safe entry/exit.
- Pedestrian environment: Direct, safe, inclusive routes to stops, with adequate width, lighting, and natural surveillance.
- Passenger facilities: Provide seating, shelter, weather protection, and RTI where feasible. Larger sites (for example, hospitals, retail/business parks) should include enhanced facilities.
- Route design: Typically, 6.7-7.3m carriageway width with swept path analysis. Avoid stops within 30m of junctions or vertical traffic calming.
- Traffic management: Protect stops from obstruction with clear bus cages (TSRGD), parking controls, and good forward visibility.
- Priority measures: Where congestion affects reliability, consider bus lanes, bus gates, or junction priority.
- Integration: Link with transport hubs, cycle parking, EV charging, and wayfinding.
- Stop types: In-carriageway stops, boarders, or bypasses should be chosen in line with LTN 1/24. Bypasses must include safe, well-marked pedestrian crossings with tactile paving and must not compromise accessibility for disabled or visually impaired users.

Bus stops and facilities should reflect local context, ranging from simple rural shelters to high-spec urban hubs on strategic corridors.

Carriageways

Manual for Streets, DMRB, CD127, CD143, LTN 1/20

Carriageways must be designed to suit the street's movement function while minimising speed and supporting vulnerable users. Width and alignment should reflect the context in line with the Design checklist —narrower in local access roads to calm traffic, wider on distributor routes to accommodate buses, HGVs or turning movements. Design should discourage footway parking, support safe overtaking of cyclists, and integrate drainage and resurfacing standards.

Cycle provision

LTN 1/20 Cycle Infrastructure Design, CD195 Designing for Cycle Traffic, draft ATE Rural Design Guidance, Wheels for Wellbeing, Inclusive Mobility

Cycle infrastructure must provide safe, coherent, direct, comfortable, attractive and inclusive routes for people of all ages and abilities. As set out in LTN 1/20, cycling infrastructure should be designed as part of a whole-street approach, prioritising active travel in line with the user hierarchy. Well-designed routes must separate cyclists from fast or heavy traffic wherever possible, addressing both physical protection and the perceived safety needed to encourage uptake. Designers should apply LTN 1/20 Figure 4.1 to determine the appropriate level of segregation for each street type.

Types of provision:

- Fully segregated: physically separated from pedestrians and vehicles (for example, kerb-protected tracks).
- Stepped tracks: at intermediate height between footway and carriageway.
- Light segregation: Involves vertical or physical separation such as wands, flexible bollards, or armadillos. May be suitable in retrofit locations or where space is constrained.
- Cycle lanes: Marked on-carriageway lanes, only suitable where speeds and flows are very low.
- Shared use: only as a last resort in constrained retrofits with very low flows. Central delineators must be provided where shared use is unavoidable.
- Mixed traffic: share the carriageway with motor traffic, only where <2,500 vehicles per day and speeds are below 20mph.

Design requirements

- Minimum widths: 2.0m one-way (2.5m preferred); 3.0-4.0m for two-way, depending on flow
- Junction treatments: Prioritise cyclists using continuous crossings, parallel crossings, or protected turns
- Visibility: Ensure sufficient forward visibility and clear separation from parked vehicles
- Accessibility: Accommodate non-standard cycles (design cycle envelope: 1.2m x 2.8m)

Cycle parking

Cycle parking is a core street design element. Facilities should be secure, convenient, and located on pedestrian desire lines near key attractors such as shops, schools, transport hubs, and community facilities, positioned in well-lit, overlooked areas with step-free access. Provision must accommodate non-standard cycles and be integrated into the wider streetscape as part of street furniture or placemaking features. It must not obstruct footways, tactile paving, or pedestrian priority routes.

Drainage and surface quality

Manual for Streets, DNRB, CD225, SuDS Manual, Wheels for Wellbeing, Inclusive Mobility

Surfaces should be smooth, high friction/ skid-resistant (≥55 PSV), and sealed, suitable for wheelchairs, cycles and mobility aids. Drainage should prioritise sustainable solutions (SuDS, permeable paving, swales) while preventing ponding or runoff. Careful detailing is required around kerbs, crossings and cycle routes to avoid jarring or slips.

Electric vehicle infrastructure

NSC Parking Standards, Manual for Streets, PAS 1899:2022, NSC EV Strategy

Charging Points should be safely integrated into the streetscape without obstructing footways or cycle routes. They must be accessible to all users, with clear signage, dropped kerbs (where possible) if on-street, and consideration for adjacent parking layout (for example, disabled bays, loading zones). Locations should align with demand and avoid cluttering high-footfall areas.

Filtered permeability

LTN 1/20, DfT Active Travel England

Filtered permeability restricts access for motor vehicles while allowing people walking, wheeling, and cycling to pass through safely and directly. It helps reduce through-traffic, improves safety and supports active travel, especially in residential areas and around schools. Crucially, it allows active travel to be more direct and attractive than car trips, supporting mode shift.

Filtered permeability works best as part of a wider active travel or Low Traffic Neighbourhood plan and should be shaped by local needs and context, ensuring equitable access for all users including disabled people and non-standard cycles. Designs may use bollards, planters, kerb buildouts or camera enforcement to block motor traffic without limiting access for emergency and refuse vehicles.

Quick win: planters and bollards can be an easy way to implement a temporary trial road closure, creating immediate reductions in traffic volumes and improved air quality. However, consideration must be given to refuse and emergency vehicle access, ongoing maintenance, and the potential displacement of traffic to neighbouring streets. When combined with greening and placemaking measures, filters can also create quieter, more sociable and attractive neighbourhood spaces.

Footways

Manual for Streets, Inclusive Mobility, Highways Development Design Guide

Footways are a fundamental component of every street, supporting walking, wheeling and access for all. They must be continuous, level, sealed and free of obstacles to support inclusive movement, particularly for disabled people, older adults and those using mobility aids.

Designs should ensure that footways are not compromised by parking, street clutter, or poorly placed utilities. They must follow the user hierarchy, placing pedestrians at the top.

Key design principles

- Compliant with Inclusive Mobility (DfT)
- Prioritise directness and continuity along desire lines
- Ensure level, non-slip surfaces with appropriate drainage
- Avoid unnecessary gradients, steps or camber
- Provide natural surveillance, especially at entrances and crossings
- Incorporate drooped kerbs and tactile paving at all crossings and changes in level
- Maintain step-free access to properties and crossings
- Use durable, slip-resistant surfaces
- Surfaces must accommodate mobility aids without jarring (avoid uneven finishes)
- Ensure ease of maintenance, especially where street trees or SuDS are integrated
- Buffer Zones (for example, verges, parking, trees) preferred between carriageway and footway
- Footways should remain clear of
    - Bollards, bins, signs, and lighting columns
    - Encroaching vegetation (minimum 2.1m vertical clearance)
    - Vehicle overrun (especially on tight turning circles or dropped kerbs)

Continuous footways should be used at side road junctions to prioritise pedestrian and cycle movement, reinforce driver awareness, and create safer, more legible environments. To ensure inclusivity for people with sight loss, incorporate contrasting surface materials and tactile paving to indicate the transition between footway and carriageway. Continuous footways should only be implemented where vehicle speeds are low, visibility is good, and pedestrian priority can be enforced.

Green infrastructure

SuDS Manual, NICE PH43, NSC Active Travel Strategy, NSC Highway Development Guide

Green infrastructure must be embedded as a core design principle in all street types, not treated as an optional addition. It plays a vital role in meeting environmental priorities, supporting public health, and strengthening the resilience of the highway network.

Well-integrated features such as street trees, sustainable drainage systems (SuDS), storm cells, biodiversity corridors, and green buffers improve air quality, reduce heat, manage surface water, and soften the visual impact of hard infrastructure. They also enhance placemaking by creating greener, more attractive spaces that support informal play, rest, and social interaction.

Strategically planted verges, trees and green buffers help calm traffic, protect vulnerable users and make streets more liveable. In tighter urban areas, practical interventions may include green bus shelters, bio-retention planters, or living walls. Storm cells and permeable tree pits can be lower-maintenance alternatives to rain gardens, while still supporting water management and tree health.

Figure 15: Stafford Road rain garden

To maximise benefits, planting must be carefully positioned, set back from boundaries and junctions to maintain visibility and accessibility and supported by a clear maintenance strategy. Minimum 2.1m vertical clearance must be maintained on pedestrian routes, with planting kept clear of desire lines, especially important for visually impaired users.

Pedestrian crossings

Inclusive Mobility, LTN 1/20, Manual for Streets and DMRB CD143, NSC Streetlighting Design Guide and Traffic Lighting Design Guide

Crossings must be designed to prioritise pedestrian safety, accessibility, and convenience, in line with Inclusive Mobility and LTN 1/20. They should provide clear, direct routes across desire lines, with tactile paving, dropped kerbs or continuous footways, and sufficient visibility for both drivers and users.

Design requirements:

- Select crossing type (for example, zebra, parallel, signalised, raised table, continuous) according to user needs, street type, and traffic volumes.
- Ensure locations are not prone to vehicle overrun, particularly at junctions or bends, with geometry tested through swept-path analysis where appropriate.
- Prevent water ponding at crossing points by reprofiling the carriageway, adjusting channels, or installing additional drainage where required.
- Position crossings to link with footways, cycle routes, bus stops, and community facilities, avoiding conflicts with driveways or parking.
- Provide lighting, signage, and passive surveillance to enhance user confidence and personal security.

Placemaking features

Manual for Streets, NSC Active Travel Strategy

Placemaking is a key principle in street design, turning transport corridors into vibrant, safe and inviting spaces that support community life. Designers should embed placemaking features that reflect the local context, character and community needs, while balancing movement and accessibility. These features should reinforce the function of the street, especially in town and village centres, urban hubs, and areas with high footfall.

Design considerations:

- Public seating and rest points, particularly near shops, bus stops and crossings, with good visibility and passive surveillance
- Wayfinding and signage that is clear, consistent and locally relevant
- Street trees, planting, and rain gardens to provide shade, visual interest, biodiversity and surface water management
- Lighting that is well integrated, energy efficient and enhances safety and atmosphere at night
- Public art or local heritage features to create a unique sense of place
- Pocket parks, parklets or park-like elements to reclaim underused space and provide pause points
- Community noticeboards, interpretation panels or digital displays to support local identity and communication
- Attractive and durable surface materials, coordinated with the local palette, to enhance the public realm
- Reduced street clutter, removing unnecessary signage or poorly located infrastructure
- Flexible space for active frontages, community events, markets or outdoor dining in appropriate locations (businesses can apply for pavement licences).

Even small-scale features can significantly improve how people experience and value their local streets.

School hubs

Manual for Streets, LTN 1/20, Inclusive Mobility, School Streets DfT Toolkit, NSC Travel Plan Guidance

School hubs are clearly defined, child-first environments around educational settings that prioritise the safety, health, and independence of children and families. They should be designed to reduce vehicle dominance during peak school times, promote active travel, and create calmer, healthier spaces that support safe learning and development. School hubs should maximise opportunities for children to walk, wheel or cycle to school as the natural first choice for short journeys, with supporting measures such as safe pedestrian and cycle crossings, secure cycle parking, and connected routes into surrounding neighbourhoods.

These hubs should be consistent, legible, and accessible, making it easy for all users, including those with disabilities, to navigate safely. Infrastructure should promote slower speeds, protect vulnerable users, and be tailored to the school's setting (urban or rural).

Design considerations:

- Pedestrian and cyclist crossings at key desire lines to ensure safe and direct access across roads
- Traffic calming measures such as speed cushions, raised tables, chicanes, and narrowed entry points and thermoplastic artwork
- Clear signage and school road markings, including zigzags and 'school keep clear'
- Peak-time vehicle restrictions or School Streets schemes to reduce traffic and improve air quality
- Wider footways and pedestrian priority areas with tactile paving and dropped kerbs
- Segregated cycleways, scooter provision, and secure, visible cycle parking
- Green infrastructure such as planters, trees, and boundary treatments to improve aesthetics and safety

- Improved visibility at entrances, driveways, and crossings to reduce conflict
- Consistent and recognisable layouts to help reinforce driver awareness and encourage safe behaviour

Community engagement with schools, parents, and pupils is essential to shape effective design and behaviour change. School hubs should also integrate with wider active travel and public transport networks to support safe onward journeys.

Streetlighting

NSC Streetlighting Design Guide, Traffic Signs Regulations and General Directions (TSRGD), NSC Supplementary Planning Document, North Somerset and Mendip Bats Special Area of Conservation (SAC)

Lighting must be NSC-standard; designed to protect bat corridors in special areas of conservation (SAC) zones. Developers are required to provide a fully compliant street lighting system for all areas to be adopted as public highway, including roads, verges, footways, cycle tracks, and parking areas.

All lighting and traffic management equipment must receive design approval from North Somerset Council's Highway lighting team prior to installation. Proposals must be submitted for assessment before any on-site works begin.

To ensure efficient long-term maintenance, all lighting equipment must be compatible with standard equipment used across the district. Specifications and product guidance will be provided by the council's lighting team. Further technical requirements are set out in the council's Street Lighting Design Guide.

In addition, all developments must assess potential impacts on the North Somerset and Mendip Bats Special Area of Conservation (SAC). This includes consideration of artificial lighting and its effect on bat flight corridors and habitats. Developers must consult the North Somerset Bats SAC Supplementary Planning Document (SPD) and engage with council officers at an early stage to ensure suitable mitigation is designed into the scheme.

Traffic calming

MfS, DMRB, LTN 1/20

Traffic calming measures must be designed to reduce vehicle speeds and improve safety for vulnerable users while maintaining accessibility for emergency services, buses, and service vehicles. Measures should be self-enforcing and integrated with the overall street design to encourage compliance without excessive signage.

Design requirements:

- Use appropriate features for the street type (for example, raised tables, buildouts, chicanes, narrowed entries) to reinforce context-sensitive speeds.
- Ensure crossings within traffic calming features (for example, raised tables) meet accessibility standards with level approaches, tactile paving, and sufficient visibility.
- Avoid creating drainage problems: design must ensure water does not pond around vertical or horizontal calming features, with carriageway reprofiling or additional drainage installed where necessary.
- Consider noise, vibration, and maintenance implications of chosen measures, especially near residential frontages.
- Where traffic calming could affect bus or emergency access, use designs such as sinusoidal profiles, speed cushions, or bypasses where appropriate.

Traffic Signal Junctions and Crossings

MfS, LTN 1/20, Inclusive Mobility, DMRB CD123/143, Traffic Signs Manual Chapter 6, NSC Highways Street Lighting Design Guide, NSC Highways Traffic Signal Design Guide

Signalised junctions and crossings must be designed to balance efficient traffic flow with the safety and priority of vulnerable users. Signals should provide clarity, reduce conflict, and accommodate all modes including pedestrians, cyclists, buses, and people with mobility impairments.

Design requirements:

- User hierarchy: Signals must prioritise safe and direct movement for pedestrians, people wheeling, and cyclists before private motor traffic.
- Crossings: Provide signal-controlled pedestrian and cycle crossings on all arms where desire lines exist. Use Toucan crossings where cycle routes cross and Puffin crossings for pedestrians.
- Timings: Crossing phases must allow for slower walking speeds (0.8-1.0m/s), in line with Inclusive Mobility, and minimise wait times to encourage compliance.
- Cycle priority: Provide early-release cycle signals or parallel crossings in line with LTN 1/20, reducing conflict with turning traffic.
- Layout: Junction design should minimise crossing distances through kerb buildouts, refuges, or staggered layouts only where space is not limited.
- Visibility: Ensure all signal heads are clearly visible to approaching users, with appropriate lighting and decluttered approaches.
- Accessibility: Tactile paving (red blister for controlled crossings), audible signals (where they won't cause conflict), and rotating cones must be included to support blind and partially sighted users.
- Bus priority: Incorporate Urban Traffic Control (UTC) bus priority, detection, or bus lanes (where appropriate) (LTN 1/24).
- Future-proofing: Allow for low-level cycle signals, adaptive signal technology, and integration with smart mobility systems.

Dimensions/standards:

- Pedestrian crossing width: 2.4-4.0m (increase in high-footfall areas).
- Refuge islands: 2.0m minimum (3.0m where used by cycles).
- Cycle early-release lanes: minimum 2.0m width, continuous through junction.

Transitions and gateway features

Manual for Streets, DMRB

Transitions and gateway features play a crucial role in signalling a change in street character and function, whether entering a residential development, moving from rural to urban settings, or arriving in a town or hub. These features should offer clear visual and spatial cues to all users, prompting appropriate changes in behaviour, particularly vehicle speed and positioning.

Where new developments connect to the existing highway network, transitional roads (typically no more than 100metres in length) provide a visual and functional bridge between two distinct character areas. These links should:

- Be free from frontage access and junctions to reduce turning movements and preserve visual clarity.
- Incorporate high-quality landscaping to create a strong sense of place and identity for the development.
- Provide footways and/or cycleways based on the predominant desire lines.

Where a road transitions from one classification to another (for example, from rural to urban, or neighbourhood distributor to local access), the change must be:

- Located exactly where the character changes, not before or after, so drivers receive timely and contextually accurate behavioural cues.
- Supported by gateway features such as surface treatments, vertical elements (trees, signs, raised crossings), or a narrowing of the carriageway.

Gateways should clearly signal to all users that they are entering a more sensitive environment (for example, urban hub or residential street), and must:

- Encourage slower speeds through changes in materials, planting, or street furniture.
- Include vertical elements such as trees, totems, signage, or public art to aid visibility and placemaking.
- Be legible for all road users, including pedestrians, cyclists, and mobility-impaired individuals.

Access controls such as barriers and A-frames can reduce accessibility for people with disabilities, families with buggies, or those riding non-standard cycles. In line with LTN 1/20 and Inclusive Mobility, there should be a presumption against their use, unless there is a persistent and significant problem of illegal motorcycle access that cannot reasonably be managed through policing or other proportionate measures.

Where rural lanes transition to urban streets:

- Provide safe crossing points, formal (for example, zebra) or informal, especially where pedestrians and cyclists move from a one-sided facility to footways and lanes on both sides.
- Support cycle transitions from segregated rural paths to shared, low-speed environments in town and village centres.
- Ensure changes in surfacing, visibility, and signage are used to clarify priority and expected behaviour.

Figure 16: B3124 gateway

Transport hubs (also referred to as mobility hubs)

www.como.org.ukguidance

Transport hubs are focal points that bring together multiple modes of travel, such as bus, rail, walking, wheeling, cycling, and shared mobility options– providing seamless, attractive, and safe interchange for users. They also serve as local destinations that can reinforce the identity and vibrancy of a place, support sustainable travel choices and reducing reliance on private car use. Transport hubs can range from small neighbourhood hubs (for example, a cluster of high-quality bus stops with secure cycle parking and local amenities) to main hubs (for example, a rail station or town-centre interchange integrating bus, rail, cycle hire, parcel lockers, EV charging and community facilities).

Design considerations:

- Multimodal integration: Hubs should facilitate easy and legible interchange between modes. This could include well-located bus stops, cycle parking, rail access, car clubs, and micromobility options such as e-bike hire.
- Pedestrian-first environments: Routes within and around hubs should prioritise walking and wheeling, with wide footways, clear sightlines,

dropped kerbs, and tactile paving. Priority crossings should align with desire lines.

- Inclusive and accessible: All users, including those with reduced mobility, should be able to use the hub independently and safely. Seating, shade/shelter, and clear signage are essential.
- Shelter and amenities: High-quality bus shelters and waiting areas should include lighting, real-time information, wayfinding, and weather protection. Seating and resting spaces should be integrated where possible.
- Cycle infrastructure: Secure, convenient cycle parking and clear connections to local cycling infrastructure.
- Character and placemaking: Hubs should reflect local identity through materials, public art, landscaping, and design elements that create a welcoming, recognisable space.
- EV and futureproofing: Consider provision for electric vehicle charging points (for both private and shared vehicles) and space for delivery lockers where appropriate.
- Safety and legibility: The hub should feel safe and intuitive to navigate, with good natural surveillance and well-defined zones for each mode.
- Location and catchment: Hubs should be sited where they can serve the greatest number of users, ideally within walking distance of homes, schools, services, or areas of planned growth.
- Maintenance and management: Long-term upkeep should be considered at the design stage, with robust materials and clear ownership of responsibilities.
- As part of any speed limit reduction, a review of existing signage must be undertaken. Signs should be checked against current specifications, and any that are redundant, outdated, or surplus to requirements should be removed to reduce street clutter and reinforce compliance with the new limit.

Transport hubs should be planned as community assets, not just infrastructure. Their design must support modal shift, reduce inequalities in access to transport, and contribute to a healthier, more connected place.

Turning areas

MfS, DMRB

Where a street terminates in a cul-de-sac or no-through road, a turning area must be provided to safely accommodate the largest vehicle expected to use the street regularly, typically a refuse or emergency service vehicle. Turning areas should be designed using appropriate swept path analysis to ensure manoeuvrability without encroachment onto footways or landscaped areas. Developers may provide an amorphous outline to the turning area so long as the minimum turning area is contained within the shape.

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