5. Types of walking and cycling infrastructure

While investment in high profile dedicated cycling infrastructure on key corridors is likely to have the biggest impact in terms of increasing cycling levels, there are also opportunities for other infrastructure improvements to make cycling easier, safer and more convenient, such as permitting contra-flow cycling on one-way streets and introducing 20mph limits in town centres and residential areas.

Similarly, for walking, public realm investments in 'core walking zones' or town centres will benefit the greatest number of people. However targeted investment in new crossings and footway connections to access local services (particularly schools and community hubs) are also important, as are very localised improvements such as dropped kerbs, tactile surfaces and improved lighting. Small changes can make a substantial difference to route choices for more vulnerable pedestrians such as the elderly and people with disabilities.

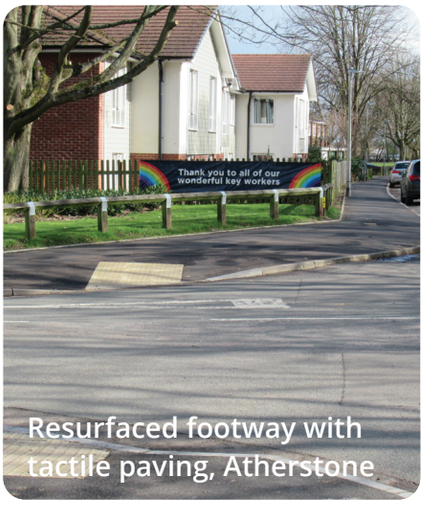
In rural areas, measures to reduce speed and manage traffic can benefit pedestrians and cyclists as well as horse-riders.

Whilst it is not practical to design every walking and cycling route at the network planning stage, it is useful to identify the type of infrastructure that is desirable, in order to develop cost estimates and assist in the feasibility and prioritisation process. The type of infrastructure on each route will vary according to criteria such as traffic speeds and levels of use, as well as physical constraints (this being particularly relevant in Warwickshire's historic streets).

Before gathering evidence and setting out proposals to upgrade existing infrastructure and provide new infrastructure, it is therefore helpful to identify the types of infrastructure that contribute to a safe and attractive environment for people on foot and on cycle. There are already many excellent examples within Warwickshire and the wider West Midlands.

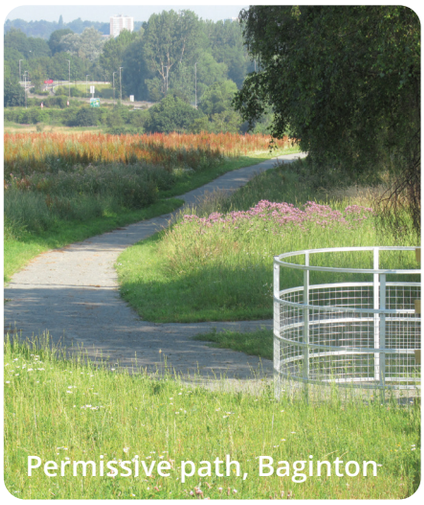
Pavements and paths

This includes footways alongside roads, permissive paths and public footpaths



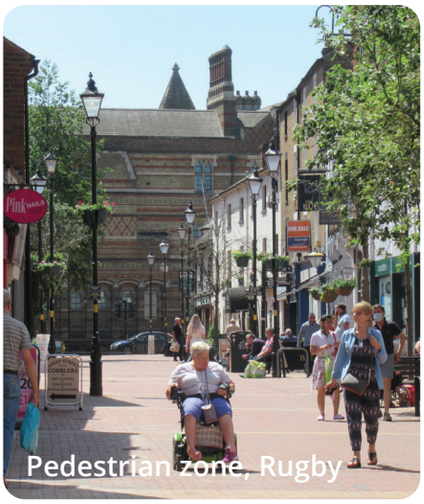
Resurfaced footway with tactile paving, Atherstone


Continuous footway across side road, Warwick


Permissive path, Baginton

Pedestrian zones and public spaces

From shopping streets to town squares


Pedestrian zone, Rugby


Pedestrian zone, Stratford


Town square, Atherstone

Quiet mixed traffic streets and lanes

Low traffic streets include quiet lanes and urban back streets as well as roads with road closures and modal filters/ cycle exemptions.

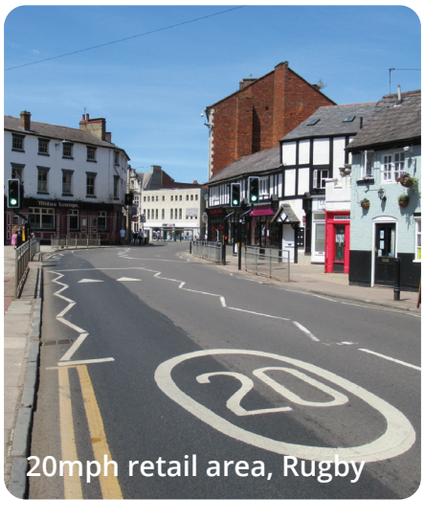

No through road to motor traffic, Stratford


No through road to motor traffic, Warwick

Cycle exemption to one-way street (modal filter), Warwick

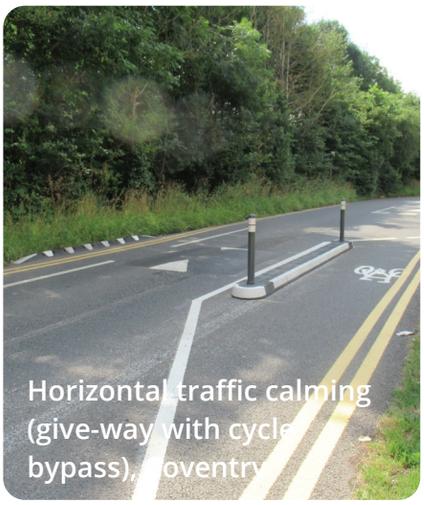
Traffic speeds can be managed through speed limits and traffic calming measures (horizontal and vertical).

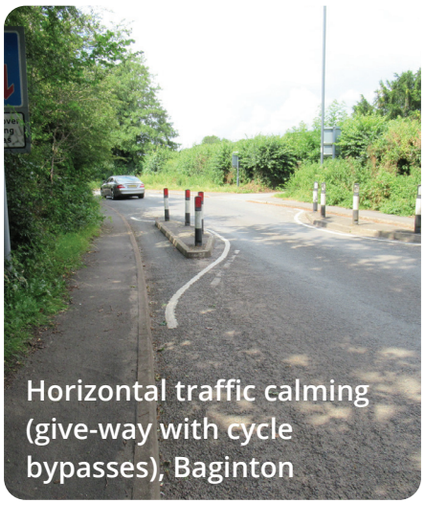

20 mph residential area, Rugby

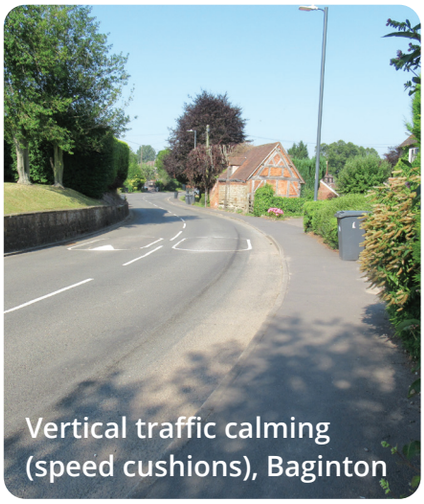


20mph retail area, Rugby


Horizontal traffic calming (give-way), Rugby


Horizontal traffic calming (give-way with cycle bypass), Coventry


Horizontal traffic calming (give-way with cycle bypasses), Baginton


Vertical traffic calming (speed cushions), Baginton

Slower speed limits in villages are highlighted using gateway signs.

Village entry point, Lighthorneside road, Warwick

Village exit point, Moreton Morrell

Traffic speeds can also be influenced by changes in road geometry and surfacing.


Buff contrast surfacing, Warwick


Historic cobbled street, Atherstone


Mixed surfacing materials and narrow roads in new residential area, Stratford

School areas are highlighted through signs, markings and parking restrictions

Leamington Spa

Atherstone

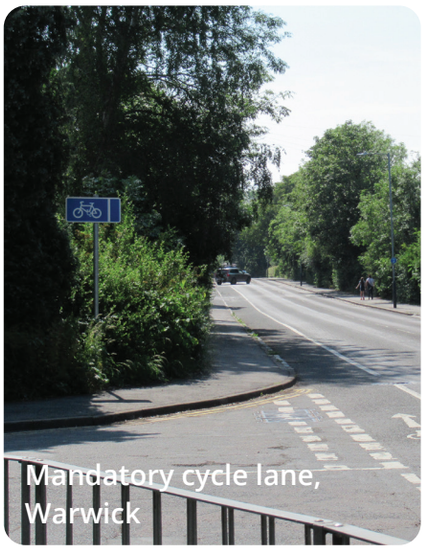
Stratford

Space for cycling within highways:

bus/ cycle lanes, advanced stop lines and cycle lanes (mandatory, advisory and contraflow)


Bus and cycle lane, Rugby


Advanced stop line for cyclists, Leamington traffic, Warwick


Mandatory cycle lane, Warwick

Advisory cycle lane, Leamington


Contraflow cycle lane, Stratford


Light segregated two-way cycle lanes, Birmingham

Motor traffic free routes for walking and cycling

These include cycle tracks, bridleways, byways and towpaths. Some routes in rural areas are also shared with horse-riders.

Well-used urban routes may have segregation between pedestrians and cyclists, either with a flat white line, raised white line or kerb.


Kerb segregated cycle track, Warwick


White line segregated cycle track alongside road, Warwick


White line segregated cycle track through open space, Warwick


Raised white line segregated cycle track with tactile surfacing, Leamington


Kerb segregated two-way cycle track alongside road, Birmingham

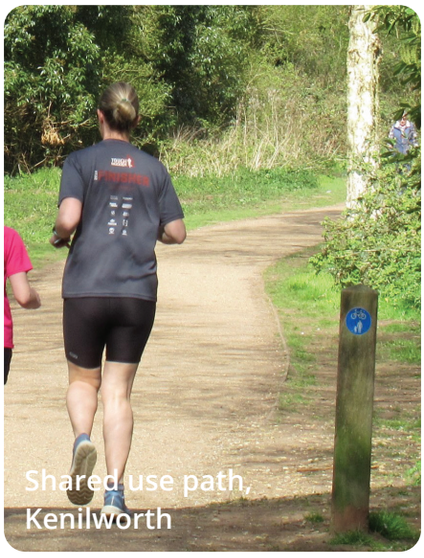
Shared use routes may be found alongside roads, rivers and canals, and through open spaces. These include Warwickshire Country Park Greenway routes in Kenilworth, Stratford and Offchurch which follow disused railway corridors.

Shared used footway and cycle track, Leamington

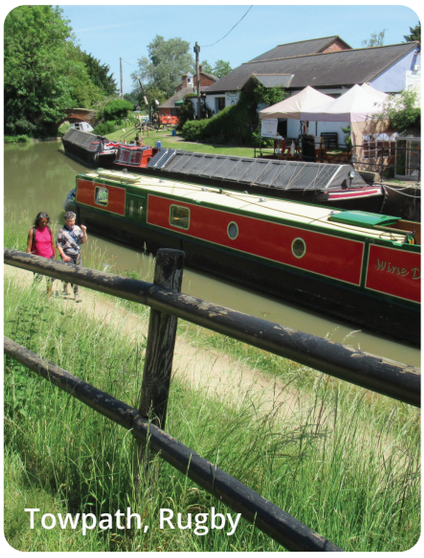
Shared use footway and cycle track, Rugby

School areas are highlighted through signs, markings and parking restrictions

Shared use path, Warwick



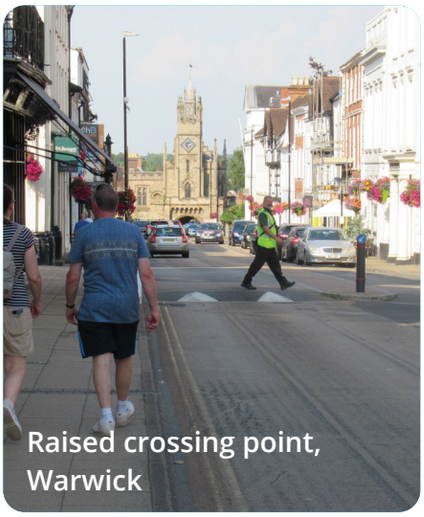
Shared use path, Kenilworth



Towpath, Rugby

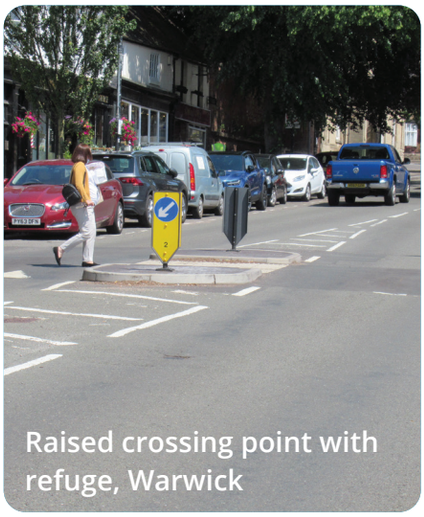
Crossings, footbridges and underpasses

There are a range of crossing types from central refuges and raised crossing points to zebra crossings and Tiger crossings (a zebra crossing with a parallel cycle crossing)...



Raised crossing point, Warwick

Central refuge, Rugby



Raised crossing point with refuge, Warwick

... to signal-controlled crossings (stand alone and at junctions) including Puffin crossings (pedestrians), Toucan crossings (pedestrians and cyclists) and Pegasus crossings (pedestrians, cyclists and horse-riders).


Zebra crossing, Kenilworth

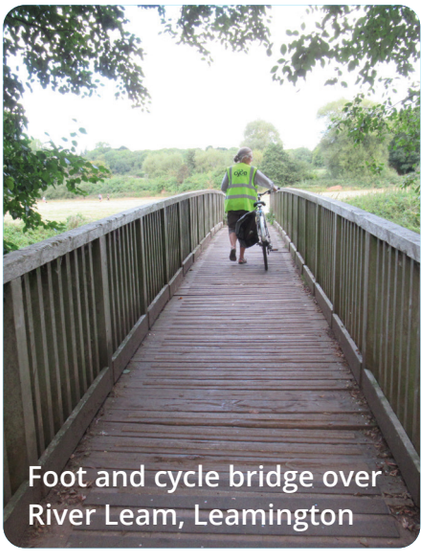

Tiger crossing, Solihull


Staggered Toucan crossing with kerbs rather than guard rail, Rugby

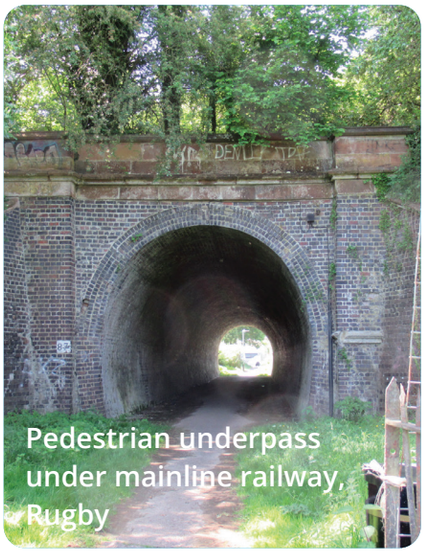

Puffin crossing, Leamington


Puffin crossing, Warwick

Busier roads, canals, rivers and railways require crossings via foot and cycle bridges or underpasses


Foot and cycle bridge over River Leam, Leamington


Access controls on foot and cycle bridge over M40, Warwick


Pedestrian underpass under mainline railway, Rugby

Cycle parking

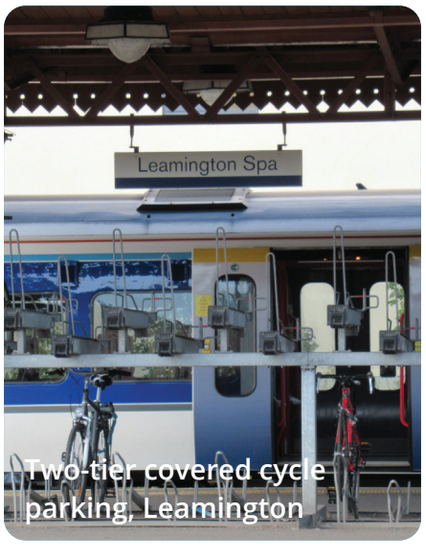
Good cycle parking should provide a fixed structure to support and secure the bicycle and be convenient for journey destinations. Long stay parking should be covered and secure.


Sheffield stands, Stratford


Sheffield stands, Rugby

Sheffield stands, Leamington


Sheffield stands and shelter, Leamington



Two-tier covered cycle parking, Leamington


Two-tier covered cycle parking, Stratford

Wayfinding

Pedestrian fingerposts, Leamington