

6 Shared Roads and Shared Space

Cycling within all purpose lanes

Many roads in Birmingham are based on Mediaeval or Victorian street profiles that originated when the majority travelled on foot. They were not designed to accommodate motorised traffic and space for parked cars. Improved conditions for cyclists and pedestrians cannot usually be achieved without returning some of the space that has been given to motor traffic, and the initial design consideration should be:

- Can traffic be removed or reduced (through removal of on street parking, road closures to prohibit through-traffic, or one-way working) to release some space for a cycle lane or track, or to make the amount of traffic more acceptable for cyclists and pedestrians?
- Can the speed limit and actual speeds be reduced to 20mph or below to enable pedestrians and cyclists to mix more safely with traffic?

Speed/flow criteria for shared all purpose lanes

Cyclists can mix safely with traffic at speed limits of 20mph and 30mph but whether or not this 'feels' safe will depend on the actual speed of traffic, the amount of traffic, the proximity of overtaking vehicles (particularly buses and HGVs), and the frequency and busyness of side roads and on street parking. Measures such as the removal of centre lines on narrower roads can help to encourage drivers to give more clearance when overtaking cyclists, while junction treatments and bay parking can help to address other potential conflict points.

Most minor roads with less than 3000 vpd do not require cycle lanes as an aid to safety and separation from traffic. However cycle lanes or logos can still be helpful in 'wayfinding' part of a marked route or to help visually narrow the carriageway to encourage lower speeds. Roads with more traffic than 3000 vpd should ideally have some form of separate provision for cycling, but it is not always possible to reallocate the necessary space. Measures to manage the volume and speed of traffic as described above should be considered.

Service Roads and Cycle Streets

Cycle streets are increasingly common on the continent and are similar in concept to home zones. They are generally low-flow access streets for motor vehicles where signs indicate that pedestrians and cyclists have priority over motor traffic. Cycle traffic flows should generally exceed the motor traffic flows to ensure that the concept works successfully enough that cyclists 'feel' safe. Dutch guidance suggests a minimum flow of 2000 cyclists per day is required. Textured surfacing and central raised central margins are often used to emphasise that such streets are low speed environments where motor vehicles should not attempt to overtake cyclists.

There are few streets in Birmingham where cyclists will outnumber cars, but there may be opportunities to develop routes within service roads as in the photograph below.



Cycle Street - Cars are Guests sign (Phil Jones Associates)



A cycle lane has been marked on the quiet side of this service road, while the cycle logo provides continuity on the side used for residential parking



A Dutch cycle street and a typical low-speed residential street in Birmingham

Cycling with Street Running Tram Lines

Future extensions of the Midland Metro will re-introduce tram lines into the streets of Birmingham. Work is already underway to construct the extension from Snow Hill to New Street station, and a further extension will run along Broad St.

There are already some well-established street running systems in other UK towns and cities including Manchester, Sheffield, Nottingham, Blackpool and Croydon. A section of Midland Metro in Wolverhampton is on street.

Incidents involving pedestrians and cyclists being struck by a tram happen but are very rare. The main hazard is slips, trips and falls associated with crossing the line. Cyclists are at risk in two ways:

- Bicycle wheels may drop into the groove of the rail and cause a fall (the wheel rarely gets fully 'stuck' but the groove causes the rider to lose their balance);
- Tyres slip on the metal surface of the rail, especially in wet conditions.

For cyclists the key design requirements are:

- Crossings should be at right angles to the line (or as close as possible). This includes arrangements for turning in and out of any side streets along the line.
- Streets where cyclists share the same direction of travel as the trams should offer sufficient width between the track and the nearside kerb for cyclists to avoid ever having to cross the track when going straight ahead.

Where these conditions cannot be met, cycling should be prohibited and an alternative route should be indicated. The standard blue 'Tram Only' signs can be used to mark the streets where other vehicles (including cycles) are prohibited. A supplementary plate describing the alternative route may be required e.g. '*Cycle access to station follow signs via New Street*'.

If there are very long sections of road where it is reasonable to assume that a tram would overtake a cyclist during normal operations there must be sufficient width for a tram to pass with clearance of at least 1.5m between the cyclist and the swept path of the vehicle.

The following non-standard signs were granted Special Authorisation by DfT for use in Nottingham. DfT also suggest use of the general 'Hazard' (exclamation mark) sign with the Tram tracks plate where other vehicles besides cycles use the carriageway.

