



Safe and convenient crossing and junctions (4/6)

Particularly on roads with the purpose of "expedient flow of vehicle traffic" good crossing designs and layouts are of importance for the obvious reasons of safety and convenience. We press for walking and cycling to be valued in urban highway design decisions. Overall, with every design we should be asking the question can an 8-year old cycle and walk this location unaccompanied. If not, we have to go back to the drawing board!

The pavement and cycleway should have **priority over sideroads**. It's important that visibility is not restricted by any objects, so that the left-turning driver sees the pedestrian and cyclist positioned next to them. Necking-down corners (previously discussed) and a speed hump/table to curb turning speeds, or setting back the ped/cycle crossing point by one-car length (for better driver visibility) could help with that.

There are **many different types of junctions** designs such as zebras crossings, roundabouts, signalised and unsignalised toucans and pelicans, with or without manual demand function or automatic detection, "cycle/ped dwell" phases (green phase that only changes when a vehicle approaches) or speed controlled traffic lights that switch to red when the driver exceeds the road's speed limit. To design inclusive crossings many parameters are to be considered. And with so many parameters to consider, we ask design engineers to speak to us so we can understand their decision-making process better. This way we can input into designs and hopefully improve junctions, like Swan House, Blue House, Haddrick Mill and Cowgate roundabouts, in the future.

Traffic lights and their phasings are an "art form". There is a huge potential for these to include cycle-friendly elements such as cycling head starts, countdowns, an own cycle phase or cycle-pedestrian phase, bike scramble (all directions have green light), permanent green left (or ahead if no side road). It must be noted that some of these are not standard permitted designs in the UK, and requires special permission by the Department of Transport.

Badly-designed junction can turn into no-go areas for pedestrians and cyclists. **This is what we do not want to see:** for pedestrians' and cyclists' sake, we do not favour crossing layouts with multiple stages making it arduous, time-consuming and inconvenient to cross. With **multiple-stage crossing designs** usually comes 'directional guardrailling' and "cattle herding" occurs. The use of **excessive guardrailling** at junctions - or elsewhere for that matter - shows that the design balance is out of kilter and that motorised traffic flow is put first, often leaving pedestrians



and cyclists stranded and helpless. Whilst risk management is important no doubt, this over-caring also partly exists because of decades of providing for car use exclusively which has left us somewhat reliant on on car-centric designs and beliefs. It's a tangled web we should be able to start to undo.

The use of **elephant footprints** to guide bike users across the often expansive areas of tarmac would be a good starting point we think.

If safe and convenient coexistence can not be guaranteed in the same space, then there are the high-end engineering solutions of **bridges and subways!** A whole new set of rules and parameters applies. As these solutions are fairly rare to be chosen, we will not go into much more detail other than listing it here. Some of the designs mentioned above require a 'Department for Transport certificate'. We ask highway engineers to have an open mind, chat through different design options and possibly, as a result of considering new ways and parameters, apply more often to the Department for Transport for exceptions to discuss and test special designs. Other cities, like Oxford and London, have done so successfully recently. We'd like to see Newcastle joining the call to the Department for Transport to permit better junction designs.

Go to our [space4cycling webpage](http://newcycling.org/space4cycling/buildingblocks) for more information

