

Protected Junctions

Updated FAQs

Q. Why haven't the Dutch or American style design been used?

- A. We wanted to provide a solution that could be applied to most junctions in Dublin, which are typically more restricted in space than those in many other countries. Providing a full set back width for a car would mean we would need to provide an additional set of signals and this arrangement would not fit at many junctions in the city.

Our design seeks to protect the cyclists up to the stop line and then protect them as they are crossing the junction, to reduce the risk of being side swiped. It provides protection to the cyclist from turning vehicles, thereby significantly reducing the risk but also provides additional space for the cyclist to divert into in case a collision is imminent. By keeping the cyclists tight to the vehicle lane it reads as a single carriageway and the cyclist is more visible to the drivers. If cyclists were diverted to the left, around a full set back width for a car, left turning vehicles may believe the cyclist to turning left and not continuing straight through the junction

Cyclists have been given an advance stop line, which means they are more visible to the car in a standing start position. In addition, the cyclists will get a 5 seconds advance start on the vehicular traffic

The design also enables the provision of a continuous signalised pedestrian movement, which is particularly important in ensuring the vulnerable pedestrians are protected.

The Dutch design, and other alternatives like cycle roundabouts, often allow for conflict situations using uncontrolled crossing points for pedestrians and cyclists. The Dublin design provides controlled crossings to protect vulnerable users.

Q. Does the cyclist have to veer left around the protection island?

- A. No, at road level the change in direction required is minimal. The island is just substantial enough to provide protection to the cyclist from left turning vehicles

Q. What is the Right of Way rule and how will users be made aware of this?

- A. The rules of the road state: *“When turning left, or right, all drivers must watch out for cyclists going ahead or turning. When making a turn, watch out for cyclists in front of you or coming up on your left. Do not overtake a cyclist as you approach a junction if you are turning left, as the cyclist may be continuing straight ahead.”*

Three measures are being implemented to remind road users of the need to comply with this rule:

- Flashing amber left arrow signal– this will warn left turning vehicles that they need to check and yield to cyclists before they make the left hand movement.
- Flashing amber road studs at the cycle crossing point-these will flash while traffic on the opposing arms have a green light and will alert left and right turning vehicles that they need to yield to cyclists crossing the junction.

- Dublin City Council, in conjunction with the NTA, will be running a safety awareness campaign, including an information video.

These measures will be monitored to assess their effectiveness and will be amended and enhanced if required.

Q. How wide will the cycle track be?

A. The aim will be to provide between 1.5 and 2m wide cycletracks. However, this is not always achievable in some locations due to local space restrictions, so reductions in the width of cycle tracks are sometimes required over short stretches.

Q. How wide will the footways be?

A. The aim will be to provide minimum of 2m wide footpaths but this may need to be reduced locally due to space restrictions. Wider footpaths will be provided where possible.

Q. Is there a level difference between the cycletrack and the footpath?

A. Yes, this will vary depending on local conditions but generally there will be a level difference of between 50 and 75mm, with a preference for greater than 60mm.

Q. Who has priority at crossings between a footpath and a cycletrack?

A. Pedestrians have priority at crossing points between footpaths and cycle tracks. Cyclists should slow down and yield to pedestrians crossing or intending to cross.

Q. Will the cyclist have their own 'green phase' with all other movements stopped?

A. This will depend on the junction but won't be the standard arrangement as it may result in very longer waiting periods for all users. In general the cyclist will be in the same phase as vehicles and where possible will get a head start using the dedicated cycle signals.

Q. Will pedestrians have to wait longer for a green light?

A. They will need to wait for an additional ~3 to 5 seconds as the main traffic lights will be green for longer to allow the cyclists to get a head start on the vehicles.

Q. Why do cyclists get a head start?

A. Cyclists get a head start so that they can travel across the junction before the vehicles. This reduces interactions between cyclists and vehicles. Cyclists who approach the junction after the vehicles have a green light can still proceed through the junction, with left-turning vehicles needing to yield to these cyclists.

The head start also means that they are more visible to drivers as they enter the junction.

Q. Will the vehicles be able to see the cyclists?

A. Yes, while there is a concrete kerb/island between the cycle track and the road, the junction has been designed so that the cyclist is quite visible to the motorists. The turning radius has been kept tight which means that left-turning cars will need to slow right down to make the turn, this will mean they will have more time and space to see the cyclists who are travelling on their left.

The stop line for the cyclist has also be positioned in front of the vehicular stop line, which will also make the cyclist more visible.

Q. If more than one bike is waiting to turn right will this block the cycle track?

A. Where there are large numbers of cyclists they may over flow in to this space but it is a protected area and safer than waiting on the carriageway

Q. Can you advise of other locations where the protected junctions are going in?

A. It is envisioned that protected junctions will be rolled out at all future major junction upgrades, including Bus Connects schemes along with other road improvement works and cycling schemes