

NOTE: FOR ALL ON-ROAD CYCLING, IT IS ADVISABLE TO WEAR A HELMET AND HI-VIZ CLOTHING



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- Critical spaces on the road and how these may change.
- Bicycle infrastructure.
- Vehicle blind zones and cyclist.
- Large vehicles making left and right turns compared to cyclists and other vehicles.
- Predictability and visibility of the cyclist on the road.
- Decision making and safe riding strategy over the course of a journey.
- Pedestrians on and off the road and why anticipation of pedestrian actions is so important to cyclists.
- Correct observation and positioning when passing a side road.
- Correct observation, signalling and position for left turns
  Minor to Major and Major to Minor
- Correct observation, signalling and position for right turns Minor to Major and Major to Minor
- Correct observation and positioning to go straight on from minor to minor roads at a crossroads.
- Correct observation, signalling and positioning for a mini-roundabout and single-lane roundabout.
- Using a walking right hand turn?
- Communicating with other cyclists and other road users.
- Right of way, what this means on the road and how it governs flow of traffic at various junction types.
- Parked and slow moving vehicles and how to act around them.

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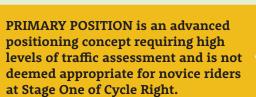


#### **Positioning**

Positioning refers to where a road user is on the road, relative to other users. In the context of safety for cyclists, it is critical, and correct position for each scenario will allow a cyclist to move with confidence on the road network.

#### **General Positioning**

- Traffic on the road
  - usually two flows of traffic.
    - 1. travelling in the **same direction** as the cyclist.
    - 2. travelling in the **opposite direction**.
- Always cycle in the same direction as the traffic:
  - in Ireland, with the edge of the road to the **left**
  - never cycle the wrong way on one-way streets or bike lanes
- Occupy a position in the road to **see and be seen**.
- SECONDARY POSITION, also regarded as the STANDARD POSITION, is the default to the left side of road or lane:
  - Approximately **one metre from the edge** of the road to help avoid:
    - potholes
    - shores
    - manholes
    - raised gratings
    - · rubbish on the road
    - the sloping camber
    - hitting a pedal off the kerb
  - cycle a straight line and steadily
  - generally allows **faster traffic to move past** to the right of a **cyclist**.
- **PRIMARY POSITION** is in the **middle of the lane** as part of the general flow of traffic.



#### **Positioning for Corners**

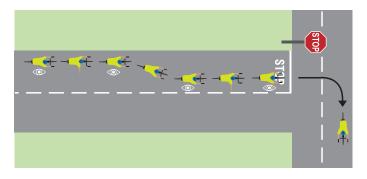
- Keep to the correct lane.
- On the correct side of the road.
- Watch out for others travelling in the opposite direction who may:
  - cut in or swing out in corners
- When a vehicle is making a right-hand turn, stay behind or pass the right-turning vehicle on the left, if it is safe:
  - never pass a right-turning vehicle on the right.
- Avoid moving between a line of waiting cars and a row of parked cars:
  - a motorist who has not seen the cyclist may pull in or open a door
- Where there is a possibility of being hidden from other road users by turning or busy traffic, ride with hands over the brakes prepared to brake or stop in any eventuality.
- Follow the directions of road markings and signs, but always be aware that others may act differently.
- Watch out for vehicles joining, leaving or crossing the flows of traffic.



#### **Left Hand Turns**

- Generally from a **SECONDARY POSITION** 
  - **cycle steadily** in sight of all traffic about one metre from the edge of the road.
  - look forward
  - **LOOK behind over the right shoulder** (where traffic will be).
  - **SIGNAL** clearly for three to four seconds.
  - return hand to the **handlebars**.
  - CHECK behind again
  - **slow down** as necessary.
  - bring the inside knee up and turn.
  - LOOK out for:
    - traffic travelling in the **opposite direction** cutting across.
    - traffic travelling in the **same direction** cutting in front in the turn.
    - traffic on the road being entered.
    - traffic leaving the road being entered, cutting the corner.
    - pedestrians crossing that road.

#### Turning Right, Minor to Major



#### **Right Hand Turns**

- A **complex** manoeuvre on the road, **crossing two flows** of traffic:
  - vehicles travelling in the same direction as the cyclist.
  - then those travelling in the **opposite**
  - complexity is greatest if the junction is a crossroads with all roads having equal priority, as the cyclist must watch for vehicles from all directions.
- Starting from a **secondary position**:
  - **cycle steadily** in sight of all traffic about one metre from the edge of the road.
  - look forward.
  - LOOK behind over the right shoulder (where traffic will be).
  - **SIGNAL** clearly for three to four seconds.
  - return hand to the handlebars.
  - CHECK behind again.
  - move to a position an arm length from the **middle of the road**:
  - take up POSITION past the middle of the destination road and aligned with the lane to be turned into
  - LOOK behind again
  - **SIGNAL again** for three to four seconds
  - **slow down** as necessary
  - bring the **inside knee up** to prepare to turn
  - CHECK behind a final time this is the "lifesaver" look to detect traffic overtaking from behind.
  - LOOK out for:
    - > traffic travelling in the **opposite direction** cutting across.
    - > traffic on the **road being entered**.
    - traffic leaving the road being entered,
      cutting the corner or moving out against
      right of way.
    - > **pedestrians** crossing that road.
  - Never attempt to turn right directly from a bike lane at the left side of the road.



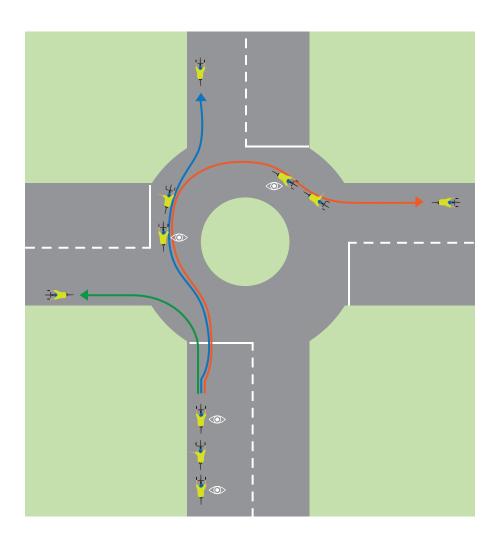
Individuals who have completed Stage One of CYCLE RIGHT will observe and practise a cycling right-hand turn, but will be STRONGLY ADVISED that the safest way to turn to the right for novice cyclists is to make WALKING RIGHT-HAND TURNS.

#### **Positioning for Simple Roundabouts**

- **Appropriate positioning** for the destination is extremely important at a roundabout.
- Keep away from the outer edge of a roundabout:
  - it is very **difficult to be seen by drivers**.
  - drivers turning left **may cut across** at risk to cyclists.
- Turning left
  - LOOK behind
  - SIGNAL to the left
  - look for traffic on the roundabout, especially to the right.
  - **GIVE WAY** to traffic from the right.
  - LOOK again.
  - ENTER to the left.
  - LOOK behind before exit.
  - **SIGNAL, LOOK and stay left** when exiting the roundabout.

- Going straight
  - LOOK behind
  - **GIVE WAY** to traffic from the right.
  - LOOK again
  - LOOK behind prior to the exit of choice
  - SIGNAL and EXIT the roundabout.
- Turning right
  - LOOK behind
  - SIGNAL and wait for a safe gap
  - CHECK BEHIND again and move to the middle of the lane
  - GIVE WAY to traffic from the right
  - LOOK again
  - stay to the middle of the lane moving round the roundabout
  - LOOK, SIGNAL, LOOK again and move to the **left** before **EXITING** the roundabout

# Positioning for Simple Roundabouts





#### **Positioning for Junctions**

- Be clear on the **right of way** governing the junctions to know **whether to stop or carry on carefully road signs, markings and traffic lights** help clarify this and need to be understood.
  - If you are at a junction where the roads are of equal importance, the traffic on your right has right of way. You must let that traffic pass before you move on.
- Take up **POSITION** necessary for the **destination route**, **LOOKING and SIGNALLING** as appropriate.

#### Right of Way: Who Goes?

**Rider 1** is not crossing anyone else's road space and is on the main road with first right of way.

**Rider 2** is crossing rider i's road space and must wait until that rider turns or moves on.

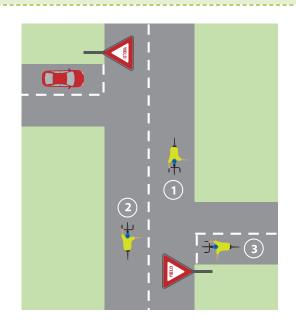
**Rider 3** is crossing the road space of both riders 1 and 2 and must wait until the turn or move on.

#### Positioning for Overtaking Parked, Slow-moving Vehicles, Other Objects

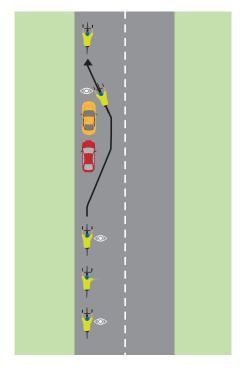
- **LOOK behind** over the right shoulder to check for traffic coming from behind.
- SIGNAL to move over to the right.
- Return the right hand to the handlebar and gradually move into **POSITION** towards the back roadside corner of the vehicle if clear to do so.
- CHECK behind again
  - if there is traffic, the rider should either **stop** and wheel the bicycle **along the path until past** the cars.
  - or wait back from the rear roadside corner of the vehicle in the start position until a suitable gap in the traffic appears.
- **Pull out** into the position if it is **safe to do so** and cycle past:
  - steady, straight line of progress.
  - door-width away from cars (approx. 1 metre).
- LOOK behind to make sure it is safe to pull in someone in the driver's seat could mean the vehicle is about to move.
- Move back to the left hand side of the road SECONDARY POSITION.



Where there is a line of parked cars, adopt and hold position until all vehicles have been passed.



#### Positioning for Overtaking Parked, Slow-Moving Vehicles, Other Objects

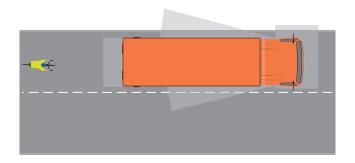




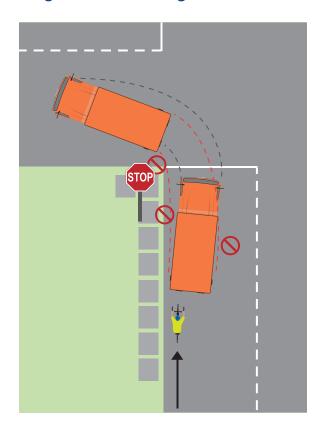
### Positioning for Passing Large Vehicles

- Leave extra room when STOPPED behind a truck to avoid a "roll-back" collision.
- Always be sure to SIGNAL early to a large vehicle behind before STOPPING, as large vehicles need a lot of time and space to stop.
- Watch out for large vehicle **BLIND ZONES**:
  - stay far enough back so that the driver can see a cyclist in the wing mirrors – the length of a truck affects the driver's rear vision and this position will also help the cyclist see and be seen more by other traffic.
  - remember a driver will not be able to see a cyclist behind or directly in front of the cab of the vehicle.
  - remember that the further a cyclist is along the sides of a large vehicle, the more they are in the blind zones.
  - beside **the passenger door**, a cyclist is often invisible because of the blind zones.
- Stop pedalling and concentrate on keeping the front wheel straight when a large vehicle is coming alongside, as a powerful draft capable of knocking a rider from a bike can be created.
- NEVER PASS A LARGE VEHICLE ON THE LEFT SIDE within the same traffic lane or near the top of a stopped line of traffic which may start moving unexpectedly as a rule, cyclists in traffic are best advised to let large vehicles turn or drive away from them.
- **NEVER edge forward along either side** of a long vehicle at a junction or in a queue.
- Take care when leaving a road into which a long vehicle is turning in the opposite direction, in case it swings over to the cyclist's side of the road.
- Take care when a large vehicle is turning left as the turning line will bring the middle of the vehicle further left than its ends, and the driver will need to steer well to the right to avoid hitting a cyclist at the path side.

#### Large Vehicle Blind Zones



#### Large Vehicle Turning Lines





## Positioning for Advanced Bicycle Areas

- Advanced Stop Lines set the point where drivers are supposed to stop before an Advanced Stop Box.
  - an Advanced Stop Box is an area at a junction before the general traffic stop line which is designated for cyclists.
  - this area is usually coloured **red**.
  - it is designed to allow cyclists move to the head of the traffic queue so that they can move away safely when the time arises or when traffic lights turn green.
  - when traffic lights turn red, bikes may move carefully along beside or through the traffic to position in the Advanced Stop Box.
    - > care is needed, as a cyclist who is still moving forward when the signal goes green can be caught out of position.
    - always look, signal and only move when it is safe.
  - Advanced Stop Boxes are found at signal or sign controlled junctions.

#### **Positioning With Other Cyclists**

- Be aware of the **position of the other riders** you are travelling with.
- Keep a safe distance from other cyclists in a group and keep several lengths apart when going downhill at high speed.
- Cycle in **single file to allow faster traffic to pass** where it can do so safely.
- When roads are not busy cycling two abreast is allowed, but always be ready to single out to facilitate the flow of traffic.
- When riding in a group, **never go up the inside** (path side) of other riders.
- There is no need to look at someone alongside to be aware of them:
- looking directly at them may cause a collision.
- look in the line of travel.
- **Never carry a passenger** unless the bike is built for more than one rider.
- Don't hold on to other cyclists on their bikes.
- Agree methods of communication and use them to ensure the safety of the group as a whole.



### FEEDBACK AND EVALUATION

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Where school teachers can facilitate practice on bikes for pupils the following questions can be used to promote learning. These can be posed as self-reflective questions by the teacher, or can be used directly to prompt pupils.

- Are helmets adjusted to the correct size and position?
- Are there any clothing problems such as open laces?
- Has everyone performed a bike check and ensured the bike is the right height for them?
- Are there any aspects of the cycling environment and/or the weather which might be problematic over the course of the session?
- Does everyone keep critical spaces on the road (space between riders, between riders and other traffic, between the cyclist and the edge of the road etc.)?
- Is everyone predictable and visible on the road?
- Does everyone signal and use verbal and non-verbal communication with others, in the group?
- Does everyone show clear understanding of different road signs, how to act as a cyclist on approach to these, how they inform road users of conditions on the road and how they help to regulate traffic flow on the road system?
- Is everyone aware that cyclists travel in the same direction as the rest of the traffic, which side of the road traffic travels on in Ireland, and how that may differ elsewhere?
- Does everyone understand right of way, what this means on the road and how it governs flow of traffic at various junction types?
- Is everyone aware of traffic travelling in the other direction on the road, including possible hazards such as vehicles crossing the middle line while overtaking, cutting corners or drifting?
- Does everyone show the ability to analyse, assess and act for themselves, rather than relying on others to act in the interests of their safety?
- Does everyone show awareness of what is happening around them in front, on the other side of the road, behind and at the side (parked cars, pedestrians, bus-stops, driveways etc.)?
- Does everyone always travel at a speed where they are in control and do they continuously demonstrate all-round observation on the bike?
- Does everyone change their speed depending on conditions?
- Does everyone show continual awareness of road positioning for particular circumstances including passing parked and slow-moving vehicles?
- Can everyone take the correct position for the desired exit and go through a simple roundabout according to correct right-of-way technique?
- Can everyone correctly assess when it is appropriate to make cycling or walking right-hand turns and demonstrate both correctly during a journey?
- Does everyone correctly approach and progress through any crossings encountered (zebra, toucan, pedestrian or signal-controlled)?
- Does everyone cycle correctly on bike lanes and bike paths and show that they know the differences between these?
- Does everyone know the correct direction of travel on bike lanes and the danger of travelling the wrong way on these lanes?
- Can everyone move up and down safely between different level surfaces (e.g. kerbs, tracks) if required?