Step-change in Cycle design
- Safety
- Segregation methods
- Reallocation of road space
- Cycle Signals
- Innovations
- Impacts

Step change in Cycle Design
- Meet TfL target of 1.5 million cycle journeys every day by 2026
- 5% mode share for cycling by 2026
- Encourage new cyclists / less confident cyclists
- Continental techniques adapted to UK
- Segregation in Time / Space for cyclists
- Make London’s busiest junctions safer and more attractive for vulnerable road users
Safety – Common Conflict types

<table>
<thead>
<tr>
<th>Conflict type</th>
<th>Indicative diagram</th>
<th>Maneuver description</th>
<th>Serious injuries casualties (% of total)</th>
<th>Fatal casualties (% of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>![Diagram]</td>
<td>Other vehicle turns right across path of cyclist</td>
<td>246 (94%)</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>2</td>
<td>![Diagram]</td>
<td>Cyclist hits open door / squeezes to avoid open door of other vehicle.</td>
<td>196 (99%)</td>
<td>2 (5%)</td>
</tr>
<tr>
<td>3</td>
<td>![Diagram]</td>
<td>Cyclist and other vehicle traveling alongside each other.</td>
<td>148 (93%)</td>
<td>4 (5%)</td>
</tr>
<tr>
<td>4</td>
<td>![Diagram]</td>
<td>Other vehicle turns left across the path of cyclist</td>
<td>125 (84%)</td>
<td>11 (25%)</td>
</tr>
<tr>
<td>5</td>
<td>![Diagram]</td>
<td>Other vehicle fails to give way or有意思的junction control and collides with cyclist</td>
<td>66 (6%)</td>
<td>1 (2%)</td>
</tr>
</tbody>
</table>

Cycle Superhighways

Initiative Routes Map

Segregation methods

- Stepped track
- Kerbed segregation
- Light segregation
Segregation – Kerb side activity

Video showing different types of segregation:

• Light segregation
• Kerbed segregation
• Hybrid track
• Bus stop bypass
• Treatment with junctions
• Early start for cyclists
• Hold the left signals

CS2 – types of segregation:

Changes in Road layout

Elephant & Castle
Changes in Road layouts
Queens Circus

Changes in Road layouts
Victoria Embankment

Changes in Road layouts
Upper Thames Street
Changes in Road layouts

Mile End Road

Changes in Road layouts

Kennington Oval

Oval CS7 – Before & After

Kennington Road – Oval Better Junction scheme
Video showing:
- Cyclists on carriageway interacting with traffic
- Cyclists on track separated in time and space from traffic

Oval - Before and After/Oval - Before and After.mp4
Signals and Junctions

- Low Level Cycle Signals
- Hold the Left
- Cycle Gates
- Early release
- Two Stage Turns

Early Release – TRL trials – LLCS & Filter

Cambridge Heath Road – 4 seconds early release for cyclists
Early Release

Video of Cambridge Heath showing
Signal sequence
Road user behaviour

Cambridge Heath - Early Release/Cambridge Heath - Early Release.mp4

Early Release

Video from cyclists viewpoint
Distance travelled to clear conflict
Distance where traffic “catch up” with cyclists

C52 Cambridge Heath Early release - cyclists view/C52 Cambridge Heath Early release - cyclists view.mp4

Hold the left - concept
Hold The left turn – variety of signal layouts

Signal Sequence
- Ahead traffic with parallel cycle movement
- Cyclists turn right using the “Two stage right Turn”
- Turning traffic held whilst cyclists on green
- Cyclists held when turning movements on green

Hold the left at Roundabouts

Video of Queens Circus:
- Showing hold the left at a roundabout
- Progression for cyclists on dominant movement
- Segregation methods

Queens Circus progression/Queens Circus progression.mp4
Cycle Gate – link between CS7 and CS3

Video at Queen Street Place
Cycle gate to allow cyclists to access bi-direction track and cycle-only road without conflict with turning traffic.
Cycle behaviour and volume traffic behaviour and understanding

Cycle Gate – Queen Street Place.mov
Two Stage Right Turn

Video at CS6 – On a Bi-Directional track
- Cycle behaviour
- Use of Signals on second part of manoeuvre
- How traffic is signalised

Right turn and 2SRT.mp4

Increase in Cyclists in London (AM peak)
Questions?

Whilst we take questions on items, we will show the video of CS5 (Vauxhall to Pimlico)

Showing two-way segregated track, including:

- Signals
- Bus stop bypasses
- Links with other cycle routes
- Benefits of segregated cycle track

CS5 both directions.mp4
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