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The evolution of London's cycling infrastructure from 2011 to 2016 - five years which achieved more than the previous thirty

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Why am I presenting this?

- London-based resident since late 1990s
- Live at southern end of Cycle Superhighway
- Worked on many cycling projects (for campaigns, consultancies and research organisations)
- Seconded into TfL 2012 and 2013 when major developments took place



1st phase Cycle Superhighways implemented 2010 but ...

- **relied on conventional UK cycling infrastructure** (painted lanes, advanced stop lines, Toucan crossings)
- **impressive increases in flows** due to **route length, continuity, blue colouring, effective marketing** (paid-for and earned)
- **May 2010 to Sep 2011**, 16 months' successful operation (high increases in cycling, no safety problems)



2011

- **Oct 2011**, first fatal collision on a Cycle Superhighway (Bow roundabout)
- **Nov 2011**, second fatality at Bow roundabout (not on Cycle Superhighway)

The screenshot shows a BBC News article page. At the top, the BBC logo is on the left, and navigation links for 'Sign in', 'News', 'Sport', 'Weather', 'iPlayer', and 'Sounds' are on the right. Below this is a red banner with the word 'NEWS' in white. Underneath the banner is a navigation bar with links for 'Home', 'UK', 'World', 'Business', 'Politics', 'Tech', 'Science', 'Health', and 'Family & Education'. Below that is a sub-navigation bar with links for 'England', 'Local News', 'Regions', and 'London' (which is underlined). The main headline of the article is 'Bow Roundabout crash: Second cyclist killed at junction'. Below the headline is the date '12 November 2011' and social media sharing icons for Facebook, Messenger, Twitter, Email, and a general 'Share' button. The article text begins with: 'A 34-year-old woman has become the second person in three weeks to die at a busy junction on a cycle superhighway in east London.' The next paragraph states: 'The victim was pronounced dead at the Bow Roundabout at about 16:45 GMT on Friday, the Metropolitan Police said.' The following paragraph says: 'The crash also involved a lorry and the driver of this vehicle has been arrested on suspicion of causing death by dangerous driving.' The final paragraph reads: 'Last month a 58-year-old man was killed in a collision with a tipper truck.'

2011

- **November 2011**, Times journalist, Mary Bowers, serious injuries, cycle collision with left-turning lorry
- **December 2011**, TfL launches 'Better Junctions' programme – all 'major' junctions in London assessed for cycle safety



2012

- February 2012, The Times launches unprecedented campaign, 'Cities fit for cycling'
- Several editions with front-pages dedicated to campaign – scale of coverage hitherto unseen in a major national paper



2012

- **February 2012**, London Cycling Campaign launches 'Love London, Go Dutch' campaign all mayoral candidates sign up (Johnson two days before May election)
- A change in the way urban cycling presented

Cycle Infrastructure Design



← Old approach
New approach →



2012

- **June 2012** 'Early start' Danish style layout at **Bow roundabout** (cycle gate)
- **First attempt at protected junction treatment** – but hamstrung by conventional UK signalling equipment
- Confusing layout with a forest of signals but ... **a start**



2013

- **March 2013**, 'Mayor's Vision for Cycling in London' published
- **“a key step forward not just for London but for the whole country”**
- **change of TfL design criteria** for cycling schemes
from (motor traffic) capacity neutral
to high-quality protected facilities



2013

TfL commissioned trials of innovative facilities (roundabouts, segregated links, low-level cycle signals) at **Transport Research Laboratory**



2013

- **Autumn 2013**, First Dutch-style protected cycle tracks (but not junctions) in London on the CS2 extension
- DfT also permits first use of low-level cycle signals and red aspect

'Before'



'After'



2014

- Very little sign of progress on London's streets. Campaign groups growing impatient but...
- TfL busy developing designs for considerable lengths of route



2015

- **First junctions completed** featuring the new innovative techniques
- Queens Circus (**July 2015**) first signalised **segregated roundabout**
- Kennington first 'hold the left' (**August 2015**)



2015

- **Cycle Superhighway 5** opened (autumn)
- a short route (1500m) but...
- **first end-to-end continental standard route** with high-quality **protected junctions**
- **Vauxhall**, a beacon of **innovation**



2016

- Mass roll-out of high-quality protected route – CS3, CS6, CS2 upgrade, Elephant & Castle roundabout conversion
- Approximately **12km** in total, costing around £60m
- Delivered just in time for the **mayoral election (May 2016)**



2016

- Changes to **legislation** and **national** cycling design **guidance**
- New **Highways England** guidance, embraced continental best-practice design standards, 'Designing for Cycle Traffic on the Strategic Road Network'
- Changes to TSRGD (**national traffic signs and signals legislation**) provided new tools (e.g. **low level cycle signals**, **Zebra type** cycle/pedestrian **crossings**)



Since 2016

- **Small sections** of protected cycle route **opened** in central London (e.g. extensions to CS6 and CS3)
- **Mass roll-out of Quietway** programme but largely **discredited** (to become **rebranded**) due to quality concerns
- Most new infrastructure restricted to Outer London through **Mini Holland programme** – quality is mixed
- **Current mayor** has **relied** more **on analysis** and extensive consultation – Johnson's second term, 'build it and they will come'
- **May 2020 next Mayoral election** – may see a **flurry of newly constructed routes** in the run-up, as with the 2016 election



2011 to 2016 – summary of key drivers for high quality infrastructure in London

Need:

1. funding increased from £100,000 to £1-5 million per km (in central London, less elsewhere) – (London had pre 2011)

2. expertise to design high-quality provision (pre 2011)

3. willingness to reallocate road-space and signal time (2013)

4. legislation/technology to allow for complex provision at signal junctions (2016)

Also, quality control and a willingness to experiment



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2011 to 2016 – summary of key drivers for high quality infrastructure in London

Other key factors

- High-profile fatalities
- Journalists and campaigners driving the agenda, not politicians
- **4 yearly mayoral term** demands **ambitious proposals** in manifestos, and a **tight timescale** for their implementation

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