

# **Evidence for the Transport Committee's Inquiry: The roll-out and safety of 'smart' motorways**

Submitted by Laura Blake, Chair of the Thames Crossing Action Group

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## **Introduction**

My name is Laura Blake, I am Chair of the Thames Crossing Action Group (TCAG). We represent thousands of people who are opposed to the proposed Lower Thames Crossing (LTC). More info if desired can be found on our website [www.thamescrossingactiongroup.com](http://www.thamescrossingactiongroup.com)

## **Reason for submitting evidence**

As a group we feel very strongly that 'smart' motorways are extremely dangerous, and we as members of the public have serious concerns about them.

Whilst Highways England(HE) have gone from referring to LTC as a motorway, to now referring to it as an all-purpose trunk road, they have still stated that it would be designed to 'smart' motorway standards.

It is not just in relation to LTC that we have concerns as a group and as members of the public we have serious concerns about just how dangerous 'smart' motorways are in general.

We feel it important that we take advantage of this opportunity to submit the evidence and opinions we have to the Transport Committee, in the hope it will help with the inquiry.

## **Evidence**

'Smart' motorways were introduced in the United Kingdom in 2006 with experiments on the M42. This led to then Transport Minister, Sir Mike Penning MP to sign off on the roll out of the 'smart' motorway programme in 2010. However, he has stated publicly, and notably on the BBCs *'Panorama – Britain's Killer Motorways'* when it first aired in Jan 2020 that what he signed off on was not what Highways England delivered.

The distance between Emergency Refuge Areas at the time he signed it off was on average 600 metres, yet what was delivered was anything up to 2.5 miles apart. How have Highways England been allowed to get away with this?

We'd also like to point out that 'smart' motorways have been introduced under stealth. The public were not consulted on the introduction of 'smart' motorways until long after they had been introduced.

People do not feel safe on 'smart' motorways, and as a result are more likely to use other roads instead, so the traffic issues just get distributed onto other local roads. So in many instances the congestion issues are instead expanded to other local roads, as a means to avoid the dangers of 'smart' motorways.

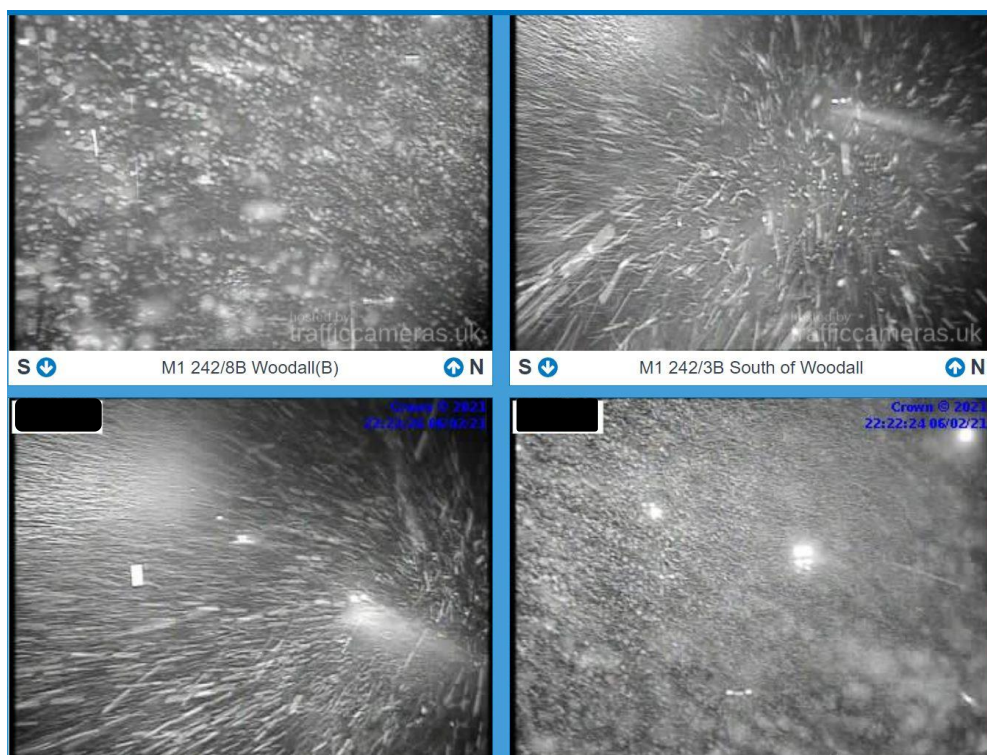
Not only can the distance between Emergency Refuge Areas be too far, the actual ERAs can also be too short. For example 16 of the 20 ERAs installed as part of the M1 junctions 28-31 scheme measure less than 100m.<sup>1</sup>

We would also point out that ERAs are even harder to locate/identify if needed on unlit sections of 'smart' motorways, adding to the level of concern over accessibility of ERAs.

When an incident occurs it is not always possible to find a safe refuge area, barriers with walls behind, on bridges/viaducts etc, where there is nowhere to escape from the extreme levels of risk.

Road signage for 'smart' motorways is often unreliable, takes too long to be turned on. As a result it is not trusted by the public because it is so often wrong. It's like the boy who cried wolf, you can never trust whether the info being displayed is accurate or not, due to HE's failures.

Stop vehicle detection and safety cameras are often either not installed or not working. Even when working they are often not being monitored efficiently. Weather such as fog, snow, rain etc mean the views from the safety cameras make it impossible to see the road/breakdowns etc. For example:



HE's own reports state that on average it takes 17 mins to spot vehicles in need of assistance, then 3 mins to activate the overhead signs to close the lane, and a further 17 mins to get to the vehicle to assist. In total an average of over 30 mins where the lives of those in the vehicle is at extreme risk.

<sup>1</sup> <https://www.newcivilengineer.com/latest/majority-of-refuge-areas-on-stretch-of-m1-smart-motorway-shorter-than-advised-length-29-03-2021/>

Recovery companies including the AA state that 'smart' motorways are not fit for purpose. Indeed it is reported that they do not allow their recovery patrol to assist a vehicle on a 'smart' motorway, due to the extreme risk. Instead they wait for HE to recover the vehicle and bring it to them in a safer area to offer assistance.

Emergency services, including the police, have voiced serious concerns over how dangerous 'smart' motorways are too, and calling for them to be scrapped.<sup>2</sup>

Electric Vehicles will only add to the problem and dangers, as they can breakdown/lose power suddenly, can need a flatbed rather than be towed. Roadside recovery has to take extra safety precautions when attending an EV as being electric there is a risk of the vehicles being live, ie electric shock. As well as the most obvious health and safety issues with this, it also means longer time at risk on the roadside during recovery.

Removing hard shoulders just spreads the congestion width ways instead of length ways along the motorway, with the added danger due to loss of safe refuge of the hard shoulder. Building roads and more lanes hardly ever solves the issue of congestion. More joined up thinking is needed to improve public transport (make it more reliable, affordable, safer etc), and putting more freight onto trains, and overall encouraging people to support local rather than everything being shipped around on roads all the time.

A lot of congestion on roads is also down to badly designed roads, junctions, and planning, and poorly maintained and managed roads, normally due to HE's inefficiencies. Incidents and accidents occurring due to potholes, bad road surface. Take the junction 1a on the M25 and the negative impacts that has on traffic flow both on the M25, the A282(Dartford Crossing section), and local roads. A junction too close to the Dartford Tunnel portals, issues of traffic lane changing, and a lot of traffic in the area. So a poorly designed junction by HE, with the added issues of permission being granted for development that generates yet more traffic in an area already suffering with severe congestion and pollution issues. During HE's work on developing the proposed Lower Thames Crossing at one point they were including a Rest/Service Area off the Tilbury junction that would have again been very close to the LTC tunnel portals, as if they've learnt nothing from the mistakes that have already been made at the Dartford Crossing.

'New and lane conversions to 'smart' motorways should not continue, especially whilst there are investigations going on. If any other business had a product or service that was being investigated due to fatalities of users they would not be allowed to continue with business as usual, the same should be compulsory with regard to 'smart' motorways. It is despicable that more isn't being done and quicker. Immediate action is needed, as more lives are being lost, and people being seriously injured while investigations and discussion take place.

On the topic of new and lane conversions of 'smart' motorways it should also be noted that environmental impacts such as carbon emissions are not being taken into account, proven at recent 'consultation' where HE seemed surprised by people asking for such info.

Highways England are being ignorant and arrogant with regard to 'smart' motorways. HE try to put the blame on drivers alone, and take no responsibility for their own actions and bad planning and handling of 'smart' motorways. Their latest 'smart' motorways advertising campaign being another prime example. It is horrendously insensitive to victims' loved ones. The way HE have attempted make light of such a serious

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<sup>2</sup> <https://www.lbc.co.uk/news/dangerous-smart-motorway-scrapped-serious-crash-police-boss/>

topic is despicable. Some who have lost loved ones in tragic circumstances on 'smart' motorways know that their loved one experienced windscreen impact and are now faced with witnessing this advert with two bugs squashed on a windscreen, singing a song. How can this be deemed acceptable that a Government company behave in such an appalling way?

Aside from that very important aspect, what if you can't 'go left' as the ad suggests? It doesn't make it clear what to do when you can't 'go left' or there is no ERA. The ad again suggests it will be the driver's fault that they have an issue, which is not always the case. It shows the incident happening right near to an ERA with easy access, plenty of space and a good area to get behind a barrier after exiting the car. This is not a true representation of a 'smart' motorway and what people face in real life or death situations on 'smart' motorways. No mention of calling 999, despite the fact it is most definitely an emergency.

Coroners have ruled how dangerous 'smart' motorways are and called for the Crown Prosecution to consider Corporate Manslaughter charges. We like "Smart Motorways Kill" strongly believe that Highways England should be legally held accountable for 'smart' motorways on grounds of corporate manslaughter, and that legal action is needed.<sup>3</sup>

Coverage of the coroner's verdict in Feb 2021 quoted that representing Highways England, Nicholas Chapman said that on the issue of corporate manslaughter Highways England owes "*no general common law duty to road users*"<sup>4 5</sup>

Just a few months earlier in Nov 2020 another HE representative, Lower Thames Crossing Tunnels & Systems Director Keith Bowers was quoted (in relation to an article about the LTC) as saying: "*This contract is unparalleled in its ambition, and we need the right partner to match that ambition.*" and "*From our bidders we're looking for outstanding construction, health, safety and wellbeing performance. We have committed to need our contractors' design and delivery to meet that target for our road users and workers.*"<sup>6</sup>

We noted that this contradicts the amounts of predicted deaths and serious injuries on LTC that HE predict in the Appraisal Summary Table we recently obtained under FOI which states "There are forecast to be 2,147 additional accidents over 60 years, including 26 fatalities, 220 serious injuries and 3,122 slight injuries".<sup>7</sup>

This also highlights that Highways England pick and choose when and how they like to represent themselves in regards to duty of care to road users.

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<sup>33</sup> <https://www.crowdjustice.com/case/smart-motorway-jr/>

<sup>4</sup> <https://smartmotorwayskill.co.uk/wp-content/uploads/2021/04/Independent-Review-of-All-Lane-Running.pdf>

<sup>5</sup> <https://www.newcivilengineer.com/latest/highways-england-referred-to-cps-for-manslaughter-11-02-2021/>

<sup>6</sup> <https://www.newcivilengineer.com/latest/exclusive-lower-thames-crossing-2bn-tunnelling-contract-goes-out-to-tender-11-11-2020/>

<sup>7</sup> [https://www.whatdotheyknow.com/request/lower\\_thames\\_crossing\\_appraisal#incoming-1724841](https://www.whatdotheyknow.com/request/lower_thames_crossing_appraisal#incoming-1724841)

We are also very aware that Irwin Mitchell solicitors commissioned a report by transport planning specialists, Royal HaskoningDHV who found all lane running motorways had the “lowest level of intrinsic safety” when compared to any other form of motorway.<sup>8</sup>

In direct relation to the proposed Lower Thames Crossing, we have struggled to get information out of Highways England/Lower Thames Crossing regarding road safety and details of the ‘smart’ motorway aspects and ERAs of the LTC.

We finally managed to get this response:

*"Please see a table below for the Emergency Area (EA) spacing on the LTC mainline. Emergency areas along LTC are spaced at a maximum of 1.6km, in line with current standards, this equates to 22 in total on the mainline. Slip roads with an EA are, A13 westbound to LTC southbound, LTC northbound to A13 eastbound, LTC southbound to A13 eastbound, and the A13 westbound to LTC northbound. The exact locations are subject to change during detailed design."*

Northbound LTC EA locations		
Center of EA chainage	Distance (m)	Notes
1+565	554	Chainage 0 is within junction, mainline commences at 1+011 Tunnel is managed with technology
7+025	5460	
8+417	1392	
9+411	994	
10+220	809	
11+133	913	
12+700	1567	
15+420	2720	
16+748	1328	
17+849	1101	
19+132	1283	Through A13 Junction hard shoulder is provided
20+480	1348	
Southbound LTC EA locations		
Center of EA chainage	Distance (m)	Notes
1+800	789	Chainage 0 is within junction, mainline commences at 1+011 Tunnel is managed with technology
7+435	5635	
8+934	1499	
10+424	1490	
11+460	1036	
15+390	3930	
16+740	1350	
17+851	1111	
19+170	1319	
20+600	1430	
		Through A13 Junction hard shoulder is provided

When you consider the fact that Sir Mike Penning has publicly stated that the length between ERAs that was the basis for signing off on ‘smart’ motorways was an average of 600m to the lengths between the proposed ERA’s for the LTC we hope it is more than obvious why we have such serious concerns over the ‘smart’ motorway aspect of the LTC.

<sup>8</sup> <https://www.itv.com/news/meridian/2021-04-06/highways-england-threatened-with-legal-action-over-smart-motorways>

We also draw your attention to the fact that the proposed LTC southbound between the M25 and A13 would be just 2 lanes (not 3 as along the rest of the proposed route) and that the majority of that 2 lane section being designed to 'smart' motorway standards doesn't have a hard shoulder. This section of the route passes over fenland with long sections of viaducts. This of course is also a matter of serious concern.

On top of that it should be considered that Highways England are not considering or planning how traffic would migrate between the two river crossings (if LTC goes ahead) when there are incidents, and that there are not adequate connections. If for example the incident was at the QE2 bridge and traffic wishes to migrate to the LTC, it has two options.

The first to take the A13 Eastbound, but as there is no direct access onto the LTC it would have to go all the way down to the Stanford junction on the A13, up and around a traffic lighted roundabout, alongside DP World, Thames Gateway, and other traffic, then back down onto the Westbound A13 back until just past the Orsett/A128 junction to access the LTC via the new joint LTC/A0189(south) slip road, quite the detour.

Alternatively, traffic could access the LTC directly from the M25. However at this point the M25 would be 5 lanes of traffic, and the LTC south is just 2 lanes all the way until past the A13, with the majority of that being without hard shoulder. Imagine the chaos with all that traffic and the likelihood therefore of a further accident/incident on that section of 2 lanes of the LTC. Another example of HE's lack of adequate planning and design.

All these points should give a clear and definite picture of why we have such serious concerns over the 'smart' motorway aspect of the proposed Lower Thames Crossing, and of 'smart' motorways in general.

And yes we are purposely using speech marks throughout this paper around the word smart when referring to 'smart' motorways, as we in no way consider there to be anything smart about 'smart' motorways.

Thank you for allowing us the opportunity to present our paper to you in relation to this public inquiry. We hope you will find it of interest and helpful to all aspects you were seeking evidence on. Please don't hesitate to contact us should you wish to discuss further.