REVIEW OF ADVANCED STOP LINES AND EARLY RELEASE LIGHTS IN EASTBOURNE

1. Introduction

A Freedom of Information Request (Section 9), showed that East Sussex County Council (ESCC) had not undertaken research as to the effectiveness of their Advanced Stops Lines (ASL) and Early Release Lights (ERLs). Bespoke then decided that an informal review would be good to assess their usability

As with much of the local cycling infrastructure, what is built, is not LTN 1/20 compliant (The Government standard) and hence does not follow best practice.

ASLs are designed to reduce conflicts between cyclists and other vehicles by creating a designated space for cyclists to wait at the head of the queue. This can lead to a reduction in collisions, particularly those involving cyclists turning right or pulling away from a junction. ASLs can enhance cyclist visibility to motorists, especially when combined with coloured surfacing, which can further reduce the risk of collisions. However in many local examples there are difficulties getting access and the paint is worn or absent. In Hastings Silverhill, as a contrast, there is a 50m long feeder lane for an ASL and so cycles can nearly always get to the front of the traffic. Many in Eastbourne are only 1m.

ERLs for cyclists involve a short, pre-green phase for cyclists before the main traffic signal turns green, allowing them to move ahead of other vehicles. This is often achieved alongside an ASL, to help cyclists establish themselves in the junction and reduce potential conflicts with turning traffic. The phase is typically a few seconds long, allowing cyclists to clear the junction before other traffic begins to move.

The author has not attempted to do a formal review but has taken notes on 120 occasions, when cycling , approaching these junctions. For a more detailed analysis there have been a number of pieces of UK research, that reviewed these types of infrastructure. (See Section 8)

2. Methodology

In order to undertake a sample, of cyclists using this infrastructure, here are some assumptions that were made

- ESCC FoI (see section 9) describes , in order for ERLs to be 'triggered', cycles have to get prior access to the ASL. Probably by undertaking on the left. Often this is not possible and if the ASL space is accessed by overtaking on the right unsure if this would de detected by the traffic camera
- Cycles have to get there on a red phase and before the lights change green. The author adopted a 30 second 'waiting rule' on red, where only those occasions counted in this report. Then observed if the 2-3 second ESL phase was triggered before the main green light.
- On occasions where there are 2 lanes of traffic the author has both assumed 2 roles - an assertive cyclist and then a risk averse one.

3. Victoria Drive – Willingdon Rd.

Reports that the lights on Victoria Drive (and this is an issue when no other traffic) do not detect cyclists. This is similar to the A259 at Pevensey with the road to Pevensey Bay, where cyclists can be undetected and the lights remain red .

In both directions on Willingdon Road there are feeders to an ASL. Heading north often hard to get to the ASL. Danger is, if deciding to pass on right hand side, to then cut through to the feeder lane , traffic may start moving when green.

Number of trips to junctions	Get to ASL	ERL works
22	18	N/A

4. Dittons Road – StoneCross

3 of the 4 junctions have ASLs with ERLs. However the paint is worn and this can lead to vehicles in the ASL and feeder lanes. Heading East sometimes it is difficult to get to ASL. ERLs are mostly triggered

Number of trips to junctions	Get to ASL	ERL works
19	14	10

5. Terminus Road – Outside station

By having a cobbled effect the ASLs are hard to see. There is encroachment at times and some drivers are unaware . The other junction, with the bus lane in Gildredge Rd, is much clearer. (here with encroachment)

Number of trips to junctions	Get to ASL	ERL works
14	11	N/A

6. Firle Road -

4 way staggered junction - ASLs with ERLs

Stansted Rd - if there is only a cycle and no cars, it may not be detected, on one occasion waited > 5 mins (2 complete phases of lights elsewhere) but never went green.

Whitley Road eastbound is hard to access and therefore by overtaking on right ERL may not be triggered.

Firle Road – Stub feeder. Hard to access, Sometimes vehicles parked on pavement

Number of trips to junctions	Get to ASL	ERL works
34	25	18

7. The Avenue – Junction with Upperton Road.

3 junctions each with 2 lanes of traffic in every direction. The ASLs have stub (1m) feeders. Any action to try to get to the ASL requires assertiveness and is especially challenging when trying to get into the right hand lane . At peak times most risk averse cyclists will have to wait until vehicles clear the lights. May take 3 phases to get through

	Number of trips to junctions	Get to ASL	ERL works
Assertive Rider	17	15	N/A
Risk Averse	13	5	N/A

8. Research

Much of the evidence and research shows how such interventions can be positive, especially when built to the correct standards

Comment	Web Link
Review of Early Release Lights	https://content.tfl.gov.uk/new-cycle-infrastructure-monitoring-report.pdf
Review of the problem of getting access to the front of the line of traffic to access ASLs	https://content.tfl.gov.uk/behavour-at-advanced-stop-lines-summary.pdf
A local campaign group demonstrate how a lack of clear marking and feeder lane makes ASLs of less use.	https://www.camcycle.org.uk/files/campaigning/papers/AdvancedStopLines.pdf
Explanation of when ASLs9 work	https://content.tfl.gov.uk/ASL-Findings-Report-October-011106.pdf
Highlighting, the perhaps obvious fact ,that ASLs and ERL are only of use when lights are red and remain so while waiting.	https://www.cycling-embassy.org.uk/wiki/advanced-stop-lines#:~:text=Advanced%20stop%20lines%20(ASLs)%20are,at%20these%20kinds%20of%20junctions.&text=Can%20allow%20cyclists%20in%20the,ASL%2C%20ahead%20of%20motor%20vehicles.
Cycle infrastructure design (LTN 1/20)	https://www.gov.uk/government/publications/cycle-infrastructure-design-ltn-120

9. Freedom of Information Request to ESCC

Request

1) What are the criteria , such as getting to the advanced stop line within a certain time frame, that would 'trigger' the Early Release ahead of the normal traffic lights

2) What are the occasions when you would not 'trigger' the early release

3) What percentage of times that a cycle meets your criteria do you expect the early release to work.

Response

1) The cyclist must approach correctly (as per the highway code) and place themselves wholly within the advanced cycle stop area before the end of the preceding stage.

2) Failure to approach along the marked path, not stopping within the cycle stop area, failure of the overhead detector, certain weather conditions can interfere with detection.

3) This information is not held. Under Section 3 (2) of the Freedom of Information Act 2000

https://www.whatdotheyknow.com/request/efficacy_of_cycling_early_releas#incoming-3050061

10. Overall Conclusions

- In many locations, there is difficulty, getting to the ASL and when applicable problems with triggering an ERL,.
- In the sample taken (120 approaches to junctions) the chance of getting to an ASL, without being prevented by vehicles, is between 65 to 80%. Lower at peak times. Once there, if there is an ERL, then this is between 60 to 70% (of the 65 to 80%) . So an overall success rate of around 45% . Though at off-peak the 'success rate' will be higher
- Lack of paint at some of these junctions may increase encroachment by vehicles and danger from left turning vehicles going into ill defined feeder lanes
- The use of 'stub feeders' of 1m length do not support cyclists getting to the ASL. Especially where 2 lanes of traffic with no gaps
- Detectors do not appear to pick up movements, at times. This is the case with other types of junctions such as Pevensey A259 and Victoria Drive, where cycles often do not seem to be detected, and cyclists have to get off and cross the road. However if a vehicle joins the queue then the traffic is detected
- There may be more of an issue with the increasing use of Active Traffic Lights (ATLs) that drop phases or else have 'hurry up' phases for buses (where they go green early). It is unclear how well cycles are detected. There are 31 new ones paid for by BSIP funds
- In conclusion there is very variable infrastructure in terms of design, implementation, usability and maintenance of these resources. The consequences of such generally poor implementation might also be extended to other areas, such as cycle lanes, paths, cycle paths and controlled crossings

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