Need for night work

- A commitment was given by Highways England that the available day-time lanes of traffic would not be reduced during the construction of the A14 scheme.
- Where operations would need to close a lane or carriageway to ensure the safety of the road users and the workforce this has to be carried out at night under a full or partial closure of the affected road (A1 / A14 / A428)

Area Logistical Problems

- Some of the villages adjacent to the A14 have very limited access (Lolworth & Bar Hill)
- In this area of Cambridgeshire the options of routes suitable for trunk road traffic means that in some cases the diversion are lengthy.

Minimal Requirements

- Diversion routes to be used are agreed with the highway authority responsible for the roads to be used; in this case Cambridgeshire County Council.
 - Where we affect the Girton junction and M11 access we have permission to divert non-motorway traffic along Kings Hedges Road
 - Diversions primarily use A428 / A1198 / A14 to A1 spur.
- Black & yellow signs are put out on the carriageway 2 weeks in advance of the closure to notify drivers of the planned dates.
- On the night of closures black & yellow diversion signs, (using the strategic symbols on the existing permanent street signs) to direct traffic onto the approved diversion.

Press / social media notifications used on A14

- Weekly media round-up issued to a wide range of regional media.
- Weekly & daily updates on A14 Facebook & Twitter channels

Initial Additional Steps Taken (2017)

- Up to 43 black and yellow "Road closed" advisory and diversion ahead signs used with various wording to alert drivers of the closure; including some "Turn off Sat Nav Follow Diversion" signs with a cone and a flashing light on it to highlight the sign
- Up to 13 Mobile VMS signs in use, displaying messages such as



• When diversions are lengthy, rather than just expecting drivers to follow a strategic diversion symbol, some of the temporary diversion signs also include "A14 W", "A14 E" etc. on them to confirm to drivers they are on the correct route.

- Paid for Police crews to be in attendance at the closure point side roads to try to ensure vehicles did not divert onto local weight restricted roads. Due to this resulting in shift pattern problems this may not always be possible as frequently in the future.
- Our traffic management crews have been stationed at the closure points to speak with confused drivers to encourage them to follow the signed diversions.
- Support from CCC with the use of their message boards to warn drivers of the closures.
- Weekly update of closures sent to Parish Councils / businesses / interested residents by email.
- The weekly information is shared with Road Haulage Association and Freight Transport Association for sharing with their membership.

Further steps taken (2018)

Jan to June

- Support from HE strategic signage team to use as many of the appropriate full network gantry signs to alert drivers of the closers; including some on the M25.
- Support from CCC to get the closures and diversions uploaded onto roadworks.org, a system which feeds into some satnav systems.
- Request to RHA, FTA and Felixtow port contacts to please remind members to follow the signed diversion.
- Agreement from RHA that they will use or weekly traffic closure information onto their new "Roadway" app that was launched in May.
- Agreement from RHA that they will share our traffic closure information with the International Roads Union (the European equivalent of RHA)
- Huntingdon Rd, Cambridge Installed an HGV counter to assess the actual numbers of HGV's using the road with or without the A14 being closed.
- Huntingdon Rd, Cambridge Installed speed activated signs to alert drivers if they are speeding (smiley / sad faces)
- Buckden / Ellington / Fenstanton / Fen Drayton / Swavesey area offered to speak with companies who are repeat offenders of the no HGV restricted routes.
 - \circ $\;$ This could lead to asking them to sign the County Council HGV covenant $\;$
- A14 IDT have taken video footage of the diversion routes and reviewed with people not familiar with the routes to check if they are clear.
- Police have recently added a number of sensitive routes onto their night time tasking list, to request that if crews have any spare time that they driver these routes to check for any non-compliance of the speed or weight restrictions.
 - Grafham & Ellington 18 tonne limits
 - Histon Night time HGV ban
 - Histon Road Speeding traffic
 - Huntingdon Road Speeding traffic
 - Victoria Road Night time 7.5 tonne ban
 - High Steet, Boxworth Weight Limit
- Whilst mid-week closures will be in place from 9pm on a Friday night closures will be delayed until 10pm to try to allow more traffic through the region before the road is closed.

• In the near future we will be able to use the support of the Highways England Traffic Officers when we close the roads, as more are in the process of being employed.

July onwards

- Discussions with TomTom satellite navigation company to understand if anything can be done to assist. They advised that unless people have "Live traffic" satnav systems that have been updated by the user to reflect current maps there is not.
- Further work with Highways England strategic signage teams to improve consistency of messaging when closures are in place; assuming no other strategic incident has to take priority.
- Weekly meetings with other regional contractors / teams to try to mitigate potential for conflicting diversions.
- Two traffic counters and four speed signs have been purchased and locations for use will be agreed with Cambridgeshire County Council and will be rotated across the project. (August onwards). Data will be gathered to inform CCC decision on the need for a weight restriction or further TRO weight limit.
 - Rotation Counter 1 (during and after night time works)
 - Huntingdon Road
 - Histon Road
 - Kings Hedges Road
 - Rotations Counter 2
 - Grafham
 - Swavesey
 - Fen Drayton / Fenstanton
- Possible use of additional night time Temporary Traffic Regulation Orders being considered with CCC & Police. In addition to the cost to put in place these will take some time to progress and it.
- Additional "Unsuitable for HGV" signs to be used where applicable.
- New "Police speed check area" signs being purchased (as below), with locations for use being agreed with the Police.

Police speed check area Marked and unmarked patrols operating

- Signs with "Turn off sat nav" on to be amended to a strike through satellite symbol, to try to emphasise the point to foreign drivers.
- If time permits the night time floating TM crew will drive the local routes to see if they can spot any non-compliance with the diversion.

- Use of HE Traffic Officer teams, when available, at key junctions to try to dissuade drivers from using village roads.
- All diversion signs which use the strategic symbols have been changed to A14 E or W and A1 N or S as applicable (August)
- HW Martin will be producing short video clips of the diversion routes and signage that we can put on social media (should all be done by mid/end August)
- Full review of locations of scheme mobile message boards to ensure they are being used to the best effect.
- A member of the County Council traffic team is physically based in the A14 office for at least one day a week to aid joined up working.

Considered but not possible to do

- Lorry Watch A number of the locations across the scheme have a 18 tonne weight limits in place and many members of the public will not be able to differentiate between a permitted or non-permitted vehicle. In addition the Police are not like to be able to follow up on any data gathered due to resource limits.
- ANPR cameras These would only gather registration numbers and would not identify legitimate weight / use vehicles. As above the Police resource to follow up is not likely to be available.
- Additional temporary traffic orders (weight restriction) Whilst arranging to have TTRO's
 put onto some local roads during construction is possible the enforcement would not be a
 priority for the Police. This might still be done in exceptional cases.
- Night time speed watch This is not permitted.
- Closures between Bar Hill and Swavesey
 - Escort residents from Bar Hall & Lolworth through the closure if put in place back at the A428. As there are over 2000 properties, plus a number of businesses who would need access this is difficult to do and keep our night time staff safe.
 - Install the physical closure point at A1198 & Girton Interchange so no traffic can get along the A14, reducing the potential for rat running via Fenstanton, Fen Drayton and Swavesey – this would prevent access into Lolworth residents access to and from all the villages either side of the A14 would be significantly affected. This would also need a significant length of lane closure on the western approach to the closure due to the need for the correct length of taper.
- Closures on Cambridge Northern By-pass
 - Possible relaxation of motorway regulations to allow non-motorway traffic to use the strategic diversion, removing the need for secondary signage for "Nonmotorway traffic".
- Take A14 EB down to one lane in advance of A1198 to make it look as though the A14 is closed at that point. (Ian Jobson suggestion)
 - This would require 8km of single lane running TM, as taper sign lines would mean the lane drop would have to go back to 400m prior to Spittle's Interchange.
 - Cost to do this each night would be addition £10,000.