Forward Plan reference number: Not Applicable

Report title: Proposed Permanent Prohibition of Right Turn on Wash Road (west) at its junction with A176 Noak Hill Road, Basildon

Report to: Councillor Kevin Bentley, Deputy Leader and Cabinet Member for Infrastructure

Report author: Andrew Cook, Director for Highways and Transport

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For: Decision

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County Divisions affected: Wickford Crouch

1. Purpose of Report

1.1 Essex County Council (the Council) has carried out an experimental traffic regulation order for the prohibition of right turn on Wash Road (west) at its junction with A176 Noak Hill Road, Basildon (the Proposal). As objections have been received, the Cabinet Member is now asked to decide whether the Proposal should be made into a permanent traffic regulation order.

2. Recommendations

2.1 To approve the making of the Proposal into a permanent traffic regulation order, prohibiting right turns out of Wash Road (west) onto A176 Noak Hill Road, Basildon. In addition to this, it is recommended that the Cabinet Member supports the advertisement of the permanent introduction of prohibition of U-turns on the length A176 Noak Hill Road in the vicinity of Wash Road (west), Basildon.

3. Summary of issue

- 3.1 The A176 Noak Hill Road and Wash Road (west) junction is located on the northwest edge of Basildon (the Site). The A176 is a single carriageway road classified as a PR1 radial feeder route with a 40mph speed limit. Wash Road (west) is a single carriageway road classified as a PR2 link road and has a speed limit of 30mph.
- 3.2 There have been 13 recorded injury collisions at the Site since 2006. Nine (7 slight and 2 serious) of these collisions involved road users turning right out of Wash Road (west) into the path of northbound and southbound road users. A fatal collision on 25 March 2016 further underlined the need for casualty reduction measures at the Site.
- 3.3 The number of injury collisions at the Site alongside the cost, policy and traffic management implications of potential improvements has led to a casualty

reduction site investigation and a number of detailed studies in 2012-13, 2014-15 and 2015-16.

- 3.4 The 2012 casualty reduction site investigation recommended the introduction of an experimental right-turn ban. Following this recommendation, a study was undertaken in 2012-13 to explore the feasibility of introducing a roundabout at the junction, as an alternative to the prohibition of right turn. The study concluded that installing a roundabout could cause "significant delays" on A176 Noak Hill Road during AM peak times and may be counter to ECC's Traffic Management Policy by giving equal priority to PR1 and PR2 roads. Accordingly in June 2013, Basildon Local Highway Panel (LHP) agreed to progress with the implementation of an 18 Month Experimental Order in the form of a prohibition of right turn.
- 3.5 In 2014 the experimental prohibition of right turn was initially supported and approved by the former Cabinet Member for Highways. However, upon receipt of passionate correspondence from residents and negative media coverage during informal consultation, ECC agreed to further consider alternative measures.
- 3. 6 A further study by the Highway Improvement Design Team was undertaken in 2014/15. This study looked at all possible alternatives to a right turn ban namely a mini roundabout, traffic signals, and once again a conventional roundabout. The study found that a mini roundabout would not be appropriate for a PR1 route with a 40mph speed limit. The study also highlighted a number of potential problems with the roundabout and traffic signal options. A conventional roundabout would be contrary to policy on the grounds that it would give priority to a PR2 over a PR1 road. In addition to this it would cause additional delays along the A176 Noak Hill Road and would cost in excess of £200,000. The traffic signals would cost in the region of £150,000 with additional issues in relation to the junction's proximity to a nearby pedestrian crossing on A176 Noak Hill Road.
- 3.7 In order to definitively assess the suitability of a conventional roundabout, prohibition of right turn and signalised junction options, the design team recommended that a further traffic modelling study be undertaken in 2015-16 by the transport planning team. This study would also be useful in assessing the impact that any improvement would have on neighbouring roads such as Dunton Road and High Road North, where LHP Members had complained about a perceived problem with "rat-running", drivers using this route as a short-cut.
- 3.8 The 2015-16 study outlined the congestion and road safety implications of various traffic signal and conventional roundabout layouts before concluding that "all options could potentially improve the safety issues at the junction. However, with the exception of the right turn ban, all options tested were shown to worsen the levels of capacity and delay at the junction particularly for the main road." The recommendation of the study, therefore, was "to implement a ban on the right turn movement out of Wash Road (west), either

as a trial, as has previously been suggested, or permanently, to reduce the number of collisions at the junction."

- 3.9 The information in the 2015-16 study indicated that only approximately 4% of the traffic movements at the junction make the movement to turn right at Wash Road (west) and so this would not cause a significant impact on the wider network, should the movement be banned. A right turn ban would likely force around 70 vehicles during the AM and PM peak times to use the A127 as an alternative route, which may cause a small increase in the number of vehicles using High Road North as those living near the junction may use it to access the A127. Appendix 2 outlines the proposed diversion route.
- 3.10 The results of the 2015-16 study were presented to the Basildon LHP where no further alternative solutions were suggested and it was agreed that only a prohibition of right turn would address safety issues without reducing capacity or increasing delays.
- 3.11 In April 2016, a report once again recommending the proposed right turn ban was presented to the previous Cabinet Member for Highways and Transport, in order for Essex Highways Officers to be instructed on how to progress the scheme. The Cabinet Member decided that officers may only proceed with the experimental order subject to another robust informal consultation to local residents. The decision was confirmed on 3 May 2016 (FP/494/04/16).
- 3.12 Following decision FP/494/04/16, an extensive consultation was carried out with 776 residents during May 2017 requesting their views on the introduction of an experimental right turn ban out of Wash Road (west) onto A176 Noak Hill Road. Although only 36% of respondents supported the proposal, many of the objections were requesting alternative solutions for the junction, such as traffic signals or roundabout features, the implications of which are outlined in paragraphs 3.4 to 3.9 above and were previously deemed as less suitable options for the Site. The previous Cabinet Member took the decision to introduce the experimental prohibition of right turn on 26 April 2018 (FP/136/04/18). Details of this decision can be found in Appendix 6.
- 3.13 Following the publication of FP/136/04/18, the decision was subsequently called in by local county members. However, following the initial call-in meeting where the Leader attended in the previous Cabinet Member's absence; the call-in was withdrawn to enable the experimental prohibition of right turn to proceed.
- 3.14 The experimental order was introduced on 27 August 2018. On this date all works were installed and a 6 month statutory consultation commenced, ending on 27 February 2019. It should be noted that comments were still accepted after this date. Before, during and after this consultation period, surveys were undertaken at the Site and accident data monitored to determine the success of the experiment. The details of the design can be found in the drawings included in Appendices 1 and 2. Site photographs can be found in Appendix 4.

Consultation

- 3.15 During the statutory consultation period, all affected residents were written to in advance with details of the previous Cabinet Member's decision, notices were placed on site, on the Essex Highways website, and in the Basildon Recorder. Other stakeholders were also emailed directly with details of the experimental order in advance of its installation.
- 3.16 A total of nine responses were received to the consultation. Six objections were received, five of which were received within the first month of the new road layout being introduced. The last objection was received after the consultation period closed. The objection points were as follows:
 - Initially comments were received with concerns over many drivers performing U-turns on A176 Noak Hill Road, after initially turning left out of Wash Road (west). Following initial reports of this, and a review of camera survey data; a temporary U-turn prohibition has been introduced on A176 Noak Hill Road in the vicinity of the Site. It is recommended that if the right turn prohibition is permanently introduced, then the U-turn prohibition should be advertised as a permanent traffic regulation order proposal.
 - Comments were received in relation to concerns that there was insufficient warning signs for the right turn prohibition However, following installation of the experimental order, a Stage 3 Road Safety Audit was undertaken which raised no concerns for the signage installed on site. There are advance warning signs on Dunton Road, High Road North and the A127 notifying drivers of the new road layout and prohibition of right turn out of Wash Road (west).
 - Two comments were received in relation to concerns over use of the Dunton Road/High Road North junction due to overgrown vegetation making the junction appear more dangerous. This is not directly a response to the consultation relating to the prohibition of right turn, however is in the vicinity of the Site and may require additional vehicles to turn right out of Dunton Road onto High Road North in order to travel along the recommended diversion route. Therefore vegetation removal was carried out at this junction.
 - Soon after its installation, a concern was received following a number of individuals continuing to turn right out of Wash Road (west) around the physical measures that had been installed. This was supported by camera survey data. The jislon poles were therefore extended up to the traffic island, as well as temporary water filled barriers being placed at the Site, to prevent this manoeuvre. Essex Police were also informed so that the Site could be monitored and enforcement action taken against anyone caught in breach of this traffic regulation order.
 - Two comments were received concerned that the junction is more dangerous than before. These comments are not supported by evidence, as collision data has highlighted that there have been no recorded injury collisions at this junction since the experimental right turn prohibition was introduced. The Site will continue to be

monitored and measures reviewed should any collision pattern arise.

- One individual suggested that a preferred option would be for no traffic to exit Wash Road (west) onto A176 Noak Hill Road at all. This was not considered as an option within the traffic modelling study, however it is expected that this would have significant capacity implications on the highway network due to the lengthy diversion that would be required for those vehicles turning left onto A176 Noak Hill Road towards Billericay.
- One individual felt that the road layout is disruptive to local residents. However, the traffic modelling study has indicated that the change in volume flow of traffic as a result of this scheme is negligible.
- One objector felt that the alternative junction layouts had not been properly assessed and options such as roundabouts, traffic signals, mini roundabouts etc. should be reconsidered. As highlighted in paragraphs 3.3 to 3.8 above, numerous studies have already been undertaken to determine the most appropriate resolution for the collision pattern at the Site, and with current traffic modelling, the right turn prohibition provides the most suitable solution in terms of safety and capacity implications. However, it should be noted that this junction may be reassessed in future as part of the transport assessment in association with the Lower Dunton Road development, which will take into account both current and predicted traffic flows.
- One objector did not feel that the collision data warrants works at this junction. They stated that data from a three year period would have been appropriate, as opposed to ten years which was used and as such the number of relevant collisions that should be considered is zero. However, collision data was used from a ten year period in this instance which is Essex Highways policy in relation to the Fatal Collision Investigation process. This was following a report from Essex Police notifying Essex Highways that a fatal collision had occurred at the Site.
- An objector felt that regardless of the impact other options for the Site may have on congestion in the area, importance must be placed on highway safety when the decision is made. This comment is well justified, however it should be recognised that there have been no collision at the Site since the installation of the right turn prohibition. The historic collision data did indicated a collision pattern from the right turn manoeuvre at this junction, so it was necessary to address this with remedial measures according to the results from the previous transport assessment undertaken. These will potentially be reassessed as part of the transport assessment in association with the Lower Dunton Road development, taking into account current and predicted traffic flows. Furthermore, the Site will continue to be monitored in the event that any further collisions occur.

- 3.17 The objections have been summarised in Appendix 3, along with the officer response to these points.
- 3.18 It should be noted that following initial objections in relation to drivers undertaking U-turn manoeuvres on A176 Noak Hill Road, camera footage was reviewed and the subsequent temporary U-turn prohibition was installed. If the recommendation in this report is accepted, work will be undertaken to consider a proposal to introduce a permanent prohibition of U-turns.
- 3.19 The following comments were received from other stakeholders:
 - Essex Police support the scheme, providing it does not solely rely on Police enforcement, and that if necessary further physical measures are introduced
 - Councillor Malcolm Buckley objects to the scheme and believes it has made a bad situation worse
 - Councillor Tony Ball has not provided any official written comments to the consultation, however did call-in the previous Cabinet Member decision with Councillor Buckley
 - Councillor Anthony Hedley has expressed support for the scheme, as a regular user of this junction he has stated that traffic flows have improved significantly at this junction since the installation of the right turn prohibition, and even at peak times the junction is not congested

Survey Data

3.20 A summary of all survey data in relation to this site can be found in Appendix 7.

3.21 Collision Data

The most recent collision data has been analysed post scheme construction and indicates that there have been no personal injury collisions at the junction of A176 Noak Hill Road/Wash Road (west) since the measures were installed. In addition to this there have been no recorded personal injury collision post construction along Lower Dunton Road, High Road North and Hornbeam Way. One slight injury collision was recorded along Willowfield at the junction of Hornbeam Way on 08/12/2018.

3.22 Speed, Volume and Destination Data

Appendix 7 displays the destination survey data, as well as locations where speed surveys were taken. Results are shown before the installation of the prohibition of right turn, as well as 5 months post-installation.

3.23 Results below in table 3, detail that a small % of road users are still ignoring the temporary 'no u turn' prohibition which was put in place to prevent road users who were turning left out of Wash Rd, and then performing a 'U-turn' manoeuvre to then travel south again along the A176. It is unclear whether these manoeuvres are being performed at the end of the installed 'Jislon poles' or whether they are being performed in the bus-stop layby further north. It was also evident that a small % of road users are also choosing the ignore the 'right turn prohibition' and are continuing to turn right out of Wash Rd onto A176 Noak Hill Rd. To undertake this manoeuvre would require road users to turn right and travel head-on into the path of northbound road users. Essex Police have been informed of the times that these manoeuvres have been occurring and have targeted enforcement to address this.

Survey data	Illegal Manoeuvre Undertaken	No. of vehicles
22/01/2019 (24 hour	Wash Road (W) left-turn then u-turn south to	
survey)	A176	27
23/01/2019 (24 hour	Wash Road (W) left-turn then u-turn south to	
survey)	A176	23
24/01/2019 (24 hour	Wash Road (W) left-turn then u-turn south to	
survey)	A176	43
22/01/2019 (24 hour		
survey)	Wash Road (W) right-turn to A176	10
23/01/2019 (24 hour		
survey)	Wash Road (W) right-turn to A176	1
24/01/2019 (24 hour		
survey)	Wash Road (W) right-turn to A176	7
	Table 3	

7 Day Surveys	BEFORE (MAY 2018)	AFTER (JAN 2019)	% INC OR DEC	BEFORE (MAY 2018)	AFTER (JAN 2019)	% INC OR DEC	BEFORE (MAY 2018)	AFTER (JAN 2019)	% INC OR DEC
	Average Daily Traffic Volumes (7 day average)	Average Daily Traffic Volumes (7 day average)	Average Daily Traffic Volumes (7 day average)	Average Daily Speed (7 day average)	Average Daily Speed (7 day average)	Average Daily Speed (7 day average)	Average 85th%til e Speed (7 day average)	Average 85th%til e Speed (7 day average)	Average 85th%til e Speed (7 day average)
Dunton Rd Eastbound (30mph Limit)	2160	1918	-11.20%	33	33.8	2.42%	38.2	38.8	1.57%
High Rd North South West Bound (30mph Limit)	3402	3968	16.64%	30.3	30.1	-0.66%	34.6	33.8	-2.31%
Willowfield South Bound (30mph limit)	4119	4559	10.68%	33.6	33.1	-1.49%	38.3	37.5	-2.09%
Hornbeam Way Eastbound (30mph Limit)	2890	3266	13.01%	34.8	35.1	0.86%	41.1	40.1	-2.43%



3.24 As part of the implementation of the no right turn prohibition, it was estimated that traffic volumes would likely increase along alternative routes being used by road users to access the A176 or A127. The results detailed above indicate that there has been a small increase in the volume of vehicles using the alternative routes of High Rd North, Willowfield and Hornbeam Way however Dunton Rd has shown a small decrease in overall volume of vehicles. Reviewing the average daily speeds (based on a 7 day average) there has been a minimal increase along Dunton Rd and Hornbeam Way, however average speeds along High Rd North and Willowfield showed a marginally decrease in average daily speeds. Reviewing the 85% tile speeds (based on a 7 day average) there has been a minimal increase along Dunton Rd, however 85% tile speeds along High Rd North, Willowfield and Hornbeam Way all displayed a marginal decrease in 85% tile speeds.

3.25 Conclusions

- To conclude, a comparison of the before and after data (shown in tables 1 & 2) indicates that the scheme has been successful in reducing 95% of vehicular movements attempting to turn right out of Wash Rd onto A176 Noak Hill Road.
- Collision data collected so far, post construction indicates that no collisions have occurred at the junction where the scheme has been implemented, further monitoring over a longer period will be required to determine the schemes long term effectiveness.

- However from a road safety perspective the information detailed in table 3 displays the fact that there is still 5% of road users who are attempting to turn right out of the junction or attempt a 'u turn manoeuvre' is unacceptable.
- A conclusion of the before and after data shown in table 4, clearly shows that the differences in traffic volumes, average vehicular speeds, and the speeds at which 85% of vehicles are travelling at, are minimal and would not be clearly evident in terms of outside observations from members of the public.

3.26 Recommendations

To address the 5% of road users still undertaking 'prohibited movements' at the junction the following is recommended:

- 1) It is recommended that the temporary prohibition of right turn order from Wash Rd into Noak Hill Rd be made a permanent order.
- 2) As a temporary measure it is recommended that additional 'red/white' water filled barriers be positioned within the central hatching just to the north of the 'jislon pole' arrangement. These barriers should be continued north for a distance which continues the length of 'U-turn prohibition order' and extends up to and just past the existing bus stop layby.
- 3) A further 'prohibited manoeuvres' survey should then be undertaken (3-6 months post water filled barrier implementation) to determine if the level of 'u turn manoeuvres' has dissipated or remains.
- 4) Depending on the analysis of the results of the 'prohibited movements' survey a permanent arrangement of 'jislon poles' should be considered along the central hatching length to extend up to and past the bus stop layby.
- 5) Consideration should also be giving to making the 'no U-turn' prohibition order permanent.

4. Options

4.1 Option 1 - Implement permanent prohibition of right turn out of Wash Road (west) and begin statutory consultation process for prohibition of U-turn on A176 Noak Hill Road

This is the recommended option. This option aims to continue to achieve the highway benefits of reducing the likelihood of collisions at this busy junction, by preventing the manoeuvre which resulted in a collision pattern. It will also allow a consultation process to be undertaken on the proposal to introduce a prohibition of U-turns along this length of A176 Noak Hill Road, whereas at present a temporary traffic regulation order is in place and no substantial consultations took place ahead of its installation.

4.2 Option 2 - Abandon all proposals

This option would satisfy some of the objectors. However, it would not satisfy all objectors, particularly those who have requested alternative measures be installed at this junction. Furthermore, it could increase delays for individuals turning left onto A176 Noak Hill Road at peak times, and most importantly, permitting the right turn manoeuvre could lead to further near misses and

potentially collisions occurring again. This option would involve removing the existing infrastructure, and as such would incur greater cost to the Council than introducing the permanent traffic regulation order. In addition, this option could raise additional risk to the Council should any future collisions occur. The previous fatal collision report has been shared with the coroner, so removal of measures at this location without suitable justification could be considered as a risk.

4.3 Option 3 - Implement permanent prohibition of right turn and abandon proposal to advertise prohibition of U-turn on A176 Noak Hill Road

This option would retain the current road layout at the Wash Road (west)/A176 Noak Hill Road junction, and the achieved highway benefits from the introduction of the prohibition of right turn. It would allow drivers to undertake U-turns along A176 Noak Hill Road if they choose to do so. However, it has not yet been determined what the road safety implications of this would be and whether it is suitable to permit vehicles to undertake this manoeuvre on this 40mph road in the vicinity of a busy junction.

4.4 Option 4 - Continue to monitor the site with further surveys

This would allow further data to be collected and presented once the scheme has had longer to bed in. However, it is unlikely there will be significant benefit from choosing this option, as several surveys have been undertaken at this location over the last year. The decision on whether the permanent traffic regulation order will be made must be taken by December 2019 at the latest. This is to allow sufficient notice for any potential works mobilisation and for all stakeholders to be notified. The experimental traffic regulation order will expire in February 2020 and cannot continue indefinitely. Further feasibility studies could be undertaken if deemed appropriate, however the experimental order cannot remain in place past February 2020, so a decision must still be taken as to whether the prohibition of right turn should remain as a permanent feature or be removed.

5. Next Steps

5.1 Following the publication of this decision, the prohibition of right turn out of Wash Road (west) onto A176 Noak Hill Road, Basildon can be made into a permanent traffic regulation order. The statutory consultation and advertisement of the proposal to permanently introduce the prohibition of U-turn on A176 Noak Hill Road can be undertaken and subsequently introduced providing no objections are received. All individuals who responded to the consultation will be updated with this outcome.

6. Issues for consideration

6.1 Financial implications

Financial implications will be funded through the 2019/20 Casualty Reduction Programme.

Making of the permanent TRO will only incur administrative and advertising costs, as no further infrastructure is proposed to enforce the right turn ban.

Proposed permanent prohibition of U-turns on A176 Noak Hill Road would initially incur administrative and advertising costs. If supported for implementation, then permanent signage will be required, as this is currently enforced via temporary signs on site.

The removal of existing prohibition of right turn infrastructure would require administrative costs to update residents on the change in road layout. It would also require works costs to remove the infrastructure.

It should be noted that a fatal collision in a built up area has been calculated by the Department for Transport to have an average whole society cost of $\pounds 2,031,842$ (based on 2017 values).

6.2 Legal implications

The Road Traffic Regulation Act 1984 gives the Council a statutory duty to exercise its traffic functions to secure the expeditious, convenient and safe movement of traffic of all kinds, including pedestrians and to provide suitable and adequate parking facilities. So far as practical the council is also required to have regard to:

(a) the desirability of securing and maintaining reasonable access to premises;

(b) the effect on the amenities of any locality affected so as to preserve or improve the amenities of the areas through which the roads run;

(c) the importance of facilitating the passage of buses and their passengers.

Justifiable prohibition of a right turn assists with the expeditious, convenient and safe movement of traffic and pedestrians.

It should be noted that the Council may be liable to future legal challenge if the measures are removed entirely, and any subsequent collisions occur. The previous fatal collision report has been shared with the coroner, so removal of measures at this location without suitable justification could be considered as a risk.

Equality and Diversity implications

7.1 The Public Sector Equality Duty applies to the Council when it makes decisions. The duty requires us to have regard to the need to:

(a) Eliminate unlawful discrimination, harassment and victimisation and other behaviour prohibited by the Act. In summary, the Act makes discrimination etc. on the grounds of a protected characteristic unlawful

(b) Advance equality of opportunity between people who share a protected characteristic and those who do not.

(c) Foster good relations between people who share a protected characteristic and those who do not including tackling prejudice and promoting understanding.

7.2 The protected characteristics are age, disability, gender reassignment, pregnancy and maternity, marriage and civil partnership, race, religion or belief, gender, and sexual orientation. The Act states that 'marriage and civil partnership' is not a relevant protected characteristic for (b) or (c) although it is relevant for (a).

7.3 The equality impact assessment indicates that the proposals in this report will not have a disproportionately adverse impact on any people with a particular characteristic. The equality impact assessment can be found in Appendix 5.

7. List of appendices

Appendix 1 - Drawing 1 DS5017-000-001A Appendix 2 - Drawing 2 DS5017-000-002 Appendix 3 - Objection Report Appendix 4 - Site photos Appendix 5 - Equality Impact Assessment Appendix 6 - CMA April 2018 FP/136/04/18

Appendix 7 – Survey Data Summary

8. List of Background papers

Transport Planning study 2015-16 HIDT Feasibility Study 2014-15 Transport Planning study 2012-13 Fatal Collision report Casualty Reduction report Speed & Volume Survey Data Junction Movement data Consultation responses CMA May 2016 FP/494/04/16 Traffic Regulation Order documents (public notices, draft order, temporary TRO) Basildon Local Highway Panel minutes Background Papers & appendices to previous CMAs

I approve the above recommendations set out above for the reasons set out in the report.	Date
Councillor Kevin Bentley, Deputy Leader and Cabinet Member for Infrastructure	21.02.2020

In consultation with:

Role	Date
Director Highways and Transportation	07.02.2020
Andrew Cook	
S151 Officer	Consent not needed
Nicole Wood	
Monitoring Officer Laura Edwards on behalf of Paul Turner	05.02.2020
Head of Network and Safety/Traffic Manager	05.02.2020
Head of Design Vicky Presland	07.02.2020