

Public Report
Overview and Scrutiny Management Board

Committee Name and Date of Committee Meeting

Overview and Scrutiny Management Board – 18 March 2021

Report Title

Transportation – Crossing the Highway - Provisions for Vulnerable Road Users

Is this a Key Decision and has it been included on the Forward Plan?

No

Strategic Director Approving Submission of the Report

Paul Woodcock, Strategic Director of Regeneration and Environment

Report Author(s)

Andrew Lee

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Ward(s) Affected

Borough-Wide

Report Summary

At a previous meeting of this committee a request was made for consideration to be given to actions that can be taken to ensure that pedestrian crossings and other road infrastructure across the Borough fully takes into account the needs of vulnerable road users and for a report to be brought back March meeting of this board.

Recommendations

That the current approach for pedestrian crossing design and configuration is noted and comments or observations are made as to whether this current approach meets the needs of residents and recommend any changes that are considered necessary.

List of Appendices Included

Appendix 1 – Equalities Screening

Appendix 2 - List of infrastructure measures to support vulnerable road users when crossing.

Background Papers

Department for Transport guidance: LTN 2/95 the Design of Pedestrian Crossings.

Consideration by any other Council Committee, Scrutiny or Advisory Panel

Overview and Scrutiny Management Board – 23 March 2011

Economic Development, Planning and Transportation – 15 March 2010

Council Approval Required

No

Exempt from the Press and Public

No

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1. Background

1.1 During the Overview and Scrutiny Management Board meeting held on 16 December 2020 Members expressed concern regarding:-

- The ability of “vulnerable road users such as the elderly and people with reduced mobility to cross roads safely due to road safety infrastructure often not meeting their needs....”
- Those concerns “not confined to particular roads or crossings and advised that they were concerned about the safety of vulnerable road users crossing roads safely right across the Borough”.
- A formal recommendation was brought to Cabinet.

1.2 Clarification was sought on how the needs of vulnerable road users are taken into consideration.

1.3 The report also outlines the approach used for determination of crossing “wait times” which had been noted as a concern within the current delivery process.

2. Key Issues

2.1 A key part of the design considerations for signalised crossings is the configuration of both pedestrian and road traffic “wait times”. This issue is considered in great detail to ensure the optimum highway usage is attained that enables effective and safe use of the crossing by pedestrians and other non-motorised road users whilst maintaining effective traffic flow. Rotherham’s pedestrian crossing installations are configured using “wait time” parameters detailed in government guidance note LTN 2/95 the Design of Pedestrian Crossings.

2.2 The key risk at this stage of design is the extent to which traffic flow is restricted resulting in congestion, potential contributions to air quality concerns and also potential for driver error or route changing that could result in increased accident risks. These are all considerations in the configuration of “wait times” for all vehicle and pedestrian users in addition to technical considerations of phasing (for complex signalised crossings or junctions) and site based technical challenges of space, visibility of signals to drivers and so on. Details are provided below of the specific method used to determine these timings.

2.3 Issues relating to vulnerable road users are taken into account throughout the whole design process associated with new highway projects and these are evaluated during the road safety audit process. Particular attention is taken at sites where there are known vulnerable road users, such as outside schools, areas of heavy pedestrian footfall, or cycling.

Vulnerable Road Users: Pedestrian Crossing design and timings (“Wait times”)

- 2.4 All new signal-controlled pedestrian crossing facilities installed in Rotherham are of the Puffin Crossing Style incorporating near-side pedestrian signal displays as opposed to the traditional far-side aspects traditionally found on Pelican Crossings. This type of crossing has two forms of detection for pedestrians, these being, kerb-side detectors which can cancel the request to cross the road where pedestrians move on before the green pedestrian symbol appears, therefore, reducing un-necessary delay to traffic flows, and on-crossing detectors which enable the crossing period to be extended where pedestrians require more time to reach the opposing footway (refer to DfT LTN 2/95 Table 6 *Period 6* below). The cycle is initiated by a pedestrian demand formed by both the push button being pressed and the pedestrian occupancy of the kerb-side detector zone i.e. remaining on the crossing for longer than the pre-set crossing end period, the concluding Red phase which allows pedestrians to complete the crossing process (*Period 5* in the table below).
- 2.5 The initial green pedestrian symbol indicated on the near-side pedestrian signal display indicates the point at which pedestrians can start to cross the road if safe do so. Following this the detection units monitor the crossing area and will maintain a red signal for traffic until such time that pedestrians have cleared the carriageway, or the maximum permitted time is reached. During this period a red pedestrian symbol will appear on the near-side pedestrian signal heads indicating to those pedestrians wishing to cross the road that it is no longer safe to do so without calling the crossing again.
- 2.6 At signalised crossings the pedestrian demand units incorporate either audible, and/or rotating tactile cones for visually impaired pedestrians.
- 2.7 Whilst crossings with nearside operation have become the main form of crossing in many places, it is recognised that there are places where they are unsuitable. Accordingly, although it is no longer possible to install Pelican crossings in England, Scotland and Wales, a crossing using far side signals is prescribed in the Regulations and is defined as a “Pedex crossing”. These are a junction pedestrian facility installed as a stand-alone crossing and use far side signals. The sequence is the same as at a signal-controlled junction, with a steady amber period for traffic, and a green pedestrian symbol followed by a blackout period.
- 2.8 Reducing pedestrian wait times at crossings can be investigated on a site specific basis and will take into account both pedestrian usage and vehicle flows, as a crossing which is activated more will increase traffic delays, particularly during peak periods.
- 2.9 Configuration of “wait times” in Rotherham is completed in compliance with the above-mentioned government guidance which allows some discretion. The relevant table within the guidance is restated below (LTN 2/95 Table 6).

Table 6 PUFFIN CROSSINGS - OPERATIONAL CYCLE & TIMINGS

PERIOD	SIGNALS SHOWN		TIMINGS (Seconds)
	TO PEDESTRIANS	TO VEHICLES	
1	Red Standing Figure (Wait)	Green (proceed if way is clear)	20-60 (fixed) 6-60 (VA)
2	Red Standing Figure	Amber (stop unless not safe to do so)	3
3	Red Standing Figure	Red (stop, wait behind Stop line on carriageway)	1 to 3
4	Green Walking Figure with audible signal if provided (cross with care)	Red	4 to 9
5	Red Standing Figure (do not start to cross)	Red	1-5
6	Red Standing Figure	Red	0-22 (pedestrian extendable period)
7	Red Standing Figure	Red	0-3 (only appears on a maximum change if pedestrians are still being detected)
8	Red Standing Figure	Red	0-3 (only appears at a pedestrian gap change)
9	Red Standing Figure	Red with Amber (stop)	2

- 2.10 In terms of accommodating the needs of all road users the following process is employed. For each of the periods 1-9 in column 1 of the above table engineers set the wait phases defined in columns 2 & 3 within the time limits given in column 4. An example scheme within Rotherham is given below to illustrate how this is used locally, with timings from a new installation at Canklow:

Period	Time (seconds)	Pedestrian Signal	Vehicle Signal
1	30	Red	Green
2	3	Red	Amber (fixed)
3	2	Red	Red
4	4	Green	Red
5	3	Red	Red
6	7	Red	Red
7	0		
8	0		
9	2	Red	Red/Amber (fixed)

Note: Periods 7/8 are no longer used and the time is incorporated into Periods 5 & 6.

Vulnerable Road Users: additional measures other than crossings

- 2.11 Appendix 2 sets out a range of measures undertaken by staff within the Transportation unit to improve the highway network for vulnerable road users, with reference to the associated Design.
- 2.12 The objective of the road safety audit process is to provide an effective, independent review of the road safety implications of engineering interventions for all road users, with the road safety auditors making recommendations to the design team, where applicable, to improve the road network for vulnerable road users

3. Options considered and recommended proposal

- 3.1 The Council's current method of assessing pedestrian crossing requests was approved in February 2006 (minute No. 182 refers), with modifications to the method being approved by the former Cabinet Member for Economic Development, Planning and Transportation in March 2010 (minute No. G140 refers).
- 3.2 Depending on the extent of changes taking place consultation takes place with local road users, frontages and where relevant to the scale of changes with key

representative groups. Such consultation enables a range of design solutions to be considered.

4. Consultation on proposal

- 4.1 In terms of the existing approach used to consider vulnerable road users, as the existing methodology of assessing controlled crossing and other related requests within the borough is current policy, no consultations are proposed if it continues to receive the support of Members.
- 4.2 Consultation takes place at scheme level for road safety and traffic management schemes according to the needs identified by each scheme.

5. Timetable and Accountability for Implementing this Decision

- 5.1 As the existing methodology of assessing controlled crossing requests within the borough is current policy, there are no additional timescales or accountability required for this decision. Schemes can take a few months or more than one year to complete depending on the project requirements for funding, design approvals and traffic order making.

6. Financial and Procurement Advice and Implications (to be written by the relevant Head of Finance and the Head of Procurement on behalf of s151 Officer)

- 6.1 The costs associated with the existing policy for implementing Controlled Crossings within the borough are covered within the Local Transport Plan.
- 6.2 Where a third-party contractor is engaged, they must be procured in compliance with the Public Contracts Regulations 2015 (as amended) and the Council's own Financial and Procurement Procedure Rules.

7. Legal Advice and Implications (to be written by Legal Officer on behalf of Assistant Director Legal Services)

- 7.1 None.

8. Human Resources Advice and Implications

- 8.1 None.

9. Implications for Children and Young People and Vulnerable Adults

- 9.1 The existing Pedestrian Crossing assessment method used in the borough includes adjustment factors that take into account the proportion of elderly, blind/partially sighted and mobility impaired pedestrians, the proportion of unaccompanied children, the proportion of pedestrians with prams and pushchairs, the carriageway width, the time pedestrians spend waiting to cross and crossing the road, vehicle speed and any improvement in accessibility as a result of providing the crossing.

10. Equalities and Human Rights Advice and Implications

- 10.1 The existing Pedestrian crossing assessment takes in to account all road users at the location being investigated. Reports for decision to approve schemes include an equality screening.

11. Implications for Partners

- 11.1 No additional implications for Partners will occur as a result of using the existing assessment and implementation method.

12. Risks and Mitigation

- 12.1 The existing assessment method used by Rotherham Borough Council is based on national guidance previously produced by the Department for Transport. This guidance has been updated within the Traffic Signs manual 6 which no longer makes specific reference to the formula approach used in this guidance and therefore enables more flexibility in local assessment methods. In continuing with the current method of assessing Pedestrian Controlled Crossing requests this mitigates risks of introducing an unproven assessment method which may not meet the needs of road users. However, a review of an alternative assessment method can be looked into and reported on if deemed an appropriate way forward.

13. Accountable Officer(s)

Andrew Moss, Interim Head of Transport Infrastructure

Approvals obtained on behalf of: -

	Named Officer	Date
Chief Executive		Click here to enter a date.
Strategic Director of Finance & Customer Services (S.151 Officer)	Named officer	Click here to enter a date.
Assistant Director of Legal Services (Monitoring Officer)	Named officer	Click here to enter a date.
Assistant Director of Human Resources (if appropriate)		Click here to enter a date.
Head of Human Resources (if appropriate)		Click here to enter a date.

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