EXECUTIVE DIRECTOR, PLACE

REPORT TO CABINET HIGHWAYS COMMITTEE

17TH JUNE 2010

ALTERATIONS AT THE WICKER/ DEREK DOOLEY WAY JUNCTION AND ASSOCIATED WORKS

1.0 SUMMARY

- 1.1 The report is to inform Members of the works carried out in and around the Wicker area following the report to the City Centre South and East Planning and Highways Area Board on 16 March 2009 and also in response to issues raised by Members at that Board meeting.
- 2.0 WHAT DOES THIS MEAN FOR THE PEOPLE OF SHEFFIELD
- 2.1 The works that have been put in place meet "City of Opportunity" priorities to empower local people by incorporating their aspirations in the design of their streets. The report contributes to the "Putting the customer first" by responding to people who have expressed various views about the initial arrangements at the Wicker/ Derek Dooley Way and local signage issues, whilst reviewing the cost and benefits of addressing these issues.
- 2.2 The works also contribute to the "Protecting and Enhancing the Environment" objective of the Council's Corporate Plan "A City of Opportunity", particularly the "Reducing Congestion" priority. The changes implemented will help to better manage traffic flows and inform drivers, both on the Ring Road and on local streets, in and around the Wicker Area.
- 2.3 Since the last report on the Wicker was considered on 16 March 2009, a number of business friendly initiatives have been introduced following discussions with and suggestions from local businesses.
- 3.0 OUTCOME AND SUSTAINABILITY
- 3.1 The main outcomes have been:
 - Improved signage.
 - Improvements to junction arrangements.
 - Fewer Penalty Charge Notices issued for bus gate contraventions at the Wicker bus gate.
- 3.2 Improving junctions and signing should also help to reduce driver confusion and therefore, journey time delays for this through traffic. In turn, this will mean less traffic on local access roads, which will aid

local access traffic, cyclists, pedestrians, taxis, public transport and service vehicles. The reduced congestion will also help the quality of the local environment, most importantly in the Wicker shopping area.

4.0 BACKGROUND

- 4.1 Requests from some traders had been received for the hours of operation of the Wicker bus gates to be amended from 24 hours to 12, (that is from 7am 7pm) and not to be operated on Sundays and Bank Holidays, as a way of assisting their businesses by allowing free access to the area for all traffic in the evenings etc. A report on this issue was submitted to the meeting of this Board on 15 December 2008. Following representations from local traders Board agreed to defer the item and undertake an evening site visit to the Wicker and the surrounding streets. This site visit took place on 14 January 2009.
- 4.2 Following the site visit a further report, including consideration of a petition collected by some 30 businesses in the Wicker area, containing over 2,000 signatures, was considered by the Area Board on the 16th February 2009, requesting that the hours of operation of the Wicker bus gates be amended from 24 hours to 12, (that is from 7am 7pm).
- 4.3 The meeting resolved that the hours of operation of the Wicker bus gate be amended to 7.00am-7.00pm, seven days a week for a one year trial period and the Director of Development Services be requested to submit a report, within a month of the Board, outlining the work required to allow for the safe operation of the new hours.
- 4.4 A further petition containing 88 signatures was presented to full Council on 4 March 2009 by the Wicker businesses calling for the authority to urgently implement the decisions made by Area Planning and Highways Board on 16 February "in the light of the deteriorating economic climate."
- 4.5 A further report was presented to the Board on 16 March 2009, as requested at the 16 February Board. This report highlighted the outcome of subsequent site investigation work and the issuing of the full Stage 3 Road Safety Audit Draft Report for the Northern Inner Relief Road (NIRR), including the Wicker, along with the interim findings of the Stage 4 Road Safety Audit. It also set out the road safety and legal implications of implementing the 16 February resolution of the Board.
- 4.6 This latter report raised a number of issues/ questions from the Members of the Board (see Section 7.0). In order to answer some of the points raised by Members, a more demonstrable understanding of why some drivers were both entering the bus gate and then compounding this action by also turning left onto the NIRR was needed. This latter illegal manoeuvre is of particular concern, as it

brings these vehicles into conflict with pedestrians legitimately crossing the NIRR on a 'green man', at a busy pedestrian crossing. Section 5.0 explains how this was achieved.

- 4.7 Since the last report a number of improvements have been made to junctions and signing in the area, as follows:
 - A new traffic island and improved/ additional signs and road markings have been installed at and in advance of, the outbound Wicker bus gate (completed early September 2009).
 - A package of local access signs, both to and from the Wicker and improved parking signs, has been implemented. These measures were agreed beforehand with representatives of the local traders.
 - The strategic signs, approaching the Northern Inner Relief Road on Sheffield Parkway and on Sheaf Street, have been improved, taking better account of new traffic patterns established since the NIRR was completed.
 - Further measures at Park Square roundabout on the Exchange Place approach to the Wicker area, have reinforced the local nature of these roads now that the NIRR is the preferred route for through traffic (works completed 27 November 2009).
 - Short stay parking charges at Council car parks in the Wicker area are being reduced to 20p per hour for the first two hours, in order to assist local businesses. The affected car parks are Wicker Lane, Willey Street (currently being used as a site compound), and Stanley Lane, which should be operational by the end of the year.

5.0 TRAFFIC SURVEYS

- 5.1 In June 2009 a traffic survey was undertaken at the junction of Derek Dooley Way and the Wicker using traffic cameras. This survey counted the number and type of vehicles travelling straight ahead outbound on the Wicker through the bus gate. A vehicle registration survey of those vehicles turning left illegally was also undertaken at the same time. It was not possible to accurately detect the registration plates of all those vehicles making this illegal turn.
- 5.2 The vehicle owners addresses were obtained from the registration plates which were observed and a letter and questionnaire sent to them (attached at Appendix A). A prepaid envelope in which to return the questionnaire and a map from "Getting to the City Centre by Car" leaflet, which shows the City Centre road network, car parks and a more detailed map of the Wicker area, together with its bus gate, was also included. This was done to help people to both understand the questionnaire and also to show them how the 'new' road network operates following completion of the Northern Inner Relief Road.
- 5.3 A total of 29 responses were received (there were 79 illegal left turn manoeuvres over the duration of the survey) and the results are shown at Appendix B, together with the registered address (home town) for

the vehicles. The headline results from the registration plate survey are:

- 90% were not Sheffield residents.
- 41% were following their Satellite Navigation Devices (SNDs).
- 41%, rather worryingly, saw the signs but said that they did not understand them.
- 40% did not see the signs and
- 7% were following the car in front.
- As mentioned above, a traffic count was carried out at the same time as the survey (3 June 2009). This count was repeated on 17 March 2010 after the works outlined in paragraph 4.7 above had been carried out. These counts are attached at Appendix C. The headline results from these traffic counts show:
 - The number of vehicles travelling illegally outbound through the bus gate has reduced by 69%.
 - The number of vehicles travelling illegally outbound through the bus gate and then turning left into the pedestrian crossing has reduced by 82%.

6.0 PENALTY CHARGE NOTICE COMPARISON

- 6.1 A comparison of the number of Penalty Charge Notices issued over two comparable periods (February to April and October to December, 2009) has also been assessed and the number of PCNs issued has reduced by 55%. Again, this comparison was made largely either side of the works outlined in paragraph 4.7.
- 7.0 WICKER BUS GATE 16 MARCH 2009 AREA BOARD RECOMMENDATIONS
- 7.1 The Board Members raised a number of questions/ recommendations at the meeting and are shown in italics, as follows (the references relate to the 16 March 2009 Board report which is attached at Appendix D).

7.2 Issue:

<u>Illegal left-turners</u> (deterrence and enforcement) – "in Paragraph 3.1 of the report now submitted (March 2009) it states that effective enforcement to the 24 hour bus gate will reduce the number of illegal left turners. However, the bus gate has been in place with camera enforcement since November, 2008 and the evidence suggests that this particular deterrent is simply not working. The reason why needs to be investigated."

Response:

The drivers survey indicated that the main reasons motorists were continuing to illegally pass through the bus gate and turn left were due to them not seeing the signs, or following their SNDs (see paragraph

5.3). As outlined in Paragraph 4.7 of this report, engineering and signage improvements have been made to make the situation clearer to motorists. Recently bought SNDs also now include the current road layout and this will also apply to those who have updated the information on older SNDs. Paragraph 6.1 clearly shows that the number of PCNs issued have reduced considerably since these interventions were introduced.

7.3 Issue:

CCTV and Effectiveness – "This Board would recommend the undertaking of a more sophisticated analysis of the effectiveness of present deterrent regimes, including consideration of why the CCTV approach appears not to have been entirely successful and what alternative or modification could be introduced."

Response:

The driver survey highlighted the issues. Changes to local and strategic signing, together with the highway improvements and the provision of updated satellite navigation information, appear to have significantly improved the situation.

7.4 Issue:

Illegal left-turners (driver rationale) – "the report now submitted (March 2009) is silent on the reasons why drivers undertake this illegal manoeuvre. Paragraph 3.1 of the report would have been bolstered by an evidence-based explanation of why drivers of some vehicles seem to be so prepared to undertake illegal and dangerous manoeuvres. This Board would suggest that a greater understanding of why drivers undertake illegal and dangerous manoeuvres would be an important step towards stopping them from doing so and would recommend that this point be explored."

Response:

The evidence based explanation, from the driver survey, is that many motorists were not from Sheffield and/ or simply following the outdated information on their SNDs, or followed the car in front, or that they did not understand the signing, or that they missed the signs. The measures implemented, together with more up to date satellite navigation information, appear to have largely resolved the problems.

7.5 Issue:

<u>Vehicle movements</u> – "in Paragraph 3.2 of the report now submitted (March 2009), it is ambiguous in respect of when current vehicle movements were logged by officers and the significance of this data is therefore questionable. This Board would recommend that more extensive data be produced regarding vehicle movements, making use of the variety of sources of information available."

Response:

Further traffic count information (see paragraph 5.4) clearly shows that the amount of abuse of the bus gate and the number of associated illegal left turns have significantly reduced, largely as a result of the measures implemented.

7.6 Issue:

Traffic levels – "in Paragraph 3.3 of the report now submitted (March 2009), it states that "if the bus gates were relaxed, a significantly greater number of vehicles would legitimately arrive at this junction", but bases this projection on the highways configuration as it was in 2000 to 2003, which is fundamentally different from that in place today. The Board would recommend that a more accurate modelling exercise be conducted to enable the Board to arrive at a more realistic view of potential traffic levels in light of the decision of this Board at its meeting held on 16 February 2009 concerning the relaxation of the Bus Gate hours."

Response:

It seems logical that traffic would increase if the bus gate times were relaxed and that traffic would increase significantly. This is exactly what happened at the Hillsborough bus and tram gates where traffic doubled when the restrictions were relaxed in the inter-peak. The cost of modelling to prove this at the Wicker bus gate is estimated to be £10,000 (2009 prices) and the necessity for this work has largely been superseded by the changes made.

7.7 Issue:

Increased left-turners ('pro rata') – "in Paragraph 3.4 of the report now submitted (March 2009), it is suggested that the number of illegally left turning vehicles would "increase pro rata" with the number of vehicles passing through the bus gate overnight. No evidence is provided to support this assertion, which assumes a simple causal correlation between traffic volume and illegal manoeuvring, irrespective of other factors such as time, day, enforcement regimes and so on. Available evidence suggests that there is already more variation than the report implies. This Board recommends that this point be more rigorously tested."

Response:

The traffic counts undertaken (see paragraph 5.4) indicate that a reduction of around 70% of illegal vehicles entering the bus gate has led to a reduction of around 80% in illegal left turning vehicles. There does appear, therefore, to be a clear relationship between the numbers of vehicles entering the bus gate and the number of left turning vehicles. This evidence demonstrates that if the hours of operation of the bus gate were to be reduced then, as the number of vehicles using the bus gate increases, so the number of illegal turning manoeuvres would also increase. This in turn would clearly lead to a greater potential for vehicular/ pedestrian conflicts and therefore, injuries to pedestrians in particular. It may also be pertinent that around 90% of motorists undertaking the illegal left turn manoeuvre were not from Sheffield (see paragraph 5.3). These drivers being less familiar with the area might also be less likely to be aware of the fact that pedestrians could be expected to be crossing on a 'green man'. Again, the necessity for further investigation has been superseded by the works carried out.

7.8 Issue:

Increased left-turners (modifying driver behaviour) – "the report does not adequately explore the relationship between measures currently not in place but which could be introduced, that might decrease rather than increase illegal manoeuvres. This Board recommends examining the potential benefits of exploring other factors beyond day/time/volume (such as signage, different enforcement regimes, mapping updates, advertising) that might significantly change drive behaviour at this junction, regardless of time or traffic volume." Response:

A number of the suggested changes have now been implemented, with new signing, highway alterations, etc. With respect to updated mapping, this has now happened for both traditional maps and SNDs. The overall impact of these measures has been significant, as the traffic counts show. With regard to advertising, this is now considered impractical because the driver survey showed that around 90% of drivers were from outside Sheffield. To run country-wide information campaigns would be very expensive and would probably have a minimal impact.

7.9 Issue:

Enforcement by South Yorkshire Police – "in Paragraph 3.5 of the report now submitted (March 2009), it speaks of "operations at this junction to reduce offending", but does not provide any detail of levels of operations, or the success rate. This Board recommends that more detail of past operations be provided, along with their results, plus information about scheduled future operations. It is suggested that a variety of sources of information in respect of illegal manoeuvres might provide a fuller picture."

Response:

Police enforcement prior to the Board reports was ad hoc and only resulted in 13 Fixed Penalty Notices. A substantial number of warnings were issued rather than Penalty Charge Notices due to the presence of an erroneous, additional temporary sign, which showed a banned left turn instead of the same as the permanent signing, which is 'prescribed ahead only'. The Police have expressed concern over the number of illegal left turns, but have stated that any future action will necessarily be ad hoc in nature, due to the resources available.

7.10 Issue:

Traffic accidents – "in Paragraph 3.6 of the report now submitted (March 2009), it projects that "the impact of relaxing the bus gate restrictions in the evening and overnight is likely to increase accidents by between 4 and 5 per year." These figures are based on a projection of overnight accident rates in the period 2000 to 2003. However, as the highways configuration has radically altered since the 2000 to 2003 data was gathered, these figures must contain a significant element of speculation. Given the importance of the safety factor in relation to the Board's decision at its meeting held on 16 February 2009, a more

factually based projection is required."

Response: The potential for accidents to occur was based on the known experience of the general correlation between vehicle kilometres travelled and accident numbers. These Department for Transport statistics also take into account the type of road (urban, rural, motorway, A/B/C roads, etc.).

7.11 Issue:

Impact upon road network — "in paragraph 3.7 of the report now submitted (March 2009) it claims that: "The main effect of a reduction in operational hours of the bus gate would be to cause increased delays on all three approaches to the Nursery Street/Blonk Street/ Lady's Bridge/Wicker junction" and goes on to suggest the overnight bus gate relaxation could lead to "increases in delay in the area, including on the Northern Inner Ring Road." These claims are not substantiated by any evidence in respect of overnight traffic volumes in the area and do not take into account the potential for improved electronic control of traffic flow."

Response: Given the major highway alterations and environmental improvements undertaken in the area and the increased priorities given to pedestrians (made possible by removing the through traffic to the NIRR), it is clear that traffic levels would increase should through traffic also be allowed to use what are now local access roads. In short, local access traffic would be impacted upon and delayed by the additional through traffic. However, to be more certain of the impacts would require traffic modelling work. As outlined above (paragraph 7.6), this would cost in the order of £10,000 and a funding source could not be identified. Given this, it was agreed with the Cabinet Member for Sustainable Transport and Street Scene that the modelling work would not be a high priority.

7.12 Issue:

Link between traffic flow and capacity – "This Board recommends that more detailed work be undertaken to show the link between actual overnight traffic flows, road capacity, signalling changes and other measures, in order to provide a fuller picture of the increased risk, if any, resulting from overnight traffic movement in and around the Wicker, in light of the decision of this Board at its meeting held on 16 February 2009, concerning the relaxation of the Bus Gate hours." Response: Given the benefits of the changes to the local road network, the improvements to pedestrian priorities, on-street parking facilities and the local environment etc. it is clear that there would be a negative impact should more traffic be allowed on to these local access roads. However, once again, to be more certain of the impacts would require expensive modelling work to be undertaken as outlined in paragraph 7.11. It is also now very clear (see paragraph 5.4) that increased use of the bus gate would be likely to lead to an increase in illegal vehicle manoeuvres at the Wicker/ Derek Dooley Way junction and this could be severely detrimental to pedestrian safety.

8.0 FINANCIAL IMPLICATIONS

8.1 There are no particular financial implications as a result of this report. However, in response to Wicker trader's requests, the cost of improving local access signing was £17,000 and was funded from LTP.

9.0 EQUAL OPPORTUNITY IMPLICATIONS

9.1 There are no particular equal opportunity implications arising directly from this report, as the detailed design of highway schemes gives consideration to site specific issues as they are identified. The Local Transport Plan programme and schemes within it are intended to promote equal opportunities for all. For example, specific facilities for people with disabilities are provided where needed. Each individual project is intended to improve the overall effectiveness of the highway network for all Sheffield residents. The equality impact in this instance is positive for many different groups of highway users.

10.0 ENVIRONMENTAL AND PROPERTY IMPLICATIONS

10.1 The Environmental Impact Assessment carried out for the NIRR recognised that the removal of through traffic from many City Centre streets and areas, which includes a number of streets in the Wicker area, would have a positive and beneficial effect. This improvement would be due to a reduction in airborne pollutants and noise. The new road will also assist regeneration by attracting new business, including to those areas relieved of traffic and also improving the visitor experience and overall access. Any increase in through traffic will reduce the benefits identified in the Environmental Impact Assessment.

11.0 LEGAL IMPLICATIONS

11.1 There are no legal implications arising from this report.

12.0 COMMUNITY SAFETY IMPLICATIONS

12.1 Improving accessibility and both road and personal safety are contained in the overall priorities of the LTP. Schemes funded through these programmes are expected to address this whenever appropriate and are therefore judged not to materially impact on community safety.

13.0 HUMAN RIGHTS IMPLICATIONS

13.1 There are no Human Rights implications arising from this Report.

14.0 HUMAN RESOURCE IMPLICATIONS

14.1 There are no Human Resource implications arising from this Report.

15.0 CONCLUSION

15.1 The Northern Inner Relief Road is working well and carries between 36,000 and 46,000 vehicles per day, depending on location. It is now clear that if the hours of operation of the bus gate were to be reduced then, as the number of vehicles using the bus gate increases, so the number of illegal turning manoeuvres would also increase and that this would be to the detriment of pedestrian safety. In view of this and the significant changes to traffic movement, which the improved highway layouts, map upgrades and signing improvements have brought about, I consider that the full time hours of operation of the Wicker bus gates should be reaffirmed and no changes made to the existing situation.

16.0 RECOMMENDATIONS

- 16.1 No changes be made to the hours of operation of the Wicker bus gate.
- 16.2 That the petitioners, Wicker traders, South Yorkshire Passenger Transport Executive, bus operators and South Yorkshire Police, be thanked for their input to the assessment process and be informed of the above decision.

Simon Green Executive Director, Place

24 May 2010