



Leicester
City Council

**WARDS AFFECTED:
CASTLE**

CABINET

14th July 2008

FEASIBILITY STUDY – GRANBY STREET SUBWAY GATEWAY

Report of the Corporate Director of Regeneration and Culture

1 Purpose of Report

- 1.1 The report outlines the options for improving the link between the station, city centre and business quarter that have been appraised. It identifies preferred options and asks that the Cabinet make a decision on which of the preferred options to take forward.

2 Summary

- 2.1 This report is in response to the Leicester Regeneration Company's (LRC) request for a crossing between the new Business Quarter and the station and the city centre for regeneration purposes.
- 2.2 It also offers an opportunity to improve the link and the public realm between the station and the city centre.
- 2.3 Links between the railway station, business quarter and city centre need to be improved for cyclists. This was identified as part of the Cycling England bid.
- 2.4 The ramps to the subway are too steep for some people with mobility difficulties to use.
- 2.5 Capital grant-funding has been secured.

3 Recommendations

- 3.1 It is recommended that the cabinet consider the strengths and weaknesses for both of the preferred options and decide which option they would prefer.
- 3.2 The preferred options are:
- Option 1 - Do Nothing;
 - Options 4.4, 4.5, 4.6 & 4.7 - to create a new gateway by filling in the subway.
- 3.3 Officers recommend that Safety Audits of the preferred option are carried out as part of any project's inception.

4 Report

- 4.1 Following significant redevelopment around the railway station, the LRC is leading on a number of options, and has identified the need to provide a crossing over St George's Way to Colton Square. Having established that such a crossing could have significant effects on accidents and congestion, consideration is being given to whether moving the crossing closer to Granby Street could have additional benefits.
- 4.2 Several options were considered:
- Option 1: Do nothing
 - Option 2: Take cyclists through the subway.
 - Option 3: Improve the existing crossing and take cyclists over the existing crossing
 - Option 4: Seven different variations of creating a very wide more direct surface level crossing and creating space to improve the public realm by filling in the subway.
- 4.3 In deciding on the preferred options we considered the following:
- Case studies in other cities where they had filled in subways to create surface level crossings.
 - Predicted pedestrian accident levels based on the case studies and accident levels at other crossing on the Inner Ring Road.
 - Vehicular delays
 - Pedestrian delays
 - Police comments
 - The effect the proposals will have on Performance Indicators in the Council's statutory Local Transport Plan
- 4.4 Reference is made to Appendix 1a, which is additional information requested by Corporate Directors' Board and is attached to this printed report, and to Appendices 1b to 5, which have been placed in the Members' Area.

Options Appraised and Preferred Options

Option 1 Do Nothing/minimum

Strengths

- No initial cost outlay.
- No additional exposure of pedestrians to risk of road accident (See Appendix 1a)
- No delay to mobile pedestrians.
- No effect on traffic flow.
- Minor improvements to the lighting, handrails surfacing steps could be carried out.

Weaknesses

- Continuing maintenance of subway.
- Inability of some pedestrians to use the subway due to the gradient of the ramp.
- 1996 British Crime survey identified subways were perceived to be one of the most unsafe places to walk after dark. See Appendix 2 survey – to be undertaken June 2008.)
- Cyclists unable to cross the inner ring road at this point – no cycle link from city

centre to the station.

- Potential loss of £7m grant from Cycling England.
- No improvement to public realm.
- Potential loss of grant from Conservation and Nature Team to improve the basement lights around the Grade II listed building. (Blunts shoes)
- No improvement to legibility of the route between the station, the business quarter and the city centre.
- No improvement to the links from the new Business Quarter. This means that there would still be a requirement from the LRC to provide a crossing with potentially greater impact on congestion and a possible increase in pedestrian accidents.

Costs

- £400pa is spent on inspecting the subway. There is approximately £23,000 worth of non-urgent repairs to be carried out on the subway for which no money is currently identified. Completely resurfacing the subway would cost £50,000.

Option 2 Take cyclists through the subway

Strengths

- No additional exposure of pedestrians to risk of road accident (See Appendix 1a)
- No delay to mobile pedestrians.
- No effect on traffic flow.
- Cyclists are given access to the station from the city centre.
- The opportunity could be taken to reduce street clutter and improve pedestrian signing.

Weaknesses

- Continuing maintenance of subway.
- Inability of some pedestrians to use the subway due to the gradient of the ramp.
- 1996 British Crime survey identified subways were perceived to be one of the most unsafe places to walk after dark.
- In order to safely allow cyclists passage through the subway, Department for Transport and Institute of Highway Technicians guidelines include segregating the subway by either white line or level, and installing speed reducing barriers. (See Appendix 3.) This could alter pedestrians' perception of the safety of the subway.
- No improvement to the public realm.
- No improvement to legibility of the route between the station, the business quarter and the city centre.
- No improvement to the links from the new Business Quarter. This means that there would still be a requirement from the LRC to provide a crossing with potentially greater impact on congestion and a possible increase in pedestrian accidents

Costs

- To install barriers and segregate by white line £5,000.
- To get cyclists to the subway entrances using road markings and The Cycle Tracks Act: £3000.
- £400pa is spent on inspecting the subway. There is approximately £23,000 worth of non-urgent repairs to be carried out on the subway for which no

money is currently identified. Completely resurfacing the subway would cost £50,000.

Option 3 Widen the central reserve and the width of the existing at-grade crossing and take cyclists over this crossing

Strengths

- No additional exposure of pedestrians to risk of road accident (See Appendix 1a)
- No delay to pedestrians
- Cyclists are given access to the station from the city centre.
- Increase in public space and potentially more attractive route.
- Pedestrians will have the option to use the subway or the crossing.
- The opportunity could be taken to reduce street clutter and improve pedestrian signing.

Weaknesses

- Continuing maintenance of the subway.
- The approach to the crossing from Granby Street in front of Blunts shoe shop is not sufficiently wide enough to safely allow pedestrians and cyclists to use it (See Appendix 4).
- Inability of some pedestrians to use the subway due to the gradient of the ramp.
- 1996 British Crime survey identified subways were perceived to be one of the most unsafe places to walk after dark.
- Removal of at least one lane of traffic.
- Disruption during construction.
- Little improvement to public realm.
- No improvement to legibility of the route between the station, the business quarter and the city centre.
- No improvement to the links from the new Business Quarter. This means that there would still be a requirement from the LRC to provide a crossing with potentially greater impact on congestion and a possible increase in pedestrian accidents

Costs

- Approximately £100,000.
- £400pa is spent on inspecting the subway. There is approximately £23,000 worth of non-urgent repairs to be carried out on the subway for which no money is currently identified. Completely resurfacing the subway would cost £50,000.

Option 4 Provide a direct an 'at grade' crossing by filling in the subway.

Appendix 5 show seven different options for the layout of a crossing built over the filled in subway. Each layout has been appraised separately.

Strengths

- The creation of approximately 500m² minimum of public open space with which to improvement public realm.
- Improvement to legibility of the route between the station, the business quarter and the city centre.
- The 2001 study ' Personal security perceptions on pedestrian journeys' on

behalf of the Department for Transport stated that 24% of respondents said subways made them feel unsafe. 13% said traffic or busy roads made them feel unsafe.

- People who have difficulties using the ramp are better catered for.
- There is a link for cyclists between the station, the business quarter and the city centre.
- It will give Leicester a greater chance of becoming Cycling England's cycle city and help secure £7million of grant funding.
- At times the route may be quicker for pedestrians. The average delay to pedestrians using the existing 'at grade' crossing is 28 seconds. The average delay to pedestrians using the crossing in option 4.5 is 19 seconds.
- Suspending the right turn into Campbell Street will result in reduce right turning accidents.
- No additional requirement from the LRC to provide a crossing to the new Business Quarter.

Weaknesses

- The cost (Appendix 5 – the costs shown do not include fees or traffic management costs).
- The increased exposure of pedestrians to traffic accidents (Appendix 1a shows a prediction of between 0.59 and 3.2 accidents – an average of 1.9. Appendix 6, is the Police comments).
- Speeds measured at 11am are 27 and 28mph. At these speeds accidents could be serious.
- The higher number of predicted pedestrian accidents (3.2 pa) will result in it being included on the Council's annual cluster site.
- The increased accidents will adversely affect the city council's performance on the national indicators NI 47 and N1 48.
- At times the route may be slower for pedestrians. Currently, the average delay to journey time for users of both the subway and the existing crossing is around 5 seconds. The predicted delay for option 4.5 is 19 seconds.
- There will be little change in journey times for southbound traffic. Of the preferred options, option 4.4 has the worst increased delay of 35 seconds for northbound pm peak traffic .
- There are few recorded crimes in the subway and 12,500 people choose to use the subway each day making it a busy thoroughfare. (See police comments Appendix 6).
- The disruption during construction.
- The suspension of the right turn into Campbell Street means that users of the station car park entering from London Road direction will have to drive to Humberstone Road roundabout and back.
- Preferred option 4.6 requires the purchase of private land on the corner of St George's Way and Campbell Street.

Costs

Approximate costs including fees, statutory undertakers and traffic management are £700,000. This does not include any purchase of land if required. (See Appendix 5 – options 4 and 5 and Appendix 1b, Case Studies).

5 Discounted options

- 5.1 Options 2 and 3 were discounted as they do not satisfactorily overcome the reasons why the subway and crossings are being evaluated.

5.2 Options 4.1, 4.2 and 4.3 have been discounted due to their impact on traffic congestion.

6 Financial Implications

6.1 Removing the subway and replacing it with a more direct pedestrian and cycle crossing is estimated to cost up to £650,000 including fees.

6.2 It is proposed to use the Growth Fund provision for the New Business Quarter allocated by 6Cs Partnership via the Leicester and Leicestershire HMA for this scheme. The sum of £650,000 has been confirmed for 2008/09, and a further £400,000 will be available in 2009/10 subject to the Leicestershire HMA confirming the 2nd year of NGP initiative grant allocation and Cabinet agreeing to release it.

Finance Officer - Martin Judson (ext 7390)

7 Legal Implications

7.1 The Service Director for Highways and Transportation has delegated powers to advertise pedestrian crossings to be advertised under Section 23 of the Road Traffic Act 1984.

Jamie Guazzaroni, Solicitor, Ext 296350.

8 Other Implications

OTHER IMPLICATIONS	YES/NO	Paragraph references within the report
Equal Opportunities	No	
Policy	No	
Sustainable and Environmental	Yes	various
Crime and Disorder	Yes	Appendix 6
Human Rights Act	No	
Elderly/People on Low Income	No	
Local Transport Plan <ul style="list-style-type: none"> • Congestion • Casualty reduction targets • Accessibility 	Yes	Appendix 1a

9 Risk Assessment Matrix

	Risk	Likelihood L/M/H	Severity Impact L/M/H	Control Actions (if necessary/or appropriate)
1	The only way to achieve all the objectives of the study is to remove the subway.	H	L	Remove subway
2	Not providing for cyclists could result in accidents between cyclists and vehicles and cyclists and pedestrians.	M	H	Remove subway
3	Removing the subway could result in between 0.59 and 3.2 pedestrian accidents a year	H	M/H	Retain subway
4	We could spend £700,000 on removing the subway	M	M/H	Retain subway

	and the majority of pedestrians like using the subway			
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L - Low
M - Medium
H - High

L - Low
M - Medium
H - High

10 Background Papers – Local Government Act 1972

London Road/Granby Street Subway File TB 26283 Sustainable Transport Team/Transport Development Section

11 Consultations on the report

11.1 The following people have been consulted in the preparation of this report.

Consultee	Date Consulted
Martin Judson (Finance Officer – Regeneration & Culture)	14 TH May 2008

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Key Decision	No
Reason	N/A
Appeared in Forward Plan	N/A
Executive or Council Decision	Executive (Cabinet)

APPENDIX 1a

Accident table

		<i>other similar sites where the subway has been removed</i>		<i>other Leicester sites</i>			<i>Granby Street subway Gateway option 4</i>			
		<i>Nottingham</i>	<i>Sheffield</i>	<i>London Road/Waterloo Way</i>	<i>St Matthews Way subway conversion</i>	<i>St Margarets Way crossing</i>	<i>existing surface level crossing</i>	<i>accidents predicted at proposed crossing using current accidents from Nottingham conversion from subway to crossing</i>	<i>accidents predicted at proposed crossing using current accidents at the London Rd/Waterloo Way pelican</i>	<i>accidents predicted at proposed crossing using current accidents from existing at grade crossing</i>
Pedestrian accident rate	Per year	0.33	2	1	1	1	0.4	0.59	3.2	2.4
Pedestrian flow	07:00-19:00	6,220	19,067	3,939	1,922	1,391	2,525	15,026	15,026	15,026
Vehicle flow	07:00-19:00	30,200	36,000	33,100	33,984	18,188	29,439	29,439	29,439	29,439

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Effect on junction's performance and performance indicators in the Local Transport Plan

	2010 AM peak PRC	2010 PM Peak PRC	AM peak increase in journey time. Northbound	PM peak increase in journey time northbound	PM peak increase in journey time. Southbound		pedestrian journey times
Do nothing	30.7	22.2					5 seconds
option 4.4	11.4	16.1	13 seconds	35 seconds	negligible	all options include removing the right turn into Campbell St and so result in some improvement to PRC	22 seconds
option 4.5	15.7	19.9	18 seconds	29 seconds	negligible		19 seconds
option 4.6	37.1	42.9	6 seconds	25 seconds	minus 8 seconds		32 seconds
option 4.7	37.1	36.5	16 seconds	19 seconds	minus 9 seconds		28 seconds
Local Transport Plan Objectives		Impact	Reasons				
Air Quality		Adverse	Increase in journey times and additional journey to Humberstone Road roundabout to turn into Campbell Street with the banning of the right turn.				
Safety		Adverse	If the worst casualty predictions are borne out the site would be included in the Council's annual accident cluster site list. It will also cause an increase in the Killed and Seriously Injured figures for the City which would adversely effect the Council's performance on the 2 new National Indicators NI47 and NI48.				
Accessibility		Beneficial to some users. Adverse to others.	Will improve access to the new business quarter for pedestrians, cyclists, train users, bus users, people with mobility difficulties.. Will improve access to city centre for cyclists, bus users, train users. Will improve access to train station and bus stops for cyclists and people with mobility difficulties. It will delay journey time to station and city centre for able bodied pedestrians.				
Congestion		Adverse	The preferred designs in Option 4 would on average result in a 23 second delay per vehicle per day. Increase traffic at the Humberstone Road roundabout could increase congestion at this junction.				
Better Road, Footway and Cycle route conditions		Beneficial	There are no cycle routes between city centre, station and business quarter at the moment.				
Improving quality of life for all		subjective	Option 4 would give greater space with which to improve public realm and give better clarity to routes to the station and business quarter and better access for those who choose not to use the subway.				

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