

Full Business Case (FBC)			
1. General Information			
Directorate	Economy	Portfolio/ Committee	Transport and Roads Value for Money and Efficiency
Project Title	20mph Pilot Areas, Area B2	Project Code	CA-02714-12-1
Project Description	<p><u>Introduction</u></p> <p>This document represents the Full Business Case (FBC) for the fourth 20mph pilot areas, known as Area B2, covering all or parts of Edgbaston, Harborne, Selly Oak and Bournville wards. Details of the revised speed limit proposals for individual roads are shown in Appendix D.</p> <p>The 20mph scheme for Area B2 is funded through the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) Local Growth Fund (LGF) contribution for the Birmingham Cycle Revolution (BCR) Phase 2 Programme.</p> <p><u>Background</u></p> <p>At its meeting of 6th November 2012, the City Council passed a Motion calling for the development of a policy on the implementation of 20mph speed limits. The recommendation of the 'Changing Gear, Transforming Urban Movement Through Walking &amp; Cycling in Birmingham' Transport, Connectivity and Sustainability Overview &amp; Scrutiny Report approved by the City Council on the 9th April 2013 also outlined the need for further roll-out of 20mph speed limits aligned to wider infrastructure interventions to support walking and cycling.</p> <p>The DfT published its circular 10/2013 'Setting Local Speed Limits' in January 2013. This states that the standard speed limit in urban areas is 30mph, which represents a balance between mobility and safety factors, but for residential roads and other streets with high pedestrian and cyclist movements local authorities should consider the use of 20mph schemes. The DfT states that there is clear evidence that reducing traffic speeds reduces collisions and casualties – collisions are less frequent at lower speeds; and where collisions do occur the risk of fatal or serious injury is also reduced. Other important benefits of 20mph schemes include quality of life and community benefits, and encouragement of healthier and more sustainable transport modes such as walking and cycling.</p> <p>Based on this positive effect on road safety and a generally favourable reception from local residents, traffic authorities are able (and encouraged by the DfT) to use their power to introduce 20mph speed limits or zones. As a result the introduction of 20mph schemes has accelerated recently across the UK. Most core cities have adopted positive policies with some such as Manchester and Bristol adopting city-wide approaches.</p> <p>Cabinet adopted a 20mph speed limit policy on 17th March 2014 which recommended that on the majority of adopted roads in Birmingham the default speed limit should be 20mph, introduced through 'limits' rather than as 'zones'. This negates the need for additional physical speed reduction measures, as 20mph limits only require terminal signs and repeater signs or roundels, whereas a 20mph zone requires traffic calming measures (eg speed humps, chicanes or repeater signs) throughout the area.</p> <p>The policy proposes that all residential roads should be 20mph, as well as those with a designated 'local centre' function or other significant local trip attracters. Roads which form part of the city's main distributor highway</p>		

network and / or carry main bus routes (mostly classified 'A' and 'B' roads) would remain at their current speed limit, unless local circumstances justify a reduction.

It was considered that many of the concerns and reasons for opposing 20mph limits could be addressed through the implementation of a pilot project before deciding whether to expand the scheme across the whole city. This would give an opportunity to demonstrate the road safety and wider benefits in a Birmingham context, and would also allow some of the reservations expressed in the consultation with regard to enforcement and behavioural change to be addressed.

The areas for the 20mph pilot schemes were determined based on a combination of factors, taking into account the consultation results, an assessment based on road safety data (to include the levels of collisions and the number of pedestrian, cycling and child accidents), complementary schemes, and the availability of funding through the Birmingham Cycle Revolution programme which included an allocation for 20mph speed limits.

Currently three pilot schemes have been implemented in the city centre (Area A1), inner parts of south Birmingham (Area A3) and east Birmingham (Area A2). The Traffic Regulation Orders for these areas were sealed on 10<sup>th</sup> October 2016 and are now in the monitoring period.

This FBC covers the fourth and final pilot area known as Area B2.

#### Proposed Speed Limit changes

The DfT Circular 'Setting Local Speed Limits' sets out the guidance to be used by all Highway Authorities when setting local speed limits. The measures proposed have been derived by taking account of existing average traffic speeds, accident statistics, road function, the composition of road users and the road environment, along with other factors such as main bus routes and cycle routes.

The proposals for Area B2 include reductions in speed limit to 20mph on the majority of roads, particularly those with a predominantly residential, retail or other community function. There are exceptions on most classified roads and main bus routes, on short cul-de-sacs off 30mph roads, and on roads which only service industrial premises and / or have no residential, retail or community functions. Private roads which do not form part of the public highway are also excluded.

#### Proposed Measures

Implementation of the proposed speed limits will require new Traffic Regulation Orders (including revoking of existing 20mph zones where those streets are to be incorporated into the new 20mph areas) and physical measures including the following:

- Installation of new 20mph and 30mph speed limit signs, posts, associated ground works, and electricity connections where signs have to be illuminated.
- The removal of existing 20mph zone signs and posts where required, and ground works to make good the footways.
- The removal of redundant 30mph speed limit signs and posts, and ground works to make good the footways.
- Painting of repeater signs on the road in the form of 20mph roundels.
- Installation of repeater signs on existing lighting columns or on new posts where required.
- Installation of variable 20mph speed limits outside schools on roads that are to remain at 30mph.

#### Capital Implications

The 20mph pilot Area B2 has a cost estimated at £0.735m and is funded

	<p>through the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) Local Growth Fund (LGF) contributions for the Birmingham Cycle Revolution (BCR) Phase 2 Programme.</p> <p>The estimated cost includes £0.105m previously approved as part of the Local Growth Fund Transport and Connectivity Projects PDD approved by Cabinet on 16<sup>th</sup> March 2015, as detailed in table 2. This new approval covers future costs to complete the design and implementation at an estimated £0.630m including contract administration fees and contingencies.</p> <p><u>Revenue Implications</u></p> <p>This project will create assets that will form part of the highway upon completion of the project; as such they will need to be maintained within the overall highway maintenance regime. The estimated net cost of including these newly created assets within the highway maintenance regime is £35,436.36 per year. This cost will be funded from the provision for Highways Maintenance held within Corporate Policy contingency. A Maintenance Finance Statement is included at the end of this Appendix.</p> <p><u>Equalities Analysis</u></p> <p>An initial Equality Analysis was carried out prior to approval of the Project Definition Document and submission of the bid in April 2013. A revised Analysis for the highway infrastructure schemes is included in Appendix B (Ref EA001483).</p> <p><u>Consultation Summary</u></p> <p>A full public Consultation on the feasibility proposals was carried out from 1<sup>st</sup> September 2016 to 30<sup>th</sup> September 2016.</p> <p>MPs and Ward Councillors within the affected areas have been consulted on these works; further details are given in Appendix F.</p> <p>District Engineers and officers from Traffic Management Services have been consulted on these works and comments have been received. These are covered in more detail in Appendix F.</p> <p>Emergency Services, Bus Operators, Disabled Groups, and Cycling and Walking Groups have been consulted by e-mail. Some comments have been received and details are given in Appendix F.</p> <p>Approximately 29,000 leaflets were delivered to residents and businesses in the local area and further information regarding the proposals was made available through public exhibition events, drop in venues and the information was also uploaded to BeHeard.</p> <p>A summary of the main issues raised in the consultation and any proposed amendments to the scheme is given below. Full details on the consultation responses are provided in Appendix F. Final conversion to 20mph will still be dependent on the advertisement of Traffic Regulation Orders as part of the statutory requirements.</p> <p><u>Main issues and Design Changes Following Consultation</u></p> <p>All consultation comments received have been considered in the design development. As a result of the comments received the following roads have been included in the 20mph proposals.</p> <ul style="list-style-type: none"> <li>• Arthur Road – from Church Road to Carpenter Road</li> <li>• Pritchatts Road – from Farquhar Road to Edgbaston Park Road</li> <li>• Vincent Drive – New Foss Way to Pritchatts Road</li> <li>• Wheelleys Road- from Carpenter Road to Lee Bank Middleway</li> </ul>
<p><b>Links to Corporate and Service</b></p>	<p><u>DfT Objectives</u></p> <p>The Birmingham Cycle Revolution programme seeks to promote sustainable</p>

<b>Outcomes</b>	<p>travel options by increasing the attractiveness of cycling, which will contribute towards improving health and the environment, reducing car usage, and improving connectivity for households without a car. Many of the measures will also benefit pedestrians, public transport users and road safety.</p> <p>The original BCR Phase 1 bid to DfT included targets to increase cycling by 27% in the initial bid area (within a 20-minute cycling time of the city centre) by 2016. This represents an increase of approximately 2,000 cyclists per day as a contribution towards achieving targets of 5% of all journeys being made by cycle by 2023 and 10% of all journeys by 2033, compared with less than 2% in 2013.</p> <p><u>City Council Objectives</u></p> <p>The proposals will support the City Council's six key outcomes outlined in the Council Business Plan and Budget 2016+, in particular:</p> <ul style="list-style-type: none"> <li>• A Strong Economy: <i>'An enterprising, innovative green city' with 'skills and employment pathways supported by infrastructure and transport links'.</i></li> <li>• A Healthy, Happy City: <i>'Citizens have a high quality of health' with 'physical activities that contribute to people's health and wellbeing'.</i></li> </ul> <p>The measures will support the aspirations of the Birmingham Development Plan (BDP), Birmingham Connected, and the Health &amp; Wellbeing Strategy.</p> <p>The measures also support the recommendations of the former Transport, Connectivity &amp; Sustainability Overview and Scrutiny Committee (TCS O&amp;S) report, 'Changing Gear, Transforming Urban Movement Through Walking &amp; Cycling in Birmingham' from April 2013.</p> <p>The proposals will also support priorities from the Birmingham Climate Change Action Plan 2010+ particularly <i>'reducing the environmental impact of the city's mobility needs through Low Carbon Transport'.</i></p> <p>The measures will support policies within the West Midlands Strategic Transport Plan, in particular:</p> <ul style="list-style-type: none"> <li>• Economic Growth and Economic Inclusion: <i>'To accommodate increased travel demand by ... new sustainable transport capacity' and 'to improve connections to areas of deprivation'.</i></li> <li>• Population Growth and Housing Development: <i>'To improve connections to new housing ... primarily through sustainable transport connections'.</i></li> <li>• Environment: <i>'To help tackle climate change by ensuring a large decrease in greenhouse gases from the ... area's transport system'.</i></li> <li>• Public Health: <i>'To significantly increase the amount of active travel' and 'to assist with the reduction of health inequalities'.</i></li> <li>• Social Well-Being: <i>'to improve the accessibility of shops, services and other desired destinations for socially-excluded people'.</i></li> </ul>		
<b>Project Definition Document approved by</b>	Cabinet	<b>Date of Approval</b>	16 March 2015
<b>Benefits</b>	<b>Measure</b>		<b>Impact</b>

<b>Quantification-Impact on Outcomes</b>	<p>The proposals will reduce the speed limit on a significant number of residential roads and shopping streets from 30 to 20mph.</p> <p>Minor road marking and other changes may also be made in a limited number of locations in order to encourage reduced speeds and compliance with the new speed limits.</p> <p>There will also be a programme of information, marketing and education to encourage behavioural change.</p>	<p>In 2013-15, there was an annual average of 40 collisions resulting in 51.7 casualties per year on the non-classified roads in Area B2.</p> <p>Assuming that the implementation of 20 mph on residential roads cuts casualties by 8%, then there would be approximately three fewer collisions and four fewer casualties per year.</p> <p>Taking into account the costs of loss of output due to injury; ambulance costs and the costs of hospital treatment; and the human costs of casualties, it is estimated that this would save approximately £198,000 per year to the wider economy.</p>
<b>Project Deliverables</b>	<p>Revised speed limits on the majority of roads in Area B2.</p> <ul style="list-style-type: none"> <li>• Appropriate lining and signing to introduce and allow enforcement of the new restrictions.</li> <li>• Other minor road marking and other changes where appropriate.</li> <li>• A programme of information, marketing and education to encourage behavioural change.</li> </ul>	
<b>Scope</b>	<p>This FBC covers the fourth 20mph pilot area, known as Area B2, covering all or parts of Edgbaston, Harborne, Selly Oak and Bournville wards</p>	
<b>Scope exclusions</b>	<p>FBCs have already been produced for the first three pilot areas in the city centre (Area A1), inner parts of south Birmingham (Area A3) and east Birmingham (Area A2).</p> <p>The 20mph pilot does not include any physical traffic calming measures, but these can still be considered in targeted locations where justified, through other work programmes such as Local Safety Schemes and Safer Routes.</p> <p>Other elements of the wider BCR project will be covered by separate FBCs.</p>	
<b>Dependencies on other projects or activities</b>	<ul style="list-style-type: none"> <li>• Roadspace – Designers are in liaison with Amey and the Traffic Manager with regard to allocation of roadspace to allow the works to proceed.</li> <li>• Amey Programme – The programme is being reviewed with Amey to ensure that opportunities are identified to co-ordinate with Amey's maintenance programme.</li> <li>• Traffic Regulation Orders and other Notices will be required to implement many of the measures within this FBC.</li> <li>• Placing Orders with Amey LG Ltd</li> </ul>	
<b>Achievability</b>	<p>There is a risk of motorists, residents and other stakeholders objecting either to the principle of 20mph speed limits, or to the proposed speed limit on specific roads. However, comments received in relation to the pilot area covered by this FBC have generally been supportive. Any objections to the Traffic Regulation Orders when advertised will be considered by the Cabinet Member for Transport and Roads before a final decision to proceed is made.</p>	

	Risks to achievability are highlighted in Appendix C – Risk Management.		
<b>Project Manager</b>	Rajpreet Singh Mander Tel: 0121 675 4401    E-mail: rajpreet.mander@birmingham.gov.uk		
<b>Budget Holder</b>	Varinder Raulia – Head of Infrastructure Projects Tel: 0121 303 7363    E-mail: varinder.raulia@birmingham.gov.uk		
<b>Sponsor</b>	Anne Shaw – Assistant Director – Transportation and Connectivity Tel: 0121 303 6467    E-mail: anne.shaw@birmingham.gov.uk		
<b>Project Accountant</b>	Andy R Price – Finance Manager (Economy) Tel: 0121 303 7107    E-mail: andy.r.price@birmingham.gov.uk		
<b>Project Board Members</b>	The Project Management Team for the works in this FBC is as follows: Senior Responsible Officer – Varinder Raulia Project Sponsor – Anne Shaw BCR Programme Manager – Andy Middleton Project Accountant – Andy R Price		
<b>Head of City Finance (HoCF)</b>	Simon Ansell (Head of City Finance)	<b>Date of HoCF Approval:</b>	TBC
<b>Planned start date for delivery of the project</b>	July 2017	<b>Planned date of technical completion</b>	September 2017

**2. Budget Summary (BCR Phase 2 – 20mph Pilot Area B2)**

		Prior to 31/03/2017	2017/18	2018/19	2019/20	Totals
<b>Capital Costs</b>		£000s	£000s	£000s	£000s	£000s
<i>Development Costs to FBC</i>		<u>105.0</u>	<u>0.0</u>			<u>105.0</u>
<i>Implementation Costs</i>		<u>75.0</u>	<u>555.0</u>	<u>0.0</u>		<u>630.0</u>
<b>20mph Area B2 Totals</b>		<b>180.0</b>	<b>555.0</b>	<b>0.0</b>	<b>0.0</b>	<b>735.0</b>
<b><u>Funding</u></b>						
GBSLEP Local Growth Fund (for BCR Phase 2)	2LG	180.0	555.0			<b>735.0</b>
<b>Funding Totals</b>		<b>180.0</b>	<b>555.0</b>	<b>0.0</b>	<b>0.0</b>	<b>735.0</b>

Revenue Consequences			2017/18 £'s	2018/19 £'s	Full Year £'s
Maintenance Costs*			16.8	33.6	33.6
Electricity Costs *			1.0	1.9	1.9
* Costs Per Annum					
<b>Totals</b>			<b>17.8</b>	<b>35.5</b>	<b>35.5</b>
<b><u>Funded By:</u></b>					
Highways Maintenance Revenue Budget			17.8	35.5	35.5
<b>Totals</b>			<b>17.8</b>	<b>35.5</b>	<b>35.5</b>

**Notes**

This report represents the final costs for implementing the scheme; Elements of the development, design and project management fees were originally approved as part of the PDD in 2015.

Works costs where applicable include for Main Works (including preliminaries, traffic management and restricted working hours).

**Asset Management / Maintenance Implications**

As part of the City Council's obligations under the Highway Maintenance and Management Private Finance Initiative (HMMPFI) contract, Highways have been formally notified of the proposed changes to the highway inventory arising from this scheme. The works relate to SSD number 5034

**Maintenance Costs**

The additional highway maintenance and energy costs estimated by the Project Design Team are £35,436.36 per annum. These costs will be funded from the provision for Highways Maintenance held within Corporate Policy contingency. It is expected that most of these costs will be incurred from September 2017 onwards.

	<b>Maintenance and Liability Cost (per annum)</b>	<b>Energy Cost (per annum)</b>	<b>Resourced by</b>
Basic standard Highway Assets	£1,646.80	£0.00	Corporate Policy contingency
Enhanced standard Highway Assets	£31,912.76	£1,876.80	Corporate Policy contingency
Highway Horticulture (Parks)	N/A	N/A	
Non-Highway Assets	N/A	N/A	
<b>Total</b>	<b>£33,559.56</b>	<b>£1,876.80</b>	



## Approvals to Date

The BCR Phase 2 programme is £8.000m in total, funded by £6.000m from the Greater Birmingham & Solihull Local Enterprise Partnership's Local Growth Fund (GBSLEP-LGF) supported by £2.000m of local contributions from the City Council's ITB allocation and other local sources. The programme received Project Definition Document (PDD) approval at Cabinet in March 2015, as part of the approval to the overall Local Growth Fund. The current position in terms of approvals is shown below:

<b><u>BCR Phase 2 Cumulative Approvals to Date</u></b>			
	<b><u>GBSLEP Local Growth Fund</u></b>	<b><u>Local Contributions</u></b>	<b><u>TOTAL</u></b>
<b><u>Overall Allocation (PDD)</u></b>	<b><u>£6,000,000</u></b>	<b><u>£2,000,000</u></b>	<b><u>£8,000,000</u></b>
<b><u>Overall Allocation (Capital Prog Feb 2016)</u></b>	<b><u>£6,000,000</u></b>	<b><u>£2,000,000</u></b>	<b><u>£8,000,000</u></b>
<b><u>Previous Approvals</u></b>			
Development Costs	£260,000	£140,000	<b><u>£400,000</u></b>
Detailed Design Costs	£400,000	£0	<b><u>£400,000</u></b>
Programme Management (to FBC)	£65,000	£10,000	<b><u>£75,000</u></b>
Canal Works	£1,950,000	£0	<b><u>£1,950,000</u></b>
Top Cycle Location (Cycle Parking Grants)	£76,000	£0	<b><u>£76,000</u></b>
Big Birmingham Bikes	£165,000	£0	<b><u>£165,000</u></b>
Rea Valley Route	£111,500	£0	<b><u>£111,500</u></b>
<b><u>Previous Approvals Total</u></b>	<b><u>£3,027,500</u></b>	<b><u>£150,000</u></b>	<b><u>£3,177,500</u></b>
<i>Remaining Funds (after previous approvals)</i>	<i>£2,972,500</i>	<i>£1,850,000</i>	<b><u>£4,822,500</u></b>
<b><u>This Approval</u></b>			
20mph Pilot Area B2	£630,000		<b><u>£630,000</u></b>
<b><u>Previous and This Approval Total</u></b>	<b><u>£3,657,500</u></b>	<b><u>£150,000</u></b>	<b><u>£3,807,500</u></b>
<i>Remaining Funds (after previous and this approval)</i>	<i>£2,342,500</i>	<i>£1,850,000</i>	<b><u>£4,192,500</u></b>
<b><u>Other Pending Approvals</u></b>			
			<b><u>£0</u></b>
<b><u>Pending Approvals Total</u></b>	<b><u>£0</u></b>	<b><u>£0</u></b>	<b><u>£0</u></b>
<b><u>Previous, This + Pending Approvals Total</u></b>	<b><u>£3,657,500</u></b>	<b><u>£150,000</u></b>	<b><u>£3,807,500</u></b>
<i>Remaining Funds (after previous, this and pending approvals)</i>	<i>£2,342,500</i>	<i>£1,850,000</i>	<b><u>£4,192,500</u></b>

3. Checklist of Documents Supporting the FBC		
Item	Mandatory attachment	Number attached
<b>Financial Case and Plan</b>		
<ul style="list-style-type: none"> <li>Detailed workings in support of the above Budget Summary (as necessary)</li> </ul>	N / A **	Section 2
<ul style="list-style-type: none"> <li>Statement of required resource (people, equipment, accommodation) – append a spreadsheet or other document</li> </ul>	N / A **	Section 1
<ul style="list-style-type: none"> <li>Whole Lifecycle Costing analysis ( as necessary)</li> </ul>	N / A **	N / A
<ul style="list-style-type: none"> <li>Milestone Dates/ Project Critical Path (set up in Voyager or attached in a spreadsheet)</li> </ul>	N / A **	Appendix E
<b>Project Development products</b>		
<ul style="list-style-type: none"> <li>Risk Management Assessment</li> </ul>	Mandatory	Appendix C
<ul style="list-style-type: none"> <li>Stakeholder Analysis</li> </ul>	Mandatory	Appendix F
<ul style="list-style-type: none"> <li>Outline Programme</li> </ul>		Appendix E
<b>Other Attachments (list as appropriate)</b>		
Equality Analysis Ref EA001438		Appendix B
Risk Management Assessment		Appendix C
Scheme Plans		Appendix D
Implementation Programme		Appendix E
Consultation Summary		Appendix F