Cycle City Ambition Bid

Brighton & Hove City Council
and partners

East – West Cycle Connections
2013 -2015

Brighton & Hove
City Council

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Brighton & Hove City Council

Cycle City Ambition Grants

Department for Transport

Applicant Information

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SECTION A - Project description and funding profile

A1. Project name: East – West Cycle Connections in Brighton & Hove

A2 Headline description:

The bid focuses on two east – west transport corridors . The first is an 0.9km extension of a successful 1.8km route of segregated on-carriageway cycle track on Old Shoreham Road. The second, a 2.07km segregated on-carriageway cycle track on Marine Parade. Both schemes reallocate road space in favour of cyclists and feature inclusive, high quality design that enhances the public realm to the benefit of all. The targeted improvements will address identified gaps in current and planned cycle network infrastructure, deliver significant economic benefits, link key business and residential development sites and reduce health and social inequalities in identified priority areas.

A3 Geographical area:

The bid proposal includes:

1) A 0.9km section of the A270 (Old Shoreham Road) linking existing on-carriageway segregated cycle tracks from central Brighton and extending westwards as far as Nevill Road towards the Hangleton residential area.

2) A 2.7km section of the A259 (Marine Parade) from the Aquarium roundabout junction with the A23 (Old Steine) linking the existing off-carriageway segregated cycle tracks at Brighton Pier eastwards to Brighton Marina.

See map on page 2.


A270 - Old Shoreham Road
1
2
3
4
5
6
7
A259 Seafront - Marine Parade
Key
Existing Infrastructre
Missing Links
Proposed Routes 2013-15
Proposed Development Sites
1.Sackville Place Devlopment Area
2.Hove Station Area
3.New England Quater and London Road
4.Brighton Station
5.Eastern Road and Edward Street
6.Brighton Marina, Black Rock and gasworks
7.Brighton Centre and Churchill Square Area

A4. Total DfT funding contribution sought (£m): £4.75 million

A5. Equality Analysis

Has any Equality Analysis been undertaken in line with the Equality Duty? ☒ Yes ☐ No

A6 Partnership bodies

A number of organisations have committed their willingness to work with Brighton & Hove City Council (B&HCC) and its partner Authorities in the Greater Brighton City Region (GBCR) to deliver and promote the proposals and the Vision contained in the 10 year Active Travel Strategy for the GBCR. Sustrans, who provided funding towards the first phase of Old Shoreham Road will review the final design of Old Shoreham Road Phase 2. Living Streets are keen to see the principles of Brighton & Hove's Public Space Public Life legibility study continue to be delivered and will sit on the Cycle City Ambition (CCA) Project Board.

A7. Local Enterprise Partnership / Local Transport Body Involvement

Have you appended a letter from the LEP / LTB to support this case? ☒ Yes ☐ No

SECTION B – The Business Case

B1. The Scheme Summary

B&HCC is making good progress towards a high quality strategic cycle network to benefit the city and the GBCR. There is still much work to do to achieve a coherent network that is at the heart of the Vision set out in the GBCR Active Travel Strategy 2013-2023 (see Appendix 5).

The GBCR Authorities have identified two key "missing links" in the cycle network in Brighton & Hove that are necessary to make cycling a more attractive form of travel in the city and which can be delivered within the bid period. The routes have been selected based on access to planned development, linkages to schools, and proximity to areas prioritised by Public Health as suffering health inequality. The economic benefits of the schemes proposed are demonstrated in detail in section B7.

This bid seeks funding to deliver two high quality cycle tracks that will benefit pedestrians as well as cyclists and improve the urban realm. B&HCC understands the importance of innovation and good scheme design to encourage more cycling. Recent experience in designing and delivering Phase 1 of the Old Shoreham Road (OSR) cycle scheme, has shown that careful consideration to scheme infrastructure detail is crucial to ensure it supports all users regardless of age, ability and gender. The design and implementation of cycle tracks is also an opportunity to enhance the urban realm, making it more accessible not just to cyclists but to pedestrians and people with disabilities. The Phase 1 OSR scheme is a good example of this approach and has been highly acclaimed by Sustrans, Cycling Embassy of Great Britain and notable cycling bloggers. The scheme has already seen an increase of over 30% in cyclists using the route since its completion in June 2012.

Completed sections of cycle track on Old Shoreham Road Phase 1 and Lewes Road LSTF

Furthermore, as part of the Local Sustainable Transport Fund (LSTF) project, the design of the Lewes Road bus and cycle track improvements have attracted national interest from the media and the wider transport planning industry for an innovative approach to reducing conflict between buses and cyclists at bus stop pinch points, introducing 'floating bus stops'. The experience and approach used in delivering OSR Phase 1 and LSTF have shaped the rationale for the proposed schemes in this bid.

The two schemes proposed are based on the principle of reallocating road space to cyclists along transport corridors creating a consistently designed strategic cycle network. The dominance of motorised traffic is a barrier to cycling along both corridors where the lack of dedicated cycle provision currently makes cycling an unpleasant and often unsafe experience. Both schemes will be designed to create high quality fully segregated cycle tracks with 'cyclists go first' green phases at controlled junctions. This will be complemented with other measures such as side road entry treatments. Both locations will benefit from the next phase of 20 mph implementation which will slow traffic on all the surrounding residential roads linking to the schemes. A further detailed breakdown of the package of measures for both elements is contained in section B4.

Overall objectives for the schemes proposed are:

- Increase the number of people walking and cycling
- Increase modal shift thereby reducing carbon outputs and improving air quality
- Improve road safety, both perceived and actual
- Support the local economy and facilitate economic development
- Improve the public realm
- Reduce health inequalities, particularly the most physically inactive groups as identified by the Brighton & Hove Heath and Wellbeing Board

Progress against these objectives will be monitored through the monitoring and evaluation framework detailed in SECTION C.

B2. The Strategic Case

Strategic Benefits Matrix		
Issue/opportunity	SE1: Old Shoreham Road Phase2	SE2: Marine Parade
Access to Jobs	✓✓✓	✓✓✓
Economic Growth	✓✓	✓✓✓
Cross party support – long term vision	✓✓✓	✓✓✓
Improved Public Realm	✓✓✓	✓✓✓
Value for Money	✓✓✓	✓✓✓
Public Health engagement	✓✓✓	✓✓✓
Carbon Emissions	✓✓✓	✓✓✓
Supporting least active, older people, women and children	✓✓✓	✓✓✓
Increasing Walking	✓✓	✓✓✓
Increasing Cycling	✓✓✓	✓✓✓
Physical and Mental health improvement	✓✓✓	✓✓✓
Business productivity	✓✓✓	✓✓✓
Enabling Development	✓✓✓	✓✓✓
Unlocking road and junction capacity	✓✓✓	✓✓✓
Supporting least active, older people, women and children	✓✓✓	✓✓✓
User Satisfaction	✓✓✓	✓✓✓
Road Safety	✓✓✓	✓✓✓

B3. The Financial Case – Project Costs

Table A: Funding profile (Nominal terms)

£000s	2013-14	2014-15	2015-16	Total
DfT funding sought	700	4050		4750
Local Authority contribution	512.1	412.9		925
Third Party contribution	0	782	182.1	964.1
TOTAL	1212.1	5244.9	182.1	6639.1

B4. Package description

Scheme Element 1 (SE1): Old Shoreham Road Cycle Route (OSR Phase 2).

Problems

- Lack of cycle provision west of Old Shoreham Road Phase 1 scheme resulting in poor east-west connectivity in central Hove and access to future development areas at Hove Station, Sackville Trading Estate, Toads Hole Valley and public health priority area of Hangleton.

- The Old Shoreham Road, formerly the main east-west arterial route into the city before the A27 by-pass was completed in 1996, has been declassified but remains unnecessarily wide. This encourages motor vehicles to speed and overtake which discourages cycling and walking along this route due to a hostile traffic environment.

- The lack of quality cycle and pedestrian provision particularly affects young people attending the high number of schools in the area (7000 pupils).

- Poor cycle and pedestrian access to Hove Park which is one of the largest urban green spaces in the city.

- Local population suffers from poor health compared to other areas in the city with the Hangleton area, to the north of the proposed route extension, identified by the public health team as a priority area for improvement and intervention.

Proposed Solutions

- Introduction of OSR Phase 2 which will connect with OSR Phase 1 a further 0.9 km westwards. The scheme will be consistent with the successful Phase 1 design including full segregation for cyclists from motor vehicle traffic provided by a low kerb edge. This will also serve to buffer the pedestrian footways from the main flow of traffic.

- Side road entry treatments to improve road-crossing for pedestrians and also reduce vehicle speeds into and out of residential streets adjacent to Old Shoreham Road.

- Upgrade of the controlled junction at Fonthill Road to improve conditions for cyclists and pedestrians, including introduction of ‘cyclists go first’ green phase at signals.

- Upgrade other existing crossings to toucans to improve cycle and pedestrian access to Hove Park.

- Personalised and Business Travel Planning will form part of the requirements of developments along this route which will support the promotion of the network links locking in long-term economic, social and health benefits.

Scheme Element 2 (SE2): Marine Parade Cycle Route

Problems

- Lack of cycle provision along the A259 Marine Parade. This results in poor east-west connectivity from, East Brighton, an identified public health priority area, and from the key development areas.

- Marine Parade (A259) suffers from incoherent and inconsistent north-south pedestrian and cycle provision creating severance between people accessing the seafront and planned development at the Marina.

- Poor quality streetscape contributes to the lack of economic and leisure activity in this area.

- Unnecessarily wide carriageway encourages vehicles to speed and overtake in built up area discouraging cycle and pedestrian movement.

- Local population, particularly in the Whitehawk area, suffers from poor health compared to other areas in the city and have been identified by the Health and Wellbeing Board as a priority for intervention.

Proposed Solutions

- Reduce carriageway width to introduce high quality segregated cycle tracks in both east and west directions to link the city centre to planned development in the Marina.

- Reduce carriageway width to slow traffic speeds and rationalise traffic movement through the area.

- Upgrade existing crossing points to toucans and introduce new formal and informal crossing points along the route to improve north-south connections for both cyclists and pedestrians.

- Upgrade controlled junction at Lower Rock Gardens to improve facilities for cyclists and pedestrians. Introduction of ‘cyclists go first’ green phase.

- Introduce raised entry treatments at side road junctions to facilitate better cycle and pedestrian movement and slow traffic.

- Introduction of greenery and “pocket parks” to improve the urban realm and encourage economic and social activity along the corridor.

- Personalised and Business Travel Planning will form part of the requirements of developments along this route which will support the promotion of the network links locking in long-term economic, social and health benefits.

B5. Package costs

		2013-14		2014-15		2015-16	
		£	Source	£	Source	£	Source
SE1 Old Shoreham Road Phase 2	Design	40k 74k	BHCC DfT				
	Build	626k	DfT	700k 782k 40k	DfT S106 BHCC		
20mph Limit implementation	Design and Implement	350k	BHCC	350k	BHCC		
SE2 Marine Parade	Design	122.1k	BHCC				
	Build	0	DfT	22.9k 3350k	BHCC DfT	182.1k	S106
TOTAL		1212.1k		5244.9k		182.1k	

B6. The Financial Case – Local Contribution/Third Party Funding

SE1: Old Shoreham Rd Phase 2 Cycle Route

Local Contribution/third Party funding	Description of funding source	Availability	Evidence source
B&HCC Local Transport Plan	As part of LTP programme £350k has been approved for 20 mph and £40k revenue for staff time	LTP funding is available from April 2013	The B&HCC LTP programme has been approved and is publicly available on the BHCC website
Section 106 Development	A total of £691k has been secured as part of the Section 106 agreement for the Sackville Trading Estate with a further £38k for Goldstone Retail Park and £53k for The Park development at Fonthill Junction	It is expected that the Section 106 will become available in 2014/15	The Section 106 agreement approved is publicly available on the link below: http://bit.ly/12tNwkI

SE 2: Marine Parade Cycle Route

Local Contribution/third Party funding	Description of funding source	Availability	Evidence source
B&HCC Local Transport Plan	As part of LTP programme £350k has been approved for 20 mph and £100k for a contribution to the scheme and £40k revenue for staff time with Public Health committing a further £5k of revenue funding to the scheme	LTP funding is available from April 2013	The B&HCC LTP programme has been approved and is publicly available on the BHCC website
Section 106 Development	A total of £182.1k has been secured as part of the Section 106 agreement for the Brighton Marina development	It is expected that the Section 106 will become available in 2015/16	The Section 106 agreement approved is publicly available on the link below http://bit.ly/YZybFk

B7. The Economic Case – Value for Money

A) Description of Value for money assessment and estimate of BCR

The following assumptions have been made during the production of the economic case for the proposed schemes. A detailed Economic Appraisal Report is attached with the bid.

- DfT contribution to which the BCR has been applied:
  - SE1: Old Shoreham Road Phase2 - £1.4million
  - SE2: Marine Parade - £3.35million

- Design, BHCC project management and estimated construction costs for the schemes including contingency;
  - SE1: Old Shoreham Road Phase2 - £2.61million
  - SE2: Marine Parade - £3.72million

  albeit these are not discounted (to 2010).

- Significant benefits centre around the improvement to the route by the introduction of the on-road segregated cycle facility leading to:
  - Improved journey ambience
  - Improved journey utility increasing demand
  - Improved health benefits and outcomes for the local population who might transfer to more regular cycle use.

Key assumptions for the estimation of cycle demand with the scheme have been set out in full detail in the economic appraisal in Appendix A The range of demand percentages were based

on Webtag 3.14.1 prediction models, journey to work census and local ward information, National Highways and Transport Survey (NHT), Personalised Travel Planning data (PTP) for local wards and surveys and local cycle counts (before and after scheme introduction).

The BCR ranges for both schemes (taken as a whole) were;

- 2.2 (webtag),
- 2.5 (census),
- 4.1 (local counts)

for each of the demand forecast approaches mentioned above.

The appraisal period has been taken as 10 years, from year of scheme opening, to accord with the Greater Brighton City Region Active Travel Strategy and the forecast year was 2024 / 2025.

A level of optimism bias has not been applied directly, but assessment of risk has been made by B&HCC through contingency items against design and construction. This includes an uplift in future construction costs (using Baxter construction indices) to 2014/2015, prior to discounting. Having delivered the Old Shoreham Road Phase 1 project on time and to budget (from LTP and Sustrans 'Links to School' funding) the minor risks around consultation, traffic regulation orders and construction issues are mostly known.

The modelling approach is based on that contained in Webtag 3.14.1, for changes in utility. Input information was extracted or calculated from B&HCC PTP, National Travel Survey (local data) and local cycle and NHT information. This is set out in the accompanying Economic Appraisal report. An internal review was also undertaken to check the demand modelling spreadsheets and the general approach and assumptions made. A range and different approaches, as mentioned above, were undertaken to estimate the likely demand, in line with the advice within Webtag 3.14.1.

B) Detailed evidence supporting assessment

Has an Appraisal Summary Table been appended?	☐ Yes	☐ No	☒ N/A

For each element of your scheme as well as for the aggregated package:

Has a Scheme Impacts Pro Forma been appended?	☒ Yes	☐ No	☐ N/A
Has an Economic Appraisal Report been appended?	☒ Yes	☐ No	☐ N/A

B8. The Commercial Case

The schemes proposed will be delivered by the in house B&HCC Transport Planning Team made up of experienced Transport Planners with expertise covering the successful implementation of infrastructure similar to that detailed in this bid. Engineering design support will be provided by existing and equally experienced in-house traffic engineers. The team has a proven track record of successfully delivering externally funded programmes of work including CiViTaS, Cycling Town, Community Infrastructure programmes, LSTF capital programmes and large scale projects of a similar nature through the LTP.

Civil and other implementation works will be awarded through B&HCC Highway Works Framework Contract which complies with the Public Contracts Regulations as well as European

Union State Aid rules. Schedule of Rates for the Contract covers the standard Highway Work items and will ensure that any associated works offer best value. Contractors on the B&HCC framework have extensive experience of delivering similar schemes, including Old Shoreham Road Phase 1 and the LSTF project.

B9. Management Case - Delivery

a) Has a project plan been appended to your bid? ☒ Yes ☐ No

See Appendix 2

b) Has a letter relating to land acquisition been appended? ☐ Yes ☐ No ☒ N/A

c) Summary details of construction milestones between start and completion of works:

Table C: Construction milestones

	Estimated Date
Start of works on Old Shoreham Road	**03/02/2014**
Start of Works on Marine Parade	**28/04/2014**
Completion of Works on Old Shoreham Road	**25/07/2014**
Opening date for Old Shoreham Road	**01/08/2014**
Completion of Works on Marine Parade	**27/02/2015**
Opening Date for Marine Parade	**01/03/2015**

B&HCC has considerable experience in successfully delivering multi million pound high quality highway projects. Most recently this includes all highway works associated with development and construction of the Brighton & Hove Football Club's new Community Stadium. The B&HCC Transport Planning Team has also been responsible for delivering a number of multi-disciplinary projects such as the Community Infrastructure Fund, CiViTaS, Cycling Town and the LSTF project in addition to the on-going implementation of the Local Transport Plan capital programme.

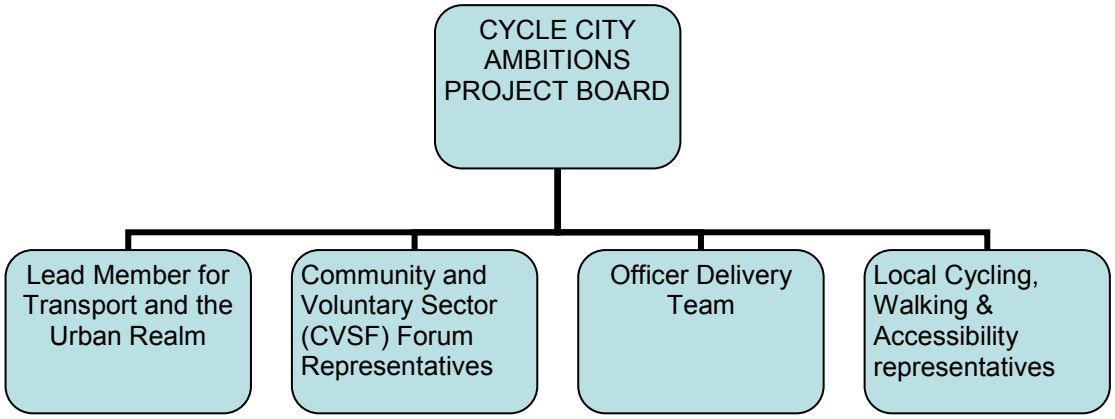
B9. Management Case – Statutory Powers and Consents

There are no statutory powers or consent required other than associated Traffic Regulation Orders.

B10. Management Case – Governance

The delivery of the Cycle City Ambition (CCA) Project will be managed through the CCA Project Board which will be made up officers, key partners and the Lead Member for Transport and the Urban Realm who will be responsible for chairing the meetings. The Project Board's role will be to provide overall guidance, ensure value for money, receive quarterly progress reports and authorise changes to the programme. B&HCC transport officers have a wealth of experience in delivering cycle related projects and initiatives. B&HCC fully recognises that to ensure a project is delivered smoothly and is fit for purpose, key stakeholders from the local community have an

important role to play. Our stakeholders have worked with BHCC on development of this bid and their involvement will continue with the governance of its implementation as the first stage of our ten year ambitions.



Roles and responsibilities

Lead Member for Transport and the Urban Realm

The Lead Member will chair the meeting and will ultimately be responsible for the political stewardship of the project and ensure that political support is managed and maintained.

Officer Delivery Team

Senior Responsible Officer – David Parker - Head of Transport Panning
Transport Project Manager - Abby Hone – Principle Transport Planner
Public Health Project Manager – David Brindley

The delivery team will be made up of representatives from public health, transport planning, highways engineering, finance and communications. As a team they will be responsible of the day to day technical, contractual and financial management of the project as well as communications with the public and wider stakeholders. They will also compile progress reports for the project board to consider.

Community and Voluntary Sector Forum (CVSF) Representatives

B&HCC have been working with representatives of the CVSF on a number of transport projects which has proved invaluable in terms of community buy in and local knowledge. The CVSF's role will be to ensure that communities are represented and are able to influence decisions affecting them.

Local cycling, walking and accessibility group representatives

There are a number of local cycling, walking and accessibility groups in the city, they will have a key role in helping to inform design issues using their local knowledge of the scheme areas.

B11. Management Case - Risk Management

Has a QRA been appended to your bid?	☒ Yes	☐ No
Has a Risk Management Strategy been appended to your bid?	☒ Yes	☐ No

B12. Management Case - Stakeholder Management

Stakeholder management for the CCA bid is provided in more detail in the ten year Strategy in Appendix 5. Representatives of national and local organisations such as Living Streets and Bricycles will be given the opportunity to nominate members for the CCA Project Board. The community and stakeholder representatives on the Project Board will ensure community and stakeholder input into the delivery of the projects.

Key stakeholders for the scheme proposals in this bid include the following groups and organisations:

Living Streets Brighton &Hove
Brighton & Hove Disabled Federation (The Fed)
Bricycles
Brighton & Hove Youth Council
Local Area Action Teams
Hove Park School
Residents groups
Community and Voluntary Sector Forum (CVSF)

a) Can the scheme be considered as controversial in any way? ☐ Yes ☒ No

b) Have there been any external campaigns either supporting or opposing the scheme?

☐ Yes ☒ No

c) Has a Stakeholder Analysis been appended? ☐ Yes ☐ No ☒ N/A

d) Has a Communications Plan been appended? ☐ Yes ☐ No ☒ N/A

B13. Management Case - Assurance

Section 151 Officer confirmation has been provided in Section D giving adequate assurance that systems are in place.

SECTION C – Monitoring, Evaluation and Benefits Realisation

Monitoring and Evaluation

B&HCC recognise that evaluation of the proposed schemes will be vital in determining whether the overall objectives have been met as well as providing an evidence base for on-going monitoring in the context of the wider 10 year Active Travel Strategy for the GBCR.

B&HCC has good experience in monitoring projects that require rigorous evaluation and the sharing of results, including the Cycling Town programme, Community Infrastructure Fund and the European funded CIVITAS and MMOVE projects

The methodology proposed follows the DfT's guidelines for 'light touch' evaluations. A pragmatic approach has been taken to provide an indication of the likely level of change, both in behaviour and attitude. In particular, we are mindful that any primary data gathering should be consistent with existing activities to monitor the impacts from various cycling and walking programmes, including LSTF initiatives, to provide a holistic overview of change.

A comprehensive evaluation programme is proposed, which covers establishing a benchmark of the existing situation, post implementation monitoring to establish the immediate impacts of the schemes and legacy monitoring to review the long term impacts in terms of health, social and economic legacy.

Key Performance Indicators

A number of key performance indicators (KPIs) have been established for the evaluation in terms of research outputs, outcomes and processes. These KPIs will be used to measure the success of the intervention:

Outcomes	Measures	Data Source
1. Reduction in trips by car	Number of trips by each mode by journey purpose after the intervention compared to before.	Traffic Count data
2. Increase in walking and cycling trips	Number of trips/stages by journey purpose after the intervention compared to before. Percentage accessing green space.	Cycle and Pedestrian Count data Census data NHT and NTS data PTP data ONS Annual Population Survey
3. Decrease in pedestrian and cyclist casualties/accidents	Casualties relative to distance travelled and/or number of pedestrians/cyclists.	Local Casualty Data
4. Perceptions of Safety	Respondents' stated opinions regarding changes to their perception of safety when walking/cycling. Perception of safety when walking alone after dark	City Tracker Survey On Street Surveys Pre and Post implementation ONS Annual Population Survey

5. Perceptions of wellbeing	Levels of satisfaction with individual health. Percentage who feel they belong in local area.	ONS Annual Population Survey City Tracker Survey Local Public Health Data

Benchmark Survey

Existing local transport and health data sources have been used (as outlined earlier in this document and in the Economic Appraisal) to establish current cycling and walking activity in both Brighton & Hove and the wider GBCR. Focus has concentrated on local populations adjacent to the proposed scheme locations and been supplemented with Census and Sport England data at Local Authority level, covering:

- Travel to work data (Census)
- Cycling at least 5 times a week for 30 minutes or more (Sport England)
- Walking and cycling for at least 30 minutes by various frequency (Sport England)

Further baseline data collection will be undertaken including on street surveys and counts and more detailed analysis of the Annual Population Survey.

After Survey

It is proposed that the 'after' surveys are conducted at least four months after the scheme is completed and not during the winter months. Regular traffic, pedestrian and cyclist counts will be undertaken together with on street interviews.

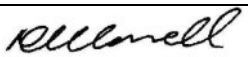
Further review of Census data, MOSAIC neighbourhood classification, the Annual Population Survey, the local City Tracker survey and local public health data will be undertaken to set the detailed local survey findings in context.

Within the wider framework of the whole city, we will continue to monitor travel behaviour on an ongoing basis, with a focus on walking and cycling usage/attitudes using existing data gathering vehicles undertaken by the authority.

The range of evaluation activities detailed will result in a sound understanding of the effectiveness of the project in encouraging modal shift, and identify any lessons that can inform delivery in subsequent schemes.

SECTION D: Declarations

D1. Senior Responsible Owner Declaration	
As Senior Responsible Owner for East – West Cycle Connections in Brighton & Hove I hereby submit this request for approval to DfT on behalf of Brighton & Hove City Council and confirm that I have the necessary authority to do so. I confirm that Brighton & Hove City Council will have all the necessary statutory powers in place to ensure the planned timescales in the application can be realised.	
Name: David Parker	Signed: 
Position: Head of Transport Planning	

D2. Section 151 Officer Declaration	
As Section 151 Officer for Brighton and Hove City Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that Brighton and Hove City Council - has allocated sufficient budget to deliver this scheme on the basis of its proposed funding contribution - accepts responsibility for meeting any costs over and above the DfT contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties - accepts responsibility for meeting any ongoing revenue requirements in relation to the scheme - accepts that no further increase in DfT funding will be considered beyond the maximum contribution requested and that no DfT funding will be provided after 2014/15 - confirms that the authority has the necessary governance / assurance arrangements in place and, for smaller scheme bids, the authority can provide, if required, evidence of a stakeholder analysis and communications plan in place	
Name: Nigel Manvell	Signed: 

Appendix 1

Brighton & Hove City Council

UNITED BY OUR DIFFERENCE

WSP

CYCLE CITY AMBITION GRANT

Brighton & Hove City Council
Economic Appraisal Report

25/04/2013

50400930

Table of Contents

1. Introduction

1.1.1 WSP have been requested to provide technical assistance to Brighton and Hove City Council (BHCC) on economic appraisal for cycle infrastructure improvement scheme bids to be submitted through the DfT led Cycle City Ambition Grants.

1.1.2 WSP were also requested to provide support on the development of scheme monitoring and evaluation framework to support the cycle bids as well as the proposed BHCC 10 year cycle strategy.

1.1.3 This economic appraisal report has been prepared

- to provide general background to cycling in the City of Brighton & Hove;
- to identify background information used in the development of the economic assessments, and;
- to outline the proposed Monitoring and Evaluation strategy for the bid schemes and wider strategy.

Brighton & Hove City Council Policy Drivers

1.1.4 Brighton & Hove City Council have set out an ambitious approach to walking and cycling within the City, demonstrated through their cross party support for the “Cities for Cycling” Notice of Motion (March 2012) http://present.brighton-hove.gov.uk/mgAi.aspx?ID=20113.

1.1.5 The City Council has adopted a coherent approach to the development of the City which sees walking and cycling as a vital and key way for residents, workers and visitors to move about.

1.1.6 This has been encapsulated in their adopted “Public Space Public Life” – legibility for Brighton & Hove http://www.brighton-hove.gov.uk/index.cfm?request=c1190374 guidance which underpins the City Council local plan, public realm and transport infrastructure improvements within the City.

1.1.7 The City Authority is currently in final development of a 10 year plan for cycle infrastructure investment which is seen as ambitious yet realistic with “a vision for an improved and fully integrated network that will be delivered over the next 10 years”.

1.1.8 Key areas of the plan will include:

- junction improvements;
- better street design for new developments and existing streets;
- segregated, or practically segregated, cycle unstructured alongside arterial roads for commuters;
- segregated infrastructure to access schools;
- better infrastructure to link up businesses, hospitals, shops and key services;
- links between green spaces;
- expansion of 20mph limits across the City (the first phase went live on the 8th April 2013), and;
- improved interchange hubs with better facilities to enable and encourage better door to door journeys.

1.1.9 There is a strong focus on public health priorities in the bidding process and given the funding support from this area and the opportunities it provides to address some of the health inequalities in the cities, links to public health priorities in terms of population groups and geographical areas will be a key feature of the vision and strategic plans.

1.1.10 The schemes being proposed will create cycle infrastructure which will provide links to health priority areas (Hangleton and Whitehawk).

1.1.11 Targets being considered for the strategy include:

- Doubling of cycle parking spaces in the city
- Doubling of numbers cycling to work in the city
- Increases in numbers of women and children cycling

1.1.12 The two proposed schemes, Old Shoreham Road Phase 2 and A259 Marine Parade improve the east – west corridors in to the City. These specific schemes:

- fit well with the works that have already been done in the city as well as those planned for the future through programmes including the LTP, LSTF, BBA and HA capital programmes;
- address identified needs for walking and cycling improvements in the city;
- link the key public health priority areas of Whitehawk and Hangelton;
- link to the east and west to key areas identified in the City Deal (NewHaven and Shoreham Harbour) and link communities to public transport hubs to access these areas;
- link to key developments and plans in the city, and;
- form a key starting link for the cross boundary links that will be a feature of the 10 years strategy taking improvements beyond the city into the neighbouring authorities of Adur, Worthing and Lewes.

2 Cycle City Bid Schemes – Description

2.1.1 BHCC are submitting cycle city ambition bids for two new on road cycle schemes in the city:

- Old Shoreham Road phase 2 (OSR ph2)
- A259 Marine Parade

2.1.2 The figure 1 below identifies the locations of the proposed cycle improvements with dotted lines. The solid identifies the recently completed Old Shoreham Road phase 1 cycle project. The coloured circles represent proposed development areas within the BHCC Local Plan.

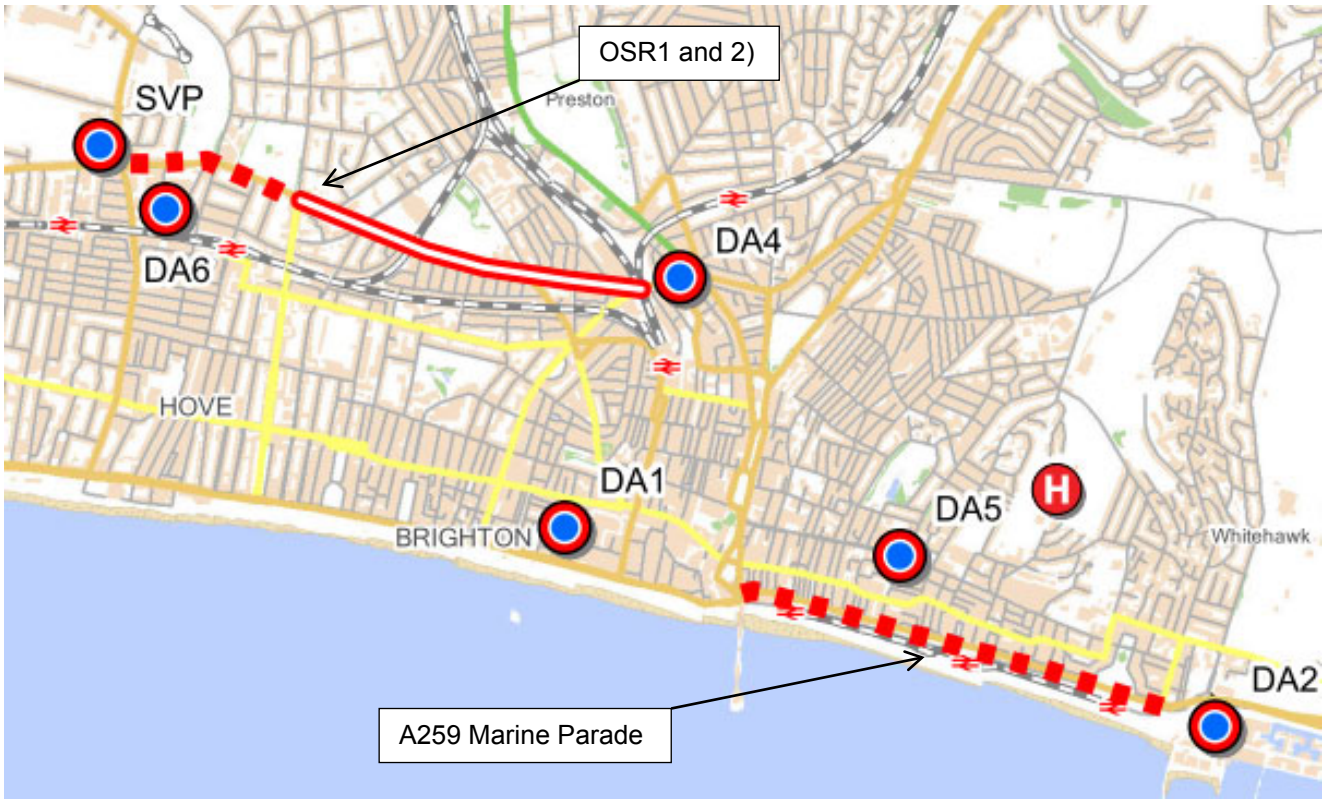


Figure 1 Location of Proposed Cycle Route Schemes (Dotted Lines)

2.1.3 The Potential development sites highlighted from the City Council Local Plan are:

- DA1 Brighton Centre and Churchill Square Area
- DA2 Brighton Marina, Gasworks and Black Rock Area
- DA4 New England Quarter and London Road, incorporating Brighton Rail Station
- DA5 Eastern Road and Edward Street Area
- DA6 Hove Station Area
- SVP Sackville Place Development Area
- H 3T's Royal Sussex County Hospital Redevelopment

2.1.4 These areas are anticipated to deliver over the next 18 years (plan to 2030) the following developments:

- 80,000 sqm of employment space
- 35,000 sqm of retail space
- 4,300 new dwellings
- A New Primary School
- 74,000 sqm Hospital floor space improvements (3 T's)
- 3,800 sqm university campus extension
- 700 new student accommodations
- 25,000 sqm conferencing facilities
- 10,500 sqm leisure facilities

2.1.5 With these developments will come public realm, highway and transport infrastructure improvements and funding, but they also provide a future base for increasing the walking and cycling in the City.

Old Shoreham Road Phase 2

2.1.6 The OSR ph2, an on-road segregated cycle lane, can be seen (dotted red line in figure 1) and extends the recently completed OSR ph1 (June 2012) linking the residential areas (and proposed development areas) to the City Centre and Brighton Rail Station.

2.1.7 The original OSR ph1 was approximately 1.8km in length and the proposed extension provides approximately a further 0.9km, bringing the enter on road segregated lane (in both directions) to 2.7km.

2.1.8 In general the route passes through mixed residential (flats and houses), commercial and small local retail provision as well as major educational establishments (Hove Park School and Sixth Form Centre).

2.1.9 OSR phase 1 (and its extension, phase 2) provides improved access to a number of proposed development areas noted in figure 1, especially, DA4, the New England Quarter and London Road, incorporating Brighton Rail Station.

2.1.10 A selection of photographs of the OSR1 are provided over the page, these have been taken from the CIHT Awards 2013 submission by BHCC for the scheme. These show some before and after treatments and also details of the segregated on-road facility quality of materials and minimised street clutter, especially at side road junctions.

2.1.11 The OSR phase 1 scheme started construction in November 2011 and was completed and opened in June 2012. Before and after surveys have been undertaken (counts) as well as attitudinal surveys of users of the new routes (before and after) and a summary of key findings is contained in section 2 of this report. This information forms the basis of some of the assumptions for the impacts of the extension of the OSR on-road segregated lanes in phase 2 are based on these surveys.

Typical Before Road Cross section

Typical cross section - segregated on road paths

Typical details along the routes and quality of on-road facility

Details at side road crossing, minimised signs and marking to reduce street clutter were a key feature

A259 Marine Parade

2.1.12 The A259 Marine Parade will provide an improved, on road segregated cycle facility along the seafront. At just over 2km in length it will extend between the seafront at the A259 Aquarium Roundabout along the whole length of the A259 on both sides to Arundel Road the eastwards.

2.1.13 In general the route passes through mixed residential (flats and houses), guest houses and hotels being the predominant land use. The road passes close to the Royal Sussex County Hospital, which has received planning permission for a major redevelopment (marked H on figure 1).

2.1.14 The proposed cycle route would also serve new development sites at DA2, Brighton Marina, Gasworks and Black Rock Area and DA5, Eastern Road and Edward Street Area.

2.1.15 Although there is currently a combined cycle route between the Marina and the city centre, below the sea wall, this is difficult to access from the A259 as there are cliffs and steep drops between the highway and the sea wall. As such, the existing combined route tends to serve just leisure cycling and it is also separated from other land uses by the existing topography and land forms.

A259 Marine Parade, cyclists passing parked cars and using footways

2.1.16 The A259, a major coastal route, links a number of ports, marinas and City / Town centres with lots of HGV traffic. It is very wide, accommodating on street parking controls (a mix of permit and pay and display) wide, single, traffic lanes and central “white line” islands to accommodate turning movements into side roads. It is perceived that there is significant scope to rationalise the provisions

to provide on-road segregated cycle lanes on both sides, with localised treatments at the main aquarium roundabout.

3 Supporting Local Statistics

3.1.1 WSP have been provided with a number of census and other datasets by BHCC which are detailed below and help support the economics assessment.

Journey to Work Census Information

3.1.2 Overall, Brighton & Hove City has seen a marked increase in cycle to work in the last 10 years. This is highlighted in the following table, compared to other key cycling towns and cities:

- 6910 people travel to work by bicycle.
- Between 2001 and 2011, cycling to work increased by 83%[1] – highest growth from all authorities in the UK outside of London.
- Just under 5% of the population cycle to work

3.1.3 **Brighton & Hove has shown the highest growth rate in cycling to work outside of London.** Brighton & Hove now ranks 32nd out of all areas in England and Wales (6th in the South East) for the percentage of those who travel to work by bicycle, and the percentage of people travelling to work on bicycle has risen from 3% to 5%. *This increase constitutes more than doubling in ten years (3168 residents travelling to work by bike in 2001 to 6910 in 2011).* Cycling to work has shown a percentage increase of 83% (equivalent to a growth rate[1] of 6.3% a year[2]). *The growth rate for Brighton & Hove is distinctly higher than other comparable cycling demonstration towns*[3] – as can be seen in the table below:

Cycling Demonstration Town	% 2011 Cycling to work	% 2001 Cycling to work	% Growth / Decay
Joined in 2005			
Aylesbury Vale	1.7%	2.1%	-18.40%
Brighton and Hove UA	4.9%	2.7%	83.38%
Darlington UA	2.4%	2.2%	8.14%
Derby UA	3.8%	4.4%	-15.34%
Exeter	6.3%	4.5%	42.06%
Lancaster	4.1%	3.8%	5.57%
Joined in 2008			
Blackpool UA	3.2%	3.2%	-0.61%

[1] Adjusting for the growth of the working population, the Compound Annual Growth Rate Per Capita = ((% Bikers in 2001) / (% Bikers in 2011)$^{0.1}$ - 1

[2] The figures here go some way to consolidate the highly quoted 27% increase in cycling from 2006-2009, as the compound three yearly growth rate (not taking into account the increase of the working population) for 3 year intervals would come in at 26%. It is also conceivable that this calculated figure, representative of an idealized steady growth over 10 years would underestimate these later years, given the cities status as a cycling demonstration town, and conversely overestimate earlier years.

[3] Figures not included for towns that exist only within a wider authority (e.g. Leighton-Linslade, Chester, Southport)

Bristol (City) UA	7.7%	4.6%	68.58%
Cambridge	29.9%	25.9%	15.28%
Colchester	4.0%	4.3%	-7.68%
Southend-on-Sea UA	2.9%	2.7%	4.55%
Stoke-on-Trent UA	1.5%	1.6%	-5.16%
Woking	2.7%	2.7%	0.05%
York UA	11.4%	12.0%	-4.92%

Cycle Counter Data

3.1.4 BHCC have installed a number of automatic cycle counters across the city to assist in the monitoring of cycle use (all journey purposes) and details of the locations are shown in figure 2 below.

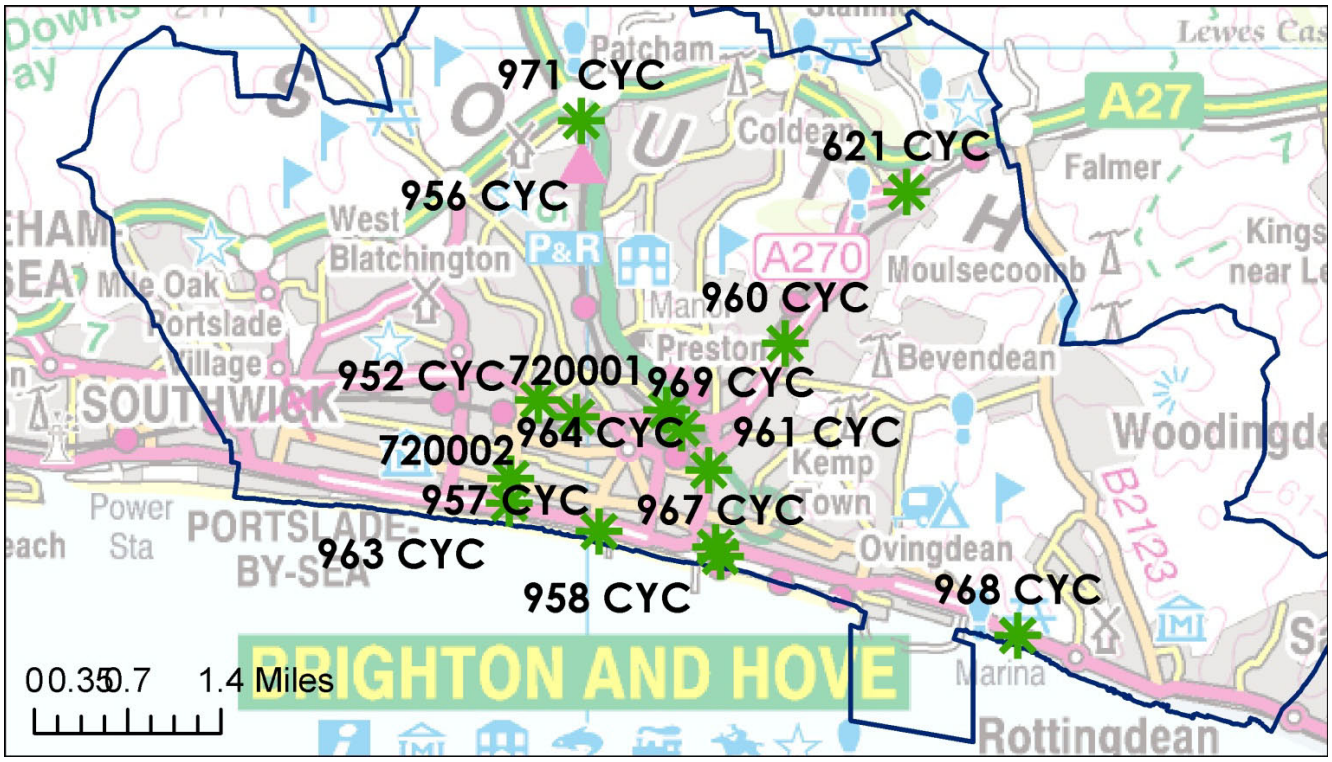


Figure 2 location of automatic cycle counters

3.1.5 Information of cycle count figures are available from the Council website, but the following is a summary of the 39% growth from 2003 to 2012

3.1.6 The percentage is taken from 11 automatic cycle counters at various points in the city. Totals for counters which were not present for a year, were imputed from the growth of other channels.

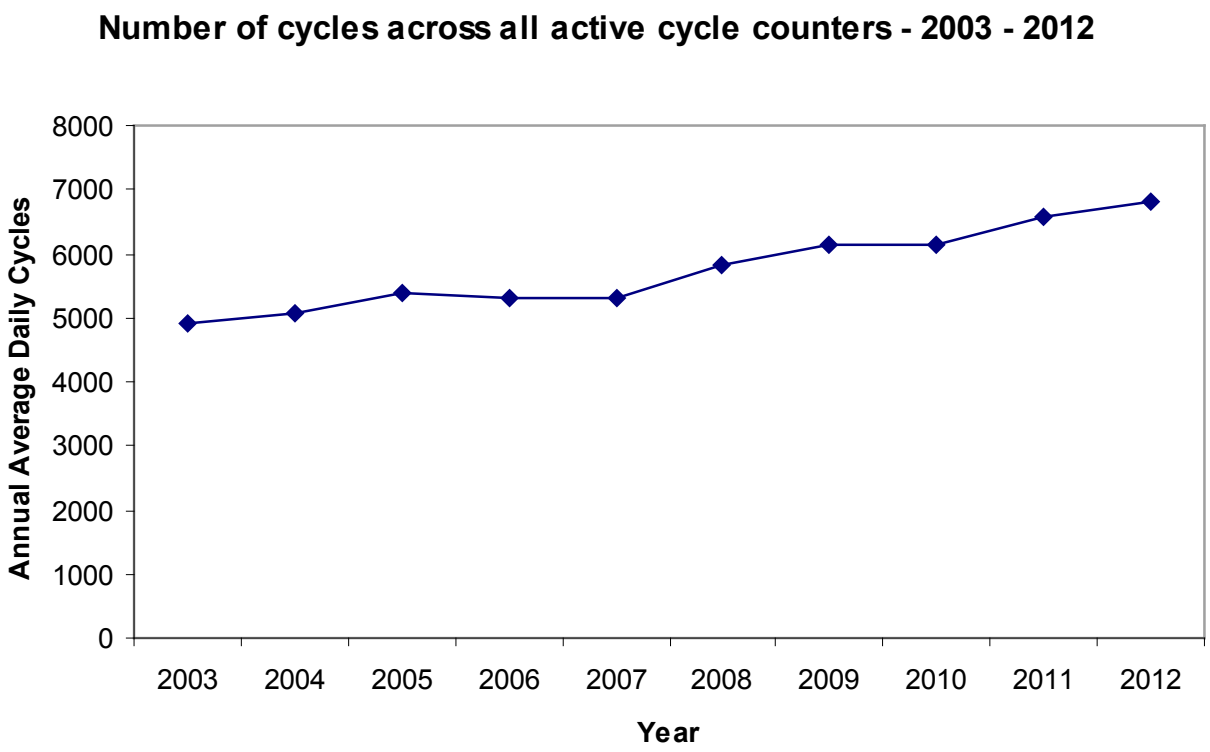


Figure 3 Annual Average Cycle Growth, BHCC from 2003 to 2012

National Highways & Transport Survey (NHT)

3.1.7 Brighton & Hove City Council took part in the national highway and transportation (NHT) survey; a public satisfaction survey on highway and transport issues. The survey collects public perspectives on, and satisfaction with, highways and transportation services in local authority areas.

3.1.8 The information from here could be used if the percentages are taken to apply throughout the city.

3.1.9 Question 21 asks respondents how often they use different transport modalities to get about.

- 21% cycle at least weekly, and 6% cycle daily.
- 93% walk at least weekly, and 66% walk daily.
- 73% drive car at least weekly, and 36% drive daily.

3.1.10 Question 22 asks respondents how they normally travel to various places – respondents can tick more than one box so percentages will sum to greater than 100.

	Walking	**Bicycle**	**Bus**	**Car**	**Passenger**	**Motorcycle**	**Taxi**	**Train**
Work	37%	18%	26%	57%	12%	3%	7%	25%
Schools / Colleges	55%	8%	20%	41%	9%	2%	2%	6%
Shopping	62%	11%	56%	58%	21%	2%	8%	6%
Doctors	59%	6%	21%	35%	8%	1%	4%	0%
Hospitals	15%	4%	48%	50%	17%	2%	14%	2%
Leisure facilities	50%	21%	40%	51%	24%	3%	23%	21%
Visiting friends / family	48%	16%	40%	63%	31%	4%	15%	30%

3.1.11 The survey additionally asks people if they personally drive a car more than once a month. This can be used as an indicator of the number of people who have access to a car that they can use (i.e. instead of walking or cycling). Of those who drive a car more than once a month:

- 24% cycle at least weekly, and 6% cycle daily.
- 93% walk at least weekly, and 62% walk daily.
- 95% drive car at least weekly, and 52% drive daily.

3.1.12 Similarly the method of travel for people who drive at least monthly is below:

	Walking	Bicycle	Bus	Car	Passenger	Motorcycle	Taxi	Train
Work	32%	18%	17%	73%	11%	3%	7%	24%
Schools / Colleges	55%	6%	12%	47%	5%	2%	1%	5%
Shopping	56%	12%	50%	78%	19%	2%	4%	6%
Doctors	56%	5%	11%	49%	7%	1%	2%	0%
Hospitals	11%	4%	38%	68%	15%	2%	9%	1%
Leisure facilities	47%	23%	32%	66%	22%	3%	25%	20%
Visiting friends / family	46%	17%	29%	82%	27%	5%	13%	25%

3.1.13 It appears that cycling prevalence is slightly higher for people who have access to a car, suggesting that people who do not have a car may generally use public transport rather than switching to bicycle.

3.1.14 Supporting this idea, an overall view of people who cycle and drive at least monthly is provided below:

		Bike Monthly	
		Yes	No
Drive Monthly	Yes	22.3%	44.0%
	No	5.4%	28.4%

3.1.15 The statistics also support the idea that 11% of the population regularly drive, and cycle too but only monthly, suggesting that this figure could represent the margin that could be persuaded to cycle more often. An 11% figure is used within the demand calculations for potential future cycling as the population bases from which to draw new work trips.

3.1.16 There are an additional variety of satisfaction based statistics from the NHT – which are comprehensively summarised on the website:

http://nhtsurvey.econtrack.co.uk/

Personal Transport Planning (PTP)

3.1.17 BHCC have undertaken a number of PTP schemes across the City as part of LTP and also LSTF projects in the last 2 to 3 years. A summary of the key findings from these projects is set out below:

- The proportion of people cycling can be shown to considerably increase during the year in which an area is the focus of personalised travel planning (PTP).
- Cycle journeys made by single adults (e.g. students / commuters) appear to be the best to target for further shifts in behaviour – as this demographic shows the greatest shift during PTP projects.
- The number of journeys, in general, made for educational purposes is increasing at the highest rate. These journeys also have the highest increase in number made by bicycle (40% increase).
- Educational journeys made with children show an 8% increase in cycling, but those with single adults (e.g. college/university) show a 47% increase. The scheme would appear to have to most significant impact on these types of journeys.
- Predictably, journeys lasting between 5mins and 30mins are where there are the most increases in cycling.

Did different modes of transport get used?

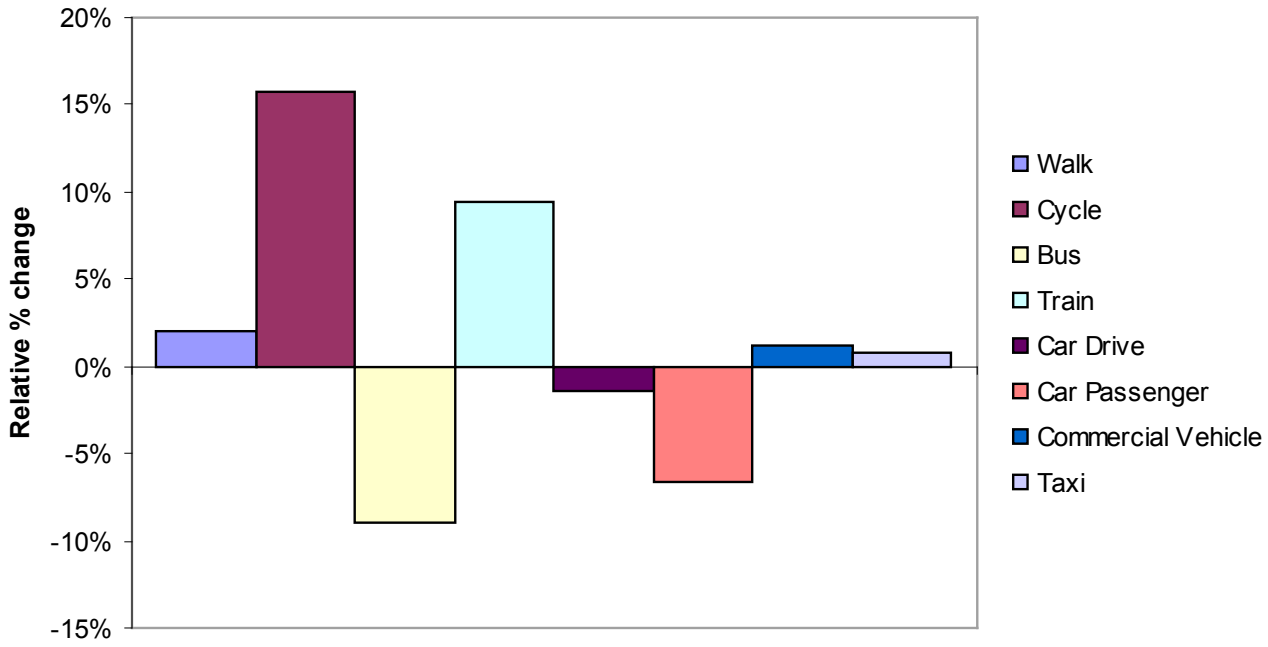
3.1.18 PTP most affects cycling behaviour, which on average shows a 16% growth from the baseline. The table below shows the percentages for the major transport modalities, from data pooled from all six PTP areas.

	Baseline	Post-PTP	% Growth
Walk	32%	33%	2%
Cycle	6%	7%	16%
Bus	16%	15%	-9%
Train	3%	4%	9%
Car	38%	37%	-2%

3.1.19 The proportion of use of the major transport modalities weighted by the number of residents in each area is represented in the table below:

	Before
Walk	37%
Cycle	7%
Bus	16%
Train	4%
Car	37%

How BHCC PTP interventions affected journeys:



PTP Journeys per day per reason

The BHCC PTP work found the following, overall:

Reason	% Overall
Work	14%
Return Home	46%
Education	7%
Health	2%
Shopping	13%
Leisure	15%
Faith	1%
Other	2%

And by bike:

Reason	% Bike
Work	18%
Return Home	43%
Education	6%
Health	3%
Shopping	8%
Leisure	17%

Faith	0%
Other	4%

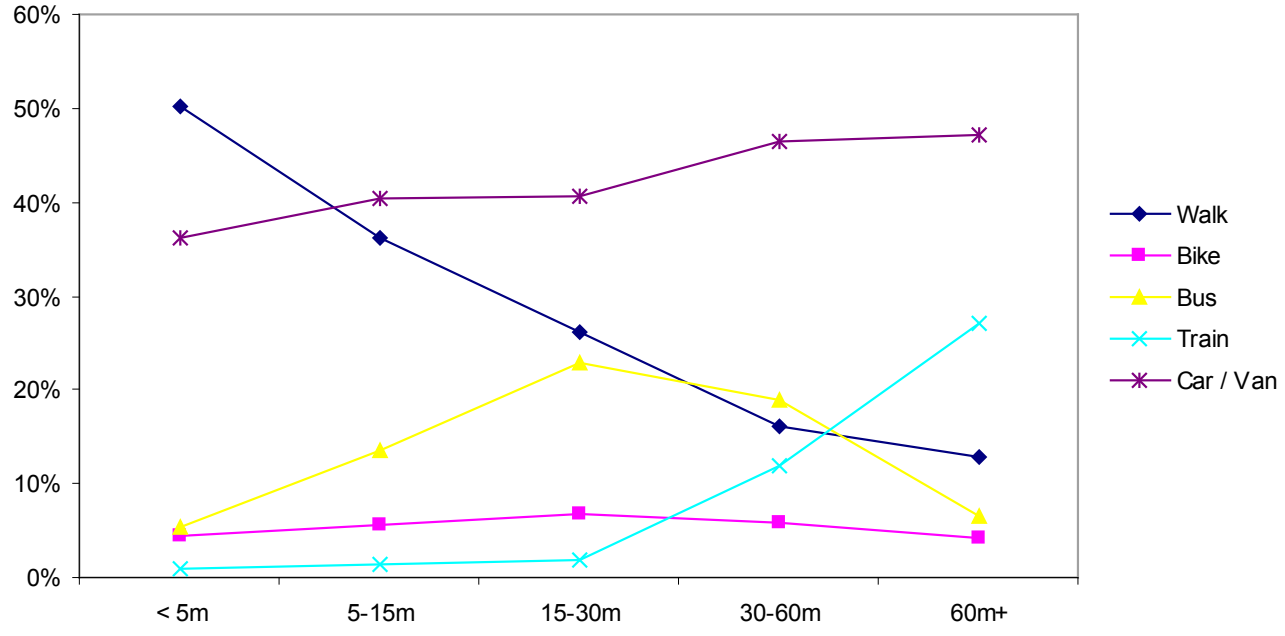
3.1.20 Taking the figure of 6910 cycling to work journeys per day from the Census (2011), a very rough estimate of 37706 cycling journeys (6910 / 14%) per day can be inferred from values from the above table – assuming that each transport type is distributed equally amongst the journey reasons.

Modes by length of journey (mins)

3.1.21 The table below shows the percentage for each mode per journey time.

Journey Time	Walk	Bike	Bus	Train	Car / Van
< 5m	50%	4%	5%	1%	36%
5-15m	36%	6%	14%	1%	40%
15-30m	26%	7%	23%	2%	41%
30-60m	16%	6%	19%	12%	47%
60m+	13%	4%	7%	27%	47%

3.1.22 The graph below shoes the data above, e.g. walking frequency drops off as journey time increases.



Households with cycles

3.1.23 51% of households have 1 or more bicycles. The table below shows from these households the breakdown of modes overall, and for journeys under 15mins:

Mode	% Overall	% < 15mins
Walk	32%	40%
Bike	10%	10%
Bus	11%	7%
Train	4%	1%
Car Driver	34%	33%
CarPassenger	5%	5%
CommercVehc	1%	1%
Taxi	1%	2%
Motorbike	1%	0%
Other	0%	0%

3.1.24 In the city it can be estimated that 19% of car/bus journeys are a) 15mins or less and b) made by households with bicycles. BHCC believe these journeys are a candidate for converting to bike journeys.

Barriers to cycling

3.1.25 The following summary of questions asked as part of the PTP studies with respect to perceived barriers to cycling have been extracted.

PTP Question 7:

3.1.26 179 respondents (18%) said they had noticed improvements in cycling facilities in Brighton & Hove over the last 12 months. 16 % of respondents who noticed improvements did not have a bicycle in their household (51%). Of those who had cycled in the last month and were asked what would encourage them to cycle more the top 4 responses were:

- More cycle lanes
- More on street cycle parking
- More cyclist awareness by drivers
- More secure cycle parking

3.1.27 Those who hadn't cycled in the last month were asked why and said:

- Don't own a bike (40%)
- Unfit (8%)
- Personal safety (3.5%)

PTP Question 6:

3.1.28 121 respondents (12%) said they had noticed improvements in cycling facilities in Brighton & Hove over the last 12 months. 7.5% of respondents who noticed improvements did not have a bicycle in

their household (67%). Of those who had cycled in the last month and were asked what would encourage them to cycle more the top 3 responses were:

- More cycle lanes
- More cycle awareness by drivers
- More secure cycle parking

3.1.29 Those who hadn't cycled in the last month were asked why and said:

- Don't own a bike
- Unfit or hills
- Personal safety
- Children
- Takes too long

Summary of Route User Survey Results OSR Phase 1

3.1.30 The following are an overview of attitudinal surveys undertaken by BHCC following the opening of the OSR phase 1. A key aspect which should be drawn from the results is the change in attitude to safety of the new route and how this is influencing trip making by cycle.

Headline findings

- 189 people surveyed in 2011, 176 in 2013.
- Large reduction in cyclists riding on pavement.
- Journeys related to education show a nearly double increase.
- OSR Area is used more frequently, more often.
- Large increase in 'safety' being listed as reason for using route.
- Increase in all positive feelings – decrease in feeling unsafe.
- Decrease in 'road surface' being reason for not liking OSR.
- Increase in use of area by less experienced / occasional cyclists.

Cycling – Highway or Pavement?

3.1.31 Large reduction in cyclists riding on pavement.

Location	2011	2013
Highway	53%	84%
Pavement	47%	16%

Purpose of Journey (to and from combined)

3.1.32 Education journeys show a nearly double increase.

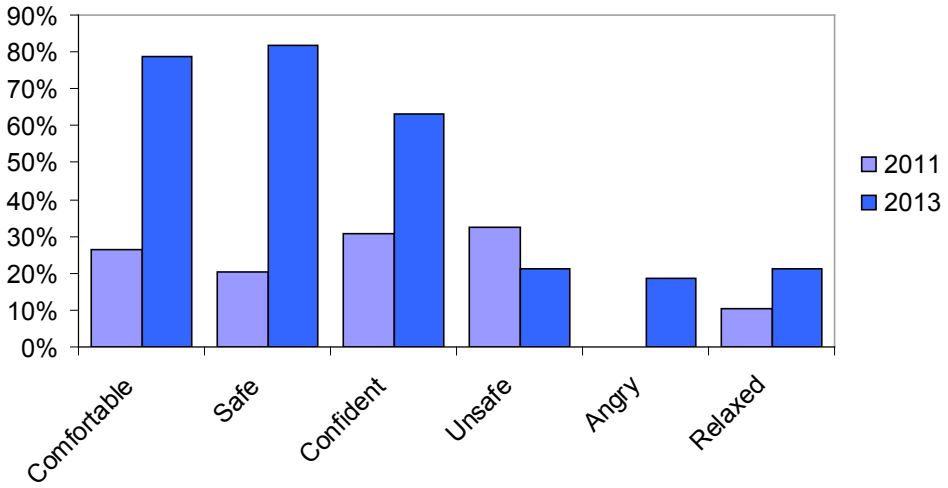
	2011	2013	Increase/Decrease
Home	127	162	14%
Home-Recreation	36	33	-18%
Work	49	46	-16%
In course of work	3	1	-70%
Education (school, college)	17	37	**94%**
Shopping	23	17	-34%
Personal Business	14	17	8%
Visiting Friends/Family	19	23	8%

Social/Entertainment	21	10	-57%

Feelings when cycling along OSR

3.1.33 Increase in all positive feelings – decrease in feeling unsafe. Increase in Anger – perhaps due to sentiment that changes where waste of public spending, but could be due to attitude of data gatherer.

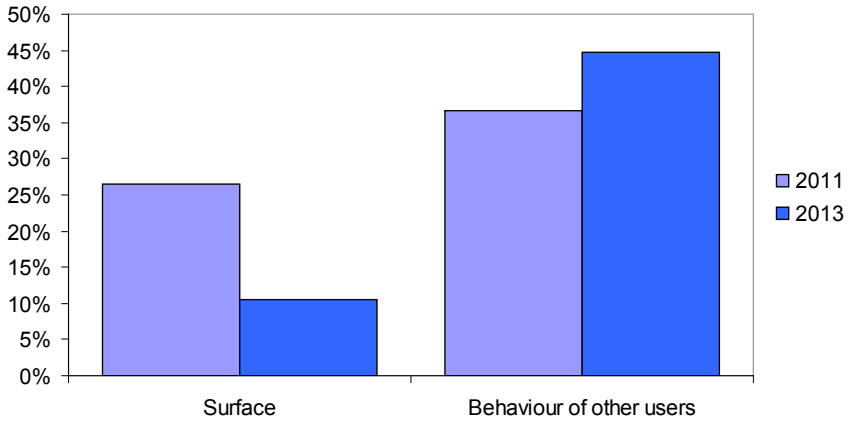
Feeling	2011	2013	Change
Comfortable	27%	79%	198%
Safe	20%	82%	300%
Confident	31%	63%	106%
Unsafe	33%	21%	-36%
Angry	0%	18%	-
Relaxed	10%	21%	106%



Reason for not liking OSR

3.1.34 Decrease in 'road surface' being reason for not liking OSR.

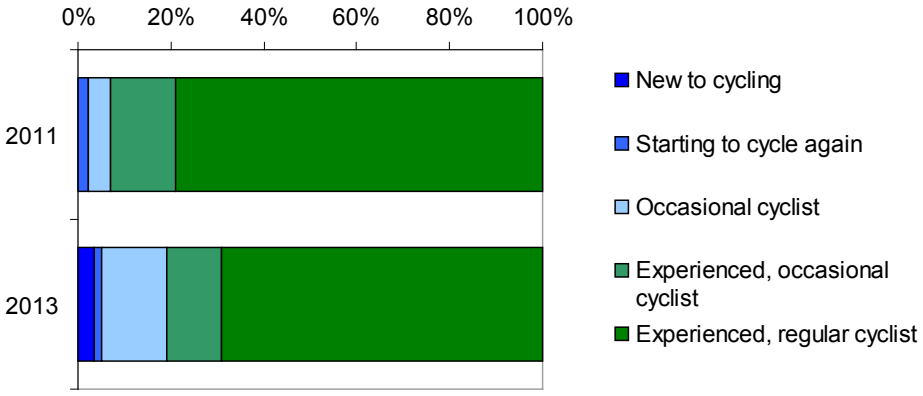
Reason	2011	2013
Road Surface	27%	11%
Behaviour of other users	37%	45%



Type of cyclist

3.1.35 Increase in use of area by less experienced / occasional cyclists.

Type	2011	2013
New to cycling	0%	3%
Starting to cycle again	2%	2%
Occasional cyclist	5%	14%
Experienced, occasional cyclist	14%	12%
Experienced, regular cyclist	79%	69%

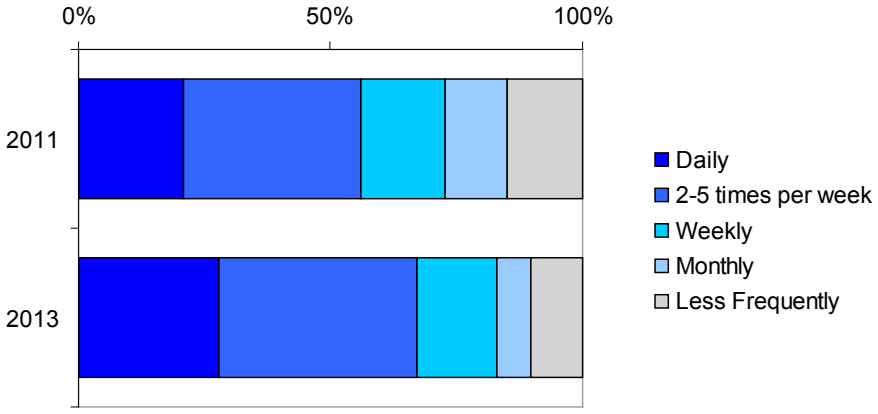


Frequency of journey

3.1.36 Area is used more frequently, more often.

Frequency	2011	2013	Change
Daily	39	49	33.49%
2-5 times per week	66	69	11.08%
Weekly	31	28	-4.03%

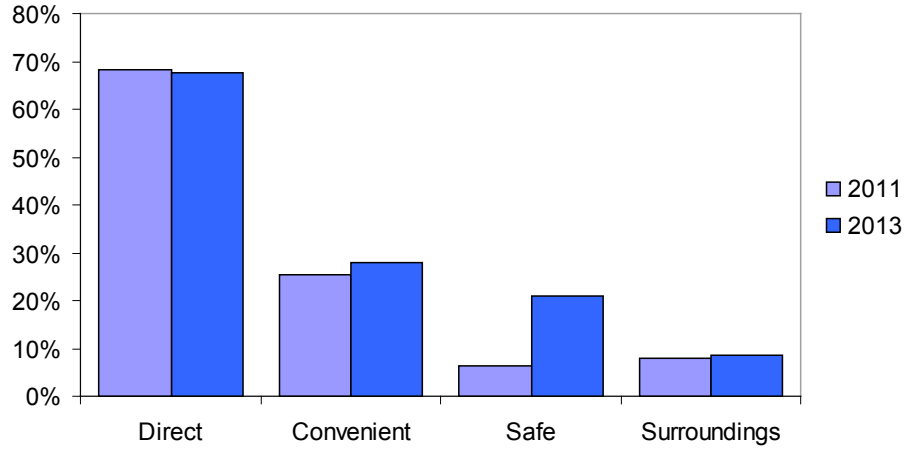
Monthly	23	12	-44.57%
Less Frequently	28	18	-31.70%



Reason for using this route

3.1.37 Large increase in perception of safety of route.

Reason	2011	2013	Change
Direct	68%	68%	-1%
Convenient	25%	28%	10%
Safe	6%	21%	231%
Surroundings	8%	9%	7%



Changes in Cycle Use on OSR Phase 1

3.1.38 Some initial results from the before and after scheme cycle counts have only recently been completed. In part these have been affected by the poor weather conditions for cycling since the scheme opened. However, BHCC transport planners have undertaken a review based on comparable weather conditions between November 2011 and November 2012, to provide this initial information.

3.1.39 There are obviously quite a few problems estimating the increase in number of cycles based on just one days data, the main being that it varies considerably with temperature and then by rain. Two possibilities were to use counts from the automatic cycle counter situated along the OSR on a weekday and Saturday from November 2011 and 2012 in which the temperature and precipitation were similar. This implies a growth of 38% (for both days).

Date	Average Temp	Precipitation	Cycles OSR Site 1	Cycles OSR Site 2	Average Cycles	Growth
Thursday 3rd November 2011	15.4	3.3	282	356	319	
Saturday 5th November 2011	11.9	0.76	212	150	181	
Tuesday 13th November 2012	12.1	4.32	498	382	440	37.9%
Saturday 17th November 2012	11.2	0.25	273	225	249	37.6%
Average Mon-Fri November 2012	11.05	3.26	483	379	431	35.1%
Average Sat-Sun November 2012	11.65	3.18	214	177	196	8.0%

3.1.40 It is not proposed to use this growth figure as the basis for the forecast demand for cycling with the proposed improvements of OSR ph2 and A259 Marine Parade. However, it is intended to be used as a range of potential scenarios for cycle growth and thus potential economic benefits for the schemes. The range of growths will be based on :

- Webtag 3.14.1 calculation of demand
- Journey to Work census increase in cycle to work
- Surveyed growth from implementation of OSR phase 1

4 Economic Assessment Inputs

4.1.1 For preparation of the Economic Assessment of the proposed schemes, detailed use of the approach set out within Webtag 3.14.1 has been made with reference to other Webtag guidance outlined within 3.14.1

4.1.2 In addition to this, an assessment of the potential health benefits of cycling has been made using the WHO HEAT appraisal approach mentioned with the Cycle City Grant guidance.

4.1.3 It is very difficult to ascertain the potential reduction in car use by travellers switching to cycle use. Although the PTP and NHT give general potential levels.

4.1.4 WSP have for this assessment assumed that, taken from paragraph 2.1.15, around 11% of the car commuting population could be encouraged to switch to more regular cycling.

4.1.5 It is proposed to calculate only the following monetised benefits for the schemes, taken as a whole, rather than individually):

- Physical health benefits
- Journey ambience benefits
- Reduced Absenteeism benefits

4.1.6 It should be noted that there could be expected to be benefits from reduced car use (Consumer Users, congestion reduction), Greenhouse gases (air quality and carbon reduction) improvement, and potential accident reduction. However, it is likely that this will be marginal, be influenced by other factors in the City (such as the recent introduction of a wide area 20mph speed limit) and the background growth in traffic due to local developments.

4.1.7 In addition, no benefits have been taken for the improvement in the quality of the walking environment due to the reduction in cyclist on the pavement. A reduction in cycles using of the pavement was noted in the OSR ph1 post surveys (47% to 16%). This corresponds with a significant increase in cyclists on the road going from 53% to 84%.

4.1.8 Over a longer period of monitoring, it may be possible to establish some of the criteria to allow for calculation of car reductions and thus further economic benefits.

4.1.9 A separate HEAT analysis has also been completed to provide an understanding of potential average annual benefits per year, this is covered in section xx later in this assessment report.

Calculation of Demand

4.1.10 For calculating potential future cycle demand for the two proposed schemes the following growth rates “with intervention” have been assumed:

- Webtag 3.14.1 Para 1.5 increase journey to work cycling — 1.36%
- Census Journey to Work 2001 to 2011 increase in cycling — 2.2% (increase from 2.7% to 4.9%)
- OSR ph1 change in traffic counters work journey purpose — 6.84% (18% of 38%)

4.1.11 The Webtag calculation of demand is contained in Appendix A and the spreadsheet was used to calculate potential demand, based on the change in utility of the route from “without” to “with” intervention for each of the growth assumptions.

4.1.12 In order to estimate the potential demand for additional cycling with the scheme the following input assumptions have been used in the calculation processes:

- Average cycle distance 4840 metres
- Average cycle speed 16km/h based on standard accessibility assessments
- Journey to work Census Wards contributing to catchment 82078 all modes
- Selected WARDS journey to work 5.2%
- An additional 11% of population could choose to travel by bike (BHCC NTS monthly calculation para 2.1.15) assumed for journey to work

4.1.13 The above inputs were then used with the calculation approach set out in Webtag 3.14.1 to estimate the potential cycle demand "with" intervention. The summary table below sets out the potential cycle demand with growth assumption:

Growth Assumption	Growth Rate	Potential Demand Combined Schemes
Webtag 3.14.1	1.36%	344
Census	2.20%	556
Counter	6.84%	1729

4.1.14 These potential demand figures (across both schemes) can then be used to estimate the monetised benefits for the physical health benefits, journey ambience and reduced absenteeism.

Scheme Pro-Forma Sources of Information

4.1.15 As required by the DfT Cycle City Ambitions Grant form the following locations of information have been used to inform and complete each of the inputs with suitable evidence.

Old Shoreham Road phase 2

4.1.16 Scheme Description without and with the scheme : provided in section 1.1.18 and following paragraphs and photographs (of OSR phase 1).

4.1.17 Route length : extracted from BHCC GIS mapping = 0.9km.

4.1.18 Average cycle length (m) : calculated from NHT and other BHCC journey statistics (see appendix A) as calculated as 4840m. It is not expected to change with the scheme as the scheme is proposed as an extension on-road segregated lane dedicated to cyclists.

4.1.19 Average cycle speed (km/h) : Based on average used within DfT Accession modelling (16km/h) as a reasonable assumption, routes are generally flat and level

4.1.20 Number of users per day : **Without scheme** taken from 2012 traffic counter with addition of average ward cycle growth per year for appropriate wards of 5% to proposed scheme opening (319 cycles per day plus 5% of 319 for 2 years = 32, total at opening 351)

4.1.21 Number of users per day : **With the scheme** calculated from Webtag 3.14.1 with change in utility (see appendix A for derivation) with range of growth figures (1.36% webtag, 2.20% census, 6.84% from counters and journey purpose splits by bike). For OSR ph2 potential demand with scheme range of daily use 533, 646, 1269 respectively of growth assumptions.

4.1.22 Percentage of additional cyclists that would have driven a car otherwise, the assumption is based on the surveys completed by BHCC and assumed as 11%, see section 2.1.15. This is a conservative estimate as there may be more drivers on a weekly basis who could switch to cycling.

4.1.23 Car Traffic Vehicle Kilometres : Taken from http://www.dft.gov.uk/traffic-counts/ for major roads traffic counters 26303 & 46301 cars and taxi with estimate of 6% for further reduction with the scheme based on NHT figures for BHCC for monthly could drive car / cycle as potential level for conversion. However, this information was not carried forward in to the estimation of benefits (congestion reduction, greenhouse gas and accidents) as outlined in paragraphs 3.1.6 and 3.1.7.

A259 Marine Parade

4.1.24 Scheme Description without and with the scheme : provided in section 1.1.24 and following paragraphs and photographs (of OSR phase 1).

4.1.25 Route length : extracted from BHCC GIS mapping = 2.07km.

4.1.26 Average cycle length (m) : calculated from NHT and other BHCC journey statistics (see appendix A) as calculated as 4840m. It is not expected to change with the scheme as the scheme is proposed as an extension on-road segregated lane dedicated to cyclists.

4.1.27 Average cycle speed (km/h) : Based on average used within DfT Accession modelling (16km/h) as a reasonable assumption, routes are generally flat and level

4.1.28 Number of users per day : **Without scheme** taken from 2012 traffic counter with addition of average ward cycle growth per year for appropriate wards of 5% to proposed scheme opening (282 cycles per day plus 5% of 282 for 2 years = 28 , total at opening 310)

4.1.29 Number of users per day : **With the scheme** calculated from Webtag 3.14.1 with change in utility (see appendix A for derivation) with range of growth figures (1.36% webtag, 2.20% census, 6.84% from counters and journey purpose splits by bike). For A259 Marine Parade potential demand with scheme range of daily use 471, 571, 1121 respectively of growth assumptions.

4.1.30 Percentage of additional cyclists that would have driven a car otherwise, the assumption is based on the surveys completed by BHCC and assumed as 11%, see section 2.1.15. This is a conservative estimate as there may be more drivers on a weekly basis who could switch to cycling.

4.1.31 Car Traffic Vehicle Kilometres : Taken from http://www.dft.gov.uk/traffic-counts/ for major roads traffic counter 47895 cars and taxi with estimate of 6% for further reduction with the scheme based on NHT figures for BHCC for monthly could drive car / cycle as potential level for conversion. However, this information was not carried forward in to the estimation of benefits (congestion reduction, greenhouse gas and accidents) as outlined in paragraphs 3.1.6 and 3.1.7.

Input Information to HEAT Assessment

4.1.32 WSP have undertaken some initial assessments based on the World Health Organisation's "Health Economic Assessment Tool (HEAT)". These are contained in Appendix B.

4.1.33 These initial calculations were based on a range of potential growth rates for the existing cycling and potential future cycling numbers only. The estimates were not based on large population samples of within WARD or City areas. The schemes were combined to get overall figure, rather than by route.

4.1.34 Input information assumed the following additional items:

- Based on existing (661) cycle use on existing routes and growth of cycling of 1.36%, 2.20% and 6.84% as derived earlier (leading to total cycle input of 1005, 1217 & 2390)
- Assumed 90% return trip for 124 days cycling per year
- 4840m average cycle distance (with and without scheme)

- Webtag figure £1,654,000 for cost of life and UK mortality rate
- 3 year build up in cycling and 10 year period over which benefits calculated with 3.5% discount rate

Other Influences on Cycle Demand Calculations

4.1.35 As outlined in the introduction and background section there will also be a number of influences on the potential future demand for cycle use within BHCC. A majority of these will be future development and those that will have major influence on the schemes were set out in figure 1.

4.1.36 Other local schemes which are likely to influence cycle demand are:

- General reduction in speed limits across the City to 20mph, part of which has already been implemented by the Authority
- Provision of improved and secure cycle parking at Brighton Railway Station (see below) announced in January 2013 (http://www.southernrailway.com/southern/news/new-850000-cycle-hub-for-brighton-station/)

"Transport Minister, Norman Baker MP has today announced that Southern is to build an £850,000 multi-facility cycle hub at Brighton station, with £550,000 of the funding coming from the DfT's Cycle-Rail initiative.

The new two-storey building which also includes funding contributions from Network Rail and Brighton & Hove City Council will be built at the rear of the station in the New England Quarter and will have up to 500 spaces – increasing the total number of cycle spaces at the station by around 220."

- The expansion of the Royal Sussex Hospital will also include and improvement in cycle parking (additional 339 spaces). Along with this the AMEX house development site in Edwards Street will also provide a further 232 cycle spaces.
- The provision of cycle storage and cycle secure parking will be a high priority in all future developments within the city.
- Joint promotion and working with the local Health Authorities to encourage improved physical exercise to reduce mortality rates.

4.1.37 The Webtag guidance 3.14.1 indicates that improved cycle storage (external and internal) can have a marked effect on cycle use utility (Table 3).

Estimation of Potential Schemes BCR

4.1.38 Appendix A contains a number of extracts from the calculation spreadsheet used for estimating the likely monetised benefit using the approach outlined in Webtag 3.14.1:

- Health / Physical fitness benefits
- Journey ambience benefits
- Reduced absenteeism benefits

4.1.39 As highlighted in the section above there are also other non-monetised benefits which would increase the schemes overall BCR.

4.1.40 Based on the range of potential demand for cycling "with" the schemes the range of BCRs is set out below:

Costs for DfT funding Bid taken from BHCC calculations spreadsheet (2012 prices with increase by Baxter to 2014 construction)			
	Webtag	Census	Counter
Old Shoreham Road Phase 2	£ 1,400,000	£ 1,400,000	£ 1,400,000
A259 Marine Parade	£ 3,350,000	£ 3,350,000	£ 3,350,000
Combined Total Costs in 2014/2015	£ 4,750,000	£ 4,750,000	£ 4,750,000
Discount of Costs (4 years to 2010)	£ 4,139,351	£ 4,139,351	£ 4,139,351
Potential Discounted Benefits (health,JA, Absent)	£ 7,614,699	£ 7,854,939	£ 9,183,193
Potential Discounted benefits from HEAT Assessment over 10 years	£ 1,550,000	£ 2,500,000	£ 7,770,000
Potential Benefit to Costs Ratio	2.2	2.5	4.1

Appendices

Appendix A Cycle Demand and BCR Calculations

Average Cycle Distance based on NHT and other data sets for Brighton Area and Calculation of Demand using Webtag 3.14.1 approach

Calculation Prepared by Stephen Reed WSP — 22nd April 2013 — Checked C Drennan WSP — 22nd April 2013

Base Data Assumptions

Modes of Length of Journey to Work from BHCC NHT Survey Results (Provided by BHCC)

Journey Time	Walk	Bike	Bus	Train	Car / Van
< 5m	23.32%	11.84%	5.31%	4.61%	13.98%
5-15m	48.38%	43.29%	39.17%	17.89%	44.12%
15-30m	22.28%	32.58%	42.20%	15.79%	27.65%
30-60m	4.74%	9.88%	11.90%	34.74%	10.50%
60m+	1.29%	2.41%	1.43%	26.97%	3.75%
		100%			

2011 Census Journey to Work by Bike: 6907 (BHCC Census Data)

Journeys by Bike equivalent all journey purposes: 38372

Likely over estimate of daily travel

Corrections by reducing by estimated 10%: 34535

Calculation of Average Journey Length

Assumption that average cycle speed is: 16 km/h (based on standard cycle speed from accession)

266.7 m/minute

Journey Time	short distance (m)	long distance (m)	trips per distance	short distance Ave/t	long distance Ave/trip
< 5m		1333	4089		5451925
5-15m	1333	4000	14950	19933602	59800806
15-30m	4000	8000	11252	45006012	90012024
30-60m	8000	16000	3412	27296464	54592928
60m+		16000	832		13316696
			total trip distance	111004699	223174379
	range of trip distance (m) all journey types			3214	6462
	range of trip distance (km) all journey types			3.2	6.5

Journey Per day per person (NHT for BHCC Area)

Overall

Reason	% Overall	
Work	14%	25.9%
Return Home	46%	
Education	7%	
Health	2%	
Shopping	13%	
Leisure	15%	
Faith	1%	
Other	2%	

By Bike

Reason	% Bike	est trips	
Work	18%	6216	31.6%
Return Home	43%	14850	
Education	6%	2072	
Health	3%	1036	
Shopping	8%	2763	
Leisure	17%	5871	
Faith	1%	345	
Other	4%	1381	
		34535	

BHCC		National	
Average trip length (km)	4.84	NTS 2011 (km)	4.8

Health Benefits Calculation Using Webtage 3.14.1

Calculate Mean Distance Travelled Per Annum

Mean Distance travelled on route	4.84	km	*from calculation on Demand Worksheet*
Mean speed on route	16	km/h	*from calculation on Demand Worksheet*
Proportion of users who make a return trip	90%		
Average days travelled on route	124	taken from WHO HEAT assessment	
Mean Distance travelled per year per cyclist	1140		

Calculate relative risk for scheme study area

mean distance travelled per year per cyclist calculated from HEAT assessment		1091	km
Relative risk (Copenhagen)		0.72	
1-relative risk (Copenhagen)		0.28	
1 - Relative risk (scheme study area)		0.29	

Calculate Reduced Mortality

Mean proportion of England Wales population aged 15-64 who die each year from all causes (Source ONS, 2011)		0.00223	
Extra cyclist encouraged by scheme relative to without intervention case		556	
Expected deaths in this population		1.2399	
Lives saved (in year x) =		0.36	
Cost of Life (Source DfT, 2010 cost at 2010 prices)	£	1.654	million
Reduced Mortality benefits (in year 2010 prices)	£	599,948	

Range of Potential Future Health Benefits based on Sensitivities on Growth					
		all purposes		Total	Potential Range Helath Benefits
Source	Figure	OSR ph2	A259	Both	
Webtage	1.36%	182	161	344	£371,191
Census	2.20%	295	261	556	£599,948
Cycle Coun	6.84%	918	811	1729	£1,865,665

Based on Proposed On road segregated lane improvement along the Old Shoreham Road (Phase 2) and A259 Marine Parade.

Scheme Length

OSR2	0.9 km	900 metres
A259	2.07 km	2070 metres
		2970 metres

Based on cycle counters and local cycle counts for OSR (phase 1)

Pre-Intervention Cycle Flows

OSR1 pre-intervention survey average flow (proxy OSR2) 2011 + growth to scheme opening 351 cycles two way

A259 Marine Parade BHCC Counter 958 plus growth to scheme opening 310 cycles two way

Post Intervention Cycle Flows demand on top of existing	Demand Assumptions			
	1.36%	2.20%	6.84%	
OSR2	533	646	1269	cycles two way
A259 Marine Parade	471	571	1121	cycles two way

Total time of existing cycles on sections of routes (based on 16km/h speed)

OSR2	3.4 minutes
A259 Marine Parade	7.8 minutes

Estimate of Time/ monetised Benefit for Existing cyclists

			value		ben/min	ben/hour
OSR2	1185	minutes	2.99	p/min	£ 3,542	£ 212,522
A259 Marine Parade	2406	minutes	2.99	p/min	£ 7,195	£ 431,704
			(from table 4 webtag 3.14.1)			

Estimate of Time/ monetised Benefit for Potential cyclists

	webtag	census	counter		value		webtage demand ben/min	webtage demand ben/hour	Census demand ben/min	Census demand ben/hour	Counter demand ben/min	Counter demand ben/hour
OSR2	616	996	3098	minutes	2.99	p/min	£ 921	£ 55,233	£ 1,488	£ 89,308	£ 4,632	£ 277,913
A259 Marine Parade	1251	2026	6295	minutes	2.99	p/min	£ 1,870	£ 112,197	£ 3,029	£ 181,733	£ 9,412	£ 564,696
					(from table 4 webtag 3.14.1		reduced by value of half		reduced by value of half		reduced by value of half	

Range of Potential Future Journey Ambience benefits based on Sensitivities on Growth					
		all purposes		Total	Potential Range JA Benefits
Source	Figure	OSR ph2	A259	Both	
Webtage	1.36%	182	161	344	£ 811,655
Census	2.20%	295	261	556	£ 915,266
Cycle Counts	6.84%	918	811	1729	£ 1,486,835

Potential Reduction in Absenteeism from Increased Cycling

Based on Webtage 3.14.1 and also Webtag 3.5.6

Based on the information within the 3.1.4.1 advice

Annual benefit to employers of increased walk and cycle per day through reduced absenteeism is 0.4 days gross salary costs

There are predicted to be 108 new journey to work due to the schemes

Average hourly salary taken from Webtage 3.5.6 £ 28.68 per hour

Average hours worked from ONS for full time employment 42.7 hours per week
Average hours worked from ONS for full time employment 8.54 per day

estimated costs per day based on above figures £ 244.93 per day cost

Therefore 0.4 days gross salary costs as a saving £ 97.97 average saving per annum per person

	webtage demand	census demand	count demand
Number of additional work cyclists from scheme interventions	108	175	546
Per annum saving in absenteeism through increase cycling	£10,630	£17,145	£53,492

BHCC Cycle Scheme OSR Phase 2 and A259 Marine Parade

Calculation of Benefits over 10 years of Cycle Strategy

It is assumed that construction of the schemes will take place in the 2014/2015 year and come in to service by the end of the 2014/2015 financial period

It is expected that the build up of cycle use will take 3 year (linear growth from base to predicted demand)
with full demand being used from 2018 to 2025 (7 years)
Although there may be a rate of decay in cycle users, this would be ofset at the very least by new developments along and at the end of the routes (see *map figure* worksheet)

Calculated Annual Benefits based on 3533 increase in cycle demand over base "without schemes"

Year 1 increase after opening	1178
Year 2 increase after opening	2355
Year 3 increase after opening	535
Years 4 to 10 after opening	535 per year

Based on Webtag Demand for Cycle Use

Potential Benefit	Per Annum	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Benefits over Period
Health Benefits	£ 371,191	£ 123,730	£ 247,461	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 3,340,719
Journey Ambience	£ 811,655	£ 270,552	£ 541,104	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 7,304,898
Reduced Absenteeism	£ 10,630	£ 3,543	£ 7,086	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 95,667
											Total Potential Benefits over 10 years	£ 10,741,285

Based on Census Growth Demand for Cycle Use

Potential Benefit	Per Annum	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Benefits over Period
Health Benefits	£ 599,948	£ 199,983	£ 399,965	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 3,569,476
Journey Ambience	£ 915,266	£ 305,089	£ 610,178	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 7,408,509
Reduced Absenteeism	£ 17,145	£ 5,715	£ 11,430	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 102,183
											Total Potential Benefits over 10 years	£ 11,080,168

Based on Counter Growth Demand for Cycle Use

Potential Benefit	Per Annum	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Benefits over Period
Health Benefits	£ 1,865,665	£ 621,888	£ 1,243,777	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 371,191	£ 4,835,193
Journey Ambience	£ 1,486,835	£ 495,612	£ 991,223	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 811,655	£ 7,980,078
Reduced Absenteeism	£ 53,492	£ 17,831	£ 35,661	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 10,630	£ 138,530
											Total Potential Benefits over 10 years	£ 12,953,800

Discount Benefits

Source: http://www.hm-treasury.gov.uk/d/green_book_complete.pdf
THE GREEN BOOK, Appraisal and Evaluation in Central Government
TABLE 6.1:THE DECLINING LONG TERM DISCOUNT RATE

Years	for calc	Discount rate
0-30	0	3.50%
31-75	31	3.00%
76-125	76	2.50%
126-200	126	2.00%
201-300	201	1.50%
301 and	301	1.00%

	2010	2011	2012	2013	2014									
	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Discount Rate	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Cumulative Discount	100.00%	96.62%	93.35%	90.19%	87.14%	84.20%	81.35%	78.60%	75.94%	73.37%	70.89%	68.49%	66.18%	63.94%

Discount over 10 years

Discounted benefits	£ 7,614,699	at 2010 prices	webtag
Discounted benefits	£ 7,854,939	at 2010 prices	census
Discounted benefits	£ 9,183,193	at 2010 prices	counter

Costs for DfT funding Bid taken from BHCC calculations spreadsheet
(2012 prices with increase by Baxter to 2014 construction)

	Webtag	Census	Counter
Old Shoreham Road Phase 2	£ 1,400,000	£ 1,400,000	£ 1,400,000
A259 Marine Parade	£ 3,350,000	£ 3,350,000	£ 3,350,000
Combined Total Costs in 2014/2015	£ 4,750,000	£ 4,750,000	£ 4,750,000
Discount of Costs (4 years to 2010)	£ 4,139,351	£ 4,139,351	£ 4,139,351
Potential Discounted Benefits (health,JA, Absent)	£ 7,614,699	£ 7,854,939	£ 9,183,193
Potential Discounted benefits from HEAT Assessment over 10 years	£ 1,550,000	£ 2,500,000	£ 7,770,000
Potential Benefit to Costs Ratio	2.2	2.5	4.1

The WHO HEAT assessment was used with the various growth rates assumptions

Growth Assumption	Rate	HEAT outcome average annual benefit
webtag	1.36%	£ 155,000
census	2.20%	£ 250,000
counter	6.84%	£ 777,000

Appendix B WHO HEAT Calculations

HEAT estimate

Reduced mortality as a result of changes in cycling behaviour

The number of individuals cycling has **increased** between your pre and post data.
There are now **344 additional** individuals regularly cycling, compared to the baseline.

However, the average amount of cycling per person per year has not changed.
The reported level of cycling in both your pre and post data gives a reduced risk of mortality of: **21 %**, compared to individuals who do not regularly cycle.

Taking this into account, the number of deaths per year that are prevented by this change in cycling is: **0.18**

Financial savings as a result of cycling

Currency: GBP, rounded to 1000

The value of statistical life applied is: **1,654,000 GBP**	
*Based on a **5** year build up for benefits, a **3** year build up for uptake of cycling, and an assessment period of **10** years:*	
the average annual benefit, averaged over **10** years is:	**196,000 GBP**
the total benefits accumulated over **10** years are:	**1,965,000 GBP**
the maximum annual benefit reached by this level of cycling, per year, is:	**305,000 GBP**
This level of benefit is realised in year **9** when both health benefits and uptake of cycling have reached the maximum levels.	
When future benefits are discounted by **3.50 %** per year:	
the current value of the average annual benefit, averaged across 10 years is:	**155,000 GBP**
the current value of the total benefits accumulated over 10 years is:	**1,545,000 GBP**

Please bear in mind that HEAT does not calculate risk reductions for individual persons but an average across the population under study. The results should not be misunderstood to represent individual risk reductions. Also note that the VSL not assign a value to the life of one particular person but refers to an average value of a â€œstatistical lifeâ€•.

It is important to remember that many of the variables used within this HEAT calculation are estimates and therefore liable to some degree of error.

You are reminded that the HEAT tools provide you with an approximation of the level of health benefits. To get a better sense for the possible range of the results, you are advised to rerun the model, entering slightly different values for variables where you have provided a â€œbest guessâ€•, such as entering high and low estimates for such variables.

HEAT estimate

Reduced mortality as a result of changes in cycling behaviour

The number of individuals cycling has **increased** between your pre and post data.
There are now **1,217 additional** individuals regularly cycling, compared to the baseline.

However, the average amount of cycling per person per year has not changed.
The reported level of cycling in both your pre and post data gives a reduced risk of mortality of: **21 %**, compared to individuals who do not regularly cycle.

Taking this into account, the number of deaths per year that are prevented by this change in cycling is: **0.65**

Financial savings as a result of cycling

Currency: GBP, rounded to 1000

The value of statistical life applied is: **1,654,000 GBP**	
*Based on a **5** year build up for benefits, a **3** year build up for uptake of cycling, and an assessment period of **10** years:*	
the average annual benefit, averaged over **10** years is:	**695,000 GBP**
the total benefits accumulated over **10** years are:	**6,950,000 GBP**
the maximum annual benefit reached by this level of cycling, per year, is:	**1,078,000 GBP**
This level of benefit is realised in year **9** when both health benefits and uptake of cycling have reached the maximum levels.	
When future benefits are discounted by **3.50 %** per year:	
the current value of the average annual benefit, averaged across 10 years is:	**547,000 GBP**
the current value of the total benefits accumulated over 10 years is:	**5,466,000 GBP**

Please bear in mind that HEAT does not calculate risk reductions for individual persons but an average across the population under study. The results should not be misunderstood to represent individual risk reductions. Also note that the VSL not assign a value to the life of one particular person but refers to an average value of a â€œstatistical lifeâ€•.

It is important to remember that many of the variables used within this HEAT calculation are estimates and therefore liable to some degree of error.

You are reminded that the HEAT tools provide you with an approximation of the level of health benefits. To get a better sense for the possible range of the results, you are advised to rerun the model, entering slightly different values for variables where you have provided a â€œbest guessâ€•, such as entering high and low estimates for such variables.

HEAT estimate

Reduced mortality as a result of changes in cycling behaviour

The number of individuals cycling has **increased** between your pre and post data.
There are now **1,729 additional** individuals regularly cycling, compared to the baseline.

However, the average amount of cycling per person per year has not changed.
The reported level of cycling in both your pre and post data gives a reduced risk of mortality of: **21 %**, compared to individuals who do not regularly cycle.

Taking this into account, the number of deaths per year that are prevented by this change in cycling is: **0.93**

Financial savings as a result of cycling

Currency: GBP, rounded to 1000

The value of statistical life applied is: **1,654,000 GBP**	
*Based on a **5** year build up for benefits, a **3** year build up for uptake of cycling, and an assessment period of **10** years:*	
the average annual benefit, averaged over **10** years is:	**987,000 GBP**
the total benefits accumulated over **10** years are:	**9,875,000 GBP**
the maximum annual benefit reached by this level of cycling, per year, is:	**1,531,000 GBP**
This level of benefit is realised in year **9** when both health benefits and uptake of cycling have reached the maximum levels.	
When future benefits are discounted by **3.50 %** per year:	
the current value of the average annual benefit, averaged across 10 years is:	**777,000 GBP**
the current value of the total benefits accumulated over 10 years is:	**7,766,000 GBP**

Please bear in mind that HEAT does not calculate risk reductions for individual persons but an average across the population under study. The results should not be misunderstood to represent individual risk reductions. Also note that the VSL not assign a value to the life of one particular person but refers to an average value of a â€œstatistical lifeâ€•.

It is important to remember that many of the variables used within this HEAT calculation are estimates and therefore liable to some degree of error.

You are reminded that the HEAT tools provide you with an approximation of the level of health benefits. To get a better sense for the possible range of the results, you are advised to rerun the model, entering slightly different values for variables where you have provided a â€œbest guessâ€•, such as entering high and low estimates for such variables.

Appendix 2

Brighton & Hove City Council

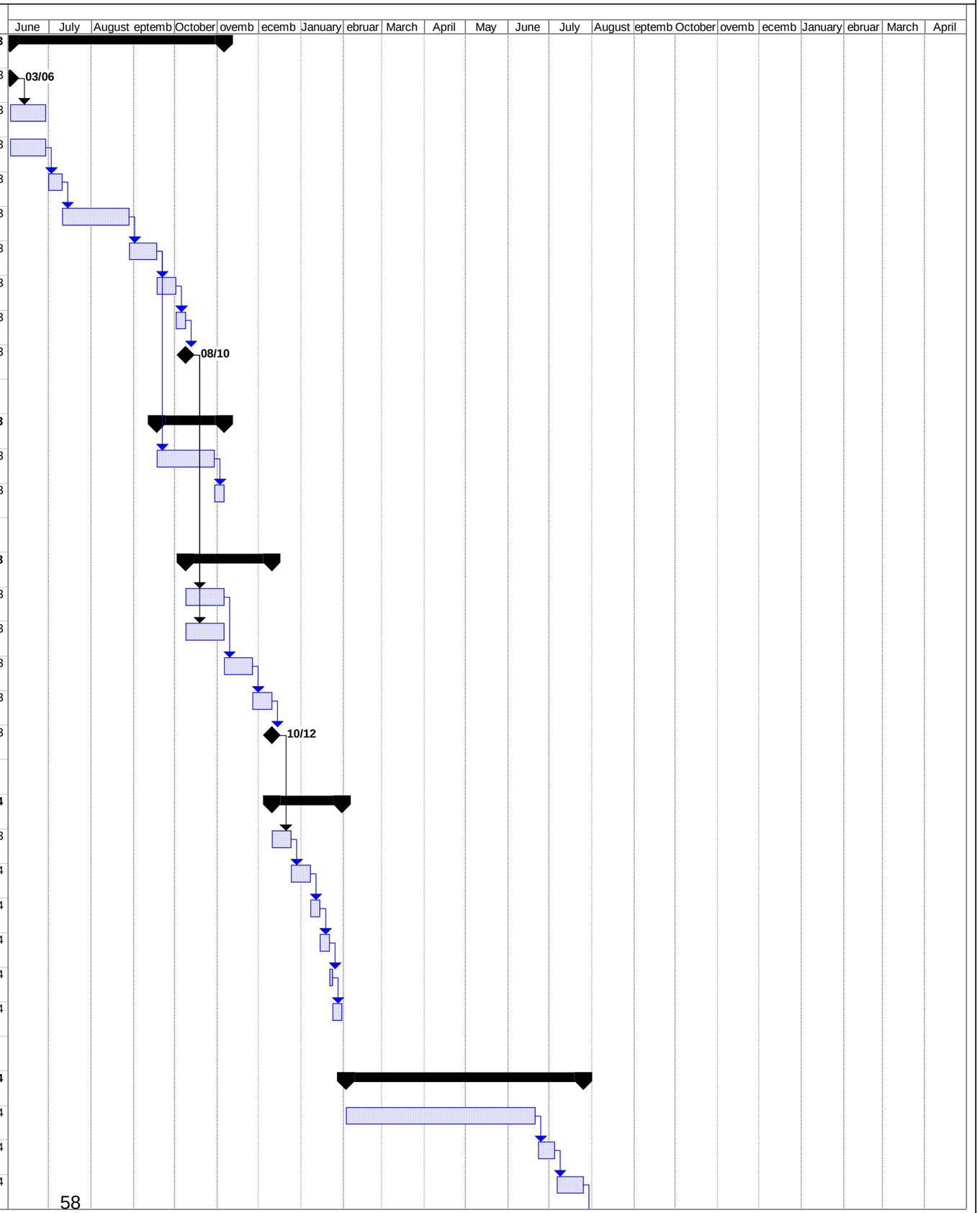
A259 Marine Parade - Brighton And Hove City Council

ID	Task Name	Duration	Start	Finish
1	**Preliminary design**	**162 days**	**Mon 03/06/13**	**Tue 14/01/14**
2	Project Approved to Proceed	0 days	Mon 03/06/13	Mon 03/06/13
3	C2 Stats Utilities Searches	60 days	Mon 03/06/13	Fri 23/08/13
4	Finalise Preliminary Design and draft TPO and schedules	80 days	Mon 03/06/13	Fri 20/09/13
5	Presentation to Councillor Committee for permission to consult (committee 8th October)	12 days	Mon 23/09/13	Tue 08/10/13
6	Prepare for and undertake Public Exhibition on Proposed Works (6 weeks consultation)	60 days	Wed 09/10/13	Tue 31/12/13
7	Review Exhibition Feedback and Committee (permission advertise TRO) 14 Jan 2014	10 days	Wed 01/01/14	Tue 14/01/14
8	Undertake RSA1 and designers response	20 days	Mon 23/09/13	Fri 18/10/13
9	Internal Review BHCC and allow for update plans post RSA1 and exhibition outcomes	40 days	Mon 21/10/13	Fri 13/12/13
10	Approval to proceed to Detailed Design and publish TRO	0 days	Tue 14/01/14	Tue 14/01/14
11				
12	**TRO Processes**	**35 days**	**Wed 15/01/14**	**Tue 04/03/14**
13	Publish TRO and Consultation Period	30 days	Wed 15/01/14	Tue 25/02/14
14	TRO Objections to Committee (4th March 2014) with report to approve TRO	5 days	Wed 26/02/14	Tue 04/03/14
15				
16	**Detail Design**	**40 days**	**Wed 15/01/14**	**Tue 11/03/14**
17	Detail design	15 days	Wed 15/01/14	Tue 04/02/14
18	C3 utility search and quotes	15 days	Wed 15/01/14	Tue 04/02/14
19	RSA2 and Designers Response	15 days	Wed 05/02/14	Tue 25/02/14
20	Technical Approval (BHCC internal)	10 days	Wed 26/02/14	Tue 11/03/14
21	DD Complete	0 days	Tue 11/03/14	Tue 11/03/14
22				
23	**Main works Tender Process**	**32 days**	**Wed 12/03/14**	**Thu 24/04/14**
24	Production of Bill of Quantities / Internal Ordering	5 days	Wed 12/03/14	Tue 18/03/14
25	Term Contractor Pricing	10 days	Wed 19/03/14	Tue 01/04/14
26	BHCC Pricing Review BBLP	5 days	Wed 02/04/14	Tue 08/04/14
27	BHCC Approval process	5 days	Wed 09/04/14	Tue 15/04/14
28	Start of Works Exhibition Local Centre	2 days	Wed 16/04/14	Thu 17/04/14
29	NRSWA Notices	5 days	Fri 18/04/14	Thu 24/04/14
30				
31	**Main Construction**	**220 days**	**Mon 28/04/14**	**Fri 27/02/15**
32	Start onsite construction (BHCC Term Contractor)	200 days	Mon 28/04/14	Fri 30/01/15
33	Road Satey Audit 3	10 days	Mon 02/02/15	Fri 13/02/15
34	Designers Responses to RSA 3 and Defects Review	10 days	Mon 16/02/15	Fri 27/02/15

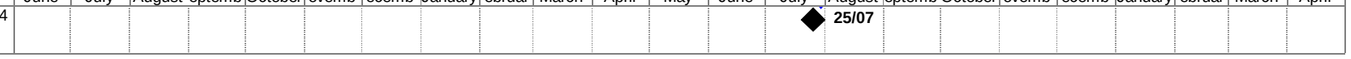
ID	Task Name	Duration	Start	Finish
35	**Project Complete**	0 days	Fri 27/02/15	Fri 27/02/15

Old Shoreham Road Phase 2

ID	Task Name	Duration	Start	Finish
1	**Preliminary design**	**112 days**	**Mon 03/06/13**	**Tue 05/11/13**
2	Project Approved to Proceed	0 days	Mon 03/06/13	Mon 03/06/13
3	C2 Stats Utilities Searches	20 days	Mon 03/06/13	Fri 28/06/13
4	Finalise Preliminary Design and draft TRO and schedules	20 days	Mon 03/06/13	Fri 28/06/13
5	Presentation to Councillor Committee for permission to consult (committee 9th July)	8 days	Mon 01/07/13	Wed 10/07/13
6	Prepare for and undertake Public Exhibition on Proposed Works (4 weeks consultation)	35 days	Thu 11/07/13	Wed 28/08/13
7	Review Exhibition Feedback and Committee (TRO) 8th Oct	14 days	Thu 29/08/13	Tue 17/09/13
8	Undertake RSA1 and designers response	10 days	Wed 18/09/13	Tue 01/10/13
9	Internal Review BHCC and allow for update plans post RSA1	5 days	Wed 02/10/13	Tue 08/10/13
10	Approval to proceed to Detailed Design	0 days	Tue 08/10/13	Tue 08/10/13
11				
12	**TRO Processes**	**35 days**	**Wed 18/09/13**	**Tue 05/11/13**
13	Publish TRO and Consultation Period	30 days	Wed 18/09/13	Tue 29/10/13
14	TRO Objections to Committee (26th November 2013) with report to approve TRO	5 days	Wed 30/10/13	Tue 05/11/13
15				
16	**Detail Design**	**45 days**	**Wed 09/10/13**	**Tue 10/12/13**
17	Detail design	20 days	Wed 09/10/13	Tue 05/11/13
18	C3 utility search and quotes	20 days	Wed 09/10/13	Tue 05/11/13
19	RSA2 and Designers Response	15 days	Wed 06/11/13	Tue 26/11/13
20	Technical Approval (BHCC internal)	10 days	Wed 27/11/13	Tue 10/12/13
21	DD Complete	0 days	Tue 10/12/13	Tue 10/12/13
22				
23	**Main works Tender Process**	**37 days**	**Wed 11/12/13**	**Thu 30/01/14**
24	Production of Bill of Quantities / Internal Ordering	10 days	Wed 11/12/13	Tue 24/12/13
25	Term Contractor Pricing	10 days	Wed 25/12/13	Tue 07/01/14
26	BHCC Pricing Review BBLP	5 days	Wed 08/01/14	Tue 14/01/14
27	BHCC Approval process	5 days	Wed 15/01/14	Tue 21/01/14
28	Start of Works Exhibition Local Centre	2 days	Wed 22/01/14	Thu 23/01/14
29	NRSWA Notices	5 days	Fri 24/01/14	Thu 30/01/14
30				
31	**Main Construction**	**125 days**	**Mon 03/02/14**	**Fri 25/07/14**
32	Start onsite construction (BHCC Term Contractor)	100 days	Mon 03/02/14	Fri 20/06/14
33	Road Satey Audit 3	10 days	Mon 23/06/14	Fri 04/07/14
34	Designers Responses to RSA 3 and Defects Review	15 days	Mon 07/07/14	Fri 25/07/14



ID	Task Name	Duration	Start	Finish
35	**Project Complete**	0 days	Fri 25/07/14	Fri 25/07/14



BHCC Old Shoreham Road Phase 2

Please provide one Pro Forma for each element of your scheme (e.g. each route) as well as for the aggregate impact.			
Input data	**Without Scheme**	**With Scheme**	**Reference to supporting information (e.g. section of Economic Assessment Report).**
Description of infrastructure/facilities	Wide single carriageway with double yellow lines along majority of route, 20 mph speed limit, recently reduced. No segregation between road users	Segregated on road facility, located between kerb and carriageway (separated from main through traffic by island), improved surface and finishes, drainage levels adjusted to improve surface flatness (no depressions at drainage gullys).	*See economic appraisal report, main submission documents with photographs of before and after treatments for the OSR phase 1 works.*
Route length (km)	0.9km	0.9km	*Refer for more detailed description (incl maps etc). Not expected to change unless new routes provided.*
Average trip length (km)	Range of trip length averages from 3.2km to 6.5km with the average at 4.84km	Range of trip length averages from 3.2km to 6.5km with the average at 4.84km	*Based on BHCC PTP information*
Average cycling speed	16km/h	16km/h	*Based on average used within DfT Accession modelling*
Number of users (per day)	351	533 646 1269	*Without scheme taken from 2012 traffic counter with addition of average ward cycle growth per year for appropriate wards of 5%. With scheme based on calcs within webtag 3.14.1 (see separate spreadsheet) and range of growth (1.36%, 2.20% & 6.84%)*
Percentage of additional cyclists that would have driven a car otherwise.	N.A.	11%	*Taken from BHCC NTS surveys see Economic Appraisal Report for details*
Car Traffic vehicle kilometres (per average day)	In 2001 counter 26303 8788 By 2011 counter 46301 13089	Approx 9932 by 2014 opening without scheme implementation counter 26303 Approx 12709 by 2014 opening without scheme implementation counter 46301 Assume further 6% reduction with scheme to 9336 on counter 26303 & 11947 on counter 46301	*Taken from http://www.dft.gov.uk/traffic-counts/ for major roads traffic counters 26303 & 46301 cars and taxi with estimate of 6% for further reduction with the scheme based on NHT figures for BHCC for monthly could drive car / cycle as potential level for conversion*

BHCC A259 Marine Parade On road Cycle Facility

Please provide one Pro Forma for each element of your scheme (e.g. each route) as well as for the aggregate impact.			
Input data	**Without Scheme**	**With Scheme**	**Reference to supporting information (e.g. section of Economic Assessment Report).**
Description of infrastructure/facilities	Wide single carriageway with on street parking (permit and pay & Display) all majority of route, 30 mph speed limit. No segregation between road users	Segregated on road facility, located between kerb and parking bay areas (separated from main through traffic by parked cars), improved surface and finishes, drainage levels adjusted to improve surface flatness (no depressions at drainage gullys).	*See economic appraisal report, main submission documents with photographs of before and after treatments for the OSR phase 1 works.*
Route length (km)	2.07	2.07	*Refer for more detailed description (incl maps etc). Not expected to change unless new routes provided.*
Average trip length (km)	Range of trip length averages from 3.2km to 6.5km with the average at 4.8km	Range of trip length averages from 3.2km to 6.5km with the average at 4.8km	*Based on BHCC PTP information*
Average cycling speed	16km/h	16km/h	*Based on average used within DfT Accession modelling*
Number of users (per day)	310	471 571 1121	*Without scheme taken from 2012 traffic counter with addition of average ward cycle growth per year for appropriate wards of 5%. With scheme based on calcs within webtag 3.14.1 (see separate spreadsheet) and range of growth (1.36%, 2.20% & 6.84%)*
Percentage of additional cyclists that would have driven a car otherwise.	N.A.	11%	*Taken from BHCC NTS surveys see Economic Appraisal Report for details*
Car Traffic vehicle kilometres (per average day)	In 2001 7590 By 2011 5880	Approx 5367 by 2014 opening without scheme implementation Assume further 6% reduction with scheme to 5045	*Taken from http://www.dft.gov.uk/traffic-counts/ for major roads traffic counter 47895 cars and taxi with estimate of 6% for further reduction with the scheme based on NHT figures for BHCC for monthly could drive car / cycle as potential level for conversion*

Calculation of relative potential reduction in car use with the scheme

Reduction from 2011 to 2001	1710
Estimated reduction per year	171
Potential background reduction by Scheme open 2014	513
Potential Car Trafffic vehicle kilometres by scheme opening	5367
6% reduction with scheme based on half of 11% monthly alternative car / cycle stats from NHT for BHCC area	5045

Appendix 3

RISK MANAGEMENT STRATEGY A259 MARINE PARADE AND OLD SHOREHAM ROAD PHASE 2

The Cycle City Ambitions Grant bidding guidance sets out a requirement for promoters to prepare a supporting Risk Management Strategy and in addition, ask for specific questions on how risk is being handled:

- What Risk Allowance is applied;
- How will cost overruns be dealt with;
- What are the main risks to project delivery timescales and what is the cost impact; and
- How will cost overruns be shared between non-DfT funding partners

Reponses to each of these are provided in the main bid document, but these should be seen in the context of the overall strategy for managing risk adopted for the cycle improvement schemes.

The objective of the strategy is to ensure that the risks potentially affecting the schemes are identified, assessed and reviewed and that measures are in place to manage risk and respond to changes in the level of risk.

Specific actions covered by the strategy include these critical tasks:

- Setting up the risk register covering as many risks as can be identified and whose impact can be classified;
- Maintenance of the risk register;
- Managing the risks through a process of review, coupled to specific actions – toleration, treating the risk by mitigation actions, transferring the risk to another owner, or terminating the activity in question, thus extinguishing the risk;
- For those remaining under active management, escalating the risk if it cannot be mitigated or otherwise dealt with.

The risk registers appended to this document have been drawn up for both schemes. From this, the principal risks are associated with the securing of Councillor and Senior Officer 'buy-in', the potential impact of no funding from DfT and the outcome of Traffic Regulation Order processes. The register sets out key mitigation approaches and the appended project programme provides time for Project Board and Council Committee review and approval processes.

The risk register will be kept under regular review, as much of the delivery process is at an early state of organisation. In addition to this:

- The risk register will be updated with periodic BHCC project board aligned to the main delivery milestones;
- The City Council will seek to transfer ownership of certain construction-related risks to the contractor, through the Term Commission process;
- The Project Manager will keep the risk register up to date and in the event of any changes potentially raising the level of exposure, the respective risk owners and SRO will be informed, with all actions (e.g. formal escalation to the Project Board) recorded in the risk management log;

At the present time, the risk register is being developed to include the project manager's responses to risks and the document includes initial views on the identity of the risk owners and their respective actions. This will be taken forward noting the on-going risk responses, however active management of the strategy through the risk register in a substantive manner awaits the first meeting of the project delivery team and Project Board.

Any perceived issues in securing detailed scheme approval has to be set against the lack of planning permission needed, urban environment (low ecology impacts), the support shown through Council policy and local stakeholders (to previous schemes).

Initial cost estimates have been prepared by BHCC and the following contingencies have been applied:

- 10% contingency applied to preliminary, detailed design and TRO production
- 20% contingency applied to construction costs, including Baxter Indices uplift to likely 2014 construction prices.

This equates to a Cost of risk of approximately:

A259 Marine Parade	£570,000
Old Shoreham Road phase 2	£225,000

Potential Cost overruns will be dealt with through careful planning between all parties on traffic management and also detailed cost estimates from tendered Bills of Quantities. The construction contract allows for early warning and negotiations with contractors to seek to minimise cost overruns and offset delays through improved working practices. Approach will include:

(i) early involvement with supplier to minimise risk (BHCC Term Contractor)

(ii) risk + reward sharing form of contract and

(iii) ultimately, risk falls back to BHCC

BHCC will bear cost overruns from capital funding sources and will seek to “backfill” these from Developer contributions from sites within BHCC administrative areas.

			PRE - MITIGATION						RESIDUAL RISK POST MITIGATION		
Risk ID	Risk Description	Threat / Opportunity	Probability of Occurrence	Cost Impact if Occurs	Overall Risk Score	Risk Response	Risk Org	Risk Mitigation Owner	Probability of Occurrence	Cost Impact if Occurs	Overall Risk Score
	STRATEGIC RISKS										
1.1	Lack of commitment from Elected Members	Threat	Unlikely	VH	10	BHCC Policy to improve cycling, local consultation on routes and TRO, phase 1 scheme already in place.	BHCC	BHCC	Unlikely	VH	10
1.2	Lack of commitment/ support from Senior Management	Threat	Unlikely	VH	10	BHCC Policy, local commitment to cycle improvements, engineering issues known	BHCC	BHCC	Unlikely	VH	10
1.3	DfT funding sources not available	Threat	Unlikely	VH	10	Review with DfT reason for not funding, review internal processes and scheme costs, update project information and approach to support future bids, review potential for alternative funding sources (other Government or LEP bid approachs, CIL/S106 funding)	BHCC	BHCC	Unlikely	VH	10
	PROJECT RISKS										
2.1	Design constraints due to constrained highway boundary	Threat	Unlikely	H	8	Reviewed highway boundary as part of preliminary design.	BHCC	BHCC	Unlikely	M	6
2.2	Unexpected land purchase requirements	Threat	Unlikely	L	4	Continual design review, highway boundary already known, scheme general approach already known	BHCC	BHCC	Very Unlikely	H	4
2.3	Statutory Utilities in highway	Threat	Fairly Likely	H	12	Early C2 collation and adjustment to design as required plus C3 stats design processes. Provisional costs for diversions lowering allowed for in OB and cost estimation	BHCC	BHCC	Unlikely	H	8
2.4	Lack of topographical information	Threat	Very Unlikely	M	3	Land survey information will be collected at strat of project along with stats	BHCC	BHCC	Very Unlikely	H	4
2.5	Failure to agree on technical design issues (alignments, cross sections, highways width, cycleways / footway provision etc)	Threat	Unlikely	M	6	Internal discussions between various BHCC technical officers with input from external stakeholders (CTC and others). Road safety audits will be needed on detailed design.	BHCC	BHCC	Very Unlikely	M	3
2.6	Impact of temporary TM restrictions greater than expected	Threat	Likely	M	12	Early involvement with Technical Officers at WBC and BFC, discusisons with Emergency Services, detailed TM plans when contractor in place	BHCC	BHCC	Fairly Likely	M	9
2.7	Lack of co-ordination with other highway works	Threat	Fairly Likely	M	9	Early discussions over highway access arrangements and section 50 notices. Road space booking as early as possible with NRSWA team in BHCC.	BHCC	BHCC	Unlikely	M	6
2.8	Traffic management issues	Threat	Fairly Likely	M	9	Early involvement with Technical Officers at BHCC, discusisons with Emergency Services, detailed TM plans when contractor in place and NRSWA permits	BHCC	BHCC	Fairly Likely	M	9
2.9	Unforeseen ecological sensitivities	Threat	Unlikely	M	6	existing roadways and pavements, not through any greenfield or sensitive ecological areas	BHCC	BHCC	Unlikely	L	4
2.10	Supply chain insolvencies	Threat	Very Unlikely	H	4	Contractor wil be BHCC Term Contractor who would be freshly appointed, so wil have gone through procurement process	BHCC	BHCC	Very Unlikely	L	2
2.11	Road Safety Audit Issues which are unresolveable	Threat	Unlikely	H	8	Known design approaches (from previous projects), continuous internal review and technical officer oversight, early RSA1 to identify any kley issues.	BHCC	BHCC	Unlikely	L	4
2.12	Project scope creep, pressure to include other "non-related" works - impact on time and costs	Threat	Fairly Likely	H	12	Internal BHCC project board for scrutiny and agreement to any scheme extension, only agreed if funding available and does not affect project delilvery timescales.	BHCC	BHCC	Unlikely	M	6
2.13	Objections to Traffic Regulation Orders	Threat	Likely	H	16	BHCC internal processes followed to get approval to proceed to advertise TRO, review exhibition and TRO feedback and present to Councillors for approval to adopt. Impact on additional need for further TRO review and councillor agreement	BHCC	BHCC	Fairly Likely	M	9
2.14	Poor accuracy of cost estimates	Threat	Unlikely	H	8	Ongoing review of costs during preliminary and detailed design work, based on known costs from OSR phase 1 works	BHCC	BHCC	Unlikely	M	6

			PRE - MITIGATION						RESIDUAL RISK POST MITIGATION		
Risk ID	**Risk Description**	**Threat / Opportunity**	**Probability of Occurrence**	**Cost Impact if Occurs**	**Overall Risk Score**	**Risk Response**	**Risk Org**	**Risk Mitigation Owner**	**Probability of Occurrence**	**Cost Impact if Occurs**	**Overall Risk Score**
	STRATEGIC RISKS										
1.1	Lack of commitment from Elected Members	Threat	Unlikely	VH	10	BHCC Policy to improve cycling, local consultation on routes and TRO, phase 1 scheme already in place.	BHCC	BHCC	Unlikely	VH	10
1.2	Lack of commitment/ support from Senior Management	Threat	Unlikely	VH	10	BHCC Policy, local commitment to cycle improvements, engineering issues known	BHCC	BHCC	Unlikely	VH	10
1.3	DfT funding sources not available	Threat	Unlikely	VH	10	Review with DfT reason for not funding, review internal processes and scheme costs, update project information and approach to support future bids, review potential for alternative funding sources (other Government or LEP bid approachs, CIL/S106 funding)	BHCC	BHCC	Unlikely	VH	10
	PROJECT RISKS										
2.1	Design constraints due to constrained highway boundary	Threat	Unlikely	H	8	Reviewed highway boundary as part of preliminary design.	BHCC	BHCC	Unlikely	M	6
2.2	Unexpected land purchase requirements	Threat	Unlikely	L	4	Continual design review, highway boundary already known, scheme general approach already known	BHCC	BHCC	Very Unlikely	H	4
2.3	Statutory Utilities in highway	Threat	Fairly Likely	H	12	Early C2 collation and adjustment to design as required plus C3 stats design processes. Provisional costs for diversions lowering allowed for in OB and cost estimation	BHCC	BHCC	Unlikely	H	8
2.4	Lack of topographical information	Threat	Very Unlikely	M	3	Land survey information will be collected at strat of project along with stats	BHCC	BHCC	Very Unlikely	M	3
2.5	Failure to agree on technical design issues (alignments, cross sections, highways width, cycleways / footway provision etc)	Threat	Unlikely	M	6	Internal discussions between various BHCC technical officers with input from external stakeholders (CTC and others). Road safety audits will be needed on detailed design.	BHCC	BHCC	Very Unlikely	M	3
2.6	Impact of temporary TM restrictions greater than expected	Threat	Likely	M	12	Early involvement with Technical Officers at WBC and BFC, discusisons with Emergency Services, detailed TM plans when contractor in place	BHCC	BHCC	Fairly Likely	M	9
2.7	Lack of co-ordination with other highway works	Threat	Fairly Likely	M	9	Early discussions over highway access arrangements and section 50 notices. Road space booking as early as possible with NRSWA team in BHCC.	BHCC	BHCC	Unlikely	M	6
2.8	Traffic management issues	Threat	Fairly Likely	M	9	Early involvement with Technical Officers at BHCC, discusisons with Emergency Services, detailed TM plans when contractor in place and NRSWA permits	BHCC	BHCC	Fairly Likely	M	9
2.9	Unforeseen ecological sensitivities	Threat	Unlikely	M	6	existing roadways and pavements, not through any greenfield or sensitive ecological areas	BHCC	BHCC	Unlikely	L	4
2.10	Supply chain insolvencies	Threat	Very Unlikely	H	4	Contractor wil be BHCC Term Contractor who would be freshly appointed, so wil have gone through procurement process	BHCC	BHCC	Very Unlikely	L	2
2.11	Road Safety Audit Issues which are unresolveable	Threat	Unlikely	H	8	Known design approaches (from previous projects), continuous internal review and technical officer oversight, early RSA1 to identify any kley issues.	BHCC	BHCC	Unlikely	L	4
2.12	Project scope creep, pressure to include other "non-related" works - impact on time and costs	Threat	Fairly Likely	H	12	Internal BHCC project board for scrutiny and agreement to any scheme extension, only agreed if funding available and does not affect project delilvery timescales.	BHCC	BHCC	Unlikely	M	6
2.13	Objections to Traffic Regulation Orders	Threat	Fairly Likely	M	9	Extension of existing scheme so historical background to local impacts known and likely cost implications lower. BHCC internal processes followed to get approval to proceed to advertise TRO, review exhibition and TRO feedback and present to Councillors for approval to adopt. Impact on additional need for further TRO review and councillor agreement	BHCC	BHCC	Unlikely	M	6
2.14	Poor accuracy of cost estimates	Threat	Unlikely	H	8	Ongoing review of costs during preliminary and detailed design work, based on known costs from OSR phase 1 works	BHCC	BHCC	Unlikely	M	6

Appendix 4

Brighton & Hove City Council

Coast to Capital
Arun House
Hurst Road
HORSHAM
West Sussex
RH12 2DN

26 April 2013

Ian Davey
Chair of Transport Committee
Member of Planning and Housing Committees
Brighton & Hove City Council
HOVE

Dear Ian,

Cycle City Ambition Grant

We strongly support Brighton & Hove City Council's bid to the Cycle City Ambition Grant fund which would mean that even more people would be able to enjoy cycling and walking in the Greater Brighton City Region (GBCR) for both utility and leisure purposes.

The LEP are very optimistic about the 'city deal' proposals being made by the GBCR for an 'eco-tech' region which will exploit the talent and skills of people in the Region while creating a much needed growth industry for the area. What is particularly exciting about this bid and the 10 year active travel Strategy is the potential for the GBCR to fully demonstrate the ethos of the industry it will be marketing by investing in a low-carbon transport system and exploring transport opportunities presented by 'eco tech' transport modes such as electric bikes.

Some commuting journeys are already being made by bike between GBCR towns like Lewes, Newhaven, Shoreham and Worthing with limited support to do so at present. The potential growth of active travel in the GBCR is massive and will be much needed in future years to ensure people have affordable and equal access to the job opportunities being created in the Region.

The cycle hubs planned for Brighton and Lewes stations will also see more people able to make longer journeys by walking and cycling to stations. The LEP is also encouraged by the potential for more sustainable tourism and growth in cycling-related businesses in the Region.

It is credit to the authorities involved in the city deal that they are agreed on the bid being spent on continuing urban routes in the city of Brighton & Hove. Clearly the GBCR accepts this investment as part of a long-term aim to create high-quality, consistent active travel networks in the Region. It is reassuring to see a ten year strategy with flexibility allowing the working relationship of authorities in the GBCR to grow alongside the needs and aspirations of their communities.

Yours sincerely,

Ron Crank
Chief Executive
Coast to Capital LEP

cc Abby Hone – Principal Transport Planner, Brighton & Hove City Council

Brighton & Hove City Council

Councillor Geoffrey Theobald, OBE
Leader of the Conservative Group

Trevan House
44 Dyke Road Avenue
Brighton
BN1 5LE

26th April 2013

Dear Cycle City Ambition bid team,

Re: Cycle City Ambition Grant bid

Thank you for involving us in the Cycle City Ambition Grant bid process. We value the opportunities the grant presents to support active travel in Brighton & Hove and certainly welcome working with adjoining authorities in the Greater Brighton City Region to create a decent quality active travel network to support our economy. This is both in terms of a more efficient transport network which sees less people travelling short distances by private vehicle and our health issues and associated costs reducing as more people take to the streets and travel actively

We are pleased to see the Public Space Public Life Legibility Study for Brighton & Hove being used to illustrate how better street design in our city, will address some of the most difficult transport related issues we face.

The bid also creates an ideal opportunity to work more closely with our authority partners in the Greater Brighton City Region, sharing best practice and working together to create the right facilities and environment for people to feel welcomed and able to cycle more and walk more.

We look forward to working with East Sussex and West Sussex to bring forward the start of a ten year focus on active travel in our region.

Yours sincerely,

Councillor Geoffrey Theobald
Conservative Group Leader

Councillor Graham Cox
Conservative Group Transport Spokesman

Telephone: (01273) 291195 or 556665
Fax: (01273) 501346

Email: geoffrey.theobald@brighton-hove.gov.uk

Conservative Member for Patcham Ward

Telephone: 01273 290000
www.brighton-hove.gov.uk
Printed on recycled, chlorine-free paper

Brighton & Hove City Council

Councillor Gill Mitchell
Leader of the Labour and Co-operative Group

41 Bennett Road
Kemp Town
Brighton BN2 5JL

Support Letter
Labour and Co-Operative Group, Brighton & Hove

Dear Ian and the Cycle City Ambition bid team,

Re: Cycle City Ambition Grant bid

Thank you for the opportunity to contribute to the Cycle City Ambition Grant bid. It has been good to see the Public Space Public Life Legibility Study for Brighton & Hove being used as the basis for better street design in our city. The people centred approach to designing our streets is certainly a good way forward to create the balance we need in our transport system, creating an efficient network which properly supports people to feel able to travel actively.

We also welcome the opportunity the bid creates to work more closely with our authority partners in the Greater Brighton City Region, sharing best practice and working together to create the right facilities and environment for people to feel welcomed and able to cycle more and walk more.

We are happy to support the bid for grant funding to support two active travel schemes which have the potential to transform how people are able to travel in Brighton & Hove and eventually beyond and across authority boundaries. We are aware that the Old Shoreham Road scheme has had a positive impact in creating a more people friendly environment where levels of cycling are increasing. Extending the benefit of this facility further west makes good strategic sense, with pending developments where there will be pressure on the transport network and the existing number of students heading to schools like Hove Park and Blatchington. The A259 on the Seafront road at Marine Parade will be a very welcome addition to the network, allocating space in a proportionate way to encourage greater use of the public realm and creating an environment more permeable and inviting for pedestrians and cyclists.

We look forward to working with East Sussex and West Sussex to bring forward the start of a ten year focus on active travel in our region.

Yours sincerely,

Councillor Gill Mitchell
Leader - Labour and Co-Operative Group, Brighton & Hove

Telephone/Fax: (01273) 291177
Email: gill.mitchell@brighton-hove.gov.uk
Labour and Co-Operative Member for East Brighton Ward

Telephone: 01273 290000
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Brighton & Hove City Council

Public Health Department
Room 127, King's House
Hove, Grand Avenue
Hove, BN3 2LS

Date: 24th April 2013

e-mail: tom.scanlon@brighton-hove.gov.uk

Dear Councillor Davey and Cycle City Ambition bid team

Re: Greater Brighton Cycle City Ambition Bid

I am writing to confirm our strong partnership support for the above bid.

Increasing walking and cycling is a major priority for the Greater Brighton City Region which supports a number of public health priorities:

- Increasing physical activity levels,
- reducing road traffic accidents,
- increasing mental health and wellbeing and
- improving air quality

If successful this bid will enable significant and transformative changes to occur in our Region which would impact our population positively on all of the priorities above.

The two schemes being proposed in the urban centre of Brighton & Hove (Old Shoreham Road and Marine Parade) would mean that even more people are able to enjoy moving around the region in a healthy and sustainable way, especially as the 10 year strategy will seek to expand consistent high quality active travel routes throughout the Greater Brighton City Region.

The Region is bounded by the newly designated South Downs National Park (SDNP) where there is much potential for improved sustainable transport connections and people travelling actively to the SDNP from urban centres in the region by also integrating with other transport modes.

We look forward to working together with our partners in the city region to create the active travel environment we need.

Yours sincerely,

Tom Scanlon
Director of Public Health

Councillor Rob Jarrett
Chair of Health & Wellbeing Board

Brighton & Hove City Council
King's House
Grand Avenue
Hove BN3 2LS

Dear Councillor Davey and Cycle City Ambition bid team

Re: Greater Brighton Cycle City Ambition Bid

I am writing to confirm my support for the above bid.

The Health & Wellbeing Board has agreed a number of priorities for improving health and wellbeing across the city. These priorities include plans to improve emotional wellbeing and to promote healthy weight and good nutrition.

It is well established that regular exercise is a key element in maintaining healthy weight, and any initiative which makes it easier for city residents to walk or cycle is therefore likely to make a valuable contribution to reducing obesity levels.

Similarly, whilst emotional wellbeing is a complex issue, it is widely accepted that regular exercise can make a significant contribution to people's happiness.

I am therefore very happy to give my backing to the bid and look forward to learning more about its progress.

Yours sincerely

Cllr Rob Jarrett
Chair, Brighton & Hove Health & Wellbeing Board

Tel: 01273 291148
Email: rob.jarrett@brighton-hove.gov.uk

Cabinet Member for Adult Social Care & Health
Green Party Councillor for Goldsmid Ward

Economy, Transport & Environment

Rupert Clubb
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Abby Hone
Principal Transport Planner
Brighton & Hove City Council
Room 405, 2nd Floor, Hove Town Hall
Norton Road
HOVE
BN3 3BQ

26 April 2013

Dear Abby

BRIGHTON & HOVE'S CYCLE CITY AMBITION BID

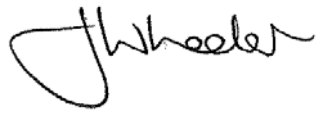
I am writing to confirm East Sussex County Council's wishes to support Brighton & Hove's Cycle City Ambition bid. We recognise the huge benefits for the provision of creating seamless cross boundary cycle networks for existing and potential cyclists between Brighton & Hove and East Sussex, and would be keen to work with yourselves and other partners to facilitate this now and in the future.

This principle is outlined in ESCC Local Transport Plan Implementation Plan 2011 - 2026 in our approach to the 'Lewes, South Coast Towns (Telscombe Cliffs, Peacehaven and Seaford) and South Downs' area. This states that ESCC will 'focus on improvements for safe and coherent walking and cycling routes on key corridors from Brighton and Hove and within Lewes and the south coast towns. This policy is supported through ESCC Implementation Plan 2011/12-2015/16, which guides the investment priorities in the County Council's Local Transport Capital Programme. This outlines that we will look to improve the walking and cycling route 'Regional Route 90' between Lewes and Brighton, subject to the availability of funding, by the end of the Implementation Plan period.

As you are already aware we are undertaking a considerable number of measures that supports access by walking and cycling across the boundaries between Brighton and Lewes as part of our respective Local Sustainable Transport Fund (LSTF) programmes and the 2 Parks LSTF programme all of which complements your bid.

If you require any further information please contact me and we wish you success with the bid.

Yours sincerely



Jon Wheeler
Team Manager, Strategic Economic Infrastructure

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Transport Planner
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(01243) 642105

Ian Davey
Deputy Leader
Brighton & Hove City Council

29th April 2013

Dear Cllr Davey,

Greater Brighton Active Travel 2013-2023 City Ambition Grant Bid

West Sussex County Council is delighted to support Brighton & Hove City Council's City Deal bid and vision for improving cycle infrastructure across the Greater Brighton City Deal area.

The aspirations for active travel contained in the bid and vision align with the County Council's aims in the West Sussex Transport Plan 2011-26. The Greater Brighton region includes Adur and Worthing Districts in West Sussex, who share many of the same transport characteristics as Brighton. Alleviating the inefficient transport network here, costing the Sussex economy £2.5bn annually, will benefit the economy of the City Deal Region.

The vision looks to foster economic growth, by connecting those less economically active communities along the coast through access to jobs and opportunities. One example is improved access to Shoreham Harbour that will support the regeneration of this area.

Active travel reduces the health inequalities experienced in many of our most deprived communities in West Sussex. This will assist the County Council in its new role as strategic health commissioner through its Promoting Action on Health Inequalities 2012-2017 strategy.

West Sussex County Council looks forward to working in partnership with Brighton & Hove City Council to deliver local community aspirations for active travel.

I wish you all the best with the bid submission.

Yours sincerely,

Pieter Montyn
Cabinet Member Highways & Transport
West Sussex County Council

sustrans
JOIN THE MOVEMENT

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BY EMAIL

Abby Hone
Principal Transport Planner
Brighton & Hove City Council
Room 405, 2nd Flr, Hove Town Hall
Norton Road
Hove BN3 3BQ

29 April 2013

Dear Abby

Cycle Cities Ambition Fund

Sustrans is fully supportive of your "East – West Cycle Corridors in Brighton and Hove" proposal. The 10-year strategy is suitably ambitious and with a sustained level of investment is certainly achievable. Your detailed proposals for the Old Shoreham Road and the Marine Parade will transform active travel in these corridors, building on the high quality work you have delivered in Grand Avenue, Lewes Road and Old Shoreham Road (East).

Sustrans will continue to support your infrastructure work with practical advice and technical support as required. Our smarter choices work with schools across the city will complement your capital investment and this programme can be directed to those areas that will benefit from the infrastructure improvements.

We wish you every success with your bid and look forward to assisting with the implementation.

Yours sincerely,

SB Pratt

Simon Pratt
Regional Director, South East

South Downs
National Park Authority

Abby Hone
Principal Transport Planner
Brighton & Hove City Council
Room 405, 2nd Flr,
Hove Town Hall
Norton Road
Hove BN3 3BQ

26 April 2013

Dear Abby and the Cycle City Ambition bid team,

Re: Cycle City Ambition Grant bid

We are very pleased that Brighton & Hove City Council are leading a bid application to DfT to continue their excellent work in creating an environment conducive to even more cycling and walking. The City Council is making demonstrable effort to support active travel in the Greater Brighton City Region.

Our working relationship with the City Council as part of the 2 National Parks LSTF has given the South Downs National Park Authority a greater understanding of the need for urban transport networks to be people friendly. The networks in urban centres adjacent to and within the national park are often the start point of journeys out into the South Downs so getting people walking and cycling is vital if we are to support people getting to and moving within the National Park sustainably.

The ten year active travel Strategy for the Greater Brighton City Region is particularly encouraging. The SDNPA is working on the first Management Plan for the National Park and our recent engagement with stakeholders has given us a clear indication that our draft policies around sustainable transport, and cycling in particular, are strongly supported by communities in and around the National Park. For this reason I believe the development of your ten year Strategy alongside stakeholders will be particularly valuable in delivering the outcomes of the SDNP management plan and our own long term Vision for cycling in the South Downs.

We look forward to working with the Greater Brighton City Region to develop the active travel network and to closer discussion and engagement with all of our joint stakeholders.

Yours sincerely,

Allison Thorpe
Strategy Lead Access and Recreation
South Downs National Park Authority
Telephone: 01730 811770
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www.southdowns.gov.uk

Brighton and Hove Living Streets

PO Box 5208

Hove, BN52 9JZ

Dear Abby and the Cycle City Ambition bid team *22 April 2013*

Re: Cycle City Ambition Grant bid

Thank you for the opportunity to contribute to the Cycle City Ambition Grant bid. We were pleased to see from the bid guidance that, while the grant is for delivery of the 'first two years of a transformational long-term cycling strategy,' there is also an emphasis on ensuring that any cycling-related infrastructure improvements should create an enhanced and accessible environment for pedestrians.

We welcome the Greater Brighton City Region Active Travel strategy which states clear targets to increase the level of walking & cycling and we are very happy to support the bid for two routes which would benefit both pedestrians and cyclists, namely the Old Shoreham Road and Marine Parade.

The City Council has demonstrated through recent schemes such as Old Shoreham Road that it is possible to deliver an improved pedestrian environment along with benefits for cyclists: a better experience for people moving on foot and by bike can be brought about with measures such as courtesy crossings or raised tables at side roads, the introduction of wide zebra crossings and toucan crossings, plus the reduction of carriageway widths and the removal of the centre line, in order to reduce speeds.

Living Streets has long supported the Brighton and Hove *Public Space Public Life* legibility study, with its emphasis on the needs of people who use our streets. We understand that this was the first time that information on footfall in the city centre had been interpreted and made public in a meaningful way. In addition, Brighton & Hove City Council's 'Street Design Guidelines' have been instanced by Living Streets HQ as an example of a policy which should be adopted by every council.

We look forward to ongoing discussions and engagement with BHCC on taking forward the strategy, and to working with the City Council as it implements the schemes.

Yours sincerely

Stephen Young

Stephen Young

Chairman, Living Streets Brighton and Hove Group

Go-Ahead House
26-28 Addiscombe Road
Croydon
CR9 5GA

Ian Davey, Transport Committee Chair
Brighton & Hove City Council
Hove Town Hall
Norton Road
Hove BN3 3BQ

26 April 2013

Dear Ian and the bid team,

Cycle City Ambition Grant
Southern provides train services from London Victoria and London Bridge to Brighton, through south London and to Surrey, East and West Sussex and parts of Kent and Hampshire.

We would like to express our support for Brighton & Hove City Council's bid to the Cycle Ambition Grant fund to encourage more people to travel actively in the Greater Brighton City Region. This ambition fits with our own commitment to increase cycle facilities at stations to improve access to the rail network and to encourage more sustainable door-to-door journeys. We have added over 2000 cycle spaces at our stations in the last three years with plans for more.

In particular, cycle hubs are planned for both Brighton and Lewes stations during the next year. The large cycle hub at Brighton will hold 500 cycle spaces as well as a cycle repair/maintenance workshop, cycle hire, toilets, changing rooms and shop. At Lewes, the proposed hub will provide 200 additional parking spaces as well as a cycle repair and maintenance facility.

These hubs and additional cycle parking at other stations in the area will see more people able to make journeys that include cycling, supporting the aim to increase sustainable travel in the region.

Yours sincerely

Paul Best
Project Manager

Brighton & Hove Community & Voluntary Sector FORUM

18 April 2013

Abby Hone,
Principal Transport Planner
Transport Planning
Brighton and Hove City Council

Dear Abby Hone,

RE: Cycle City Ambition Grant bid

The Brighton and Hove Community and Voluntary Sector Forum (CVSF), is a membership organisation which supports the local community and voluntary sector. CVSF has over 350 local community groups, voluntary organisations, charities and social enterprises in its membership.

CVSF supports its members and the wider community and voluntary sector to come together to network and influence the city's plans and strategies for the benefit of local communities. Many of our member organisations are supportive of plans to increase cycling and walking in the city for the benefits it brings to individual's health and wellbeing.

CVSF would be delighted, should Brighton and Hove City Council be successful in bidding for funding from the Cycle City Ambition Grant bid, to support the Council in engaging with local voluntary and community groups by facilitating the involvement of CVSF members, and groups in the wider sector, who are interested in playing a role in the development of active travel strategies and initiatives.

With very best wishes

Sally Polanski

Chief Executive Officer,
Community and Voluntary Sector Forum

Brighton Junction, 1a Isetta Square, 35 New England Street, Brighton, BN1 4GQ
Telephone (01273) 810230 **Email** info@cvsectorforum.org.uk
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Hove Park School
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Valley Campus: Hangleton Way, Hove, East Sussex, BN3 8AA
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Email: office@hovepark.org.uk
Mr D Trimmer – Head Teacher

25th April, 2013

FAO Abby Hone
Prinicipal Transport Planner

Dear Abby and CCA bid team

Re: Cycle City Ambition Grant bid

Hove Park school is pleased that Brighton and Hove City Council has listened to our express wishes to have the cycle and pedestrian facilities recently implemented at Old Shoreham Road extended further west to the vicinity of our school. We also note the aspiration of the Greater Brighton City Region Active Travel Strategy 2013-2023 to extend the facilities further west in years to come, taking a similar quality route across the boundary of Brighton & Hove into West Sussex. The proposal for Old Shoreham Road will certainly help us to support our students to walk and cycle to school independently.

Our city Council has demonstrated through recent improvements at Old Shoreham Road that they can deliver a much improved pedestrian environment as well as bringing big benefits for people cycling. At the time of the consultation for the first part of the scheme we conducted a survey with our staff, students and parents to assess the level of support for such facilities extending futher along OSR to the school and the results showed that although a low percentage of students cycle, the number is increasing and many of our cohort walk to and from school.

In supporting young people to learn and develop we realise the tangible benefits of having physically active young people in a learning environment. Helping our students to actively travel to school has a knock on effect of increasing concentration levels and ability to focus on schoolwork. We also recognise the importance of supporting our pupils to be more independent. Travelling to school by bicycle in particular helps young people to do this and we fully support them being able to do so in a safer street environment.

We look forward to working with Brighton and Hove City Council to realise the improvements to the street environment along Old Shoreham Road, more discussion on taking forward the Strategy, where we particularly welcome a periodic stakeholder review.

Yours sincerely,

Derek Trimmer
Headteacher
Hove Park School

Brighton, Hove and district cycling group

Bricycles

www.bricycles.org.uk

www.facebook.com/Bricycles
https://twitter.com/Bricycles

2 Glovers Yard
121 – 123 Havelock Road
Brighton
BN1 6GN

18 April 2013

Ian Davey
Chair of Transport Committee & Deputy Leader
Brighton & Hove City Council,
King's House,
Grand Avenue
Hove BN3 2LS

Cycle City Ambition Grant: letter of support

Dear Ian,

On behalf of Bricycles, (the Brighton Hove and District Cycling Group) and as the local representative of CTC, the national cycling charity, I am writing in support of Brighton and Hove City Council's bid for Cycle City Ambition Grant funding.

We strongly support Brighton and Hove City Council's application.

Brighton and Hove City Council is making steady progress in encouraging and enabling cycling across the city. We are optimistic about further modal shift towards human powered mobility in this region.

A successful application for the Cycle City Ambition Grant would mean that even more people would be able to enjoy cycling, a healthy and sustainable transport mode for both utility and leisure purposes.

The Greater Brighton City Region has some unique features which make it an excellent location for investment.

Hundreds of French cyclists, including disabled cyclists arrived by ferry to Newhaven, East Sussex in July 2012

Brighton hosts the largest bike ride in Europe every June, the BHF London to Brighton bike ride which attracts 27,000 cyclists, and more cycling takes place in lesser known events throughout the year. The ferry port at Newhaven provides an entry point for continental visitors arriving by bike, as they did in large numbers for the Olympics in June 2012. (See left). There is an attractive open air velodrome at Preston Park, Brighton which is the oldest cycle track in the country. The region is bounded by the newly designated South Downs National Park where there is potential for improved sustainable transport connections and increased visitor numbers.

We believe that Brighton and Hove is superbly positioned to make excellent use of this grant. Brighton has strong links with nearby towns such as Lewes, Newhaven, Shoreham and Worthing. Commuting to work by bike and leisure cycling already takes place, and the topography is generally helpful.

Tel: 01273 552662 becky.reynolds2@btinternet.com

There are a range of mapped routes such as Regional Route 90 linking Brighton to Lewes and the Cuckoo Trail; the South Coast Cycle Route along Brighton Seafront (Sustrans Route 2) and the route going north from Brighton via Gatwick to London (Sustrans route 20). In addition, there are many other roads and tracks used for cycling journeys.

Bricycles and Brighton and Hove CTC have regular and close contact with cycling counterparts in other areas. Bricycles is a member of Cycle East Sussex, an alliance of community cycling groups. There are many groups calling for improvements in conditions for cycling, both in East and West Sussex.

The council's work on extending 20 mph speed limits and instating 2-way cycling in one-way streets has been extremely valuable in improving cycling conditions. In common with Brighton and Hove City Council, we support the Times newspaper's "Cities fit for cycling" campaign. We believe there is huge latent demand for cycling.

The Cycle City Ambition Grant would help the City and the region obtain maximum benefit from funding awarded in previous years (i.e. Cycling Demonstration Town including BikeIt, Cycling Town funding, LSTF funding for the Lewes Road) and to make the most of the cycle-rail integration (Linking Places) funding across the south-east and the potential of the new Bike Hub planned for Brighton railway station.

There is scope for increased sustainable tourism / leisure, utility cycling and growth in cycling-related businesses connected with all the above-mentioned activities.

We are happy to support all evidence-based interventions to maximise active travel in the City of Brighton and Hove and the Greater Brighton City Region.

Yours sincerely,

Becky Reynolds

Bricycles Campaigns Officer and Newsletter Editor - www.bricycles.org.uk
CTC Right to Ride Representative, Brighton and Hove www.communigate.co.uk/sussex/ctcbrighton

CC
Abby Hone, Principal Transport Planner, Transport Planning, Brighton & Hove City Council

Lewes Road for Clean Air

1 Seville Street, Brighton BN2 3AR 07944 152706
www.biketrain.org www.lewesroadforcleanair.org

Abby Hone
Transport Planning
Brighton & Hove City Council
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Norton Road
Hove
BN3 3BQ

19th April 2013

Dear Abby,

Re Cycle City Ambition application

We, at Lewes Road for Clean Air, are delighted that Brighton & Hove City Council and neighbouring authorities are submitting this bid to improve cycling infrastructure across the 'Greater Brighton' area.

We believe that there is huge potential in and around the city to turn many more people onto cycling – whether they are long-term residents, students or visitors - if only suitable conditions can be provided. A successful application will be an exciting step toward this, building on the huge amount of excellent work already being done by you and colleagues.

Our focus as a community group is, of course, on Brighton's the Lewes Road, where we are working, through our Bike Train project, for a shift from 2% to 10% of journeys by bike in the next few years. This, following on from the recent and ongoing LSTF investment. Of course no single route can provide the necessary solutions on its own and further work to extend and improve the wider cycling network and links with neighbouring towns is essential in addressing the bigger picture which will achieve the long term improvements in air quality, public health & wellbeing and carbon reductions that we, and so many in the area, are keen to see.

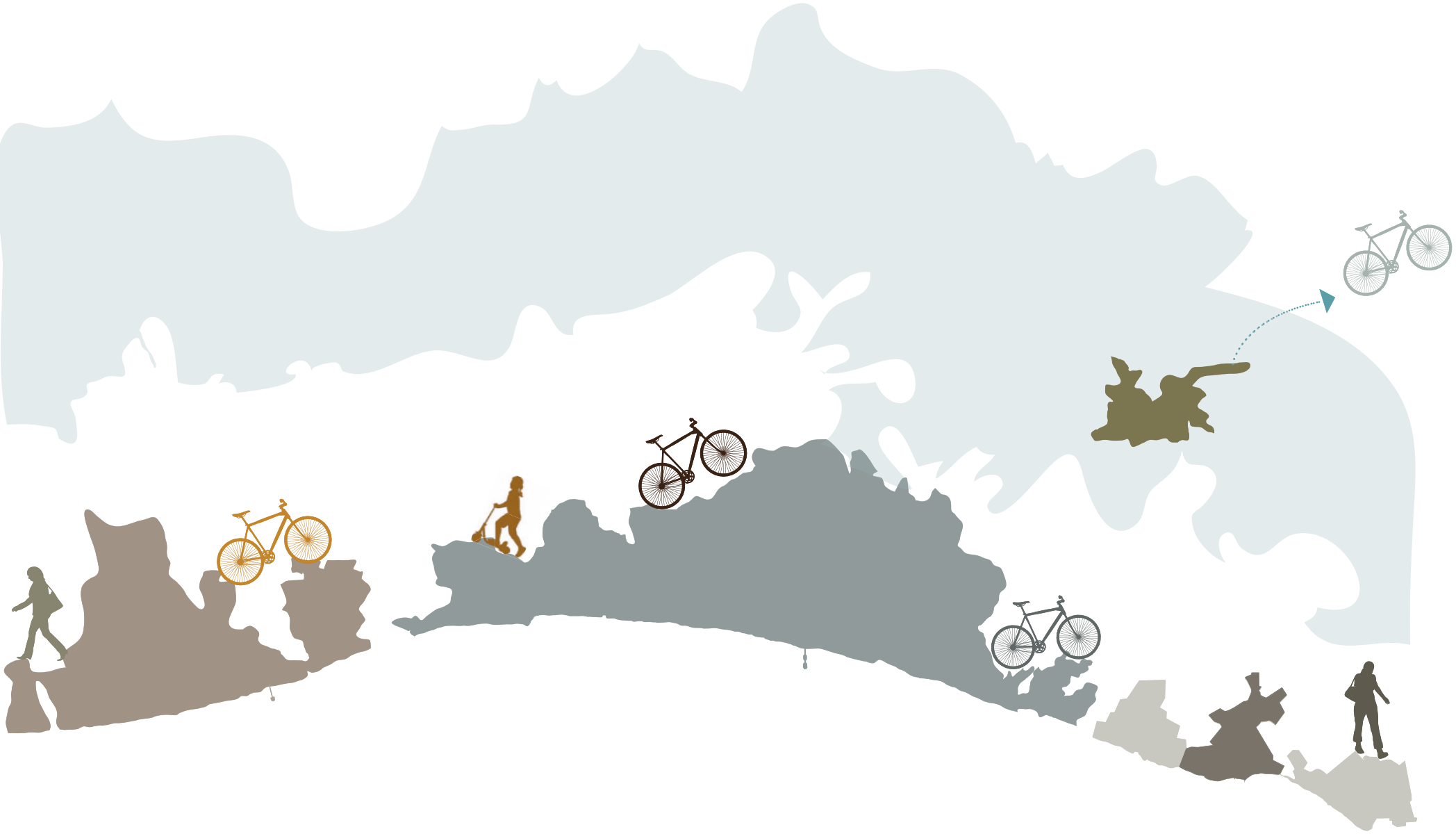
We offer our full endorsement for this bid and look forward to supporting the projects which we dearly hope will come out of it.

Yours sincerely

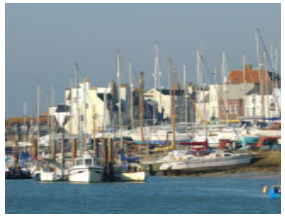
Duncan Blinkhorn

Appendix 5

Brighton & Hove City Council



Greater Brighton City Region
Active Travel Strategy 2013 - 2023



CONTENTS

FOREWORD

Investment in cycling and walking infrastructure and associated active travel promotion over the last 10 years has seen the level of cycling in Brighton & Hove double. This is the largest increase in cycling in England outside of London. While our increase in walking has led us to achieve the highest proportion of walking to work in the South East rising from 17% to 21%.

We have achieved much but still have more to do. Over the next ten years we must build on our success, working in partnership with our neighbours to create a transport network that fully supports people travelling actively, so that a minimum of 10% of our working population are travelling to work each day by bicycle and at the very least we sustain walking levels in Brighton & Hove while increasing walking levels across the Greater Brighton City Region (GBCR).

This Strategy will animate our region with a new way of thinking about efficient transportation and orientate the reader with a vision for active travel in the GBCR. A strategy needs to be kept alive and so we will hold ourselves to account at least every two years, reviewing the delivery plan with GBCR partners and stakeholders to ensure we are making good progress. It is within our grasp for the city region to reach Brighton & Hove's recently adopted One Planet Council principles of making walking and cycling the norm.

Brighton & Hove aspires to infrastructure design which inherently supports active travel and has shown that it can achieve long-term programmes that deliver real change. The Legibility Study for our city was led by the Labour administration in 2005. 'Public Space Public Life' was then born under a Conservative administration in 2007 and the recommendations continue to be taken forward by the current Green administration today. Recently all parties have supported The Times' 'Cities Fit for Cycling' campaign.

The bell of change has been rung for party-political division when it comes to active travel – all parties are committed to walking and cycling as an important part of our transport systems, and better infrastructure can be pivotal in meeting that commitment.

Ian Davey
Deputy Leader of Brighton & Hove City Council

The Greater Brighton City Region (GBCR) includes the local authorities of Brighton & Hove, Lewes District, Adur District and Worthing Borough (the Highway Authorities of West Sussex County Council and East Sussex County Council) who jointly seek to build on emerging eco-tech sectors developing within the area.

The GBCR is bounded by the South Downs National Park to the North and the English Channel to the South and covers a population of over half a million with 23,000 businesses, employing 248,000 people, reflecting a coherent functional economic area.

The Region includes the commercial gateways of Newhaven Port to the East and Shoreham Harbour with Shoreham Airport to the west. Gatwick international airport and the business market of London are accessible within 30 minutes and 60mins respectively by rail.

Other GBCR partners include: Coast to Capital Local Enterprise Partnership (LEP), University of Brighton, University of Sussex, Local Business Partnerships and key local businesses such as EON, EDF, Ricardo & American Express.

HUMAN-POWERED MOBILITY AT THE CORE OF OUR TRANSPORT NETWORK

This Strategy is geared towards helping people to travel actively, by walking, cycling or any other human-powered method.

This will help increase the efficiency of our transport network to support the growth of our economy, create equality of access to jobs and services, reduce CO2 emissions, reduce costs for the NHS, improve our air quality and help people be happier and healthier by incorporating physical activity into their everyday life.

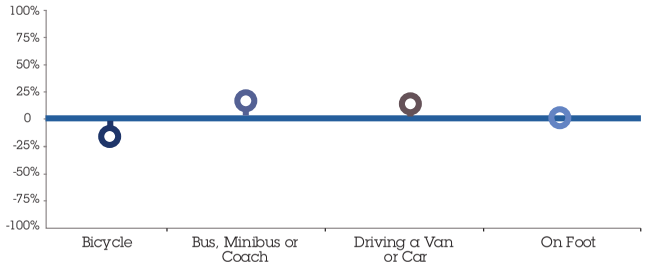
Our shared GBCR aspiration of coherent and consistently well designed cross-boundary network links will lead to more people feeling invited and able to travel actively.

The Strategy is aimed at those people who are not already travelling actively but given the right kind of infrastructure and support would feel welcome and able to do so.

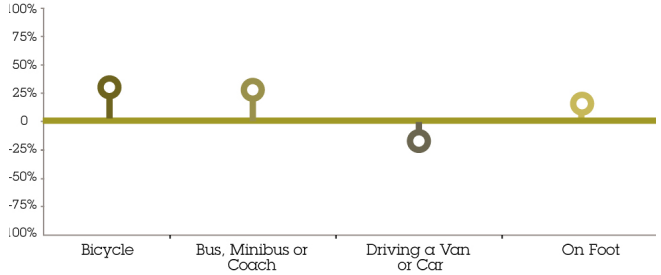
The images on this page illustrate the modal share for urban centres within the GBCR based on a census data comparison of 2001 and 2011. The images show that people travelling on bicycle and foot are only increasing in Lewes and Brighton & Hove whilst Newhaven is showing a decrease.

How people travel to work in the GBCR (2001-2011 census data comparison)

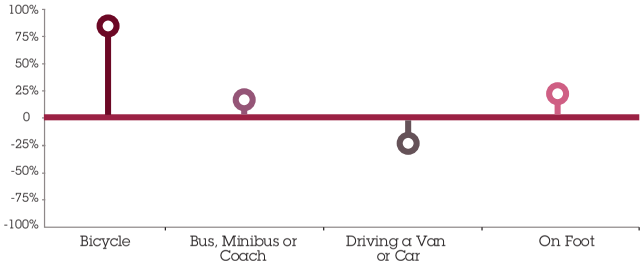
Adur



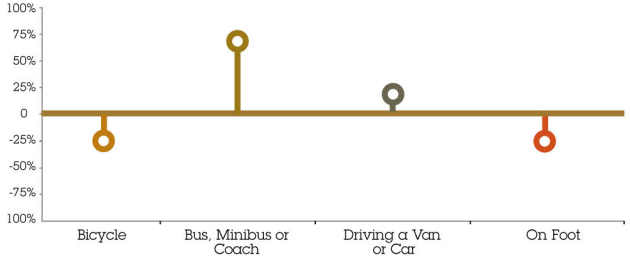
Lewes



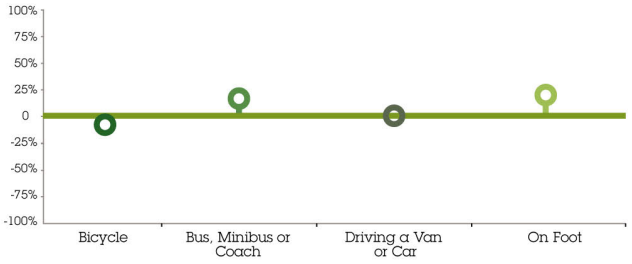
Brighton and Hove



Newhaven



Worthing



OUR VISION

OUR STRATEGIC TARGETS for 2023:

- 10% of people travelling to work will get there by bike
- Key destinations (e.g. schools and businesses) will have cycle parking for a minimum of 10% of their users.
- 85% of people in the GBCR will have a positive perception of road safety.
- 20% of people in urban centres will undertake a substantial part of their daily commute on foot.
- The casualty rate for people cycling will have decreased from 2.3 per 1000 cyclists to 1.5 across the GBCR.

Key Outcomes

Liveable Streets: Where people respond eagerly and enthusiastically to opportunities for active travel; where they are encouraged to move actively through the streets; where walking, cycling and all other kinds of human powered movement are seen as a normal part of the wider street activity; where public life is carefully supported by environments which invite people to walk more and stay longer in the public realm.

Fit for People: More people, of greater diversity, 'swapping the steering wheel' for active travel in public spaces which embrace the diversity of its people as well as its destinations, creating an inclusive place for all – residents and visitors alike. Reversing any downward trends in active travel modes across the GBCR to create an upward trend for cycling and walking.

Safer Streets: Streets and public spaces where people cycling and walking feel like they belong; where they are fully catered for, where the negative safety impacts of vehicles are minimised; where all users treat each other with respect and where natural surveillance is maximised through vibrant, active streets.

In November 2012 a BBC correspondent reporting from Berlin wrote 'Is Berlin the safest city to be a cyclist?'

Referring to the cycling culture he said:
'The test of whether cycling has really taken off in a city is who does it. […]. In Berlin, it is the people. Old ladies cycle in stately and elegant fashion, old men pedal so slowly that it's a wonder the bike doesn't fall over. Young mothers tow toddlers in trailers […]'

In the last seven years over 600km of bike lanes have been created in Berlin and now the diversity of people getting on their bikes to travel are a testament to the success of getting the balance of streets right for people – from segregated cycle infrastructure to pedestrian priority areas with low speed limits.
Fear of traffic is often the primary deterrent to people travelling actively. At times the perception of safety is at odds with the evidence, but it is the perception of safety that counts when getting more people to walk and cycle. Better street design, suited to the context of surroundings can have a transformative effect on perceptions of safety.

Census data shows the population of the GBCR is projected to grow in size and in age. This presents some interesting challenges in the years ahead and by encouraging healthier, more active lifestyles in early and mid life we can support our ageing population while addressing our public health priorities and costs. With an active travel network in our Region suitable for everyone, be they 8 or 80 years old, we will lay the foundations for making active travel a normal part of everyday life for everyone.

Mental illness in our Region is generally higher than national levels. Creating the right environments for increasing equality of access to public space, where people feel welcome is vital for encouraging physical activity.

"The test of whether cycling has really taken off in a city is who does it. […]. In Berlin, it is the people. Old ladies cycle in stately and elegant fashion, old men pedal so slowly that it's a wonder the bike doesn't fall over. Young mothers tow toddlers in trailers[...]"





WHY OUR STRATEGY MATTERS

Travelling actively has a positive impact on physical health and mental health and wellbeing. The indirect benefits of physical activity help to address the issues that lie behind poor health such as worklessness and child poverty. Creating environments which help people travel actively has the potential to redress the inequality in our streets by linking areas of deprivation, often including those people with the poorest health, with access to services and employment, while also encouraging people to engage actively in their local communities and neighbourhoods.

In the GBCR we will create the right street environments with well designed infrastructure to make active travel the easiest, most convenient and cost-effective travel option for people in our Region. This will also ensure that our Region realises the benefits of active travel in terms of health, equality and economy.

From a car planned Region to...

...a Region that puts people first!

Since the popularity of private motor transport took hold in the latter half of the 20th century our public highway network has not been designed to promote or support active travel. Increased walking and cycling comes from many things, but in particular from safe, efficient journeys in people-friendly environments where people feel welcomed to use the streets and public space.

Ways in which we will help achieve people friendly environments to support active travel in the GBCR include:

High-quality infrastructure: The right type of environment and infrastructure, appropriate to the streetscape, volume and speed of motorised traffic is the 'acid test' for less confident utility cycle users. While pedestrian priority areas will be appropriate for non-motorised users in low speed or low traffic volume areas, faster-moving, trafficked areas may require high quality segregated cycle infrastructure.

Closing the gaps: Continuous, high-quality and context appropriate active travel routes for utility and leisure travellers need to be created throughout the GBCR. This approach will inspire confidence in our local communities to travel actively in throughout our Region.

Greater permeability: People will only be encouraged to walk and cycle if these are the quickest and easiest ways to get about. Meeting desire lines of people travelling actively can be realised through cycle contraflows on one-way streets, allowing cyclists to enter a street otherwise closed to traffic and pedestrian priority streets allow cycling.

Better junctions: Provision for people walking and cycling often fails most at junctions, particularly traffic light controlled junctions where motorised vehicles have traditionally been prioritised at the expense of non-motorised users. Direct, straight-across pedestrian crossings, cycle pre-greens and advanced stop line, reduced waiting time for pedestrians will all give confidence to people travelling actively.

Pedestrian wayfinding: Giving people on foot consistent wayfinding information with timed walking distances and 'heads-up' mapping for pedestrians demonstrates the 'walkability' of an area.

Cycle parking: Cycle parking spaces that are easy to use, sheltered and secure where possible supports cycle users at the end of their journey. Increasing the cycle parking provision is a target for the GBCR Region.

Courtesy crossings: Creating level crossing facilities for all users at junctions helps to give increased priority to pedestrians and mobility impaired users. Bringing the road surface up to meet the footway is of great importance to mobility impaired users in particular and aids with calming traffic speed.

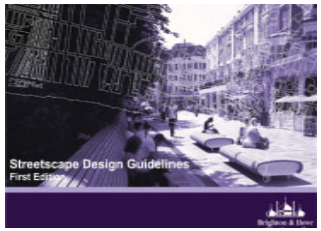
Cycle wayfinding: Signing cycle routes with timed distances is more meaningful to most people, particularly people who are starting to cycle or returning to cycling and feel less confident about distances.

20mph zones: This is a key priority for the GBCR, particularly in urban centres and residential areas. There is a direct relationship between vehicle speed and accident severity. Introducing 20mph speed limits has great potential to reduce the number and severity of casualties, increase the perception of safety on our roads and encourage active travel.

Interchange cycle hubs: Where distances may be too great for to make the entire commute to by bike cycle/rail integration and better station waiting environments will encourage people to walk and cycle to rail stations in the GBCR. Lewes and Brighton Station cycle hubs are due for delivery by March 2014.

Community Hubs: Communal bike storage and maintenance to encourage sharing of skills and enthusiasm and active travel know-how.

Design Guidance: A consistent approach to quality of infrastructure and street design will be adopted across the GBCR based on Brighton & Hove City Council's 'Streetscape Design Guidelines'. The pending guidance for South Downs National Park utility 'Greenways' for active travel is also referencing Brighton & Hove's guidance as exemplary.



E-Bikes: The GBCR will work in partnership with the University of Brighton to exploit opportunities for the electric bike market In the Region. Electric bikes have potential to increase cycling journey distances for both utility and tourism trips. Of particular interest to the GBCR are-cargo bike "last-mile" delivery/freight opportunities.

Behaviour Change: A range of promotional and community engagement measures will be co-ordinated across the Region with the delivery of infrastructure to enhance benefit and maximise change. With opportunities for adult cycle training provision being explored in conjunction with support for communities wanting to change to active travel.

Cycle training: This remains an essential offer for all schools in the region. Sustrans Bike IT has proven a success in junior schools and will be rolled out appropriately for secondary schools.

Active travel to Schools: The Region will continue to focus specifically on young peoples' needs for active travel opportunities in conjunction with active travel networks to support all users. If children and young people can experience walking and cycling as a normal part of their lives from the earliest opportunity, they will be more likely to travel actively to school, college and work in later life with all the positive health and social benefits this brings.

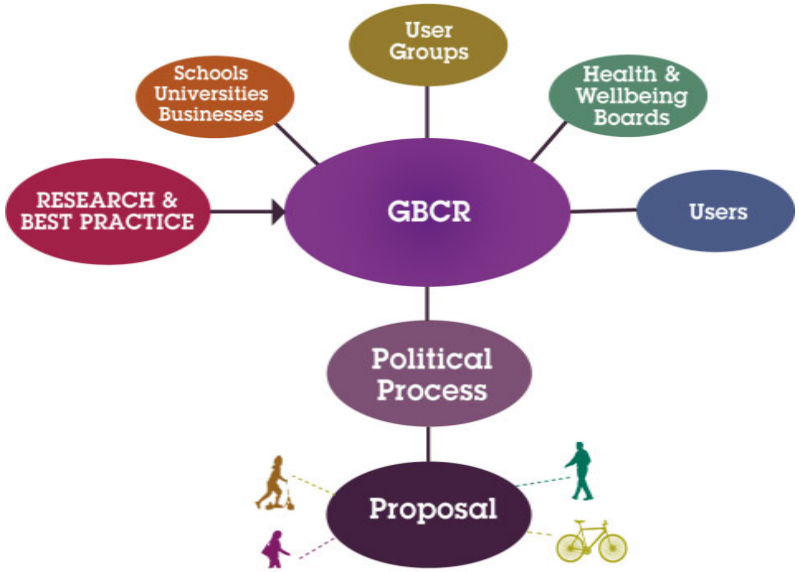
Partners of the GBCR are aware that we need to hold ourselves to account for the targets and outcomes we have set in this Strategy. We need to keep the Strategy document live and instil faith in our communities that we will deliver against our Vision.

We've been talking to people across the GBCR for some time about why they do and don't walk and cycle, and what might encourage more people to do so.

Implementing this strategy will continue this conversation, and will be an iterative process involving partners and interested groups throughout its delivery.

It is vital that interest groups, street and road users, active or otherwise work to together to achieve balanced street environments fostering understanding and co-operation. The GBCR partners will make particular effort to seek the views of hard-to-reach groups in our Region such as ethnic minorities, young people (esp. 12-17 years old) and older people so we can achieve a diversity of representation to shape our streets and active travel networks. Other groups engaged will include schools, residents, pedestrians, disability groups, local businesses, pressure groups, motorists, community groups, workers, environmental organisations, emergency services, and freight/ delivery companies.

Timely review of progress being made against the Strategy will take place once a year through existing arrangements such as the 2 National Parks Local Sustainable Transport Fund grouping with our City Deal partners and GBCR Highway Authorities (West Sussex County Council and East Sussex County Council. Brighton & Hove City Council (BHCC) have a well attended Active Travel Forum, led and administered by BHCC Public Health and Transport Planning teams which will be extended to include Regional partners.



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