

Local Sustainable Transport Fund - Application Form

Guidance on the Application Process is available at: www.dft.gov.uk/pgr/regional/

Bids for both small projects and initial proposals for large projects should be no more than 20 pages long.

Applicant Information

Local transport authority name(s)*:

Brighton & Hove City Council (BHCC)

Senior Responsible Owner name and position:

Mark Prior, Lead Commissioner City Regulation and Infrastructure

Bid Manager name and position:

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SECTION A - Project description and funding profile

A1. Project name: Lewes Road Corridor

A2. Headline description:

The bid focuses on the Lewes Road Corridor and consists of tried and tested smarter choices measures in combination with infrastructure improvements. This combined package approach is designed to deliver significant economic benefits and reduce carbon outputs in the area. The smarter choices measures include a sustained community led Personalised Travel Planning project with residents in the area as well as travel planning with the Universities, local schools and employers. The targeted infrastructure measures will include upgrades to public transport infrastructure, cycling improvements, traffic signal upgrades, pedestrian improvements, and improved links to the newly formed South Downs National Park.

A3. Geographical area:

The LSTF bid targets the area known as the Lewes Road Corridor and adjoining residential areas. This area is shown on the thematic map on the following page along with graphical illustrations of the range of measures proposed as part of this bid.

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A4. Type of bid (please tick relevant box):

Small project bids

Tranche 1 bid

A5. Total package cost (£m): £6.28 million

A6. Total DfT funding contribution sought (£m): £4.03 million

A7. Spend profile:

ξK	2011-12	2012-13	2013-14	2014-15	Total
Revenue funding sought	547.5	545	540	457.5	2090
Capital funding sought	250	830	760	100	1940
Local contribution	432.5	717.5	787.5	312.5	2250
Total	1230	2092.5	2087.5	870	6280

A8. Local contribution

The local contribution element of the BHCC & partners LSTF bid is made up of the following elements:

Organisation	Contribution
B&H Bus Company	£400k
Southern Rail	£100k
EPSRC	£430k
Sussex University	£360k
S.106 Funding	£280k
Brighton & Hove PCT	£90k
BHCC LTP3	£475K
BHCC Staff Time (in kind)	£115k
Total Local Contribution	£2.25m

A9. Partnership bodies

A number of organisations have committed their support for the BHCC LSTF bid and their willingness to work in partnership with the city council to deliver specific projects. These partners are listed below and have been broken down into different categories based on their anticipated level of involvement in the project.

Funding and Delivery Partners

The following organisations will be contributing funding specifically towards delivery of specific elements within the LSTF project:

- Brighton & Hove Bus Company
- Southern Rail
- Brighton University
- Sussex University
- Engineering and Physical Sciences Research Council (EPSRC)
- Brighton & Hove PCT

Delivery Partners

The following organisations have indicated their willingness to work in partnership with the city council in delivering elements of the bid and will be represented on the stakeholder steering group discussed in section E1.

- South Downs National Park
- Bevendean, Coldean, Moulsecoomb and Coombe Road Community Local Access Teams (LAT's)
- Lewes Road 4 Clean Air
- Community & Voluntary Sector Forum (CVSF)
- Sussex Safer Roads Partnership (SSRP)
- Sustrans
- Local Access Forum
- Coombe Road Primary School

SECTION B – The local challenge

B1. The local context

The proposed LSTF area extends along the length of the A270 Lewes Road from the city centre in the south, northwards to the Universities and the new South Downs National Park (SDNP) at the city's northern boundary.

Lewes Road is one of only three key arterial routes into the city and consequently carries high volumes of both strategic and local traffic. In its northern section the Lewes Road is a four lane dual carriageway of poor quality late 1960's design that filters down into two lanes in the southern area of the corridor. Increases in car usage over the years has caused chronic severance between the east and the western side of the area, traffic congestion, poor air and noise quality, and high accident rates. The dominance of traffic together with poor cycling and pedestrian facilities and low quality urban realm has acted as a genuine barrier to the economic growth and social vitality of the area.

The area has its own district shopping centre designed to serve local residents, students and workers. However, the district centre was identified in the 2006 Retail Study as potentially vulnerable with a high turnover of premises and vacant retail outlets. Further studies concluded that the economic potential of the area is severely restricted by poor transport infrastructure and high levels of congestion.

There are approximately 120 businesses located within the area, which is identified as a potential growth area within the LDF Core Strategy. Provision will be made for an additional 445 residential units, 24,800 sqm employment floorspace, the Falmer City Academy, additional education floorspace as well as the 22,374 seat community stadium providing a permanent home for Brighton & Hove Albion FC and for sports facilities, training and jobs for the wider community. The former Preston Barracks site, vacant since 1999, is located in the middle of the area where provision is made for a mixed use employment-led development comprising 18,600sqm employment floorspace and 200 residential units. Transport links in and around this area will need to improve in order to unlock this potential growth.

The area contains the large residential areas of Moulsecoomb, Bevendean and Coldean which all suffer from high unemployment, social deprivation and high crime rates. Statistics show that nearly 40% of children in Year 6 and below in the area are either overweight or obese. Moulsecoomb and Bevendean are classified as residential renewal areas and Lewes Road south of the Voque Gyratory is identified as a community safety priority area.

The area also contains the City's two Universities, accommodating some 25,000 students and 4000 staff. Jointly they play a major role in the City's economic, social and cultural vitality but are also major trip generators. The majority of students live either on campus or in the surrounding residential areas within walking or cycling distance of the main sites but car usage still remains high. In addition, there are 15 primary schools with around 5000 students, one secondary school with over 700 pupils and a further 2 SEN Schools with 300 pupils putting extra pressure on the road network with detrimental impacts on residential areas. The poor surrounding cycling and pedestrian facilities mean parents and carers are reluctant to let their children walk or cycle which also contributes to a lost opportunity to improve health.

The recently formed South Downs National Park provides an important new tourist, education and health destination for residents and visitors to the area. Importantly, Stanmer Park which lies within the bid area, has been designated the 'Gateway' to the entire SDNP enhancing the opportunity for real economic and health benefits for the local area. Many of the key access points to the Downs are found in the LSTF area but those access points need improving upon if the local residents and business community are going to truly benefit from this opportunity.

B2. Evidence

As mentioned previously in Section B1, the LSTF corridor is a key growth area within the city which will result in increased pressure on the transport infrastructure. Investment in sustainable transport measures will therefore be required if economic growth is not to be constrained. There are also significant transport challenges facing those people who already live and work in the area and this section provides a brief overview of the evidence which informs this argument and considers it through a series of identified problems such as congestion, air quality and road safety which directly inform the package of measures outlined in C3.

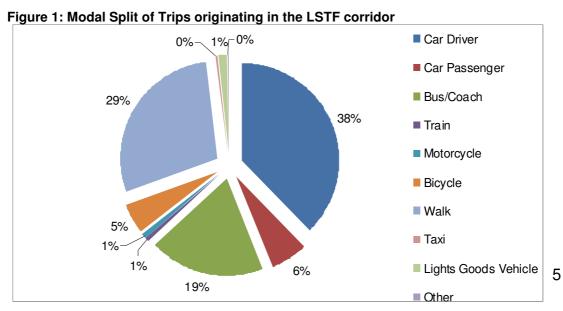
B2.1 Congestion and Journey Times

Traffic congestion has been identified as a major problem in parts of Brighton & Hove, including the main Lewes Road A270 route. Traffic monitoring sites on Lewes Road indicate average weekday (12 hour) flows of approximately 20,677 vehicles, highlighting the volume of traffic using the corridor and the pressures future development would bring. This situation is further evidenced by 2010 journey time figures for the area, with a weekday eastbound journey along the length of the corridor (distance 6.5 miles) averaging 20:54 minutes, increasing to 22:30 during the evening peak. The corresponding westbound journey time was 22:47 increasing to 24:04 during the evening peak.

Journey time figures are also available for public transport in the corridor, where a number of bus services operate with up to 39 buses per hour in the peak period. Journey times are approximately 28 minutes to the University of Sussex from the city centre, a distance of 4.5 miles. Train services operate at a frequency of four per hour from Brighton, taking 3 minutes to London Road, 5 minutes to Moulsecoomb and 9 minutes to Falmer.

B2.2 Modal Split: Single Occupancy Car Use

As part of the development of the city council's new transport model, a 2010 household travel survey was undertaken and this indicates that trips originating in the LSTF corridor are heavily weighted towards non-sustainable modes (see Figure 1). Meanwhile, automated counts on Lewes Road reveal an average weekday figure of 755 cyclists which contrasts with that for vehicles (20,677) cited earlier, whilst pedestrian counts in the vicinity recorded an average of 1,448 pedestrians per day. A baseline picture of public transport patronage is provided by Brighton & Hove Bus Company which estimates 9.5 million bus passengers in the LSTF corridor annually (2.5 million of whom are estimated to travel to the Universities) and Southern Rail figures which show annual railway station footfall figures ranging from 1,033,392 at Falmer to 462,558 at London Road and 334,430 at Moulsecoomb.



The household travel surveys also provide detail on trip length by mode which reveals that 73% of home based origin trips undertaken by car in the LSTF corridor are 5km and under. This highlights the potential for the sustainable modes that this bid seeks to promote and suggests they can become a realistic alternative travel choice for many journeys that are currently undertaken by car. Furthermore, when it is considered that 75% of all trips to work and 91% of those for educational purposes are 5km and under, the merit of school and workplace travel planning initiatives becomes clear.

Data provided by the Universities suggests there is significant scope to influence the travel behaviour of both staff and students. For example, the University of Brighton's 2009 Travel Survey indicated that 38% of staff and 26% of students travelling to its Falmer campus drove as single occupants, as did 44% of staff and 19% of students travelling to Moulsecoomb campus. Similarly, figures for the University of Sussex indicate that 45% of staff and 21% of students drive as single occupants. Postcode analysis carried out for the Universities indicates that 57% of staff and 83% of students at the University of Sussex live within a 30 minute cycling catchment whilst 52% of staff and 68% of students live within 400m of a direct bus route to the University. Meanwhile, as of 2009, 48% of the University of Brighton's staff and 51% of its students lived within 5km of their place of work or study respectively.

Although Brighton & Hove's public transport patronage compares well nationally and a 27% increase in cycling was experienced across the city between 2006 and 2009 as a result of participation in the Cycling Towns project, the modal choice and occupancy data presented highlights the potential to increase the use of sustainable modes further still. Indeed, investment in various sustainable travel measures is identified by respondents to the University of Brighton's travel survey as something that would encourage sustainable travel, underlining the suitability of the proposed package in the area.

B2.3 Transport and the Local Economy

The household travel surveys highlight that 35% of trips by residents in the LSTF corridor are undertaken for work and 24% for shopping, figures which indicate the potential economic benefits of investing in sustainable transport measures around Lewes Road.

Traffic congestion has been identified as a barrier to local and regional economic growth as demonstrated by the Brighton & Hove *Business Retention and Inward Investment Strategy* (2009). For example, the report states that:

"Congestion within the city centre is identified to be a significant barrier to inward investment according to the surveys of local businesses undertaken as part of this commission. Indeed, the majority of businesses cited transport infrastructure as a barrier to investment and growth".

This can be seen as particularly relevant to Lewes Road given the status of the A270 as a major route into the city centre. It is also supported by the Sussex Enterprise *Voice of Business Survey (2009)*, where 57% of respondents felt that traffic congestion had a negative impact upon their business, compared to 50% regionally. When asked to estimate the annual cost of local and regional transport problems to their business, respondents gave an average figure of £19,212, further emphasising the positive impact on economic growth that the investment outlined in this bid could achieve.

The *Brighton & Hove Retail Study* (2006) highlighted that vacancy rates along the Lewes Road were amongst the highest in the city at 14%, pedestrian footfall low and the environment and pedestrian movements hampered by traffic congestion. The study recommended measures to deliver an improved shopping environment with enhanced pedestrian linkages.

B2.4 Social Issues

Parts of the LSTF corridor experience some of the most significant social disadvantage in England. Index of Multiple Deprivation (2007) statistics show that parts of the area are amongst the 5% most deprived in the country whilst a number of its wards contain some of the 10% most deprived areas nationally. Job Seeker's Allowance (JSA) claimants for

February 2011 for three wards in the area exceed city averages (3.5%) with proportions of up to 4.4%, whilst the total number of out-of work benefit claimants in three wards also exceeds city (15.1%) and Great Britain (14.7%) averages with proportions of up to 19.9%.

Of particular relevance from a transport perspective is the proportion of households in the area without a car (35.7% in Moulsecoomb and Bevendean). This relatively low car ownership in the LSTF corridor is shown when contrasted with levels for comparable wards in terms of their distance from the city centre such as Withdean (22.1%) and Patcham (22.3%).

Reliance on public transport is therefore high with 20.5% of residents travelling to work by bus compared to 12.5% for the city as a whole. This underlines the importance of investment in public transport infrastructure to residents in the LSTF corridor and their ability to access services and employment.

Also of relevance in terms of accessibility is the city's challenging topography which adds to difficulties for many of those in the community as well as acting as a deterrent to the use of active modes of transport. The LSTF area is amongst the hilliest in the city and this has been considered in the development of LSTF measures, for example through the proposed research project and trial into the use of electric bikes.

B2.5 Public Transport Services and Infrastructure

An audit of the infrastructure supporting public transport in the city has highlighted that there are a number of gaps in provision within the LSTF corridor. In particular, whilst the main A270 route is generally well equipped with bus shelters and Real Time Information Signs (RTI), the surrounding routes in residential areas have limited provision. Of the 221 bus stops in the corridor, only 38% have shelters and 10% have RTI. The disparity in provision is highlighted by the fact that residential areas such as Moulsecoomb, Bevendean and Coldean have shelters at only 15% of bus stops with just 2% equipped with RTI. In addition, a particular local issue is the lack of a bus service linking the area directly to Brighton Station.

B2.6 Air Quality

An adverse impact on air quality is a clear consequence of congestion in the city generally and the LSTF corridor specifically. Parts of the LSTF area are amongst the worst performing in the city for air quality, with Nitrogen Dioxide (NO₂) measurements recorded at up to 150% (45.9- $60.7~\mu g/m^3$) of the English legal standard (40 $\mu g/m^3$). Consequently, the area of Lewes Road south from the Vogue Gyratory is included in the city's 2008 Air Quality Management Area. A particular contributory factor to air pollution problems in the locality is the occurrence of stop-start traffic flow conditions in Lewes Road. The proposed traffic signal review and upgrade would improve journey times by reducing delays at the junctions, thus aiding the economy through journey time improvements and improving air quality.

B2.7 Road Safety

Lewes Road has had a significant number of road safety incidents in recent years. Between 2006 and 2010 there were 268 reported collisions (6% of collisions citywide), of which 43 were classified as serious. The bulk of the accidents occurred in the southern half of Lewes Road between The Level and Natal Road. Pedestrians and cyclists were each involved in just under a quarter of reported accidents (pedestrians 22% and cyclists 24%). The proportion of cyclists involved in collisions (24%) is significantly higher on Lewes Road than citywide, where the figure is 15%. This highlights the need for a sustained road safety campaign aimed at raising awareness of vulnerable road users.

B2.8 Access to the South Downs

As mentioned in Section B1, The LSTF corridor is in close proximity to the newly designated South Downs National Park. A total of 9 different rights of way originate within the LSTF area but limited accessibility and poor local knowledge of these has been identified as a barrier to their use. A User Survey has found that 52% of Brighton & Hove's Rights of Way users would use them more often if surfacing and signing were improved. In addition, the LSTF area contains two missing links- desirable areas that do not currently exist between existing rights of way as identified in the Brighton & Hove's *Rights of Way Improvement Plan*. As such, an opportunity exists to improve these facilities. This would have the potential to add to the

tourism and recreational attraction of Brighton & Hove and benefit the city economically as a consequence while also improving the health of local residents. Furthermore, behaviour and attitude surveys conducted by Sustrans (2006 and 2008) revealed that over half of respondents would cycle more if improvements were made to their local cycle network.

B2.9 Issues and Opportunities

This section has presented data which highlights the current and future transport issues within the LSTF area. These issues and opportunities can be summarised as follows:

- Congestion is identified as having an adverse impact on the local economy and air quality, a problem likely to worsen with planned future growth.
- Poor pedestrian links and severance act as a deterrent to sustainable travel and also impact on the local economy.
- University travel surveys demonstrate an opportunity to increase the number of staff and students travelling by sustainable modes.
- Low car ownership means that a large proportion of the residents rely on public transport to reach services and employment, highlighting the need for improvements to the network in order to support growth.
- Public transport infrastructure is limited compared to elsewhere in the city and no direct bus route is provided to Brighton Station.
- The topography of the area presents a barrier to active modes of travel.
- Significant numbers of road safety incidents on Lewes Road suggest that measures are required to address these.
- The South Downs National Park extends within the LSTF area at several locations yet links from the surrounding area into the park are limited and not well sign posted.

B3. Objectives

The objectives of the BHCC LTP3 are laid out below and it is evident that the package of measures proposed as part of the LSTF would strongly contribute to each of the objectives. The focus of the LSTF bid is strongly based around supporting economic growth and reducing carbon emissions, and these feature prominently in the LTP3 objectives. Promoting equality, improving safety, and improving quality of life are also key aims of the LSTF and again these feature highly in the LTP3 objectives. There are clear links between the two strategies and the LSTF package has been developed with the objectives of LTP3 clearly in mind.

Supporting economic growth

- To ensure the local transport system operates efficiently, is well maintained and can cope with extreme occurrences.
- To improve access to job opportunities, shopping areas and cultural and visitor attractions.
- To help inform travel decisions and improve reliability of journey times for all road users.
- To deliver transport improvements required to support sustainable housing growth.

Reducing carbon emissions

- Increase the use of low-emission forms of transport and support the use of associated technologies.
- To reduce the need to travel for some journeys and enable people to travel more sustainably.

Promoting equality and opportunity

- To increase the availability and accessibility of travel choices for everyone, particularly disadvantaged people, and those living outside the central area.
- To improve streets and the wider transport system to assist in the regeneration of deprived areas and communities.

Contributing to safety, security and health

- To reduce fear of danger and the risk of personal injury as a result of transport collisions.
- To minimise the impacts of transport-related air and noise pollution on people, and the natural and built environments.

 To encourage and enable greater levels of active and healthy travel, such as cycling and walking, especially for shorter journeys.

Improving quality of life

- To create safe and attractive streets and places that everyone can enjoy and use responsibly.
- To enable greater access to a wide range of goods, services, and places, including the city's natural environment.

SECTION C - The package bid

C1. Package description

The BHCC LSTF bid comprises a combination of smarter choices and targeted infrastructure measures which together form a mutually supportive and coherent package designed to address the identified transport issues in the area. The smarter choices element will comprise a range of travel planning interventions targeting all sections of society in the bid area and will include Personalised Travel Planning (PTP) with local residents, and targeted travel planning work with Sussex and Brighton Universities and the 18 schools in the area. The smarter choices and infrastructure measures have been designed to specifically address the issues identified in Section B of this submission. The ongoing engagement with residents, schools and universities will allow us to actively involve members of the local community in refining the design and location of infrastructure measures.

Each of the package measures is described below in detail, starting with the Smarter Choices (SC) measures which underpin the bid, followed by the supporting Targeted Infrastructure (TI) measures.

SC1 – Personalised Travel Planning (PTP)

BHCC has extensive experience in this field and has a proven track record of delivering PTP in the western half of the city through the successful Cycling Towns project.

The proposed LSTF area contains approximately 32,000 addresses and no PTP interventions have taken place previously. The approach to PTP in the LSTF area will involve ongoing engagement with residents, enabling us to monitor effectiveness over the entire 4 years of the LSTF and fully understand the longer term benefits. We will also use PTP as a way of engaging with the local community and informing residents about the infrastructure measures that will be delivered through the LSTF. As part of this, residents and businesses will have the opportunity to influence the design and location of certain infrastructure measures, such as new bus shelters, RTI signs, and links to the South Downs. We will also use PTP to introduce local residents to new facilities being provided, and in some cases demonstrate how to use them, therefore overcoming the common issue of infrastructure investment with no associated promotion and marketing. Two specialised travel planning officers will work with the local community to influence consistent travel behaviour change.

SC2 - Travel Planning (Universities)

Both Sussex and Brighton Universities are members of our existing Business Travel Plan Partnership and we will use this mechanism to work closely with the universities to address staff and student travel issues through a comprehensive travel planning project.

The project will involve in-depth engagement with students and staff at both universities though attendance at events such as freshers' fairs and also holding surgeries and workshops aimed at providing sustainable travel advice. We will also work with the universities to produce targeted travel information aimed at new students which will be distributed before the new students arrive, therefore enabling them to make more informed choices on travel before they actually arrive at the university. In order to encourage students to participate in the travel planning process, we will offer a range of incentives such as cycling equipment (locks, lights etc), free bus tickets, and a range of tailored travel information.

SC3 - School Travel Planning

We will work closely with the 18 schools in the LSTF area to develop and progress their travel plans and implement the Sustainable Travel to School Strategy by promoting sustainable transport modes, particularly walking and cycling. The LSTF will enable locally focused delivery of Bikeability through a Cycle Training Coordinator, who will also work with the universities to deliver safer cycle training and Level 3 Bikeability courses. The work will include developing road safety awareness in respect of school keep clears, improved mode of travel data, communications with schools and creating online resources. Bike-IT will also consistently support the schools in the bid area to deliver an intensive programme of promotional and educational activities to increase the number of school journeys undertaken by bicycle. Bike-IT is proven to create a pro-cycling culture in schools by raising awareness, developing skills and encouraging children to travel actively. A Bike-IT programme of activities will be developed (in consultation with schools and partners) that can offer additional benefits to children and schools.

SC4 - Community Road Safety Campaign

This element will aim to promote road safety along the academic corridor and adjacent residential areas, through the 'Share the Road' publicity campaign. This focuses on encouraging road users of all types to recognise their own responsibilities and to be more aware of the issues facing others. The emphasis will be to improve safety for the most vulnerable road user groups, including pedestrians and cyclists and the local community will play a key part in developing material and deciding on potential initiatives.

SC5 - Electric Bikes Research and Promotion

Working with the EPSRC (Engineering and Physical Sciences Research Council) through Brighton University, this research project will focus on electrically assisted cycles as a unique mode of transport, with distinctive potential and challenges in the UK context. The focus is on 'bridging the gap' between those traditionally attracted to cycling and the wider population (especially commuters and the ageing population) - helping to mainstream cycling. Other associated aims include understanding detailed design issues associated with electric bikes to enable product improvement. Ethnographic techniques will be used to understand how electric bikes are perceived and integrated with wider lifestyle decisions by participants. The battery potential will be enhanced to add feature sets (GPS, mobile phones, sensors, etc) that monitor and improve the user experience and enrich the journey ('data-bikes'). Efforts to link electric charging to existing charging points in the City will also be explored.

Working in conjunction with personal and workplace travel planning, target groups will include two local employers and four community groups (specifically with older female members). 35 electric bikes will be provided to participants who will use them for day to day journeys on a trial basis, recording details of trips made. The LSTF area includes some of the city's most prohibitive topography and e-bikes provide a real opportunity to make access to cycling equitable.

TI1 - Links to South Downs National Park (SDNP)

On 31st March 2010 the South Downs became Britain's newest National Park, comprising over 1600 km² of open space, which already results in an estimated 39 million visitor days each year. The proposed LSTF area is unique in the City because there are a number of potential access points to the National Park and a large number of residents living in the adjacent residential areas of Moulsecoomb, Bevendean and Coldean. The Rights of Way Improvement Plan (ROWIP) identifies several missing links that require improvement and further links that would benefit from upgrading to Easy Access standard to enable mobility impaired residents to use them safely.

This element of the package will explore opportunities to enhance both pedestrian and cycle access to the South Downs, particularly through Wild Park and Stanmer Park which are both gateways to the vast areas of open space that exist. Capital works will include resurfacing of off-road routes, provision of road crossing points to remove barriers, and provision of signing and interpretation boards at access points. A map and leaflet will be produced highlighting walking and cycling routes in the surrounding National Park which will be distributed to 5000

targeted individuals in the LSTF area. Residents and businesses in the local area will be encouraged to contribute to the project through the PTP intervention.

TI2 - Traffic Signal Review and Upgrade

Traffic congestion along the A270 Lewes Road running through the LSTF area has been identified as an issue that restricts economic development, discourages bus travel and results in poor air quality. A contributory factor to this congestion is the ageing traffic signal equipment at the key junctions along the corridor, particularly at the Vogue Gyratory. There is also no UTC system in place to link traffic signals along the route and ensure optimal efficiency.

Through the LSTF bid, we will review efficiency and signal timings along the Lewes Road corridor. The Vogue Gyratory Junction will be refurbished with new low voltage LED equipment and provision of a linked MOVA/SCOOT application to provide a 'green wave' for sustainable modes and general traffic to relieve congestion and improve journey times along the corridor.

TI3 - Pedestrian Wayfinding Extension

This element enables the extension of the city centre pedestrian wayfinding system along the Lewes Road corridor. The city centre system was introduced in 2010 as part of the city's legibility strategy and feedback from residents and visitors has been very positive. There will be a strong focus on providing wayfinding signs around the university sites and halls of residence to target new students arriving in the city and demonstrate that shops and facilities in the city centre can be reached easily on foot. The same wayfinding system will also be provided at rail stations and the new Community Stadium at Falmer to provide a coherent and recognizable support system for pedestrians.

TI4 - Bus Real Time Information (RTI) Extension and Upgrade to GPRS

Upgrading the highly successful RTI system to incorporate GPRS technology will enable coverage in outlying residential areas to be improved, meaning that RTI signs can be implemented in the densely populated residential areas of Moulsecoomb, Bevendean, Hangleton, Coldean and on interconnecting routes. Car ownership is relatively low in these areas meaning that residents are highly reliant on the bus system to access shops and services. There are currently no RTI signs in any of these estate areas due to poor coverage of the existing radio-based system.

This element of the scheme would involve working closely with Brighton & Hove Bus Company who will be providing over £400k match funding and assisting with the placement of signs. Local residents will also be involved in this element through the PTP project where they will be able to influence the location of the new signs.

TI5 - Rail Station Access Improvements

This element comprises the development of Travel Plans for Falmer, Moulsecoomb and London Road Stations and implementation of small scale measures to improve access. Such measures would include signage, all-ability access, cycle parking and passenger information. Working in partnership with Southern Rail, who will be investing over £2m in Brighton & Hove Stations over the LSTF fund period.

TI6 – Improved Bus Stop Waiting Environments

The LSTF project will fund improvements to the Bus Stop waiting environment along the Lewes Road corridor itself and more importantly in the surrounding residential areas where provision has been identified as amongst the worst in the city. Improvements will include accessible kerbs, new bus shelters, lighting, and improved information.

TI7 - Bus Service Improvements to Brighton Station

Working in partnership with Brighton & Hove Bus Company, this element will provide funding to extend existing Bus Service 21 to the rear of Brighton station, thereby becoming the only connecting bus route serving the LSTF area with direct access to the station. Currently to get to Brighton Station from the LSTF area passengers would need to change buses at least twice, meaning this is not a viable journey and therefore resulting in an increased number of

people driving to the station. As this would be a new route, the funding would be used as a pump-priming mechanism to enable the service to grow in popularity over the four year LSTF period, with the aim being to ensure the service is commercially viable after the fund period.

C2. Package costs

SC1	£K	2011-12	2012-13	2013-14	2014-15	Total
PTP	Revenue	130	140	140	70	480
	Capital	0	0	0	0	0
SC2	£K	2011-12	2012-13	2013-14	2014-15	Total
University TP	Revenue	95	95	95	95	380
Offiversity 11	Capital	55	70	70	55	250
SC3	£K	2011-12	2012-13	2013-14	2014-15	Total
School TP	Revenue	125	125	125	125	500
Oction 11	Capital	0	0	0	0	0
SC4	£K	2011-12	2012-13	2013-14	2014-15	Total
RS Campaign	Revenue	30	65	65	20	180
110 Gampaign	Capital	0	0	0	0	0
SC5	£K	2011-12	2012-13	2013-14	2014-15	Total
Electric Bikes	Revenue	50	137.5	207.5	50	445
Electric Bires	Capital	0	20	0	0	20
TI1	£K	2011-12	2012-13	2013-14	2014-15	Total
SDNP Links	Revenue	55	55	55	55	220
	Capital	45	165	165	65	440
TI2	£K	2011-12	2012-13	2013-14	2014-15	Total
Traffic Signals	Revenue	55	55	55	55	220
	Capital	50	345	345	30	770
TI3	£K	2011-12	2012-13	2013-14	2014-15	Total
Ped	Revenue	50	50	50	50	200
Wayfinding	Capital	60	110	110	0	280
TI4	£K	2011-12	2012-13	2013-14	2014-15	Total
RTI Extension	Revenue	50	50	50	50	200
	Capital	150	250	250	0	650
TI5	£K	2011-12	2012-13	2013-14	2014-15	Total
Rail Access	Revenue	25	25	25	25	100
	Capital	60	85	85	70	300
TI6	£K	2011-12	2012-13	2013-14	2014-15	Total
Bus Access	Revenue	5	5	5	0	15
	Capital	70	180	130	0	380
TI7	£K	2011-12	2012-13	2013-14	2014-15	Total
Bus Service	Revenue	70	65	60	55	250
Improvements	Capital	0	0	0	0	0
GRAND TOTAL						6280

C3. Rationale and strategic fit

The BHCC LTP3 objectives are included at section B3 and it is evident that the LSTF bid has been designed with these clearly in mind. The two key themes of supporting economic growth and reducing carbon emissions can be seen in the LTP3 objectives and all elements of the LSTF bid are designed to tackle these key issues.

A strategic fit matrix has been developed to demonstrate the mutually supporting nature of the various LSTF bid package elements, as shown overleaf. The identified transport issues are shown on the left hand side and the proposed LSTF measures across the top, with the extent to which each measure addresses the identified issue indicated in the chart.

Strategic Fit Matrix

Strategic Fit Matrix												
					LS	TF BID E	LEMEN	ITS				
Issue / Opportunity	SC1 – PTP	SC2 - University TP	SC3 - School TP	SC4 - RS Campaign	SC5 - Electric Bikes	TI1 - Links to SDNP	TI2 - Traffic Signals	TI3 - Ped Wayfinding	TI4 - RTPI Extension	TI5 - Rail Access	T16 – Improved Bus Stops	TI7 - Bus Improvements
Traffic Congestion on A270 Lewes Road	///	√ √	√ √		✓		///	✓	√	√ √	√ √	√ √
Poor Pedestrian Links / Severance	√	✓	✓	✓		///	√ √	///		✓		
High number of car trips to Schools / Universities	///	///	///	~	√ √		~	✓ ✓	/ /	√	>	/ /
Low Car Ownership / Reliance on Public Transport	///	///	///		√	✓	√	/ /	/ / /	/ / /	///	///
Poor Public Transport Infrastructure	✓				✓		✓	✓	/ / /	/ / /	///	///
Topography Discourages Cycling	✓	✓	✓		/ / /	√ √						
Road Safety Collisions on Lewes Road	√ √	/ /	√ √	///			√ √					
Limited Access to SDNP	//	✓				///		///		✓		

C4. Community support

There is a large amount of community support for the BHCC LSTF bid and this is evidenced by the large number of partner organisations that will be actively participating in delivery of the various bid elements. Across Brighton & Hove a series of Local Action Teams (LAT's) have been set up to tackle the major issues as identified by the local community, such as transport and anti-social behaviour. In the proposed LSTF area there are 4 LAT's and each of these has stated their support for the LSTF bid and willingness to work in partnership with the City Council in delivering the various package elements. The Community and Voluntary Sector Forum has also expressed its willingness to actively contribute to the project and the Lewes Road 4 Clean Air group is also supporting the bid. This support amongst the local community will be crucial to ensure the measures achieve their maximum potential in encouraging people to travel more sustainably.

Support has also been forthcoming from the two key transport providers within the city; Southern Rail and Brighton & Hove Bus Company, both of whom have committed significant sums of money towards the project. Sussex and Brighton Universities have also committed to working in partnership with the City Council to deliver several elements of the bid.

Letters of community support for the bid are included at Appendix A.

SECTION D – Value for money

D1. Outcomes and value for money

In order to quantify the likely benefits that will be achieved as a result of the proposed LSTF package of works, a comprehensive benefits appraisal has been undertaken using a variety of widely accepted techniques best suited to the individual measure in question. Evidence of the anticipated benefits have either been taken from previous BHCC initiatives or from

published evidence of schemes undertaken elsewhere in the UK, such as the Sustainable Travel Towns or in the 'Soft Measures – Hard Facts' document produced by the Department of Health and partners. The appraisal quantifies the likely benefit that each measure will deliver expressed as an economic benefit and / or a reduction in carbon emissions. A summary table of the anticipated benefits is included on the subsequent pages and an explanation of the methodology and assumptions used for each assessment is included below.

This section also includes a description of the non-quantifiable benefits.

Quantifiable Benefits

Below is a brief explanation of the methodology used to appraise the measures which will result in quantifiable benefits.

SC1 (PTP) - Based on a reduction in car mileage of 4.5% amongst active participants in the PTP project. Assumes 25% of the LSTF population will participate in the PTP project and of those 25% will actively participate and travel by car less. Carbon reduction calculated using a figure of 0.3kg per mile for a medium sized car and assuming an average car driver travels 6000 miles per year. Economic benefit calculated using the WHO Health Economic Assessment Tool (HEAT) to determine health benefits. Assumes reduction in car mileage would be replaced by active travel modes. (The HEAT tool can only be applied to cycling but it is widely accepted that the benefits from increased walking will be greater).

SC2 (University Travel Planning) – Based on a 9% reduction in the proportion of staff and students traveling to university by car. Carbon reduction calculated using a figure of 0.3kg per mile assuming 5 mile round trip car journey undertaken 3 times per week on a 40 week academic year. Economic benefit calculated using the WHO HEAT tool.

SC3 (School Travel Planning) – Based on a 10% reduction in the proportion of car trips to school (currently 20.7%). Carbon reduction calculated using a figure of 0.3kg per mile assuming 2 mile round trip car journey undertaken every day during term time. Economic benefit calculated using the WHO HEAT tool.

SC5 (**Electric Bikes**) – Based on 35 electric bikes saving on average 500kg CO2 per bike per year. Bikes will be in use in years 2 and 3 of the LSTF project.

TI1 (SDNP Links) – Based on 5000 walks leaflets distributed to targeted individuals and 41% of those individuals replacing a 1 mile return car journey with a corresponding walking trip once per week using the new upgraded facilities delivered through the LSTF project. Carbon reduction calculated using a figure of 0.3kg per mile. Economic benefit calculated using the WHO HEAT tool.

TI2 (**Traffic Signal Upgrade**) – Based on a 12% reduction in delay at the upgraded junction for all traffic. Economic benefit has been calculated for car drivers and bus passengers using standard values of time for each as prescribed by DfT. Benefit has been calculated annually during the LSTF period but benefits would continue to accrue after this time.

TI4 (RTI Extension) – Economic benefit is based on a stated preference exercise undertaken as part of the Shoreham Harbour Community Infrastructure Fund (CIF) project which showed that RTI is valued by passengers at 1.4 minutes of in-vehicle waiting time. This is equivalent to 11.3 pence per person, per RTI sign, per year. Average number of people using each bus stop in the LSTF area has been calculated at 117 per day. Assumes implementation of 40 new signs over the LSTF period.

TI6 (Access to Buses) – Economic benefit is based on the value to passengers of new bus shelters with lighting (6.56p, TfL standard figures). Assumes implementation of 5 new shelters with lighting per year.

Non-Quantifiable Benefits

Although it is clear that all of the measures proposed in the LSTF bid will deliver significant benefits to the local community, it has not been possible to accurately quantify the benefits arising from several of the proposed measures. This is for a range of reasons such as uncertainty over the exact nature of the measures that will be delivered, as in the case of the Access to Rail measures which will be informed by the initial survey work undertaken at the stations themselves. Also, as in the case of the pedestrian wayfinding scheme, there is anecdotal evidence of benefits but this is not sufficient to undertake a quantified analysis. For these reasons, a summary of the non-quantifiable benefits for such measures is included below.

SC4 (Community Road Safety Campaign) – Significant benefit in the form of a reduction in accidents within the area is likely to occur as a result of this measure but there is insufficient reliable data to be able to accurately quantify the likely scale of any benefit. Detailed analysis of collision statistics will be undertaken as part of this measure and a cost/benefit analysis will be undertaken at the end of the LSTF project as part of the reviewing and monitoring stage.

TI3 (**Pedestrian Wayfinding**) – Pilot results from the Legible London scheme have suggested that pedestrian satisfaction with the scheme is very high and users have said that it will strongly encourage them to walk more often. Within the TfL pilot area there has been a 5% increase in the number of walking trips but TfL recognise that a number of other factors can influence people travel choice and the increase cannot be attributed to the wayfinding system in isolation.

TI5 – (Access to Rail) – As mentioned previously, the exact nature of these works is not yet known and this will be informed by the initial inventory surveys undertaken as part of the LSTF project to determine the most appropriate new facilities for each station. Once implemented, the improvements will create an enhanced station environment with improved signage, lighting, security, waiting areas, cycle storage and seating that will provide further encouragement for local people to use the rail network.

TI7 – (Bus Service Improvement) – At this stage it is difficult to make accurate predictions on the number of additional passengers that will use this improved bus service. The number is likely to be significant however and a large number of these passengers will have previously travelled by car to access the station, thereby contributing to congestion and air pollution along the corridor and in the city centre.

D2. Financial Sustainability

BHCC is confident that the measures contained within this bid will produce lasting and permanent benefits that will not require significant amounts of ongoing funding beyond the LSTF period. With regard to the capital measures proposed, these will remain as a legacy of the LSTF project and will continue to be used by members of the local community and those travelling through the area. The benefits produced as a result of these measures will continue to accrue long after the fund period has come to an end. A specific measure that could be seen as requiring ongoing funding is the improved bus service provision to Brighton Station. However, in discussion with Brighton & Hove Bus Company, we are confident that this can become commercially viable by the end of the fund period and therefore require no additional support form the City Council.

The high level of community support and involvement in the smarter choices measures will mean that the benefits produced will be sustained in the long term resulting in a cultural shift without the need for additional intervention. Monitoring and evaluation work will continue beyond the fund period and should it be necessary to carry out further travel planning work then the City Council will be committed to ensuring the necessary resources are available to facilitate this through its LTP programme. The identification of local community champions throughout the project will ensure that positive messages regarding travel choices will be maintained within the community.

Summary of Benefits					Quantifiable Benefits			
LSTF Measure	Appraisal Category	Where are the Benefits coming from?	Evidence	Year 1	Year 2	Year 3	Year 4	
SC1 - PTP	Carbon Reduction (kg)	4.5% reduction in car mileage amongst active participants in PTP	Previous 5 years BHCC PTP initiatives. Also backed up by evidence from PTP projects elsewhere	0kg	101,520kg	203,040kg	304,560kg	
	Economic Benefit (£)	Health benefits associated with a corresponding 4.5% increase in walking and cycling	Benefits quantified using the WHO Health Economic Assessment Tool (HEAT).	£0.00	£130,929.83	£261,859.66	£392,789.49	
SC2 - Travel Planning - Universities	Carbon Reduction (kg)	9% reduction in the proportion of staff and students travelling by car	Evidence from BHCC Travel Plan Partnership as well as published information in 'Transportation' Journal	0kg	116,280kg	116,280kg	116,280kg	
	Economic Benefit (£)	Health benefits associated with a corresponding 9% increase in active modes	Benefits quantified using the WHO Health Economic Assessment Tool (HEAT).	£0.00	£174,160.96	£174,160.96	£174,160.96	
SC3 - School Travel Planning	Carbon Reduction (kg)	10% decrease in the proportion of car trips to schools in the LSTF area	BHCC data shows that reductions in car usage of between 8-25% can be achieved when working intensively with schools	13,167kg	13,167kg	13,167kg	13,167kg	
	Economic Benefit (£)	Health benefits associated with a 10% increase in active modes	Benefits quantified using the WHO Health Economic Assessment Tool (HEAT).	£37,323.89	£37,323.89	£37,323.89	£37,323.89	

SC5 - Electric Bikes	Carbon Reduction (kg)	35 electric bikes saving 500kg CO2 per bike per year	Avon and Wiltshire Health Trust electric bike trials	0kg	17,500kg	17,500kg	0kg
TI1 - SDNP Links	Carbon Reduction (kg)	41% Increase number of people walking 1 mile return journey once per week instead of driving Department of Health 'Soft Measures - Hard Facts' document suggests 41% of participants in a scheme in Wiltshire walked short distances instead of driving		0kg	32,500kg	65,000kg	65,000kg
	Economic Benefit (£)	Health benefits associated with the above increase in walking and cycling	Benefits quantified using the WHO Health Economic Assessment Tool (HEAT).	20.00	£47,988.48	£95,976.95	£95,976.95
TI2 - Traffic Signal Upgrade	Economic Benefit (£)	12% reduction in delay for cars and buses at upgraded junction on A270 Lewes Road	TRL report 279 quantified the benefits of MOVA at 20 sites across the UK. 12% average delay reduction at medium sized junctions	£0.00	£63,259.71	£127,059.42	£127,059.42
TI4 - RTI Extension	Economic Benefit (£)	Value of RTI to passengers using the bus, based on stated preference exercise undertaken as part of the Shoreham CIF project	Stated preference exercise revealed that RTI is valued at 11.3 pence per person using the bus stop	£48,250.00	£96,500.00	£144,750.00	£193,000.00
TI6 - Access to Buses	Economic Benefit (£)	Value of bus shelter and lighting to bus passengers	Standard values applied by TfL are 6.56 pence per passenger for providing a bus shelter with lighting	£0.00	£18,676.32	£37,352.64	£56,028.96

SECTION E – Deliverability

E1. Implementation

The LSTF programme will be delivered by the BHCC Transport Planning Team, made up of experienced Transport Planners with expertise covering the range of measures outlined in our bid. Engineering support will be provided by in-house traffic engineers. The team has a proven track record of successfully delivering externally funded programmes of work including Civitas, Cycling Town, and Community Infrastructure Fund programmes and large scale projects of a similar nature through the LTP.

Experience from previous projects tells us that community involvement is critical in providing schemes that work for the community as a whole.

In order to ensure successful delivery of the LSTF project, sufficient revenue funding for 6 x FTE staff posts has been included in the bid. This will ensure staffing levels are consistent with previous externally funded projects such as Cycling Town and will ensure the experienced delivery team can be retained for the purposes of the LSTF project. Experience from previous projects has demonstrated that this level of staffing is required in order to actively involve the community in all elements of the bid, and has also shown that projects such as PTP require consistently high staffing levels if they are to be successful.

The staff posts funded through the LSTF project will therefore be as follows: 2 x PTP travel advisors, 1 x School Travel Plan Officer, 1 x Bikeability co-ordinator, and 2 x Transport Planning Officers.

The following governance structure will be created to oversee delivery of the project:

- 1. LSTF Project Board The Board will be made up of a political lead who will champion the bid, along with senior officers and importantly a local community representative. Its role will be to provide overall guidance, approve major plans, receive quarterly progress reports and authorise changes to the programme. The project board will meet on a quarterly basis where members of the delivery team will provide verbal and written updates against the project programme.
- 2. LSTF Delivery Team Comprising of project managers overseeing LSTF implementation, a finance officer, evaluation officer, and representatives from external delivery partners. Its primary role will be to implement schemes and it will meet monthly to ensure adequate progress is being made. The delivery team will compile quarterly progress reports for the Project Board.
- 3. LSTF Stakeholder Steering Group This group will ensure community and stakeholder input into the LSTF programme. The Group will provide a comprehensive consultation group that will advise on a range of issues related to the programme, such as advising on the detail of scheme implementation or providing feedback on the success of the programme. The group will be made up of representatives from delivery partners and community stakeholders.

E2. Output milestones

The table included overleaf highlights the specific deliverables and outputs that are expected in each year of the LSTF programme. Once funding has been confirmed a comprehensive project programme will be developed with key milestones and deadlines. This will be used to report progress to the project board as outlined above.

In addition to the deliverables identified in the table, there will be an ongoing programme of data collection and monitoring to enable a thorough understanding of the impacts of each measure with indicative results produced and reported annually.

Output Milestones					
LSTF Measure	Year 1	Year 2	Year 3	Year 4	Target Output
SC1 - PTP	PTP engagement	PTP engagement	PTP engagement	PTP engagement Monitoring & Evaluation	4.5% reduction in vehicle trips amongst active participants
SC2 - University Travel Planning	Staff & Student engagement	Staff & Student engagement	Staff & Student engagement	Staff & Student engagement Monitoring & Evaluation	9% reduction in the proportion of staff and students travelling by car
SC3 - School Travel Planning	School engagement Bike IT – 2 schools	School engagement Bike IT – 5 schools	School engagement Bike IT – 5 schools	School engagementBike IT – 5 schoolsMonitoring & Evaluation	10% decrease in proportion of car trips to schools in the LSTF area
SC4 - Road Safety Campaign	Design and scoping of campaign	RS Campaign	RS Campaign	RS Campaign Monitoring & Evaluation	Decrease in the number of road safety collisions
SC5 - Electric Bikes	Research and identification of trial participants	Electric Bike trials and data gathering	Electric Bike trials and data gathering	Monitoring & Evaluation	Reduction in car trips during trial period and improved knowledge
TI1 - SDNP Links	Scoping and design of route improvementsConsultation	Route implementation Leaflet Design	Route implementation Leaflet Production and distribution	Route implementationLeaflet distributionMonitoring & Evaluation	41% of people walk a 1 mile journey once per week instead of driving
TI2 - Traffic Signals	Feasibility design and costings	ConsultationDetailed DesignImplementation	Implementation of junction upgrades	Monitoring & Evaluation	12% reduction in delay for all vehicles at the junction
TI3 - Pedestrian Wayfinding	Basemapping Scoping of sign locations	ConsultationSign DesignImplementation (10 signs)	• Implementation (10 signs)	Monitoring & Evaluation	Increase in walking trips in the LSTF area
TI4 - RTI Extension	GPRS upgradeSign location scopingResearch sign types	Consultation Installation (20 signs)	• Installation (20 signs)	Monitoring & Evaluation	Increase in bus trips in the LSTF area
TI5 - Access to Rail	Station InventoryStation travel plansScoping of measures	Station travel plansConsultationImplementation	Implementation	Installation Monitoring & Evaluation	Improved station environment leading to increased train use
TI6 - Bus Stop Improvements	ConsultationScoping of LocationsInstallation (3 shelters)	Consultation Installation (10 shelters)	Consultation Installation (7 shelters)	Monitoring & Evaluation	Improved bus stop environment leading to increased bus use
TI7 - Bus Service Improvements	Scheduling Commence improved route	Continue improved route	Continue improved route	Continue improved route Monitoring & Evaluation	Increased bus patronage on improved route

E3. Summary of key risks

RISK - Package will overspend / will not deliver within timescale

SOLUTION - The delivery team have experience of successfully delivering similar programmes to budget and within set timescales. Progress will be reported to the Board on a quarterly basis and any identified issues dealt with swiftly.

RISK - Partners will not deliver their aspect of the Package

SOLUTION - Commitment from partners to participate fully in the programme has been confirmed prior to submission of the bid. The Council already has strong working relationships and effective channels of communication with many of the partners and these will continue to be used during the programme. The LSTF Project Delivery Group will be set up to bring together delivery partners and monitor progress.

RISK - Unanticipated problems arise at detail design or implementation stage resulting in the inability to implement a scheme

SOLUTION - The bid is predominantly made up of tried and tested measures and extensive feasibility testing has been carried out prior to submission. Therefore significant delivery issues are not envisaged. However there is flexibility within the programme to make appropriate small scale changes without affecting the overall package objectives.

RISK - *Political support for the programme, or aspects of the programme, is withdrawn* **SOLUTION** - The bid has been developed in consultation with elected Members and political support has been confirmed prior to submission. The measures selected are deemed to be acceptable across the local political spectrum and therefore a change in political leadership will not affect support for the programme.

E4. Project evaluation

BHCC has significant experience and commitment to evaluating the outcomes of both smarter choices and infrastructure measures and is confident that sufficient knowledge and experience is in place to assist the DfT in assessing and sharing the benefits of the LSTF programme should this bid be successful.

BHCC has participated in a number of programmes with a strong emphasis on evaluation and the sharing of results including the Cycling Towns programme and the European funded CIVITAS and MMOVE initiatives. Through its involvement in these programmes, BHCC has worked with partners on the evaluation of component projects. For example, one of the core rationales of CIVITAS is to learn lessons from the projects implemented and disseminate these results. These programmes offer direct parallels with the package presented in this bid in terms of the inclusion of projects such as Workplace and School Travel Planning, Personalised Travel Planning, and a Community Road Safety Campaign.

The extensive baseline data that BHCC is able to provide is outlined fully in Section B2 and includes household travel surveys, automated traffic and cycle counts, pedestrian counts, vehicle occupancy and journey time surveys, air quality monitoring, road safety statistics and public transport patronage figures. This provides a sound basis on which to monitor progress against the expected outputs identified in the bid.