



SOMERSET COUNTY COUNCIL

Local Sustainable Transport Fund Bid

MOVING BRIDGWATER FORWARD



February 2012

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APPLICANT INFORMATION

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SECTION A - Project description and funding profile

A1. Project name

Moving Bridgwater Forward

A2. Headline description

‘Moving Bridgwater Forward’ will remove the barriers that stop people accessing new jobs, education and other services. It will make Bridgwater wealthier, healthier and happier, whilst cutting carbon emissions. It offers new ways of travelling, thinking and working:

- New and improved walking and cycling routes linking people with jobs and education.
- Intensive Personal Travel Planning, Area Wide Travel Planning, Smarter Choices, Social Marketing and events to encourage people to think about their options.
- Partnerships with other providers and a ‘Community Fund’ to help brilliant projects do more and enable local people take responsibility for addressing their needs.

A3. Geographical area

The bid focuses on Bridgwater, one of Somerset’s key towns. The area covered by the bid extends from the village of North Petherton to the south, through the Regional Rural Business Centre and associated development around Huntworth (near to J24 of the M5) and the town centre to planned development further north (see Map A below). The area is flat and between 0.5 and 3 miles from Bridgwater town centre, well within walking and cycling distance.

Employment in manufacturing and logistics is growing quickly, largely to the north of the town. Significant residential development is planned to the south of the town. A new hospital site, School for the Future and accommodation to support the planned new nuclear facility at Hinkley Point are all planned to be in the heart of the project area.

Whilst flat, compact and well connected to the strategic road network, Bridgwater’s geography presents some challenges. The river, railway line, canal and heavily congested major roads (with high HGV flows) all run from North to South, severing East to West movements. This severance is compounded by poor

local environments which make alternative routes feel unsafe. The area also suffers from high unemployment, low educational attainment and is home to some of the most deprived wards in the country. The challenges presented by these factors are considered further in B1.

A4. Type of bid

Small project bids		
Tranche 1 bid		
Expression of interest for Tranche 2		(please complete sections A and B only)
Tranche 2 bid	x	

A5. Total package cost (£m)

£6.753m

A6. Total DfT funding contribution sought (£m)

£4.346m

A7. Spend profile

£K	2011-12	2012-13	2013-14	2014-15	Total
Revenue funding sought	0	569	915	805	2290
Capital funding sought	0	637	822	597	2056
Local contribution	800	809	609	189	2407
Total	800	2015	2346	1591	6753

A8. Local contribution

Bridgwater's local planning documents set out a clear vision for regeneration and sustainable transport (set out in the newly adopted Core Strategy (Sedgemoor District Council, 2011)) and a wide range of new developments are planned for the bid area. This allows the bid package have a big impact at a reduced cost, by leveraging in local contributions.

The bid includes development-related transport contributions (s106) and a commitment for local funding from Somerset County Council's integrated transport (LTP) programme over the 4 years. It also includes contributions from a range of partners who share our aspirations, these contributions show the willingness of the whole local community to contribute (these contributions are all covered by the letters of support included as Appendix A). Local contributions include:

- £1915k in s106 receipts (bonded sums protected by legal agreements and due to be received during the fund period)
- £250k SCC LTP capital and £83k SCC revenue (staff time)

- £15k pa for three years from '1610'⁽¹⁾ for a Cycle Development Officer (50% of costs)
- £5k pa for three years from '1610'⁽¹⁾ to fund cycling events
- £10k pa for first year from the NHS to deliver cycling projects
- £22k from Sustrans
- £12.5k worth of project team accommodation from Sedgemoor District Council
- A significant contribution from the Centre for Transport and Psychology⁽²⁾ (see A9)
- The planned new nuclear development at Hinkley Point would contribute £1.5M to walking and cycling improvements. A substantial portion of this would benefit the bid area and would represent a further local contribution to the bid. A letter of support from EDF Energy is included in Appendix A. This contribution is **in addition to those detailed in A7**, as its exact nature and phasing are not as clear as they are for other contributions.

A9. Partnership bodies

Somerset County Council has worked with a number of partners to help select the best package and will continue working with them to ensure it is delivered efficiently and effectively.

Sustrans is a key partner and will deliver the Behavioural Change elements of the package, capitalising on their expertise and experience in the field. Sedgemoor District Council will also play a key role, hosting the project team in their offices on the edge of the project area. Section E1 explains more about how Somerset County Council will work with these organisations to deliver the project together.

Other partnering bodies and organisations include:

- '1610'⁽¹⁾ (contracted by NHS Somerset) delivering active travel training.
- Futures for Somerset providing business outreach and community engagement projects associated with Building Schools for the Future.
- Bridgwater College as a provider of education and development opportunities.
- A variety of local community groups who will help shape, define and deliver various projects within the package (see section C4).
- The Centre for Transport and Psychology (CTP)⁽²⁾ has expressed an interest in providing valuable support in evaluating the effectiveness of the behaviour change elements, which may also be helpful to the DfT in their evaluation of the fund.
- Finally, given the proximity of the area to J24 of the M5, the Highways Agency are very supportive of the intended package proposal and see it as an extension of their Influencing Travel Behaviour (ITB) programme, which has undertaken similar area-wide travel planning projects (notably at J25 of the M5).

Appendix A includes letters of support from all partners.

SECTION B - The local challenge

B1. The local context

Bridgwater has 36,000 residents, approximately a third of the population of the district of Sedgemoor. Served by the M5, A38 and A39 and close to Taunton and Bristol, Bridgwater is extremely well connected. This has allowed the town to develop a strong manufacturing sector and become an increasingly important centre for distribution and logistics. However, the recent economic downturn has hit retail and office based employment and exposed weaknesses that have stopped the town's economy becoming as

1 [1610](#) is a non-profit making leisure trust that is the largest provider of leisure facilities in Somerset.

2 CTP is joint initiative between JMP and psychologists from the Universities of Bath, Exeter and Surrey, working to develop sustainable travel behaviour (<http://vctcp.org/vctcp/home.html>).

strong and sustainable as it needs to be. Unfortunately the good transport links described above also combine with the town's topography to present a number of barriers and environmental issues. This is the local context which this bid has been designed to address, getting people into work and getting people to work. The five sections below explain this context further, building a picture of the challenges the bid addresses.



Jobs

Unemployment levels in Bridgwater are more than double the Somerset average of 2.4%. In the wards of Hamp and Victoria, unemployment is 6.2% and 6.5% respectively (JSA Allowance claimants from February 2011(ONS, 2011a)). Between 2008 and 2009, in the wider Sedgemoor area, the number of new businesses failing increased 25% and the number of new enterprises starting fell 14% (ONS, 2011b).

Sedgemoor's Local Development Framework proposes 6,270 new jobs by 2027, largely in the existing employment areas, in the north, south and (to a lesser extent) centre of Bridgwater. EDF Energy is developing proposals for a new nuclear power station at Hinkley Point on the Severn Estuary, approximately 5 miles from Bridgwater. Construction is expected to take 10 years, creating another 5,600 jobs.

These jobs are vital to address unemployment and deprivation and move Bridgwater forwards. However, making transport work will be vital to making these developments successful:

- The residential areas (including substantial new developments) that will provide the workforce for these new jobs are mainly in central and southern Bridgwater. However, the jobs are likely to be dominated by the manufacturing and distribution sectors, close to the motorway junctions on the northern and southern edges of town. If the proposals gain planning permission, the new jobs at Hinkley Point would be 5 miles from the town.
- The distances to travel are not huge, generally 2-3km (rising to 5 miles for Hinkley) but people's transport options are limited. Car ownership is low, as many people can't afford cars. This helps avoid further traffic on the already congested main roads but prevents people from getting to peripheral jobs. Bus services are infrequent, especially outside peak hours when people need to travel for shift work. Walking and cycling are viable options given the distance and flat topography, but current conditions are not attractive for either. The sub-section on 'Barriers' below explains how traffic and HGVs make the roads unappealing to cyclists and conditions on off-road routes make them feel unsafe, particularly after dark when people's shifts often start or finish.
- Construction activity is a great opportunity but it will put a real strain on transport networks. The majority of construction traffic from any development at Hinkley will pass through Bridgwater, discussions continue with EDF about how this will be mitigated and managed but the impact will be considerable.



Education

Access to jobs is only part of the problem. To reduce unemployment and attract a diverse range of businesses local people need the skills the new jobs will demand. Somerset's Local Economic Assessment ('The State of the Somerset Economy' (Eco Gen, 2010)) showed that a lack of skilled and degree-qualified workers deters business from investing in the area. 17.7% of people in Bridgwater live in the most deprived 20% of wards in the country, compared with 4% in the whole of Somerset. The main three pockets of deprivation are Hamp, Victoria and Sydenham. A vital aspect of this statistic is the 'Rank of Education Skills and Training Score' which shows that 7 Local Super Output Areas in Hamp, Victoria and Sydenham are within the worst performing 10% in the country, with 4 in the worst 5%.

The main two schools in Hamp, Robert Blake (Secondary) and Elmwood (Special), have been improved through the 'Building Schools for the Future' programme. Bridgwater College is part of the Somerset University Partnership Project, aiming to bring higher education opportunities to Somerset residents. In January 2011 it opened a multi-million pound Energy Skills Centre, offering specialist training to those seeking work in the nuclear and energy industries. This will be vital to support any further development at Hinkley Point and to allow local people to be able to take advantage of the employment opportunities it would offer.

While many young people are able to attend Bridgwater College, our local engagement showed that some struggle to access crucial vocational opportunities in 'car captive' areas on the periphery of the town, due to lack of transport options (see 'Barriers' Sub-section). Therefore, we need to provide the opportunities for people to make the most of these new opportunities and gain the skills needed for the new jobs described above.



Health

Mortality and child obesity rates in Sedgemoor are higher than the rest of Somerset. NHS Somerset has already placed Health Trainers in Hamp, Victoria and Sydenham to work with these communities to tackle issues such as inactivity, unemployment and lifestyle-related ill health. The NHS also commissions a number of physical activity programmes through local providers, such as '1610'¹ and Somerset County Council's transport team. This all highlights the need to improve health and get people fit to work to work and contribute to the local community. However, this is a big challenge and the 'Barriers' discussed below could prevent active travel from playing its vital part.



Barriers

The previous sub-sections introduced some of the barriers that stop people accessing jobs, education and services or visiting their families and friends in Bridgwater. Other barriers include:

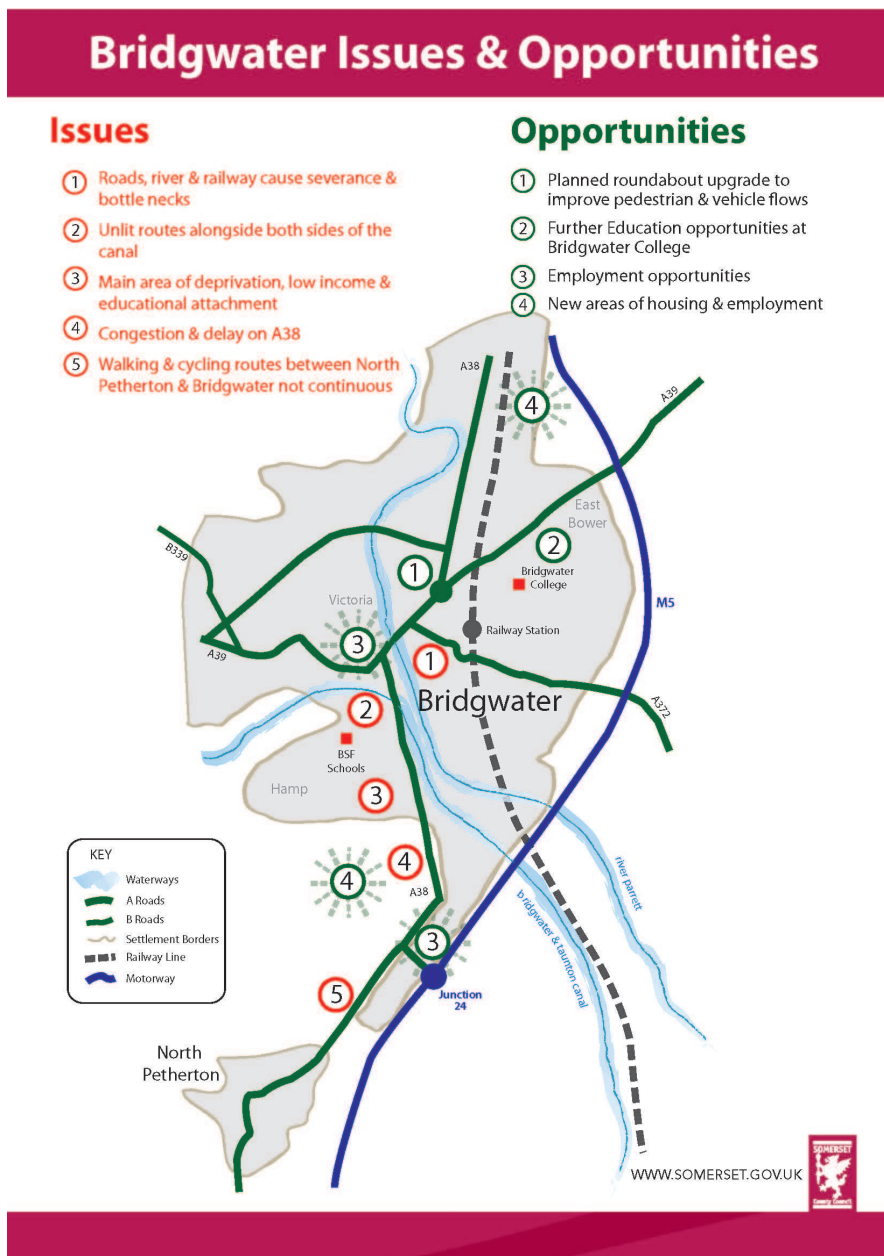
- Congestion is common on the main A38 and A39 roads through Bridgwater and the Highways Agency reports significant queuing on the off-slips at Junction 24 of the M5, caused partly by heavy demand on the Huntworth roundabout on the A38. This leads to delay and uncertainty for travellers and the freight traffic that local businesses depend on.
- Few evening bus services in residential areas preventing people from accessing shift work.
- A poor walking and cycling environment. Only 72% of people were satisfied with the quality of the environment, compared with 84% in Somerset as a whole (DCLG, 2008). Local communities suggest that poor lighting, insufficient natural surveillance, path conditions and antisocial behaviour make people feel insecure on off-road routes, particularly after dark. Only 40% of Bridgwater's population felt safe after dark, compared with 59% in the wider Somerset area (DCLG, 2008).
- Rail and river routes through the town, combine with congested roads to create significant severance to walking and cycling routes. Whilst the canal offers a really attractive route for some walking and cycling trips, it also acts as a barrier to some other trips.
- Below average car ownership is good for encouraging sustainable travel but currently stops people accessing the things they need. 27.8% of household don't have access to cars compared with 17.6% for the whole county (ONS, 2001).



Environment

The level of CO₂ generated by transport in Sedgemoor is higher than any other district in Somerset (DECC, 2010). Low-lying ground in and around the town means Bridgwater is already at risk of flooding from both fluvial and tidal events. It is hoped that the development of 7,455 new homes by 2027 (Sedgemoor LDF) will help improve the local environment and deliver a long-term flood defence system for the town. However, reducing CO₂ has to be a key priority for such a vulnerable area.

These challenges set the context for the evidence presented in B2 and the objectives set out in B3. The bid has to tackle the disconnect between jobs and employees (spatially and in terms of their skills) and overcome health and travel barriers in doing this. Last, but by no means least, it has to help reduce CO₂ emissions to allow Bridgwater to enjoy these other improvements in safety. These challenges are summarised in Map A below.



Map A - Issues and Opportunities in Bridgwater

B2. Evidence

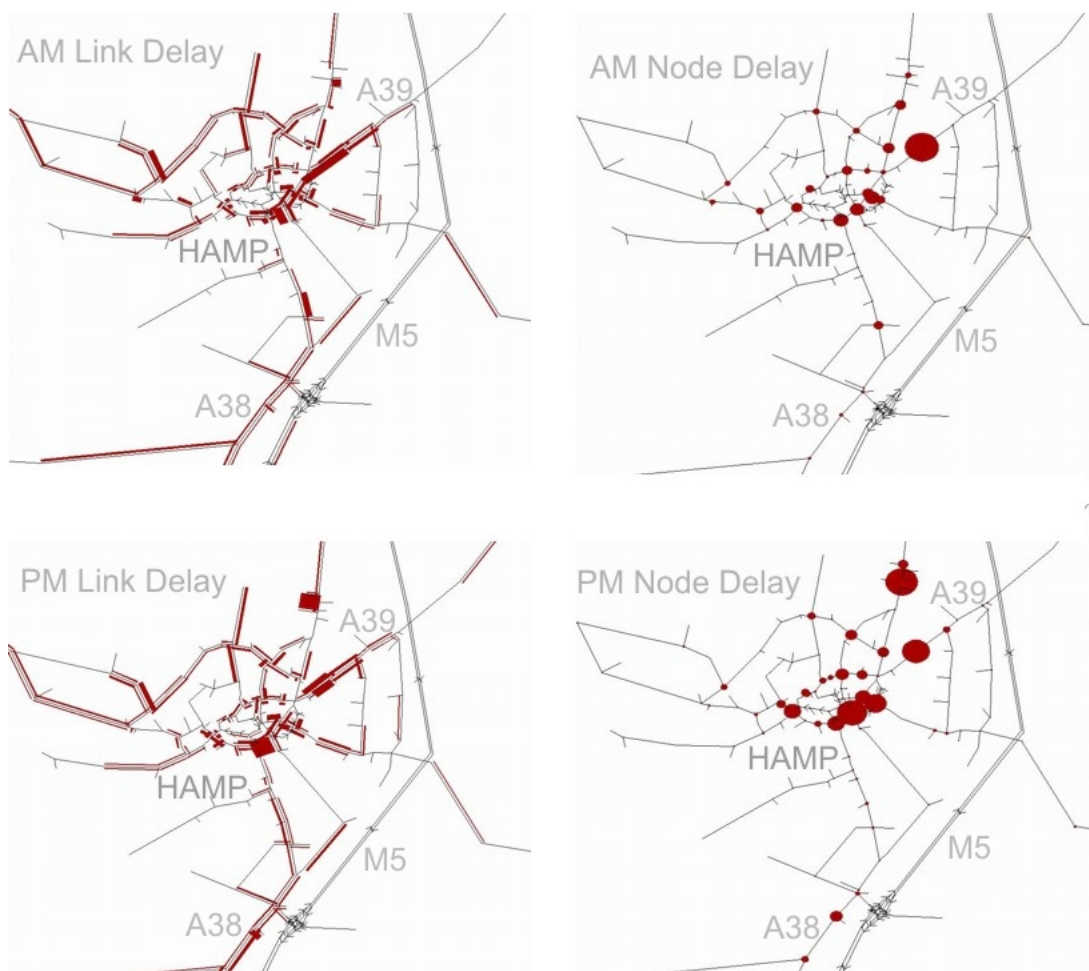
This sub-section provides evidence of the impact the contextual factors described in B1 have on travel in Bridgwater. It draws lessons from previous studies of the area and helped us develop the objectives set out in B3.

How the network is working

A large body of evidence about travel in Bridgwater has been collected in the last 5 years. This includes the 'Bridgwater, Taunton and Wellington Future Transport Strategy' (now incorporated into the Somerset Future Transport Plan (FTP) 2011-2026) and the Government-supported 'Connect 3' DaSTS Project

(2010). The data shows that Bridgwater suffers from congestion on the major routes through the town, notably on the A38 and A39, as shown on the Link and Node delay maps for projected growth to 2016 reproduced below. This congestion occurs not only in the peaks but also in the interpeak period, which may be due to Bridgwater's distribution industry (see B1). This level of traffic, congestion and delay:

- Reduces the attractiveness of the town to businesses, particularly logistics businesses.
- Is one of the barriers to travel described above, reducing access to jobs and education.
- Has significant environmental impacts, in terms of CO₂, air quality and townscape.



How people travel

The Census shows that 60% of people drive to work and a further 7% travel to work as a car passenger in Bridgwater (ONS, 2001). 13% of residents walk to work and 10% cycle to work, a figure almost 4 times higher than the national average. Within a 2km radius, 29% of the Bridgwater population walk to work and 17% cycle. Between 2km and 5km, this changes to 4% and 13% respectively.

This suggests that walking and cycling are good options for Bridgwater and they need to play a key part in addressing the issues identified in B1. Our work with local people has also shown strong support for measures that encourage walking and cycling. On-street surveys in Bridgwater, undertaken in 2010 during the development of our FTP, put walking and cycling promotion and infrastructure among the three most important issues for people in the town:

"A lot more people would cycle ... [if we had] continuation of cycle lanes in built up areas, no point having them for 5 yards and then stopping them" (Cycling Commuter, Bridgwater)

"Make people aware of cycle paths" (Car Driver, Bridgwater)

The National Highways and Transport Survey (NHT) 2011 shows low satisfaction with Cycle Provision, Signage and Information in Hamp, at between 20% and 40%.

Data from schools in the bid area shows that 71.53% of pupils walk to local schools. This is high compared to the county average of 49.99%, reflecting the fact that pupils live close to their schools. Consequently, single (family) occupancy car use is low at 11.06% compared to the county average of 25.34%. However, cycling to school is just below the county average. Given the relatively high levels of cycling to work, this suggests that there may be specific barriers that the bid needs to address to increase cycling to school. This reliance on walking is also likely to contribute to the problems when students have to go further afield to access vocational training or jobs.

Planned baseline data includes:

- Indicators of employment and engagement with education
- Indices of Multiple Deprivation (latest version released March 2011)
- Use of DfT's carbon calculator
- Updated modelling and count data
- Mode of Travel to work (Census data)
- Our 'attitudes towards sustainable transport' surveys (see section C4)
- Community and business awareness, engagement and satisfaction
- National Highways and Transport survey (annually recorded)
- School travel data

B3. Objectives

This section summarises the objectives of Somerset's Local Transport Plan and how the bid will support them. Somerset's Future Transport Plan 2011-2026 (which forms Somerset's Local Transport Plan) has 6 objectives designed to help our economy grow and preserve what we love about Somerset. This bid has been developed to help us meet these objectives in Bridgwater. The table below shows how the bid package described in C1 links to the challenges identified in B1 *and* deliver the Future Transport Plan's objectives. Package elements have been designed to do as much as possible for all of our objectives but the table below summarises the most important links.

		Challenges					Bid package elements								How the bid will help	
		Jobs	Education	Health	Barriers	Environment	Infrastructure and Signage	DIY Streets	Area Travel Planning	Focused Work with partners	Events and Promotion	Community Fund	Smarter Choices and Marketing	Personalised Travel Planning		
		£	1+2=3	+	→	🌳										
FTP Objectives	Making a Positive Contribution														Helping people get around helps them to contribute to society and a number the elements explicitly encourage people to contribute to the changes they need.	
	Living Sustainably														Encouraging walking and cycling will benefit the global economy and physical changes will improve the local environment.	
	Ensuring Economic Wellbeing														A healthy, well educated workforce with access to a range of jobs will boost the local economy and give it the strength to survive and thrive.	
	Enjoying and Achieving														Improving access to education and getting people fit will allow them to achieve and enjoy more.	
	Staying Safe														Better infrastructure and information will help people access safer routes and tackling fear of crime will make people feel secure.	
	Being Healthy														Enabling and encouraging walking cycling will get people fit and healthy. Better transport links will also improve access to healthcare services.	
Key															Strong link with objective	
															Link with objective	

SECTION C - The package bid

C1. Package description

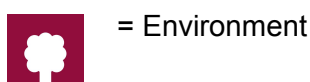
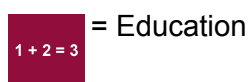
This bid will allow us to Move Bridgwater Forward by connecting workers with jobs and students with schools and colleges. It will make Bridgwater easier to get around and make people feel safer, happier and healthier all over the town. It will improve Bridgwater's environment and reduce its contribution to climate change.

To do this it needs to reduce congestion and delay, improve the experience of walking and cycling in Bridgwater, help people understand all of the options they have and tackle a huge range of specific barriers that affect different people.

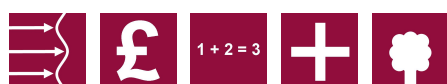
Doing all of these things will require a range of different solutions. To make sure the package is deliverable it is composed of tried and tested solutions that respond directly to what the Bridgwater community needs.

Empowering communities like this offers great value and ensures schemes are well targeted but also helps them to develop the capacity to keep on delivering after the funding ends.

The summary of each bid element below explains what they do and why they were chosen. The icons show which of the challenges identified in B1 different elements address:



Infrastructure and Signage Improvements



What – A new cycle route from North Petherton to Bridgwater along the A38,

via the canal and through Hamp to the town centre (shared with walkers where appropriate). Walking and cycling signs throughout the town, where gaps have been identified. Costed studies have been produced to support this work.

Why – To avoid the barriers caused by congestion and severance. To provide a sustainable 'spine' linking residential areas with employment, retail and other services. To encourage more people to cycle, get fit and reduce CO₂.

Area Travel Planning



What - Working with businesses in South Bridgwater to develop more effective Travel Planning.

Why – To help workers understand the different ways they can get to work. To reduce businesses' costs, make deliveries easier and give them access to a wider and healthier labour market. To improve opportunities for new businesses and expansion. To cut congestion, reduce carbon emissions and improve the performance of the transport network.

Personalised Travel Planning (PTP)



What – A high intensity PTP project covering over 8,000 people in East Bower, Hamp and the new development to the south of Hamp. These areas were selected following a market segmentation study which identified them as good targets.

Why – To make people are more aware of the travel options they have for reaching jobs, education and other services. To enable and challenge people to change their habits, travel more sustainably and make themselves healthier and wealthier.

Smarter Choices and Social Marketing



What – A social marketing campaign targeting our challenges and promoting behaviour change. Drawing on past experience of social marketing in this area (www.movingsomersetforward.co.uk), 5 years of attitudinal market research and insights from behavioural psychology (like those in 'MINDSPACE' (Dolan et al., 2010)).

Why – To make people more aware of the travel options they have to access employment, education, shops and other services. To help people feel they can make the changes they need to get into work, into education, get healthy and help the environment. To make doing these things feel normal.

Events and Promotion



What – Events that improve people's skills or make them feel part of bigger change. Including British Cycling 'Sky Rides', cycle challenges, adult cycle training and bike repair courses.

Why – To give people a practical experience of the sustainable travel options they have, making them feel 'normal' and even enjoyable! To leave a legacy of skills, training and activity that ensure long-term change and empowerment after the fund ends.

Focused Work with partners



What - Supporting other partners' work to tackle the challenges identified in B1.

- Sustrans' 'Bike It' Officer
- NHS Health Workers in Hamp
- Futures for Somerset (BSF) work in the Hamp community

- Volunteers at the ReCreation Centre

Why – Strengthening existing successful projects allows us to share resources, deliver excellent value and means we know we are investing in things that work. These projects will develop a stronger community made up of better educated, more employable, individuals. They will give people the skills and resources to access the places they need.

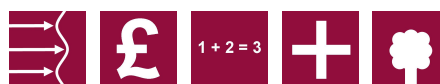
DIY Streets



What – Using Sustrans' proven methodology to bring communities in Hamp together to redesign their streets. An affordable way to create home-zone style streets that meet their needs.

Why – To help people create streets where they feel safe from traffic and crime. This will give people the confidence to walk and cycle to work and education, especially for early and late shifts when fear of crime is a particular concern. It will give people ownership of their streets, create a local environment they are proud of and help them travel in ways that get them fit and reduce carbon emissions.

Community Fund



What - A £50,000 fund to get small local projects off the ground. We have identified local projects that already address the bid's objectives but could do much more with a little help.

Why – Our experience with community rail has shown us that small contributions can unlock massive and sustained benefits. These community projects also help people take pride in their community and feel responsibility for their local area. This makes people feel safer, fosters further improvements and gives people confidence and skills making them more employable.

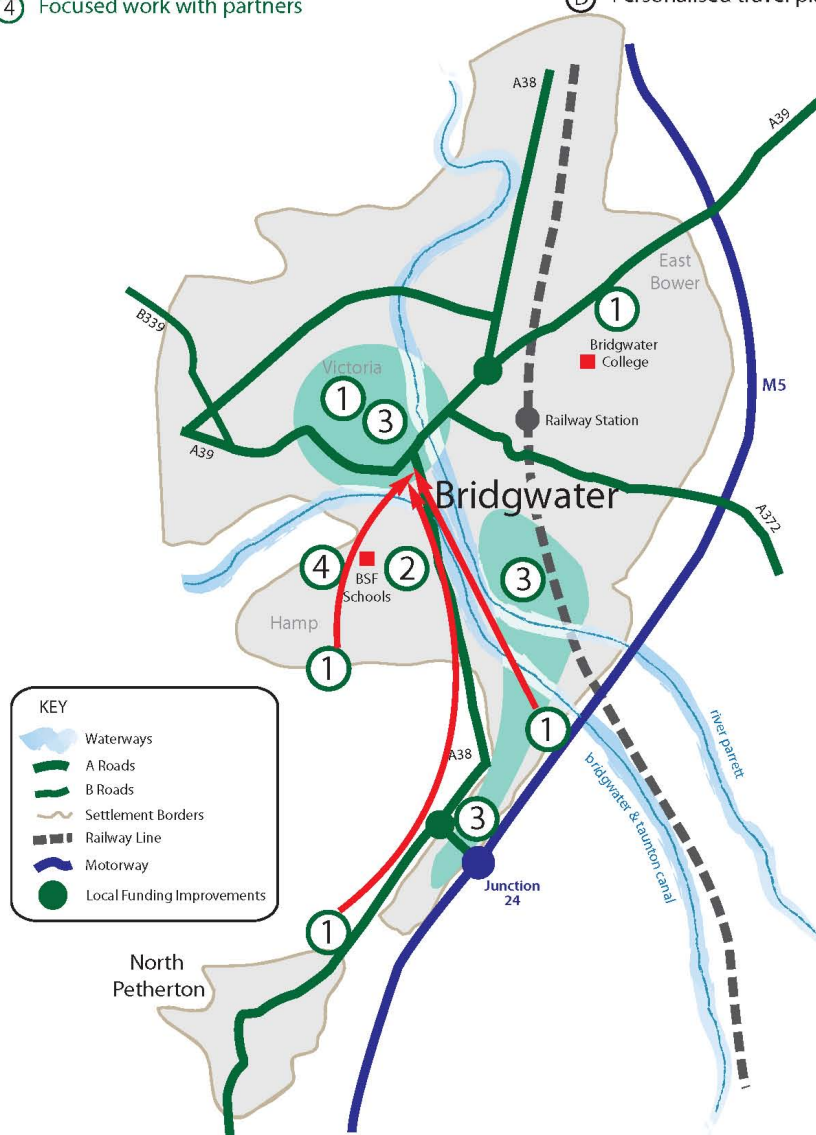
Bridgwater LSTF Package

Site Specific

- ① Infrastructure and signage improvements
- ② DIY streets
- ③ Area travel planning
- ④ Focused work with partners

Bridgwater Wide

- Ⓐ Events & Promotion
- Ⓑ Community Fund
- Ⓒ Smarter Choices & Social Marketing
- Ⓓ Personalised travel planning



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C2. Package costs

The bid elements described in Section C1 have been packaged together to form the five key elements. The table below breaks down the costs of each of these elements.

Scheme element 1	£K	2011-12	2012-13	2013-14	2014-15	Total
Infrastructure and signage improvements (including monitoring)	Revenue	0	180	243	124	548
	Capital	0	637	622	297	1,556
Scheme element 2	£K	2011-12	2012-13	2013-14	2014-15	Total
Area Travel Planning and Personalised Travel Planning	Revenue	0	30	235	210	475
	Capital	0	0	0	0	0
Scheme element 3	£K	2011-12	2012-13	2013-14	2014-15	Total
Smarter choices, social marketing, events and promotion	Revenue	0	129	116	151	396
	Capital	0	0	0	0	0
Scheme element 4	£K	2011-12	2012-13	2013-14	2014-15	Total
Focused work with partners, community fund and administration	Revenue	0	110	191	190	491
	Capital	0	0	0	0	0
Scheme element 5	£K	2011-12	2012-13	2013-14	2014-15	Total
DIY Streets	Revenue	0	120	130	130	380
	Capital	0	0	200	300	500
GRAND TOTAL	-	0	1,206	1,737	1,402	4,346

C3 Rationale and strategic fit

The elements of the bid package have been carefully chosen to meet the area's needs (as described in Section B) and to work together to support and build on each other. Sub-section C1 showed the range of challenges (from B1) which each element addresses. This sub-section looks at the package from another perspective, it considers the combined impact the bid will have on the challenges Bridgwater faces, to show the benefits people will feel on the ground.

B1 different elements address:



1 + 2 = 3

Jobs and Education - The bid area suffers from high unemployment and low educational attainment. There are a number of new employment, education and training opportunities (see B1) but to take advantage of these people need to be able to travel more flexibly than they can at the moment. They need to reach early and late shifts and access employment sites and placements on the edge of town. By helping people to walk and cycle using better cycling infrastructure, streets that meet their needs, information and promotion - they will gain this flexibility. Travel planning in homes and at workplaces will help tackle specific needs at both ends of people's commuting trips and make sure workplaces are as accessible as possible. Involving the community in these improvements (with elements like the community fund and DIY streets) will also help people gain the skills and confidence to get into work.



Environment and Barriers - Getting people walking and cycling will be vital to reducing CO₂ emissions whilst growing Bridgwater's economy. The bid elements described above combine with a powerful package of behavioural change measures to make walking and cycling easier and encourage people to try them.

A number of barriers, formed by the local environment, stop people from getting around, particularly by foot or bike. The local environment causes fear of crime and makes walking or cycling un-enjoyable. Heavy traffic severs routes and makes walking and cycling dangerous. By reducing traffic, all of these measures will reduce this problem but some elements are designed specifically to address particular barriers. Providing infrastructure, signs and information to help people avoid heavy traffic and improving areas through 'DIY Streets' (and community fund projects) will open up new travel options. Events, promotion and social marketing will capitalise on physical changes to improve perceptions of the local environment and encourage people to consider climate change when they travel.



Health – The bid will help people in Bridgwater live longer and healthier lives. Active travel is great way to stay fit and healthy, all of the measures described above will work to make this easier and more appealing. Getting more people engaged in the community, through work or community projects, will make them healthier too. It's good exercise and feeling part of something improves people's health and wellbeing.

The bid elements have also been chosen because of the way they work together and build on each other to have the biggest possible cumulative impact. They include a mix of investments that provide new travel opportunities (new routes, better streets, community projects and travel plan outputs) and investments that encourage people to take advantage of these new opportunities (travel planning, social marketing, events and promotions). The bid also involves all sectors, with businesses and individual community members joining us to shape the bid and put it into action.

The bid has been designed to help us deliver Somerset's Future Transport Plan. The table in B3 shows that the challenges the bid addresses relate directly to the plan's objectives. The second part of the table, which relates each of the bid's elements to the Future Transport Plan's objectives, shows that almost every measure contributes to each objective. By involving local people and businesses in delivering the bid, it follows our commitment (in our CountyPlan and transport policies) to give people the opportunity to meet their own needs where they can and concentrate our investment on where it is most needed.

The bid is designed to reduce existing inequalities by tackling the problems that cause them and avoid further inequalities by reducing the need for significant new heavy infrastructure. A wide range of schemes tailored to the needs of different areas disperse the benefits across the bid area, avoid border effects and ensure everyone gets the best from the bid.

C4. Community Support

The bid package is designed to respond to what the community wants. It is based on responses to our FTP consultation, local school and business travel plans and engagement with a number of community and business groups about the bid.

FTP consultation responses from Bridgwater build on the survey responses summarised in B2 to provide a picture of what people want from transport in the area. When asked about their aspirations for transport in the area, 21% of respondents' comments were directly related to cycling and walking issues. Of these, 59% wanted more cycle routes, 24% wanted improved priority for cyclists and pedestrians and 5% wanted to see better use of river paths and footpaths.

Street surveys in Bridgwater show local residents' transport priorities:

- 1st priority: Improving public transport
- 2nd priority: Promoting walking, cycling, bus and car share schemes and working with public partners to improve access to education and health
- 3rd priority: Developing and maintaining footpaths and cycle routes
- 5th priority: Provide opportunities and routes to make it easier for people to do more walking and cycling
- 7th priority: Make it easier for people to choose non-car forms of transport.

Somerset County Council has also conducted attitudinal market research in Bridgwater at 6 monthly intervals since 2007, based on Anable's (2005) Smarter Choices segmentation model. 27% of Bridgwater motorists are "malcontents" and 6% are "Aspiring Environmentalists". This suggests a significant percentage of motorists are open to switching modes. Put together, all of this information shows dissatisfaction with Bridgwater's local environment and a desire to address barriers to walking and cycling in order to access jobs, education, health and other facilities.

During the development of this bid, we also met with representatives of business and community groups to discuss their needs, what the bid should include and how they could play a part in it. These groups included:

- Sedgemoor Business Forum
- The ReCreation centre for young people in Hamp
- Ward members for the south Bridgwater areas
- NHS health trainers and community health workers

- Sedgemoor Action Group for the Environment
- Local cycling groups
- Bridgwater Challenge

All are enthusiastic supporters of the bid (see letters in Appendix A) and agreed that transport plays a key role in improving economic and social prospects for the area. Building on existing community projects also helps us to make sure we meet their needs and should increase buy-in within the community. The support of the community builds on the strong support of vital delivery partners, as discussed in A9 and Appendix A.

SECTION D - Value for money

D1. Outcomes and value for money

The bid has been designed to have a big impact on Bridgwater, using measures that have been proven to offer excellent value for money in the demonstration towns and through best practice studies like Cairns et al.'s (2004a). However it is important to understand what impact it would really have. This section summarises what the package will deliver on the ground ('Outputs') and the effect it will have on Bridgwater ('Outcomes'). Considering just a limited number of benefits from a selection of the bid elements, the bid is shown to offer good value for money (against the whole cost).

Outputs

The package will have a wide range of tangible impacts on Bridgwater, including:

Output	Challenges addressed				
6.5 Miles of new cycle paths	£	1 + 2 = 3	+	→ → →	🌳
Offering Personalised Travel Planning to over 8,000 households	£	1 + 2 = 3	+		🌳
Area Travel Planning for key local employers	£		+	→ → →	🌳
Local streets improved through the DIY streets project	£	1 + 2 = 3	+	→ → →	🌳
'Bike It' project covering over 8,000 pupils		1 + 2 = 3	+		🌳
Health trainers working one on one with people in the area, to help them get fitter.	£	1 + 2 = 3	+		🌳
1125 people taking part in 'Sky Rides' – predominantly new and non-cyclists	£	1 + 2 = 3	+		🌳
Around 1,000 participants in a new 'Cycle Challenge' – encouraging people to cycle more and get their friends and family involved.	£	1 + 2 = 3	+		🌳
1,000 bikes fixed and local people trained to fix more bikes	£	1 + 2 = 3	+		🌳
Cycle and pedestrian route signing, using helpful units (e.g. minutes walk)	£	1 + 2 = 3	+	→ → →	🌳
£50,000's worth of help to get brilliant local projects started	£	1 + 2 = 3	+	→ → →	🌳

Outcomes

The bid is largely composed of behavioural change measures, which have been proven to be highly effective at addressing the type of challenges introduced in B1 but can't easily be appraised in the way that traditional infrastructure schemes have. However, it is important to understand those benefits which can be quantified, in order to ensure the bid really can deliver this type of excellent value for money.

Unit 3.9.5 of DfT's (2007) Transport Analysis Guidance allows the calculation of decongestion and selected environmental benefits arising from the removal of traffic. We used this to place a value on these benefits, for the bid elements for which we could make a robust forecast of the level of traffic they will remove from the road. Whilst a considerable body of evidence is developing on the value of our bid elements, these studies use a variety of different measures of schemes' benefits. Therefore, we were only able to forecast the level of traffic removed for a limited number of the elements. The table below explains how we forecasted the benefits of those elements for which we could find suitable evidence and how we have ensured that the forecasts are appropriate.

Bid element(s)	Reduction in vehicle KMs/PA
Workplace travel planning, personalised travel planning, travel awareness and public transport information and marketing.	8.5% of annual vehicle kilometres = 4,077,708km
How the reduction was forecast	
<p>Cairns et al. (2004a) provide an evaluation of the reduction in traffic arising from various smarter choices interventions. Figures for high intensity implementations of relevant interventions were combined to provide a percentage reduction. This percentage was applied to a total vehicle mileage (annually) in the study area (which was, in turn, derived from local model data⁽³⁾ annualised using a factor based on local Automatic Traffic Counter data).</p> <p>The package elements included here are designed to be at least equal to those considered in Cairns et al.'s study. All elements are high intensity implementations, with attendant levels of cost and time attributed to them based on best practice evidence. Their delivery will be scoped accordingly to ensure they deliver the results forecast.</p> <p>However, it was important to ensure the bid elements were sufficiently similar to those considered by Cairns et al. for their results to be transferrable. Therefore, the package was reviewed against the study's results. The range of measures is comparable to that discussed in the study (with some additional measures to compensate for those that would not have suited Bridgwater). The bid elements outlined are also comparable with the case studies considered by Cairns et al. in terms of the population covered and the range of techniques employed (2004b). Some measures, such as Personalised Travel Planning, being more intensive than the relevant case study examples. Therefore, whilst generalising between different areas will always be difficult, this suggests that the study's results should be transferable.</p> <ul style="list-style-type: none">• Workplace travel plan costs and scope were developed from the Highway Agency's local experience in Area Travel Planning projects.• Personalised Travel Planning costs and scope were developed by applying the results of our segmentation research (see C1) to DfT's (2006) analysis of PTP costs. Although likely to be suitably responsive and large enough to achieve economies of scale, the target areas suggest	

3 All model data was derived from SCC's 'Connect 3' Saturn Model, developed in 2010 as part of DaSTS work. It covers the Bridgwater, Taunton and Wellington area; appropriate cordons were used to produce relevant data where necessary.

lower than optimum response rates. Therefore, costs account for the need to compensate for this lower response rate.

- Travel awareness, information and marketing costs and scope are based on the cost of the '[Moving Forward](#)' campaign we previously ran countywide (scaled down) and prices from specific quotes for additional events.

We believe this provides a balance of cost and scope that will enable these interventions to be implemented effectively with results at least comparable with those forecast.

Bid element(s)	Reduction in vehicle KMs/PA
Bike it	25km per head of pupil population = 204,800km (0.5% of annual vehicle kilometres)

How the reduction was forecast

Department of Health et al. (2011) suggest a 25km/pa reduction in car travel per pupil across the pupil population. This rate was applied to the predicted pupil population for relevant schools in 2011. Our costs and scope are based on a direct quote from the provider Sustrans. Bridgwater's topography, high overall cycling levels and relatively low levels of cycling to school (see B1) suggest this element should return at least this average reduction in traffic, particularly in the context of the range of complementary measures that would also be in place.

Bid element(s)	Reduction in vehicle KMs/PA
Cycle lanes- travel to work only	2,795,906km (5.8% of annual vehicle kilometres)

How the reduction was forecast

A logit model was developed to estimate the attractiveness of new cycle lanes for journeys to work, according to DfT TAG Unit 3.14.1 (s1.7) (DfT, 2010). A copy of the model is included as Appendix C. In order to make an appropriate assessment of a package of routes competing for overlapping markets (rather than discrete routes as implied in the guidance) the average change in trips for all of the facilities was employed. Standard values specified by the guidance were used to develop a proportional trip reduction. This was applied to a trip rate derived from the traffic model⁽³⁾ containing only local trips of cycling distance. A trip distance derived from DfT (2009) data was used to convert the logit model results into a car km saving.

The challenges identified in B1 suggest cycle paths should be particularly effective in Bridgwater, as cycling is a great option for the town but traffic is currently a significant barrier. Also, the implementation of a number of routes should offer some agglomeration of benefits, by opening up a range of destinations. Costs are developed from engineering studies to increase their accuracy and ensure a sufficiently attractive product is provided. Therefore, it is felt the values suggested by the model should be achievable.

These reductions in car kilometres were then apportioned to the road types ('A' and 'Other' roads) and congestion bands (1-5) for which the guidance provides costs. This was achieved using proportions derived from local model data⁽³⁾, the results of this process are summarised in Appendix B. As categorising every link in the model was not practicable within the time available, a sample of around 20 (two-way) links within the town was used to show the relative levels of traffic on these road types. Reductions in

car kilometres for each road type were then valued according to the guidance. This produced values for the years 2010, 2016 and 2026; values for intervening years were calculated through straight line interpolation.

These values were adjusted to take account for the projected timescales for implementation, based on the proportion of funding allocated to be spent by the previous year (according to formative funding profiles available at the time). Costs were taken from the same formative funding profile, which had a marginally higher total cost than the final bid. Therefore, this assessment provides a slightly pessimistic view of the benefits relative to the costs. Costs and benefits were discounted according to the guidance in Unit 3.5.4 of DfT's Transport Analysis Guidance (2011), using green book discount rates and the standard 2002 base year. **Full results of this process are included in Appendix B.**

The results showed a Net Present Value (above and beyond costs) of over £800,000 at 2002 levels, based on decongestion and selected environmental benefits alone. This shows that even a limited number of the benefits, from a selection of package elements, still outweigh the complete cost of the package. However these benefits are only part of the picture, the full value would be much higher. This appraisal does not include any of the benefits arising from the community fund and only includes the 'Bike It' officer from the 'focused work with partners' element. Whilst only around three per cent of the bid cost, these focused contributions to great value projects would deliver a higher than average level of benefits. However, the benefits arising from the elements appraised not captured by the results above are likely to be far more significant. The calculation of decongestion benefits only includes benefits arising from the removal of cars from the road. It ignores the value of getting people into work and education, health benefits, the value of removing barriers to travel (to individuals and the economy) and the wider benefits associated with a closer community and safer local environment. These benefits are significant in their scale and are fundamental to addressing the local challenges identified in Section B. Therefore, it is important to understand that the results above reflect only a fraction of the bid's total benefits. The discussion of un-quantifiable benefits below demonstrates where these benefits will be felt.

The table above explains that we are confident that our bid elements will perform at least as well as the schemes considered in the studies from which our forecasts were derived. However, this type of appraisal has to make a range of assumptions and its results must be treated with a degree of uncertainty. To reflect this uncertainty we undertook a number of sensitivity tests, in order to examine the impact achieving lower levels of benefits would have on the value of the bid.

Percentage of benefits	100%	80%	75%	70%	60%	50%
Net Present Value	£836,389	-£12,084	-£224,203	-£436,321	-£860,558	-£1,284,794

This sensitivity testing shows that even if the package delivered a considerably lower level of benefits than forecast, for the same limited selection of benefits, those benefits would still be very close to the total cost of the bid. Delivering just 75 per cent of the forecast benefits would have a Net Present Value equal to 95% of the full bid cost. Delivering 60 per cent of the forecast benefits would have a Net Present Value equal to 80 percent of the full bid cost. This shows that the bid package offers good value for money, even when only considering a limited selection of benefits and allowing for considerable uncertainty in the forecasts.

Other information requested to assist in the assessment of the bid is included as Appendix B.

Non-quantifiable benefits – The quantification of benefits summarised above highlights the value the bid will provide but it is important to remember the benefits not-included in that assessment. All of the bid elements not considered above (including partnership working, DIY streets and the Community Fund) will deliver significant decongestion and environmental benefits too. Furthermore, there are a whole host

of other benefits that we have not been able to capture at all. The figure below summarises the new opportunities, skills, ideas and ways of working the bid will deliver that are not captured in the appraisal above.

New opportunities	New businesses attracted by better conditions	Businesses have a larger pool of talent to recruit from
A more connected town, with more opportunities	Businesses have a larger pool of talent to recruit from	Reduced JSE Claimant Count in Targeted Areas
Increased opportunities to access employment, education and other vital services	Increased awareness of travel opportunities	Better informed public
New skills	New skills learnt from participating in the bid	Improved health especially mortality and obesity levels
Higher educational attainment		
New Ideas	An environment people are proud of and care about	Improved Perceptions of Safety
New/improved routes act as promotion	People who want to improve their lives and now how to	Visible Legacy of Project
		People feel they are making a difference
New ways to work	Greater social cohesion and 'Big Society'	Partnerships generate increased trust and mutual support
Improved communication between community, partners and SCC	Businesses build/generate Corporate Social Responsibility together	New projects and ideas for the future

D2. Financial sustainability

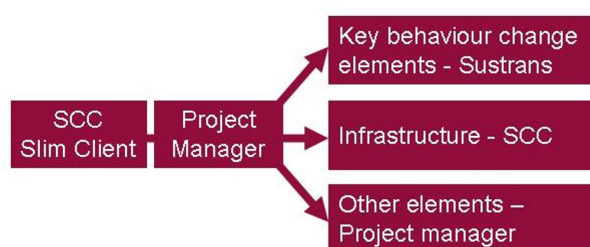
The bid is designed to change people's behaviour, skills and habits rather than relying heavily on new infrastructure or services. These changes will be self sustaining, creating an upwards spiral of better educated, more employable, healthier and more sustainable travellers who will continue to reap benefits from the project long after the funding has finished. The crucial role of the community and stakeholders will also provide a mechanism for many of elements to continue.

However, infrastructure will play an important part in Moving Bridgwater Forward. All infrastructure will be adopted by SCC. Applications to the Community Fund will have to demonstrate how they will become self sustaining and embed transport issues into the applicant's day to day activities.

SECTION E - Deliverability

E1. Implementation

This bid has been developed to maintain Somerset County Council's good record for delivering projects. We have worked with delivery partners from the start, chosen tried and tested measures and developed detailed plans for built infrastructure to ensure the bid is deliverable. A clear delivery plan is a vital part of this, the diagram below summarises our plan.



A lean client within (and funded by) Somerset County Council will provide a project board function, providing leadership and making decisions. This will allow us to maintain control of delivery whilst getting the best value from DfT investment by avoiding the need for a heavy client or procurement team. The Project Manager will be hosted by Sedgemoor District Council, in offices near the bid area. They will manage the implementation

of the bid according to the Slim Client's guidance and following PRINCE2 Project Management principles, which we have used to successfully deliver a variety of transport projects (including Major Scheme Projects).

Delivery will be carried out by three bodies, under the Project Manager and Slim Client's guidance. Somerset County Council will deliver the larger capital elements of the package, to ensure robust engineering and safety criteria for cycle schemes on the highway are met. The project costs outlined in C1 for these elements are developed from detailed site audits and engineering feasibility reports undertaken for a range of routes in Bridgwater in 2011 to inform this application, rather than desktop estimates. This gives the schemes proposed the best possible chances of being delivered on time and on budget. Sustrans will be a key delivery partner; they will deliver many of the revenue projects, particularly behaviour change elements like PTP and DIY Streets. Their expertise in running such projects and the lower overheads made possible by their charity status ensure excellent value for money. The Centre for Transport and Psychology (see A9) has offered expert support with the delivery of behavioural change elements, providing additional expertise and research skills that will be invaluable in delivering and monitoring such an innovative combination of measures. This will add to the monitoring planned by Somerset County Council and Sustrans, offering a valuable independent academic perspective. The remaining elements will be delivered by the Project Manager or outsourced by them (under the Slim Client's guidance). Somerset County Council has a framework consultancy contract for transport planning and engineering services which could be employed at competitive rates. However, specialist bodies or social enterprises may offer more efficient delivery mechanisms for some elements.

E2. Output milestones

The table below details the output milestones we will use to plan and deliver the bid.

	Infrastructure Program													
	2011/12		2012/13				2013/14				2014/15			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Route A phase 1														
Route A phase 2														
Route B														
Route C														
Route D														
DIY Streets														
Bower Ped Signing														
Project Office Recruitment														
Project website creation & design														
Project Marketing Campaign														
Cycle Route Promotional push														
East Bower promotional push														
Flagship Events														
Personalised Travel Planning														
Area-wide business travel planning														
Bike It Project														
DIY Streets Project in Hamp														
SkyRide package														
Community Fund Elements														
Cycle challenge campaigns														

Key	Final Design	Planning
Legal / Consultation / Audits	Construction	Delivery
Land Acquisition	Topo Surveys and Initial design	

E3. Summary of key risks

Risk	Likelihood	Severity	Risk	Mitigation Measures
Change in or lack of political support for schemes or local funding allocations	2	3	6	Liaison with Cabinet Member, support confirmed within political decision-making process. Funding agreed within the capital programme.
Lack of Business and Community Support	3	2	8	Early discussion during the bid preparation process with the local business forum explaining the role of the fund and what it could bring to the area. Ongoing communications programme once notified of success to provide comprehensive information. Projects to involve the community and community decision-making on elements of funding.
Funding estimates fall short of actual requirement	2	4	8	Detailed feasibility cost estimates have been undertaken for the capital works, and revenue projects have been costed based on previous examples and, to some extent, can be scoped to deliver accordingly.
Secured external funding does not materialise	2	5	10	Minimal likelihood; the bulk of contributions are from s106 agreements where the value is written into legal agreements. SCC has allocated some of its capital programme and other partners have issued letters of support (Appendix 1).
Project partners are unable to fulfil their commitments	3	4	12	Key delivery partners have confirmed their support (see appendix A) and willingness to fulfil stated commitments.
Change in Project Management personnel	2	2	4	Change happens and can be dealt with using project management controls. SCC will take steps as necessary to ensure project management and delivery stays on track.
Delivery of project elements delayed by unplanned events	3	3	9	Programming and risk management will be a key part of the project delivery. This would be run using SCC's project management methodology based on Prince2 controls. SCC has a strong track record in transport scheme delivery.
Risk Levels		Low	Medium	High
Likelihood of Occurrence		1 = Very Unlikely	5 = Very Likely;	
Severity of Impact		1 = Insignificant	5 = Critical	

E4. Project evaluation

The baseline data specified in B2 will form the basis of our monitoring and the Centre for Transport and Psychology has offered support in analysing the behavioural change elements (see A9). We are keen to work with the DfT to agree an evaluation programme that will allow the lessons learnt from the project to be shared.

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APPENDIX A - Letters of support

HEART OF THE SOUTH WEST

Local Enterprise Partnership

Creating opportunities in Devon, Plymouth, Somerset and Torbay

Nell Cruse

Interim Transport Policy Manager
Environment Directorate
PPC702A Strategic Planning
Somerset County Council
County Hall,
Taunton, TA1 4DY

9th January 2012

Dear Nell

On behalf of The Heart of the South West Local Enterprise Partnership (LEP), I am pleased to provide support for Somerset's bid to the Local Sustainable Transport Fund which seeks to improve access to jobs, development and training opportunities in Bridgwater by investing in sustainable transport measures that will minimise congestion and stimulate economic growth. This proposed investment would support the LEP Priorities of Job Creation, Productivity and Earnings.

With major regeneration work underway on the new development at North-East Bridgwater, which is the site of long-term plans to deliver 2,000 high quality new homes, community facilities and more than 3,000 jobs for the area, together with the recent completion of the new Energy Skills Centre at the College, and continuing residential development in the south of the town; this sustainable transport investment would help to accelerate the economic growth of the town.

I wish you every success with the bid.

Yours sincerely



Tim Jones
Chairman

Tel: 01752 252136 Mobile: 07771 800275 Email: tim@plymouthoffice.co.uk Address: Poseidon House Neptune Park,
Cattedown Plymouth PL4 0SN

www.heartofswlep.co.uk | info@heartofswlep.co.uk

Partnership Letter: LSTF bid

Dear Stephen,

This letter constitutes a non legally binding Memorandum of Understanding ["MoU"] between Sustrans and Somerset County Council (SCC). The purpose of this MoU is to acknowledge Sustrans' support for the bid and to record the key areas of partnership between Sustrans and SCC, including roles and responsibilities, in relation to SCC's forthcoming Local Sustainable Transport Fund (LSTF) bid ["the Bid"] and related works. Accordingly, this MoU records Sustrans and SCC's agreement to work together as appropriate and required on the Bid, which is to be to the second tranche of the LSTF unless agreed to the contrary. SCC and Sustrans will also work together on other related opportunities as appropriate.

1. Roles and responsibilities

Somerset County Council will

- draft the Bid to the timetable set out in Schedule 1
- consult with Sustrans on the Bid with sufficient time for meaningful input and discussion
- provide match funding and co-ordinate other local contributions
- deliver elements as set out in Schedule 2 (works), to be appended when finalised and provide appropriate support to Sustrans in the delivery of their elements

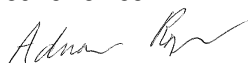
Sustrans will

- provide financial and other information, including evidence, to assist preparation of the Bid
- provide in-kind match contribution for volunteer time to the Bid of £9,000 p.a.
- deliver elements as set out in Schedule 2 (works) below and provide relevant support to SCC in the delivery of their elements

2. Points of contact

Rupert Crosbee will act as the day-to-day point of contact for Sustrans and Hannah Fountain will act as such for SCC.

This letter has been signed by Sustrans' Regional Director for the South West and should be counter-signed in duplicate by an authorised senior Somerset County Council officer.



Adrian Roper
Sustrans



Stephen Walford
Somerset County Council



**Schedule 1
Bid submission**

What	By Whom	When
Draft bid to Sustrans for comment	SCC	9 th January 2012
Comments returned to SCC	Sustrans	16 th January 2012
Bid finalised and submitted	SCC	24 th February 2012

**Schedule 2
Works**

(Table to be appended)

LEADER OF COUNCIL

Cllr. Duncan McGinty



My Ref: DMcG/DB/HB
Please ask for: Cllr Duncan McGinty
Direct Line: 01278 435396
Fax: 01278 446412
E-mail: duncan.mcginity@sedgemoor.gov.uk
DX 80619 BRIDGWATER

Sedgemoor District Council
Bridgwater House, King Square
Bridgwater, Somerset TA6 3AR

Tel: 0845 4082540
DX: 80619 Bridgwater
www.sedgemoor.gov.uk

Date: Monday, January 30, 2012

Mr Stephen Walford
Transport Policy Manager
Somerset County Council
County Hall
Taunton
Somerset
TA1 4DY

Dear Stephen

On behalf of Sedgemoor District Council we are pleased to provide support for Somerset's bid to the Local Sustainable Transport Fund which seeks to improve access to jobs, development and training opportunities in Bridgwater by investing in sustainable transport measures that will minimise congestion and reduce carbon emissions. As noted in your application, the Council is demonstrating its support by committing to provide accommodation for the project team to ensure that a successful bid can be based at the heart of the community in Bridgwater.

This proposed investment would support the District Council's vision of making Sedgemoor a "safer, cleaner, more pleasant and vibrant District in which to live, work, learn, invest or visit". It also addresses some of the key objectives of the Council, both in terms of regeneration by delivering a prosperous economy and sustainable communities, and also the environment by enabling a greener Sedgemoor.

The District Council is already working with partners and developers to deliver major investment and regeneration work across key sites in Sedgemoor and this sustainable transport investment would help accelerate the economic growth of the town by making it easier to get to educational and employment opportunities by active travel modes, providing visible Government support for the low carbon vision Sedgemoor is championing.

We look forward to working with the County Council to deliver this package.

Yours sincerely,

Councillor Duncan McGinty
Leader of Council

Kerry Rickards
Chief Executive



**INVESTORS
IN PEOPLE** | Silver

14th December 2011

Hannah Fountain
Technical Lead Sustainable Movement
Somerset County Council
Environment Directorate
County Hall
Taunton
TA1 4DY



Somerset Primary Care Trust
Wynford House
Lufton Way
Lufton
Yeovil
Somerset
BA22 8HR

Tel: 01935 384000
Fax: 01935 384079

headquarters@somerset.nhs.uk

Dear Hannah

Local Sustainable Transport Fund Bid

NHS Somerset fully supports the Local Sustainable Transport Fund bid put forward by Somerset County Council and we look forward to working alongside the County Council team to deliver these proposals.

The South and East Bridgwater areas contain a number of wards characterised by deprivation and inequality, as defined by the Health and Social Needs Analysis Group (HSNAG) Report which provides a summary of the health and social needs in Somerset. As such, NHS Somerset has provided these areas with bespoke interventions designed to target issues such as low physical activity and social exclusion.

Sustainable transport offers a positive message: reducing greenhouse gas emissions can bring collateral health gains to the Bridgwater population; promoting primary prevention of poor health and opening a major pathway for health promotion strategies.

Health co-benefits will accrue locally as a result of sustainable transport improvements by increasing physical activity and improving access to education, employment and social opportunities, all of which complement and add value to our existing projects.

We have recently worked successfully with the County Council on projects to increase cycling in the major towns of Somerset, which delivered excellent results against both health and transport objectives. We look forward to building on this success and working together in Bridgwater, should this bid be successful.

Yours sincerely

A handwritten signature in black ink, appearing to read 'L. A. Webster'.

Louise Webster
Sustainable Development Manager



Chairman: Jane Barrie OBE Chief Executive: Ian Tipney
www.somerset.nhs.uk







Stephen Walford
Transport Policy Manager
PPC702a
Somerset County Council
County Hall
Taunton
TA1 4DY

Please ask for: Tim Nightingale
Direct Line: 01823 410231
E-mail: TNightingale@1610.org.uk
Reference: DS/TN
Date: 14 February 2012

Dear Stephen

Re: Local Sustainable Transport Fund Bid

As expected there have been a number of changes to our potential support since the original bid was drawn up:

1. Our Lottery bid for Living Well was not successful and therefore we do not have all of the resources to underpin this project as originally outlined re the community physical activity plan.
2. We would still consider the allocation of £15k per annum to support a cycling development post within the Trust – matched with funds from the project. Our annual funding would need to link into our longer term contract from the County Council.
3. We would still consider allocating up to £5k per annum to cycling events etc.
4. We are actively promoting Corporate Membership with business from Feb 1st 2012 – with a focus on health and wellbeing. This links into promoting healthier lifestyles and cycling could feature in this offer.

If this level of support is acceptable then I would be happy to re-confirm our support for the bid.

Yours sincerely

Tim Nightingale
Chief Executive
1610 Limited

1610, Hestercombe House,
Cheddon Fitzpaine, Taunton TA2 8LG

T 01823 410227
www.1610.org.uk

Registered charity number 1130010. Registered in England and Wales, company number 06727055





BRIDGWATER CHALLENGE

My Ref: AG/RB/Bridgwater Challenge/LSTF Bid
Please ask for: Rachel Boothroyd
Direct Line: 01278 435250
Fax: 01278 436423
E-mail: rachel.boothroyd@sedgemoor.gov.uk
DX 80619 BRIDGWATER

Date: 14 December 2011

c/o Sedgemoor District Council
Bridgwater House, King Square
Bridgwater, Somerset TA6 3AR

Tel: 0845 4082540
DX: 80619 Bridgwater
www.sedgemoor.gov.uk

Stephen Walford
Transport Policy Manager
Somerset County Council
County Hall
Taunton
Somerset TA1 4DY

Dear Stephen

LSTF Bid

On behalf of Bridgwater Challenge I am pleased to provide support for Somerset's bid to the Local Sustainable Transport Fund which seeks to improve access to jobs, development and training opportunities in Bridgwater by investing in sustainable transport measures that will minimise congestion and reduce carbon emissions.

This proposed investment would support the Bridgwater Challenge Vision of being an energy conscious town known for its ambitious approach to sustainability and low carbon living. It also addresses some of the key issues identified during the visioning process; namely those of delivering a more accessible town, and breaking down the barrier of the road network.

With major regeneration work underway on the new development at North-East Bridgwater, which is the site of long-term plans to deliver 2,000 high quality new homes, community facilities and more than 3,000 jobs for the area, together with the recent completion of the new Energy Skills Centre at the College, and continuing residential development in the south of the town; this sustainable transport investment would accelerate the economic growth of the town and provide visible government support for the low carbon vision Bridgwater is championing.

In particular, the Bridgwater Vision (published in 2009) identifies design principles for Huntworth, in South Bridgwater, including a priority for "high quality, safe and user friendly pedestrian and cycle routes through the area to strengthen links to the Town Centre particularly along the canal corridor". This project will join up with another developing Vision project to revitalise the canal and docks in central Bridgwater and create a continuous, quality sustainable route linking town centre to communities to the open countryside of South Bridgwater.

I look forward to working with the county council to deliver this package.

Yours sincerely

Anthony Gibson
Chairman, Bridgwater Challenge



Sedgemoor District Council Somerset County Council Taunton Deane Borough Council
Bridgwater College Town Council Bridgwater Chamber of Commerce Environment Agency
Bridgwater Industrialists EDF Energy

Our ref:
Your ref:

Nell Cruse
Interim Transport Policy Manager
Environment Directorate
PPC702A Strategic Planning
Somerset County Council
County Hall
Taunton
TA1 4DY

Michael Ginger

2/08K
Temple Quay House
2 The Square, Temple Quay
Bristol BS1 6HA

Direct Line: 0117 372 8208
26 January 2012

For the attention of Nell Cruse

Dear Nell

LSTF SUBMISSION

We understand that Somerset County Council is re-submitting a bid for funding under the Local Sustainable Transport Fund and that this will include a programme of measures focussing on areas adjacent to M5 junction 24.

There is significant queuing on the off slips at J24 and this is caused partly by heavy demand at the Huntworth roundabout. Whilst there is not a current problem of queuing onto the mainline itself, we are concerned that the risk of this will increase as the development sites identified in the core strategy come forward. These developments include the site at the south west of the Huntworth junction and proposals for 2000 new houses at the west of the A38. A major commercial development 'Bridgwater Gateway' was recently granted planning consent. Further, if the current application for the development of Hinkley Point power station is approved, this will place additional pressure on the M5 in the Bridgwater area. There are strong travel planning elements to these schemes which can complement Somerset County Council's proposals.

Measures which help to reduce demand at this junction are likely to be beneficial to the efficient operation of the strategic road network.

The Agency has worked in close partnership with Somerset County Council in order to establish an area travel plan in areas close to junctions 25. We are confident that Somerset County Council has the skill and knowledge to take forward effective sustainable travel measures.

Yours sincerely

Michael Ginger
South West Asset Development Team
Email: michael.ginger@highways.gsi.gov.uk

BRIDGWATER TOWN COUNCIL



TOWN HALL BRIDGWATER SOMERSET TA6 3AS
Telephone 01278 427 692 or 01278 455 742 Mobile 07776 216670
townclerk@bridgwatertowncouncil.gov.uk

14 December 2011

Ms N Cruse
Interim Transport Policy Manager
SCC
County Hall
TAUNTON
TA1 4DY

Dear Nell

BRIDGWATER – LOCAL SUSTAINABLE TRANSPORT FUND BID

Thank you very much for the cabinet member decision papers, and the information on the transport fund bid. It was disappointing that the tranche 1 was not successful, but the invitation to re-submit is appreciated.

The Town Council have noted the key elements which can form the basis of the bid. Undoubtedly, on the experiences of life in Bridgwater the sort of schemes which can be promoted have the capability to make a real difference to local problems and for investment to make a huge benefit to people particularly in south Bridgwater. This is supported entirely by the consultation responses from local organisations and local people.

The Bridgwater Town Council lend their full support to the submission of the bid tranche 2 and hope that this will be successful in bringing additional resources into the town.

We await a final copy of the submission, but with the infrastructure concentrating on the delivery of a safer cycle route from North Petherton to Bridgwater and revenue elements intended to work with local residents, communities and businesses to source ways to enable more active travel to take place – as well as increasing access to employment, education and town centre retail opportunities we commend the bid.

The Town Council look forward to working with the County Council and District Council in the implementation stages in the future.

Yours sincerely

A handwritten signature in black ink, appearing to read "Alan Hurford".

Alan Hurford
Town Clerk

North Petherton Town Council



20 Quantock Close
North Petherton

19th December 2011

Dear Nell Cruse

North Petherton Town Council are delighted to support Somerset County Council's "Local Sustainable Transport Fund" bid.

There is currently no safe bicycle link between Bridgwater and North Petherton - an issue that has been brought to our attention on many occasions by local residents. Three main points are always raised:

- 1 The A38 in North Petherton is at its narrowest point along its whole length;
- 2 The roundabout junction between the A38 and the M5 motorway junctions is extremely dangerous for cyclists; and
- 3 Students from North Petherton are deemed to be within walking and cycling distance from Robert Blake Science College, yet the road is clearly too dangerous to cycle.

Councillors were also assured when the new villages of Stockmoor and Willstock were built that there would be a safe cycle route to Bridgwater connecting all the communities. This promise has been "forgotten".

Road traffic is frequently at a standstill between the outskirts of Bridgwater through to North Petherton - this proposal will ease this congestion by taking traffic off the roads, as well as promoting healthy lifestyles and benefit the local and global environment.

Additional developments that have been proposed for this area have made the A38 less safe for cyclists. The Rural Business Centre and Bridgwater Gateway developments will substantially increase traffic movements in the area and the proposed new nuclear power station at Hinkley Point will result in substantially more buses and Goods Vehicles travelling along the A38. An unintended consequence of this will be that the A38 between North Petherton and Bridgwater is perceived as being increasingly dangerous for cyclists.

We wish you every success with this project.

Yours sincerely

Bill Revans
Town Mayor
North Petherton Town Council.



Futures for Somerset

Morgan House,
Mount Street
Bridgwater
Somerset
TA6 3ER

www.futuresforsomerset.co.uk

Community Enterprise Manager: Dominique Beach

T: 01278 411776

M: 07585 307028

E: DMBeach@somerset.gov.uk

Hannah Fountain
Team Leader Smarter Choices
Somerset County Council
Environment Directorate
County Hall
Taunton TA1 4DY

27th January 2012

Dear Hannah,

I am writing to indicate my support for your LSTF Bid for Bridgwater, Somerset.

As you are aware, Futures for Somerset is a strategic partnership between Somerset County Council, BAM PPP and BSF Investments. The Partnership's core focus is upon transforming education for learners across Somerset through engagement with Authorities, schools, teachers, students, local communities and business enterprises.

I am confident that some of our aspirations for the local community of Hamp, Bridgwater, and local surroundings will align themselves very closely with your proposals and vision in relation to this bid.

I wish you every success with you bid and look forward to working collaboratively with the Smarter Choices Team in the near future.

Yours Sincerely

Dominique Beach

Dominique Beach
Community Enterprise Manager
Futures for Somerset

Futures for Somerset is a strategic partnership between Somerset County Council, BAM PPP and BSF Investments.

Registered Company Name: Futures for Somerset Limited.

Registered Address: Millennium Gate, Gifford Court, Fox Den Road, Stoke Gifford, Bristol. BS34 8TT

Registered Company No: 07250123



6 February 2012

FAO : Ryan Bunce
Senior Transport Planner
Somerset County Council
Environment Directorate
County Hall
Taunton
Somerset
TA1 4DY

Our Ref SCC1/LSTF
Your Ref [Ref]

Dear Ryan,

Bridgwater Local Sustainability Transport Fund Application (LSTF)

Thank you for sending through details of your application for LSTF. British Waterways (BW) is a public body set up to maintain and develop the network of canals and other inland waterways in a sustainable manner so that they fulfil their full economic, social and environmental potential.

In addition to statutory navigation and safety functions, British Waterways has to;
Conserve our waterway heritage and environment
Promote and enable rural and urban regeneration
Maintain and enhance leisure, recreation, tourism and education opportunities for the general public and
Facilitate waterway transport

British Waterways is delighted to have the opportunity to support the bid made by Somerset County Council for funding through the Local Sustainable Transport Fund for transport initiatives in and around Bridgwater that address the twin challenges of revitalising local economies and tackling climate change.

Inland waterways cut across policy themes and support a range of Government agendas, including:

- sustainable communities;
 - housing growth and renewal;
 - urban renaissance;
 - place-making and place-shaping
 - rural development and diversification;
 - visitor economy and sustainable tourism;
 - sustainable transport;
 - health and well-being;
 - climate change, carbon reduction and environmental sustainability; and
- social inclusion and cohesion.

British Waterways The Dock Office Commercial Road Gloucester GL1 2EB
T 01452 318000 F 01452 318076 E enquiries.hq@britishwaterways.co.uk
www.britishwaterways.co.uk www.waterscape.com

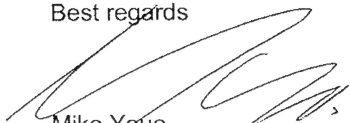
British Waterways promotes the use of the Bridgwater & Taunton Canal and Bridgwater Docks for all of the above. The towpath is particularly useful as a Sustainable Transport corridor leading from the open country side and urban fringe areas into the heart of both Taunton and Bridgwater as well as linking the two towns. The towpath is being increasingly promoted as a recreational and commuter route allowing swift, level access into the towns all year round, thus reducing the reliance on private car journeys, reducing congestion and pollution and therefore helping to tackle climate change as well provide health and social benefits for users.

British Waterways is working with the County Council, Taunton Deane Borough Council and Sedgemoor District Council to ensure that the towpath is recognised and enhanced as a Green infrastructure route and is promoted within the LTP3 and other policy documents such as the Core Strategy and Green Infrastructure Strategy. However increased usage also brings dis-benefits in the way of additional wear and tear and higher maintenance costs.

The re-development of Bridgwater Docks and the Canal Corridor are at the heart of the regeneration of the town as shown in the Bridgwater Vision Project and will be vital in promoting improved traffic free linkages throughout the town. It is hoped that the canal and canal corridor will become a much loved focal point for the town rather than a under-used forgotten asset.

We welcome any opportunity to secure additional funding to help improve and maintain this valuable asset and provide enhanced linkages for the benefit of the residents of Somerset. We therefore fully support Somerset County Council in their bid to secure LSTF funding for the area including the towing path through Bridgwater .

Best regards



Mike Youe
Enterprise Manager

British Waterways
South Wales, Severn & K&A
The Dock Office
Commercial Road
Gloucester
GL1 2EB

(M) : 07710 175386

Bridgwater Education Trust

1st Floor, Morgan House
Mount Street
Bridgwater TA6 3ER
Tel. 01278 411777



FAO Patrick Flaherty
Service Director – Physical Regeneration
Somerset County Council
PPC701, C7,
County Hall,
Taunton
TA1 4DY

Please ask for **Direct Line**
Julie Walker 01278 411773
Email jwalker1@somerset.gov.uk

My reference **Your reference**
LSTF bid

Date: 16 December 2011

Dear Patrick

The Bridgwater Education Trust is a partnership of the 4 secondary and 2 special Schools in Bridgwater; its partners are Bridgwater College, SCC and Sedgemoor District Council. The Trust encourages the member Schools to work collectively/collaboratively on projects for increase the positive impact of projects within the town. This is further enhanced through the business engagement activities with businesses. Through the Trusts work we aim to raise aspirations across the town of Bridgwater by improving access to education and employment opportunities.

These aims/goals support and work alongside the 'Moving Bridgwater Forward' bid. It is a great opportunity for the two organisations to work together with the shared goal of improving opportunities and facilities in Bridgwater.

Yours sincerely

Julie Walker
Bridgwater Education Trust

Bridgwater Education Trust || 07775 027444 || Company No. 06672308 || Charity No 1135982
<http://www.bridgwatereducationtrust.co.uk>





Hannah Fountain
Technical Lead – Sustainable Movement
Somerset County Council
County Hall
Taunton
TA1 4DY

30th January 2012

Dear Ms Fountain,

As requested we are formally putting forward our support for the setting up of a car club in the Bridgwater area.

The car club would help bring about a range of benefits:

- Reduced car usage which in turn reduces:
 - carbon pollution, mitigating the effects of climate change
 - air/noise pollution, reducing health-related problems
 - congestion, benefiting the economy
- Increased use of public transport, which in turn:
 - Increases investment in services
- Increased use of local businesses, which in turn:
 - Increases the resilience of the local economy
- Improves local employment potential
- Provide low earning groups access to car travel, which in turn:
- Increases sense of well-being and independence

In agreement with yourself, initially the car club will be 2-3 vehicles and Co-cars will match Somerset County Council's contribution of £15,000 to support its growth over 3 years. Co-cars has over five years experience developing and managing car clubs and we are confident with financial support Bridgwater Car Club will be a great success.

We will also be looking to allow residents of Bridgwater to invest in the car club as shareholders. Using the Industrial & Provident Society rules we are enabling members to gain greater control over the clubs and increase the sense of community ownership whilst seeing a modest financial return.

Yours sincerely,

0845 345 2544 | www.co-cars.co.uk | drive@co-cars.co.uk | 13 Monmouth Hill, Topsham, EX3 0JF
Registered in England & Wales No. 5232497

ParkThatBike

Hannah Fountain
Smarter Choices Team Leader
Somerset County Council
County Hall
Taunton
Somerset TA1 4DY

16th December 2011

Dear Hannah

Re: Local Sustainable Transport Fund (LSTF) Bid

I am writing to confirm that ParkThatBike fully supports Somerset County Council's LSTF bid. Your proposed programme will strengthen the local economy, encourage economic growth and reduce carbon emissions. By cutting congestion and encouraging more local trips by sustainable means, journey reliability and accessibility will be improved for businesses and for the community.

ParkThatBike is a social enterprise (established in 2009) that specialises in initiatives to improve cycle parking. Design guidance from the Department for Transport and from Cycling England emphasises that fear of cycle theft is a major disincentive to cycle. On the other hand, the installation of high quality cycle parking close to the cyclist's destination is a major inducement to cycle. As well as being of practical use, the provision of cycle parking sends a clear message to those who are considering cycling: it says that cycling is a high status form of travel that is properly encouraged and supported. This helps persuade more people to give cycling a try.

ParkThatBike has worked with Somerset County Council and local stakeholders on previous projects. The partnership resulted in high quality facilities, correctly installed, in several Somerset towns. As a consequence, cycling has been made easier and more convenient – and more people have chosen to use their bikes for local trips.

This is a positive foundation upon which to build. We hope your bid is successful and look forward to working with you.

Yours sincerely



Peter Andrews • Director

14 The Barracks • Parkend • Glos GL15 4HR

01594 564 344

office@parkthatbike.com

Community Development and Wellbeing

Please ask for: Tom Dougall
My Ref: TMD/P10
Direct Line: 01278 - 435257
Fax: 01278 - 436413
E-mail: tom.dougall@sedgemoor.gov.uk
Date: 15th December 2011

Mr D Mitchell
Cycling Officer
Somerset County Council
County Hall
Somerset
TA1 4DY

Dear David

Local Sustainable Transport Fund Bid for Bridgwater

Many thanks for your presentation to the Sedgemoor Cycle Group on 18th March 2011.

The Sedgemoor Cycle Group was very interested to hear about LSTF bid for Bridgwater. The group supports the bid and considers it will bring great benefits to people living, working or in education along the North Petherton to Bridgwater corridor.

The group looks forward to working with your team to develop the details.

Best wishes for the bid

Yours sincerely

Councillor J Taylor
Chair of Sedgemoor Cycle Group



Sedgemoor District Council
Bridgwater House, King Square
Bridgwater, Somerset TA6 3AR
Tel: 0845 408 2540
DX: 80619 Bridgwater
www.sedgemoor.gov.uk

APPENDIX B – Technical information

Further details of discounted forecast of costs and (selected) benefits

See D1 for further explanation.

	2010	2011	2012	2013	2014	2015
Benefits of car KMs saved	£362,655.55	£395,505.98	£428,356.40	£461,206.83	£494,057.25	£526,907.68
Adjusted for partial implementation	£0.00	£0.00	£29,984.95	£202,931.00	£370,542.94	£526,907.68
Cost	£0.00	£0.00	382000	1861000	1592000	1262000
Annual PVB (to 2002)	£0.00	£0.00	£21,256.89	£138,996.72	£245,219.13	£336,906.96
Annual PVC (to 2002)	£0.00	£0.00	£270,806.99	£1,274,683.97	£1,053,559.01	£806,928.04
Annual NPV	£0.00	£0.00	£-249,550.09	£-1,135,687.25	£-808,339.88	£-470,021.09
	2016	2017	2018	2019	2020	2021
Benefits of car KMs saved	£559,758.10	£570,138.61	£580,519.12	£590,899.63	£601,280.14	£611,660.65
Adjusted for partial implementation	£559,758.10	£570,138.61	£580,519.12	£590,899.63	£601,280.14	£611,660.65
Cost	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00
Annual PVB (to 2002)	£345,808.36	£340,310.39	£334,788.81	£329,251.51	£323,705.86	£318,158.77
Annual PVC (to 2002)	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00
Annual NPV	£345,808.36	£340,310.39	£334,788.81	£329,251.51	£323,705.86	£318,158.77
	2022	2023	2024	2025	2026	
Benefits of car KMs saved	£622,041.16	£632,421.67	£642,802.18	£653,182.69	£663,563.20	
Adjusted for partial implementation	£622,041.16	£632,421.67	£642,802.18	£653,182.69	£663,563.20	
Cost	£0.00	£0.00	£0.00	£0.00	£0.00	
Annual PVB (to 2002)	£312,616.66	£307,085.56	£301,571.05	£296,078.33	£290,612.24	
Annual PVC (to 2002)	£0.00	£0.00	£0.00	£0.00	£0.00	
Annual NPV	£312,616.66	£307,085.56	£301,571.05	£296,078.33	£290,612.24	
NPV (i.e. PVB-PVC discounted to 2002 levels)	£836,389.21					

Quantifiable information requested for use by assessors

Trips per annum through Bridgwater

2010	2011	2012	2013	2014	2015	2016	2017
47,973,045	48,526,273	49,079,501	49,632,729	50,185,957	50,739,185	51,292,413	51,813,706
2018	2019	2020	2021	2022	2023	2024	2025
52,334,999	52,856,292	53,377,585	53,898,878	54,420,171	54,941,464	55,462,757	55,984,050
2026							
56,505,343							

Years 2010, 2016 and 2026 were derived from local model data (introduced in footnote above) and annualised using a factor based on local Automatic Traffic Counter data. Values for other years were developed through straight line interpolation.

Modal split

Mode	2010	2011	2012	2013	2014	2015	2016
Walk	25%	25%	25%	25%	25%	25%	25%
Cycle ¹	2%	2%	2%	2%	2%	2%	2%
Car Driver	44%	44%	44%	44%	44%	44%	44%
Car Passenger	23%	23%	23%	23%	23%	23%	23%
Bus/Coach	5%	5%	5%	5%	5%	5%	5%
Rail/Underground	1%	1%	1%	1%	1%	1%	1%
Mode	2017	2018	2019	2020	2021	2022	2023
Walk	25%	25%	25%	25%	25%	25%	25%

¹ The modal share for cycling suggested by this TEMPRO dataset is perceived to be low. Other sources suggest relatively high rates of cycling, particularly for certain journey purposes (the 2001 Census suggested 9% for journeys to work, for example). Care should be taken in using this element of the data, as other sources may be more relevant for certain purposes.

Cycle	2%	2%	2%	2%	2%	2%	2%
Car Driver	44%	44%	44%	44%	44%	44%	44%
Car Passenger	23%	23%	23%	23%	23%	23%	23%
Bus/Coach	5%	5%	5%	5%	5%	5%	5%
Rail/Underground	1%	1%	1%	1%	1%	1%	1%
Mode	2024	2025	2026				
Walk	25%	25%	25%				
Cycle	2%	2%	2%				
Car Driver	44%	44%	45%				
Car Passenger	23%	23%	23%				
Bus/Coach	5%	5%	5%				
Rail/Underground	1%	1%	1%				

Years 2010, 2016 and 2026 were derived from TEMPRO 5.4; trips with origins and destinations in Bridgwater (Average Day, inc. weekends). Values for other years were developed through straight line interpolation.

Kilometres per annum

2010	2011	2012	2013	2014	2015	2016	2017
618,219,036	624,535,561	630,833,552	637,113,010	643,373,935	649,616,327	655,840,185	660,546,000
2018	2019	2020	2021	2022	2023	2024	2025
665,212,383	669,839,337	674,426,859	678,974,951	683,483,612	687,952,843	692,382,643	696,773,013
2,026							
701,123,951							

Calculated from trip rates above and average interpeak trip lengths below. As no all day trip length data was available, this was deemed the best method of accounting for all trips. If another method of calculation is preferred it can be provided on request.

Average length of trip per annum

AM peak hour average trip length (meters)

2010	2011	2012	2013	2014	2015	2016	2017
16,469	16,384	16,298	16,213	16,127	16,042	15,957	15,909
2018	2019	2020	2021	2022	2023	2024	2025
15,862	15,815	15,768	15,720	15,673	15,626	15,579	15,532
2026							
15,484							

Interpeak hour average trip length (meters)

2010	2011	2012	2013	2014	2015	2016	2017
12886.8	12870.05	12853.3	12836.55	12819.8	12803.05	12786.3	12748.48
2018	2019	2020	2021	2022	2023	2024	2025
12710.66	12672.84	12635.02	12597.2	12559.38	12521.56	12483.74	12445.92
2026							
12408.1							

PM peak hour average trip length (meters)

2010	2011	2012	2013	2014	2015	2016	2017
15586.8	15556.433	15526.067	15495.7	15465.333	15434.967	15404.6	15379.13
2018	2019	2020	2021	2022	2023	2024	2025
15353.66	15328.19	15302.72	15277.25	15251.78	15226.31	15200.84	15175.37
2026							
15149.9							

Years 2010, 2016 and 2026 were derived from local model data (introduced in footnote above). Values for other years were developed through straight line interpolation.

Apportioning car kilometre savings to road types

The tables below show how proportions of trips made by different road types, in terms of road class and congestion level, were used to calculate from where car kilometres would be removed from the network. These proportions of trips were derived from a sample of routes from our Saturn model of Bridgwater as described in D1.

Road Type	Band	Proportion of trips		
		2010	2016	2026
A	1	3%	25%	23%
	2	7%	25%	23%
	3	10%	24%	26%
	4	13%	1%	2%
	5	17%	0%	0%
Other	1	3%	8%	8%
	2	7%	9%	9%
	3	10%	6%	6%
	4	13%	0%	2%
	5	17%	1%	0%

Road Type	Band	Car KM's removed		
		2010	2016	2026
A	1	1,803,839	1,774,813	1,629,329
	2	1,698,693	1,796,026	1,655,562
	3	1,886,081	1,710,694	1,841,223
	4	24,347	59,308	155,221
	5	0	0	0
Other	1	628,661	578,611	572,262
	2	840,144	658,753	630,825
	3	170,386	442,061	419,040
	4	14,861	14,810	154,657
	5	11,403	43,339	20,296

APPENDIX C - Copy of logit model

Appendix C – Copy of logit model

Path	Logit model used to calculate demand for cycle lanes in Section D1 (for travel to work only)*										Total mode share
	Utility without	Utility after	length	journey time	change in utility	Current proportion	Proportion after				
1	-0.115	-0.033	1.62	8.1	0.6642	0.23	0.36723173	0.310386884	0.23	0.36723173	14.68926921
2	-0.115	-0.033	1	5	0.41	0.23	0.310386884	0.384542588	0.23	0.310386884	12.41547537
3	-0.115	-0.033	1.8	9	0.738	0.23	0.384542588	0.309509975	0.23	0.309509975	15.38170352
4	-0.115	-0.033	0.99	4.95	0.4059	0.23	0.309509975	0.43506599	0.23	0.43506599	12.380399
5	-0.115	-0.033	2.31	11.55	0.9471	0.23	0.43506599	0.454300098	0.23	0.454300098	17.40263961
6	-0.115	-0.033	2.5	12.5	1.025	0.23	0.454300098	0.280635561	0.23	0.280635561	18.17200392
7	-0.115	-0.055	0.89	4.45	0.267	0.23	0.280635561	0.265161591	0.23	0.265161591	11.22542245
8	-0.115	-0.055	0.63	3.15	0.189	0.23	0.265161591	0.381635717	0.23	0.381635717	10.60646364
9	-0.115	-0.033	1.77	8.85	0.7257	0.23	0.381635717	0.264285689	0.23	0.264285689	15.26542867
10	-0.115	-0.033	0.45	2.25	0.1845	0.23	0.264285689	0.392334159	0.23	0.392334159	10.57142756
11a	-0.115	-0.033	1.88	9.4	0.7708	0.23	0.392334159	0.298236176	0.23	0.298236176	15.69336634
12	-0.115	-0.033	0.86	4.3	0.3526	0.23	0.298236176	0.332741591	0.23	0.332741591	11.92944703
13	-0.115	-0.033	1.25	6.25	0.5125	0.23	0.332741591	0.372966537	0.23	0.372966537	13.30966363
14	-0.115	-0.033	1.68	8.4	0.6888	0.23	0.372966537	Average			14.91866149
								Average			13.85438367
								Ave increase			2.047928817
								Reduction in car trips			1360.925701
								Miles saved			4082.777103
								KMs saved/day			6570.592833
								KMs saved/pa			2398266.384

* Developed from DfT TAG Unit 3.14.1 (Section 1.7 of DfT, 2010). Formula employed copied below.

$$P_y^f = \frac{P_y^b e^{\Delta U_y}}{P_y^b e^{\Delta U_y} + (1 - P_y^b)}$$

ΔU

is the change in utility of the cycling mode

P_y^b

is the proportion of those choosing to cycle out of the maximum of those where it is a viable option, without any intervention

P_y^f

is the proportion of those choosing to cycle out of the maximum of those where it is a viable option, with intervention

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