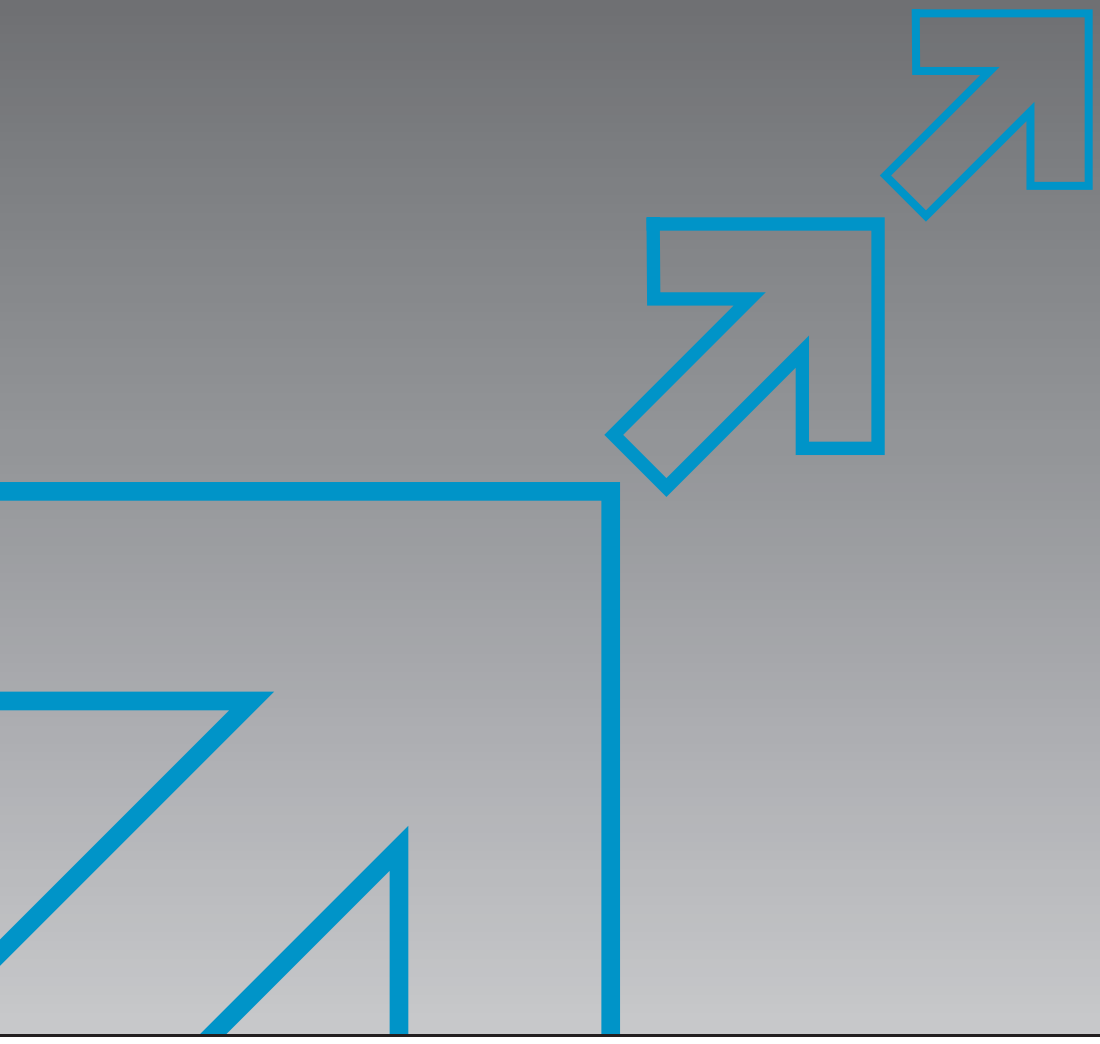
A SUSTAINABLE JOURNEY TO WORK IN SOUTH YORKSHIRE

ANNEX 1: LSTF DETAILED PROGRAMME



SHEFFIELD
City Region

SOUTH YORKSHIRE
INTEGRATED TRANSPORT
AUTHORITY

CONTENTS

1 INTRODUCTION

1.1 THE ANNEX DOCUMENTS

This document forms part of the series of Annex documents, which are presented here to support our Local Sustainable Transport Fund (LSTF) Business Case. This series of documents presents a substantial body of information and analysis have compiled while developing the Business Case, which is the final submission to the Department for Transport (DfT), following our successful "key component" bid.

The systematic prioritisation of our programme elements has been used to determine our final bid, alongside other considerations, such as consultation. This information and analysis has been brought together to identify the problems that need to be addressed by the LSTF fund and the correct solutions to achieve this.

1.2 THIS DOCUMENT

This document is the Detailed Scheme Description part of the series of Annexes and contains a complete description for each scheme we have included in our Business Case. Chapters 2, 3, 4 and 5 present further details on the schemes identified within each priority corridor. Chapter 6 presents the details of the Business and Employers Sustainability Toolbox (BEST) project.

2 BARNSLEY ACCESSIBILITY IMPROVEMENT CORRIDOR

2.1 INTRODUCTION

This priority corridor starts at the urban centre of Barnsley and links it to a more dispersed, rural area, which suffers from variable levels of accessibility. A number of more rural communities are reliant on car trips for employment and training opportunities. There is also limited active mode infrastructure linking communities with employment sites.

Therefore, the focus of this project is to improve accessibility and connectivity between both rural and urban areas to employment sites by public transport and active modes to reduce reliance on the private car and broaden the travel horizons of individuals in more isolated areas.

2.2 INVESTMENT IN BARNSLEY ACCESSIBILITY IMPROVEMENT CORRIDOR

BARN 1 Targeted Corridor Enhancements

These enhancements will work to increase green time at traffic signals on bus routes travelling into Barnsley Town Centre in the morning peak hour and increase green time for the reverse direction in the evening peak hour. As part of this, sensors will be applied to the traffic lights to recognise when buses are running late to increase their green time and improve the reliability of services. Both changes to signals will reduce journey times by bus and smooth the flow of traffic, which will reduce the production of carbon.

Traffic Regulation Orders (TROs) will also be applied to the following junctions where parked cars are causing unreliability issues for buses on key routes into Barnsley Town Centre:

- Brierley Road, Grimethorpe;
- Cemetery Road, Grimethorpe;
- High Street, Grimethorpe;
- Pontefract Road, Cudworth;
- Snydale Road, Cudworth; and
- John Road, Cudworth.

In addition to the changes to signals and TROs, an improvement to widen the left exit of the Snydale Road, Cudworth junction will help to improve visibility and reduce the volume of traffic. **Figure 2.1** lists the milestones for Targeted Corridor Enhancements.

Figure 2.1: Targeted Corridor Enhancements Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Feasibility and detailed design: March 2013	Complete modelling tender actions: October 2012	Start on site for installation of traffic control systems: June 2013	August 2013	Complete site works for installation of traffic control systems: February 2014	Assess post implementation network operation: March 2014
Design enhanced traffic system: May 2014	Complete contract workers tender actions: May 2013	Start on site for installation of new signal timings and systems: June 2014	August 2014	Start on site for installation of new signal timings and systems: February 2015	Assess post implementation network operation: March 2015

BARN 2 Barnsley Cycle Routes

11.6km of cycle infrastructure will be constructed to improve linkages between communities and employment sites. **Figure 2.2** shows the location of these cycle routes. The majority of this cycle infrastructure will be segregated off-road facilities to improve movement for cyclists in areas where there is high vehicle usage.

Figure 2.2: Location of Barnsley Cycle Routes

There are three elements to the Barnsley Cycle Routes. The first is of which is the cycle infrastructure in Barnsley Town Centre, which is an improvement to the cycle provision on busy roads. This cycle route connects the Transport Interchange in Barnsley Town Centre to Dearne Valley Park, crossing over the busy A61, Harborough Hill Road and next to the educational and employment centres on and around Queens Road. This allows for a direct cycling and connection from the Transport Interchange to establishments on the opposite side of a busy A61.

The second route is the Cross Dearne Route, which is partly located along the A6195. This is a busy north-south route within Barnsley District. The cycle route leaves the A6195 to take a more direct route to Darfield and then on to the Dearne Way, allowing for a more strategic north-south cycle route through the district. The final cycle route is mainly an off-road facility and provides a link between the North Dearne villages of Thurnscoe, Bolton on Dearne and Great Haughton. This route enhances connectivity between the residential areas of Great Haughton, Goldthorpe rail station and employment sites in and around Thurnscoe and Goldthorpe.

Usage of existing off-road cycle routes are increasing in Barnsley both for accessing employment and educational sites as well as for leisure. The aim of both of these cycle routes is to build on this momentum.

The following figure provides a list of the milestones set out for this scheme.

Figure 2.3: Barnsley Cycle Routes Milestone

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Feasibility and detailed design of the North Dearne Valley section: November 2012	Complete contract workers tender actions: December 2012	Start on site: January 2013	January 2013	Complete site works: June 2013	Post Implementation Assessment: March 2015
Feasibility and detailed design of Cross Dearne Valley section: July 2013	Complete contract workers tender actions: September 2013	Start on site: October 2013	October 2013	Complete site works: September 2014	Post Implementation Assessment: March 2015
Feasibility and detailed design of the Town Centre section: February 2013	Complete contract workers tender actions: March 2013	Start on site: April 2014	April 2014	Complete site works: March 2014	Post Implementation Assessment: March 2015

BARN3 Plugged in Barnsley

19 SMEs will take part in a trial of electric vans and cars and will have an electric charging point installed on their premises. Across the priority area, there will be 1 rapid charger and 5 slow chargers installed. Following participation in the trial, the SMEs will be offered the opportunity to continue running the vehicles, with the electric charging points permanently installed. The infrastructure installed during the initiatives will facilitate electric vehicle operation in South Yorkshire beyond the initial LSTF Period.

Where public transport, walking and cycling are not viable options, either for geographic or operational reasons, EVs can fill a niche that would normally be filled by conventionally fuelled vehicles, thereby reducing emissions or air pollutants and carbon dioxide. Taking a practical view of the challenge, there are two main ways of reducing the carbon dioxide produced by transport:

- helping people to choose to make fewer journeys by car and
- by making better use of vehicle technology, such as greener fuels.

Achieving this transformation through vehicle technology, requires tackling the main challenge in this market - the 'chicken and egg' problem in that few people will purchase vehicles until there is confidence in its ability to provide unrestrained travel over appropriate distances. A key challenge is, therefore, to overcome the 'range anxiety' that potential users of electric and gas vehicle users have, i.e. the fear they will be unable to recharge/refuel their vehicles on (longer) journeys.

The South Yorkshire LTP3 Implementation Plan makes a clear commitment to low carbon vehicles, stating:

- "…the need to reverse the growth in carbon emissions from transport"
- "…to work to improve the efficiency of all vehicles and reduce their carbon emissions and to improve air quality especially in designated Air Quality Management Areas."
- (To improve air quality and reduce climate change impacts)"There are three strands to the proposal:- 1. Investment in low carbon vehicles; 2. Investment in low carbon infrastructure; 3 promoting the more efficient use of vehicles."
- "Sheffield aspires to be amongst the leaders in electric/low emission vehicles";
- "We would propose to access additional funding from national and European sources where possible, as well as working in partnership with the private sector to facilitate the development of the market and maintenance of alternative fuels infrastructure and we will be exploring the potential for partner contributions here."

This package is an innovative demonstration scheme that will increase the competitiveness of small businesses (SMEs) by catalysing their uptake of electric vehicles (EVs). This is a unique scheme – there are no other schemes operating in the United Kingdom (UK) that enable SMEs to trial EVs on a discounted basis, and then support them to purchase or hire them on a commercial basis. PSY deliberately takes a different route to addressing market failure than the Plugged in Places (PiP) programmes that operate across the UK. PIP programmes are focussed on installing charging points on the assumption that increasing the visibility of charging points in public

locations will provide confidence to potential users of EVs and encourage uptake. It is our view that installing charging points alone will not catalyse the uptake of EVs and that "hands-on trials" are needed to address the market failures (price, imperfect information and externalities) that currently inhibit SMEs from using EVs.

This project will help SMEs to become more competitive whilst reducing their emissions of greenhouse gases and damaging air pollutants. This will be achieved in a number of ways:

- Reduced running costs: electric vehicles cost around £2 to fully charge which produces a range of around 100 miles. A company using one electric car for a year that does 10,000 miles will save £1,200 (based on 2 pence per mile for an electric vehicle compared to 14 pence per mile petrol/diesel). Research indicates that the maintenance costs of electric vehicles are at least 25% cheaper than that of petrol or diesel vehicles. CO2Sense has developed a savings calculator (see: www.co2sense.org.uk/piy) which enables SMEs to enter their estimated annual mileage and a minimum savings figure is automatically generated. It shows that a company leasing three electric cars for a year which collectively do 70,000 miles could save £7,303. This saving is based on a comparison of an electric vehicle to a very low emission petrol or diesel vehicle (107 g CO2/km).
- Marketing: SMEs participating in trials will have an opportunity to demonstrate their 'green credentials' to their stakeholders and customers. Participating SMEs will be able to brand their trial vehicles using magnetic boards and CO2Sense will assist them issue press releases to communicate their commitment to reducing greenhouse gas and air pollutant emissions. Our experience working with SMEs on resource efficiency programmes indicates that SMEs are keen to differentiate themselves from competitors through a commitment to environmental issues and we are confident that they will value the marketing opportunity a trial affords.
- Supply chain benefits: this scheme will produce opportunities for companies in the supply chain. Our analysis shows that the investment in the installation of charging points can sustain 8 new jobs within Sheffield City Region. This rises to a total of 32 jobs when ERDF funding is approved. This work will provide a major boost to firms in the sub-region and region in an economically challenging environment. We have consulted with the Electrical Contractors Association and they are hugely supportive of the project and the opportunity it will provide to their members in South Yorkshire. We have also consulted with a number of vehicle suppliers and already have 4 companies that have confirmed their interest in supplying vehicles. They are Mercedes-Benz UK (they own Smart cars which include the new Smart EV), Future Transport System (they deliver the electric vehicle trial scheme in the North East), Simon Bailes (they supply Nissan Leafs to Future Transport Systems), and Greenbean Cars (they currently provide hybrid-electric taxi services).

The following figure outlines the milestones set out for Plugged in Barnsley.

Table 2.4: Plugged in Barnsley Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Complete design of delivery and marketing strategy: August 2012	Complete all tender actions: September 2012	Launch marketing plan: September 2012	September 2012	Complete commercial trials: March 2015	Hold review meetings with suppliers: December 2012
		Commence commercial trials: October 2012			Hold review meetings with suppliers: June 2013
					Interim evaluation: October 2013
					Hold review meetings with suppliers: December 2013
					Hold review meetings with suppliers: June 2014
					Final evaluation: September 2014
					Hold review meetings with suppliers: December 2014
					Hold review meetings with suppliers: March 2015

BARN4 Jobconnector: X19

The service scheme, **Jobconnector X19**, will facilitate an increase in the frequency of the existing X19 service to two buses per hour (Monday to Saturday). This will improve connectivity not only within this priority corridor, but will also strengthen the Barnsley-Doncaster growth axis and provide links to the Doncaster Regeneration Corridor. Figure 2.5 shows the location of the existing Jobconenctor X19 route.

Figure 2.5: Route of the Existing Jobconnector: X19

This will provide flexibility to employment opportunities in both Doncaster and Barnsley Town Centres. The Targeted Corridor Enhancements will also help to improve reliability on this route. The scheme aims to address the limited access the employment sites for some communities at the fringe of the current bus network which is seen a barrier to linking people, particularly those in deprived areas, to current & emerging employment opportunities. Current patronage projections suggest that this route will become commercially viable beyond the life of LSTF. A similar scheme, which involved increasing the 265 service between Barnsley and Sheffield from an hourly to a half hourly service, became commercially viable beyond the life of the funding.

The following figure outlines the milestones set out for Jobconnector: X19

Figure 2.6: Jobconnector X19 Milestones

<table>
<tr><th>Design</th><th>Procurement</th><th>Start works</th><th>Coordinated BEST delivery to maximise impact</th><th>Complete works</th><th>Assessment</th></tr>
<tr><td rowspan="3">Detailed timetable produced: August 2012</td><td rowspan="3">Confirm contract and registration: August 2012</td><td>Service variation registered: August 2012</td><td rowspan="3">September 2012</td><td rowspan="3">Service continues beyond 2015</td><td>Implementation Assessment: March 2013</td></tr>
<tr><td>Enhanced Service commences: October 2012</td><td>Implementation Assessment: March 2014</td></tr>
<tr><td></td><td>Implementation Assessment: March 2015</td></tr>
</table>

2.3 BEST IN BARNSLEY ACCESSIBLITY IMPROVEMENT CORRIDOR

This supporting package of schemes will work to promote and encourage a greater uptake of sustainable travel opportunities. Figure 2.7 lists the specific outcomes from BEST that are expected to impact upon the workplaces and residents living within the Barnsley Accessibility Improvement Corridor.

Figure 1.7: BEST in Barnsley Accessibility Improvement Corridor

Scheme		Targets
BEST1	**ECO Academy**	• 597 eco-driving training sessions delivered to individuals in 26 businesses; • 51 businesses will receive a 'Better Driving for Business' seminar; • 6947 young drivers will receive eco-driving and safety messages during driving lessons; • 78 businesses will receive a young drivers at work presentation; • 515 bus drivers will receive the customer excellence programme and receive accreditation through the continuing Professional Competence Programme; and • 134 fleet vehicles to receive a 1 to 5 star rating.
BEST2	**Busboost**	• 2,007 employees provided with trial bus passes; and • 224 residents of the priority corridor provided with trial bus passes.
BEST3	**Walkboost**	• 1.827 parent car drivers on the school run informed about walking routes; • 39 communication leaflets distributed; and • 1 street audit undertaken.
BEST4	**Cycleboost**	• 1,045 participants cycle trained to Bikeability Levels 2&3; • 75 Dr. Bike sessions held with an average 11 bikes per session being safety checked and minor maintenance carried out; • 448 people registered for cycle leasing, of which 70% are car drivers; and • 149 Sheffield Cycle stands installed by SMEs within the priority corridor.
BEST5	**Travel Training**	• 26 disabled or vulnerable people independently trained to travel to employment or training locations; and • Approximately 300 students will be travel trained each year.
BEST6	**Marketing and Communications**	• Targeted Marketing to ensure investment is publicised and the BEST targets are met.

Further detail on each work package included in BEST is described in the Chapter 6 of this Annex.

3 DEARNE VALLEY ENTERPRISE CORRIDOR

3.1 INTRODUCTION

This priority corridor straddles the Dearne Valley, which is a former coalmining area and was previously considered as one of the most heavily polluted areas in Western Europe. To improve economic development within the area, the Dearne Valley holds the Sheffield City Region Enterprise Zone, "Modern Manufacturing and Technology Growth Area". However, many residents do not own a car and existing public transport services are not matched to these areas of opportunity.

Therefore to address the poor connectivity and the heavy pollution, the main focus of this project will be to improve connectivity by public transport and the prominence of alternative active modes.

3.2 INVEATMENT IN DEARNE VALLEY ENTERPRISE CORRIDOR

DEAR1 Targeted Corridor Enhancements

These enhancements will work to increase green time at traffic signals on bus routes travelling into Barnsley Town Centre and Sheffield City Centre in the morning peak hour and increase green time for the reverse direction in the evening peak hour. Also, sensors will be applied to the traffic lights to recognise when buses are running late to increase their green time and improve their reliability. The location of signals identified to undergo to have the sensors added include the A6135, Sheffield Road and the B6096 Hawshaw Lane.

The following figure outlines the milestones for Targeted Corridor Enhancements:

Figure 3.1: Targeted Corridor Enhancements Milestones

Scheme	Design	Procurement	Start works	BEST Activity Critical Path	Complete works	Assessment
Targeted Corridor Enhancements	Feasibility and detailed design: March 2013	Complete modelling tender actions: October 2012	Start on site for installation of traffic control systems: June 2013	August 2013	Complete site works for installation of traffic control systems: February 2014	Assess post implementation network operation: March 2014
	Design enhanced traffic system: May 2014	Complete contract workers tender actions: May 2013	Start on site for installation of new signal timings and systems: June 2014	August 2014	Start on site for installation of new signal timings and systems: February 2015	Assess post implementation network operation: March 2015

DEAR2 Dearne Valley to Swinton Cycle Route

1.2 Km of cycle infrastructure will be constructed to improve linkages between Swinton and Dearne Valley College. **Figure 3.2** shows the location of this cycle route. The majority of this cycle infrastructure will be segregated off road facilities.

Figure 3.2: Barnsley - Dearne Valley and Dearne Valley to Swinton Cycle Routes

The Dearne Vallley to Swinton Cycle route will upgrade the exiting off-road link between Dearne Valley College and Swinton. This existing link provides a vital connection to Dearne Valley College but is of poor quality. Therefore, this improvement will provide an upgrade to the route making it safer and more attractive to a greater number of students.

The following figure lists the milestones set out for the Dearne Valley to Swinton Cycle Route.

Figure 3.3: Dearne Valley to Swinton Cycle Route Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Complete detailed design: February 2013	Complete all tender actions: April 2013	Start on site: May 2013	May 2013	Complete site works: June 2013	Post implementation assessment: June 2014 Post implementation assessment: March 2015

DEAR3 Elsecar Park and Ride
An 80 space park and ride at Elsecar rail station aims to encourage a sustainable connection to employment opportunities within the wider geographical area. This will provide a permanent multimodal connection with the rail network for those who would normally drive.

The station is located in Elsecar and close to the centre of Hoyland. The communities were developed around the coal mining and associated industries in the early part of the 20th century and hence during the 1980's suffered significantly from the closure of the comparatively costly traditional drift mines in the area. Elsecar, Hoyland and the surrounding communities have therefore become commuter towns to the larger neighbouring conurbations of Sheffield and Barnsley as well as in the Enterprise Zone in the Dearne Valley between Barnsley and Doncaster.

There are currently 11,229 households within the station's catchment, as identified on the attached plan Appendix A, with the potential of a further 1579 households being built within this area. The train provides a key link to jobs and education in Sheffield, Barnsley, Leeds and Huddersfield. Current jobs in the Barnsley, Meadowhall and Sheffield zones alone account for 39,748 jobs with a possible further 13,213 jobs based on projected developments.

Along with providing greater accessibility to employment for those living further from the station, the project also aims to regenerate the area immediately around the station with the provision of the access road which is intended to serve a new development on the old derelict school site. Provision of the new compliant ramp will provide easy access and interchange between the local bus and rail services.

Patronage at Elsecar is currently at 108,391 passengers a day. Nationally accepted growth forecasts (figures from Northern Rail) indicate that implementation of an 80 space car park will increase patronage by 71% by 2013/2014. Further growth is forecast due to the associated construction of a housing development adjacent to the station being constructed as part of this project. Along with the current demand for parking at the station, of the 1,579 proposed houses within the catchment approximately 1,000 of these are considered to add to the likely demand for parking being greater than 1.6km from the station. The extension of the park and ride at the adjacent Wombwell station, increasing the size by 200% proved to be successful and is reported as full on most days with 100% satisfaction recorded in the post implementation survey. The pre-planning submission consultation indicated strong support for the park and ride. The two ramps as Elsecar station are not DDA compliant. There is a legal requirement to ensure DDA compliant access to stations and this scheme will deliver this objective.

The following figure sets out milestones for Elsecar Park and Ride.

Figure 3.4: Elsecar Park and Ride Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Detailed Design: January 2013	Complete tender actions: March 2013	Start on site: April 2013	April 2013	Complete site works: September	Post implementation Assessment: March 2014

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
				2013	Post implementation Assessment: March 2015

DEAR4 Barnsley - Dearne Valley Cycle Route

15.22Km of cycle infrastructure will be constructed to improve linkages between communities and employment sites. **Figure 3.2** shows the location of these cycle routes. The majority of this cycle infrastructure will be unsegregated on road facilities and in areas where there is high vehicle usage. The cycle routes connect existing on and off road facilities in the Dearne Valley. This cycle infrastructure also provides connectivity to the Barnsley Cycle Routes, creating an integrated network of cycle infrastructure. The cycle routes across Hoyland and Bolton-upon-Dearne connect the residential areas with centres of employment and educational establishments. Both routes connect to existing and proposed cycle routes that are linked up to local rail stations, providing further connectivity to employment and educational establishments within and beyond the district.

The following Figure lists the milestones set out for Barnsley – Dearne Valley Cycle Routes.

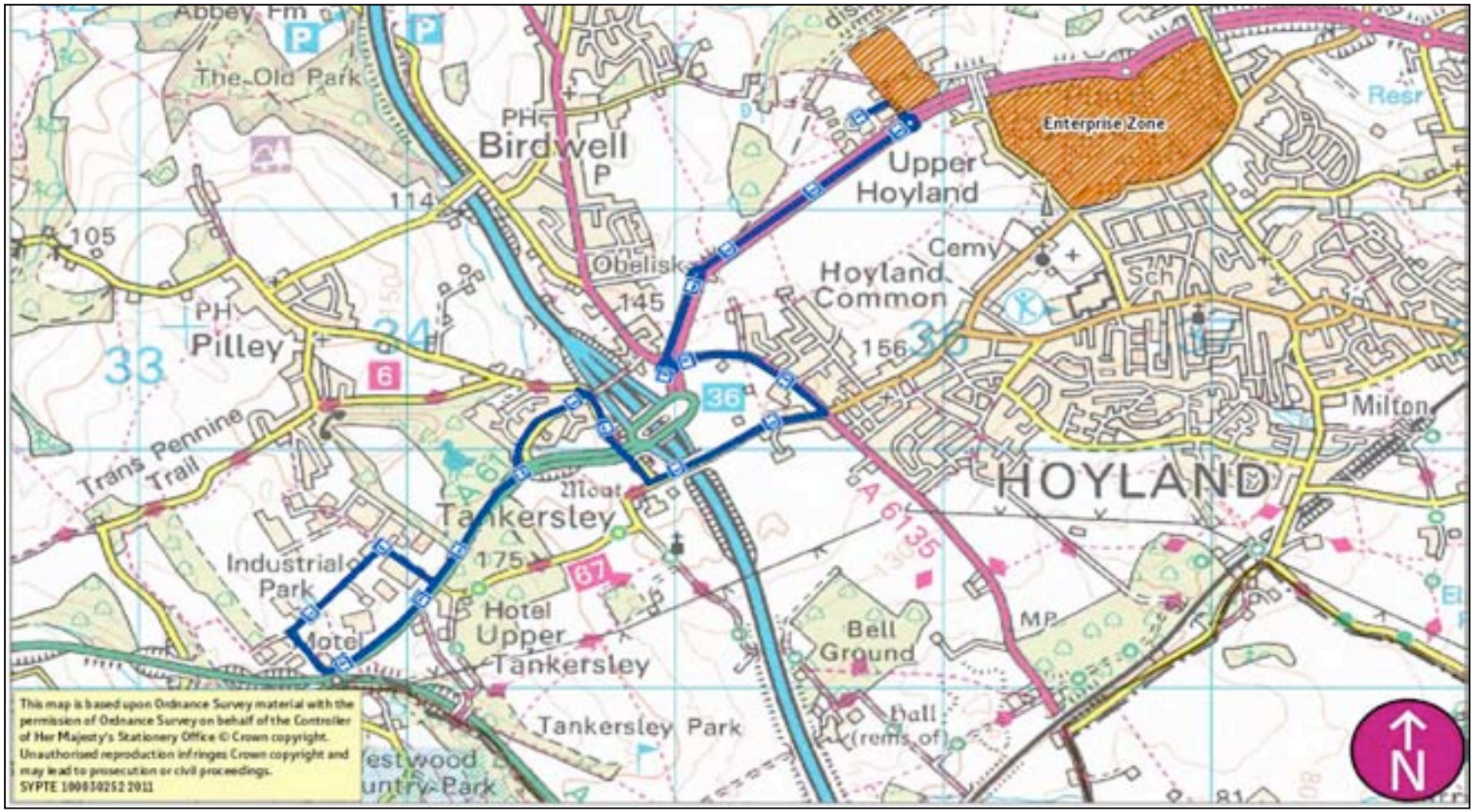
Figure 3.5: Barnsley – Dearne Valley Cycle Routes

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Feasibility and detailed design of the North Dearne Valley: November 2012	Complete tender actions: December 2012	Start on site: January 2013	January 2013	Complete site works: June 2013	Post implementation assessment: March 2014
Feasibility and detailed design of the Cross Dearne Valley: January 2013	Complete tender actions: September 2013	Start on site: October 2013	October 2013	Complete site works: September 2014	Post implementation assessment: March 2015
Feasibility and detailed design of LEZ route: January 2014	Complete tender actions: March 2014	Start on site: April 2014	April 2014	Complete site works: March 2015	Post implementation assessment: March 2015

DEAR5 Jonbconnector: Wentworth and Shortwood

The Jobconnector Wentworth and Shortwood aims to improve public transport connectivity to employment opportunities, particularly to the Sheffield City Region Enterprise Zone. **Figure 3.6** displays the route.

Figure 3.6: Route of the Jobconnector: Wentworth to Shortwood



This service intends to provide a 15 minute service for 2 and half hours across both peak periods. It is intended that beyond the life of LSTF this service will become commercially viable and continue to serve the communities and industries within this area.

Increasingly, more and more commercial bus services are being withdrawn from locations which cannot support a regular daily bus service on a commercial basis and where simultaneously the monies available to support non-commercially viable routes have diminished. This lack of public transport availability can restrict the ability to access opportunities of employment or training and can isolate people within their own neighbourhood. Equally, people without access to a car can be severely disadvantaged without some form of public transport link.

The project will enable local businesses to attract and recruit a sustainable, reliable labour supply by addressing transport and travel barriers affecting local communities. It will also assist economically inactive people to access employment and training opportunities which would otherwise be less easily available to them because of geographic and economic reasons. Through identifying and implementing transport and travel solutions, the project aims to ensure availability of low carbon options that reduce reliance on the private car and single occupancy trips. The project will encourage the use of environmentally-friendly modes of transport and to reduce CO2 emissions by encouraging and facilitating sustainable modes of transport.

In addition, through focused information provision, the Jobconnector Wentworth to Shortwood network will encourage the reduction in the use of the car for short trips. Informing and educating and helping people to change their behaviours will be a key element of the Jobconnector Wentworth to Shortwood concept. The delivery of the Jobconnector Wentworth to Shortwood Network would result in economies of scale and better utilisation of vehicles by building on existing community transport provision. CT in SY mini bus services are aimed at the disabled and elderly and are under-utilised at peak commuting times. This project will enable existing resources to be used more efficiently. Analysis will be undertaken to determine timings and exact routes, utilising 'hail and ride' where appropriate. Fares would be set at a rate which would minimise the effect of cross-ticketing. This is particularly important given that one of the key aims of the Jobconnector Wentworth to Shortwood network is to feed in to the mainstream network and to make it an attractive option to car users as part of the aim to reduce short trips – or in other words to act as a 'Nudge' towards sustainable transport choices. Effective marketing of the new services will be very important. As well as the more traditional marketing and information provision, the Jobconnector Wentworth to Shortwood network will be promoted through more targeted advertising at a neighbourhood level in order to reach a new, extended client base.
The following sets out the milestones for Jobconnector: Wentworth to Shortwood.

Figure 3.7: Jobconnector: Wentworth to Shortwood

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Detailed timetable produced: August 2012	Confirm contract and registration: August 2012	Press release: October 2012		Service continues beyond 2015	Annual report produced: November 2013
Marketing package developed: August 2012		Service commences: October 2012	September 2012		Annual report produced: November 2014
					Exit strategy produced: November 2014
					Succession strategy implemented: February 2015

DEAR6 Plugged in Dearne Valley
11 SME's will take part in a trial of electric trucks, vans and cars and will have an electric charging point installed on their premises. Across the priority area, there will be 1 rapid charger and 5 slow chargers installed. Post the trial of electric vehicles the SME's will be offered the opportunity to continue running the vehicles. With the electric charging points permanently installed, the infrastructure to allow electric vehicle operation in South Yorkshire post LSTF will be present.

Where public transport, walking and cycling are not viable options, either for geographic or operational reasons, EVs can fill a niche that would normally be filled by conventionally fuelled vehicles, thereby reducing emissions or air pollutants and carbon dioxide. Taking a practical view of the challenge, there are two main ways of reducing the carbon dioxide produced by transport:

- helping people to choose to make fewer journeys by car and
- by making better use of vehicle technology, such as greener fuels.

Achieving this transformation through vehicle technology, requires tackling the main challenge in this market - the 'chicken and egg' problem in that few people will purchase vehicles until there is confidence in its ability to provide unrestrained travel over appropriate distances. A key challenge is, therefore, to overcome the 'range anxiety' that potential users of electric and gas vehicle users have, i.e. the fear they will be unable to recharge/refuel their vehicles on (longer) journeys.

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This package is an innovative demonstration scheme that will increase the competitiveness of small businesses (SMEs) by catalysing their uptake of electric vehicles (EVs). This is a unique scheme – there are no other schemes operating in the United Kingdom (UK) that enable SMEs to trial EVs on a discounted basis, and then support them to purchase or hire them on a commercial basis. PSY deliberately takes a different route to addressing market failure than the Plugged in Places (PiP) programmes that operate across the UK. PIP programmes are focussed on installing charging points on the assumption that increasing the visibility of charging points in public locations will provide confidence to potential users of EVs and encourage uptake. It is our view that installing charging points alone will not catalyse the uptake of EVs and that "hands-on trials" are needed to address the market failures (price, imperfect information and externalities) that currently inhibit SMEs from using EVs.

This project will help SMEs to become more competitive whilst reducing their emissions of greenhouse gases and damaging air pollutants. This will be achieved in a number of ways:

- Reduced running costs: electric vehicles cost around £2 to fully charge which produces a range of around 100 miles. A company using one electric car for a year that does 10,000 miles will save £1,200 (based on 2 pence per mile for an electric vehicle compared to 14 pence per mile petrol/diesel). Research indicates that the maintenance costs of electric vehicles are at least 25% cheaper than that of petrol or diesel vehicles. CO2Sense has developed a savings calculator (see: www.co2sense.org.uk/piy) which enables SMEs to enter their estimated annual mileage and a minimum savings figure is automatically generated. It shows that a company leasing three electric cars for a year which collectively do 70,000 miles could save £7,303. This saving is based on a comparison of an electric vehicle to a very low emission petrol or diesel vehicle (107 g CO2/km).
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- Supply chain benefits: this scheme will produce opportunities for companies in the supply chain. Our analysis shows that the investment in the installation of charging points can sustain 8 new jobs within Sheffield City Region. This rises to a total of 32 jobs when ERDF funding is approved. This work will provide a major boost to firms in the sub-region and region in an economically challenging environment. We have consulted with the Electrical Contractors Association and they are hugely supportive of the project and the opportunity it will provide to their members in South Yorkshire. We have also consulted with a number of vehicle suppliers and already have 4 companies that have confirmed their interest in supplying vehicles. They are Mercedes-Benz UK (they own Smart cars which include the new Smart EV), Future Transport System (they deliver the electric vehicle trial scheme in the North East), Simon Bailes (they supply Nissan Leafs to Future Transport Systems), and Greenbean Cars (they currently provide hybrid-electric taxi services).

The following sets out the milestones for Plugged in Dearne Valley.

Table 3.8: Plugged in Dearne Valley Milestones

<table>
<tr><th>Design</th><th>Procurement</th><th>Start works</th><th>Coordinated BEST delivery to maximise impact</th><th>Complete works</th><th>Assessment</th></tr>
<tr><td rowspan="5">Complete design of delivery and marketing strategy: August 2012</td><td rowspan="5">Complete all tender actions: September 2012</td><td>Launch marketing plan: September 2012</td><td rowspan="5">September 2012</td><td rowspan="5">Complete commercial trials: March 2015</td><td>Hold review meetings with suppliers: December 2012</td></tr>
<tr><td rowspan="4">Commence commercial trials: October 2012</td><td>Hold review meetings with suppliers: June 2013</td></tr>
<tr><td>Interim evaluation: October 2013</td></tr>
<tr><td>Hold review meetings with suppliers:</td></tr>
<tr><td>December 2013</td></tr>
</table>

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
					Hold review meetings with suppliers: June 2014
					Final evaluation: September 2014
					Hold review meetings with suppliers: December 2014
					Hold review meetings with suppliers: March 2015

3.3 BEST IN DEARNE VALLEY ENTERPRISE CORRIDOR

This supporting package of schemes will work to promote and encourage a greater uptake of sustainable travel opportunities. Figure 3.9 lists the specific outcomes from BEST that are expected to impact upon the workplaces and residents living within the Dearne Valley Enterprise Corridor. A greater level of detail on each work package included in BEST is described in the BEST section below.

Figure 3.9: BEST in Dearne Valley Enterprise Corridor

Scheme		Targets
BEST1	**ECO Academy**	• 327 eco-driving training sessions delivered to individuals in 18 businesses; • 37 seminar to a further businesses will receive a Better Driving for Business seminar; • 4938 young drivers will receive eco-driving and safety messages during driving lessons; • 54 businesses will receive a young drivers at work presentation; • 366 bus drivers will receive the customer excellence programme and receive accreditation through the continuing Professional Competence Programme; and • 74 vehicles to receive a 1 to 5 star rating.
BEST2	**Busboost**	• 1427 employees provided with trial passes; and • 123 residents provided with trial passes
BEST3	**Walkboost**	• 1299 parent car drivers on the school run; • 21 communication leaflets; and • 1 street audit.
BEST4	**Cycleboost**	• 572 participants cycle trained to Bikeability Levels 2&3; • 41 sessions held with an average 11 bikes per session safety checked and minor maintenance carried out; • 82 participants registered for cycle leasing, 70% of which are car drivers; and • 149 Sheffield Cycle stands will be put in place.
BEST5	**Travel Training**	• 18 disabled or vulnerable people independently trained to travel to employment or training locations; • Approximately 300 students will also be travel trained each year.
BEST6	**Marketing and Communications**	• Targeted Marketing to ensure investment is publicised and the BEST targets are met.

4 DON VALLEY ENTERPRISE CORRIDOR

4.1 INTRODUCTION

The Don Valley Enterprise Corridor between Sheffield and Rotherham has been the focus of a number of regeneration initiatives to revive the area and serve as one of the key drivers for wider growth in the Sheffield City Region. The overarching transport problems identified in the corridor are the quality, reliability and capacity of transport links into Rotherham and Sheffield, connectivity between these urban centres and the links to areas of employment.

The focus of this project is therefore to build upon existing public transport capacity and connectivity and engender a culture of sustainable trips that transcends the continued evolving nature of the Priority Area.

4.2 INVESTMENT IN DON VALLEY ENTERPRISE CORRIDOR

DONV1 Targeted Corridor Enhancements

These enhancements will work to increase green time at traffic signals on bus routes travelling into Barnsley Town Centre in the morning peak hour and increase green time for the reverse direction in the evening peak hour. Also, sensors will be applied to the traffic lights to recognise when buses are running late to increase their green time and improve their reliability. Further to these interventions, the following junctions will be improved to increase bus reliability:

- Old Warren Vale, Rotherham: improvements to right turn for buses emerging onto Warren Vale Road;
- Monkwood Road, Rotherham: removing roundabout to reduce bus delay;
- Grove Road/Barnsley Road, Rotherham: increasing left hand radius to improve visibility for buses; and
- Arundel Gate, Sheffield: widening to provide a separate bus lane.

The following figure outlines the milestones for Targeted Corridor Enhancements in Don Valley Enterprise Corridor.

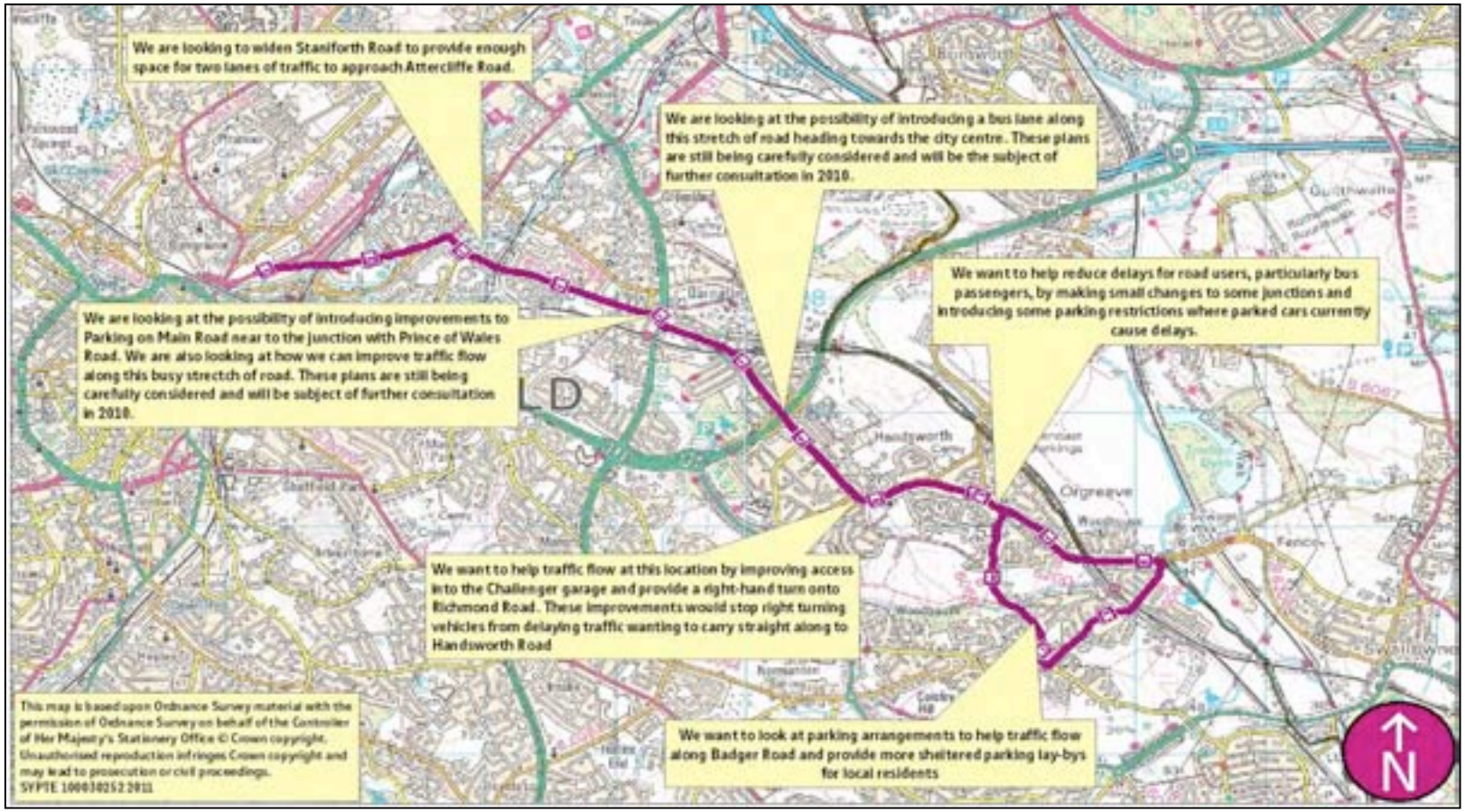
Figure 4.1: Targeted Corridor Enhancements Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Feasibility and detailed design: March 2013	Complete modelling tender actions: October 2012	Start on site for installation of traffic control systems: June 2013	August 2013	Complete site works for installation of traffic control systems: February 2014	Assess post implementation network operation: March 2014
Design enhanced traffic system: May 2014	Complete contract workers tender actions: May 2013	Start on site for installation of new signal timings and systems: June 2014	August 2014	Start on site for installation of new signal timings and systems: February 2015	Assess post implementation network operation: March 2015

DONV2 Key Bus Routes: Woodhouse and Parkgate

The Woodhouse to Sheffield route begins in Woodhouse and continues towards the city centre along Badger Road, Handsworth Road and Staniforth Road. **Figure 4.2** displays the route and the location of the interventions.

Figure 4.2: Route of the Woodhouse to Sheffield Key Bus Route



The route is used by thousands of people and close to one thousand bus trips are made per day. As traffic levels continue to increase, there is a pressing need to tackle congestion and provide improvements to public transport, to encourage private sector investment along the corridor. Without this investment, economic activity and growth along the corridor will be limited as businesses will not be persuaded to invest along a corridor that has limited accessibility. The reliability of buses along this route are worse and delay in journey times and huge variability in journey time.

This Woodhouse to Sheffield route is one of the radial routes into Sheffield and is congested in both peaks hours during the week and also on Saturdays. This route has been identified as one of the key routes due to problems of congestion along the route which inevitably create problems of reliability and punctuality of buses. Bus users had the most difficulty with journeys to and from Schools/colleges/education (10.5%). The main difficulties bus users experienced, were with unreliable services. The main services along the route are First Operator Service 52 and StageCoach 52. Both Stagecoach and First operate 6 buses per hour along the route. Reliability of bus services and fares are the main issues for the bus users.

There are 31% of households do have not access to a car or van in Woodhouse and Darnall area. 86% of people in the catchment area are in employment and travel to work. Woodhouse, Darnall and Handworth area are the most deprived areas in South Yorkshire. Hence this route is the one of the heavily congested route identified for improvements. Bus operators First and Stagecoach together with the SYPTE have signed up to the new partnership OPTIO, which will make the network simpler, more flexible and more convenient. This would involve integrated ticketing and coordinated time tables to reduce waiting time for buses and improved bus services frequencies. The route 52 has been chosen for OPTIO scheme and the operators are committed to see improvements happen. Stagecoach are investing their money on the new vehicles which means infrastructure improvements along the route are required to supplement these.

The other side of the city centre where this route continues Service 52 have been improved as part of S10 quality bus corridor and reliability of buses has been improved between city centre and Crookes. First phase of the prioritised route has been completed.

The main objectives of the Woodhouse to Sheffield Key Route proposals are to:

- Improve journey times for buses and other traffic and reduce congestion;
- Improve the reliability and quality of buses to reverse its decline along the corridor; and
- Assist Sheffield in achieving its carbon reduction target.

The main benefits of this proposal are:

- improved traffic flow and journey times for all road users, reducing 'lost time';
- improve the reliability, punctuality and journey time reliability of public transport;
- improve passenger facilities and information, including Real Time Information;
- increase bus patronage;
- reduce effect of traffic congestion on air quality, especially at junctions;
- provide improved facilities for pedestrians, reduce community severance and improve access to bus stops;
- increased accessibility to employment and other opportunities for communities along the route; and
- provide an attractive and sustainable gateway corridor.

The following improvements will be made to the Woodhouse to Sheffield bus route:

Badger Road

- Bus stops would be moved out of the lay-bys to provide sheltered parking for local residents.
- Double-yellow lines would be introduced along some stretches of Badger Road to prevent double parking which delays road users.

Retford Road

- Adjusting the corner where Ballifield Drive meets Retford Road would allow buses to turn without stopping traffic heading towards Woodhouse
- Introducing double yellow lines will improve access around the junction.
- The introduction of parking restrictions will allow for smoother travel along this road, and improve visibility and safety for those travelling through the area.

Handsworth Road

- The introduction of yellow lines will help improve traffic flow, particularly around the entrance to the garage.
- A new right turn lane along Handsworth Road will allow for a smoother flow of traffic along the corridor.

Stainforth Road

- Staniforth Road would be widened to provide enough space for the second lane of traffic towards the city.
- Introducing two bus stop clearways to replace the current double yellow lines would mean that other vehicles cannot stop along the road.

Main Road –

- Introduction of two lane approach

Bus Stop Improvements along the route – There are 90 bus stops along the route and 95% of stops needs improvements which include raised kerbs, tactile paving, bus clearway and bus shelters at some stops and also real time information at stops where required along the route.

In addition to the improvements in the Woodhouse to Sheffield route, the Parkgate Key Bus Route in Rotherham will also have the following improvements:

- Traffic Regulation Orders in areas where parked cars cause delays;
- Providing a right turn lane to improve access to Challenger garage and on to Richmond Road; and
- Providing a separate bus lane to improve flow in busy stretches.

The following figure sets out the milestones for the Woodhouse to Sheffield and Parkgate Key Bus Routes.

Figure 4.3: Woodhouse to Sheffield and Parkgate Key Bus Routes Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Woodhouse feasibility and detailed design: August 2012	Complete all tender actions for Woodhouse: September 2012	Start on Site Woodhouse: October 2012	January 2013	Complete Site works Woodhouse: March 2015	Post implementation Assessment: April 2015
Parkgate feasibility and detailed design: April 2014	Complete all tender actions for Parkgate: May 2014	Start on site Parkgate: June 2014	September 2014	Complete Site works Parkgate: March 2015	

DONV3 Don Valley Tram Stop Upgrades

The Tram Stop Upgrades include the provision of cycle stands, real time displays and PA systems at all stops within the priority corridor. **Figure 4.4** shows the location of the tram stops that are to be included in this upgrade.

Figure 4.4: Location of the Tram Stops to be included in the Don Valley Tram Stop Upgrades and Jobconenctor Malin Bridge

The existing tram network serves many of the region's important key housing areas, both existing (e.g. around Hillsborough) and housing growth areas (e.g. around Mosborough in south Sheffield) and regeneration and employment locations including both the Upper and Lower Don Valley areas which are within the LSTF priority areas for investment.

It serves key areas of local economic importance such as Crystal Peaks and Hillsborough as well as important leisure and retail sites (e.g. Meadowhall Centertainment, Hillsbrough and Ponds Forge Leisure Centre, the Arena as well as the two main Football Stadium of Sheffield Wednesday and Sheffield United). It also serves the

University area and is a key feeder to the Heavy Rail network. A map of the network is shown in Appendix 1. The map also shows how the network is configured with the Blue, Yellow and Purple routes.

Section 10 of the Tram Strategy & Delivery Plan (Feb 2009) highlights the desire within the industry to 'Improve Customer Facilities at stops'. Included within the objectives is the introduction of new facilities: CCTV, Seating, Real-time information in addition to the realignment of the shelters with the loading points for the tram doors. It is the aspiration of the SYPTE to upgrade all tram stops in line with the Tram Strategy subject to funding availability.

The following figure sets out the milestones for the Don Valley Tram Stop Upgrades.

Figure 4.5: Don Valley Tram Stop Upgrades Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Sign maintenance agreement with Stagecoach: March 2013 Detailed design: March 2013	Complete tender actions: March 2013	Start on site: May 2013	May 2013	Complete Site works: March 2014	Post implementation Assessment: March 2015

DONV4 Jobconnector: Malin Bridge

The Jobconnector Malin Bridge will receive an upgrade to the stop to improve pedestrian movement between the two public transport systems. Both schemes will improve multi-modal connectivity beyond the life of LSTF. The location of this scheme is shown on Figure 4.11.

The Malin Bridge Tram Terminus is situated in the north west of Sheffield close to Hillsborough. The Terminus is located adjacent to a one way gyratory road system which links a number of roads with Holme Lane which leads to Hillsborough and onwards to the City Centre. The terminus is in a residential area, with a P&R site located nearby.

The scheme consists of civils works to construct a bus stopping point, accompanying TRO work if required, possible stats diversions, lining and signing as appropriate, and possible pedestrian crossing improvements. The scheme will create a bus stop within the existing traffic island. A new access and stop would be created within the existing traffic island, for buses only. Buses would reach the stop by using the right hand lane of the gyratory, avoiding much of the build up of traffic. The stop would be separated from the tram platform by a single carriageway carrying the main traffic flow.

The following figure outlines the milestones for Jobconnector Malin Bridge.

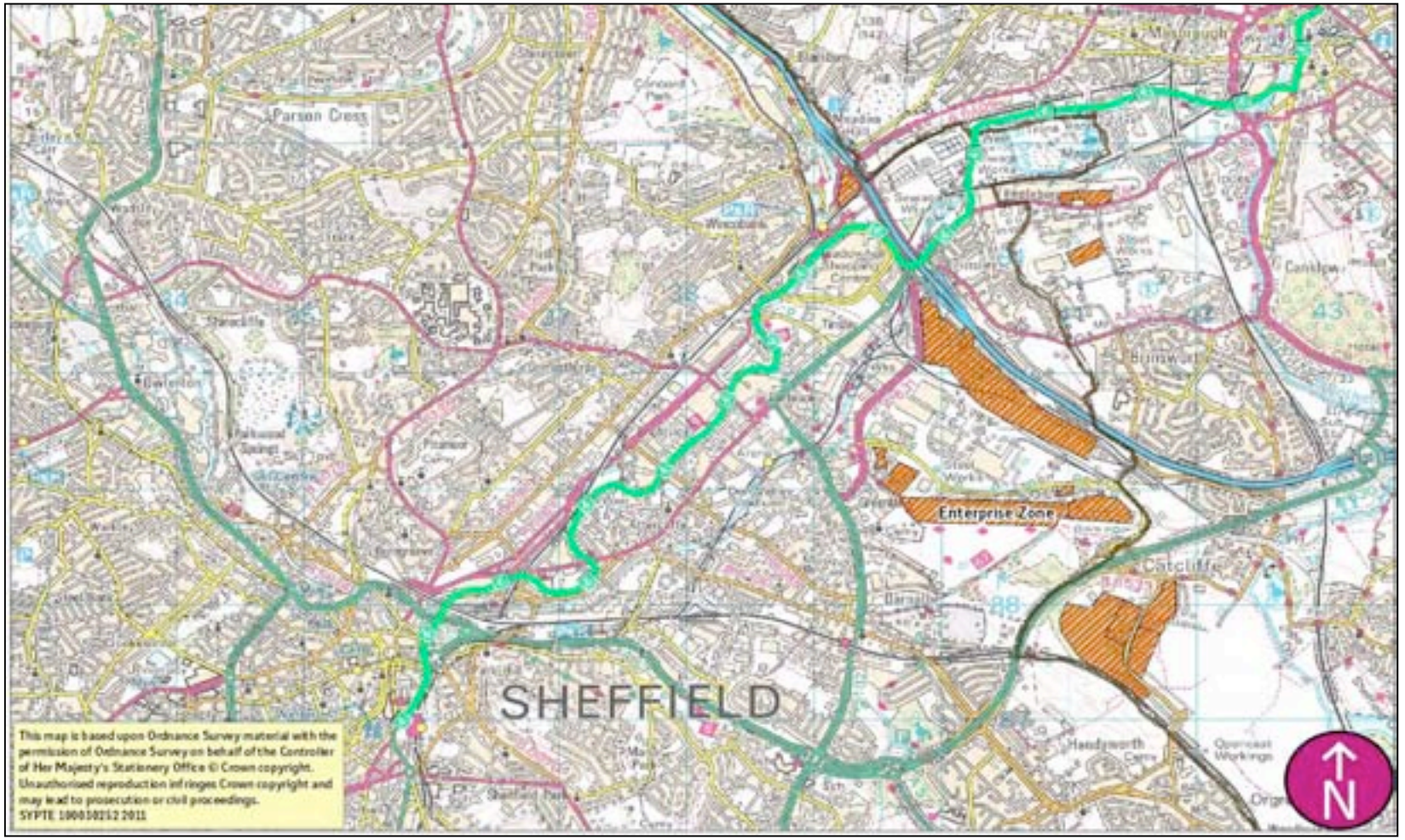
Figure 4.6: Jobconnector Malin Bridge

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Agree design with partners: September 2012	Tender actions: July 2013	Complete TRO's: July 2013	July 2013	Complete site works: January 2014	Post implementation Assessment: December 2014
Detailed design: July 2013		Start on site: July 2013			

DONV5 Lower Don Valley Cycle Route

13.25Km of cycle infrastructure will be constructed to improve linkages between communities and employment sites. **Figure 4.7** shows the location of this cycle route. The majority of this cycle infrastructure will be segregated off road facilities along the current canal tow path.

Figure 4.7: Lower Don Valley Cycle Route



The cycle route is along exiting infrastructure that requires an upgrade to improve both the safety and the quality of the surface. This upgrade provides a vital cycling and walking connection between Sheffield City Centre and into Rotherham Town. The route passes through residential neighbourhoods and into dense employment areas, including passing the Advanced Manufacturing Enterprise Zone. This is also the route of the popular Five Weirs Walk.

The upgrade to this route includes improving signage of the cycle route and to key locations from the cycle route, as well as improving drainage and sight lines. Also new surfacing and kerbs will be provided where there has been significant degradation of the existing facility or the current line of the route is to be improved. Each element will improve the quality of the route both for commuters and leisure.

The following figure sets out the Milestones for the Lower Don Valley Cycle Route.

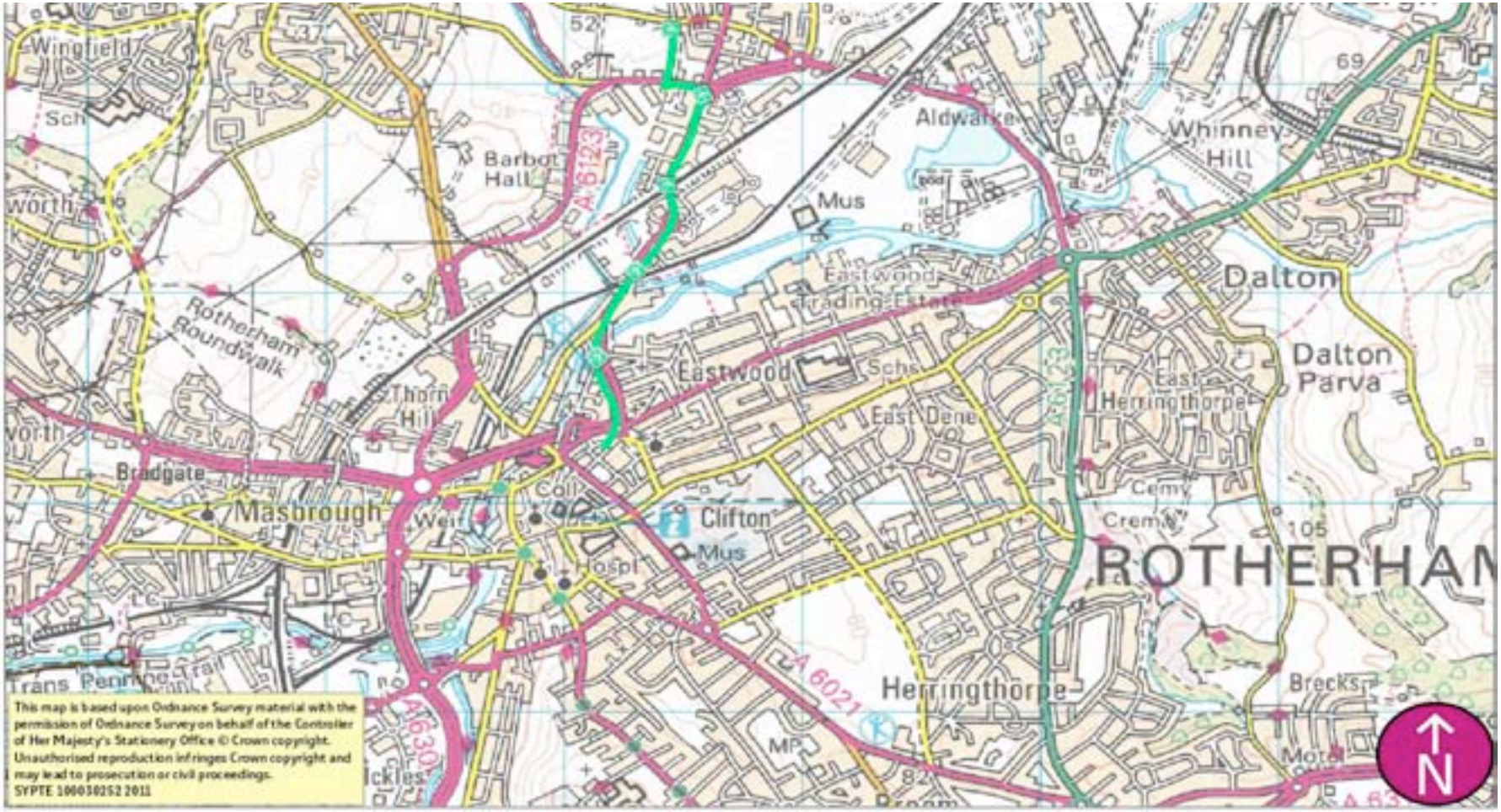
Figure 4.8: Lower Don Valley Cycle Route Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Complete detailed design: June 2013	Complete all tender actions: August 2013	Start on site: September 2013	September 2013	Complete site works: February 2014	Post implementation assessment: January 2015

DONV6 Rawmarsh to Rotherham Town Centre Cycle Route

3.15Km of cycle infrastructure will be constructed to improve linkages between Rawmarsh and Rotherham Town Centre. **Figure 4.9** shows the location of this cycle route. The majority of this cycle infrastructure will be unsegregated on road facilities to provide active mode connectivity where there is high vehicle usage.

Figure 4.9: Route of the Rawmarsh to Rotherham Town Centre Cycle Route



The facility provides a connection between the residential areas of Rawmarsh to Rotherham Town Centre along a busy road. This will provide cyclists with a designated space, where currently they are integrated with the fast flowing traffic. The route also provides a more direct connection to the town centre from Rawmarsh than the existing road network. The proposed cycle route passes through a housing estate and over the railway line via an upgrades parapet and bridge. This route is quicker than completing the same route by the existing infrastructure.

The following figure sets out the milestones for the Rawmarsh to Rotherham Town Centre Cycle Route.

Figure 4.10: Rawmarsh to Rotherham Town Centre Cycle Route Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Complete detailed design: April 2013	Complete all tender actions: July 2013	Start on site: September 2013	September 2013	Complete site works: February 2014	Post implementation assessment: February 2015

DONV7 Plugged in Don Valley

11 SME's will take part in a trial of electric trucks, vans and cars and will have an electric charging point installed on their premises. Across the priority area, there will be 1 rapid charger and 5 slow chargers installed. Post the trial of electric vehicles the SME's will be offered the opportunity to continue running the vehicles. With the electric charging points permanently installed, the infrastructure to allow electric vehicle operation in South Yorkshire post LSTF will be present.

Where public transport, walking and cycling are not viable options, either for geographic or operational reasons, EVs can fill a niche that would normally be filled by conventionally fuelled vehicles, thereby reducing emissions or air pollutants and carbon dioxide. Taking a practical view of the challenge, there are two main ways of reducing the carbon dioxide produced by transport:

- helping people to choose to make fewer journeys by car and
- by making better use of vehicle technology, such as greener fuels.

Achieving this transformation through vehicle technology, requires tackling the main challenge in this market - the 'chicken and egg' problem in that few people will purchase vehicles until there is confidence in its ability to provide unrestrained travel over appropriate distances. A key challenge is, therefore, to overcome the 'range anxiety' that potential users of electric and gas vehicle users have, i.e. the fear they will be unable to recharge/refuel their vehicles on (longer) journeys.

The South Yorkshire LTP3 Implementation Plan makes a clear commitment to low carbon vehicles, stating:

- "…the need to reverse the growth in carbon emissions from transport"
- "…to work to improve the efficiency of all vehicles and reduce their carbon emissions and to improve air quality especially in designated Air Quality Management Areas."
- (To improve air quality and reduce climate change impacts)"There are three strands to the proposal:- 1. Investment in low carbon vehicles; 2. Investment in low carbon infrastructure; 3 Promoting the more efficient use of vehicles."
- "Sheffield aspires to be amongst the leaders in electric/low emission vehicles";
- "We would propose to access additional funding from national and European sources where possible, as well as working in partnership with the private sector to facilitate the development of the market…..and maintenance of alternative fuels infrastructure and we will be exploring the potential for partner contributions here."

This package is an innovative demonstration scheme that will increase the competitiveness of small businesses (SMEs) by catalysing their uptake of electric vehicles (EVs). This is a unique scheme – there are no other schemes operating in the United Kingdom (UK) that enable SMEs to trial EVs on a discounted basis, and then support them to purchase or hire them on a commercial basis. PSY deliberately takes a different route to addressing market failure than the Plugged in Places (PiP) programmes that operate across the UK. PIP programmes are focussed on installing charging points on the assumption that increasing the visibility of charging points in public locations will provide confidence to potential users of EVs and encourage uptake. It is our view that installing charging points alone will not catalyse the uptake of EVs and that "hands-on trials" are needed to address the market failures (price, imperfect information and externalities) that currently inhibit SMEs from using EVs.

This project will help SMEs to become more competitive whilst reducing their emissions of greenhouse gases and damaging air pollutants. This will be achieved in a number of ways:

- Reduced running costs: electric vehicles cost around £2 to fully charge which produces a range of around 100 miles. A company using one electric car for a year that does 10,000 miles will save £1,200 (based on 2 pence per mile for an electric vehicle compared to 14 pence per mile petrol/diesel). Research indicates that the maintenance costs of electric vehicles are at least 25% cheaper than that of petrol or diesel vehicles. CO2Sense has developed a savings calculator (see: www.co2sense.org.uk/piy) which enables SMEs to enter their estimated annual mileage and a minimum savings figure is automatically generated. It shows that a company leasing three electric cars for a year which collectively do 70,000 miles could save £7,303. This saving is based on a comparison of an electric vehicle to a very low emission petrol or diesel vehicle (107 g CO2/km).
- Marketing: SMEs participating in trials will have an opportunity to demonstrate their 'green credentials' to their stakeholders and customers. Participating SMEs will be able to brand their trial vehicles using magnetic boards and CO2Sense will assist them issue press releases to communicate their commitment to reducing greenhouse gas and air pollutant emissions. Our experience working with SMEs on resource efficiency programmes indicates that SMEs are keen to differentiate themselves from competitors through a commitment to environmental issues and we are confident that they will value the marketing opportunity a trial affords.
- Supply chain benefits: this scheme will produce opportunities for companies in the supply chain. Our analysis shows that the investment in the installation of charging points can sustain 8 new jobs within Sheffield City Region. This rises to a total of 32 jobs when ERDF funding is approved. This work will provide a major boost to firms in the sub-region and region in an economically challenging environment. We have consulted with the Electrical Contractors Association and they are hugely supportive of the project and the opportunity it will provide to their members in South Yorkshire. We have also consulted with a number of vehicle suppliers and already have 4 companies that have confirmed their interest in supplying vehicles. They are Mercedes-Benz UK (they own Smart cars which include the new Smart EV), Future Transport System (they deliver the electric vehicle trial scheme in the North East), Simon Bailes (they supply Nissan Leafs to Future Transport Systems), and Greenbean Cars (they currently provide hybrid-electric taxi services).

The following figure sets out the milestones for Plugged in Don Valley.

Figure 4.11: Plugged in Don Valley Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Complete design of delivery and marketing strategy: August 2012	Complete all tender actions: September 2012	Launch marketing plan: September 2012	September 2012	Complete commercial trials: March 2015	Hold review meetings with suppliers: December 2012
		Commence commercial trials: October 2012			Hold review meetings with suppliers: June 2013
					Interim evaluation: October 2013
					Hold review meetings with suppliers: December 2013
					Hold review meetings with suppliers: June 2014
					Final evaluation: September 2014
					Hold review meetings with suppliers: December 2014
					Hold review meetings with suppliers: March 2015

4.3 BEST IN DON VALLEY ENTERPRISE CORRIDOR

This supporting package of schemes will work to promote and encourage a greater uptake of sustainable travel opportunities. **Error! Reference source not found.** 4.12 lists the specific outcomes from BEST that are expected to impact upon the workplaces and residents living within the Don Valley Enterprise Corridor. A greater level of detail on each work package included in BEST is described in the BEST section below.

Figure 4.12: BEST in Don Valley Enterprise Corridor

Scheme		Targets
BEST1	**ECO Academy**	• 2268 eco-driving training sessions delivered to individuals in 37 businesses; • 73 seminars to a further businesses will receive a Better Driving for Business seminar; • 9883 young drivers will receive eco-driving and safety messages during driving lessons; • 111 businesses will receive a young drivers at work presentation; • 732 bus drivers will receive the customer excellence programme and receive accreditation through the continuing Professional Competence Programme; and • 510 vehicles to receive a 1 to 5 star rating.
BEST2	**Busboost**	• 2855 employees provided with trial passes; and • 851 residents provided with trial passes
BEST3	**Walkboost**	• 2599 parent car drivers on the school run; • 147 communication leaflets; and • 2 street audits.
BEST4	**Cycleboost**	• 3970 participants cycle trained to Bikeability Levels 2&3; • 284 sessions held with an average 11 bikes per session safety checked and minor maintenance carried out; • 1701 participants registered for cycle leasing, 70% of which are car drivers; and • 567 Sheffield Cycle stands will be put in place.
BEST5	**Travel Training**	• 37 disabled or vulnerable people independently trained to travel to employment or training locations; • Approximately 300 students will also be travel trained each year.
BEST6	**Marketing and Communications**	• Targeted Marketing to ensure investment is publicised and the BEST targets are met.

5 DONCASTER REGENERATION CORRIDOR

5.1 INTRODUCTION

This priority corridor starts close of the Doncaster Borough centre and links it to a number of deprived communities that are currently poorly connected to employment opportunities.

Doncaster is targeting its economic policies on supporting and attracting businesses with the highest potential for growth and is also focused on delivering growth in some of the most deprived areas within the City Region and nationally. Despite the relative disadvantage of a number of the adjacent communities, such as Adwick and Askern, there is a greater tendency to use the private car over that of public transport or active travel modes.

Therefore, the focus of this project is to facilitate greater access by sustainable modes and reduce severances to unlock development potential in the priority corridor.

5.2 INVESTMENT IN DON VALLEY ENTERPRISE CORRIDOR

DONC1 Targeted Corridor Enhancements

These enhancements will work to increase green time at traffic signals on bus routes travelling into Doncaster Town Centre in the morning peak hour and increase green time for the reverse direction in the evening peak hour. Also, sensors will be applied to the traffic lights to recognise when buses are running late to increase their green time and improve their reliability). Further to these interventions, the following junction will be improved to increase bus reliability:

- Sunny Bar Junction, Doncaster.

Figure 5.1 outlines the milestones for Targeted Corridor Enhancements in Doncaster Regeneration Corridor.

Figure 5.1: Targeted Corridor Enhancements Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Feasibility and detailed design: March 2013	Complete modelling tender actions: October 2012	Start on site for installation of traffic control systems: June 2013	August 2013	Complete site works for installation of traffic control systems: February 2014	Assess post implementation network operation: March 2014
Design enhanced traffic system: May 2014	Complete contract workers tender actions: May 2013	Start on site for installation of new signal timings and systems: June 2014	August 2014	Start on site for installation of new signal timings and systems: February 2015	Assess post implementation network operation: March 2015

DONC 2 Waterfront Regeneration

Waterfront Regeneration occurs to the North of Doncaster Town Centre, and relates to the Holmes Market Junction Doncaster (grid reference 4579340/4039040). **Figure 5.2** shows the location of this scheme. This will unlock access to a major regeneration site through the construction of a new access into to the Waterfront regeneration site on the edge of Doncaster town centre delivering the following elements (scheme drawing provided):

- Additional traffic lane (440m)
- New length of footway / cycleway (147m)
- New length of footway (287m)
- Carriageway Resurfacing (5,800m)
- New traffic signal junction with signalised pedestrian crossing

The project will improve the Holmes Market which is the key gateway access to the Waterfront site and will unlock 15.6 hectares of brown field land comprising 4.8ha B1 office, 2.6ha B2 general industrial and.1,500 dwellings. This can be considered as an extension to the town centre and will generate approximately 3,300 jobs in a sustainable location on the edge of the town centre close to the Interchange, thus providing better access to sustainable modes to the wider business community. **Figure 5.3** shows the detailed scheme drawings for this intervention.

A traffic appraisal has been undertaken for the scheme using the 2005 Doncaster Multi mode model to assess the impact on journey times and key junctions within the study area to confirm impact on key performance indicators – namely LTP6 and NI167. The model results indicate no major changes to either indictor and no significant changes in traffic flows and routing across the study area. Whilst no TEE\TUBA analysis has been undertaken, given the above it is considered that the scheme would result in a modest CBR.

An improved and enhanced access to a major edge of centre regeneration site will facilitate non car penetration to the site and will allow developments to come forward based no sustainable travel plans. In particular this will provide the opportunity to apply travel plan principles from day one for new developments setting ambitious targets for non car use.

The overall Waterfront Spatial Masterplan will limit car access and promote non car usage – the site will include a comprehensive walking, cycling and bus network which will result in sustainable trip modes – the preliminary model conclusions indicate that a 35% bus mode share would be achievable. The long term development of the Waterfront area will allow revenue funding to be secured to support the public transport network as and when each phase is developed.

Upon completion of build out will have attracted over £300m of private sector investment. Each development plot will require submission of a Travel Plan which will set stringent mode split targets requiring revenue support to a range of non car sustainable modes. Thus the pump priming of £1.15m LTSF will generate long term transport revenue of, on average, over £1m per annum.

Investment is targeted at regenerating our most deprived neighbourhoods (by IMD). Index of Multiple Deprivation (IMD) – The IMD provides a nationally consistent, relative measure of deprivation in Doncaster, and Lower Super Output Area (LSOA) level. LSOA is a low level geographical area that has approx 1500 population, there are 193 in Doncaster. The overall level of deprivation in Doncaster is determined by combining results of the LSOA's across the borough. The IMD 2007 ranked Doncaster the 41st most deprived out of 354 local authority areas in England.

The economically excluded will benefit from this scheme as improved access to employment will be created. The scheme will help unlock development land meaning more employment opportunities will be created. Of the new jobs created within the Waterfront it is anticipated that 30-40% of new employees will be from deprived communities.

Figure 5.2: Waterfront Regeneration

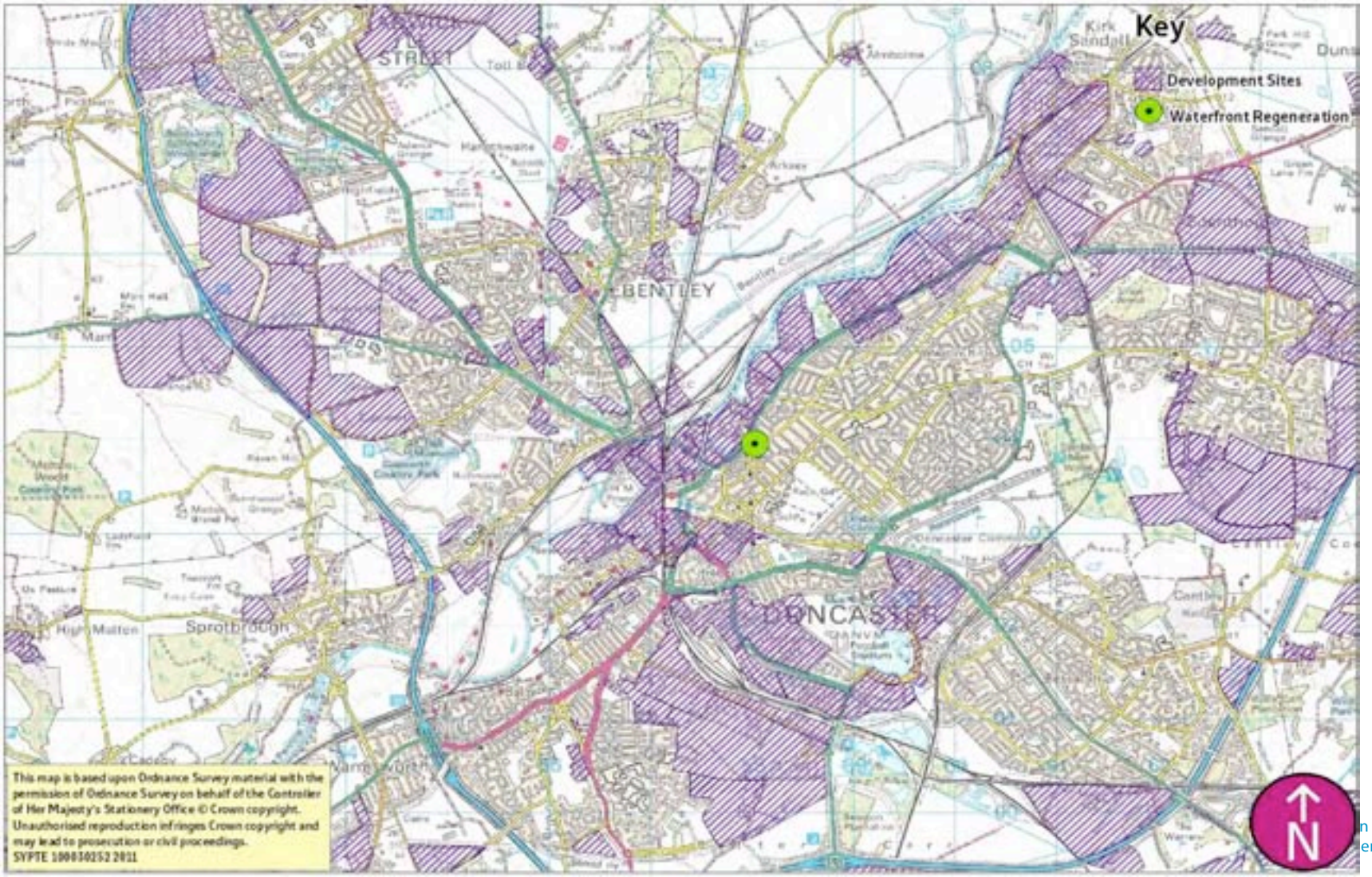


Figure 5.3: Waterfront Regeneration Active Modes Highway Improvement

Figure 5.4 outlines the milestones for Waterfront Regeneration in Doncaster Regeneration Corridor.

Figure 5.4: Waterfront Regeneration Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Detailed scheme design: August 2012	Complete tender actions: October 2012	Complete advance utility diversionary works: December 2012 Start on site: January 2013	June 2014	Complete site works: July 2014	Post implementation assessment: March 2015

DONC 3 Adwick Sustainable Access

This intervention is located on the B1120 Doncaster (grid reference 4543290/4087850) and displayed in **Figure 5.5**. This scheme includes:

- New length of footway / cycleway (250m)
- New length of footway (125m due to widening + 60m of exist footway resurfaced)
- New traffic signal junction with signalised pedestrian crossing
- Carriageway Resurfacing (1,242m^2)
- Additional traffic lane to turn right into Adwick Rail Station (40m)

These will improve the B1220 Adwick Lane junction which is the key gateway access to the regeneration sites in and around Adwick and Carcroft along with access to Adwick rail station and will unlock 54 hectares of brown field land which could be used for a mix of B1, B2 or B8, potentially generating 2871 jobs. Due to existing access constraints, if this scheme is not implemented then traffic management restrictions will be imposed creating severance and reducing accessibility in North Doncaster and constraints on developments. **Figure 6** shows the detailed scheme drawings for this intervention.

This scheme complements the existing highway network by incorporating additional infrastructure to support options for walking, cycling and bus between the existing settlements and to existing and a large number of planned employment sites in the area. In addition to support accessibility at a wider level the scheme supports improved access to the local rail station via sustainable modes to ensure linked sustainable trips across the borough. In addition the scheme incorporates traffic management to reduce delays and prioritise public transport through signal movements. The project therefore provides an option for a multi sustainable modes scheme to ensure that residents have the option of sustainable mode which will ensure a wide market potential travellers are targeted.

This means that the scheme can achieve mode shift away from vehicles by targeted measures to bring the area in line with national levels for cycling, walking and bus use. In addition to the best value created by a scheme that delivers considerable aggregate carbon shift by tackling all modes there is considerable detriments to sustainable modes which may lead to increased CO2 and detriments to the economy if the scheme does not go ahead. This is because failure to implement this scheme will result in deterioration of the bridge between the two settlements Adwick and Carcroft to such an extent that traffic management restrictions will have to be imposed which will restrict access to residential and employment sites including access to Adwick rail station. This will result in major severance for communities across North Doncaster which will result in residents having poor employment opportunities leading to a spiral of deprivation. This will result in further increased queuing times and increased journey times for public transport and increased C02 emissions through standing traffic.

The economically excluded will benefit from this scheme as improved access to employment will be created. The scheme will help unlock development land meaning more employment opportunities will be created. Of the new jobs created within the Waterfront it is anticipated that 30-40% of new employees will be from deprived communities. The working age population within Doncaster is made up of 61% of the population in 2006, slightly lower than the national average (62%) and is projected to decline even further in the period up to 2031 due to an increasing ageing population. Doncaster's population is predominantly classed as 'White British' (ONS estimated) comprising 94% of the population at mid year 2007. This is higher than the national figure (83%), the Yorkshire and Humber (88%) and the City Region (92%). Until Doncaster is able to retain more of it youth and graduates, the workforce in Doncaster is likely to become smaller. An Urban Renaissance programme based on creating opportunities for all, but focused on creating a more vibrant economy that helps to retain the workforce of the future.

Specific tangible benefits will be however be realised by the following groups:

- Economically Disadvantaged – The works will improve accessibility to a key site of future employment, managing the flow of traffic to provide safe crossing points for pedestrians.
- Pedestrians, Persons with Disabilities, Elderly Persons – The route will also be safer with better lighting and CCTV to help reduce crime, make residents more confident to use new routes and create a safer and more attractive to private sector investment.

Figure 5.5: Adwick Sustainable Access

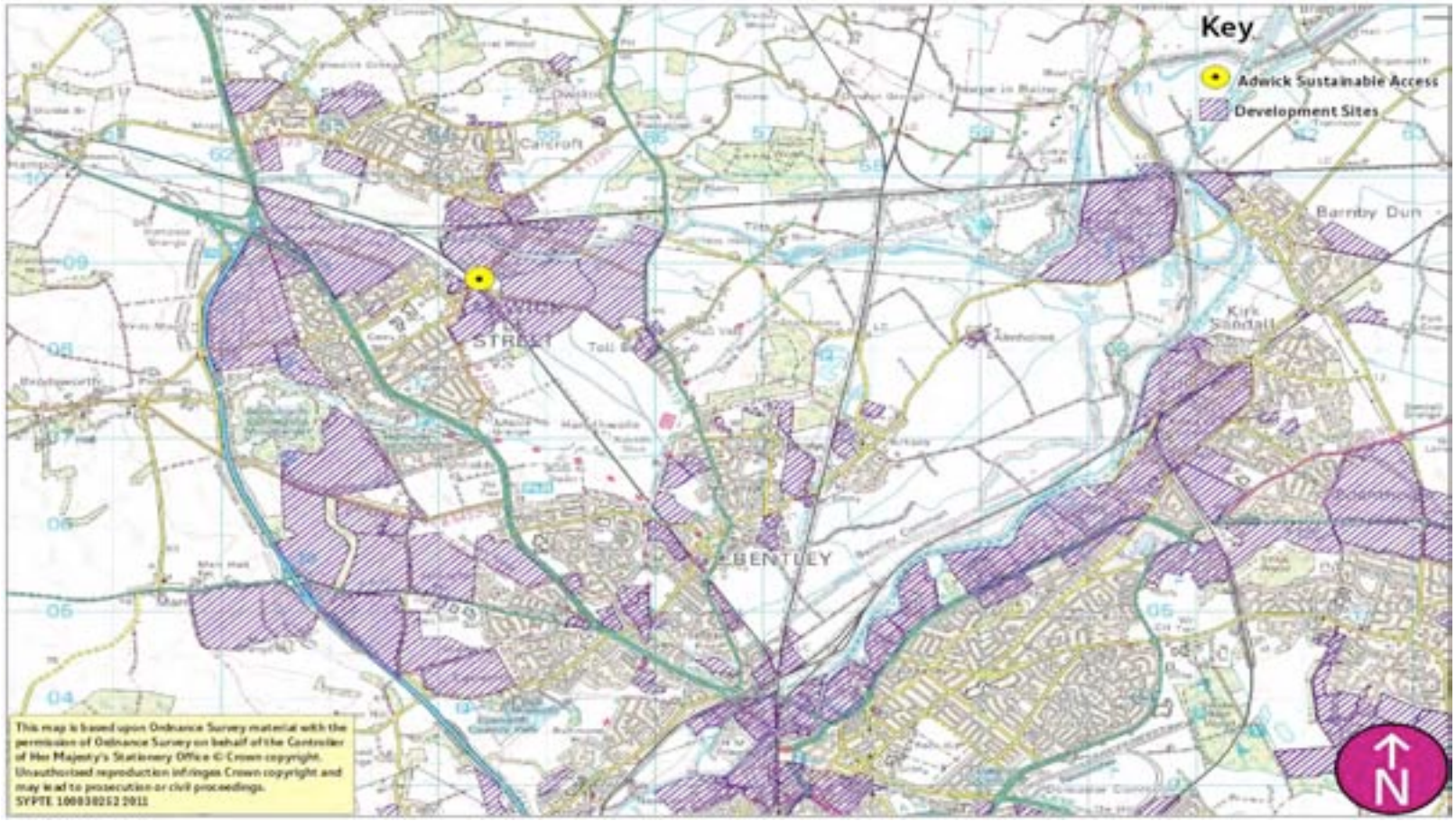


Figure 5.6: Adwick Sustainable Access, Bridge Widening

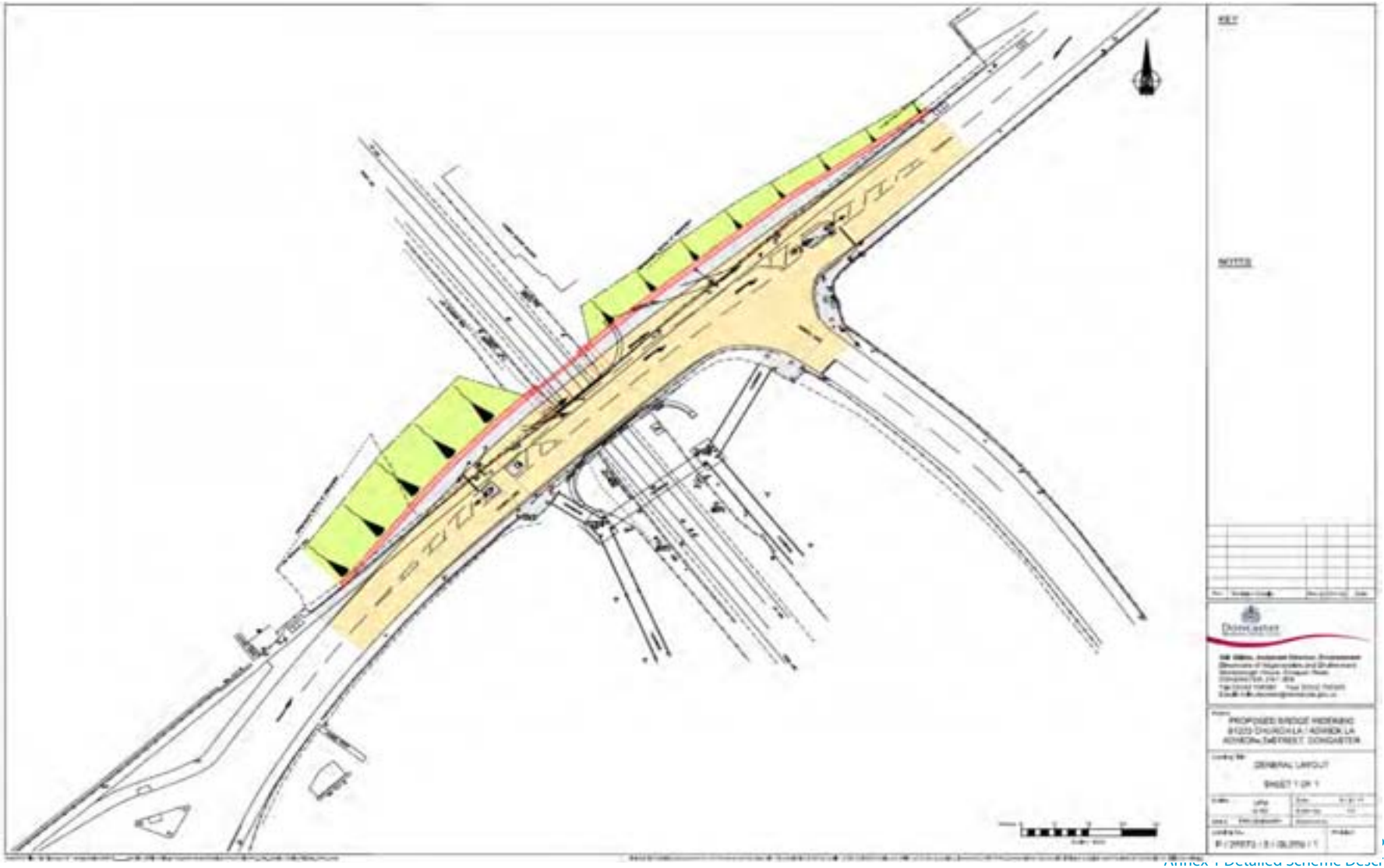


Figure 5.7 outlines the milestones for Adwick Sustainable Access.

Figure 5.7: Adwick Sustainable Access Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Detailed design: February 2013	Complete all tender actions: March 2013	Start on site: April 2013	July 2013	Complete site works: August 2013	Post implementation assessment: March 2014 Post implementation assessment: March 2015

DONC 4 Jobconnector X19

The service scheme, **Jobconnector X19**, will facilitate an increase in the frequency of the existing X19 service to two buses per hour (Monday to Saturday). This will improve connectivity not only within this priority corridor, but will also strengthen the Barnsley-Doncaster growth axis and provide links to the Doncaster Regeneration Corridor. **Figure 5.8** shows the location of the existing Jobconenctor X19 route.

Figure 5.8: Route of the Existing Jobconnector: X19

This will provide flexibility to employment opportunities in both Doncaster and Barnsley Town Centres. The Targeted Corridor Enhancements will also help to improve reliability on this route. The scheme aims to address the limited access the employment sites for some communities at the fringe of the current bus network which is seen a barrier to linking people, particularly those in deprived areas, to current & emerging employment opportunities. Current patronage projections suggest that this route will become commercially viable beyond the life of LSTF. A similar scheme, which involved increasing the 265 service between Barnsley and Sheffield from an hourly to a half hourly service, became commercially viable beyond the life of the funding.

Figure 5.9: Jobconnector X19 Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Detailed timetable produced: August 2012	Confirm contract and registration: August 2012	Service variation registered: August 2012	September 2012	Service continues beyond 2015	Implementation Assessment: March 2013
		Enhanced Service commences: October 2012			Implementation Assessment: March 2014
					Implementation Assessment: March 2015

DONC 5 Plugged in Doncaster
26 SME's will take part in a trial of electric trucks, vans and cars and will have an electric charging point installed on their premises. Across the priority area, there will be 1 rapid charger and 5 slow chargers installed. Post the trial of electric vehicles the SME's will be offered the opportunity to continue running the vehicles. With the electric charging points permanently installed, the infrastructure to allow electric vehicle operation in South Yorkshire post LSTF will be present.

Where public transport, walking and cycling are not viable options, either for geographic or operational reasons, EVs can fill a niche that would normally be filled by conventionally fuelled vehicles, thereby reducing emissions or air pollutants and carbon dioxide. Taking a practical view of the challenge, there are two main ways of reducing the carbon dioxide produced by transport:

- helping people to choose to make fewer journeys by car and
- by making better use of vehicle technology, such as greener fuels.

Achieving this transformation through vehicle technology, requires tackling the main challenge in this market - the 'chicken and egg' problem in that few people will purchase vehicles until there is confidence in its ability to provide unrestrained travel over appropriate distances. A key challenge is, therefore, to overcome the 'range anxiety' that potential users of electric and gas vehicle users have, i.e. the fear they will be unable to recharge/refuel their vehicles on (longer) journeys.

The South Yorkshire LTP3 Implementation Plan makes a clear commitment to low carbon vehicles, stating:

- "…the need to reverse the growth in carbon emissions from transport"
- "…to work to improve the efficiency of all vehicles and reduce their carbon emissions and to improve air quality especially in designated Air Quality Management Areas."
- (To improve air quality and reduce climate change impacts)"There are three strands to the proposal:- 1. Investment in low carbon vehicles; 2. Investment in low carbon infrastructure; 3. Promoting the more efficient use of vehicles."
- "Sheffield aspires to be amongst the leaders in electric/low emission vehicles";
- "We would propose to access additional funding from national and European sources where possible, as well as working in partnership with the private sector to facilitate the development of the market…..and maintenance of alternative fuels infrastructure and we will be exploring the potential for partner contributions here."

This package is an innovative demonstration scheme that will increase the competitiveness of small businesses (SMEs) by catalysing their uptake of electric vehicles (EVs). This is a unique scheme – there are no other schemes operating in the United Kingdom (UK) that enable SMEs to trial EVs on a discounted basis, and then support them to purchase or hire them on a commercial basis. PSY deliberately takes a different route to addressing market failure than the Plugged in Places (PiP) programmes that operate across the UK. PIP programmes are focussed on installing charging points on the assumption that increasing the visibility of charging points in public locations will provide confidence to potential users of EVs and encourage uptake. It is our view that installing charging points alone will not catalyse the uptake of EVs and that "hands-on trials" are needed to address the market failures (price, imperfect information and externalities) that currently inhibit SMEs from using EVs.

This project will help SMEs to become more competitive whilst reducing their emissions of greenhouse gases and damaging air pollutants. This will be achieved in a number of ways:

- Reduced running costs: electric vehicles cost around £2 to fully charge which produces a range of around 100 miles. A company using one electric car for a year that does 10,000 miles will save £1,200 (based on 2 pence per mile for an electric vehicle compared to 14 pence per mile petrol/diesel). Research indicates that the maintenance costs of electric vehicles are at least 25% cheaper than that of petrol or diesel vehicles. CO2Sense has developed a savings calculator (see: www.co2sense.org.uk/piy) which enables SMEs to enter their estimated annual mileage and a minimum savings figure is automatically generated. It shows that a company leasing three electric cars for a year which collectively do 70,000 miles could save £7,303. This saving is based on a comparison of an electric vehicle to a very low emission petrol or diesel vehicle (107 g CO2/km).
- Marketing: SMEs participating in trials will have an opportunity to demonstrate their 'green credentials' to their stakeholders and customers. Participating SMEs will be able to brand their trial vehicles using magnetic boards and CO2Sense will assist them issue press releases to communicate their commitment to reducing greenhouse gas and air pollutant emissions. Our experience working with SMEs on resource efficiency programmes indicates that SMEs are keen to differentiate themselves from competitors through a commitment to environmental issues and we are confident that they will value the marketing opportunity a trial affords.
- Supply chain benefits: this scheme will produce opportunities for companies in the supply chain. Our analysis shows that the investment in the installation of charging points can sustain 8 new jobs within Sheffield City Region. This rises to a total of 32 jobs when ERDF funding is approved. This work will provide a major boost to firms in the sub-region and region in an economically challenging environment. We have consulted with the Electrical Contractors Association and they are hugely supportive of the project and the opportunity it will provide to their members in South Yorkshire. We have also consulted with a number of vehicle suppliers and already have 4 companies that have confirmed their interest in supplying vehicles. They are Mercedes-Benz UK (they own Smart cars which include the new Smart EV), Future Transport System (they deliver the electric vehicle trial scheme in the North East), Simon Bailes (they supply Nissan Leafs to Future Transport Systems), and Greenbean Cars (they currently provide hybrid-electric taxi services).

Figure 5.10: Plugged in Doncaster Milestones

Design	Procurement	Start works	Coordinated BEST delivery to maximise impact	Complete works	Assessment
Complete design of delivery and marketing strategy: August 2012	Complete all tender actions: September 2012	Launch marketing plan: September 2012	September 2012	Complete commercial trials: March 2015	Hold review meetings with suppliers: December 2012
		Commence commercial trials: October 2012			Hold review meetings with suppliers: June 2013
					Interim evaluation: October 2013
					Hold review meetings with suppliers: December 2013
					Hold review meetings with suppliers: June 2014
					Final evaluation: September 2014
					Hold review meetings with suppliers: December 2014
					Hold review meetings with suppliers: March 2015

5.3 BEST IN DONCASTER REGENERATION CORRIDOR

This supporting package of schemes will work to promote and encourage a greater uptake of sustainable travel opportunities. **Figure 5.11** lists the outcomes from BEST that are expected to impact upon the workplaces and residents living within the Doncaster Regeneration Corridor. A greater level of detail on each work package included in BEST is described in the BEST section below.

Figure 5.11: BEST in Doncaster Regeneration Corridor

Scheme		Targets
BEST1	**ECO Academy**	• 808 eco-driving training sessions delivered to individuals in 19 businesses; • 39 seminar to a further businesses will receive a Better Driving for Business seminar; • 5232 young drivers will receive eco-driving and safety messages during driving lessons; • 57 businesses will receive a young drivers at work presentation; • 388 bus drivers will receive the customer excellence programme and receive accreditation through the continuing Professional Competence Programme; and • 182 vehicles to receive a 1 to 5 star rating.
BEST2	**Busboost**	• 1511 employees to be provided with trial bus passes; and • 303 residents provided with trial bus passes.
BEST3	**Walkboost**	• 1376 parent car drivers on the school run; • 53 communication leaflets; and • 1 street audit.
BEST4	**Cycleboost**	• 1414 participants cycle trained to Bikeability Levels 2&3; • 101 Dr Bike sessions held with an average 11 bikes per session being safety checked and minor maintenance carried out; • 606 participants registered for cycle leasing, 70% of which are car drivers; and • 202 Sheffield Cycle stands will be put in place.
BEST5	**Travel Training**	• 19 disabled or vulnerable people independently trained to travel to employment or training locations; and • Approximately 300 students will also be travel trained each year.
BEST6	**Marketing and Communications**	• Targeted Marketing to ensure investment is publicised and the BEST targets are met.

6 BUSINESS AND EMPLOYERS BOOST OF PRODUCTIVITY (BEST)

6.1 INTRODUCTION

The BEST project will ensure the successful delivery of our infrastructure and service elements. This package of schemes will work to promote our infrastructure and service projects as well as encouraging a greater uptake of sustainable travel opportunities across all of our priority corridors. The synergy between efficient implementation of our infrastructure and service packages and an effective marketing and programme of supporting activities will ensure the most effective delivery of our LSTF programme.

6.2 BEST ACROSS OUR LSTF PROGRAMME

BEST 1 ECO Academy

ECO Academy is aimed at three groups and will be implemented across the four priority corridors. The first element of the work package is as follows:

- To develop an accessible customer excellence development programme and to deliver this to 2000 customer facing, bus, tram and train employees;
- Fleet owners;
- A 3 hour ECO Driver training programme for 4,000 drivers in 100 businesses consisting of a 1 hour workshop and a 2 hour in-car training session;
- A Driving for Better Business seminar for 200 businesses from across the four priority corridors;
- 360 ADIs would deliver road safety interventions as part of their lessons to 27,000 pupils;
- 300 businesses will receive the young drivers at work presentation;
- 600 scooter riders will be trained over the LSTF; and
- 6000 young people who are about to enter the world of work will attend the Drive for Life event.

The unique, air quality focused, fleet recognition scheme enables the local authorities in South Yorkshire to engage and work in partnership with freight and passenger vehicle operators based in, and serving, South Yorkshire. The following lists the targets over the LSTF period:

- Recruitment of 15 new members pa;
- 300 vehicles pa to receive a 1-5 star rating pa;
- 5 members to agree to an enhanced road map so boosting income to the scheme pa;
- Implementation of a bespoke web site.

Upon application to join the scheme operators' vehicle fleets and operational practices are assessed for their contribution towards improving air quality. They are provided with an individual star rating for each vehicle, identified on vehicle decals, and an overall star rating for their organisation which is shown on their certificate. 5* operators are also provided with a plaque to highlight their efforts. Publicity is provided via the website (http://www.care4air.org/ecostars/index.html). Operators are also provided with a 'road map' containing information on further actions that they can implement to further improve air quality.They are

- Fuel management
- Developing driver skills
- Vehicle specification and maintenance
- Use of IT support systems
- Fleet performance monitoring

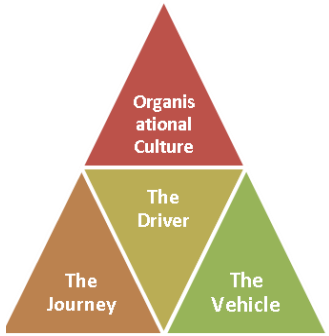
Joining the scheme offers operators the opportunity to cut costs by up to £2,300 per vehicle and improve environmental performance by cutting fuel consumption. The ECO Stars South Yorkshire scheme has in excess of 5,000 vehicles signed up from across 32 members, who include household names such as Sainsbury's, Next, Archbolds, Stagecoach, First Group, as well as Local Authority fleets and other local fleet operators.

Ongoing support is provided to operators to assist them in improving their star rating over time.
The driver training programme has already been developed. This funding would enable the programme to be delivered to more instructors. The ADI stream of this project has been worked up in conjunction with the University of Sheffield's Young Driver Behaviour Change Unit and the Driving Standards Agency. It is the first scheme of its kind in the country and other Road safety Partnerships have shown great interest. The DSA is trialling a more intensive programme but are very impressed with the SY project as it has been developed with a high degree of ownership of the Driving Instructor Associations and is more economical than their pilot.

160 ADIs have already been trained and this project will continue to support them with their coaching of learner drivers and will train and support a further 100 ADIs per year. As each ADI teaches on average 20 learner drivers to drive each year this would mean that the number of learners gaining road safety messages would be 7000 in 11/12 and rising each year by a further 2,000 each year. This project would mean that by the end of 2016 every driving instructor across the county will be working in providing eco-driving and road safety messages to young drivers. Once they are trained to deliver these messages, limited support is required to keep them going.

Driver education is one element of a much bigger jigsaw. The scheme will be highly flexible to fit with each business' needs. Below is an illustration of 4 areas that should be addressed in any scheme.

Figure 5.12: Conceptual View of Driver Training



Research is increasingly finding that making changes to the culture of an organisation is a prerequisite to the delivery of a successful driver education programme. Therefore a successful eco-driving intervention needs to flexibly address all levels outlined above.

A large part of the focus of this project would to be to embed eco-driving into the whole business culture. We will provide the businesses with a tool-kit and initial support for setting up all of the infra-structure within their business so that the training we provide is refreshed and the impact on driving continually monitored as part of the performance indicators of the company. This focus would then mean that the changes made to the way people drive would continue after we have worked with each company. The starting point for engagement would be to outline the clear business case for the companies to undertake this activity. Our previous work in this field has been so successful that participating companies have become business champions and will help us to continue to get more companies on board beyond the life of the project.

The following figure sets out the milestones for ECO Academy.

Figure 5.13: ECO Academy Milsetones

Design	Procurement	Start works	Complete works	Assessment	Schemes Supported by BEST
Complete programme and delivery design: October 2012	Complete all tender actions: November 2012	Commence ADI driving instructor training: January 2013	Complete ADI driving instructor training: October 2014	Implementation assessment: October 2013	• Plugged in Don Valley • Plugged in Doncaster • Plugged in Barnsley • Plugged in Dearne Valley • Jobconnector X19 • Jobconnector: Wentworth and Shortwood • Jobconnector Malin Bridge • Marketing and Communications • Safe and sustainable commuting • Busboost
	Confirm registration of ADI driving instructors and bus operators: December 2012	Commence website development: January 2013	Commence website development: May 2013	Implementation assessment: March 2014	
		Commence monitoring programme: May 2013	Complete monitoring programme: August 2013	Implementation Assessment: March 2015	
		Commence marketing programme: January 2013	Complete marketing programme: January 2015		
		Commence driver training programmes: January 2013	Complete driver training programmes: February 2015		

BEST 2 Busboost

Free trials of bus travel for car drivers alongside ongoing support, advice and monitoring. The aim is to bring about bus journey distance that was once made by the car (modal shift).

- Busboost Work – with employees, via employers in the county.
- Busboost Residential – with people living in the four priority corridors households, particularly along key bus routes and links to district and town centres.

The following shows the number of participants that the bus passes will be issued to across the LSTF delivery period.

Figure 5.14: Busboost Targets

		Work	Residential	Total
Target participants	Yr1	1890	0	1890
	Yr2	3780	900	4680
	Yr3	3780	900	4680
Total		**9450**	**1800**	**11250**

Target Population:

- The targets above are ambitious – squeezed into 2.5 years whereas we had initially planned for 4 years worth of Busboost. A modest look at target organisations in Sheffield showed that 12,500 employees could be targeted in a year in Sheffield. The Sheffield figures around 20,000 are therefore ambitious.
- The other districts have half the Sheffield target population to take into account their lower number of employers.
- Some organisations could be targeted more than once, which is why the numbers of target employees aren't totalled at the bottom.

Target Participants – 6% of employees who were communicated to about Bus It at the NHS Sheffield pilot took part. So the Target Participants figures are 6% of the target populations.

Target Changed – 35% of pilot participants said they would change how they commute for all or some of the week. So the Target changed is 35% of the Target Participant numbers.

The following figure sets out the milestones for Busboost:

Figure 5.15: Busboost Milestones

Design	Procurement	Start works	Complete works	Assessment	Schemes Supported by BEST
Finalise project area targets and scope out employers: September 2012	Complete tender actions: September 2012	Start promoting tickets and signing up participants: October 2012	Complete promoting tickets and signing up participants: December 2014	Post implementation assessment: January 2013 Post implementation assessment: January 2014 Post implementation assessment: January 2015	• Key Bus Routes • Jobconnector X19 • Jobconnector: Wentworth and Shortwood • Jobconnector Malin Bridge • Targeted Corridor Enhancements • Marketing and communications • Safe and sustainable commuting • Cycleboost • Walkboost • ECO Academy

BEST 3 Walkboost

Walkboost aims to encourage those who normally drive the short distance to work or school to consider walking. To do this, this work package includes the following elements, which will be applied across the four project corridors:

- Walk programmes – commuter: 100 employment road shows & 1to1/group support packages for potential walkers;
- 150 group walking packages directing people to local amenities plus other support;
- 10 walking maps with additional versions focusing on employment/visitor sites;
- 5 community street audits: Auditing routes with local community identifying potential improvements;
- Minor improvements to walking routes based upon the street audits;
- A target of 71000 parents who can walk to work but drive to do the school run will be encouraged to allow their children to walk to school (without them);
- Walking advice will be incorporated into job seekers support

The following figure lists the milestones that have been set out for Walkboost.

Figure 5.16: Walkboost Milestones

Design	Procurement	Start works	Complete works	Assessment	Schemes Supported by BEST
Complete design of marketing campaign: September 2012	Complete procurement of leaflet design: September 2012	Commence marketing campaign: October 2012	Complete marketing campaign: February 2015	Implementation assessment: March 2013	• Lower Don Valley Cycle Route • Dearne Valley to Swinton Cycle Route • Busboost • Cycleboost • Marketing and Communications • Safe and sustainable commuting • Travel training
		Start street audits: April 2013	Complete street audits: March 2014	Implementation assessment: March 2014	
		Undertake improvement works: September 2013	Complete improvement work: March 2014	Implementation assessment: March 2015	
				Implementation assessment March 2014	
				Implementation assessment: March 2015	
		Start marketing campaign for full behavioural change package: February 2013	Complete marketing campaign for full behavioural change package: February 2015	Implementation assessment March 2014	
				Implementation assessment: March 2015	

BEST 4 Cycleboost

More and more people are switching to cycling for shorter journeys, to work, key destinations. Cycling across the county is increasing at a good rate, in Sheffield the increase is only superseded by the increase in London. This is a key component to taking away the perceived barriers to starting and continuing cycling. A number of elements of this scheme have been running for a number of years already in Sheffield ensures that bikes are road worthy f It also provides an accessible service in normal working hours, therefore potentially negating the need to visit a bike shop and not have access to ones bike for a number of days

A full commuter support programme, based on providing cycle parking at businesses, bike loans, Dr Bike sessions, for a period of four weeks and cycle training to bikeability levels 2 and 3 adults and families.

A total of 1000 cycle stands will be implemented in businesses across the four priority corridors. These will therefore be in place and will provide a permanent location for cycle parking beyond the life of LSTF.

Participants who receive a bike have to agree to cycle to work at least 50% of the days in the 'challenge' period of four weeks. As well as a bike, participants receive training, advice on the right bike for them, necessary equipment and details on route planning. This is incetivised by the development of a cycle-to-work website, which allows different departments to 'compete' with each other, and gives participants immediate updates on their progress in terms of kilometres pedalled in relation to others, calories burned, CO2 saved, etc. In total, 3000 participants across the four priority areas will be encouraged to take part.

The Dr Bike sessions will provide regular maintenance and safety checks at a variety of locations and organisations. This will be mainly tied in to the organisations involved in the workplace bike leasing scheme. Up to 500 bike doctor session will take place across the four priority corridors with an average of 11 bikes per session safety checked and minor maintenance carried out on over 5,500 bikes.

Cycle training will be provided to over 7000 individuals, groups and families through learn to ride sessions. They will be engaged through the work place and trained so that they can ride their bike safely, securely and confidently on the roads of the region. Adults will also be shown how to teach their children to ride in a safe and confident style. The Learn to ride session will focus on adults that have not ridden for a considerable time or have never ridden and is open to those who don't own a bike.

The following figure lists the milestones that are set out for Cycleboost.

Figure 5.17: Cycleboost Milestones

Design	Procurement	Start works	Complete works	Assessment	Schemes Supported by BEST
Complete detailed design: October 2012	Confirm registration of workplaces: March 2013	Start marketing campaign: November 2012	Complete marketing campaign: December 2014	Implementation assessment: January 2014	• Cycle Routes • Adwick Sustainable Access • Waterfront Regeneration • Marketing and communications • Safe and sustainable commuting • Busboost • Walkboost • Tram Stop Upgrades
Scope interested workplaces: January 2013	Confirm registration of workplaces: March 2014	Begin implementation: April 2013	Complete implementation: December 2013	Implementation assessment: January 2015	
Scope interested workplaces: January 2014		Begin implementation: April 2014	Complete implementation: December 2014		

BEST5 Travel Training

This work package has two parts. The first is targeted Travel Training to help people get to work or training aimed at people in NEETS categories, adult learners, and all ability levels. This overcomes barriers presented by lack of network knowledge, lack of familiarity with services and with practice (for example best value ticket purchase) and other common misconceptions, such as convenience, personal comfort, reliability, safety.

The second part of this project is a joint delivery approach between Children's and Adult Services in Sheffield. The project will support young people, vulnerable adults and older people across all ranges of the local community. A large proportion of people benefiting from this project will have high level of health and behavioural needs and will be in receipt of support from the Health Sector. A key objective will be equip people with the travel skills required to get into full time employment and make a contribution to the local economy. This enablement can happen at all ages but the focus of this project will be on post 16 year old students and young adults. The business sector will benefit from the development of a cohort of independent travellers capable of contributing to the local economy both in terms of getting jobs and in investing earned income.

Young people who are able to travel independently are able to access more specific learning options delivered in different college establishments. This allows the student to access a more flexible timetable as there are no longer travel restrictions. Many young people are unable to take up apprenticeships or work placements offered to them, as they are unable to travel there themselves which could be a stipulation of being offered the placement.

The primary outputs will be:

- 1000-1250 students will be travel trained per year;
- Minimum 100 disabled and vulnerable young people vulnerable adults formerly unable to travel independently trained annually to use public transport, walk or cycle and therefore being able to access employment as well as other social and educational opportunities; and
- Mobility passed will be issued.

The following figure outlines the milestones for Travel Training.

Figure 5.18: Travel Training Milestones

Design	Procurement	Start works	Complete works	Assessment	Schemes Supported by BEST
Scope interested educational, training and workplaces: October 2012	Recruitment of Travel advisors: December 2012	Start marketing campaign: March 2013	Complete Marketing campaign: December 2014	Implementation assessment: November 2013	
Complete design of marketing campaign: December 2012	Confirm registration of educational, training and workplaces: February 2013	Start liaison: April 2013	Complete liaison: January 2015	Implementation assessment: August 2014	• Marketing and communications • Safe and sustainable commuting • Busboost • Cycleboost • Walkboost • Cycle Routes • Jobconnector X19 • Jobconnector Malin Bridge • Jobconenctor: Shortwood and Wentworth • Tram Stop Upgrades
				Post implementation assessment: February 2015	
				Implementation assessment March 2014	
				Implementation assessment: March 2015	
		Start marketing campaign for full behavioural change package: February 2013	Complete marketing campaign for full behavioural change package: February 2015	Implementation assessment March 2014	
				Implementation assessment: March 2015	

BEST 6 Marketing and Communications

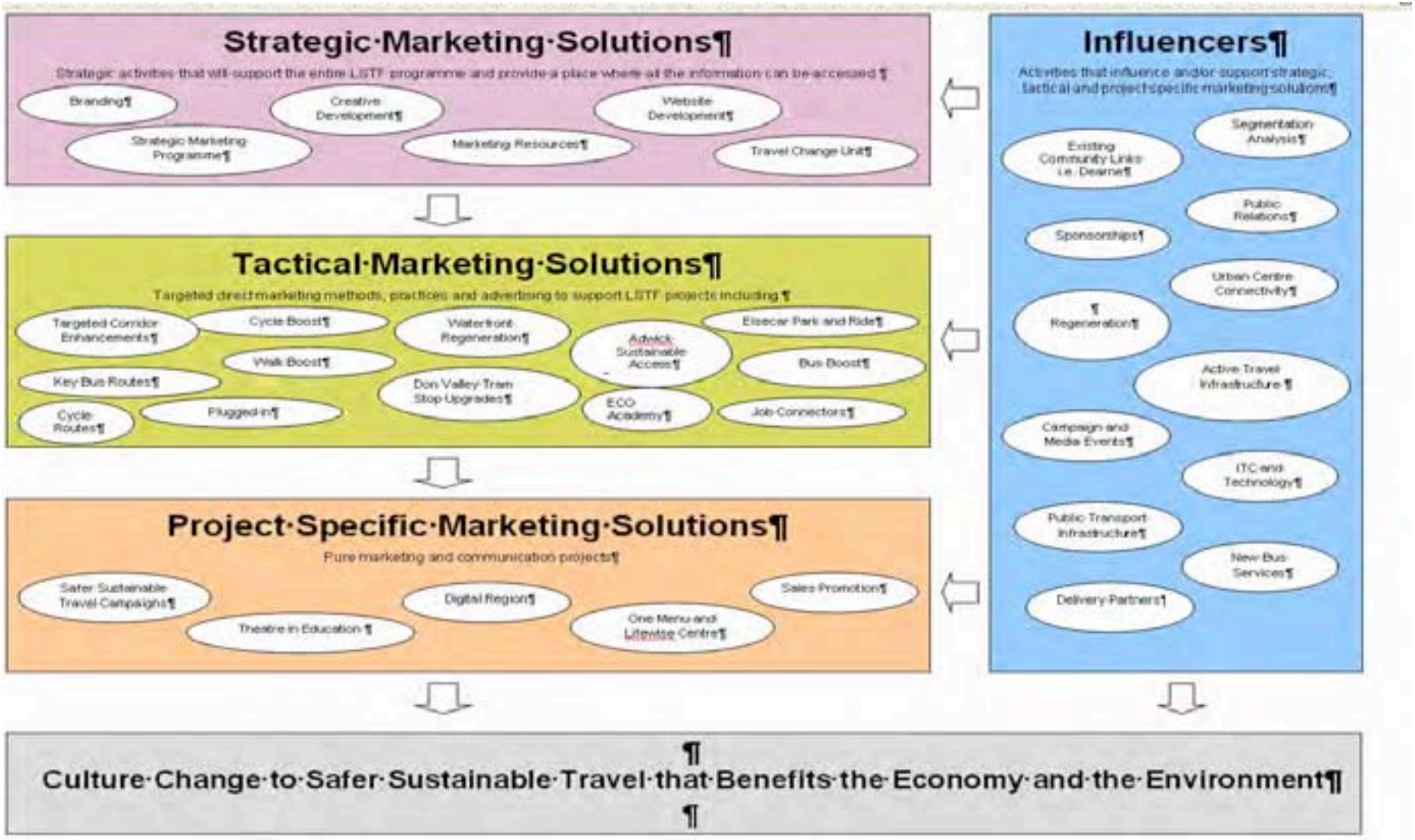
The elements above will also be supported by the marketing and communications scheme to ensure they reach the largest possible audience and achieve their anticipated targets within each priority corridor. The following are key elements of the marketing and communications scheme:

- A Marketing Manager and Marketing Officer will be recruited to implement, oversee and monitor the progress of the whole marketing *strategy*. This individual will form part of the Travel Change Unit;
- A Marketing Manager will also be appointed to work along side the PR company Ruby Slippers;
- A Creative Advertising Agency will be procured to help with the branding, campaigning and initial set up of the website;
- 5 safer sustainable travel communication campaigns put out across the priority corridors. Programme managed by SRP in partnership with the new SCR Behaviour Change Network;
- Promotional events in the City and Town centres, educational workshops, engaging local media and improving on-line communications.

The marketing and communication element will work to oversee, promote and engage the targeted audiences across our LSTF bid. This will be used as the mechanism through which the individual schemes are communicated with residents and employees of the priority corridors.

The following figure outlines the Marketing and Communications plan.

Figure 5.19: Marketing and Communications Plan



The following figure outlines the milestones set for Marketing and Communications.

Figure 5.20: Marketing and Communications Milestones

Design	Procurement	Start works	Complete works	Assessment	Schemes Supported by BEST
Complete design of marketing programme and production of materials: January 2013	Recruitment of marketing manager and marketing officers: November 2012	Start design of websites: November 2012	Complete design of websites: January 2013	Implementation assessment: October 2013	• Key Bus Routes • Jobconnector X19 • Jobconnector: Wentworth and Shortwood • Targeted Corridor Enhancements • Cycle Routes • Adwick Sustainable Access • Waterfront Regeneration • Malin Bridge Feeder • Tram Stop Upgrades • Safe and sustainable commuting • Busboost • Cycleboost
		Start marketing campaign for full behavioural change package: February 2013	Complete marketing campaign for full behavioural change package: February 2015	Implementation assessment March 2014	
				Implementation assessment: March 2015	

7 CONCLUSION

This annex document has been presented to provide details on each scheme within the project corridors. This has included a mapped location for each scheme as well as detailed scheme drawings where appropriate. Each project corridor is also supported by BEST, which will work to promote and incentivise use of our investment programme. Coordination with BEST has been highlighted with each scheme to highlight their strong linkages.

Included in each project corridor are also the key milestones for each scheme. This will demonstrates that each scheme has been designed to allow timely delivery and reach the required audience.

To ensure a timely delivery of the project and the achievement of all milestones, the following levels of reporting structure will be implemented:

- Quarterly reporting to DfT regarding the project spend and actions to reduce risk
- Quarterly reporting to Project Board and Corporate Management Board regarding achievement of milestones and assessment of risk
- Monthly reporting to Programme Manager regarding on the achievement of milestones, work package spend and assessment of risk