

HAMPSHIRE COUNTY COUNCIL**Decision Report**

Decision Maker:	Executive Member for Environment and Transport
Date:	22 January 2013
Title:	Project Appraisal: A32 Forton Road/The Crossways/Lees Lane North junction and Lees Lane, Gosport - Junction improvements and priority measures for Bus Rapid Transit.
Reference:	4490
Report From:	Director of Economy, Transport and Environment

Contact name: Louise Berridge

Tel: 01962 826986

Email: louise.berridge@hants.gov.uk

1. Executive Summary

1.1 The report seeks approval for the implementation of infrastructure improvements and bus priority measures at the A32 Forton Road/The Crossways/Lees Lane North junction and Lees Lane, in Gosport, at a cost of £560,000.

1.2 The scheme will deliver the following measures:

- A 45.4 metre contra flow bus lane on Lees Lane North.
- A give-way junction at the end of the one-way section of Lees Lane in order to give priority to the buses.
- Selected Vehicle Detection (SVD) for buses, on The Crossways and Lees Lane North approach to The Crossways/A32 Forton Road/Lees Lane North junction.
- Safety and capacity improvements for all general traffic and buses through the junction, by upgrading the existing traffic signals at the junction. The new signals will incorporate Microprocessor Optimised Vehicle Actuation (MOVA), which enables better adjustment to changing traffic demand and thereby improves operational efficiency.
- Extended parking created on the north side of Lees Lane to replace the parking lost on Lees Lane North for the contra flow bus lane.
- A new bus stop and shelter on Lees Lane North with shelter facilities including 24 hour CCTV for passenger security and screens, providing

real time bus, train and ferry times together with local information, news and weather.

- 1.3 This paper seeks to explain the background and the development of the two schemes, and the benefits and details of the proposed infrastructure measures.

2. Background and Objectives

2.1 The first phase of the South East Hampshire Eclipse Bus Rapid Transit (*Eclipse* BRT), opened in April 2012. *First Hampshire & Dorset (First Bus)* bus services, E1 and E2 (previously routes 86 and 82) use the new *Eclipse* BRT bus-way for part of their journey. It enables those buses to bypass the worst of the congestion and thus offer fast, reliable journey times between Gosport and Fareham. Service 10 also uses the bus-way for parts of its journey to enable as many people as possible to benefit from the dedicated route. The Eclipse bus-way is a 3.3km dedicated bus-way, 'Henry Cort Way', between Redlands Lane and Tichborne Way. At both ends of the route, in Fareham to the north and Gosport to the south, the buses rejoin the on-road network. Extension of the wider BRT network is essential to enhance and improve connections for the bus-way.

2.2 The first phase has produced a 16% increase in bus patronage on the *Eclipse* E1 and E2 bus routes, operated by *First Bus*. An overall increase of 6% in bus patronage has been achieved in Gosport. The *Eclipse* E1 and E2 routes into Gosport leave the Eclipse bus-way at Tichborne Way, then pass through the Brockhurst roundabouts and continue to the Gosport ferry.

2.3 *First Bus*, as of 18 November, revised bus route provision in the region. The off-peak X88, which used part of the bus-way between Redlands Lane and Wych Lane has been replaced with Route 10. This is an hourly service from Monday to Saturday, between the Fareham rail station and the Gosport ferry. Route 10 buses, although not full *Eclipse* standard, are fitted with Selective Vehicle Detection (SVD) tags and Real Time Passenger Information (RTPI), and therefore, benefit from the bus priority proposals on the bus-way and the wider area. The bus services using the *Eclipse* routes are as follows:

E1 Route – A32 Fareham Road, Brockhurst roundabouts, Elson Road, Grove Road, The Crossways, Forton Road, Lees Lane North/Lees Lane, Whitworth Road, Bury Road, Stoke Road, Creek Road, Gosport ferry.

E2 Route -Tichborne Way, Rowner Road, Brockhurst Medical Centre, Brockhurst roundabouts, Brockhurst Road, Ann's Hill Road, Bury Road, Stoke Road, Creek Road, Gosport ferry.

10 Route – Wych Lane, Nobes Avenue Shops, Carisbrooke Road, Brockhurst Medical Centre, Brockhurst roundabouts, Brockhurst Road, Forton Road, Spring Garden Lane, Creek Road, Gosport ferry

2.4 A prioritised matrix of wider BRT networks and routes is undergoing development for the sub-region. Extending the Eclipse Bus-way, from

Tichborne Way, into Gosport, is considered a high priority to improve accessibility to, from and within Gosport. Expanding the BRT network in the town could provide an alternative to the private car and assist in relieving the peninsula of existing congestion and delay.

- 2.5 Off and on-road proposals are proposed to link the existing extent of the Eclipse Bus-way, from Tichborne Way to the Gosport ferry. Off road extensions north to Fareham and south from Tichborne way to Rowner Road are currently being developed. Planning permission is in place to extend the off-road bus route south, on the disused railway line, to Military Road, in Gosport. However, the most viable location to terminate the route would be at Rowner Road, rather than further south at Military Road, with a new, at-grade, traffic controlled junction.
- 2.6 The '*BRT Phase 3 Military Road to Gosport ferry Feasibility Report*' (November 2011), produced by Hampshire County Council Engineering Consultancy, recommended three preferred routes for on-road BRT, from the southern end of the Eclipse Bus-way at Tichborne Way, to the Gosport ferry. Two of these routes are the existing E1 and E2 routes and will be developed further. This report also recommended possible improvements at a number of locations on these preferred routes in order to improve bus journey time reliability. One of these key locations on the existing E1 route is at the A32 Forton Road/The Crossways and Lees Lane North junction.
- 2.7 The '*BRT Phase 1B Tichborne Way to Military Road and Improvements to Rowner and Brockhurst roundabouts Feasibility Report*' (December 2011), produced by Hampshire County Council Engineering Consultancy, identified and recommended that to enhance connectivity for all Eclipse BRT buses (E1 and E2 services) from the bus-way rejoining the on-road network, improvements should also be undertaken at the Brockhurst north and south Roundabouts.
- 2.8 Following consultation with the *First Bus* and undertaking the relevant studies and surveys, possible BRT routeings and existing problems on the proposed Gosport BRT network were identified. One of the locations on the existing *Eclipse* and proposed BRT routes currently found to cause delay to buses, which could be enhanced significantly by introducing bus priority measures, is on the A32 Forton Road, at the junction with The Crossways, Lees Lane North and Lees Lane. Measures to improve traffic flow and reduce traffic queues at this signalised junction are required to improve the reliability of bus journey times.
- 2.9 Opposite Lees Lane North is the one-way, northbound arm of the junction with the A32; Lees Lane provides the one-way, southbound link, 65m to the east of the traffic signals. Lees Lane North is restricted to one lane by the provision of parking bays and hatching on the offside. Lees Lane has two traffic lanes, one of which carries on southwards, and the other which provides a free-flow lane link to the Lees Lane North one-way system. Parking is restricted to off-peak hours on Lees Lane.

- 2.10 The existing geometry of the junction, the location of the existing bus stop and on-street parking all create difficulties for bus turning manoeuvres by the *Eclipse* E1. The one-way system, incorporating Lees Lane, also generates poor manoeuvring and visibility issues.
- 2.11 Traffic delays at this junction have been identified by the bus operator and by traffic delay software (*Strategis*). This shows delays southbound on The Crossways approach to the junction with the A32 Forton Road of up to 30 seconds in the morning peak, evening peak and off-peak hours. Delays are also evident northbound on Lees Lane North (one-way road), on the approach to the junction with the A32. Delays were shown to be more than 30 seconds in the afternoon peak.
- 2.12 In March 2012, Transport for South Hampshire (TfSH) was successful in securing £4.5m from the Better Area Bus Fund (BBAF) for measures which increased bus patronage in urban areas and contributed to targets in creating growth and reducing carbon emissions. It was decided that the proposals at the A32 Forton Road/ The Crossways/ Lees Lane junction, and the proposals at the aforementioned A32 Fareham Road and Brockhurst roundabouts, (subject to of a separate Project Appraisal), were relatively easy to deliver and identified as being in the right order of cost for funding through the BBAF. Hence, as part of this award, £1.1m was secured towards infrastructure measures to improve BRT provision on the A32. The funds have been specifically secured towards the A32 measures to implement BRT bus priority measures and on-road improvements in Gosport. The funding cannot be transferred, or used for other proposals without approval from BBAF Board or the Department for Transport. It is hoped that the contracts for these two schemes can be let together.

3. Need for the Scheme

- 3.1 The South East Hampshire sub region has a constrained transport network, with strategic links congested in peak periods. The proposed measures at the A32 Forton Road/The Crossways/Lees Lane North junction are required to improve traffic flow during peak time traffic periods, not just for BRT services but also for the benefit of all road users at this location, by enabling the better management of traffic through this busy junction, with safety benefits for all.
- 3.2 In 2008 BRT was identified as an important transport measure which could provide a realistic and viable alternative to the private car to help reduce congestion on roads such as the A32. The first phase of BRT opened in April 2012. To continue the positive momentum achieved by *Eclipse* and improve connectivity with the existing route, the expansion of BRT into a wider network is critical.
- 3.3 The existing traffic signals at the A32 Forton Road/The Crossways/Lees Lane North junction use outdated equipment and do not effectively manage changeable traffic flows to the detriment of all vehicles as well as public transport reliability. The more responsive signals will improve the flow of traffic through the junction for all road users public transport reliability. Whilst

serving communities in Elson and Hardway, the E1 currently experiences delays as it negotiates residential parking and the junction itself. The proposed scheme for this junction will give significant journey time savings for E1, but would also favour other buses on routes 9A, 10 and 11 through the use of SVD and MOVA.

3.4 The principal objectives for the proposed future BRT network and therefore for the improvements at the A32 Forton Road/The Crossways/Lees Lane North junction improvement measures are:

- To provide a sustainable, modern, viable and high quality public transport.
- To improve journey time reliability.
- To offer greater public transport alternatives to the private car, with bus priority and connections between residential, employment and commercial and key strategic sites, such as Strategic Development Areas.
- To provide a catalyst for economic growth for South Hampshire, whilst contributing to a reduction in environmental harm.
- To assist in meeting environmental target requirements, such as Air Quality Management Areas (AQMAs).

3.5 Bus priority measures are required at the A32 Forton Road/The Crossways/Lees Lane North junction to enable BRT to avoid congestion after rejoining the on-road network, particularly during the peak traffic flow periods. This, combined with other future improvements on the proposed Eclipse bus routes, including proposed measures on the A32 Fareham Road between the Brockhurst roundabouts, will improve bus journey times and reliability in Gosport.

4. Alternative Options

4.1 The option to provide a bus lane on The Crossways approach to the junction was considered. However, with a Public Realm scheme on the A32 Forton Road to widen footways programmed for 2013, providing a bus lane in this location would entail reducing the footway area and thus was not considered acceptable. It is considered that SVD will be sufficient to give buses priority, in both directions, through the signal-controlled junction.

4.2 During consultation and discussions with the bus operator (*First*), an awkward manoeuvre buses currently undertake to turn right into Lees Lane, from the A32 Forton Road, was identified. Difficulty increases even more if the buses use the bus stop on the A32 Forton Road, eastbound, and have to cut across two lanes of traffic to enter the right turn lane, for Lees Lane. Two options were considered here:

- Making Lees Lane North two-way for buses and access only, with Lees Lane providing for two-way traffic. However, this would be difficult to enforce and Lees Lane is rather narrow, with an acute left turn onto the A32 which would mean that Stop lines for the traffic signals would be positioned such that additional delay would be incurred between phases.
- The alternative option to provide the contra-flow bus lane on Lees Lane North, where a bus stop will also be provided, was selected.

5. Measures of Success

- 5.1 'Strategis' traffic data, taken between September 2009 and September 2010, for A32 Forton Road/The Crossways /Lees Lane North junction and the approaches, showed small delays on all approaches, during the AM peak (7am – 9am). Delay was even more evident in the PM Peak, (4pm – 6pm) on the north and southbound approaches to the junction, as well as northbound on Lees Lane. Delays were shown to be greatest in the off peak period (10am – 12pm), on all approaches.
- 5.2 Improvements in bus time reliability through the A32 Forton Road/The Crossways/Lees Lane North junction would indicate the scheme is successful. The scheme will provide journey time improvements for BRT, other bus services and general traffic. The provision of new lower powered traffic signals, incorporating Microprocessor Optimised Vehicle Actuation (MOVA), should enable improved traffic flow and capacity through the junction for all road users, with signal optimisation and more responsive timings.
- 5.3 Junction modelling was undertaken, using Linsig 3. Results from this base model showed the existing Practical Reserve Capacity (PRC) to be negative, -0.2% in the morning traffic peak hour and -10.6% in the evening peak. This indicates there is no capacity for additional traffic growth with the existing operation of the junction. When the modelling was undertaken with the new proposals, it indicated traffic flow and capacity could be significantly improved for the junction overall, with PRC values of 35.8% and 16.5% respectively.
- 5.4 Accident data at the A32 Forton Road/The Crossways/Lees Lane North shows there were 7 slight and 4 serious injury accidents, between 01/09/07 and 31/08/12. None of the accidents involved buses.
- 5.5 A reduction in the number of recorded personal injury accidents at the A32 Forton Road/The Crossways/Lees Lane North junction would also signify a successful scheme.
- 5.6 Post scheme monitoring will be achieved by comparing the 'before' surveys with similar 'after' surveys, following implementation and settlement of the scheme.

6. Finance

6.1	<u>Estimates</u>	<u>£'000</u>	<u>% of total</u>	<u>Funds Available</u>	<u>£'000</u>
	Design Fee	39	7	Better Bus Area Fund	560
	Client Fee	11	2		
	Supervision	7	1		
	Construction	503	90		
	Land	0	0		
	Total	<u>560</u>	<u>100</u>	Total	<u>560</u>

6.2	<u>Revenue Implications</u>	<u>£'000</u>	<u>% Variation to Committee's budget</u>
	Net increase in current expenditure	34	0.031
	Capital Charge	34	0.026
	Total Expenditure	<u>68</u>	<u>0.057</u>

7. Scheme Details

- 7.1 Location plans and general arrangement drawings, for the A32 Forton Road/The Crossways/Lees Lane North junction, are attached in Appendix A. A map showing the latest *First* bus routes is also attached.
- 7.2 The scheme will provide a new contra flow bus lane on Lees Lane North and a give-way junction at the end of the one-way section of Lees Lane; it will give priority and significant journey time savings to *Eclipse* E1 buses, reducing the one-way section of Lees Lane to a single lane by removing the existing right turn lane. This will facilitate some extended parking on the north side of Lees Lane. Other measures proposed to improve facilities for the BRT, other bus services and general traffic, are to upgrade the existing traffic signals, to incorporate MOVA, and to provide SVD on The Crossways and Lees Lane North approaches to the junction.
- 7.3 The new 45.4 metre long, 3.4 metre wide, contra-flow bus lane commences at the A32 Forton Road/Lees Lane North junction, and continues on the east side of Lees Lane North to the junction with Lees Lane. This will enable buses to go directly across to Lees Lane North to access Lees Lane and travel south towards Whitworth Road. At present, buses access Lees Lane from the A32 Forton Road and via the one way system. These manoeuvres are difficult for buses, particularly if they use the northbound bus stop on the A32 Forton Road beforehand.
- 7.4 Due to the 4 metre minimum width required for a bus lane to allow use by bicycles, cyclists will be exempt from using the contra flow bus lane on Lees

Lane, as will Taxis. However, emergency and breakdown services and community safety vehicles will be permitted to use the bus lane.

- 7.5 The existing parking conditions currently provided on Lees Lane North are 13.2 metres of parking, (approximately parking for 2 cars). This is restricted between 8 am and 6 pm, to 1 hour in any 2 hours. The existing parking conditions currently provided on Lees Lane are 31.5m of single yellow line (approximately parking for 7 cars) with a No Waiting restriction between Monday and Friday, from 8am - 6pm.
- 7.6 In the proposals, the two existing parking bays on Lees Lane North will be removed to provide space for the contra-flow bus lane. Double yellow lines with a loading ban are proposed on the east side of Lees Lane North to prevent blocking of the bus lane. Lees Lane will be altered to a single lane creating parking space on its north side. A 9 metre loading bay (for the Bingo Hall) and parking bays for approximately 4 cars will be provided. The parking will be restricted between 8 am and 6 pm to 1 hour in any 2 hours. These parking restrictions increase the existing parking time allowed on Lees Lane. The 9 metre loading bay will allow unrestricted parking between 6pm and 8am, therefore creating three additional parking bays overnight (unrestricted hours). Managers at the Bingo Hall have been consulted on the alterations to the loading and parking areas and are satisfied with the proposals.
- 7.7 Therefore, the overall changes to daytime parking (restricted hours) equate to two additional parking bays. At night (unrestricted hours), two bays will be lost.
- 7.8 Access for deliveries to the Public House located on Lees Lane North are currently undertaken via Trafalgar Square, and therefore will not be affected by the proposals.
- 7.9 Where Lees Lane meets Lees Lane North, at the end of the one-way section of Lees Lane, a give-way junction will be implemented. This will allocate priority to the buses travelling southbound on the proposed Lees Lane North contra flow bus lane.
- 7.10 The scheme also delivers capacity improvements for buses and all traffic through the junction by upgrading the existing traffic signals at the junction. The new signals will incorporate Microprocessor Optimised Vehicle Actuation (MOVA). MOVA enables better adjustment to traffic demand as it changes, thereby improving operational efficiency. Junction modelling undertaken using Linsig 3 showed the existing Practical Reserve Capacity (PRC) to be negative, -0.2% in the morning traffic peak hour and -10.6% in the evening peak. This indicates there is no capacity for additional traffic growth with the existing operation of the junction. When the modelling was undertaken with the new proposals, incorporating the MOVA, it demonstrated traffic flow and capacity could be significantly improved overall at the junction, with PRC values of 35.8% and 16.5% respectively. MOVA will therefore significantly improve traffic flow not only for the BRT service, but for general traffic and other bus services, including the 9A, 10 and 11 and any future BRT routes.

- 7.11 A new southbound *Eclipse* bus stop on Lees Lane North will be provided with raised kerbs and a three bay cantilevered shelter bus shelter with RTPI and CCTV. Bus stop 'cage' markings will be painted.
- 7.12 Options for providing Selective Vehicle Detection (SVD), are due to be finalised by Hampshire Council's Intelligent Transport Systems Group. SVD will be provided by one of the following options:
- TagMaster - Proximity card
 - RTEM - Loop profiling system
 - Global Positioning System (GPS) - Virtual loop based systems which uses GPS/local radio.
- 7.13 The Tagmaster Selective Vehicle Detection is an above ground detection system provided by Siemens. The system uses automatic Radio Frequency Identification (RFID), to selectively detect suitably tagged vehicles. The uniquely identified tag is mounted in the windscreen of the bus and the tag reader is mounted on a wide range of existing poles or lamp columns. The second system, from RTEM, uses detector loops in the carriageway. These will identify the type of vehicle approaching the junction by its chassis profile and activate a priority call when it detects a bus. The third option under consideration is through the use of a Global positioning system. The location of the bus is configured by the on-bus software, therefore negating the requirement for physical detection. The bus informs the traffic signal controller and requests priority at a given location, prior to the junction.
- 7.14 The existing street lighting in this location is adequate for the proposals, and therefore no additional street lighting will be required.
- 7.15 A TRO is required for the following aspects of the scheme proposal:
- A 40 metre long, by 3.4 metre wide, south-bound contra-flow bus lane, on Lees Lane North. Taxis will be exempt from using the lane and due to inadequate width available, cyclists will also be under the exemption.
 - Removal of two parking bays, currently restricted between 8am and 6pm, to 1 hour in any 2 hours, on Lees Lane North. This is to accommodate the contra flow bus lane.
- 7.16 Police approval has been obtained for the preparation and advertisement of the TRO. Approval from County Members will be acquired in December 2012. A letter drop to residents and local businesses will be undertaken in January and the TRO advertised in February, for 21 days. Although proposals include the loss of two parking spaces in Lees Lane North, the negating measures proposed in the adjacent road, Lees Lane, should alleviate public concern.

8. CDM

- 8.1 The project was brought to the attention of the Health and Safety Executive on 2 April 2012.

9. Departures from Standards

- 9.1 The proposals have been designed to comply with Department for Transport and Hampshire County Council standards for highway improvement schemes.
- 9.2 Safety Engineering have been consulted during the feasibility work and a Safety Audit undertaken. Any issues raised were addressed in the detail design. A further safety audit will be undertaken on completion of construction.

10. Community Engagement

- 10.1 A number of Councillor briefings have been undertaken to inform the five relevant County Members and local Gosport Councillors of the proposals. Requests for additional information, relating to the effect of the proposals on the traffic delay and for minor alterations to be undertaken to the design, were received for the proposals on the A32 Forton Road/ The Crossways and Lees Lane North junction. Once this has been completed, consent for approval will be given. This work will be completed and approval obtained in December 2012.
- 10.2 The local Hampshire County Council Highways Office and Passenger Transport Group at Gosport Borough Council were consulted on the scheme. Any comments received were considered and incorporated in the design, where applicable.
- 10.3 Neighbourhood notification to inform residents and local businesses of the proposals will be undertaken in January 2013, before publication of the Traffic Regulation Order in February 2013.

11. Statutory Procedures

- 11.1 A TRO will be required for the contra flow bus lane and changed parking arrangements on Lees Lane North and Lees Lane.

12. Land Requirements

- 12.1 No third party land is required for the proposals at the above junction.

13. Maintenance Implications

- 13.1 The proposed new bus lane and traffic signals will generate maintenance costs, which have been incorporated in the revenue implications. Bus shelters excluding CCTV and RTPi will be owned and maintained by Gosport Borough Council under the terms of their advertising contract with Clearchannel. Bus shelters, CCTV, RTPi and associated power/data supplies and operational costs to process CCTV images and annual service costs are to be funded by revenue budgets. The materials selected in the design are standard highway materials to match those existing at the sites.

14. Recommendation

- 14.1 That, subject to approval of the Traffic Regulation Order, approval be given to the Project Appraisal for a package of bus priority measures and infrastructure to improve the reliability of bus journey time on the A32 Forton Road, at the junction with The Crossways/Lees Lane North and Lees Lane, in Gosport. The estimated works package cost is £560,000.

Rpt/4490/LB

CORPORATE OR LEGAL INFORMATION:**Links to the Corporate Strategy**

Hampshire safer and more secure for all:	yes
Corporate Improvement plan link number (if appropriate):	
Maximising well-being:	yes
Corporate Improvement plan link number (if appropriate):	
Enhancing our quality of place:	yes
Corporate Improvement plan link number (if appropriate):	

Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

DocumentLocation

Engineering Consultancy

Major Schemes

IMPACT ASSESSMENTS:

1. Equalities Impact Assessment:

- 1.1 The proposals in this report have been developed with due regard to the requirements of the Equality Act 2010, including the Public Sector Equality Duty and the Council's equality objectives. An [assessment of the impacts](#) on developing Hampshire's highways network and transport systems can be viewed on the County Council's website.

It is considered that the issues covered by this report will not have impacts requiring further specific actions by the Council above those already established in its existing policies and working procedures.

2. Impact on Crime and Disorder:

- 2.1. The provision of CCTV at the new bus stop on Lees Lane North is expected to have a positive effect on reducing crime rates in the vicinity of the bus stop.

3. Climate Change:

- (a) How does what is being proposed impact on our carbon footprint /energy consumption?

The current policy of Reduce, Recycle, Reuse will be implemented, such that excavated material, where possible, will be reused as sustainable material on future schemes.

- (b) How does what is being proposed consider the need to adapt to climate change, and be resilient to its longer term impacts?

The scheme proposals are expected to have a positive effect on climate change by improving facilities and infrastructure for bus services, cycle and crossing facilities, thereby offering a healthy alternative travel opportunity.

LTP3 Priorities and Policy Objectives

3 Priorities

- To support economic growth by ensuring the safety, soundness and efficiency of the transport network in Hampshire
- Provide a safe, well maintained and more resilient road network in Hampshire
- Manage traffic to maximise the efficiency of existing network capacity, improving journey time reliability and reducing emissions, to support the efficient and sustainable movement of people and goods

14 Policy Objectives

- Improve road safety (through delivery of casualty reduction and speed management)
- Efficient management of parking provision (on and off street, including servicing)
- Support use of new transport technologies (i.e. Smartcards; RTI; electric vehicle charging points)
- Work with operators to grow bus travel and remove barriers to access
- Support community transport provision to maintain 'safety net' of basic access to services
- Improve access to rail stations, and improve parking and station Facilities
- Provide a home to school transport service that meets changing curriculum needs
- Improve co-ordination and integration between travel modes through interchange improvements
- Apply 'Manual for Streets' design principles to support a better balance between traffic and community life
- Improve air quality
- Reduce the need to travel, through technology and Smarter Choices measures
- Promote walking and cycling to provide a healthy alternative to the car for short local journeys to work, local services or school
- Develop Bus Rapid Transit and high quality public transport in South Hampshire, to reduce car dependence and improve journey time reliability
- Outline and implement a long term transport strategy to enable sustainable development in major growth areas

Other

Please list any other targets (i.e. National Indicators, non LTP) to which this scheme will contribute.