A Better Connected South Hampshire

DfT Local Sustainable Transport Fund Bid

December 2011

Executive Summary





















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Transport for South Hampshire (TfSH) is delighted to submit a business case for funding from the Local Sustainable Transport Fund (LSTF) of £17.8m to be added to £13.3m local contributions from local authorities, bus operators, BAA and local businesses such as Aviva and B&Q. Our proposals support sustainable economic growth within urban South Hampshire, whilst also reducing carbon.

Rising levels of congestion threaten economic growth and increase carbon emissions; but more highway capacity is unsustainable. However, two-thirds of trips are less than 5km; providing an **opportunity** to transfer trips to improved bus services or active modes.

Package Description

Our package involves an investment of £31.2m and comprises three inter-locking layers:

- 1) Low cost physical improvements along nine corridors to ensure that public transport provides a realistic, reliable and therefore attractive alternative to the private car, linking people to jobs – total cost £16.4m
 - Enhancements to 16 bus and rail interchanges covering improved access, more and clearer information, cycle parking, shelters and seating;
 - Improving bus journey time reliability with targeted priority measures and junction improvements;
 - A step change in public transport information with 250 Real Time Passenger **Information screens** and the ability to access real time information using **Smartphones**, and through **SMS text** at other bus stops.
 - Integrating public transport and active modes through cycle links and pedestrian and cycle crossings;
- 2) Integration of public transport with an inter-operable South Hampshire smartcard ticketing system – total cost £9.3m
 - ITSO compliant smartcard across bus and ferry services, implemented and run in partnership with South Hampshire Bus Operator Association (SHBOA);
- 3) A highly targeted marketing approach to achieve behavioural change, underpinning the other two – total cost £5.1m.
 - Travel awareness campaigns

 - Engaging residents and businesses
- Hospital Travel Plans
- Station and interchange Travel Plans

 Travel to school and college initiatives
 - Promoting Smartcards

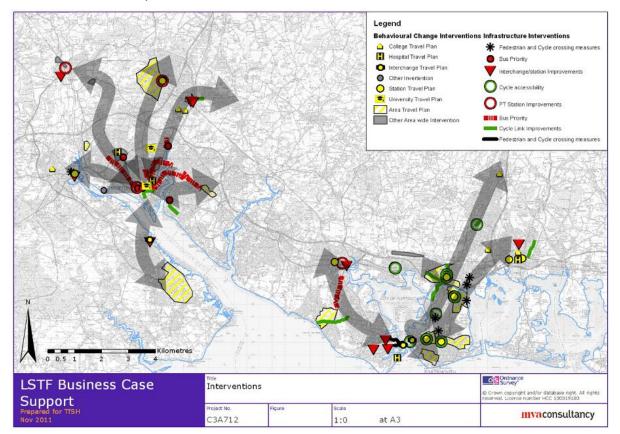
In addition there is £0.3m for monitoring and evaluation of benefits.

Key Outcomes from LSTF Package

- 8.5 BCR and £255m NPV
- £3.9m in 2014 agglomeration benefits
- creates 375 new jobs by 2019 and 763 by 2026 directly from the LSTF interventions
- reinforces the 38k new jobs predicted by 2026
- improves access to jobs on nine key corridors
- provides wider labour markets for employers
- strengthens the roles of our three international | gateways and our city centres
- targets significant pockets of deprivation, economic inactivity and health problems
- tackles 28 barriers identified by stakeholders

- reduces carbon output by 26k tonnes (c 1%)
- improves air quality (-56tonnes NOx pa)
- delivers mode shift from the private car (-5%)
- increases PT use (+25%)
- reduces congestion by 10%
- improves bus journey times (-1% to -7%)
- improves environment at PT interchanges
- much improves access to PT services
- improves journey time reliability for all
- improves health and reduce absenteeism and mortality (save about 1 life pa)
- reduces road accidents (-37 PIAs pa)

The figure below shows the nine corridors and the locations of the physical interventions and behavioural change measures; the smart ticketing system will operate across the TfSH area on bus and ferry services.



Our package of interventions represents a **targeted approach**: targeted on nine economically crucial commuter corridors; targeted on areas containing groups with a propensity for changing behaviour; targeted on making the transport system work harder and more efficiently; targeted on linking disadvantaged sectors of the population with new and existing employment opportunities .

Partnerships

TfSH is a partnership with a **proven track-record of delivery**. It is a formal Joint Committee, made up of the local transport authorities of Hampshire County Council (HCC), Southampton City Council (SCC) and Portsmouth City Council (PCC), as well as the **Solent Local Enterprise Partnership**. TfSH provides advice and research for both **Partnership for Urban South Hampshire (PUSH)** and the **Solent LEP** on transport matters. Partnership working is a strong feature of TfSH, and has been a key component of the development of this business case.

Our stakeholders

- District Councils
- PUSH
- South Hampshire Bus Operators Association (SHBOA) and ferry operators
- SUSTRANS
- University of Southampton
- South Downs National Park
- Southampton Airport
- Associated British Ports
- BAA

- Transport Alliance (Chambers of Commerce, Business Solent and Hampshire Economic Partnership)
- Highways Agency
- South West Trains
- Network Rail
- NHS
- Exxon
- DB Schenker (port freight operator)
- Gun Wharf Quays (shopping centre)

1 Strategic Case

Characteristics of the Area

South Hampshire is the **largest urbanised area in southern England, outside London** and is home to over 1.1m people. It reflects a **functional economic area**, anchored around the two cities of Portsmouth and Southampton and the M27 corridor. Its coastal geography with a number of peninsulas creates particular transport challenges, with movements channelled through a limited number of river, estuary and harbour crossing points.

The area has strong economic links with its neighbouring areas, and also with regional, national and global economies, principally through its **three international gateways** – Port of Southampton, Port of Portsmouth and Southampton International Airport.

South Hampshire, and in particular the two cities have been underperforming in comparison to the wider South East and the recession has exacerbated this. Southampton, Portsmouth and Gosport stand out as having particularly acute problems across a range of measures, with significant pockets of deprivation, economic inactivity and health problems.

Despite this inequality the economic opportunities of the area are significant. The marine, logistics, higher education and advanced manufacturing sectors are very strong national economic drivers. The **Economic Development Strategy** for the area has identified a preferred growth scenario to realise 56,300 new jobs in South Hampshire by 2026.

Particular opportunities exist around a number of key sectors that tend to locate in our cities, as well as at the Enterprise Zone at Daedalus. The key period of effort needs to be from 2011 to 2015, to increase the GVA growth rate, and set South Hampshire on a preferred growth trajectory.

Current and Future Transport-Related Problems

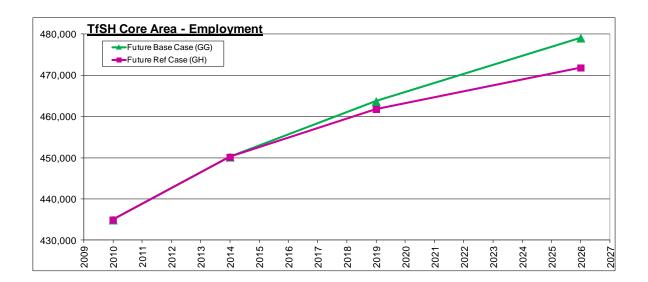
Overall there is a significant use (25%) of **Active Modes** across the area during an average day but this reduces considerably for journeys to work (10.6% walk and 4.6% cycle) where the majority of trips are made by car (70%). **Severe congestion** exists throughout the area, especially at junctions on radial routes into the city centres and between urban centres. Around 10% of peak period highway travel time is spent in **queues**. Significant increases in highway capacity for general traffic are not sustainable. Examination of where **bus speeds fall below 10kph** has identified the corridors where physical measures can be designed to improve bus speeds and reliability.

Total car demand on the highway network is expected to grow by 13% by 2026 (assuming only committed interventions and therefore constrained by increased congestion). Furthermore, the total time lost due to **delays will increase by more than 50%** compared to today. Most of the vehicles contributing to the highway delays are on short trips – **68% of highway trips are less than 5km** in length – highlighting the **opportunity** to transfer these trips to improved bus services or active modes. Public transport demand overall will rise, but bus patronage is forecast to decline slightly as a result of the worsening highway congestion and the resultant worsening bus journey time reliability.

Forecasts of **vehicle emissions** show that despite rising vehicle hours and kilometres, technology improvements will reduce all emissions except **carbon** up to around 2020. Beyond that emissions increase significantly.

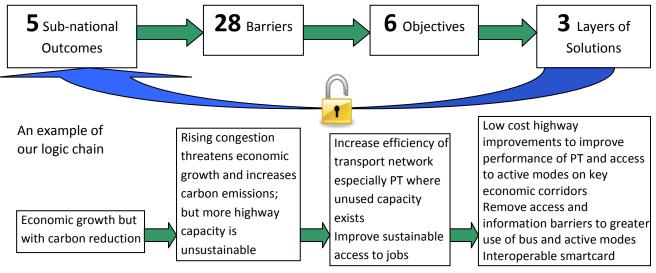
Our SRTM modelling capability enables us to demonstrate the impact of transport constraints on economic growth.

In the figure below, the green line shows employment growth unconstrained by worsening transport costs, whereas the pink line shows the impact of increased transport costs in South Hampshire. The gap between the two lines shows the impact of what would happen without the LSTF investment. Our LSTF proposals will start the process of bridging this gap.



Developing Transport Solutions

We adopted a careful analytical process to identify the solutions needed to unlock our preferred outcomes.



A MOSAIC analysis was undertaken to identify those most likely to respond positively to our proposals. This resulted in a set of **nine well-defined corridors** targeted at supporting our cities, economic centres and growth opportunities within which to concentrate interventions. The analysis also identified disadvantaged sectors of the community where there were demonstrable barriers to employment opportunities either close-by or within reach by public transport. Essentially the problem is that **low skilled workers do not now live conveniently nearby low skilled employment** and do not have low cost transport options to make the journey. In addition the analysis took account of significant development opportunities such as the Enterprise Zone at Daedalus.

Much can be achieved by a co-ordinated and concerted series of 'nudges' concentrated on specific corridors, economic sectors and population segments. The full range of potential interventions was tested at a stakeholder workshop.

The LSTF interventions are framed by and form part of a wider **Long Term Strategic Implementation Plan** (LTSIP) for South Hampshire, and represent a critical **first step** to reducing the number of car trips and managing our transport networks better.

2 Economic Case

In recent years TfSH has substantially increased its evidence capability through an investment in the webTAG-compliant **Sub-Regional Transport Model (SRTM)** that includes a **Local Economic Impact Model (LEIM)**.

The **SRTM** was used in combination with TUBA to determine the economic case for the proposed interventions. The Net Present Value (NPV) and Benefit Cost Ratio (BCR) of the whole package is greater than the sum of its parts. The **whole package**, over a 30yr appraisal period, produces a **NPV of £253m with a BCR of 8.5**. These result from a **5% reduction in car trips; a 24% increase in public transport trips and a 9% increase in active modes** in 2026. **Business users** benefit significantly through time savings from reduced congestion which also benefits bus passengers and operations. In addition, increased patronage benefits the public transport operators.

There will be an increase in employment of **375 jobs by 2019 and 763 by 2026** directly attributable to our LSTF interventions. These are located principally in Southampton and Portsmouth supporting the PUSH 'cities first' approach. In addition there is an expected increase in public transport operator employment of **25% (c 375 jobs)** and **394 new jobs** expected during the implementation phases and possibly beyond. Furthermore, the generation of new jobs in the Daedalus Enterprise Zone (650 by 2015 and 3,700 by 2026) will be significantly reinforced by the package measures. These increases in employment are part of the **56,000 additional jobs** forecast by 2026 for the TfSH area, assuming no further interventions beyond the LSTS measures.

Early results, from a Wider Benefits analysis using LEIM, show significant **agglomeration** benefits amounting to £3.94m in 2014.

3 Commercial Case

TfSH has a proven track-record of delivery that underpins our confidence that all projects will be deliverable within the stated timescales and milestones. Responsibility for delivery of the proposals will be allocated between the three local authorities and the bus and ferry transport operators, as appropriate.

Most of the individual projects are relatively small and independent of each other. They also utilise **non-competing resources** and the reduction in LTP funding by a third last year has freed up delivery capacity. Recent success in other bids does not compromise this position.

All three TfSH local authorities have an **established approach to procurement** which means that procurement arrangement are already in place and will support delivery. For the smartcard system, the bus and ferry operators will use **established procurement mechanisms** at national/company levels. We have a **Memorandum of Understanding** between TfSH and SHBOA for implementation of the smartcard system and **firm contracts** will be drawn up with individual operators ready for the funding decision in June 2012.

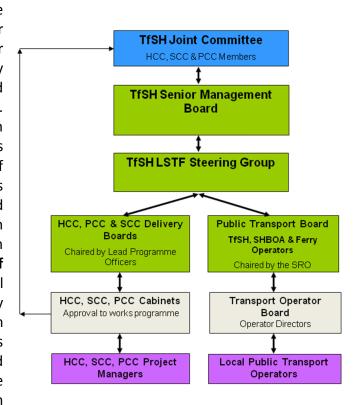
4 Financial Case

Whole Package	2012/13	2013/14	2014/15	Total
DfT revenue funding sought	£1,469,833	£2,668,028	£1,947,388	£6,085,000
DfT capital funding sought	£3,576,999	£4,160,752	£4,015,803	£11,754,000
DfT TOTAL funding sought	£5,046,832	£6,828,780	£5,963,191	£17,839,000
Local contribution	£3,372,217	£5,463,824	£4,488,541	£13,324,000
TOTAL PACKAGE COST	£8,419,049	£12,292,604	£10,451,732	£31,163,000

All costs include a level of contingency and an uplift from lessons learned in other similar schemes. **Financial sustainability** equals about £2m pa. **Local contributions** are from local authorities, bus operators, BAA and local businesses such as Aviva and B&Q.

5 Management Case

A small amount of additional resource and management will be added to our existing **governance** of TfSH. detailed **project plan** shows the key output milestones, interactions and timescales. There are few dependencies. Within the three year implementation period, activity will be progressed across all corridors to achieve economies of scale. Critical to the whole package is inter-operable smartcard considerable advanced work has been undertaken and lessons learnt from similar installations. The management of risk is shared by the individual local authority and public transport Delivery Boards. The realisation of benefits from behavioural and physical interventions will be monitored by the proposed shared service for behaviour change including the University of Southampton and SUSTRANS.



Governance Chart