Sheffield City Council

Highway Maintenance PFI Project
Outline Business Case to the Department for Transport

November 2008

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Sheffield City Council

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Glossary

AST	-	Assessment Summary Table
BCI	-	Bridge Condition Index
BCR	-	Benefit to Cost Ratio
BSCI	-	Bridge Stock Condition Index
BVPI	-	Best Value Performance Indicator
CCI	-	Carriageway Condition Index
CIP	-	Core Investment Period
CLG	-	Communities and Local Government
CPI	-	Consumer Prices Index
CRDP	-	City Region Development Programme
CVI	-	Coarse Visual Inspection
DNO	-	Distribution Network Operator
DVI	-	Detailed Visual Inspection
FBC	-	Final Business Case
FCI	-	Footway Condition Index
FSS	-	Formula Spending Share
HAMP	-	Highway Asset Management Plan
LTP	-	Local Transport Plan
NATA	-	New Approach to Appraisal
NCI	-	Network Condition Index
OJEU	-	Official Journal of the European Union
Original EOI	-	Original Expression of Interest (submitted September 2006)
OSP	-	Outstanding Sheffield Programme
OTP	-	Organisational Transformation Programme
PFI	-	Private Finance Initiative
PIN	-	Prior Information Notice
PSC	-	Public Sector Comparator
RPIX	-	Retail Prices Index excluding Mortgage Interest Payments
SCRIM	-	Sideways-force Coefficient Routine Investigation Machine
SON	-	High Pressure Sodium Lighting
SoPC4	-	Standardisation of PFI Contracts – Version 4
SOX	-	Low Pressure Sodium Lighting
SPV	-	Special Purpose Vehicle
SRB	-	Single Regeneration Budget
SYPTE	-	South Yorkshire Passenger Transport Executive
TMA	-	Traffic Management Act
TUPE	-	Transfer of Undertakings (Protection of Employment) Regulations
UKPMS	-	United Kingdom Pavement Management System
Updated EOI	-	Updated Expression of Interest (submitted February 2008)

Executive Summary

Description of the Project

This Project is a comprehensive highway maintenance project designed to achieve a holistic and co-ordinated approach to Sheffield's entire adopted highway network and associated streetscene. The Project will refurbish and maintain the highway network so that it meets user needs for safety, cleanliness and general appearance, facilitates the use of all forms of transport links and improves customer satisfaction.

Strategic Context

The Council's Vision of being a modern vibrant city where people choose to live, invest and work can only be realised if the City's highway network and streetscene are improved to a standard suited to a modern European city. The proposed Highway Maintenance PFI Project has a huge role to play in achieving the Council's Policy Priorities and Vision and is well-aligned with the priorities and targets within the Sheffield City Strategy and Local Area Agreement as well as with wider Government and regional objectives.

Need for the Project

Sheffield's highway network and streetscene have suffered from a low level of capital maintenance investment for many years and this has resulted in substantial lengths of the network requiring refurbishment. Customer surveys show that satisfaction with the condition of the City's roads has fallen to 22%, and the most recent BVPI results show that the City's roads are in the bottom quartile nationally for all four highway condition indicators. Although the recent CPA results show the Council as having a 4-star rating overall, the Environment Block, which covers the majority of services included in this Project, continues to achieve only a 2-star rating. The level of resources needed to deal with this problem is beyond the means of the Council.

An absence of investment in the highway network and streetscene will not only frustrate the achievement of the Policy Priorities but will lead to a deteriorating environment, detracting from the value of the huge investment being made by the Council, its Partners and the Government in regenerating the City.

Deliverables and Benefits

Investment in the highway network will lend support to the further regeneration of the City and assist in the achievement of the Council's Vision and Policy Priorities thereby adding value to that investment.

The Project's direct benefits will be improvements to all of the highway assets, including smoother carriageways and footways, lighting which meets modern standards, and a more planned approach to maintenance. As a result of the improvements, numerous indirect benefits will flow, such as reductions in road traffic accidents and vehicle operating costs. Other very real benefits will emerge from improvements in the streetscene, resulting in streets that are well managed and that residents can be proud of.

Approach to the Project and Value for Money

Based on the Council's Vision and market-testing with prospective contractors and funders, the Project will be city-wide and "fence-to-fence" on all adopted roads, and encompass all forms of highway maintenance and soft services, such as street cleaning. This approach to the scope of the Project reduces interfaces and thereby improves value for money.

To achieve its objectives within an affordable and value for money scheme, Sheffield has adopted a solution that focuses on the key outcomes for service users and seeks to sustain rather than improve the average structural condition of the highway. This approach is likely to result in less invasive treatments thereby reducing traffic disruption and offering greater value for money. It will also further enhance the opportunity for the private sector to use its highway maintenance experience and expertise to determine the nature and frequency of treatments to the City's roads in order to best achieve the Council's requirements.

The proposed scope of the Project and the highway maintenance approach to be adopted have been subject to rigorous market testing to ensure both the marketability of the proposals and their value for money. The Council's proposals have been enthusiastically welcomed by the market.

The five criteria - Environment, Economy, Safety, Accessibility and Integration - identified in the DfT's New Approach To Appraisal - have been used to demonstrate that the project will provide overall value for money to the City. To supplement this assessment, and using HM Treasury guidance, the Council has also demonstrated the Value for Money of the Project in qualitative terms (measured against Viability, Desirability and Achievability criteria) and this is supported by a quantitative analysis.

Affordability

The expected cost of the Project has been rigorously tested by means both of a Shadow Bid Model and an Affordability Model that uses Project-life funding flows to calculate the PFI Credit needed.

The Council is seeking a PFI Credit of £674.1 million for the Project which, together with existing Council budgets for this service, and additional resources agreed by Members, will enable the Council to deliver the Project.

Deliverability

The Council has a Project Delivery Team of experienced officers in place, led by a full-time Project Director. Technical, financial and legal advisers have been appointed and all have experience of working on Highway Maintenance PFI schemes either already procured or currently in procurement.

Inventory and condition data have a high degree of completeness and accuracy, and gives the Council a high level of confidence in the deliverability of the Project.

Member and Stakeholder Support

The Project has strong political support from both the Liberal Democrat and Labour groups on the Council. The Project was initially developed under a Labour administration but with the support of the leading opposition group, the Liberal Democrats. Since the change in political control of the Council in May 2008, both parties have continued to support the Project which has a vital role to play in the delivery of the Council's Corporate Plan.

Members have approved the scope of the Project, the Procurement Strategy and timetable, and the resources required to deliver the Project, including significant provisions for contingencies. Authority to procure the Project is delegated to the Project Sponsor, subject to one further report to Members at the time the Preferred Bidder is selected.

The Project has support from its stakeholders across the City who are aware of and welcome the immense benefits that the Project will deliver. Stakeholders, including employees and Trades Unions, are regularly briefed on the development of the Project.

Conclusion

For these reasons and because of its experience in successfully delivering other major, and in some cases, ground-breaking projects, within set timescales and to budget, the Council believes that it is ideally placed to deliver a Highway Maintenance PFI Project and confirms its willingness to continue to work with the DfT, the Transactor and with other Authorities to ensure that the benefits achieved and the lessons learnt from the Project can be utilised nationally.

1 Strategic Case

1.1 Introduction

The Strategic Case gives the background to the Project and describes how it emanates from the Council's Vision and Ambitions and fits with regional and national strategies. The need for the Project is demonstrated and the scope of the Project and how this has been derived is outlined. Finally, the options for the delivery of the Project and the risks, constraints and dependencies of the Project are summarised.

1.2 Background to the Project

Sheffield, with a population of more than 530,000, is England's third-largest metropolitan district, and its setting adjacent to and partly within the Peak District National Park means that Sheffield can be regarded as the country's greenest city. Although as much as 61% of the City is green space, Sheffield boasts a rich industrial and cultural heritage, with an international reputation for manufacturing excellence, quality and innovation, and for many years Sheffield's proud industrial tradition has contributed to the economic prosperity of the country.

A structural realignment of manufacturing industry in the 1970s and 1980s led to massive job losses in the City and, in response to this, Sheffield City Council ("the Council") took major steps to regenerate the City by using Objective One, Housing Market Renewal, Better Homes and SRB Programme funding to generate significant investment in the City. The regeneration programme also led to a transformation of the City Centre that attracted more than £1 billion of investment through public private partnership arrangements, and this renewal of the heart of the city has played a large part in restoring the local pride of Sheffield's citizens.

External perceptions of Sheffield have improved rapidly in recent years and there is evidence of greater investor confidence: office, retail and industrial rents in the City have outperformed national trends in recent years and unemployment, which stood at over 15% in 1984, now tracks the national average.

Sheffield is, therefore, at least as well placed as other comparable cities to withstand the prospective downturn in the global economy and for the Council to continue to take forward the regeneration of the City.

Despite recent investment in the City, the condition of the City's highways remains a challenge for the Council and one which must be overcome if the Council's Vision for the City is to be met. This Project is seen as being "the last key piece in the jigsaw" that is the regeneration of the City, and it is the one project which will allow the benefits from other regeneration schemes, both planned and already undertaken, to be fully realised.

1.3 Description of the Highway Maintenance PFI Project

Sheffield's extensive rural as well as urban highway network is topographically complex and almost 2,000km in length. Other highway assets include 69,000 street lights, over 350 bridges and other structures, and 35,000 highway trees.

The project proposed by the Council is a comprehensive highway maintenance project, the scope of which is described more fully below, and which is designed to

achieve a holistic and co-ordinated approach to the highway and streetscene, creating user perceptions of a seamless service, minimising interfaces and maximising value for money.

The Highway Maintenance PFI Project ("the Project") will encompass the entire adopted highway network in Sheffield. Carriageways, footways, bridges and streetlights will be improved and thereafter maintained throughout the 25-year life of the Project.

1.4 Business Strategy

As Highway Authority, the Council has responsibility within its Community for the highway network which is an important public asset. With a current value of over £2 billion, this is the Council's largest and most valuable asset and, by most measures, the largest publicly owned asset in the City.

However, the Council's long-standing financial legacy issues have meant that the standard of carriageway and footway maintenance has fallen short both of the recommended national standards and of the public's expectations, resulting in high levels of dissatisfaction. Recent surveys show that only 22% of service users are satisfied with the condition of the City's roads.

The proposals for improving the City's highway network and streetscene thus have a vital role to play in achieving the Council's Vision of being a modern vibrant city where people choose to live, invest and work.

In order to achieve its Vision, the Council has highlighted six Ambitions, four of which link closely to the Project:

- Leading Sheffield's Transformation;
- Vibrant, Safe and Strong Communities;
- Protecting and Enhancing the Environment; and
- Putting the Customer first and achieving better Value for Money.

Within these key Ambitions are a number of Policy Priorities which have an important role to play, as described below, in the achievement of the Vision.

1.4.1 Leading Sheffield's Transformation

Within the Ambition of Leading Sheffield's Transformation, the Project links with and will contribute towards the Council's Policy Priorities of creating a setting for investment, providing better transport links and promoting Sheffield as a destination for visitors, businesses and investors.

The Council's ambition is to promote wealth creation by providing the essential conditions for profitable businesses and the generation of jobs and enterprise in the City. Despite its revival over the last ten years, Sheffield's economy still falls short of the national average and that of some other major cities. The present volatility in the world economy makes projections difficult, but Sheffield is at least as well placed as many other major cities to deal with the impact of an economic downturn and to respond to changing economic circumstances.

The highway network is a key asset for the City's economy, accounting for 95% of the movement of people and goods into, out of and around the City. An improved

highway network and streetscene will play a vital role in the economic transformation of the City by promoting and helping to maintain business confidence and attracting investment.

Several important regeneration projects are in progress across the City including the new retail quarter, the final phases of the Heart of the City project, and the redevelopment of the Moor, Tudor Square, the Crucible Theatre, West Bar and the Wicker. In early 2009, Sheffield Digital Campus, a high-tech business centre for companies in the creative and digital industries, will open. Without investment in the highway network and streetscene, these schemes, which are vital to the regeneration of the City, will not realise their full potential.

These regeneration schemes, together with the better transport links created by an improved highway network, will assist in achieving the Policy Priority of promoting Sheffield as a visitor destination and encouraging businesses and investors into the City.

1.4.2 Vibrant, Safe and Strong Communities

The Council's Ambition is that all areas of the City will be places that are attractive and where people want to live. Within this Ambition, the Project links to and will contribute towards the Council's Policy Priorities of creating stronger communities with thriving district and local centres and reducing anti-social behaviour, crime and fear of crime.

To realise this, the City's district centres must become and remain thriving and attractive places in which to live, work, shop and relax. For many Sheffield residents and businesses, the streetscene is their environment, accounting for up to 80% of public open space in some inner city areas. If the streetscene is well-maintained, it gives a message of reassurance and dispels feelings of social exclusion. It also encourages residents to take pride in their local environment and gives a clear signal that the streets and neighbourhood as a whole are managed, thus reducing crime and anti-social behaviour.

The Project will be specified such that each Community Assembly area – see Section 1.4.4 below - will receive an appropriate share of rehabilitation work each year. This will optimise the performance of the network and help to deliver the economic, social and environmental improvement agenda consistently and equitably.

Feeling safe and secure is essential to people's quality of life. The new streetlighting infrastructure to be delivered by the Project will provide a much higher quality of lighting throughout the City. Currently, a high proportion of the high-crime areas in the City are also those with the poorest lighting levels. Research has shown that improved streetlighting levels can lead to a significant reduction in crime and fear of crime as better lighting encourages increased street usage.

1.4.3 Protecting and Enhancing the Environment

The Council is committed to taking local action to tackle climate change and improve the environment, and to finding ways to make it easier for residents to do the same. The Project has a major part to play in the achievement of this Ambition and links with the Council's Policy Priorities of minimising its carbon footprint, increasing

recycling, reducing congestion, providing public transport that is easier for people to use, providing safer roads and creating streets that residents can be proud of.

The environmental impact of the Project will depend upon the Service Provider's methods of working, and proposals for the Project will be evaluated on their environmental impact and energy usage. The Service Provider will be required to minimise the carbon footprint of the highway network across its lifetime by maximising the use of sustainable and recycled materials, minimising the energy demands in design, construction, maintenance and re-use, maximising durability and longevity and taking account of climate change in design by means of lifecycle planning.

One of the key benefits of the Project will be smoother road surfaces, which reduce wear and tear on motor vehicles and reduce fuel consumption, thereby reducing carbon usage.

The Project will bring the condition of the highway network up to an acceptable standard in a manner which strikes a balance between disruption to the day-to-day functioning of the network and its swift rehabilitation. To minimise traffic disruption, the timing of the work will be integrated with other programmes such as utilities mains laying and major economic regeneration projects. The Service Provider will be incentivised to minimise the amount of lane closures required to carry out the work.

Good carriageway surfaces, complemented by clear signage and markings will provide a safer environment for motorists, leading to fewer accidents to drivers, cyclists and pedestrians. Good footway surfaces will result in fewer personal injury accidents. Improved surfaces and lighting will encourage more people to adopt environmentally friendly and healthier forms of transport such as walking and cycling. It will also assist in making public transport more accessible and attractive by improving the lighting around bus stops, and the footway routes used to get to them.

Fully programmed maintenance will demonstrate to the public that the local environment is being properly cared for without the wastefulness of repeated reactive maintenance. The whole focus of the Project is to create streets that residents can be proud of.

1.4.4 Putting the Customer First and Achieving Better Value for Money

The Council's Ambition is to be excellent in all that it does, with excellently run, high performing, and consistently high quality, value for money services for its customers. Within this Ambition, the Project will support the Policy Priorities of customer focus, community assemblies, effective resource management and becoming a modern efficient organisation.

The Council's progress towards achieving excellent services has been recognised by the Audit Commission, who have awarded Sheffield the maximum 4-Star status overall for the third year running. However, the Environment Block, which covers most of the services included within the Project, continues to achieve only a 2-Star rating. The improvements facilitated by the Project will allow the Council to improve this rating to 4-Star.

The Project has been designed to integrate with the processes and projects the Council is using to improve customer focus and equality of access through provision of support to the Council's One Stop Shop and Call Centre. Working in consultation with the Council's Customer Experience project, the Project will develop a protocol for customer consultation and communication of works programmes including refurbishment and rehabilitation schemes, ongoing maintenance and specific improvement projects.

Under proposals for giving local communities a greater choice over the services they receive and a stronger influence over the issues that directly affect them, the Council is currently setting up seven Community Assemblies to replace the existing twelve Area Panels. The Project will work closely with Community Assemblies to ensure that programmes of planned work are fully responsive to local circumstances and to the contents of the Community Plans developed by the Community Assemblies to reflect local priorities and targets.

The Council is continually striving to increase its efficiency so that more money can be spent on improving the services that are most important to residents and businesses. The Corporate Plan recognises that at the top of the list of these priorities is the condition of the City's roads and pavements. The Council's Medium Term Financial Strategy sets an objective of only incurring additional spending which is directly matched to the achievement of Corporate Plan objectives or matched by additional income on an invest to save basis. The Highway Maintenance PFI Project is integral to the achievement of the Council's Ambitions and, in recognition of this, the Corporate Plan confirms that the Council will contribute an additional £9.6 million (at 2007/08 prices) annually from 2011 onwards towards the Project.

1.4.5 Sheffield City Strategy and Local Area Agreement

The Council's Vision, Ambitions and Policy Priorities are reflected in the City Strategy, which is the Council's sustainable community strategy as required by Section 4 of the Local Government Act 2000. The City Strategy is produced on behalf of the Council by Sheffield First Partnership, Sheffield's Local Strategic Partnership, which brings together the Council and the private, voluntary, community and faith sectors to deliver initiatives that will make Sheffield a successful city.

The vision of the City Strategy is for Sheffield to be "a successful, distinctive City of European significance at the heart of a strong city region, with opportunities for all". The following are the main themes of the Strategy which, for the reasons outlined above, the Project can play a part in achieving:

- Strong economy;
- Successful neighbourhoods;
- Inclusive, healthy communities; and
- Environmental excellence.

The priorities set out in the Sheffield City Strategy will be delivered by the Sheffield First Agreement, the City's Local Area Agreement. The Project will assist in the achievement of a number of priority and local improvement targets within the Sheffield First Agreement including:

- Improved street and environmental cleanliness (levels of litter);
- Improved street and environmental cleanliness (levels of graffiti);
- Reduction in people killed or seriously injured in road traffic accidents;

- The number of new business start-ups in Sheffield as recorded by the BETA model;
- New business registration rates;
- Condition of Principal Roads - percentage of local authority Principal Road Network where structural maintenance should be considered;
- Perceptions of anti-social behaviour; and
- Reductions in crime such as assault with injury, serious acquisitive crime and arson incidents.

1.4.6 Government Programmes and Projects

The Project is aligned with wider Government policies such as the 10-Year Transport Plan. It will assist in the delivery of an improved, efficient and well-maintained highway infrastructure by removing the backlog (although the timescales of the Project mean that this will not be fully achieved until 2018).

The Project forms part of the Department for Transport ("DfT") Highway Maintenance Pathfinder Programme. The other projects within this programme are those being developed by the Isle of Wight and the London Borough of Hounslow. The three Pathfinder Authorities represent widely different types of communities and highway networks. The Sheffield Project is the largest of the three Pathfinders in network length and value, and can provide a model for highway maintenance schemes in major cities and other dense urban environments throughout the country. The DfT holds regular Networking and Strategy meetings with the three authorities, in which Sheffield plays a full part, sharing knowledge, experience and good practice wherever possible. Sheffield's Project is currently the most advanced of the three Pathfinder schemes and will, at least initially, play the leading role in testing the potential for the development of standardised PFI Projects in this new sector.

1.5 <u>Drivers for Change</u>

1.5.1 Socio-economic Characteristics

Sheffield has a changing and growing population; its current population of around 530,000 is projected to increase to 600,000 in 2027. Since 2002, there has been a 24% increase in the 20-29 age group and the working-age population is set to grow by 35,000 by 2029. This has implications for economic development and the need to create jobs in the City, especially in a less favourable economic climate than formerly.

Sheffield is rapidly becoming an increasingly ethnically diverse city. The ethnic minority population of the City has increased from 5% in 1991 to an estimated 14% today. As approximately 30% of births are currently of black and minority ethnic children, the ethnic make-up of the City is set to change substantially.

The size of the total primary school age group is expected to increase after 2009 and the secondary school age group after 2016. By 2020 the number of older people in the population will have increased by around 14% from current levels, and the number of over 80s by 23%.

The Council has made great strides in regenerating the City following a loss of a quarter of its jobs in the 1970s and 1980s. Since then, massive economic restructuring has taken place within the City. In the 1970s, 49% of employment was

in manufacturing whereas in 2007 this was down to 12%. Over the same period, the City has diversified and grown its economic base. Between 1995 and 2005 there was an 11% increase in business stock and the service sector now accounts for over 80% of economic activity, with particular emphasis on growth in financial and business services, and creative and digital industries.

The economy in Sheffield is worth around £8 billion (local Gross Domestic Product) and employs over 245,000 people. There are now over 12,000 businesses in the City, a modern manufacturing industry worth £3 billion to the regional economy and a large public sector employment base which accounts for 30% of jobs.

The current diversity of employment in the City means that it will be better placed than some similar areas in the impending downturn in economic activity. A recent report by Cushman and Wakefield, the UK Cities Monitor 2008, showed that Sheffield had risen from fifteenth to tenth in a league table of places offering the best deal for companies looking to relocate, from twelfth to third for the development of "Back Office" functions, such as Human Resources and Accounts, and from fifteenth to fourth in terms of potential for setting up a call centre.

The additional economic activity arising from the delivery of the Project will benefit the area greatly and help to mitigate the effects of the downturn. Employment on highway maintenance will increase considerably from current levels and, as with all infrastructure projects, a strong multiplier effect can be expected, attracting and generating additional economic activity and employment through the many benefits of the Project, such as better maintained transport links and an improved physical environment. This is expected to have a particularly strong effect in the inner urban area given the high student population of Sheffield and the growth of inner city living.

1.5.2 Internal Business Drivers

Like many other local authorities, Sheffield has not been able to invest in highway maintenance at a level sufficient to maintain the condition of the highway infrastructure. This is evidenced by the most recent full set of Highway Condition Best Value Performance Indicators ("BVPIs") which all show Sheffield to be in the lower quartile for metropolitan authorities. To improve this situation and to assist in achieving the Council's Vision, a substantial and sustained increase in investment in the highway infrastructure is required.

The conclusions of a Best Value Review of the Council's highway functions, carried out in 2001, together with the findings of Comprehensive Performance Assessments and stakeholder feedback related to highway issues, all indicate the importance of addressing the condition of the highway network.

Improving the highway infrastructure is a major priority for the Council which, because of the high cost of the work involved, represents a significant resource issue. Through the Council's Medium Term Financial Strategy, huge progress has been made in improving the Council's financial stability in recent years. This includes achieving a balanced budget for the last six years and building up an adequate level of reserves. This improvement has been confirmed by the Audit Commission who, in 2007, concluded that "Strong financial management directs resources to priorities and enables a flexible response to changing needs". As a consequence of this improved financial position, the Council can begin to consider directing additional resources towards improving the highway network but,

notwithstanding this, the scale of improvement required could not be made using the Council's resources alone.

1.5.3 External Business Drivers

Legislation

The Council has numerous legal responsibilities in relation to the highway, and the Project will enable it to better meet these responsibilities.

Under Section 41 of the Highways Act 1980, the Council has a duty to maintain its highways so as to ensure safe passage. This can be more effectively delivered with a planned maintenance regime as proposed by the Project rather than the mainly reactive maintenance which is all that current resources allow.

The Traffic Management Act 2004 requires all works on the highway to be planned and co-ordinated. The additional planning that the Project will require will ensure better co-ordination between the utilities and the Service Provider, and minimise roadwork disruption.

Government Requirements

The Project will assist in meeting a number of wider Government objectives and requirements:

The 10-Year Transport Plan requires authorities to remove the highway maintenance backlog. The backlog could not be removed within any reasonable timescale through the use of currently available resources. However, the Project will enable the Council to complete this over the seven years from the start of the contract.

The Government requires all Highway Authorities to produce a Highway Asset Management Plan ("HAMP") and manage their network in accordance with that plan. The Council has produced a HAMP for its area based on the current availability of resources. The HAMP will be incorporated into a wider South Yorkshire Transport Asset Management Plan. The HAMP details how the network will be maintained using asset management principles. However, for the majority of asset types, the current service standards can best be described as minimum to fair with little prospect of improvement at existing resource levels. Under the Project, a significantly higher standard will be achieved for each asset type by the end of the Core Investment Period ("CIP") allowing the Service Provider to work in accordance with the Codes of Practice for Highways, Structures and Street Lighting.

As part of Whole Government Accounting, the Council is required to value the highway asset and to report on changes in its value over time. At current resource levels, the asset value will decrease, whereas under the Project the value will increase significantly during the CIP and, in relation to the majority of assets, be sustained for the remainder of the contract.

The Project will enable the Council to deliver savings towards the Gershon savings target. Private Sector Efficiencies will be delivered immediately and continue throughout the life of the Project. This will be achieved: partly through economies of scale arising from both the size of the Project and the buying power of the Service Provider, which is likely to include a major construction business as a Consortium

Member and/or Principal Sub-Contractor; partly through innovation in service delivery methods afforded by the scale of the Project and the wider programme of which it forms a part; and partly through more effective procurement thus enabling higher levels of service to be delivered for the available funding.

The resources available for the Project will enable the highway asset to be managed in accordance with Asset Management Planning techniques, which, combined with increased accountability for the value of the assets, will ensure value for money in maintaining assets over the life of the Project.

Regional Objectives

The Project will help the Council to achieve regional objectives. A key element of the Transport Vision set out in the Sheffield City Region Development Programme ("CRDP") is to connect homes and places of work and leisure with sustainable links. The CRDP recognises that to achieve this it is essential that the road network is maintained in a good condition and that the current condition of the network acts as a barrier to the easy movement of the wider workforce, preventing local residents from benefiting from the full range of opportunities for work, leisure and recreation which are present in the City Region. The Project will contribute towards addressing this need.

Yorkshire Forward's Regional Economic Strategy recognises the importance of its core cities and the need for them to drive economic performance. An excellent transport infrastructure, including a well-maintained highway network, is seen as essential to economic performance, and the delivery of the Project will help Sheffield to fulfil its core city role.

1.6 Issues with Existing Arrangements

All of the highway maintenance services covered by the Project are currently delivered in-house by Street Force, the Council's direct delivery organisation.

Street Force was established following a Best Value Review of Highway and Street Services in 2001 which recommended that all highway maintenance services, including street cleaning, should be brought together into one department.

The combined service has now been operating successfully for over seven years, and the integration of services has been strongly welcomed by those contractors and funders who have taken part in the soft market testing carried out by the Council and those who attended its Industry Event, as it will greatly facilitate the transfer of functions to the Service Provider.

Street Force operates from one major depot approximately a mile from the City Centre, together with a number of satellite depots. In terms of the Council's organisational structure, Street Force is one of a number of services located within the Development, Environment and Leisure Directorate. Street Force employs around 780 staff and operatives - see attached Organisational Structure diagram in Appendix 1. The service operates a mixed economy model and uses external sub-contractors for major maintenance works.

Although Street Force provides a good and well-regarded service with the available funding, the current maintenance practices are inefficient, and levels of reactive

maintenance are increasing due to an inability to fund an adequate level of programmed maintenance by conventional means. The need to identify sources of major capital investment to deal with the poor structural condition of the highway infrastructure was highlighted by the 2001 Best Value Review, although the Council's financial position at that time made it impossible to carry out the level of capital investment required. In addition, although a Whole Service Assessment of Street Force in 2003 identified a number of areas of good practice, it also expressed concern that the low level of programmed maintenance being undertaken would lead to the continual downgrading and deterioration of the highway asset and again recommended substantial investment. Since then, the Council has provided some limited capital funding which has been targeted at elements of the network considered to represent the highest risk to the public. This one-off funding does not help with effective asset management planning and long term decision making. The low level of investment in the network has caused a general deterioration in the condition of carriageways and footways as reflected by the most recent full set of condition BVPIs in relation to Principal Roads, Other Classified Roads, Unclassified Roads and Footways which all show the Council's performance to be in the lowest quartile for metropolitan authorities.

The Cushman and Wakefield report referred to in Section 1.5.1 shows that Sheffield has fallen from fifth to ninth in terms of easiest cities in which to travel around.

Current service levels are clearly not sustainable.

1.7 Business Need and Service Gap

The Council's statutory duty under the Highways Act 1980 to maintain the highway network in order to ensure safe passage means that it will be necessary to continue to provide a highway maintenance service for the foreseeable future.

The effectiveness of a highway maintenance service can be measured by three key parameters:

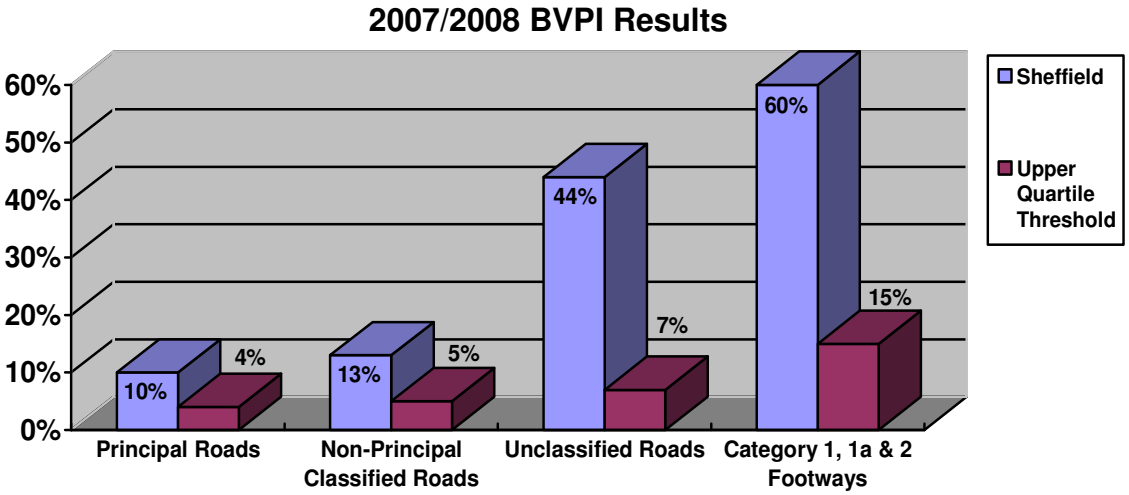
- Asset integrity representing asset value;
- Serviceability in terms of "user friendliness"; and
- User satisfaction with the service provided.

The current and desirable positions for each of these criteria in relation to five major elements of the highway network are described below.

1.7.1 Carriageways and Footways

Asset Integrity

The general condition of carriageways and footways was, until recently, measured and compared nationally using a series of BVPIs which indicated the percentage of the network where structural maintenance should be considered. The table below shows the 2007/08 BVPI results for Sheffield, which all fell into the bottom quartile for metropolitan authorities, and which are compared with the upper quartile threshold for that year.



In all cases, the condition of all categories of Sheffield's roads falls well short of that achieved by the best performing authorities, and these gaps can only be closed by a significant increase in funding for programmed works.

The June 2007 floods caused significant, though localised, damage to Sheffield's highway network. Following close working with the DfT, the Council secured Exceptional Maintenance funding to enable it to repair the damage, and a programme of remedial works is under way to restore the network to its pre-flood condition by April 2009.

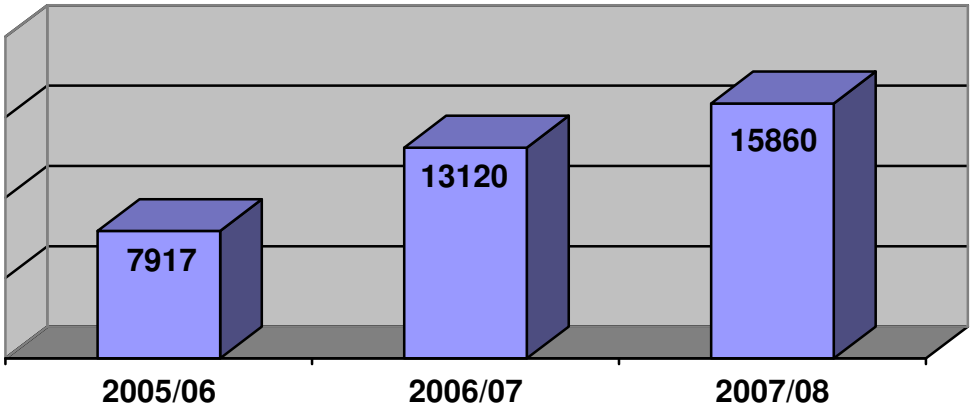
Serviceability
The serviceability or usability of the roads and footways, particularly from the users' point of view, is quantified by several key features:

- safety of surface (e.g. good skid resistance);
- ride quality (e.g. smooth, pothole free surface); and
- aesthetic appearance (e.g. level of patching).

Safety of surface - In terms of skid resistance, the Principal Road Network in Sheffield is tested annually and 7% is currently greater than 0.05 Characteristic SCRIM Coefficient units below the investigatory level. This represents the proportion of the network which should be given priority for remedial service treatment.

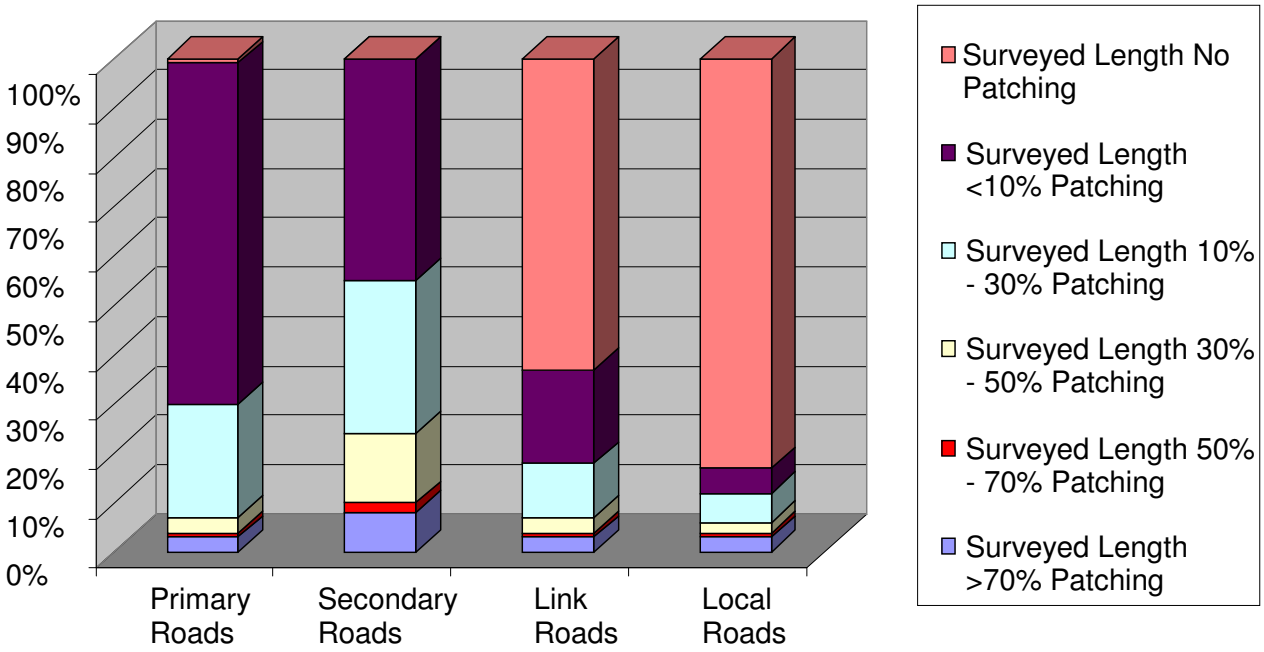
Ride quality - Longitudinal Road Profile has been used as a measure of ride quality. SCANNER results indicate that 10% of 'A' roads and 23% of 'B' roads have road profiles worse than the thresholds contained within UKPMS. Furthermore, an increasing number of dangerous defects are being identified each year. These include carriageway potholes that are greater than 40mm deep. The table below illustrates how the incidence of dangerous defects has almost doubled in Sheffield in the period 2005/06 to 2007/08.

Number of dangerous defects in carriageway



Aesthetic appearance - Patching surveys have demonstrated the following percentages of network sections with different levels of patching for each of the following road categories: Primary, Secondary, Link and Local Roads. Local evidence indicates that if a road has more than 10% patching, public dissatisfaction becomes significant.

PFI Carriageway Patching Network Analysis



The information on link and local roads in the above table is based on a relatively small sample of the network. Surveys continue to be undertaken but early indications suggest that the current data understates the true problem.

The criteria described above do not in themselves provide an appropriate measure to quantify the carriageway and footway improvement required through the Project. The Council has therefore developed a Carriageway Condition Index ("CCI") in consultation with its advisers, in which structural, safety and user-perception parameters have been combined and weighted to create an overall measure of condition appropriate to Sheffield's needs and priorities. A Footway Condition Index ("FCI") has similarly been developed which includes structural, functional and aesthetic components.

User Satisfaction
The most recent Council Household Survey shows that levels of public satisfaction with roads and footways in Sheffield were 22.3% and 33.9% respectively, indicating low levels of satisfaction. The 2008 National Highways and Transport Public Satisfaction Survey, organised by the Highway Works Benchmarking Club on behalf of thirty authorities, found that customer satisfaction levels with the condition of the highway were highest (at 58.4%) in Portsmouth which currently has the only operating PFI scheme in the country. By comparison, the Sheffield customer satisfaction figure (which was the lowest out of all the authorities taking part) was less than half this level at 27.5%.

1.7.2 Streetlighting

Asset Integrity
The table below shows that a significant proportion (69%) of the Council's street lighting columns is now over 20 years old.

Age of Lighting Columns by Type					
Age (years)	**Column Type**				
	Concrete	**Steel**	**Heritage**	**Other**	**Total**
<20		18,500	1,500	1,600	**21,600**
21-30	10,600	12,800		2,000	**25,400**
31-40	6,800	5,400		800	**13,000**
>40	3,800	-		4,700	**8,500**
TOTAL	**21,200**	**36,700**	**1,500**	**9,100**	**68,500**

The age of the lighting stock causes a number of problems. A significant proportion of the Council's columns are concrete. These were installed between the 1950s and the 1980s and have now exceeded their design life. The legacy is that many of these columns and associated brackets now show visible signs of cracking and spalling. Many pre-stressed concrete columns installed in the late 1970s are becoming structurally unsound following corrosion and expansion of the steel reinforcement within them. In addition to being unsightly, there is a potential health and safety risk of concrete falling on vehicles or passers-by, or of the lighting unit collapsing.

Many cast iron columns, included in the "Other" column in the above table, do not comply with current electrical safety standards. Furthermore, in many cases, the attachments used in the 1960s and early 1970s to convert these units from gas or tungsten filament to low pressure sodium luminaires are becoming unstable and in need of removal.

Older steel columns often exhibit signs of corrosion around ground level and have other structural faults which on occasion have led to column collapses. In view of this, columns are being tested, using non-destructive testing methods, to determine the degree of corrosion of the steel. This information, coupled with visual inspections, has enabled the Council to identify and prioritise columns for replacement.

Serviceability
The key aspects of serviceability from the customer point of view are:
- Lighting levels;
- Quality of light;
- Percentage of lights working; and
- Average repair time for identified faults.

Lighting levels - The spacing of the cast iron units and the predominant use of low pressure sodium ("SOX") lighting results in large areas of the highway having insufficient illumination for pedestrians and other highway users. It is estimated that 85% of the existing lighting stock produces lighting levels significantly below European and British lighting standard requirements. In conjunction with the replacement of existing columns which are in poor structural condition, it is intended to introduce a small number of additional lighting columns to ensure that current lighting level design standards are achieved.

Quality of light - Around 30% of lighting units in Sheffield still incorporate SOX sources - see table below. The monochromatic light created by these units has a detrimental impact on colour rendition and consequently on the recognition of objects and people. It is, therefore, desirable that such lighting units be replaced with high pressure discharge light sources or other modern light sources with good colour rendition but, with current budgets, the Council is only able to replace on average 3,600 of these units annually.

Light Sources for Lighting Columns	
Light Sources	**Number**
SOX	20,900
SON	46,500
Other	1,800
TOTAL	**69,200** *

* *This is greater than the number of columns as some units have multiple light sources*

Percentage of lights working - The percentage of lights working averaged 97.3% during 2007/08. In keeping with the results of the best performing lighting authorities, the proposed target level for this Project is 99%. This performance level is currently not significantly below the proposed target level, but this is mainly as a result of the Council directing its expenditure primarily towards ensuring that its streetlights are in-light, at the expense of addressing the problem of ageing columns.

Average repair time - The average repair time for individual faults in 2007/08 where the Council was responsible (BVPI 215a) was 2.75 days which is upper quartile performance for metropolitan authorities. This performance is comparatively high, but again, at the expense of addressing replacement of columns as they reach the end of their design life. With the significant improvement in the quality and condition of lighting equipment that the Project will provide, this repair time should improve even further as the number of faults reduces.

The average repair time for individual faults in 2007/08 where the Distribution Network Operators ("DNO"s) were responsible (BVPI 215b) was 16.41 days which is second quartile performance for metropolitan authorities. Again, this should improve

as a result of the Project, as the scale of the Project and the necessary close working between the Service Provider and the DNO will promote a greater focus and effort on this performance area, which will be incentivised through the Payment Mechanism.

User Satisfaction
The Council's Household Survey in 2006 indicated that the level of public satisfaction with the streetlighting service was 60.3%. The 2008 National Highways and Transport Public Satisfaction Survey, organised by the Highway Works Benchmarking Club, found a similar level of satisfaction with street lighting for Sheffield (63.3%) compared with an overall average for thirty authorities of 67.8%.

Public satisfaction levels usually relate to outage levels and light quality rather than the condition of the stock itself, so the relatively high satisfaction figure is not indicative of the underlying and long-term problem of the ageing lighting stock in Sheffield.

1.7.3 Bridges

Asset Integrity
There is currently no national BVPI measure for Bridges. The CSS (formerly known as the County Surveyors' Society) has developed a Bridge Condition Index ("BCI") and the Council intends to use this as a measure of condition improvement for both the overall stock and at an individual structure level. The current Bridge Stock Condition Index ("BSCI") figures (i.e. BCI at overall stock level), based upon results for 80% of the stock, are shown in the table below, alongside the desirable BSCI figures:

Bridge Stock Condition Indices		
Indicator	**Current (out of 100)**	**Desirable (out of 100)**
$BSCI_{AV}$ (all parameters)	90.5	95
$BSCI_{CRIT}$ (critical components)	84.6	95

These figures demonstrate that the overall condition of the bridge stock is reasonably good. However, the low score for BSCI (critical components) gives cause for concern and justifies the need for the significant level of investment that the Project will deliver.

Serviceability
From a user perspective the key requirements for structures are:
- Structural safety (i.e. no parts in danger of falling off);
- Adequate parapets (in terms of height and strength);
- Full access (no temporary weight restrictions or width limits); and
- Aesthetic appearance.

Structural safety – A weakness of the Council's current regime is that it is reliant on General and Safety Inspections to identify potential safety issues. By improving BCI

levels, the integrity of the stock will be much improved and the risk to the public will be reduced.

Adequate parapets – Existing parapets on many structures do not meet modern standards. As part of the Project, deficient parapets will be upgraded. Furthermore, regular inspections and follow-up repairs will be undertaken to ensure the continued integrity and functionality of parapets.

Full access - There are currently ten structures on the network with a temporary weight restriction. Seven of these structures belong to Network Rail. The non-Network Rail structures will be strengthened as part of the Project and the restrictions removed.

Aesthetic appearance – Whilst the current service includes the removal of graffiti, only limited repainting and cleaning is undertaken. Under the Project, the aesthetic appearance, particularly of key structures, will be enhanced and maintained through improved cyclical maintenance regimes.

User Satisfaction
This service area has not been subject to a public satisfaction survey.

1.7.4 Trees

Asset Integrity
A full survey of all highway trees in Sheffield, undertaken in 2007, found the following age distribution across the stock:

Age Classification of Trees	
Classification	**Number**
Young trees	1,700
Semi-mature trees	7,500
Mature and over-mature trees	25,900
TOTAL	**35,100**

Although all essential safety work identified from the survey has been or will be undertaken by the Council prior to the start of the Project, a large proportion of the mature and over-mature trees (75% of the stock) are now ready for replacement with younger trees of a more appropriate species for use on the highway. This should help to reduce the incidence of tree root damage to footways and private property.

Failure to replace the ageing tree stock would result in an increasing need to remove trees for Health and Safety reasons which would leave unsightly gaps and reduce the City's green cover. There are about 1,000 gaps where over-mature or damaged trees have already been removed for safety reasons, but funding has not been available for replacement. These gaps will be filled as part of the Project.

Overgrown trees can obscure sight-lines and traffic signs, and better maintenance will reduce this safety risk.

Serviceability
Although residents are concerned about the appearance of highway trees in terms of size, shape and spread, of more direct concern is where a tree creates nuisance to an adjacent frontage for a variety of reasons such as trees blocking light, branches overhanging property and trees affecting TV reception. Requests for service to remove such nuisance situations have increased from 2,553 in 2006/07 to 2,895 in 2007/08. With proper management of the tree stock, the number of these service requests should significantly reduce.

User Satisfaction
This service area has not been subject to a public satisfaction survey but the level of nuisance reports highlighted above gives an indication of the public's concern.

1.7.5 Traffic Signals

Asset Integrity
There are 484 signal installations in Sheffield, including 181 pedestrian crossings. The current age profile of the traffic signal stock is set out in the table below:

Age of Traffic Signals	
Age (years)	**Number**
0-5	93
6-10	60
11-15	166
16-20	84
21-25	42
26-30	26
>31	13
Total	**484**

The Code of Practice for traffic control and information systems suggests a life expectancy of 15 years as being the viable limit beyond which major traffic signal components become difficult to source, which can lead to the integrity of the installation as a whole being compromised. Approximately 34% of the current stock is older than 15 years. As no funding is currently available from within Council budgets to replace life-expired equipment, this figure will increase to 61% by the commencement of the Project in 2011. This ageing condition of the stock increases the likelihood of a traffic signal installation being out of commission for an extended period, compromising road safety and the efficiency of the highway network. This adversely affects the Council's ability to achieve its Corporate Ambitions, successfully execute its Policy Priorities and meet some of its statutory obligations under the Traffic Management Act.

Serviceability
The focus of existing budgets is on maintenance activity to keep the signals operating. This is becoming increasingly difficult given the age of the stock.

In 2007/08, there were 724 instances of "all out" signal installations (where the full installation is not functioning rather than just one lamp being out). As the total number of signal sites is 484, this indicates that, on average, there are approaching two failures per site each year, which has led to significant disruption of traffic flows around the City. "All out" failures predominantly occur with older installations.

Despite an annual bulk lamp change, the number of individual lamp failures is also increasing, with 722 replacements required in 2007/08 compared to 647 in 2005/06. This can be a further indication of the poor condition of the ageing stock.

User Satisfaction
There have been no specific surveys of public satisfaction with traffic signals.

1.8 Inventory and Data Collection

The Council's inventory and condition data, particularly for the high value assets, is accurate and either complete or nearing completion – see Appendix 2 for details. This data will be invaluable to Bidders and will enable the private sector to accurately price the work and risk.

100% condition data coverage is available for the entire carriageway network and comprises Deflectograph, SCANNER and Coarse Visual Inspection ("CVI") data as appropriate to the hierarchy of the road network. This already comprehensive data continues to be updated with between one third and one half of the network being resurveyed on an annual basis, thereby enabling trends and deterioration rates to be monitored. 100% SCRIM data is available for the Primary and Secondary Networks.

100% Detailed Visual Inspection ("DVI") data is available for Category 1, 1a and 2 footways (equivalent to 22% of the total footway network). A 15% sample of the remainder of the network has been surveyed using a hybrid DVI methodology. In addition, a new survey based on the Transport Research Laboratory's methodology is now being used to survey the network as this is considered to be a more appropriate survey for the development of the Footway Condition Index. To date, 15% coverage has been achieved using this new methodology and this will be increased to 35% by May 2009.

Carriageway and footway lengths, and some widths, have been physically measured on site. A video survey of the entire highway network has been undertaken and has been used to confirm the widths previously measured on site and to provide data where site measurements are not available.

Principal Inspections of the key structures on the highway network have been completed and no previously unidentified serious defects have been reported.

Full inventory data is available for the stock of street lighting and illuminated signs, together with assessments of current age and condition. The lighting requirement for each street has been determined, including the power variation measures to be specified, thus delivering an improvement in energy efficiency whilst providing the appropriate lighting quality.

Full inventory and age profile data are available for the stock of traffic signals.
All 35,000 individual highway trees have been surveyed and the Council now has a full inventory detailing species, age class, diameter etc.

The digital video survey of the highway network has been used to obtain data on lower value assets such as verges and barriers.

An inventory collection exercise is in progress for non–illuminated signs and street nameplates using the video survey with site validation by the street lighting night survey teams. This work will be completed by January 2009.

Soft market testing has indicated that Bidders are impressed with the current level of inventory and condition data, and will use the video survey as a way of validating the Council's data, reducing their need to carry out site inspections and thus reducing bid costs.

All the above data, including trend data, will be available to potential Bidders in the electronic data room from the start of the procurement process.

1.9 Impact of Not Changing

Failure to invest in the City's highway infrastructure will cause the network to deteriorate further and the Council will find it increasingly difficult to fulfil its legal responsibilities and achieve its Vision and Ambitions. Customer satisfaction levels will reduce further; Sheffield already has very low satisfaction levels as evidenced by the National Highway and Transport Public Satisfaction Survey in which Sheffield was the lowest out of the thirty local authorities surveyed. Fault notification will continue to increase (already 47,000 per year).

In addition, failure to invest in the network will lead to further adverse consequences as summarised below under the New Approach To Appraisal ("NATA") headings:

- *Environmental Impact*
  - The need to undertake increasing numbers of emergency repairs and to impose weight restrictions and lane closures will cause traffic disruption and congestion which in turn will result in increased carbon emissions, poorer air quality and increased noise levels in those areas where traffic is diverted.

- *Safety*
  - Inadequate skid resistance, uneven road and footway surfaces, increasing numbers of potholes and a reduction in light quality due to the need to remove structurally unsound lighting columns will result in an increase in the number of vehicle and pedestrian accidents.
  - Further deterioration of the condition of the main roads leading to lane closures and load restrictions will increase congestion levels on these roads and will displace traffic onto minor roads which will increase the risk of accidents.
  - Reduction in light quality will result in increased crime and fear of crime.

- *Economy*
  - Ride quality will deteriorate which will result in increased vehicle operating costs.
  - Value for money will reduce as reactive maintenance is not a cost effective way of maintaining the network.
  - Business costs will increase as a result of longer and less reliable journeys, which will also discourage new investors.

- The cost of insuring against and meeting third party claims for injuries, and damage caused by the poor condition of the network, will increase.
- Deterioration in the streetscene will discourage investment in the City.

- *Accessibility*
  - Deteriorating carriageway and footway standards will discourage people from walking and cycling and create difficulties for the mobility impaired.
  - Poor lighting levels could increase community severance as people may be deterred from travelling at night.

- *Integration*
  - Fragmentation will result from load restrictions, lane closures or diversion of traffic onto the City's Secondary Road Network due to the failure of parts of the Primary Road Network.
  - Poor signing and lining will lead to increased levels of bus and tram lane abuse resulting in a less efficient public transport service.
  - Reliability of journey times will reduce due to less integration with rail and other forms of transport.

1.10 Description of the Project

1.10.1 Scope

The vision for the Highway Maintenance Project is for a holistic and co-ordinated approach to highway maintenance throughout the City, aiming to create user perceptions of a seamless service, and to restore the streetscene to a quality which meets the Council's Vision.

To achieve this, it is proposed that the Project should be City-wide, and should include all adopted roads, encompass all forms of highway maintenance and extend to a "fence-to-fence" approach.

To determine the services to be included or excluded from the Project, all potential highway maintenance services were identified and assessed by a panel of legal, financial and technical highway practitioners against pre-agreed criteria including: delivery of the Council's Ambitions and Policy Priorities; statutory and regulatory considerations; contractibility of services; market availability and appetite for risk; minimising wherever possible unnecessary interfaces; total contract cost considerations; potential to achieve best value for money; and affordability factors.

Following this assessment, and approval by the Highway Maintenance Project Board of the initial scope of the Project, the Council developed a list of included and excluded services, and used this as a basis for carrying out soft market testing with potential contractors to determine their appetite for the Project. The soft market testing found that potential contractors were enthusiastic and endorsed the proposed scope of the Project as it suited the private sector's strengths, experience and expertise, and confirmed that those services to be excluded were more suitable for direct management by the Council as Highway Authority.

In October 2008, the scope of the Project was approved by the Council's Cabinet. The services to be included in the Project have been categorised as either Core or Non-Core Services. The Core Services are those which will be paid for through a Unitary Charge - a regular monthly amount payable in full where services are

delivered to the specified standard. The Non-Core Services will be delivered by the Service Provider as and when requested by the Council and separate and additional payment will be made for these services.

Appendix 3 lists the Core and Non-Core Services which comprise the Project.

1.10.2 Core Services

The key Core Services which are included in the scope of the Project are set out below:

Carriageway rehabilitation and maintenance
The Service Provider will be responsible for the rehabilitation and maintenance of carriageways. The requirement will be based on a Carriageway Condition Index and the Service Provider will be responsible for determining which roads are to be treated and what treatments are to be used in order to achieve the specified CCI standard. It is expected that treatments selected by the Service Provider could vary from replacement of the black layers to surface dressing depending upon carriageway conditions.

The Service Provider will be responsible for all carriageway asset surveys and inspections, and for keeping records of these surveys and inspections up to date.

The Service Provider will also be responsible for reactive maintenance and for emergency response throughout the contract, although this should be at a significantly lower level than at present as a result of the higher level of programmed maintenance.

Footway, Cycleway and Urban Rights of Way rehabilitation and maintenance
The Service Provider will have similar responsibilities as for carriageways, and the condition of these assets will be measured principally through a Footway Condition Index based on similar principles to the CCI.

Bridges and Other Structures
The Service Provider will be responsible for removing the backlog of identified maintenance work, particularly in relation to bridges, improving the standard of routine maintenance and undertaking Principal and General Inspections. The standard achieved will primarily be measured through a Bridge Condition Index.

Streetlighting rehabilitation and maintenance
The Service Provider will be required to improve the standards of lighting in order to meet the relevant British and European standards. To achieve this, it is expected that the Service Provider will replace around 85% of the City's streetlights during the first five to seven years of the Contract and provide a small number of additional columns in order to improve lighting quality in certain areas.

The Service Provider will be responsible for reactive maintenance of streetlights, including responding to outage reports. As with carriageways, this should be at a significantly lower level than at present as a result of the replacement of older equipment and a higher level of programmed maintenance.

The Service Provider will be responsible for liaising with the electricity suppliers who have a statutory monopoly for making and repairing connections to the mains

supply. This will be particularly important during the early years of the Contract when co-ordination with the electricity suppliers will be vital to the Service Provider's programme, to ensure timely connection of new lighting columns.

Traffic Signals, Signs, Street Nameplates and Road Markings
The Service Provider will be responsible for replacing older traffic signal installations and those that do not meet current standards. In order to achieve this, it is envisaged that up to 40% of traffic signals will be replaced during the first five to seven years of the Contract, with the remainder being replaced in later years. Road signs, markings and street nameplates will be renewed as necessary.

Drainage
The Service Provider will be required to deal with known highway flooding locations and to address new problem areas which may occur in the future. The Project will require the replacement of all old-style gulleys, which are particularly difficult to maintain, and which therefore increase the risk of flooding.

Environmental Maintenance on Highway
Although the Council's requirements will be output based, it is expected that the Service Provider will provide a basic level of service in relation to verge cutting and street cleaning similar to that currently provided. In addition to this basic service, there will be flexibility for Community Assemblies to request additional services at pre-agreed prices.

A number of the environmental maintenance services may be subject to market testing at approximately five-yearly intervals. In addition to confirming the value for money of the services, this will provide an opportunity for the Council to review its requirements and the performance standards achieved by the Service Provider.

The Service Provider will be required to keep verges in repair, which may result in the worst and most regularly damaged verges being protected or hardened.

Highway Trees
A significant improvement in the standard of tree maintenance will be necessary, with large numbers of over-mature trees being replaced by more appropriate species, and others pruned, crowned or otherwise maintained in a safe condition. The Project will allow the highway tree stock to be returned to a more balanced age-profile. The overall number of highway trees across the City will be sustained at current levels.

Winter Maintenance Service
The Service Provider will be required to provide a winter maintenance service at a level similar to that currently provided.

Other activities
There will be a number of other activities which the Service Provider will be required to undertake, such as inspection of Statutory Undertakers' works and dealing with insurance claims (and providing an indemnity to the Council against such claims).

The Service Provider will also be required to act as the Council's "eyes and ears" in relation to Highway Enforcement and will make the initial approach on issues such as stones on verges, A-boards, overhanging vegetation etc.

Programming of Works and Services
The Service Provider will be required to produce annual programmes of work, together with 3-year indicative programmes, having first consulted with Community Assemblies, Statutory Undertakers, the Council's Traffic Manager etc. The Council will have the opportunity to comment on these programmes, and their implementation will be subject to the approval of individual schemes by the Council's Traffic Manager.

1.10.3 Non-Core Services

Non-Core Services will include a range of works and services related to, but not central to, the key obligation to refurbish and maintain the highway network.

Design and Build Service
It is proposed that the Design and Build service currently provided by Street Force in relation to highway schemes, should transfer to the Service Provider who will be required, as and when requested by the Council, to undertake the design and build of Local Transport Plan ("LTP") integrated transport schemes up to an agreed scheme value. Again, as and when requested by the Council, the Service Provider may also be required to provide a design and build service in relation to other highway improvement schemes.

Strategic Assistance
The Service Provider will be required to provide the Council with assistance in civil and other emergencies, such as the floods of June 2007.

1.10.4 Retained Services

The Council will retain a number of highway functions for strategic and policy reasons. These retained services will include Transport Planning and Policy, Road Safety, Development Control, Highway Adoptions, Highway Records, Traffic Information and Control, Highway Regulation (other than the first approach to defaulters, which will be made by the Service Provider) and Highway Co-ordination. Other functions which will remain outside the scope of the PFI Contract are the maintenance of Rural Rights of Way (other than significant structures on these routes), Parking Services, Environmental Enforcement, abandoned cars, and Environmental Education and Community Development. The Council's duties and responsibilities under the Traffic Management Act will also be retained in-house.

The environmental maintenance and cleaning of non-highway land will not be included within the scope of the PFI Contract and the Council is currently carrying out an option appraisal of ways of delivering these services. The reason for this exclusion is the need for a clear focus within the PFI contract on highway services, which have a well-defined and separate identity, and, in particular, have a strongly imposed legal regime codifying and defining what the extent and level of the Council's responsibilities are, in a manner significantly different from its responsibilities for non-highway land.

The Council will retain the right both to allow and to carry out street advertising, and the Service Provider will have no right to advertise on street without the Council's consent.

1.11 Objectives

The overall aim of the Project is to refurbish and maintain the highway network so that it complies with the Council's statutory obligations and meets users' needs for safety, cleanliness and general appearance, facilitates the use of all forms of transport links and improves customer satisfaction.

Key objectives of the Project are to:

- Provide a step-change in the condition of the City's roads within seven years, and sustain that improvement over the remainder of the contract so that the highway remains fit for purpose. Improvements to carriageways and footways will be measured by Carriageway and Footway Condition Indices. Improvements to bridges will be measured through a Bridge Condition Index.
- Make the City's streetscene more welcoming and more widely used. This will be measured using customer satisfaction surveys.
- Ensure safe passage including public and personal safety, and improve road safety, including reducing road traffic accidents. These will be monitored through road traffic accident statistics.
- Encourage greater access to and increase usage of public transport. This will be identified using South Yorkshire Passenger Transport Executive ("SYPTE") public transport patronage statistics.
- Reduce crime and fear of crime. Changes in crime levels will be identified using South Yorkshire Police crime statistics and fear of crime monitored through public surveys.
- Reduce vehicle maintenance and fuel costs. It is intended that local measures will be developed using data collected from maintenance statistics of local HGV and PSV operators, and from surveys of motorists and motor repair service centres.
- Reduce the number and value of liability claims against the Council from trips and slips. This information will continue to be recorded and monitored by the Council, using data collected by the Service Provider, where appropriate.

1.12 Strategic Benefits

The Project will deliver a well-maintained highway network which can play a significant role in the achievement of the four transport Shared Priority themes identified in the 2nd South Yorkshire LTP as highlighted below:

Accessibility – A well-maintained transport network provides access to areas of employment. An attractive and appropriate streetscape, whether in an industrial or in a residential setting, adds to the desirability of the area as a place to work and invest in, whilst improved footways and cycleways promote alternatives to motorised transport.

Congestion – A well-maintained transport network encourages greater use of healthy and more sustainable modes of travel, and a strategic and optimised lifecycle approach will cause less disruption and congestion.

Road Safety – Highway maintenance activities and good levels of illumination contribute significantly to accident prevention and casualty reduction.

Air Quality and Quality of Life – Planned and co-ordinated maintenance reduces disruption and minimises levels of slow moving or stationary traffic, which all have an adverse effect on air quality, noise and the amenity of nearby residents. Improving the quality of the network will also help to achieve a shift towards more sustainable forms of transport.

The strategic benefits to be delivered by the Project have been recognised and confirmed by several of the Project's key stakeholders. In their letter of support for the Project, SYPTE acknowledge that the Project will make bus use more attractive by delivering improvements that will benefit passengers walking to and from bus stops, waiting at bus stops and whilst travelling on the bus. The role the Project will play in encouraging use of public transport and walking, and the consequent positive impact on health, is also recognised in the letter of support from Sheffield Teaching Hospitals.

Similarly, the benefits of the Project have been acknowledged by Sheffield Hallam University which notes in a letter of support for the Project that it relies heavily on staff and students travelling to and from its various sites and that the quality of transport infrastructure is often a determining factor when students are deciding which University to attend.

The improvements in the condition and skid resistance of the City's roads and the part these improvements will play in reducing road traffic accidents is acknowledged in the letter of support from South Yorkshire Police. They also note the role of improved streetlighting in providing public confidence in using the street environment and thereby deterring criminal activity.

These letters, together with letters of support from other Council Partners in the City, are attached at Appendix 4.

1.13 Key Stakeholder Requirements

The key requirements for some of the principal stakeholders of the Project are:

- Smooth carriageways and footways;
- Well-lit streets;
- Well-signed roads;
- Litter-free environment;
- Clear road markings;
- Free-draining highways; and
- Good tree cover.

Specifically:

- Residents require a well-lit, aesthetically pleasing environment;
- The business community requires a highway network which enables journey and delivery times to be reliable;
- Visitors to the City require an attractive streetscene and clearly signed roads;
- Potential Investors require a combination of the above three requirements;
- Bus operators and users require smooth carriageways to make their journey more comfortable and also well-lit and well-maintained footways to improve the safety to, from and at the bus stop;
- Car and HGV drivers, and emergency services require well-maintained and well-signed carriageways;

- Pedestrians, especially the elderly, those with any form of mobility limitation, and those with young children, including those using pushchairs, require smooth footways; and
- Cyclists require smooth road surfaces that are free from potholes and uneven ironwork.

1.14 Options

Prior to the submission of the Original EoI in September 2006, the Council, in conjunction with its advisers, examined a wide range of Project options to assess their potential to assist in the achievement of the Council's Ambitions and Policy Priorities.

1.14.1 Original Options

The options selected for appraisal at the Original EoI stage were primarily based upon the Portsmouth and partially completed Birmingham projects, which both use a Network Condition Index ("NCI") with the intention of improving the average highway condition to that defined as "Fair". A number of other options were included in the appraisal for comparison purposes.

The review of options was carried out using the best practice Options Appraisal Guidance from the 4ps and the Council determined the following options as being the most appropriate for comparison:

- Do minimum (defined at that time as the level of service achievable with the current level of expenditure);
- Spend at estimated Formula Spending Share ("FSS") across the whole network (as current levels of expenditure are significantly below the estimated FSS levels);
- Primary elements of highway network improved and maintained to the defined NCI Fair condition;
- Tertiary and Secondary elements of highway network improved and maintained to the defined NCI Fair condition; and
- Whole network improved and maintained to the defined NCI Fair condition.

In addition to the above options, the Council also considered but rejected a number of further options. A true "do nothing" option was discounted as it would not allow the Council to fulfil its Statutory duties. An option which provided highways to the higher NCI "Excellent" standard was also discounted as there was an element of "gold-plating" in this option which substantially increased the cost of the Project without providing additional benefits, hence reducing value for money.

The options analysis at that stage resulted in the "Whole network to NCI Fair condition" being identified as the initial preferred option. However, it was recognised in the Original EoI that this would require a very high proportion of the total PFI Credits available nationally for the Pathfinder projects, and the Council therefore put forward in its Original EoI the idea of phasing the Project in order to improve affordability to the DfT.

1.14.2 Phasing Options

Subsequent to the submission of the Original EoI, the Council considered, in some detail, a number of phasing options. Options such as geographical phasing would not meet the Council's Strategic Objectives and were eliminated early, but the following two options for improving the network to full NCI Fair condition were developed to a level at which the Council could evaluate their likely benefits and disbenefits:

Option A – improvements to the Secondary and Tertiary Highway Network in a first phase, followed by improvements to the Primary Network in a second phase. The order in which the improvements were to take place in this phasing option was selected because the Secondary and Tertiary Networks are in a poorer condition relative to the Primary Network and their improvement, therefore, would have a greater impact on the achievement of the Council's Vision;

Option B – an incremental approach to improving the whole network in two phases, first to a lower average level than NCI Fair and then to the NCI Fair Condition itself.

These were both good engineering solutions which would provide the Council with a high level of benefits in safety and other terms. Furthermore, the outcome at the end of the second phase of either option would have been equivalent to that for the Original EoI proposal. However, a phased approach would have a number of drawbacks including interface and procurement issues, lower value for money and concerns related to the level of certainty and timing of the second phase. In view of this, the Council's attention turned to developing a new approach which would provide better value for money and improve affordability, thereby removing the need for a phased solution.

1.14.3 Development of New Approach

The Original EoI proposal and both phased options all had a major emphasis on improving the structural condition of the Primary Network as measured by Deflectograph. This requirement could well have necessitated a Service Provider undertaking significant quantities of full carriageway reconstruction, including the replacement of the sub-base layer, which would lead not only to high cost but also to high levels of disruption and would also be environmentally unsustainable.

To test whether there were any feasible alternative approaches to delivering the Project which not only reduced costs but also reduced disruption and was more environmentally friendly, the Council held a number of internal workshops, including engineers, accountants and technical advisers, and carried out a desktop review of international best practice. The process was designed to challenge the assumptions used to date and to focus on "What is important to a city such as Sheffield?".

The outcome was a list of key technical requirements and outcomes for highway users. These were:

- increased safety – measured by skid resistance;
- improved ride quality – measured by transverse and longitudinal road profile;
- acceptable visual appearance of the road surface – measured by levels of patching; and
- low levels of road surface defects – measured by SCANNER or standard UKPMS visual inspections.

This led to the development of a new approach, the focus of which is on delivering these outcomes through less invasive and therefore less disruptive treatments. As an example, where the Original EoI proposal would have required significant levels of full reconstruction of the Primary Road Network, the new approach would be more likely to lead to replacement of only the asphalt layers, with full reconstruction including the sub-base only occurring in isolated soft spots. This is a more realistic reflection of good engineering practice in an urban environment.

The new approach has been developed with the support of a UKPMS expert, PCD Systems Limited, and a letter of support from PCD Systems Limited is attached at Appendix 5. The new approach has also been tested with potential Bidders through soft market testing. Strong feedback has been received that the approach provides a better value for money solution more suited to a dense urban environment.

This approach will achieve the same high level of service in terms of skid resistance, ride quality and visual appearance as the Original EoI proposal, but at a more affordable cost. To ensure that the Service Provider's focus is not solely on the surface layers of the highway, there will be a separate requirement to ensure that the average structural condition of the network, as measured by Deflectograph, does not deteriorate below the current level. Through this approach, the asset value of the underlying layers will be sustained and there will be a significant increase in the value of the upper layers.

This new approach formed the basis of the Updated EOI submitted by the Council in February 2008. This approach has been further developed since that time and is the Council's Preferred Option – see Section 2.

For the purposes of comparison and assessment, the Preferred Option is compared in Section 2 with a revised Do Minimum Option as part of the Option Appraisal for this OBC. The revised Do Minimum Option has been defined as one which stabilises the current condition (as measured using the new approach parameters). This provides a more feasible alternative for comparison with the Preferred Option than the original Do Minimum Option, which assumed that expenditure on highway maintenance would continue at the current level with the inevitable deterioration in the condition of the highway network.

1.15 Risks

The Project Development Team held a series of workshops to produce Risk Registers for the operational and the development phases of the Project.

The first stage of the process to produce the Operational Risk Register was to identify a long-list of risks associated with the delivery of the Project based on the 4ps Risk Register developed for a range of different types of PFI/PPP projects in the local authority sector. Risks were grouped under appropriate headings including Core Investment Period Phase, Lifecycle Phase, Operation Phase and Financial risks.

The long-list of risks was then considered at a risk workshop and assessed against local and project-specific circumstances, adding or removing risks where necessary, to result in a short-list of about 430 risks. The likelihood and impact of each of these

shortlisted risks was then assessed as high, medium or low and the basis of the base cost to be used for quantification agreed.

In preparation for the quantification process, the short-list was further reduced to around 50 principal risks, by removal of all risks initially assessed as low or medium impact and likelihood.

A copy of the Operational Risk Register is attached at Appendix 6 together with a summary of the major operational risks.

Details of the processes followed to develop the Risk Register for the development phase, the Project Risk Register, are described in Section 5.8.

1.16 Constraints

The Council has identified the following constraints within which the Project must be delivered:

1.16.1 Traffic Disruption

A key constraint affecting the Project is the level of traffic disruption which may be caused by undertaking the improvements on the highway network required to deliver the Project. This applies particularly during the CIP, when the most intensive work to the Primary Network is likely to be taking place.

In view of this constraint, when developing the various options for the delivery of the Project, detailed consideration was given to the potential disbenefits to users from the likely increased traffic disruption during the implementation of the Project.

Many of the early options considered by the Council had a major emphasis on improving the structural condition of the Primary Network, potentially necessitating a Service Provider to undertake significant quantities of full carriageway reconstruction, and thereby leading to high levels of disruption. As an example, the most intense option would have required around twenty-five major highway maintenance works on the Primary routes at any one time during the CIP, whereas the Council has found that traffic disruption across the City can become unacceptable if the number of such works rises above the range of three to five.

The Council has significant experience of dealing with events with a potential to cause disruption, such as the construction of the Supertram and Inner Relief Road schemes. Even if such events are well managed and directly affect only a minor proportion of the network, the resulting traffic disruption inevitably becomes more widespread in a dense urban environment. For this reason, it was felt important in comparing implementation strategies, to include a measure of this likely disbenefit to users and this has been incorporated into the NATA Benefit to Cost Ratio ("BCR") calculations used by the Council in its Updated EoI and in this OBC. These calculations highlighted that the disbenefit of traffic disruption was significantly reduced by the use of the Carriageway Condition Index proposed by the Council rather than indices which placed heavy reliance on the structural condition of the network.

The identification of this constraint in the development stages of the Project and the subsequent remodelling of the scheme to an approach which minimises the impact

of the Project on traffic disruption has placed the Council in a position where this constraint can be more readily managed.

1.16.2 Resources

A further constraint on the Project is the requirement to deliver the Project within the identified affordability envelope set by Members.

In October 2008, the Council reconfirmed its commitment to provide additional resources of £9.6 million to the Project in addition to Transport and Highways annual budgets of £27.1 million (both figures at 2007/08 prices and subject to annual inflation increases).

The detailed work carried out by the Council in developing its Shadow Bid Model, including the contingency levels built into this and the Affordability Model has given confidence that the Project can be delivered within this constraint.

1.16.3 Traffic Management Act

A potential constraint was the impact of the introduction of the Traffic Management Act ("TMA") regulations including those allowing the introduction of permit schemes. After discussion with the Council's Traffic Manager and consultation with potential Bidders, it was decided that this constraint should be eliminated by excluding TMA functions from the scope of the Project.

1.17 Key Assumptions

This OBC is underpinned by Shadow Bid and Affordability Models based on a number of assumptions developed by officers in consultation with financial and technical advisers, and designed to work in the context of the Council's wider financial strategies.

The key assumptions fundamental to the financial evaluation of the project are:

- Affordability – This has been tested through the development of a Shadow Bid Model and applying sensitivities to this model to further test the robustness of the forecasts.
- Value for Money – This has been assessed using NATA to ensure that the level of expenditure assessed as necessary to deliver the Project provides an adequate return to society in financial and other terms.
- Availability of bank funding in the current economic climate – While it is clear that the Project cannot be guaranteed to attract funding in the current economic conditions, an assumption has been made that there will be a return to more normal conditions in the PFI funding markets by the time the Project is due to reach financial close, albeit with potentially tighter credit conditions and higher funding margins. Financial assumptions have been amended and tailored accordingly to allow for this presumption, including a degree of conservatism to make some allowance for current market volatility.
- Market appetite for the Project – This has been tested through several rounds of soft market testing, both to promote the Project and to ensure that there is a fit between the requirements on the Private Sector and the Project needs, and to test the Private Sector's desire and ability to respond to a call for bids.

- Credit risk on contractors and funders – This has been assumed to be greater for the Project than would, for instance, be the case for a PFI accommodation contract, given the higher level of risk to the Private Sector in respect of lifecycle work and costs in a long-term maintenance-based contract. This has led to the financial assumption that funders will require significant levels of reserves within the Special Purpose Vehicle ("SPV"), not only for debt service, but also for ongoing lifecycle maintenance purposes, together with higher than normal levels of banking ratios. The requirement for conservative funding assumptions has been further accentuated by the recent adverse movements in the general economic climate.

1.18 Dependencies

The factors upon which the successful delivery of the Project depends are:

1.18.1 External Dependencies

Statutory Undertakers
To enable the Project to fully realise its benefits, it is vital that the works to be undertaken are carried out in consultation with the Traffic Manager and take into account the Statutory Undertakers' programmes of works.

Stakeholder Support
The support and co-operation of stakeholders is vital to the delivery of the Highway Maintenance PFI Project, particularly during the operational phase of the Project when work on the improvement and maintenance of the Highway network is under way.

1.18.2 Internal Dependencies

Political Support
The Project has received the continuous and unanimous support of the Liberal Democrat and Labour groups within the Council, which together currently make up 81 of the 84 seats on the Council. Successful delivery of the Project depends on this continued political support.

Availability of Internal Resources
In July 2006, the Council approved a development budget of £3.3 million for the initial development of the OBC. In October 2008, a further £6.0 million was added to cover procurement costs through to contract signature.

In addition to the provision of financial resources to deliver the Project, continued support at a senior level within the Council is also vital and this is exemplified by the appointment of John Mothersole, Chief Executive, as Project Sponsor.

Interface with Other Council Projects
The key Council projects that this Project interfaces with are the Non-Highway Maintenance project and the projects included in the Outstanding Sheffield Programme ("OSP"), particularly the ICT project and the Customer Experience project – see Section 5.5.2.

1.19 Summary

The Project will fulfil the very clear need for a step-change improvement in the condition of Sheffield's highway network, is a key element in the City's strategies and will complement the City's regeneration schemes. The scope of the Project is comprehensive, as is the detailed inventory and condition data. A wide range of options has been considered for the delivery of the Project, including a new approach which is well-suited to a dense urban environment and minimises traffic disruption. All key Project risks, constraints and dependencies have been identified.

2 Economic Case

2.1 Introduction

The Economic Case describes how the wide range of options identified in the Strategic Case has been appraised and a Preferred Option selected. The Preferred Option is compared in value for money terms with a sustainable Do Minimum Option. All benefits of the scheme are identified and a Shadow Bid Model is described in detail and compared with a Public Sector Comparator.

2.2 Economic Options Appraisal

As described in Section 1.14, the Council, in conjunction with its advisers, has examined a wide range of options for delivery of the Project, and assessed the ability of each of these options to assist in the achievement of the Council's Ambitions and Policy Priorities.

This process began with the consideration of a long list of options at the Original EoI stage and continued as part of the ongoing development work that the Council and its advisers undertook between submission of the Original EoI in 2006 and submission of the Updated EoI in February 2008.

The Preferred Option identified in this OBC is closely based on the Preferred Option identified in the Updated EoI, but the comparator Do Minimum Option has been refined from being the best achievable with current levels of expenditure to a more sustainable Do Minimum Option which would involve additional expenditure but achieve a steady-state position for most measures of highway asset condition, albeit at the current poor condition.

Appendix 7 sets out and describes the options assessed, and summarises the Council's and its advisers' views on the options, and the rationale for selecting the Preferred Option and eliminating the other options.

The Preferred Option is then taken forward to the NATA benefit cost analysis for comparison of its value for money with the "sustainable" Do Minimum Option – see Section 2.3.

The options summarised in Appendix 7A are those considered as part of the development of the Original EoI. The Do Minimum Option shown in this table is the original comparator with expenditure at current levels, and, as such, the benefits of undertaking the Preferred Option include an allowance for the deterioration of the network over the course of the contract.

Having determined that options which did not increase spending or did not cover the whole network were unlikely to achieve either Project objectives or were unfeasible for other reasons, the Council, during the period when it was developing its Updated EoI, examined a number of options for delivering a whole network project, including a number of means of phasing the delivery. These are summarised in Appendix 7B, together with descriptions and reasons for rejection where applicable. Also shown is the sustainable Do Minimum Option, which would involve increasing expenditure on capital and lifecycle works by around £5 million a year but without PFI funding.

More detail of the process of identifying options and selecting the Preferred Option is set out in the Strategic Case of this OBC, where the Preferred Option is also described in further detail.

2.3 Value for Money

In accordance with NATA, the benefits and costs of the Preferred Option have been assessed against Central Government's five objectives for transport:

- Environmental Impact;
- Safety;
- Economy;
- Accessibility; and
- Integration.

An Assessment Summary Table ("AST") has been compiled and is attached at Appendix 8B. This provides details of the financial and non-financial costs and benefits of the Project. Where it has not been possible to monetise a potential benefit (for example reductions in noise pollution), a commentary describing the likely qualitative impact of the Project has been included.

The cost and benefits that are monetised are the incremental values above or below the associated cost or benefit in the realistic and sustainable Do Minimum Option. This Do Minimum Option would involve additional expenditure sufficient to halt the decline in carriageway and footway surfaces and keep other highway assets, such as streetlights and traffic lights, at their current performance levels. On this basis, it is assumed that the benefits identified and measured in the AST would not show deterioration throughout the period of the Project, although such factors as general and specific inflation, traffic growth and the expected general decline in accident rates (through increased vehicle safety and other safety measures) have been taken into account.

The costs included as part of the evaluation are the Council's best estimate of the costs of the Project, after taking into account potential private sector efficiencies and an uplift for Pre-Final Business Case ("FBC") optimism bias, to allow for potential underestimation of the costs. The costs have also been uprated by the Webtag factor of 20.9% to allow for the effects of taxation.

Highway maintenance is a comparatively new field for the estimation of BCRs, and the Council has held internal workshops and discussions with external advisers, and conducted desk-top reviews of international practice in measuring the benefits of highway refurbishment and maintenance to determine what benefits may arise from carrying out the Project and which of those benefits are quantifiable. These, therefore, differ somewhat from those which would apply, for instance, to a transport scheme involving the construction of a new element of highway infrastructure, such as a new highway structure or new transport link.

The main benefits of the Preferred Option over the Do Minimum comparator that the Council and its advisers have identified as a result of this process and which they consider can be monetised are, in order of value:

- A reduction in Vehicle Operating Costs for all vehicles using the City's roads, as smoother roads will cause less wear and tear on tyres and suspensions, and reduce servicing intervals, servicing costs, depreciation and fuel consumption;

- Improved skid resistance, signage, road markings and streetlighting, which will improve safety and therefore reduce Road Traffic Accidents for all users;
- Improved streetlighting, which will help to reduce night-time crime; and
- Improved carriageway and footway surfaces, which will help to reduce trips, slips and other accidents and injuries, including those giving rise to Public Liability claims against the Council.

Acting against these benefits is the disbenefit of the traffic disruption arising from the implementation of the Project, particularly during the CIP, when the most intense highway refurbishment works will be taking place. The choice of the Preferred Option has been strongly influenced by the desire to minimise this disruption, and the cost to society of the initial increase in traffic disruption has therefore been counted as a disbenefit of the Project and its estimated cost deducted from the value of the benefits.

The outcome of the NATA exercise is that the Preferred Option is estimated to have a BCR of 5.1%, based on conservative estimates of benefits achievable. This is considered to be a very satisfactory level of BCR and clearly demonstrates that there is significant value for money to society in carrying out this Project.

Details of the principal assumptions made in estimating the costs and benefits of the Project are set out in Appendix 8A. The costs and benefits have been calculated using a spreadsheet model incorporating these assumptions and, by varying the assumptions in the model, the sensitivity of the BCR calculation to changes in these assumptions has been tested. Key sensitivities have been calculated and are included in the table below:

BCR Sensitivities	
Sensitivity	**BCR**
Base Case	5.1
Delays caused by congestion increased by 100%	4.7
Vehicle Operating Cost savings reduced by 50%	3.7
Crime reduction reduced from 25% to 10%	4.5
Reduction in skidding accidents (non special conditions) from 50% to 10%	4.3

These sensitivities demonstrate the robustness of the BCR for the Project with the lowest BCR outcome being 3.7, even with a 50% reduction in one of the major benefits of the Project.

2.4 Benefit Identification

Both direct and indirect benefits of the Project have been identified and these will be measured throughout the Project.

The direct benefits will be improvements to the highway assets. These will include: improved surfaces to carriageways and footways; repairs to and improved maintenance of bridges and other structures; replacement and modernisation of streetlighting, traffic lights and illuminated signs; and replacement and better maintenance of highway trees. All these and the other direct benefits will be included in the Payment Mechanism, self-monitored by the Service Provider (with checks by the Client Function) and subject to monetary deduction for failure to achieve required standards.

Indirect benefits will include the quantified and unquantified benefits shown in the BCR calculations – see Section 2.3 above and Appendix 8.

The quantified indirect benefits will include reductions in: vehicle operating costs; road traffic accidents; night-time crimes; and public liability claims and related incidents. These will be measured through examining trends in data produced by the Council and the Police and by other bodies such as insurance companies and motoring organisations.

The unquantified indirect benefits of the Project will include: improvements in the streetscene; encouragement for pedestrians to use the streets more; and increased usage of public transport. These benefits will be measured principally through public satisfaction surveys with questions aimed at assessing public views both before and after the highway improvements take place.

The responsibility for measuring benefits will lie with the Council's Client Function for the Project (using data captured by the Service Provider where applicable). The Client Function will be under the leadership of a Contract Manager who will be appointed during the procurement phase of the Project. A key responsibility for the Contract Manager will be establishing systems and protocols for assessing and realising benefits through capturing data and measuring trends against highway expenditure and improvements.

2.5 Financial Model

The Council, along with its advisers, have produced a detailed Shadow Bid Model for the Project. This model estimates the work required and cost of that work to meet the Council's required standards and seeks to replicate a commercial bid that the Council and its advisers believe a Bidder would submit given the requirements of the Project and the risk allocation matrix developed to date.

The Council and its advisers have been closely monitoring the recent turbulence in the financial markets and its potential effect on the Project. The economic assumptions used in the Shadow Bid Model therefore make an allowance for stricter covenants when the funding market returns to a more "normal" level of activity and with allowances built in for the newness of the Highway Maintenance sector in the UK.

The following appendices give details of the results of this modelling exercise:

- Appendix 9 - Estimated Cost of Required Work; and
- Appendix 10 - Financial Model Summary and Assumptions.

The output of the Shadow Bid Model is a series of estimated Unitary Charge amounts, which are used to estimate the affordability of the Project – see Section 4.3 and Appendix 11.

[Two paragraphs and one table removed for reasons of commercial confidentiality]

2.6 Public Sector Comparator

The Council has considered available options for delivering the proposed level of investment for its Preferred Option. These included the potential use of prudential borrowing. However, the level of commitment included in the Council's Medium Term Financial Strategy for all the Council's resources means that it would not be possible for the Council to allocate the level of resources required to deliver this Project with conventional funding. As a consequence, the Council has evaluated the feasibility and value for money of a PFI solution. A PFI Shadow Bid Model has been produced and a detailed explanation of the methodology used is given in Appendix 10.

The scope of the Preferred Option, its size and the required outputs have been assessed against agreed value for money criteria to ensure that the Preferred Option is likely to provide value for money for the public sector.

First of all, a Qualitative Assessment was made of the value for money of the PFI option. This is set out in Appendix 12 and demonstrates that a PFI contractual arrangement is a feasible and practical solution to meeting the Project objectives.

To demonstrate that value for money will be achieved through PFI procurement, the Council also carried out a Quantitative Assessment to compare the PFI option with a Public Sector Comparator ("PSC"), using the HM Treasury Value for Money guidance issued in August 2004, by identifying, allocating and valuing risks in the PFI Option between the public and private sectors.

Risk identification for the PFI Option was carried out by the Project Development Team at a series of workshops - see Section 1.15 and Appendix 6. Having identified these Project risks, an analysis of the impact cost, probability of occurrence and time-discounting factor have been determined for each risk. An assessment of which party, the Council or the Service Provider, can best manage each risk under a PFI delivery has then been undertaken. When both parties working together can best manage the risk, it has been shared between them. The matrix attached at Appendix 6 identifies the proposed allocation of risks between the Council and the Service Provider. As can be seen, all major operational risks will be transferred to the Service Provider.

Most likely, best case and worst case likelihood percentages were then agreed for each risk. Some risks were removed from the principal list of risks during this assessment process, resulting in the inclusion of approximately 20 principal risks in the quantified Risk Register.

Base costs, at 2011/12 prices, were input into the Risk Register and the agreed percentages for impact and likelihood of each risk applied. The most likely, best case and worst case effect of each principal risk was then assessed.

A Monte Carlo Analysis of the outputs from the risk workshop for the CIP and Lifecycle phases was carried out and the annualised risk values calculated. Using this analysis, the expected value of the risks to be allocated to the private sector under the PFI procurement model, but retained by the public sector under the PSC model, has been added to the base cost of the PSC, within the HM Treasury Value for Money model, to give a true comparison of the costs of the two procurement

routes, and the expected cost of the retained private sector risks under the PFI Model provided for within the affordability calculations.

[Two paragraphs removed for reasons of commercial confidentiality]

2.7 Summary

The Preferred Option is shown to be very good value for money, with an estimated BCR of 5.1, and significant savings compared to a Public Sector Comparator. Key benefits of the scheme are savings in vehicle operating costs and reduced road traffic accidents, as well as less quantifiable benefits such as improvements to the streetscene.

3 Commercial Case

3.1 Introduction

The Commercial Case describes how the Procurement Strategy and the indicative Project Timetable have been developed and how the market for the scheme has been tested and stimulated. The way in which risks are proposed to be allocated between the public and private sectors is described, as are the proposed Output Specification and Project Agreement. Finally, the Human Resource implications of the Project and the proposed arrangements for Contract Management are outlined.

3.2 Output Specification

The Council's key requirements for the delivery of both Core and Non-Core Services will be set out clearly in a specification, detailing in output terms what the Service Provider will be required to provide and achieve. The Output Specification will be backed by a Payment Mechanism which will specify the response and rectification times allowed for the Service Provider to correct any failures, and permit the Council to apply financial deductions if those time periods are not met. This will incentivise the Service Provider to meet the performance standards set out in the Output Specification and to correct any failures as quickly as possible.

The Output Specification will consist of individual chapters covering each major asset type or service and will set out requirements for both the CIP and the remainder of the contract as appropriate. A further chapter will cover more generic issues such as contract management. The Output Specification will be completed and made available to the Bidders at the start of the procurement process.

A list of the Core and Non-Core Services is set out at Appendix 3. Key aspects of the Output Specification are described in Appendix 14.

3.3 Procurement Strategy

3.3.1 Appraisal of Procurement Options

The Project Delivery Team held a workshop to determine the appropriate procurement process for the Project. The issues discussed at the workshop included generating interest in the market, capacity of organisations in the industry, encouraging innovative tenders, the complex nature of the Project, necessity for negotiation with Bidders and the different procurement processes that could be used to maintain the element of competition whilst still having the ability to negotiate with Bidders to ensure that a value for money solution is procured.

The Council considered available options for delivering the proposed level of investment for its Preferred Option and concluded that PFI is the best route for achieving the Council's strategic objectives for maintaining the highway infrastructure. All core requirements for the Project can most naturally be specified in output terms, there is an established market for the types of works and services required and an appetite for the particular works and services of the Project and for delivering them through a PFI contract. Furthermore, modelling has demonstrated that PFI can deliver a value for money solution for the Project. As a consequence, the Council has evaluated the feasibility and value for money of a PFI solution.

Previous PFI projects procured by the Council have used the Negotiated procurement process. However, the Public Contracts Regulations 2006 and EU Directive 2004/18/EC, now require that local authorities use the Competitive Dialogue process when procuring particularly complex projects, defined as those where the technical means to satisfy the needs or objectives of the authority or the legal and financial make-up of the project cannot be fully specified. It is likely that all PFI contracts in the UK will fall within this definition and, in accordance with procurement law, the Council intends to procure the Project using the Competitive Dialogue procedure.

3.3.2. Commercial Interest

Soft Market Testing

The Council has undertaken a number of rounds of soft market testing meetings with potential contractors and funders for the Project. Initially these meetings were used to develop the scope of services and to test the methodology for measuring the condition of the highway asset. As the Project has developed, soft market testing has become more detailed and discussions on how the Council proposes to procure the Service Provider have been addressed.

The procurement strategy and the proposed Project timetable were discussed in detail with contractors including:

- Justification for the use of the Competitive Dialogue process;
- The successive tender stages of the Competitive Dialogue process;
- The proposed structure, required attendees and nature of dialogue meetings;
- The evaluation award criteria and process;
- The process for de-selecting solutions;
- Commercial confidentiality;
- The use of IT systems to support the process; and
- The experience of the procurement teams supporting the Council and the Bidders.

The views and experiences of the potential contractors have been taken into account when refreshing the Project timetable which is attached at Appendix 15 to this OBC - see Section 3.8.

A list of organisations taking part in soft market testing is included at Appendix 16, and copies of letters of support from potential Bidders are attached at Appendix 17.

Stimulating the Market

A Prior Information Notice ("PIN") was published in the Official Journal of the European Union ("OJEU") in August 2008, and a copy is attached at Appendix 18. Organisations responding to the PIN received an Information Pack – see Appendix 19 – and an invitation to attend an Industry Event hosted by the Council, which took place in September 2008. At the Industry Event, presentations were given by the Project Sponsor outlining the economic and social position of Sheffield and illustrating how the Project will help to deliver the Council's strategic and economic ambitions for the City. The Deputy Leader of the Council described the high level of political support for the Project, and the Project Director, Technical Workstream Leader and Procurement Workstream Leader gave an overview of the Project, and explained the scope of services and how the Council intends to procure

the PFI Service Provider. In addition, a representative of the DfT spoke at the Industry Event and explained how the Sheffield Project fits into the Department's Pathfinder Scheme and wider programme.

The Event was well attended with over 60 representatives from the Highway Industry taking part. Feedback received from attendees was positive with organisations requesting a delegate list in order to make initial contact with companies whom they might consider partnering with to form a consortium to bid for the Project.

3.3.3 Procurement Strategy

Contract Publicity

Subject to approval of this OBC by Project Review Group, the Council will advertise the opportunity to bid for the PFI contract in the OJEU under both Works and Services. A copy of the OJEU Contract Notice will also be published on the Council's website.

Procurement Process

The Project will be procured using the Competitive Dialogue procurement process. This process will allow the Council to incorporate successive stages into the procurement process with the ability to hold dialogue sessions with Bidders at each stage. The dialogue will assist Bidders in developing their solutions and will encourage innovation and the use of new technology. The successive stages of the procurement process will allow the Council to maintain a competitive tender process with Bidders' solutions being de-selected at each consecutive tender stage until the Council is confident that the dialogue can be closed and a Call for Final Tenders made. The choice of procurement process and accompanying procurement strategy was approved by the Council in October 2008 - see Appendix 20.

IT Support Systems and Processes

The Council has appointed 4Projects to provide an extranet system to support the procurement phase of the Project. The extranet system will provide a virtual data room and an e-tendering tool to support Bidders through the procurement process. The virtual data room will provide a comprehensive set of information relating to all aspects of the Project, including, in particular, technical information. A significant amount of funding has been spent on surveys and inspections of the highway asset to ensure that Bidders have sufficient information in order to prepare fully costed bids. The Bidders will have access to all of the Project documentation at the start of the procurement process including the Output Specification and Project Agreement. Protocols will be in place to maintain commercial confidentiality and to ensure that all users of the extranet system are formally registered and access levels approved.

Evaluation

The Council is obliged under procurement law, as confirmed by recent case law, to publish its detailed award of contract evaluation criteria, sub-criteria and all attributed weightings, by including them in the OJEU Contract Notice or accompanying procurement documentation.

Following an evaluation workshop, involving the Project Director, Project Manager and Workstream Leaders, the headline contract award evaluation criteria were agreed as being: Technical Proposals - 50%; Legal and Commercial Proposals - 30%; and Financial Proposals - 20%. These criteria and their weightings were approved by Council in October 2008.

Evaluation Teams for each of these criteria are now being established, led by Workstream Leaders and consisting of specialist in-house and external advisers. In-house procurement officers will guide the teams through the evaluation process. The Council has a policy of ensuring that any employees who are included on the TUPE list for a Project are not involved in the evaluation of bids for that Project.

A further evaluation workshop is planned where the Council's external advisers will be invited to convey lessons learnt from evaluating similar PFI projects. The Evaluation Team leaders will then meet with their respective evaluation teams to develop the sub-criteria and weightings within their headline criteria. These will be published and used to evaluate Bidders' submissions.

3.4 Project Agreement

The Council is currently developing a Project Agreement with its external legal advisers, DLA Piper. There is as yet no standardisation of documentation for projects in the Highway Maintenance sector. The precedents being used to inform the drafting of the Project Agreement therefore include: the Streetlighting Model Contract (due to the number of analogous issues relating to maintenance PFI projects already dealt with in this Model Contract); the Standardisation of PFI Contracts versions 4 ("SoPC4"); the draft Highway Management Procurement Pack issued earlier this year by 4ps; and Project Agreements signed on other PFI deals by the Council.

A series of fortnightly meetings has been held with DLA Piper to discuss and reach agreed positions on all key issues for inclusion in the Project Agreement. As DLA Piper has experience of this sector from the Birmingham City Council Highway PFI project, the Council is able to take advantage of this knowledge on all key issues within the sector.

The Council is committed, wherever possible, to adhering to the drafting contained within SoPC4, including all required drafting and such matters as the recently updated guidance on refinancing. However, there are likely to be a number of sector-specific derogations for which approval will be sought. Such derogations are likely to include amendments to the drafting on Maintenance, Treatment of Assets on Expiry, Insurance and Surveys.

These derogations arise, in the main, because this is a maintenance project rather than a design and build project. The Council will, wherever possible, take advantage of the lessons learnt on any sector-specific derogations approved in the Birmingham City Council Project Agreement to inform any derogations it proposes to SoPC4 drafting. The Council will keep a running list of derogations from SoPC4 which it will frequently review as the drafting of the Project Agreement is developed to confirm the necessity of any such derogations.

Within the Project Agreement, the provisions relating to required insurances will include an obligation on the Service Provider to obtain insurance cover for all usual

risks arising from their activities in fulfilment of the Council's Output Specification and other requirements. The Council will, however, not require the Service Provider to obtain insurance cover for material damage at the full replacement value of the entire network, as this would not provide the Council with any significant benefit and would not represent good value for money to the public sector.

The drafting of the Project Agreement will be completed prior to the start of the procurement process and will be made available to bidders at the commencement of procurement.

3.5 Pricing Framework and Payment Mechanisms

The pricing framework is intrinsically linked to the Council's requirements as set out in the Output Specification. The Council's requirements will all have performance standards, response times and specified monitoring frequencies set, and, in some cases, a permitted moratorium attributed to them. If the Service Provider fails to meet any of these then the monthly Unitary Charge will be subject to financial deductions. In some instances, service points, which can lead to termination, will be awarded.

3.6 Risk Allocation and Transfer

To ensure that the Council is successful in transferring an appropriate level of operational risk to the private sector and that value for money is achieved, a range of standardised guidance has been utilised. The Council will seek to achieve optimum risk transfer by retaining only those risks which it can effectively manage better than the private sector or is legally unable to transfer to the private sector. Target performance levels will be demanding so as to ensure that the risks identified as being borne by the private sector are actually transferred to them.

In order to fully assess the value for money of different service delivery options, the Council has developed an understanding of the cost of managing each of the risks associated with this Project. This analysis has enabled the Council to identify the optimum allocation of Project risks and to reflect the cost of managing these risks within the financial analysis of the different options. A comprehensive analysis of the risks inherent in the Project has been undertaken as part of this OBC.

This process began at the Project scoping stage, when services were included or excluded from the scope of the proposed contract based, inter alia, on market availability and appetite for risk and the potential of the service to achieve value for money if included within the scope of the Project.

Having determined the services to be included in the scope of the Project, the Project Risks for those services were identified at a risk workshop – see Section 1.15 above. The Project Delivery Team then held a further workshop to allocate risk ownership as belonging to the Council, the Service Provider or as a shared risk, using the principles outlined above. A copy of the Operational Risk Register is attached at Appendix 6.

The Council is confident, from soft market testing with the private sector and from knowledge of PFI schemes in other sectors, that the proposed level of risk transfer is practical and provides a sound basis against which the private sector will be able to submit their initial bids. The PFI procurement will be conducted through the

Competitive Dialogue process and Bidders may suggest changes in the allocation of some of the risks to achieve better value for money. The Council will consider and evaluate such suggestions as they arise during the dialogue period. The financial and risk models have been designed to support the negotiations by facilitating such re-evaluations.

3.7 Human Resources Issues

Currently, all of the services included within the scope of the Project are provided in-house by the Council and form part of the current Street Force operation. The number of staff involved in these operations is between 550 and 600, and it is considered that TUPE will apply to these members of staff, and that consequently their employment will transfer to one or more sub-contractors of the SPV at Service Commencement.

The principles governing the transfer of Council staff to other employers are outlined in Sheffield City Council's Transfer of Employees to other Employers – A Code of Good Practice (see Appendix 21), which has been negotiated and agreed with the Trades Unions representing Council employees.

Sheffield has a history of successfully communicating and consulting with staff in situations where they may transfer to new employers. The Code of Good Practice covers the best value context and the involvement of Trades Unions, and broadens the statutory requirements to cover matters of direct interest to employees. Development of this Code has taken account of Cabinet Office, 4ps and employer organisation guides and codes. The Council and the Trades Unions have jointly agreed this Code and are fully committed to its principles.

Key elements of the Code include early communication of the process to staff and Trades Unions, and creation of a joint Trades Union forum to meet regularly with empowered managers within the Council to discuss the contract. The Trades Unions provide knowledgeable and experienced officials to participate in the process, and they will be a part of the evaluation process in respect of workforce matters and meet with Bidders on these matters at key stages during the procurement process.

The Council's agreed Code ensures, so far as it is able to within the current statutory framework, that employment issues are taken into account when procuring the Project. The Council will, for example, set out in the Project Agreement requirements relating to:

- Assurances on protection of terms and conditions of employment (core to the contract of employment);
- Pension arrangements (there is an expectation that closed scheme admitted body status will be obtained);
- Positive action and application of anti-discrimination legislation;
- Maintenance of a healthy and safe working environment and compliance with appropriate legislation;
- Policies in relation to recognition of Trades Unions; and
- Policies in relation to employee development.

The consultation programme in respect of this Project will be guided by the Highway Maintenance Joint Trades Union Forum which was established in August 2006 and which meets monthly. The consultation programme will broaden during the later

phases of the procurement process, and employees will be afforded the opportunity to meet with pension authority staff and attend surgery-type sessions with Trades Union representatives.

Additionally, large, medium and small group meetings with managers and Trades Unions will take place. Electronic and hard copy newsletters will continue to be produced throughout the procurement of the Project, with information from both management and Trades Unions included. Facilities will be provided for the new employer and employees to work on implementation issues prior to the Service Commencement date**.**

The Alternative Dispute Resolution Procedure from the Code of Practice on Handling Workforce Issues developed by the Local Government Association, the Employers' Organisation for Local Government, the TUC and the CBI has been formally appended to the Council's agreed Code of Good Practice.

3.8 Indicative Project Timetable

The Council has developed a realistic and manageable indicative Project timetable, which is attached at Appendix 15. The timetable has been developed using lessons learnt from the procurement of previous PFI/PPP projects, the requirements of procurement law and best procurement practice. All internal and external approval processes have been included as have Gateway Review stages.

Set out below are the key stages of the Indicative Project timetable:

OJEU Published	16 March 2009
PQQs returned	30 April 2009
Outline Solutions submitted	23 July 2009
Detailed Solutions submitted	10 December 2009
Refined Solutions submitted	1 July 2010
Final Tenders submitted	9 November 2010
Preferred Bidder Appointed	2 February 2011
Commercial Close	April 2011
Financial Close	May 2011
Contract Start	1 August 2011
Core Investment Period complete	August 2018

The Council will use an extranet system to manage the procurement process. The Council's procurement team will administer the extranet system with the Project Delivery Team. Core business documents will be reviewed and updated using the document management system, giving all external advisers access to the most up-to-date Project documentation. The extranet system will also be used by the team managing the procurement process to issue procurement documentation to Bidders at key stages of the process.

Access to the data room will be made available to all potential Bidders who express an interest in the Project following publication of the OJEU Notice. The data room will be populated with a comprehensive set of project-specific information.

The extranet will also provide an e-tendering tool which will enable Bidders to develop their solutions in a secure on-line workspace and submit their finalised bids

through the e-tendering portal. Bidders will also be able to e-mail the Procurement Workstream Leader via the extranet system with any project queries they may have.

A full audit trail of the Project will be documented by the extranet system giving integrity and transparency to the procurement process.

3.9 Contract Management Approach

The Council will establish a client function for this Project using Intelligent Client principles developed by the Council's Commercial Director. The Project has been designed to achieve high levels of public satisfaction and this will be closely monitored alongside the technical management of the contract.

A Contract Manager will be appointed during 2009/10 and will become a member of the Project Team, attending the Project Board and working alongside the Project Director during the contract negotiation phase to advise on the acceptability of commercial issues from the point of view of the future Client Team.

The Contract Manager will also be responsible for establishing the Client Team and commencing the creation of the systems, procedures and protocols required to manage the Contract, prior to service commencement.

It is currently estimated that there will be a need for approximately 20 staff in the Client Team and financial provision of £1.2 million a year at current prices has been made to meet the staffing and other costs of this function. Duplication between the Service Provider's monitoring of performance and the Client Team's oversight of performance will be avoided, except so far as is necessary to validate the Service Provider's self-monitoring regime.

The specific tasks of the Client Team are set out in Appendix 22. Upon Contract commencement, the Client Team will report to a Strategic Board, set up as a successor to the current Highway Maintenance Project Board (see Section 5.3.2 below).

3.10 Best Value

The Council will follow HM Treasury guidance in demonstrating value for money. Overall value for money in the contract will be assured through the strong competitive pressures of the multi-stage procurement process. The need for the Service Provider to seek out and achieve efficiencies will be guaranteed through the expected keen market pressure for the contract and the encouragement of Bidders to bring forward world-class innovation and methods of working. These efficiencies will then be enshrined in contractual method statements and built into the pricing of the contract throughout the contract period.

3.11 Summary

The Project will be procured under PFI using the Competitive Dialogue procedure. The Council has met with prospective Bidders on a significant number of occasions for soft market testing of the scope and other aspects of the Project. The soft market testing and an Industry Event have demonstrated that there is a keen market for the Project and that the chosen Procurement Strategy should produce good value for money.

4 Financial Case

4.1 Introduction

The Financial Case describes the budgetary arrangements for the Project, the level of PFI Credits required and the expected balance sheet treatment of the Project.

4.2 Budget Arrangements

The key elements of funding available for the Project are the cash flows from the PFI Credits, the existing Highways budgets and the additional resources approved for the scheme by the Council. This funding will be supplemented by revenue from advertising, and by interest earned by the Council on balances arising from Project cash flows.

PFI Credits have been assumed to be payable from the month of Service Commencement on an annuity basis in accordance with CLG guidance (Local Government PFI Project Support Guide (2008-09)) and with interest added at the 2008/09 discount rate of 5.5% per annum.

The Council has confirmed the availability of the budget amounts upon which the Updated EoI submission was based, and has agreed that the 2007/08 amounts included therein should be increased by RPIX.

This funding comprises:

- The Council's existing Highways annual budgets amounting to £25.8 million at 2008/09 prices (excluding Streetlighting energy, which is assumed to be a pass-through item, with costs and budgets matching throughout the contract); and
- Additional annual resources of £10.2 million at 2008/09 prices, from the start of the contract with RPIX inflation applied.

As well as meeting the Service Provider's Unitary Charges, these budgets are required to meet the cost of the Council's retained Highway functions, i.e. those Highway functions which are outside the scope of the PFI contract, and to meet the cost of retained Highway liabilities of the Council.

The cost of the retained functions is estimated at £7.7 million a year (indexed) (including Traffic Management Act functions and Client functions) at 2008/09 prices.

The retained liabilities are estimated at £3.0 million a year (indexed), again at 2008/09 prices, comprising £1.2 million for the cost of unfunded pension liabilities (which it is assumed will not be passed to the contractor) and irrecoverable overheads and profits amounting to £1.8 million. A contingency element of £1 million a year (indexed) has also been retained. This contingency is in addition to the Pre-FBC Optimism Bias figures in the Shadow Bid Model and to the interest rate buffer, also included in the model, which is equivalent to around a further £1 million a year.

Provision has also been made for continuing depreciation of assets that will no longer be under the control of the Council, and for the Council's responsibility for maintenance of bridges that are under the control of Network Rail.

There are also a number of non-repeating costs to be met from the Council's budgets such as the estimated Project Development costs of £9.3 million, contract set-up costs of £0.9 million and unfunded outstanding insurance claims at the date of transfer estimated at £2.0 million.

4.3 PFI Credit Requirement

Having made allowance for the cost of retained functions and of retained liabilities, including contingencies and one-off costs as described in Section 4.2, the Council's Affordability Model – see Appendix 11 – calculates the level of PFI Credits required to achieve the affordability of the scheme. This level of PFI Credits is then tested to ensure that it does not exceed the level of Capital and Lifecycle costs, together with the cost of funding those costs, within the Shadow Model.

The Affordability Model calculates a PFI Credit requirement of £674.1 million. ***[One sentence removed for reasons of commercial confidentiality.]*** The PFI Credit requirement includes both an already-approved amount of £79.3 million for a Street Lighting PFI scheme, and LTP structural maintenance funding equivalent to a PFI Credit of £107.0 million.

The Council is committed to identifying measures to reduce any funding requirement and the savings and third party income streams outlined in Appendix 10 have been fully reflected in the calculation of PFI Credits. Although the potential for generation of revenue from third parties is limited, opportunities do exist and may increase in the medium to long term, and will be explored further as part of the PFI procurement process to ensure that the Council maximises value for money on the Project.

The Council recognises that it will have a contractual commitment to meet the PFI service charge and has confirmed its support for the Project with regard to the revenue budget indicated in the financial model and the real level of revenue funding implicit in the affordability calculations.

The Council has undertaken significant work itself and with its advisers, to ensure that the figures submitted are realistic and reflect as accurately as possible at this stage both the state of repair of the City's highway network and the work and expenditure required to bring it up to, and then keep it at, a fully acceptable standard based on the CCI and other measures.

4.4 Balance Sheet

An initial view of the application of FRS 5 to this Project has been undertaken. The review has been carried out on the basis of Application Note F to FRS 5 – "Reporting the Substance of Transactions: Private Finance Initiative and Similar Contracts" as supplemented by Treasury Technical Note Number 1 (Revised) – "How to Account for PFI Transactions". A copy of the initial view can be found at Appendix 23. In addition, early discussions have been held with the Council's auditors. A copy of a letter from the Council's external auditors relating to this Accounting Opinion is also attached at Appendix 23.

A definitive opinion on the accounting treatment will not be possible until the transaction is firm and further opinions will be produced at Final Business Case (provisional judgement) and Financial Close (final judgement) stages, if required. However, based on other similar schemes that the Council's financial adviser, PwC,

have advised on, it is reasonable to expect that an off-balance sheet opinion is achievable for this Project. In effect, the Council, as purchaser, would have a contract for services and would record the transactions as such. It is understood that the only Highway Maintenance scheme signed to date achieved off-balance sheet treatment.

It is recognised by the Council that the Government's intention to move towards International Reporting Standards may have an impact on the accounting treatment including the potential to include PFI deals on the public sector balance sheet.

4.5 Summary

The Council has firmly committed existing Highways budgets together with additional resources of over £10 million a year to the project. These figures include significant contingency elements. The Project requires PFI Credits of £674.1 million, which include the previously approved PFI Credits of £79.3 million for streetlighting and £107.0 million for "rolled-up" LTP maintenance funding. Under current rules, the Project can be expected to be treated as off the public sector balance sheet.

5 Project Management Case

5.1 Introduction

The Project Management Case describes the Project's governance, organisation and reporting arrangements, including the use of Gateway Reviews. The Project dependencies and how they will be managed are described, as are the arrangements for communications and stakeholder management.

5.2 Approach to Project Management

The Council has developed a process for better managing the delivery of projects and programmes. The approach has been adopted in response to recommendations from Central Government and ensures that all projects within the Council are managed in a uniform manner and in the best possible way, thus increasing their chance of successful delivery.

The Council's Project Management processes are closely based on PRINCE 2 and provide a structured approach to delivering projects from their start-up to closure. A key feature of the Council's Project Management processes is ensuring there is an awareness of all risks and issues affecting the Project and that there is an efficient process in place for their management.

The Project Management process implemented by the Council is underpinned by:

- Clear ownership and responsibility;
- A business case showing that the benefits are worth the investment;
- Control and organisation;
- Identification of risks and issues;
- Engagement of stakeholders;
- Good communications;
- Regular reviews to check that the Project is on track; and
- Lessons being learnt and recorded.

In accordance with the Council's Project Management approach, a Project Assessment Matrix was completed in order to assess the appropriate level of management and control required for the Project. The Project was assessed as a "type 3", high risk project and the level of project management required has been tailored accordingly. A copy of the Project Assessment Matrix is attached at Appendix 24.

In order to ensure that the Project Business Case remains valid, that Project targets are being met and that the Project Sponsor is provided with an objective view of the progress of the Project, an independent Project Assurance role is utilised.

5.3 Project Governance, Organisation and Roles

The Council has developed a Project Approach document - see Appendix 25 - which sets out the key roles and responsibilities of the Project Sponsor, the Project Board and Project Team. A Project Organisational Structure diagram is attached at Appendix 26.

5.3.1 Project Sponsor

The Project is sponsored by John Mothersole, the Council's Chief Executive, who has been involved with the Project since its inception in 2006. The Project Sponsor is responsible for "ownership" of the Project and chairs the Project Board, which monitors and directs the Project. The Project Sponsor's role is to provide direction and leadership for the Project and to be ultimately responsible for its delivery. He has a vital role to play in building and managing relationships with external stakeholders and in ensuring that the business issues associated with the Project are properly identified and managed.

5.3.2 Project Board

The role of the Project Board is to ensure that a consistent high quality standard is achieved for the Highway Maintenance PFI Project. Its role is "management by exception", and it is kept regularly informed and asked to make decisions at key points in the Project. Currently, monthly Board meetings are held but it is planned that when the Project enters the procurement stage, Board Meetings will be held every two months or as necessary.

5.3.3 Project Delivery Team

The Project Delivery Team includes both Council officers and external advisers and is headed by a full-time Project Director who is assisted in the day-to-day management of the Project by a full-time Project Manager.

Within the Project Delivery Team, a number of workstreams have been established covering all aspects of project development. The identified workstreams are: Technical; Legal; Financial; Procurement; Business Transfer; and Human Resources. A seventh workstream, Communications, is currently being added into the Project structure. Workstream Leaders, the majority of whom are already employed full-time on this Project, are responsible for developing their workstream, managing their workstream advisers, budgets and risks, and reporting to the Project Director on a weekly basis on their work and on any cross-cutting issues.

The Council officers included in the Project Delivery Team have experience of delivering many of the major PFI/PPP projects which the Council has undertaken in recent years. See Appendix 28 for a record of the PFI/PPP Projects undertaken by the Council.

The external advisers appointed to the Project are Mott MacDonald, DLA Piper and PricewaterhouseCoopers, and each has provided a letter of support for the Project – see Appendix 27. All of the advisers have experience of working on the Portsmouth and/or Birmingham highway maintenance PFI projects and, consequently, the Sheffield Highway Maintenance Project is able to benefit from lessons learnt by the advisers on these projects.

The Project Delivery Team includes Council officers and external advisers with very significant experience of PFI accommodation and streetlighting projects. This experience is extremely valuable in enabling the team to identify and focus on the differences between PFI accommodation and streetlighting projects on the one hand and PFI highway maintenance projects on the other. These particularly relate to the

lesser distinction in a highway maintenance project between capital and lifecycle funding and phases, which may well have a significant effect on funding profiles and on risk allocation within Bidder consortia.

5.4 Project Plan

An overall Project Plan has been developed, and summarised in the form of a Gantt Chart, setting out the key stages of the Project and the anticipated timescales for each of the stages - see Appendix 29. Each of the Project Stages is linked to the achievement of a key Project Milestone. The key Project Milestones are:

Board receive and approve Project Initiation Document	September 2008
Submission of Outline Business Case	November 2008
Start of Procurement Process – place OJEU Notice	March 2009
Issue Invitation to Submit Detailed Solutions	August 2009
Issue Invitation to Submit Refined Solutions	April 2010
Select Preferred Bidder	February 2011
Financial Close	May 2011
Contract Start	August 2011

The Project Delivery Plan is reviewed and updated regularly and is reported monthly to the Project Board. Specific Project stage plans have been produced for each of the Project stages and these are monitored and reviewed with Workstream Leaders as each stage of the Project progresses.

5.5 Project Dependencies

The Council has developed strategies for managing each of the identified dependencies of the Project in order to ensure that they do not impact negatively on Project delivery.

5.5.1 External Dependencies

Statutory Undertakers

The Council is a member of the Yorkshire Highways Authorities and Utilities Committee and takes steps to ensure that this key stakeholder is kept fully updated in respect of the development of the Project.

It is a requirement of the Council's Output Specification that the Service Provider should consult with all Statutory Undertakers when developing their annual and indicative three-year rolling programme of works. This will ensure that the Service Provider's programmes take into account the programming of the Statutory Undertakers' work and that conflict between the two is minimised.

In addition, the Council intends, during the Competitive Dialogue process, to hold structured and managed meetings between Bidders and Statutory Undertakers to ensure that Bidders are fully aware of the Statutory Undertakers' programmes that will be in place at the commencement of the contract and that the initial programme of works included as part of Bidders' proposals takes these programmes into account.

Stakeholder Support
The support and co-operation of stakeholders is vital to the successful delivery of the Project, particularly during the operational phase when work on the improvement and maintenance of the Highway network is under way. To reflect the importance of this area, a Communications and Consultation officer is currently being appointed to the Project to lead the Communication Workstream and be responsible for managing communication and consultation with all stakeholders during the procurement stage of the Project.

Once the Project enters its implementation stage, the Communications and Consultation officer will become a member of the Client team and will ensure that the Service Provider undertakes the required communications and consultation on the programming of the work.

5.5.2 Internal Dependencies

Political Support
Successful delivery of the Project is dependent upon continued political support for the Project. The Project has the unanimous support of the Liberal Democrat and Labour groups within the Council, which together make up 81 of the 84 seats on the Council. Letters of support from each of these groups are attached at Appendix 30 together with a copy of the Minute from a full Meeting of the Council on 1 October 2008 confirming approval of the Project by Members – see Appendix 31.

All political Parties represented on the Council have been, and will continue to be, briefed and consulted on the Project throughout its life.

Availability of Internal Resources
At the inception of the Project in 2006, the Council nominated John Mothersole, Executive Director Development, Environment and Leisure and member of the Council's Executive Management team, as Project Sponsor. In July 2008, John Mothersole was appointed as Chief Executive and took the decision that as the Project was a key priority for the Council, he would continue to act as Project Sponsor and play an active role in the development and delivery of the Project. This top-level support ensures that the Project maintains its high profile within the Council and receives the resources and support required to deliver the Project.

In July 2006, the Council approved a development budget of £3.3 million for the initial development of the Project. In May 2008, the Project Director presented a report to the Project Board outlining the resources required to deliver the Project - see Appendix 32 attached. The Board approved the funding required and the recruitments necessary to deliver the Project and these were confirmed by full Council in October 2008. The total Project Development Budget now approved for the Project is £9.3 million. A summary of the estimated procurement costs is included in Appendix 33. This budget is regularly and carefully monitored and there is a high degree of confidence that the Project can be delivered within the approved budget.

Interface with Other Council Projects
Within the Council, the Project has links with several other programmes and projects, including the Non-Highway Maintenance project and the Organisational

Transformation Programme ("OTP") (which includes, inter alia, the re-procurement of ICT provision across the Council).

Non-Highway Maintenance - For the reasons stated in Section 1.10.4 above, environmental maintenance (such as cleaning and grass cutting) of non-highway land is not included within the scope of the PFI contract. The Council has, therefore, established a discrete project to review these environmental maintenance services and to consider alternative ways of delivering them. It is intended that the new model for the delivery of Non-Highway Maintenance should be in place by 1 April 2010 in order to allow the new service delivery to be operational for at least a year prior to the commencement of the Highway Maintenance Project. As part of the preparation for the split of services between those on and those off the highway, work is currently under way to review the current allocation of land between highway and non-highway land, so as to ensure the most appropriate provision for the maintenance of all such land in the Council's ownership. A link between the Highway Maintenance and Non-Highway Maintenance projects has been established to ensure a smooth interface and to avoid duplication of work. This link is via the Business Transfer Workstream Leader who, in addition to leading the Business Transfer workstream of the Highway Maintenance Project, is also a member of the Non-Highway Maintenance Project Team.

Organisational Transformation Programme - This is a Council-wide programme to improve and reduce the cost of the Council's Business Support Services. The two projects within the OTP which have an interface with the Highway Maintenance Project are the Outstanding Sheffield Programme, which includes a project to reprovide all ICT services within the Council, and the Customer Experience project. Members of the Highway Maintenance Project Team have regular meetings with representatives from the ICT and Customer Experience projects to ensure that interfaces and dependencies are identified and dealt with appropriately.

It is intended that the ICT element of the OSP project will be operational from early 2009 and arrangements have been built into OSP to accommodate the transfer of ICT equipment and staff to the Highway Maintenance Project and prepare for the establishment of ICT interfaces between the Council and the new Service Provider.

Discussions regarding the future delivery arrangements for the Customer Experience project are ongoing and the team responsible for the delivery are fully aware of the requirements of the Highway Maintenance Project and are able to feed these into the development of their project. It is intended that the Council's own customer contact service will be upgraded through the Customer Experience project and will form the principal interface between the public and the Project, so that all fault reports and complaints will be immediately received and available to the Council. Customer Contact Officers will be able to directly access the Service Provider's system and directly input fault and complaint notices so that there will be no time lag between receipt of a fault or complaint report and the start of the response and rectification times agreed with the Service Provider.

5.6 Communication and Stakeholder Management

5.6.1 Communication and Consultation Strategy

A Communication and Consultation Strategy has been developed to handle Communications and Stakeholder Management issues in the period up to Contract commencement in 2011. A copy of the Strategy is attached at Appendix 34.

The purpose of the Strategy is to manage the interaction with Stakeholders and was developed following a Stakeholder Identification workshop. The Strategy ranks each of the Stakeholder groups into three categories depending on their interest in and influence on the Project and the nature and frequency of the communication and consultation required, which varies according to the category in which they fall.

In addition to identifying Stakeholders, the Strategy also sets out the key Project messages and the most appropriate channel of communication for each group of Stakeholders.

One of the first tasks of the Communications and Consultation officer will be to develop an implementation plan for the Communications and Consultation Strategy. A key function of the Communications and Consultation officer's role will be to brief, consult and liaise with stakeholders on the development and progress of the Project and on how the Project will affect them, and to manage stakeholder expectations of the outcomes and benefits of the Project.

The Communications and Consultation Officer will also lead on consultation with the local community during the development and delivery of the Project and will work closely with Community Assemblies and with the Service Provider's own communications team to ensure that local circumstances and concerns are fully represented and taken into account.

During the delivery phase of the Project, the Communications and Consultation Officer will ensure that consultation is undertaken with the Chamber of Commerce and local businesses to ensure that they are fully aware of the programme of works to be carried out in their areas and to seek to minimise the impact of those works on their business operations during the Project implementation phase.

5.6.2 Stakeholder Involvement in Development of the Project

Department for Transport
In addition to the regular network meeting for the three Pathfinder Authorities hosted by the DfT to ensure that there are no conflicts between the three projects and that their proposals and their timescales are complementary, Strategic Meetings are held with the Project Owners from the Pathfinder Authorities and senior DfT representatives at approximately quarterly intervals.

DfT have also appointed Transactors to the Pathfinder Programme to work with the three Pathfinder Authorities as they prepare their OBCs, to help to share best practice between the Pathfinders and to take this best practice forward into a wider programme at a later stage.

Members
A Working Group has been established, consisting of the Cabinet Member for Culture, Leisure and Streetscene and her advisers, and representatives of the Project Board and Project Team. This Working Group will continue throughout the Project to ensure that Members are fully involved, consulted and briefed at all stages.

Highway Maintenance Industry
In recognition of their position as one of the Project's "priority" stakeholders, the Council undertakes regular soft market testing meetings with the market to seek feedback on project development proposals and to test market appetite. In total, the Council has seen twelve organisations on one or more occasions over the period in which the Project has been developed – see Appendix 16. Letters of support from a selection of these organisations are attached at Appendix 17.

Trades Unions and Employees
Trades Unions are consulted through a monthly Joint Trades Union Forum. A staff newsletter has been developed and, to date, six issues have been published – see Appendix 35. In addition, employees have received information on and been able to ask questions about the Project at Street Force staff roadshows. Details of the Project are available on the Council's Intranet and employees have an e-mail address to which to send comments and questions relating to the Project.

Wider Stakeholders
Internal and external stakeholders have been involved in the recent Gateway Review 1 – Business Justification. Representatives from all political parties represented on the Council, the DfT, 4ps, the Trades Unions, Sheffield Chamber of Commerce, SYPTE and Yorkshire Water all took part in the Review which reported that there was a high level of confidence among internal and external stakeholders that the Project will be successfully delivered – see also Section 5.10.

Support for the Project from City Partner Stakeholders is demonstrated in Appendix 4 and the Council is committed to keeping all stakeholders fully engaged during the development of the Project.

5.7 Project Reporting

5.7.1 Reporting to Members

The Project was originally reported to Members in July 2006, when Members approved the submission of an EoI and the development of an OBC, together with an initial Project Development Budget. Members also requested that a further report be presented to them on the outcome of the Original EoI, the development of the Project and the proposed content of the OBC prior to its submission. During 2006 and 2007, in the period when the Council was awaiting a decision on its application for PFI funding, Members received regular formal and informal briefings from officers on the development of the proposed Project.

In October 2008, a full and detailed report on the Project was considered and approved by full Council. This report gave approval for: the scope of services to be included in the Project; the financial and other resources required to deliver the Project (including, in particular, the procurement costs); the procurement strategy for the Project (including an indicative Project Timetable); and the delegations required

to take the Project through to contract award - see Appendix 20 for a copy of the Cabinet Report.

The Council has considerable experience of delivering PFI/PPP projects and, in view of the time-critical decisions which have to be made throughout the procurement of a major PFI project, Members have agreed to delegate authority to make most of the decisions required to the Project Sponsor in order to make the procurement process for the Project more efficient. The delegations are set out on pages 14-15 of Appendix 20.

The selection of the Preferred Bidder will, however, be the subject of a further report to Cabinet. In order to maintain the Project Timetable, this report may need to be considered by Members after a shorter period of prior consultation with officers than would be usual if this Report related to a new initiative, and Members have agreed to this shortened consultation period.

5.7.2 Reporting to the DfT

Regular contact is maintained with the DfT via the Highway Maintenance Network meetings which take place on a six-weekly basis and the quarterly Strategic Meetings. In addition, the Transactors appointed by the DfT to assist the Pathfinder Authorities provide an independent report to the DfT on the progress and viability of the Project.

5.7.3 Reporting within the Project

The reporting arrangements for the Project are set out in the Project Approach Document – Appendix 25 - in so far as they relate to internal governance structures and in the Communication and Consultation Strategy - Appendix 34 - in so far as they relate to Stakeholders.

The Project Director provides the Project Board with a Project Highlight Report and an Executive Dashboard each month. The Project Highlight Report and Executive Dashboard (examples of which are included at Appendix 36) update the Board on the quantifiable progress of key deliverables and give an indication of the likelihood of meeting key milestones in the Project Plan. They also provide the Project Director with an opportunity to highlight issues that require the Board's attention and/or intervention to resolve.

The Project Delivery Team meets monthly, following the Project Board meetings, to allow the views and decisions of the Board to be shared with the wider team and to enable any work arising from decisions of the Board to be directed accordingly.

In addition, the Workstream Leaders meet with the Project Director and Project Manager weekly to report on progress within their workstreams and to ensure that cross workstream issues are addressed. In addition, each Workstream Leader provides the Project Manager with a monthly workstream report which outlines the tasks undertaken within the workstream during that month, the key tasks to be undertaken during the coming month, highlights any issues arising within the workstream and notes any changes in the risks owned by the workstream. These reports are shared with other Workstream Leaders and discussed at the weekly Workstream Leader meetings.

5.8 Risk Management Strategy

A Risk Management Strategy for the Project has been developed to deal with those risks which have the potential to impact on the Project between now and contract signature in August 2011.

As part of the development of this Risk Management Strategy, the Council has held a series of Risk Workshops with Workstream Leaders and external advisers to develop a Risk Register for the development and procurement phases of the Project ("the Project Risk Register"). The Project Risk Register identifies the principal risks which may affect or threaten the delivery of the Project up to contract signature, categorises the risks as to scale and probability, and outlines the way in which such risks may be avoided or mitigated. A copy of the Project Risk Register is attached at Appendix 37 and shows how risks have been grouped and allocated into the ownership of the Project Director and Workstream Leaders, together with a summary of the major procurement and development stage risks.

In accordance with the Risk Management Strategy, each of the Project's Workstream Leaders and members of the Project Team have a responsibility to identify potential risks within their workstream area and report these risks to the Project Director. The Strategy includes details of how the potential risks are assessed on the basis of likelihood and impact and how countermeasures are identified. The processes by which the risks will be monitored, managed and escalated are also included in the Strategy.

Major risks are reported to the Project Board monthly together with any changes to the Risk Register which may have arisen during that period.

5.9 Benefits Realisation Strategy

Benefits Realisation is an integral part of Project Management as it ensures that the benefits which were the basis on which the Project was established are delivered and that the objectives of the Project are achieved. The outline proposals for monitoring the achievement of the benefits are outlined in Appendix 38. The benefits of the Project will begin to be delivered once the improvement works commence (scheduled for August 2011) and the Benefits Realisation Strategy will continue to be developed as the Project progresses. The detailed proposals, protocols and methodologies will be devised and put in place by the Contract Manager and the Client Team. The Contract Manager is expected to be in post during 2009/10 and will work alongside the Project Director during the procurement phases of the Project to ensure that there is a full understanding of how the benefits of the Project have been identified and incorporated into the contractual documentation, and how they will be measured and incentivised.

Appendix 38 summarises the Primary and Secondary Benefits that the Project will deliver and sets out indicative proposals for how the delivery of each of the benefits will be measured once the Project is operational.

The Secondary Benefits are benefits to whose achievement the Project can contribute but for which the Project is not solely or principally responsible. The Council will seek to develop methods of identifying that element of each of the Secondary Benefits which can be attributed to the implementation of the Project.

All benefits will be compared, wherever possible, with the level and changes of those benefits being achieved in other areas, such as in other Core Cities.

Prior to Service Commencement in August 2011, each of the Primary and Secondary Benefits will be measured to establish a baseline against which the benefits can be measured in the future and to assist in identifying changes during the CIP and then throughout the Lifecycle period.

The Contract Manager will report achievement of benefits to the Strategic Board who will have primary responsibility for ensuring that the benefits delivered by the Project are delivered in accordance with the timescales set out in the detailed Benefits Realisation Strategy.

5.10 Project Review and Evaluation

The Council utilises OGC Gateway Reviews, conducted by 4ps, at key stages of the Project in order to provide assurance that the Project can progress successfully to the next stage and to ensure that it continues to be delivered in accordance with the Council's Project Management processes.

The key stages at which Gateway Reviews have been or will be undertaken are as follows:

Review	**Date**	**Status**
Gateway 0 – Strategic Assessment	October 2006	Completed - Amber
Gateway 1 – Business Justification	September 2008	Completed – Amber/Green (using Delivery Confidence Assessment)
Gateway 2 – Procurement Approach	February 2009	Internal planning for Review under way
Gateway 3 – Investment Decision	April 2011	Included in Project Plan
Gateway 4 – Readiness for Service	July 2011	Included in Project Plan
Internal Post Implementation Review	December 2011	To be included in Project Implementation Plan
Gateway 5 – Benefits Evaluation	July 2014	To be included in Project Implementation Plan

Key findings from the Gateway Reviews undertaken to date have been as follows:

The Gateway Review 0 – Strategic Assessment took place in October 2006. The outcome of the Review was very positive, recognising the "drive and energy of an enthusiastic and able Project Team", and reporting that there was support for the project at all levels within the Council and the wider Community and that "the Project is an integral fit with the wider strategic objectives of the Council".

In September 2008, a Gateway Review 1 – Business Justification was undertaken which found that "this project has a high probability of a successful delivery". The Review confirmed that the Project "has strong top level support and widespread cross party political endorsement".

5.11 Summary

The Council has wide experience of PFI and other major projects and a comprehensive management structure for the Project has been in place for over two years, with a full-time experienced Project Director and a Board led, as Project Sponsor, by the Council's Chief Executive. A Risk Management Strategy and strategies for managing Project dependencies are in place. A Benefits Realisation Strategy, linked to the Contract Management Strategy, will ensure that all benefits of the Project are monitored and measured.