Local Pinch Point Fund Application Form

Sunderland Strategic Junctions Improvement Scheme

Appendix

Appendix 1 – Scheme Location Plans

Drawing Number 08/ED/04257

Drawing Number 08/ED/4259 Traffic Signal Improvements to A1231 Junction
Drawing Number 08/ED/4260 Traffic Signal Improvements to A183 Junction
Drawing Number 08/ED/4261 Traffic Signal Improvements to A690 Junction

Appendix 2 – Letter of support from LEP

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Appendix 4 – Scheme Impacts Pro Forma

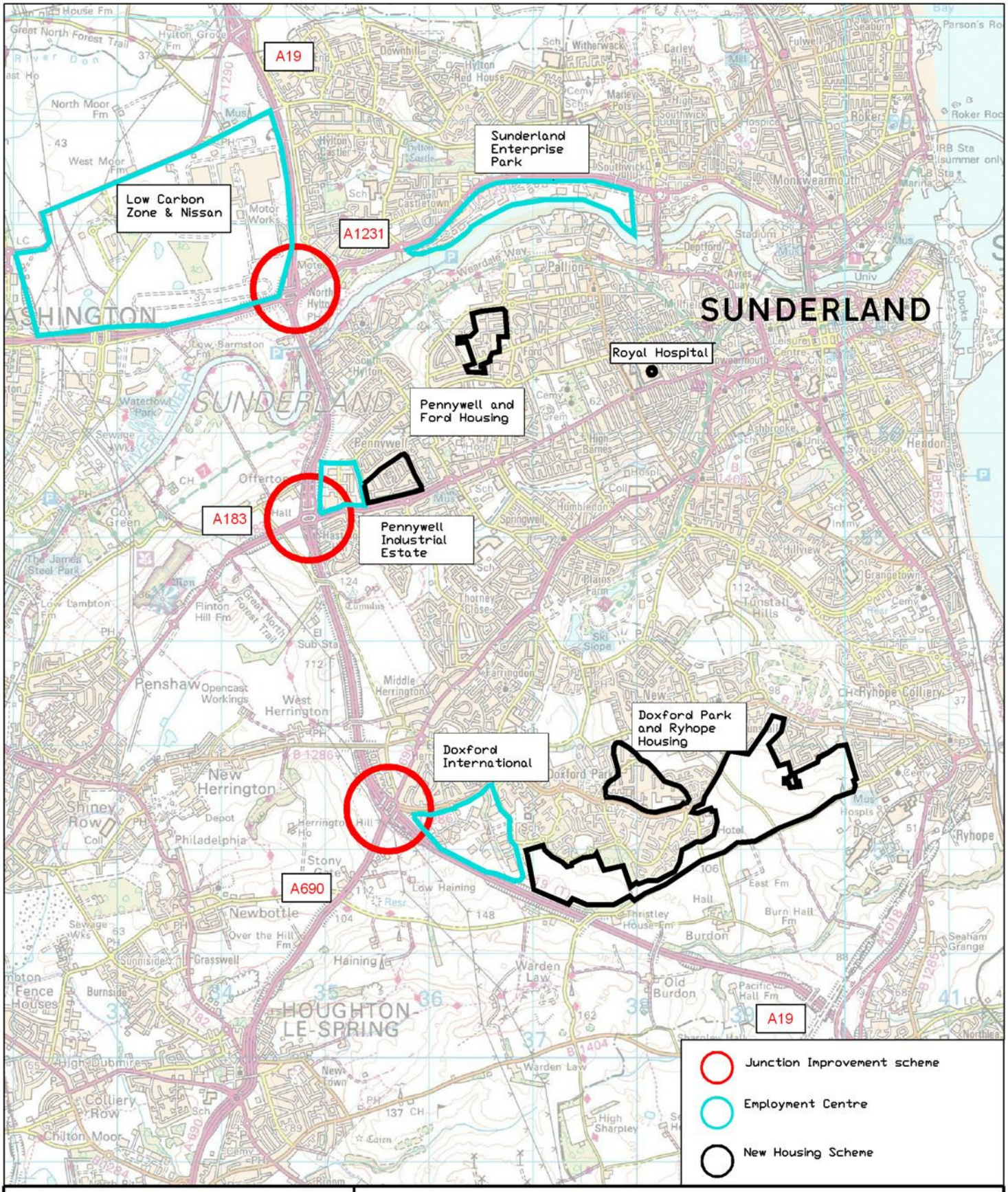
Appendix 5 – Section 151 / Head of Procurement Letter

Appendix 6 – Project Plan

Appendix 7 – Quantified Risk Register and Risk Management Plan

Appendix 8 – Application Form Checklist

Appendix 1 – Scheme Location Plans



Sunderland City Council

City Services
Jack Crawford House
Sunderland SR2 8QR

Telephone: 0191 520 5555
Web: www.sunderland.gov.uk

PROJECT: SUNDERLAND STRATEGIC JUNCTIONS IMPROVEMENT SCHEME

TITLE: LOCATION PLAN

PROJECT LEADER: DL			
DRAWN BY: MF	CHECKED BY: PDM	APPROVED BY:	NORTH
DATE: FEB 2013	SCALE: NTS	SHEET SIZE: A4	
DRAWING No.: 08/ED/4257		REVISION:	

Notes:

Operational improvement to reduce delay and queue lengths.

- Introduction of 'MOVA' operation providing more re-active traffic signal settings.
- Spiral markings to provide balanced carriageway utilisation and reduced weaving
- UTMC infrastructure providing real time information on operation and facilities to add special plans.
- Provision of queue length detection to restrict queuing on the A19
- Potential of carriageway widening

KEY

\ Traffic Signal (Primary)

\ Traffic Signal (Secondary)

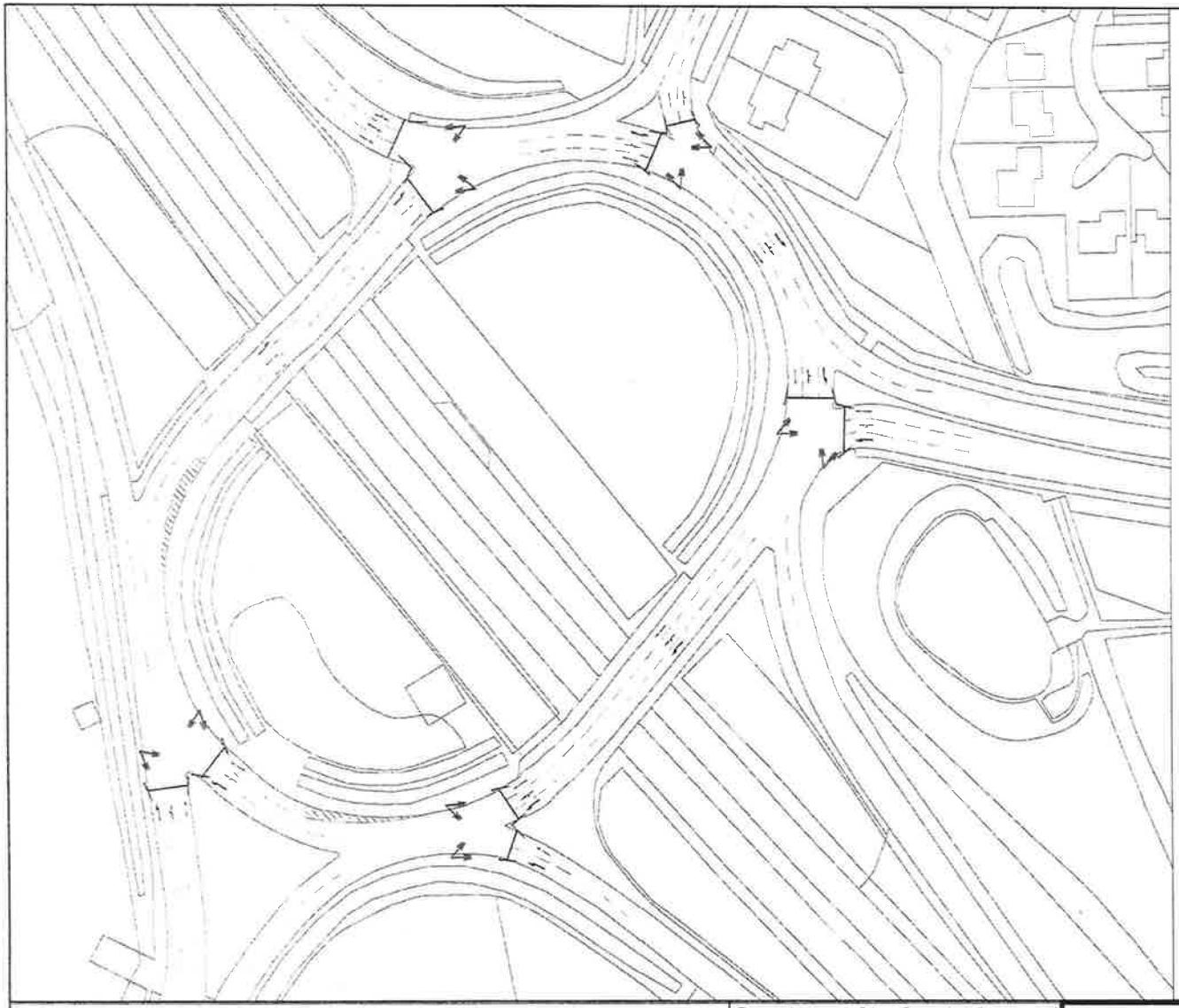
Rev.	Description	Date revised	Date checked	Date checked

Sunderland City Council

Office of the Chief Executive
Jack Crawford House
Commercial Road
Sunderland SR2 8QR

Telephone: 0191 520 5555
Fax: 0191 553 1460
Web: www.sunderland.gov.uk

PROJECT	Sunderland Strategic Junctions Improvement Scheme
TITLE	Traffic Signal Improvements to A1231 Junction
PROJECT CONTACT	Paul Muir
CONTACT DETAILS	0191 561 1519
DRAWN BY	Graham Brown DATE Jan 2013
SHEET SIZE	A4
CHECKED BY	Paul Muir DATE Feb 2013
SCALE	N.T.S
APPROVED BY	Paul Muir SIGNED
DATE	Feb 2013
DRAWING NO	08/ED/4259
REVISION	



Notes:

Operational improvement to reduce delay and queue lengths.

- Introduction of 'MOVA' operation providing more re-active traffic signal settings.
- Spiral markings to provide balanced carriageway utilisation and reduced weaving
- UTMC infrastructure providing real time information on operation and facilities to add special plans.
- Provision of queue length detection to restrict queuing on the A19
- Potential of carriageway widening

KEY

Traffic Signal (Primary)

Traffic Signal (Secondary)

Rev.	Description	Date revised	Date checked	Date checked

Sunderland City Council

Office of the Chief Executive
Jack Crawford House
Commercial Road
Sunderland SR2 8QR

Telephone: 0191 520 5555
Fax: 0191 553 1460
Web: www.sunderland.gov.uk

PROJECT	Sunderland Strategic Junctions Improvement Scheme
TITLE	Traffic Signal Improvements to A690 Junction
PROJECT CONTACT	Paul Muir
CONTACT DETAILS	0191 561 1519
DRAWN BY	Graham Brown
DATE	Jan 2013
SHEET SIZE	A4
CHECKED BY	Paul Muir
DATE	Feb 2013
SCALE	N.T.S
APPROVED BY	Paul Muir
SIGNED	
DATE	Feb 2013
DRAWING NO.	08/ED/4261
REVISION	

Notes:

Operational improvement to reduce delay and queue lengths.

- Introduction of 'MOVA' operation providing more re-active traffic signal settings.
- Spiral markings to provide balanced carriageway utilisation and reduced weaving
- UTMC infrastructure providing real time information on operation and facilities to add special plans.
- Provision of queue length detection to restrict queuing on the A19
- Potential of carriageway widening

KEY

\ Traffic Signal (Primary)

\ Traffic Signal (Secondary)

Rev.	Description	Date revised	Date checked	Date checked

Sunderland City Council

Office of the Chief Executive
Jack Crawford House
Commercial Road
Sunderland SR2 8QR

Telephone: 0191 520 5555
Fax: 0191 553 1460
Web: www.sunderland.gov.uk

PROJECT	Sunderland Strategic Junctions Improvement Scheme
TITLE	Traffic Signal Improvements to A1231 Junction
PROJECT CONTACT	Paul Muir
CONTACT DETAILS	0191 561 1519
DRAWN BY	Graham Brown DATE Jan 2013
SHEET SIZE	A4
CHECKED BY	Paul Muir DATE Feb 2013
SCALE	N.T.S
APPROVED BY	Paul Muir SIGNED
DATE	Feb 2013
DRAWING NO	08/ED/4259
REVISION	

Appendix 2 – Letter of support from LEP

David Laux
Sunderland City Council
Street Scene
(Highways and Transportation)
Jack Crawford House
Commercial Road
Sunderland
Tyne and Wear
SR 8QR

Dear David

Sunderland Strategic Junctions Improvement Scheme

I am writing to confirm the support of the North East Local Enterprise Partnership for your submission of this scheme to the Local Pinch Points Fund.

As you are aware the fund invites submissions that address congestion or improve access to key economic sites. It particularly encourages submissions that improve access to development sites, urban employment centres and Enterprise Zones, and that have the potential to create jobs and housing.

These are all key aspirations of the NELEP, and I wish you success with your proposal.

Yours sincerely

Mark Wilson

Transport Advisor

North East Local Enterprise Partnership

Appendix 3 – Appraisal Summary Table

Appraisal Summary Table

Date produced:	18/02/2012

Contact:	
Name	P Muir
Organisation	Sunderland City Council
Role	Promoter/Official

Name of scheme:	Sunderland Strategic Junctions Improvement Scheme
Description of scheme:	Incorporate MOVA and UTMC infrastructure into the existing traffic signals at the A19/A1231, A19/A183, and A19/A690 junctions

	Impacts	Summary of key impacts	Assessment					
			Quantitative			Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp
Economy	Business users & transport providers	A reduction the journey time Improved journey time reliability Increased control over traffic flows Improved queue management	Value of journey time changes(£)	£6.3m		Moderate beneficial	£6,300,000	
			Net journey time changes (£)					
			0 to 2min	2 to 5min	> 5min			
			£3m	0	0			
	Reliability impact on Business users	Improvement to journey time reliability	uncalculated			Moderate beneficial	uncalculated	
	Regeneration	Improved access to key regeneration sites within the City	uncalculated			Moderate beneficial	uncalculated	
	Wider Impacts	Improving the access to and from the City to key growth areas and the wider transport network	uncalculated			Moderate beneficial	uncalculated	
Environmental	Noise	No impact						
	Air Quality	Minor improvement due to the reduction in junction congestion	uncalculated			Minor beneficial	N/A	
	Greenhouse gases	Minor improvement due to the reduction in junction congestion	Change in non-traded carbon over 60y (CO2e)	uncalculated		Minor beneficial	N/A	
			Change in traded carbon over 60y (CO2e)	uncalculated				
	Landscape	No impact						
	Townscape	No impact						
	Heritage of Historic resources	No impact						
	Biodiversity	No impact						
	Water Environment	No impact						
Social	Commuting and Other users	A reduction the journey time Improved journey time reliability Increased control over traffic flows Improved queue management	Value of journey time changes(£)			Moderate beneficial	included above	
			Net journey time changes (£)					
			0 to 2min	2 to 5min	> 5min			
	Reliability impact on Commuting and Other users	Improvement to journey time reliability	uncalculated			Moderate beneficial	uncalculated	
	Physical activity	No impact						
	Journey quality	Improved journey quality due to the reduction in congestions	uncalculated			Moderate beneficial	uncalculated	
	Accidents	A reduction in accidents at these junctions	uncalculated			Minor beneficial	uncalculated	
	Security	No impact						
	Access to services	Improved access to key regeneration sites within the City	uncalculated			Moderate beneficial	uncalculated	
	Affordability	No impact						
	Severance	No impact						
	Option values	No impact						
Public Accounts	Cost to Broad Transport Budget	Funding is saught from the DfT for 70% of the scheme value					TBC	
	Indirect Tax Revenues	No impact						

Appendix 4 – Scheme Impacts Pro Forma

Sunderland Strategic Junctions Improvement Scheme

Scheme Type	Scenarios	Time Period	No of highway trips affected?	Total Vehicle Travelled Time (veh-hrs)	Total vehicle travelled distance (veh-km)	Total Network Delays (veh-hrs)
Improvement to exisitng highway etc…	2012 Do Minium	2012 AM	17057	174.0716124	0.964093581	
		2012 PM	16411	160.6242582	0.964093581	
		Inter Peak	14318.4	144.767421	0.964093581	
		Nights	0	0	0.964093581	
		Saturday	0	0	0.964093581	
		Sunday	0	0	0.964093581	
	2012 Do Something	2012 AM	17057	140.2925038	0.964093581	
		2012 PM	16411	136.5306195	0.964093581	
		Inter Peak	14318.4	123.0523078	0.964093581	
		Nights	0	0	0.964093581	
		Saturday	0	0	0.964093581	
		Sunday	0	0	0.964093581	

Scheme Type	Scenarios	Time Period	No of highway trips affected?	Total Vehicle Travelled Time (veh-hrs)	Total vehicle travelled distance (veh-km)	Total Network Delays (veh-hrs)
A1231	2012 Do Minium	2012 AM	6568	54.34540594	0.264776643	
		2012 PM	6668	55.17283295	0.264776643	
		Inter Peak	5334.4	44.13826636	0.264776643	
		Nights	0	0	0.264776643	
		Saturday	0	0	0.264776643	
		Sunday	0	0	0.264776643	
	2012 Do Something	2012 AM	6568	46.19359505	0.264776643	
		2012 PM	6668	46.89690801	0.264776643	
		Inter Peak	5334.4	37.51752641	0.264776643	
		Nights	0	0	0.264776643	
		Saturday	0	0	0.264776643	
		Sunday	0	0	0.264776643	

Scheme Type	Scenarios	Time Period	No of highway trips affected?	Total Vehicle Travelled Time (veh-hrs)	Total vehicle travelled distance (veh-km)	Total Network Delays (veh-hrs)
A183	2012 Do Minium	2012 AM	4314	35.28186466	0.261710633	
		2012 PM	5055	41.3421015	0.261710633	
		Inter Peak	4044	33.0736812	0.261710633	
		Nights	0	0	0.261710633	
		Saturday	0	0	0.261710633	
		Sunday	0	0	0.261710633	
	2012 Do Something	2012 AM	4314	29.98958496	0.261710633	
		2012 PM	5055	35.14078627	0.261710633	
		Inter Peak	4044	28.11262902	0.261710633	
		Nights	0	0	0.261710633	
		Saturday	0	0	0.261710633	
		Sunday	0	0	0.261710633	

Scheme Type	Scenarios	Time Period	No of highway trips affected?	Total Vehicle Travelled Time (veh-hrs)	Total vehicle travelled distance (veh-km)	Total Network Delays (veh-hrs)
A690	2012 Do Minium	2012 AM	6175	84.44434176	0.437606306	
		2012 PM	4688	64.10932376	0.437606306	
		Inter Peak	4940	67.55547341	0.437606306	
		Nights	0	0	0.437606306	
		Saturday	0	0	0.437606306	
		Sunday	0	0	0.437606306	
	2012 Do Something	2012 AM	6175	71.7776905	0.437606306	
		2012 PM	4688	54.49292519	0.437606306	
		Inter Peak	4940	57.4221524	0.437606306	
		Nights	0	0	0.437606306	
		Saturday	0	0	0.437606306	
		Sunday	0	0	0.437606306	

Scenario	Input Data / Key Performance Indicators	Unit	AM Peak Hr	PM Peak Hr	Inter-Peak Hr	Nights	Sat	Sun
			Weekday	Weekday	Weekday	19:00-07:00	07:00-19:00	07:00-19:00
Do-Minimum	Number of highway trips affected	vehicles	17057	16411	14318.4			
	Total vehicle travelled time	vehicle-hours	174.0716124	160.6242582	144.767421			
	Total vehicle travelled distance	vehicle-km	0.964093581	0.964093581	0.964093581	0.9640936	0.964093581	0.964093581
	Total network delays	vehicle-km	0	0	0			
	Highway peak period conversion factor	-	0	0	0.8			
	Number of PT passenger trips on affected routes	passenger trips	2729.12	2625.76	2290.944			
	Bus journey time on affected routes	minutes	9.172794028	9.172794028	9.172794028	9.172794	9.172794028	9.172794028
	Total PT travelled time	passenger-hrs	82287.39539	74227.93718	67711.57312	0.9640936	0	0
	Total PT travelled distance	passenger-km	0.964093581	0.964093581	0.964093581	0.9640936	0.964093581	0.964093581
	PT peak period conversion factor	-	0.16	0.16	0.16	0.16	0.16	0.16
	Number of walking and cycling trips	person trips	170.57	164.11	143.184			
	Mode share in affected area							
	~Walking and Cycling	person trips	170.57	164.11	143.184			
	~Bus/BRT	person trips	2729.12	2625.76	2290.944			
	~Rail	person trips	0	0	0			
	~Car	person trips	17057	16411	14318.4			
	~Total	person trips	19956.69	19200.87	16752.528			
Do-Something	Number of highway trips affected	vehicles	17057	16411	14318.4			
	Total vehicle travelled time	vehicle-hours	140.2925038	136.5306195	123.0523078			
	Total vehicle travelled distance	vehicle-km	0.964093581	0.964093581	0.964093581	0.9640936	0.964093581	0.964093581
	Total network delays	vehicle-km	0	0	0			
	Highway peak period conversion factor	-	0	0	0.8			
	Number of PT passenger trips on affected routes	passenger trips	2729.12	2625.76	2290.944			
	Bus journey time on affected routes	minutes	7.796874924	7.796874924	7.796874924	7.7968749	7.796874924	7.796874924
	Total PT travelled time	passenger-hrs	69944.28608	63093.7466	38348.7444			
	Total PT travelled distance	passenger-km	0.964093581	0.964093581	0.964093581	0.9640936	0.964093581	0.964093581
	PT peak period conversion factor	-	0.16	0.16	0.16	0.16	0.16	0.16
	Number of walking and cycling trips	person trips	170.57	164.11	143.184			
	Mode share in affected area							
	~Walking and Cycling	person trips	170.57	164.11	143.184			
	~Bus/BRT	person trips	2729.12	2625.76	2290.944			
	~Rail	person trips	0	0	0			
	~Car	person trips	17057	16411	14318.4			
	~Total	person trips	19956.69	19200.87	16752.528			

For Small Project Bids

For Do-Minimum Scenario

Vehicle Category	AM Peak Hr Weekday	PM Peak Hr Weekday	Inter-Peak Hr Weekday
Car Work	103	141	104
Car Non-work Commuting	747	206	599
Car Non-work Other	232	496	502
Average Car	1082	842	1205
LGV	182	152	129
OGV1	71	73	33
OGV2	0	0	0
PSV	8	8	7
All Total	1342	1075	1375
Public Transport			
Bus Work	5	4	5
Bus Non-work Commuting	99	48	85
Bus Non-work Other	40	82	57
Bus Total	144	134	148
Rail Work	0	0	0
Rail Non-work Commuting	0	0	0
Rail Non-work Other	0	0	0
Rail Total	0	0	0

Average Network Speed (kph)	AM Peak Hr Weekday	PM Peak Hr Weekday	Inter-Peak Hr Weekday
Car			
LGV			
HGV & PSV			

For Do-Something Scenario

Vehicle Category	AM Peak Hr Weekday	PM Peak Hr Weekday	Inter-Peak Hr Weekday
Car Work	103	141	104
Car Non-work Commuting	747	206	599
Car Non-work Other	232	496	502
Average Car	1082	842	1205
LGV	182	152	129
OGV1	71	73	33
OGV2	0	0	0
PSV	8	8	7
All Total	1342	1075	1375
Public Transport			
Bus Work	5	4	5
Bus Non-work Commuting	99	48	85
Bus Non-work Other	40	82	57
Bus Total	144	134	148
Rail Work	0	0	0
Rail Non-work Commuting	0	0	0
Rail Non-work Other	0	0	0
Rail Total	0	0	0

Average Network Speed (kph)	AM Peak Hr Weekday	PM Peak Hr Weekday	Inter-Peak Hr Weekday
Car			
LGV			
HGV & PSV			

JACOBS

Memorandum

Earl Grey House, 77 -85 Grey Street,
Newcastle upon Tyne, UK, NE1 6EF
+44.(0)191.255.7800 Fax +44.(0)191.255.7818

Date **18th February 2013**

To Bob Donaldson (SCC)

From Darran Kitchener (Newcastle)

Subject Sunderland Strategic Junctions Improvement Scheme

Introduction

Sunderland City Council (SCC) proposes to complete a full technological upgrade of three existing signalised roundabouts on the A19. The upgrade will entail a full installation of MOVA and UTMC infrastructure at each junction.

MOVA is designed to cater for the full range of traffic conditions, from very low flows through to a junction that is overloaded. The software operates in a 'delay minimising mode' whereby if any approach becomes overloaded it switched the signals to cope with the increased traffic.

The three junctions are the A19/A1231, A19/Chester Road and A19/A690 roundabouts; this will enable active real-time management of the traffic flow along the A19.

Study Area

Sunderland is one of five metropolitan districts in Tyne and Wear. The borough covers an area of 137 square kilometres and has an estimated population of 280,000, making it the largest and most heavily-populated district in Tyne and Wear. Sunderland is bounded by Gateshead and South Tyneside to the north and County Durham to the south and west.

The A19 is a key strategic route that provides an alternative to the A1 between North Yorkshire and Tyneside. The A19 runs through the Metropolitan District of Sunderland and is a dual carriageway to the west of the city centre.

The study area is identified in **Figure 1.1**, the A19 is highlighted in red and the junctions are circled.

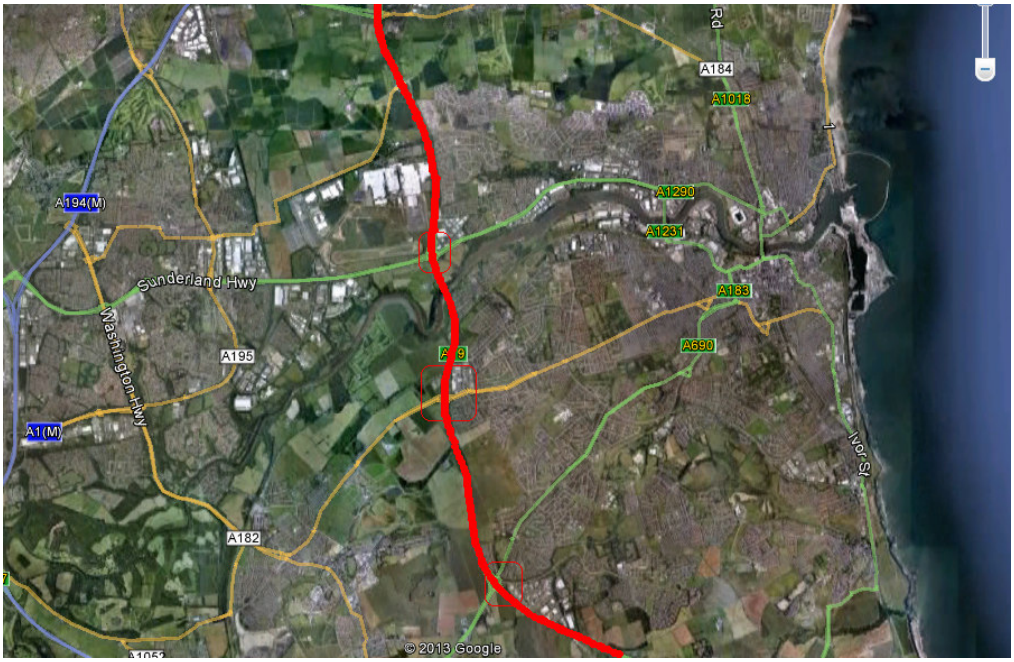


Figure 1.1 Study Area

Identified junctions

A1231 Wessington Way

The A1231 / A19 junction is a grade-separated traffic signal controlled roundabout. The A19 northbound is a three-lane all purpose road with a lane drop at the A1231 junction. In the southbound direction the A19 is a dual carriageway with a taper diverge to the slip road. The A1231 is an all-purpose dual carriageway route in both directions, and at the roundabout, all approaches are flared to three lanes to increase the capacity of the junction. The junction experiences significant traffic demands and therefore congestion occurs during the peak hours.

A183 Chester Road

The junction is a four arm, grade separated traffic signal controlled roundabout and is located where the A183 passes over the A19. The A183 is an all purpose dual carriageway route in both directions, and at the roundabout, all approaches are flared to three lanes to increase the capacity of the junction. Access to and from the A19 is via standard merge and diverge taper arrangements.

A690 Doxford Park

The junction is a five arm, grade separated traffic signal controlled roundabout and is located where the A690 passes over the A19. The A690 is a dual carriageway to the west of the junction and is a single carriageway passing through an urban area to the east of the junction.

The fifth leg is the City Way dual carriageway serving the Doxford International Business Park. Access to and from the A19 is via standard merge and diverge taper arrangements. The junction experiences significant traffic demands and therefore congestion occurs during the peak hours.

Assessment Years, Scenarios and Traffic Data

Assessment Year:

- 2012

Scenarios:

- Do Minimum AM and PM Peaks
- Do Something AM and PM Peaks
- The Do Something scenario is based on a 15% journey time saving. The Highways Agency report '*Sunderland Infrastructure Study'* November 2012, reported a 15% saving in journey times following the instruction of MOVA.

Traffic Data

- Traffic data was taken from the Highways Agency report '*Sunderland Infrastructure Study'* November 2012.
- There are gaps within the data in the HA report, therefore for analysis of traffic flow, the highest traffic flow either entering or exiting the junction was used.
  NB: If the scheme was successful a full traffic count would be undertaken in order to achieve appropriate traffic figures.

Methodology and Results

As there are no models currently developed for this scheme, a desktop analysis was development using Microsoft Excel.

Do Minimum

- The average journey distance through the roundabout was measured in AutoCAD at each site.
- Average speed limit of 32kph was decided
- Formula of Time = Distance/Speed was used to work out the average journey time
- The formula of Time X Total Vehicles in each peak was used to work out the total journey time for all vehicles.
- The journey time costs were then derived by using the formula of Cost = Total Vehicles X 646. 646 is cost in pence per second taken from Tuba v1.9. This was then annualised to derive the total benefit per year
- Each junctions journey cost were added together to give a total cost in the do minimum scenario.

Do Something

- The same process was carried out as above
- The Highways Agency provided information that the average benefit from installing MOVA and UTMC into a signal controlled junction was a reduction in journey times of approximately 15%.
- This was therefore applied to the Do Minimum calculations for each junction.
- The total journey cost calculated for the Do Something scenario by adding these two figures together.

The total benefits for the scheme were then calculated by subtracting the Do Minimum from the Do Something results.

Appendix 5 – Section 151 / Head of Procurement Letter

Sunderland City Council

Mr Steve Berry
Local Transport Funding,
Growth and Delivery Division
Department for Transport
Great Minster House
33 Horseferry Road
London
SW1P 4DR

Office of the Chief Executive
Commercial & Corporate Services,
Civic Centre,
Burdon Road
Sunderland, SR2 7DN

Tel: 0191 520 5555
Web: www.sunderland.gov.uk

Date: 20th February 2013
Our ref: 8/LPPF/01/PDM
Your ref:

This matter is being dealt with by: Paul Muir telephone 5611519
e-mail paul.muir@sunderland.gov.uk

Dear Mr Berry,

SUBJECT: LOCAL PINCH POINT FUND - SUNDERLAND STRATEGIC JUNCTIONS IMPROVEMENT SCHEME

I refer to the application to the Local Pinch Point Fund for the Sunderland Strategic Junctions Improvement Scheme.

Please take this letter as confirmation that Sunderland City Council has a procurement strategy in place for the above named scheme. The strategy is both legally compliant and will achieve best value for money in accordance with the funding requirements.

The Section 151 Officer declaration within section D2 of the application form has been completed in accordance with the funding requirements.

Please contact Paul Muir on the above telephone number if you require any further information or wish to discuss this matter further.

Yours sincerely,

Malcolm Page
Executive Director of Commercial
& Corporate Services

Appendix 6 – Project Plan

Strategic Junctions Scheme

Activity		Year	2013										2014							
	Sub-Activity	Month	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October
Tender Preparation																				
Procurement	PQQ																			
	PQQ Evaluation																			
Tender	Tender																			
	Tender Evaluation																			
Tender Award												*								
Mobilisation																				
Construction	A183 / A19																			
	A690 / A19 & A1231 /A19																			

Appendix 7 - Quantified Risk Register and Risk Management Plan

Appendix 7 - Quantified Risk Breakdown **Sunderland Strategi**

Junctions Improvement Scheme

The Probability Matrix

Description	Score	Minimum	Maximum
Very High	5	70%	100%
High	4	50%	70%
Medium	3	30%	50%
Low	2	10%	30%
Very Low	1	0%	10%

The Impact Matrix

Description	Score	Cost(£)		Time(wks)	
		Minimum	Maximum	Minimum	Maximum
Catastrophic	5	£250,001	£500,000	8	13
Major	4	£100,001	£250,000	4	8
Moderate	3	£50,001	£100,000	2	4
Minor	2	£25,001	£50,000	1	2
Negligible	1	£0	£25,000	0	1

Quantified Risk Analysis

Risk	Likelihood score	Impact score	Most likely probability	Most likely impact cost	Resultant cost	Time Delay Weeks
Change in political priorities / strategies	1	1	0%	£0	£0	1
Change in government policy	1	1	0%	£0	£0	1
Spending cuts to allocation	1	1	0%	£0	£0	1
Utilities result in more extensive / costly works	2	2	20%	£30,000	£6,000	2
Unforeseen ground conditions on site	2	2	20%	£30,000	£6,000	3
Significant changes in standards (Eurocodes) required	1	1	5%	£10,000	£500	1
Traffic management impacts more extensive than expected	4	4	50%	£100,001	£50,000	6
Scheme requires minor design modifications	1	3	5%	£100,000	£5,000	4
Flooding or drainage issues	1	3	5%	£75,000	£3,750	3
Competing schemes on surrounding road network increase construction costs	2	3	20%	£50,001	£10,000	4
Schemes become more extensive at delivery stage	2	3	20%	£50,001	£10,000	3
Poor scheme cost estimates	2	3	20%	£75,000	£15,000	4
Contractor bankruptcy	1	4	5%	£175,000	£8,750	6
Materials costs increase / Inflation	3	3	30%	£50,001	£15,000	2
Changes to allowable site working hours	2	4	20%	£100,001	£20,000	6
TOTAL COST					**£150,000**	

Sunderland City Council

Sunderland Strategic Junctions Improvement Scheme

Risk Management Strategy

February 2013

Project:	Sunderland Strategic Junctions Improvement Scheme
Programme:	Local Pinch Point Fund
Author:	Paul Muir
Date of Submission:	21st February 2013
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Revision History

Version	Comments	Author	Date Issued	Status
v1.0	Document Review	PDM	14/02/13	Draft
v2.0	Amendments	PDM	20/02/13	Issue

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1 Purpose

The purpose of the Risk Management Strategy is to clearly set the direction, scope and priorities of risk management within this particular project. These activities include the successful design, procurement and delivery of the Sunderland Strategic Junctions Improvement Scheme.

The strategy also sets out the key project objectives, identifies roles and responsibilities and defines the specific risk management processes to be undertaken together with the risk monitoring and reporting requirements of the project. It will be regularly reviewed to ensure it is aligned with the objectives and challenges facing the Project and organisation as a whole and reflects relevant changes in the internal and external contexts. This strategy underpins and aligns to the Risk Management Policy and Strategy of Sunderland City Council which is an integral part of Corporate Governance.

1.1 Objectives of the Risk Management Strategy

- To clearly identify objectives, roles and responsibilities for managing risk;
- To introduce a structured framework for the identification, assessment and evaluation of risks;
- To provide a consistent approach to prioritising risks and determining response actions;
- To establish a clear governance structure to escalate and report risks which is aligned to and supports the overall Governance Framework of the Project;
- To improve co-ordination of risk management activity throughout the Project and align to key project management activities including project planning;
- To provide a framework for allocating resources to identified risk priority areas;
- To provide mitigation for risks to avoid negativity, criticism, cost over-runs and project delays;
- To inform decision making through increasing the visibility of risk exposure through the communication of a detailed risk register (which records the results of the risk management process);

- To reinforce the importance of risk management as part of the everyday work of all personnel and stakeholders involved; and
- To ensure senior management and the Council can obtain necessary assurance that the Project is making every effort to reduce/eliminate risks which will affect the achievement of its objectives.

2 Outline of the activity

The project involves transport infrastructure improvements at three strategic junctions required to support the development of the Low Carbon Zone incorporating the enterprise zone and Nissan manufacturing plant, employment sites including Doxford International and major housing development sites. The three strategic junctions are located at the intersection of principle routes (A1231, A183 and A690) with the A19, trunk road.

Each junction is grade separated with traffic signal control provided on the roundabout circulatory carriageways. This proposal is intended to improve capacity and enhance operational control by replacing and upgrading the existing traffic signal control, converting to Extra Low Voltage and introducing both MOVA and UTMC technologies.

2.1 Key Project Objectives & Priorities

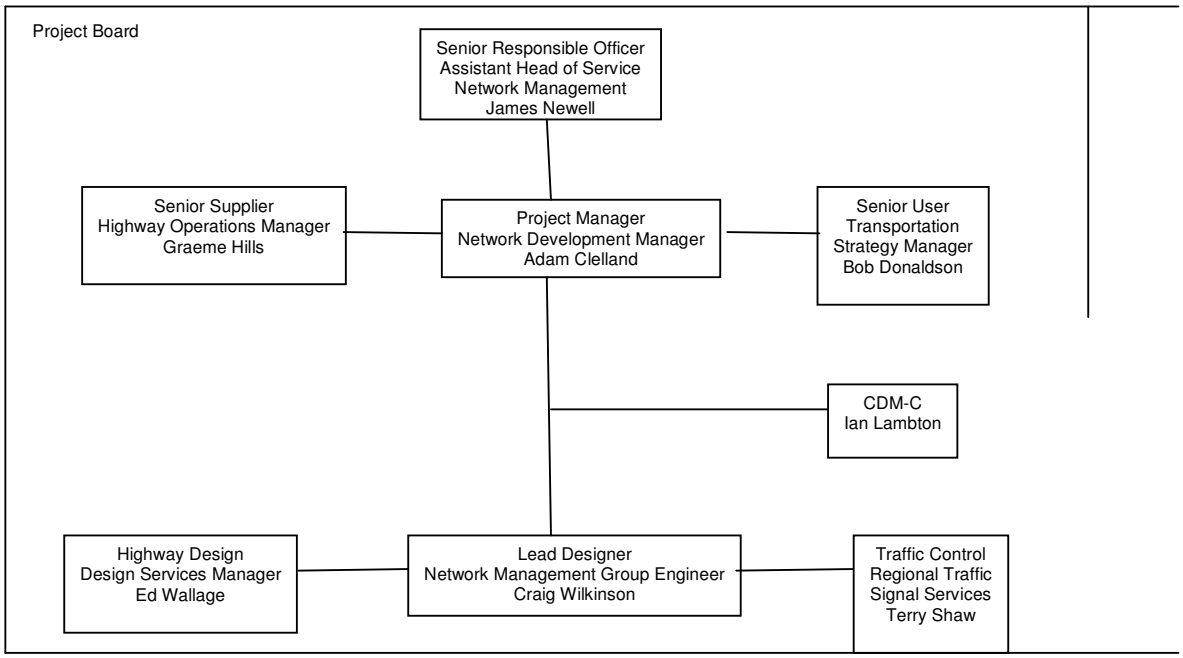
The risk management process will be applied to support the achievement of the following key project objectives to successfully deliver the Project, resulting in the following outcomes:

- To assist with delivery of the Sunderland Economic Master-plan;
- Improve access to the local and strategic road network connecting the City Centre and Washington; and promote access to the Low Carbon Zone (incorporating the enterprise zone and Nissan manufacturing plant), and other key employment sites including Doxford International;
- To create a prosperous city through linking commercial and residential development sites with the wider region, thus increasing access to the city to encourage and assist the development of these sites;
- To help develop an attractive and accessible city, which will further encourage private investment closer to the city;
- To comply with the City Council's approvals process, and meet requisite timescales for the scheme.

3 Roles and responsibilities

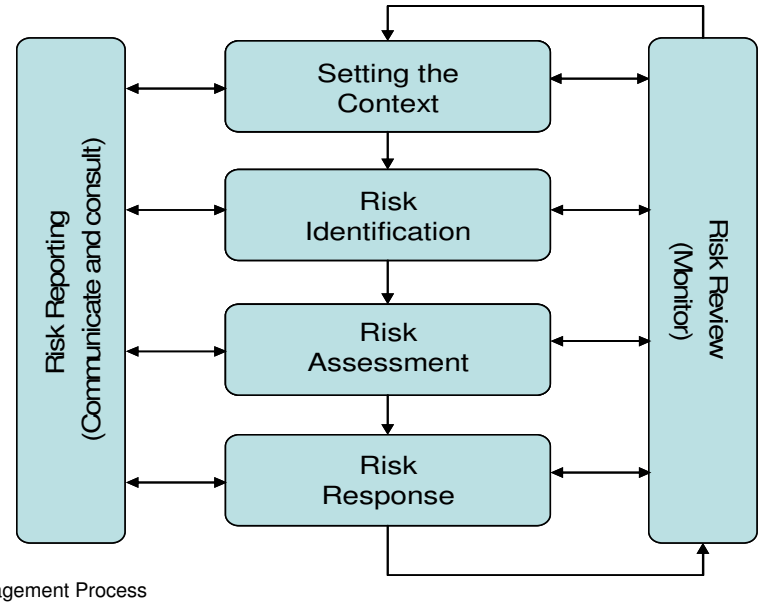
This section sets out clear roles and responsibilities for risk management activities within the project and provides a clear distinction between those who have direct responsibility for the management of risk, e.g. management and staff working within the project; have responsibility for development, implementation, maintenance and oversight of the effectiveness of the risk management strategy together with sponsorship and support for the project's risk management activities; and have responsibility for providing independent assurance, e.g. project assurance.

3.1 Project Organisation Chart



4 The Risk Management Process

The following section provides a summary of the risk management process to be implemented. The process corresponds to the main overarching principles of the risk methodology adopted by Sunderland City Council with minor alterations and additions to complement the specific needs of the Project. The project's risk management process comprises of the following steps:



The Risk Management Process

4.1 Setting the context

The main purpose of this step in the process is to gain a full understanding and gather related information regarding the Project which risk management is to be applied to.

4.2 Risk identification

Risk identification should focus on the recording of specific risk events capturing a detailed description of the area of uncertainty along with their causes and consequences.

4.3 Risk assessment

All identified risks are to be evaluated in terms of likelihood of occurrence and potential impact (considering both cost and time) on the Project in order to rank their significance and prioritise their management. Each risk is re-evaluated at regular reviews to assess any changes as a result of the management response proposed and to determine the current, up to date status.

4.4 Risk response

A key stage of the Risk Management process is to plan the management responses to reduce the level of risk. Appropriate actions will be developed to address the root causes of the risks and/ or to reduce the effect (impacts) should they occur. The action plans for all risks should include clearly defined actions, responsibilities and completion dates.

4.5 Risk reporting and review

Risk management is the responsibility of the entire project team. The framework, as set out above, relies upon individuals reviewing the overall position and understanding their own responsibility to identify risks as they become apparent.

5 Budget Required

Sunderland City Council will be responsible for the overall risk management activities for the project.

6 Timing of risk management activities

Any changes made throughout the Project, at any time, could impact on the risks ie affect existing risks or raise new risks. Risk management will be an ongoing, iterative process carried out throughout the whole lifecycle from initiation to implementation.

Appendix 8 – Application Form Checklist

Local Pinch Point Fund
Application Form Checklist

Department for Transport

Scheme: Sunderland Strategic Junctions Improvement Scheme
Lead authority: Sunderland City Council

SECTION A

	Section / page	Guidance Ref
A3. Have you appended a map?	Appendix 1	N/A
A6. Have you included supporting evidence of partnership bodies' willingness to participate in delivering the bid proposals?	P2	Para 10-14
A7. Have you appended a letter from the relevant LTB(s) / LEP(s) confirming the priority of the proposed scheme? ***[Optional]***	Appendix 2	Para 10-14

SECTION B

	Section / page	Guidance Ref
B4. Have you enclosed a letter from an independent valuer to verify the market value land if land is being included as part of the non-DfT contribution towards scheme costs?	N/A	Para 40-42
B4. Have you enclosed a letter confirming the commitment of external sources to contribute to the cost of the scheme will be required?	N/A	Para 40-42
B6. Have you provided a completed Appraisal Summary Table in a format readable by Excel 2003?	Appendix 3	Para 35-39
B6. Have you provided a completed Scheme Impacts Pro Forma in a format readable by Excel 2003? ***[Small projects only]***	Appendix 4	Para 35-39
B6. Have you provided relevant supporting material – and for large schemes – a WebTAG compliant bid?	Yes Page 8	N/A
B7. Have you attached a joint letter from the local authority's Section 151 Officer and Head of Procurement confirming that a procurement strategy is in place that is legally compliant and is likely to achieve the best value for money outcome?	Appendix 5	Para 43-45
B8. Has a letter been appended to demonstrate that arrangements are in place to secure the land to meet the construction milestones?	Table C	N/A
B8. Has a Project Plan been appended to your bid?	Appendix 6	Para 43-45
B11. Has a QRA been appended to your bid?	Appendix 7	Para 40-42
B11. Has a Risk Management Strategy been appended to your bid?	Appendix 7	Para 40-42
B12. Have you appended evidence of Stakeholder Analysis? ***[Large projects only]***	N/A	Para 40-42
B12. Have you appended a Communications Plan? ***[Large projects only]***	N/A	N/A
B13. Have you provided evidence of an integrated assurance and approval plan? ***[Large projects only]***	N/A	Para 40-42

SECTION D

	Section / page	Guidance Ref
D1. Has the SRO declaration been signed?	Yes Page 15	N/A
D2. Has the Section 151 Officer declaration been signed?	Yes Page 15	N/A