

Local Pinch Point Fund Application Form



Department
for Transport

Guidance on the Application Process is available at:

<https://www.gov.uk/government/organisations/department-for-transport/series/local-pinch-point-fund>

Please include the [Checklist](#) with your completed application form.

The level of information provided should be proportionate to the size and complexity of the scheme proposed. As a guide, for a small scheme we would suggest around 25-35 pages including annexes would be appropriate.

One application form should be completed per project.

Applicant Information

Local authority name(s)*: *Warwickshire County Council*

**If the bid is a joint proposal, please enter the names of all participating local authorities and specify the lead authority*

Bid Manager Name and position: *Nicholas Dauncey, Principal Transport Planner*
Contact telephone number: *01926 412737*

Email address: nickdauncey@warwickshire.gov.uk

Postal address: *Transport Planning
Communities
Warwickshire County Council
PO Box 43
Shire Hall
Warwick
CV34 4SX*

When authorities submit a bid for funding to the Department, as part of the Government's commitment to greater openness in the public sector under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, they must also publish a version excluding any commercially sensitive information on their own website within two working days of submitting the final bid to the Department. The Department reserves the right to deem the business case as non-compliant if this is not adhered to.

Please specify the weblink where this bid will be published:

www.warwickshire.gov.uk/rugbygyratoryscheme

SECTION A - Project description and funding profile

A1. Project name: *Rugby Gyrotory Scheme*

A2. Headline description:

Please enter a brief description of the proposed scheme (in no more than 100 words)

The proposed scheme comprises improvements to the Warwick Street Gyrotory in Rugby, south west of the town centre. A key proposal in the Warwickshire Local Transport Plan 2011 – 2026, it is designed to promote economic growth by reducing traffic congestion at a key interchange and comprises:-

- *New traffic signals on the three main approaches to the Gyrotory and on the circulatory carriageway itself to better manage traffic flow;*
- *Provision of additional lanes on the circulatory carriageway of the Gyrotory and on two key approaches to increase capacity; and*
- *Major improvements for pedestrians and cyclists, including new shared use foot / cycleway and traffic signal crossing upgrades.*

A3. Geographical area:

Please provide a short description of area covered by the bid (in no more than 100 words)

Rugby Borough is located in north-east Warwickshire. The town of Rugby has a population of approximately 64,000 and is some 15km east of Coventry and 13km north of Daventry. Rugby is well connected via the strategic road and rail networks to Birmingham, the East Midlands and the South East due to the proximity of the M6 / M1 / A14 and the West Coast Mainline.

The town is a large employment, residential and service centre; generating significant daily numbers of trips to and from the town. The Borough has experienced the highest levels of traffic growth in Warwickshire over the last 10 years.

OS Grid Reference: *SP 50089 74955*

Postcode: *CV22 6AW*

Please append a map showing the location (and route) of the proposed scheme, existing transport infrastructure and other points of particular interest to the bid e.g. development sites, areas of existing employment, constraints etc.

*A map showing the location of, and routes around, the proposed scheme is shown in **Figure 1**.*

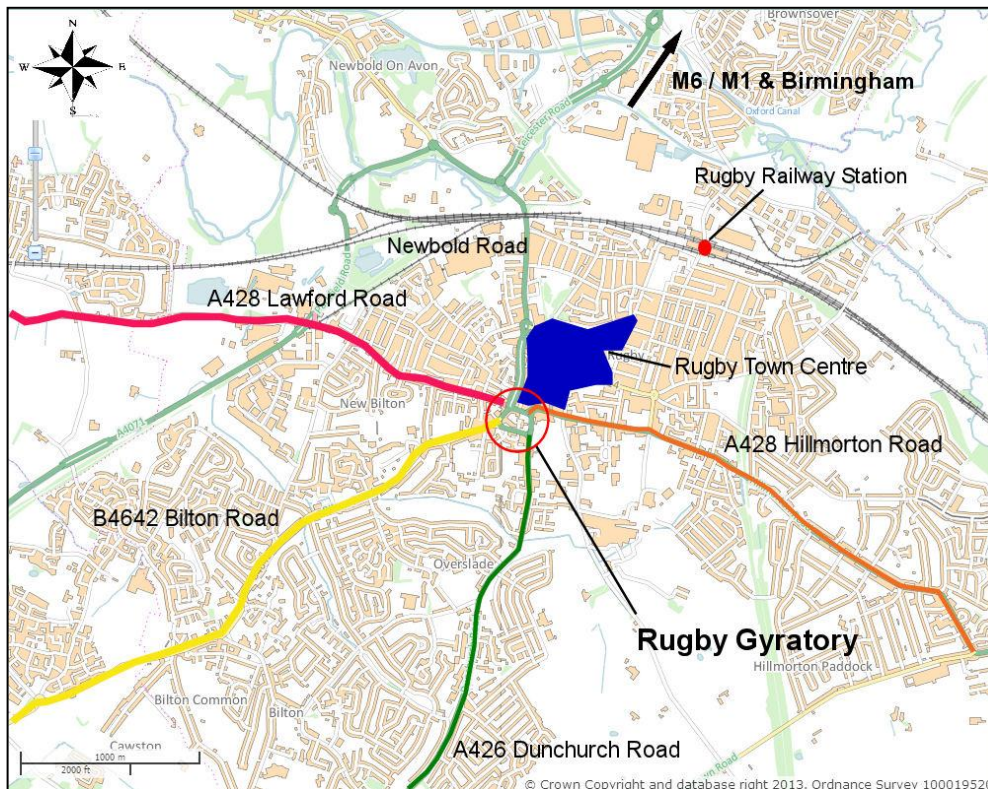


Figure 1: Location Map of Rugby Gyratory, Rugby, Warwickshire

A4. Type of bid (please tick relevant box):

Small project bids (requiring DfT funding of between £1m and £5m)

- Scheme Bid
- Structure Maintenance Bid

Large project bids (requiring DfT funding of between £5m and £20m)

- Scheme Bid
- Structure Maintenance Bid

Note: Scheme and Structure Maintenance bids will be assessed using the same criteria.

A5. Equality Analysis

Has any Equality Analysis been undertaken in line with the Equality Duty? Yes No

A6. Partnership bodies

Please provide details of the partnership bodies (if any) you plan to work within the design and delivery of the proposed scheme. This should include a short description of the role and responsibilities of the partnership bodies (which may include Development Corporations, National Parks Authorities, private sector bodies and transport operators) with confirmatory evidence of their willingness to participate in delivering the bid proposals.

The scheme will be designed by the County Council's in-house 'Design Services' team. However, during the detailed design phase we propose to engage with Sustrans to draw upon their design expertise and maximise the quality and usability of the pedestrian and cycle facilities. This will enable the scheme to realise maximum accessibility benefits. A copy of the letter of support from Sustrans is included in Appendix A.

The delivery of the scheme will be undertaken by the County Council and its appointed Principal Contractor.

A7. Local Enterprise Partnership / Local Transport Body Involvement

It would be beneficial (though not essential) if the relevant LEP or LTB (or shadow(s)) have considered the bid and, if necessary, prioritised it against other bids from the same area. If possible, please include a letter from the LEP / LTB confirming their support and, if more than one bid is being submitted from the area, the priority ranking in order of growth significance.

Have you appended a letter from the LEP / LTB to support this case? Yes No

A copy of the letter of support from the LEP is included in Appendix A

SECTION B – The Business Case

You may find the following DfT tools useful in preparing your business case:

- [Transport Business Cases](#)
- [Behavioural Insights Toolkit](#)
- [Logic Mapping Hints and Tips](#)

B1. The Scheme - Summary

Please select what the scheme is trying to achieve (this will need to be supported by evidence in the Business Case). Please select all categories that apply.

- Improve access to a development site that has the potential to create housing
- Improve access to a development site that has the potential to create jobs
- Improve access to urban employment centres
- Improve access to Enterprise Zones
- Maintain accessibility by addressing the condition of structures
- Ease congestion / bottlenecks
- Other(s), Please specify - *Improved air quality in the Rugby Air Quality Management Area (AQMA) & increased accessibility through the provision of enhanced crossing facilities for pedestrians and cyclists and other vulnerable road users.*

B2. The Strategic Case

This section should set out the rationale for making the investment and evidence on the strategic fit of the proposal. It should also contain an analysis of the existing transport problems, identify the barriers that are preventing growth, explain how the preferred scheme was selected and explain what the predicted impacts will be. The impact of the scheme on

releasing growth potential in Enterprise Zones, key development sites and urban employment centres will be an important factor in the assessment process.

In particular please provide evidence on the following questions (where applicable):

- a) What is the problem that is being addressed, making specific reference to barriers to growth and why this has not been addressed previously?

The concentrated nature of the residential, employment and service centres (those providing healthcare, retail and leisure facilities within Rugby) and the relative lack of cross-town sustainable transport routes have contributed to rapid growth in vehicle ownership & use in the town. Despite the widespread coverage of the strategic road network, the highway at key hotspots in Rugby is congested and unable to cope with increasing vehicle demands.

At the Rugby Gyratory four key arterial roads into the town converge on an area less than 0.5 sq. km in size. These roads must cater for considerable volumes of commuter, service and residential movements, in addition to carrying 'through' traffic (e.g. sub-regional movements between outlying villages and towns). The local highway network which feeds onto the Gyratory is therefore subject to sustained levels of both peak and inter-peak hour traffic congestion.

This congestion, not only restricts physical access, thus negatively impacting on the local economy, but also detracts from the quality of the public realm. This is particularly important given the local built heritage of Rugby School which is located to the east of the Gyratory in a Conservation Area and features a number of Grade I, II and II listed buildings. Two other Conservation Areas (Bilton Road and Rugby Town Centre) abut and include sections of the Gyratory and feature several listed and important, unlisted, buildings.*

(i) What are the main problems being addressed?

Traffic Congestion

*One of the two main problems which the scheme seeks to address is significant queuing on A426 Dunchurch Road (Arm C) northbound approach during the AM weekday peak (08:00-09:00), (please see **Figure 2** overleaf which shows a plan of the Gyratory with arm labels). In 2016, predicted average hourly maximum queues on Arm C are 71.8 vehicles.*

This problem may be attributed to the factors listed below:-

- There is a large through-flow of vehicles from the south-east (Arm C - A426 Dunchurch Road) to the north west (Arm A - A426 Corporation Street) in the AM peak period;*
- High levels of circulatory flow on the Gyratory itself, leaving very few gaps available for traffic wishing to enter on to the circulatory;*
- Limited stacking capacity on certain parts of the Gyratory; and*
- Restricted capacity due to inefficient lane geometry on approaches to and within the Gyratory.*

Future year analysis has also also shows significant queuing problems on the B4642 Bilton Road (Arm D) by 2033 with predicted average hourly maximum queues of 77.4 vehicles.

Accessibility for Pedestrians and Cyclists

The other problem is the Warwick Street Gyratory currently forms a major barrier for sustainable transport journeys within Rugby, particularly for cyclists and pedestrians who wish to travel to and from the town centre on a daily basis. There are already good cycling and walking routes to the south of the junction however the town centre cannot be reached safely due to the current design and operation of the Gyratory.

Cyclists have no current alternative than to join the main circulatory carriageway upon arrival and the existing levels of congestion which occur and the present layout of the carriageway are major deterrents; compromising their safety and intimidating those who are less confident / vulnerable

Similarly, there are currently only two signalised crossing points for pedestrians travelling to or from the town centre (one on the north- west junction, the other on the southern circulatory road). In reaching the central island of the Gyratory, pedestrians then have to cross the northern circulatory road via a subway which can be intimidating for the less confident / vulnerable pedestrian. The lack of formal alternatives encourages some pedestrians to cross the circulatory carriageway between the moving traffic and deters others from walking to their destination in the first instance.

A plan showing the 'arms' of the Gyratory is shown below:



Figure 2: Arms of the Rugby Gyratory

(ii) Barriers to Growth

The above capacity constraints create significant queues and delays at the Gyratory and these are predicted to increase further as committed development proposals are implemented. Examples of these include

- Approximately 1,200 dwellings between 2013/14 and 2015/16 e.g. Coton Park East, Cawston Grange, A426 Leicester Road and other smaller sites;

- Expansion/redevelopment of Elliott's Field Retail Park on the A426 Leicester Road corridor north-east of the town centre with a predicted net increase of 313 full time equivalent jobs .

Assessment work shows a significant reduction in queuing on Arms B and C following scheme implementation, an increase in average vehicle speeds and a reduction in average vehicle delays. Thus the scheme would address existing traffic congestion problems and facilitate future housing and employment growth in the town.

(iii) Why has the problem not been addressed previously?

The Rugby Transport Study (July 2009) considered improvement options for the gyratory but these were subsequently shown not to be feasible and a deliverable scheme has only recently been developed.

(iv) Strategic Rationale

Rugby Borough Council Core Strategy

The scheme forms part of the Infrastructure Delivery Plan (IDP) of the Rugby Borough Council Core Strategy. The Core Strategy sets out the Borough's plans to address current barriers to growth and plans for future housing and economic development. The IDP itself refers to an improvement scheme at the Gyratory which suffers from existing congestion problems as a critical infrastructure requirement to facilitate future housing and employment growth. The implementation of the scheme will therefore contribute towards achieving the objectives of the Core Strategy.

National Transport Goals

These proposals will also contribute towards each of the five 'national transport goals' set out in Warwickshire's third Local Transport Plan (LTP3) 2011 – 2026. The LTP was adopted by the County Council in March 2011 and include a key target area to increase service and use of public transport in order to increase the use of more sustainable travel options. A description of how the proposals will contribute to the strategic national transport goals, along with some of the local objectives set out in the LTP for Rugby is set out below:

Goal 1: Tackling Climate Change

- The proposals will reduce transport related carbon emissions by reducing the need to travel by private car through the encouragement of sustainable travel to and from the town centre.
- The encouragement of modal shift from private car to sustainable means, in addition to a reduction in road traffic congestion will make a long term contribution toward reducing greenhouse gas emissions.

Goal 2: Supporting Economic Growth

- Additional reductions in the dominance of vehicular traffic (and therefore congestion) in Rugby will help contribute towards the revitalisation of the local economy through time savings to both

consumer and business travellers, and create capacity for residents who want to access the town via public transport.

- The proposals will also help to accommodate new housing and employment developments; thus bringing long-term benefits to the local economy and encouraging new investment.

Goal 3: Promoting Equality of Opportunity

- The provision of high- quality facilities for pedestrians and cyclists as an integral element of scheme design will encourage those who do not own / have regular access to a car to access the town centre for leisure, employment or other purposes;

- Similarly the improvements in journey times (from less traffic congestion) will improve bus journey times in the town – helping to make bus travel more reliable and a more attractive alternative to the private car.

Goal 4: Contributing to Better Safety, Security and Health

- The reduction in road traffic congestion and better management of traffic flows on the gyratory should help to reduce the numbers of road traffic accidents.

- Furthermore encouraging sustainable access to and from the town centre will increase physical activity, thus helping to tackle obesity and address local air quality issues.

Goal 5: Improving Quality of Life

- Decreases in road traffic congestion, coupled with modal shift to walking / cycling will reduce the adverse environmental impacts of road traffic in terms of noise, visual intrusion and pollution on the local environment and public realm.

- This will then help to reduce air quality problems in the Air Quality Management Area (AQMA) which covers the whole town.

In addition to contributing towards delivery of the five 'national transport goals', the extension proposals will help deliver a number of local objectives contained within the 'Eastern Warwickshire Area Strategy' of the 3rd Warwickshire Local Transport Plan:

1. Local Objective: To deliver improvements that... improve local air quality in[the] existing Air Quality Management Areas (AQMA).

- Peak hour congestion levels in the town centre will reduce due to the improved through- flow of traffic through the Gyratory

2. Local Objective: To tackle congestion by improving public transport, providing better facilities for cycling and walking.

- Enhancements in the walking and cycling facilities will help to tackle congestion by promoting modal shift away from the private car and reduced levels of car ownership.

b) What options have been considered and why have alternatives have been rejected?

Two alternative options have been considered and rejected:

1. To reverse the direction of traffic flow around the Gyratory

Under this proposal the direction of traffic flow would be reversed around the Gyratory (from a clockwise to anti-clockwise direction). The objective of this approach is to provide a more direct route for traffic travelling from the east (A428 Lawrence Sherriff Street) to the A428 Lawford Road to the west and north to the A426 Corporation Street / Newbold Road corridor (M6 & M1); thereby making efficiencies in the routing of traffic around the Gyratory, improving journey times and reducing congestion. Unfortunately, however, the complexities of the opposing traffic movements at the Lawford Road / Corporation Street / Warwick Street junction precludes this as a feasible option.

2. To provide bi-direction flow around the Gyratory

Under this proposal the Gyratory would be made bi-directional, again in order to make efficiencies in the routing of traffic. However, this option would require additional carriageway lanes to be constructed and there is insufficient space within the Highway boundary to achieve this. The constraint imposed by the proximity of adjacent housing and commercial properties (many of which are listed buildings) precludes the acquisition of additional land as a cost effective option and therefore proves the scheme unfeasible.

- c) What are the expected benefits / outcomes? For example, job creation, housing numbers and GVA and the basis on which these have been estimated.

The proposed scheme is designed to address existing congestion problems by reducing vehicle delays a key pinch point in the town and to facilitate significant future employment and housing growth as set out in Rugby Borough Council's Local Development Framework Core Strategy (adopted June 2011). At least 8,040 houses are due to be accommodated within or adjacent to the town between 2006 and 2026 with projected employment growth in the Borough of some 6,200 jobs.

GVA

The following GVA assessment is an estimate based on the County Council's GVA 'development model'.

i) Job Creation

Based on similar, recently completed schemes, during project construction the following FTE jobs would be created:

- Construction: 6 FTE
- Utility: 4 FTE
- Architectural design & engineering: 3.5
- Business support: 1.5

This would then yield a £260,724 increase to GVA for the 3 month duration of the project

Based on projected growth & development figures in Rugby, by 2017 (3 years after project completion) the following number of jobs will have been phased in:

- Construction: 20 jobs
- Real estate: 10 jobs

- Retail trade: 313 jobs
- Wholesale trade: 20 jobs
- **Total: 363 jobs**

These jobs are dependent on delivery of the Rugby Borough Council Infrastructure Delivery Plan (IDP). The cost of the Gyratory scheme represents 9% of the total value of highway infrastructure improvements in the IDP and it can therefore be assumed that the scheme enables 9% of these jobs to be delivered (33 jobs).

If the total growth in jobs between 2014 and 2017 is therefore estimated to be 363; yielding a £22,386,062 increase in GVA (discounted prices) then the Gyratory scheme will deliver a £2,014,746 increase in GVA.

The total GVA increase to Rugby Borough as a result of economic growth is therefore £2,275,469.

ii) Household Growth

Based on projected growth & development figures in Rugby Borough Core Strategy, by 2017 (3 years after project completion) an estimated total of 1,961 household will have been completed.

Based on recent research by Persimmon Homes, each new household constructed releases approximately 2 new jobs into the local economy. If the Gyratory scheme represents 9% of the total value of highway infrastructure improvements in the IDP it can therefore be assumed that the scheme will create 177 households (and 354 jobs). Warwickshire County Council data indicates that the GVA per worker in Rugby Borough is £34,966 and therefore the resulting total increase in GVA through household growth is £12,377,964.

Combined GVA

The total combined growth in GVA resulting from implementation of the scheme is therefore £14,653,433.

- d) What is the project's scope and is there potential to reduce costs and still achieve the desired outcomes? For example, using value engineering.

There are three elements to the Rugby Gyratory Improvement Scheme:

- 1. The provision of three new signalised junctions;**
- 2. The provision of additional carriageway space; and**
- 3. The provision of high quality pedestrian and cycle facilities.**

An overview scheme plan is included in Appendix B.

Each element is outlined below:

1. The provision of three new signalised junctions

Three new signalised junctions will be provided on the currently un-signalised arms of the Gyratory (the A426 Corporation Street (Arm A) and A428 Lawford Road (Arm E) are already signalised and operating at optimum capacity).

- *The signalised junctions will manage traffic to ensure optimum flows during peak periods*
- *Urban Traffic Management Control (UTMC) will be installed to coordinate the signal timings*

- Cycle and pedestrian phases will be added to the new junctions
- CCTV Cameras will be installed to enable the County Council's Traffic Control and Information Systems Team (TCIS) to manipulate & optimise the new signalised junctions in 'real-time' as necessary.

2. The provision of additional carriageway space

Additional carriageway space will be provided to optimise traffic volumes, and therefore flows, through the Gyratory. This will be achieved through a combination of:

- More efficient and clearer lane markings; and
- The creation of additional carriageway from within the existing Highway boundary.

3. The provision of high quality pedestrian and cycle facilities

Pedestrian and cycle facilities will be greatly enhanced through the provision of a traffic free route through the gyratory for north – south journeys. This will be achieved through:

- The provision of pedestrian and cycle phases on the signalised junctions
- The upgrading of existing footway to shared – use foot / cycle way / removal of pinch points
- Creation of new foot / cycle way on the inside of the Gyratory
- The upgrading of existing Puffin Crossings to a Toucan Crossings
- Enhanced signing and lining to guide pedestrians and cyclists.

Value engineering (VE) had already been carried out within the scheme design to ensure that the best value for money is achieved for the public purse. The key elements of VE are as follows:

1. The removal of an additional lane of carriageway from the south-western (inside) corner of the gyratory (at the junction of Russelheim Way and Bilton Road). Whilst this section of new road would have provided additional 'stacking space' for vehicles making an east – north journey, it would require the construction of new carriageway from existing highway verge and negatively impact on adjacent residential properties. This additional section of carriageway would have had minimal impact on the overall operation of the Gyratory, in addition it would prevent the construction of new foot / cycleway on the inside of the Gyratory, and has therefore been removed from the final scheme scope.

2. The design of the traffic signals has been optimised to minimise the number of 'control units' required to operate the system. This is significant because the contract for the supply of the new traffic signals is priced on the number of control units required, rather than the number of 'signal heads' (traffic lights) installed. Minimising the number of control units provided therefore achieves an efficiency saving in the overall scheme cost.

e) Are there any related activities, that if not successfully concluded would mean the full economic benefits of the scheme may not be realised. For example, this could relate to land acquisition, other transport interventions being required or a need for additional consents?

The only consents needed for this scheme are those obtained during statutory consultation, prior to the implementation of the new traffic signals and the shared use foot / cycleway. Given the demonstrated support from key stakeholders such as Rugby Borough Council, Rugby First and Sustrans, and the minimal impact of the scheme on local residents, this scheme is expected to be successfully delivered in accordance with the scheme programme. Notwithstanding, the consultation has been programmed at the very start of the delivery phase to enable objections to be dealt with should they arise, before work begins on site.

f) What will happen if funding for this scheme is not secured - would an alternative (lower cost) solution be implemented (if yes, please describe this alternative and how it differs from the proposed scheme)?

There is no alternative low cost scheme which can address the existing congestion issues.

g) What is the impact of the scheme – and any associated mitigation works – on any statutory environmental constraints? For example, Local Air Quality Management Zones.

The whole urban area of Rugby bounded by the southern boundary with Daventry District Council, A5, M6, minor roads to the west of Long Lawford, A45 and M45 is designated as an Air Quality Management Area¹. The particular pollutants declared are as follows:

- Particulate Matter (PM10); and
- Nitrogen Dioxide (NO₂).

The scheme has been demonstrated to help address these air quality issues as follows:

Particulate Matter

- The scheme is projected to decrease Particulate Matter emissions as demonstrated in Figure 3.



Figure 3: Assessment of PM10 emissions 2016 – 2033.

Nitrogen Dioxide

¹ http://aqma.defra.gov.uk/aqma-details.php?aqma_id=267

- The scheme is projected to decrease NO_x emissions as demonstrated in Figure 4 below:



Figure 4: Assessment of NO_x emissions 2016 – 2033.

From Figures 3 & 4 above it can be seen that without the proposed interventions that air quality will further deteriorate in and around the Gyratory over the next 20 years. Through the implementation of the scheme, air quality issues can begin to be addressed. The major improvements in walking and cycling also proposed will further help to reduce greenhouse gas emissions, through sustained modal shift, although these benefits have not been quantified.

B3. The Financial Case – Project Costs

Before preparing a scheme proposal for submission, bid promoters should ensure they understand the financial implications of developing the scheme (including any implications for future resource spend and ongoing costs relating to maintaining and operating the asset), and the need to secure and underwrite any necessary funding outside the Department's maximum contribution.

Please complete the following tables. **Figures should be entered in £000s** (i.e. £10,000 = 10).

Table A: Funding profile (Nominal terms)

£000s	2013-14	2014-15	2015-16	Total
DfT funding sought	-	1,000		1,000
Local Authority contribution	46	409	-	455
TOTAL	46	1,409	-	1,455

Table B: Cost estimates (Nominal terms)

Cost heading	Cost (£000s)	Date estimated	Status (e.g. target price)
Highway Works	443	October '13	Estimate
Traffic Signal Equipment	235	October '13	Estimate
Foot / Cycleway	198	October '13	Estimate
Utility Diversions	44	October '13	5% of Construction
Design & Supervision	46	October '13	5% of Construction
Risk (P50) Allowance	64	October '13	Firm
Optimism Bias (44%)	425	n/a	Stage 1 Allowance
TOTAL	<u>1,455</u>		

Notes:

1) Department for Transport funding must not go beyond 2014-15 financial year.

2) A minimum local contribution of 30% (local authority and/or third party) of the project costs is required.

3) Costs in Table B should be presented in outturn prices and must match the total amount of funding indicated in Table A.

B4. The Financial Case - Local Contribution / Third Party Funding

Please provide information on the following points (where applicable):

- a) The non-DfT contribution may include funding from organisations other than the scheme promoter. If the scheme improves transport links to a new development, we would expect to see a significant contribution from the developer. Please provide details of all non-DfT funding contributions to the scheme costs. This should include evidence to show how any third party contributions are being secured, the level of commitment and when they will become available.

Details of the various funding contributions are shown below:

Funding	Contributor	Amount (£k)
(DfT)	(LPPF)	1,000
non- DfT	Warwickshire County Council	455
	Total	1,455

Warwickshire County Council has allocated £0.455m to contribute towards the scheme. This funding is ring-fenced for the scheme within the 2014/15 Capital Programme.

- b) Where the contribution is from external sources, please provide a letter confirming the body's commitment to contribute to the cost of the scheme. The Department is unlikely to fund any scheme where significant financial contributions from other sources have not been secured or appear to be at risk.

Have you appended a letter(s) to support this case? Yes No N/A

All funding required for the scheme, other than that sought through the Pinch Point Fund, has already been secured by the County Council.

- c) The Department may accept the provision of land in the local contribution towards scheme costs. Please provide evidence in the form of a letter from an independent valuer to verify the true market value of the land.

Have you appended a letter to support this case? Yes No N/A

- d) Please list any other funding applications you have made for this scheme or variants thereof and the outcome of these applications, including any reasons for rejection.

No other funding applications have been made for this scheme.

B5. The Financial Case – Affordability and Financial Risk

This section should provide a narrative setting out how you will mitigate any financial risks associated with the scheme (you should refer to the Risk Register / QRA – see Section B11).

Please ensure that in the risk / QRA cost that you have not included any risks associated with ongoing operational costs and have used the P50 value.

Please provide evidence on the following points (where applicable):

- a) What risk allowance has been applied to the project cost?

Following production of the risk register and report, the P50 risk figure for the scheme has been calculated as £0.064m. This represents a c.5% contingency on the scheme baseline cost.

- b) How will cost overruns be dealt with?

Warwickshire County Council will be liable for any cost overruns.

- c) What are the main risks to project delivery timescales and what impact this will have on cost?

A risk workshop was held for the project (facilitated by Equib, a third party risk management company) and a resultant register produced. Based on the quantitative assessment undertaken, the top 5 risks to project delivery are as follows:

Rugby Gyrotory - Top 5 Scheme Risks			
Risk Rank	Description	Mitigation	Value (£k)
1	Night time closures: More road closures may be required for scheme construction than allowed for in the estimate. Daytime diversion of traffic through town may be unacceptable to businesses etc. leading to night working.	<i>Include requirement in tender documents. Back additional costs off onto Contractor.</i>	28.01
2	Statutory undertakers' equipment: Water main, BT cables and 11kv power cable may need to be diverted - A428 Lawrence Sheriff Street.	<i>Undertake consultation with Utility Companies during detailed design phase to confirm location of the services. Undertake trial holes / Stats. Surveys to define exact locations.</i>	13.1
3	Street lighting may need to be added to or modified (most likely at A428 Lawrence Sheriff Street junction).	<i>Hold design review meeting with WCC Street Lighting during Detailed Design phase.</i>	4.5
4	Use of CCTV: there is a risk that CCTV for control and monitoring of traffic will add to costs for CCTV equipment, consultation, communications links and integration.	<i>Work with RBC during the detailed design phase to assess capacity of existing systems.</i>	4.41
5	Cable Routes: the system will require new ducts for cables around the gyratory. The risk is that new ducts /excavations for cables etc. may be affected by buried services - more work required due to having to work around or move utilities e.g. BT fibre.	<i>Undertake consultation with Utility Companies during detailed design phase to confirm location of the services. Undertake trial holes / Stats. Surveys to define exact locations.</i>	4.15

The cost estimates for these risks have been included in the P50 figure.

d) How will cost overruns be shared between non-DfT funding partners (DfT funding will be capped and will not be able to fund any overruns)?

Warwickshire County Council will be liable for any cost overruns.

B6. The Economic Case – Value for Money

This section should set out the full range of impacts – both beneficial and adverse – of the scheme. The scope of information requested (and in the supporting annexes) will vary according to whether the application is for a small or large project.

Small project bids (i.e. DfT contribution of less than £5m)

a) Please provide a description of your assessment of the impact of the scheme to include:

- Significant positive and negative impacts (quantified where possible);
- A description of the key risks and uncertainties;
- A short description of the modelling approach used to forecast the impact of the scheme and the checks that have been undertaken to determine that it is fit-for-purpose.

Analysis of Monetised Costs and Benefits

The analysis of Monetised Costs and Benefits and the Appraisal Summary Table has shown that the scheme has a:

- **Benefit: Cost ratio (BCR) of 20.96: 1**
- **Net Present Value (NPV) of £17.66m**
- **Net Business Value (NBV) of £10.73m**
- **Value of (Economic) Journey Time Benefits of £21.1m**

Traffic modelling assessment of the proposed scheme has also yielded the following results. *It should be noted that only the AM peak period benefits have been assessed because the PM peak period model is not sufficiently well calibrated to produce reliable outputs:

Average Vehicle Speeds

In the opening year of the scheme, the measures will realise a small decrease in average vehicle speeds:

	AM Peak Hr	
Assessment Year: 2016	Weekday	
Average Network Speed (kph)	Do Nothing	Scheme
Car	33.7	33.4
LGV	33.2	33.2
HGV & PSV	34.1	31.1

By the 2021 assessment year under the ‘Do Nothing’ scenario the background traffic growth will mean that the average (car) speed drops from 33.7kph in 2016 to 31.1kph. However, if the scheme is implemented then traffic speeds will be maintained at 2016 levels.

	AM Peak Hr	
Assessment Year: 2021	Weekday	
Average Network Speed (kph)	Do Nothing	Scheme
Car	31.1	33.3
LGV	30.9	33.2
HGV & PSV	32.9	30.9

By 2033, traffic speeds will have reduced even further in the ‘Do Nothing’ scenario (down to 27.5kph) whereas the proposed scheme will retain vehicle speeds above 31kph.

	AM Peak Hr	
Assessment Year: 2033	Weekday	
Average Network Speed (kph)	Do Nothing	Scheme
Car	27.5	31.7
LGV	27.5	31.5
HGV & PSV	30.1	29.7

Whilst this may not appear to be a significant benefit in terms of average vehicle speed, a drop of even 5kph can have marked impacts on vehicle queue lengths on the approaches to the Gyratory as demonstrated below:

Peak Hour Queue Lengths

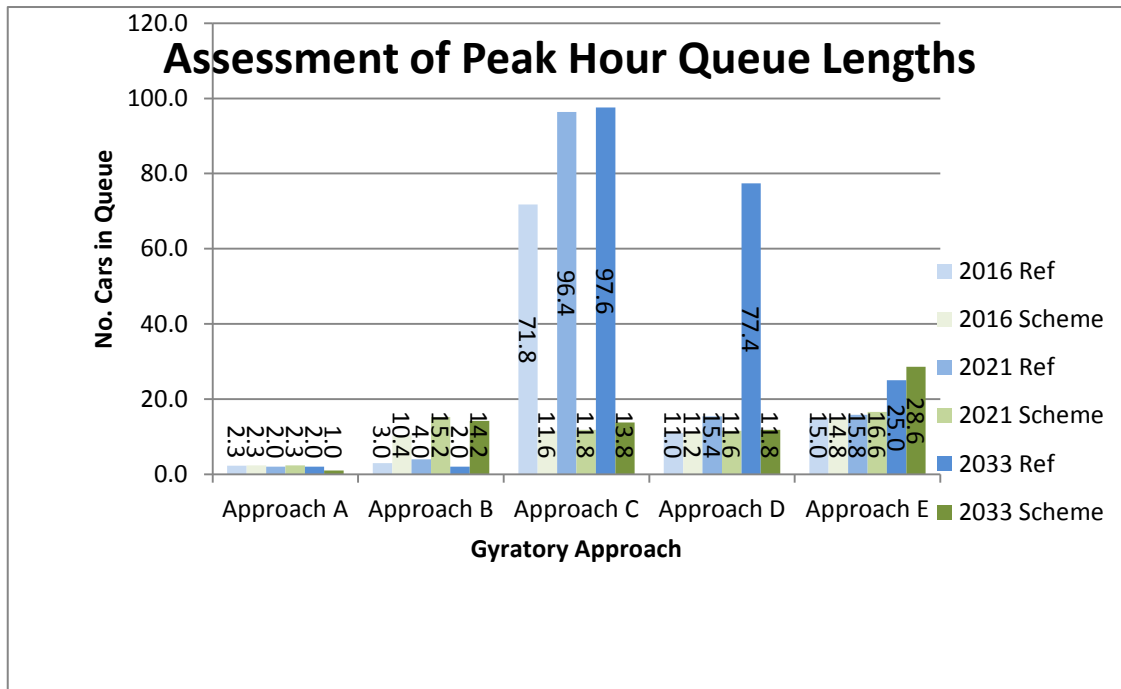


Figure 5: Assessment of Queue Lengths (AM peak hour)

From the results shown in **Figure 5** above, it can be seen that without the implementation of the scheme, significant queue lengths build up on 'Approach C' (A426 Dunchurch Road) and 'Approach D' (B4642 Bilton Road). This occurs not only in the base year (2016) but grows in both 2021 and 2033 due to the impacts of traffic growth in the town; by 2033 queues reach critical levels of 97.6 vehicles and 77.4 vehicles on these two approaches which will significantly constrain economic growth and contribute towards greenhouse gas emissions. The implementation of the scheme however, significantly reduces queuing to acceptable levels of between 11 and 13 vehicles.

There is a slight negative impact of the scheme on 'Approach E' (A428 Lawford Road) whereby the scheme introduces an average 3 additional vehicles to the AM peak hour period queues in 2033. However this is considered acceptable in light of the significant improvements on the other approaches to the Gyratory. Not only will these improvements to road congestion help contribute to improvements in the local economy but they will also improve greenhouse gas emissions (as demonstrated in Figures 3 & 4) and the quality of the public realm

At this stage in the modelling not all of the pedestrian / cycle phases proposed for the new signalised junctions have been included within the assessment. These phases will be timed to 'walk on red' so that additional delays are not introduced to the vehicle flows and are therefore considered to be de minimis. Refinements to the modelling will occur during the detailed design phase of the scheme to optimise the efficiency of the traffic signals.

Average Vehicle Delay

Figure 6 below shows that, without intervention, average vehicle delay through the Gyratory in the AM peak period is set to increase from 186.2 seconds in 2016, to 263.3s in 2021, and then to over 365 seconds in 2033. This would represent an average delay of over 6 minutes for a vehicle travelling through the Gyratory – with significant implications for the local economy, public transport reliability etc. However, following introduction of the scheme, the average vehicle delay is predicted to halve to 179.5 seconds by 2033.

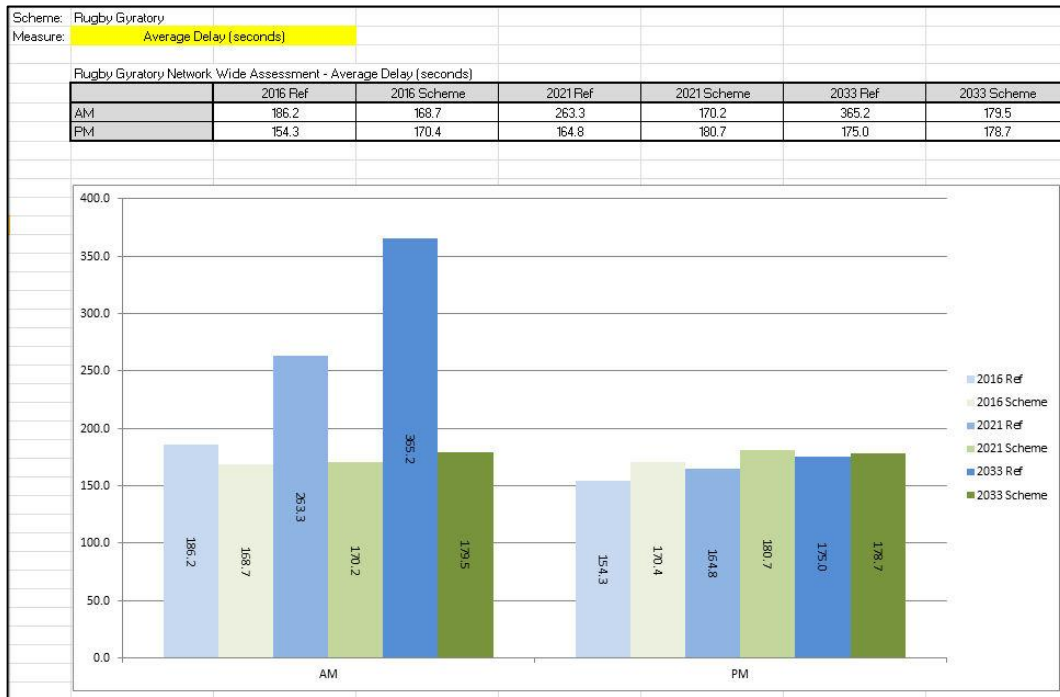


Figure 6: Assessment of Average Vehicle Delay

A short description of the modelling approach used to forecast the impact of the scheme and the checks that have been undertaken to determine that it is fit-for-purpose is to be found in Appendix E.

* Small projects bids are not required to produce a Benefit Cost Ratio (BCR) but may want to include this here if they have estimated this.

b) Small project bidders should provide the following as annexes as supporting material:

- A completed [Scheme Impacts Pro Forma](#) which summarises the impact of proposals against a number of metrics relevant to the scheme objectives. It is important that bidders complete as much of this table as possible as this will be used by DfT – along with other centrally sourced data – to form an estimate of the BCR of the scheme. Not all sections of the pro forma are relevant for all types of scheme (this is indicated in the pro forma).
- A description of the sources of data and forecasts used to complete the Scheme Impacts Pro Forma. This should include descriptions of the checks that have been undertaken to verify the accuracy of data or forecasts relied upon. Further details on the minimum supporting information required are presented against each entry within the pro forma.

Has a Scheme Impacts Pro Forma been appended? Yes No N/A

Please refer to Appendix D. A technical note outlining the methodology and assumptions behind the economic analysis can be made available upon request.

Has a description of data sources / forecasts been appended? Yes No N/A

Please refer to Appendix E

- A completed [Appraisal Summary Table](#). Bidders are required to provide their assessment of all the impacts included within the table and highlight any significant Social or Distributional

Impacts (SDIs). Quantitative and monetary estimates should be provided where available but are not mandatory. The level of detail provided in the table should be proportionate to the scale of expected impact with particular emphasis placed on the assessment of carbon, air quality, bus usage, sustainable modes, accessibility and road safety. The source of evidence used to assess impacts should be clearly stated within the table and (where appropriate) further details on the methods or data used to inform the assessment should be attached as notes to the table.

Has an Appraisal Summary Table been appended? Yes No N/A

Please refer to Appendix F

- Other material supporting the assessment of the scheme described in this section should be appended to your bid.

** This list is not necessarily exhaustive and it is the responsibility of bidders to provide sufficient information to demonstrate the analysis supporting the economic case is fit-for-purpose.*

Large project bids (i.e. DfT contribution of more than £5m)

- c) Please provide a short description of your assessment of the value for money of the scheme including your estimate of the BCR. This should include:

- Significant monetised and non-monetised costs and benefits;
- A description of the key risks and uncertainties and the impact these have on the BCR;
- Key assumptions including (but not limited to): appraisal period, forecast years, level of optimism bias applied; and
- A description of the modelling approach used to forecast the impact of the scheme and the checks that have been undertaken to determine that it is fit-for-purpose.

- d) Detailed evidence supporting your assessment – including a completed [Appraisal Summary Table](#) – should be attached as annexes to this bid. **A checklist of material to be submitted in support of large project bids has been provided.**

Has an Appraisal Summary Table been appended? Yes No N/A

- Please append any additional supporting information (as set out in the [Checklist](#)).

**It is the responsibility of bidders to provide sufficient information for DfT to undertake a full review of the analysis.*

B7. The Commercial Case

This section should set out the procurement strategy that will be used to select a contractor and, importantly for this fund, set out the timescales involved in the procurement process to show that delivery can proceed quickly.

- a) Please provide evidence to show the risk allocation and transfer between the promoter and contractor, contract timescales and implementation timescales (this can be cross-referenced to your Risk Management Strategy).

The preferred balance of risk between the promoter and the contractor is set out between the Employer and Contractor in the NEC3 Engineering and Construction Contract (ECC) Option A

Priced Contract with Activity Schedule (October 2013). The standard conditions of contract (the core clauses) have been amended as outlined in Appendix G

- b) What is the preferred procurement route for the scheme and how and why was this identified as the preferred procurement route? For example, if it is proposed to use existing framework agreements or contracts, the contract must be appropriate in terms of scale and scope.

It is expected that the works will be procured through the County Council's new Construction Framework Contract. Under this Framework Contract, all works with a total pre-quotation construction estimate of greater value can be 'called-off' without need for further tendering / procurement exercises. This Framework will be in place by late spring 2014. If, for any reason, the Framework cannot be used then the EU Restricted Procedure for a one-off scheme procurement will be followed.

- c) A procurement strategy will not need to form part of the bid documentation submitted to DfT. Instead, the Department will require the bid to include a joint letter from the local authority's Section 151 Officer and Head of Procurement confirming that a strategy is in place that is legally compliant and is likely to achieve the best value for money outcome.

Has a joint letter been appended to your bid? Yes No

Please refer to Appendix H

**It is the promoting authority's responsibility to decide whether or not their scheme proposal is lawful; and the extent of any new legal powers that need to be sought. Scheme promoters should ensure that any project complies with the Public Contracts Regulations as well as European Union State Aid rules, and should be prepared to provide the Department with confirmation of this, if required.*

B8. Management Case - Delivery

Deliverability is one of the essential criteria for this Fund and as such any bid should set out any necessary statutory procedures that are needed before it can be constructed.

- a) A detailed project plan (typically in Gantt chart form) with milestones should be included, covering the period from submission of the bid to scheme completion. The definition of the key milestones should be clear and explained. The critical path should be identifiable and any key dependencies (internal or external) should be explained. Resource requirements, task durations, contingency and float should be detailed and easily identifiable. Dependencies and interfaces should be clearly outlined and plans for management detailed.

Has a project plan been appended to your bid? Yes No

Please refer to Appendix I

- b) If delivery of the project is dependent on land acquisition, please include a letter from the respective land owner(s) to demonstrate that arrangements are in place in order to secure the land to enable the authority to meet its construction milestones.

Has a letter relating to land acquisition been appended? Yes No N/A

- c) Please provide summary details of your construction milestones (at least one but no more than 5 or 6) between start and completion of works:

Table C: Construction milestones

	Estimated Date
Completion of Detailed Design	31/01/2014
Statutory Consultation	03/02/2014 – 14/03/2014
Award of Construction Contract	30/05/2014
Works Begin on Site	02/06/2014
Completion of works (if different)	12/09/2014
Opening Date	01/10/2014

d) Please list any major transport schemes costing over £5m in the last 5 years which the authority has delivered, including details of whether these were completed to time and budget (and if not, whether there were any mitigating circumstances)

The following schemes were delivered by the County Council in the last 5 years which cost over £5m:

1. Stratford Parkway (Local Sustainable Transport Project)

- *New Parkway Station opened 19th May 2013*
- *Station completed 7 months early (originally planned to open in December 2013)*
- *Completed on- budget (£8.866m)*
- *In addition to the new Parkway Station, the scheme will provide enhanced weekday evening, Saturday & weekday off-peak train services, Electric Vehicle charging points, new bus services, station travel plan infrastructure, a cycle hire scheme & £0.5m of Smarter Choices measures.*
- *The scheme was promoted, developed & delivered by the County Council.*

2. Europa Way Roundabout Improvements (LPPF Scheme)

- *Roundabout improvement scheme on the A452 Europa Way, Leamington Spa*
- *Scheme promoted, developed and delivered by WCC, with Local Pinch Point funding.*
- *Scheme currently expected to complete 3 months ahead of programme.*
- *Scheme currently on- budget (£1.46m)*

3. Rugby Western Relief Road

- *Construction of a new Relief Road to the west of the town of Rugby*
- *Scheme opening delayed by 1 year (full scheme opened 10th September 2010)*
- *Scheme budget increased from £35m to £55m.*
- *Delays and cost increases due to a variety of complex factors (design / contractual / utility)*
- *Rigorous Corporate processes established following completion of scheme to ensure that delay and cost issues experienced are not repeated.*

B9. Management Case – Statutory Powers and Consents

a) Please list separately each power / consents etc obtained, details of date acquired, challenge period (if applicable) and date of expiry of powers and conditions attached to them. Any key dates should be referenced in your project plan.

Not applicable

b) Please list separately any outstanding statutory powers / consents etc, including the timetable for obtaining them.

Not applicable

B10. Management Case – Governance

Please name who is responsible for delivering the scheme, the roles (Project Manager, SRO etc.) and responsibilities of those involved, and how key decisions are/will be made. An organogram may be useful here. Details around the organisation of the *scheme* including Board accountabilities, contract management arrangements, tolerances, and decision making authorities should be clearly documented and fully agreed.

Warwickshire County Council (WCC) will assume full responsibility for delivery of the scheme. The scheme will be managed as a project using PRINCE2 project management techniques and guidelines. Scheme design will be carried out by the County Council's in-house design team with support from Sustrans, where appropriate, and construction will be carried out by the County Council's Framework contractor.

The Senior Responsible officer will be Roger Newham (County Transport Planner) and he will also be the Executive on the Project Board. The project manager will be Nicholas Dauncey from WCC Transport Planning. The scheme will be managed in accordance with WCC standard governance procedures which determine delegations for decision making, reporting and monitoring requirements.

The Project Board will meet as on a monthly basis to oversee delivery of the scheme. They will also then meet by exception in response to any issues that arise during scheme delivery that cannot either a) wait until the next scheduled board meeting to be resolved or b) which falls outside the project manager's delegated thresholds of responsibility.

The Board will comprise a project executive officer, a senior user (for example the local County Councillor) and a senior supplier (a senior officer from the WCC in-house highway design group). The project manager will report to the Board. The Board itself will derive its authority to deliver the scheme through the County Council's Cabinet and the Portfolio Holder for Transport & Highways as appropriate under the standard WCC governance & project management structures.

A high – level Organogram for the delivery of the scheme is shown in Figure 2, below:

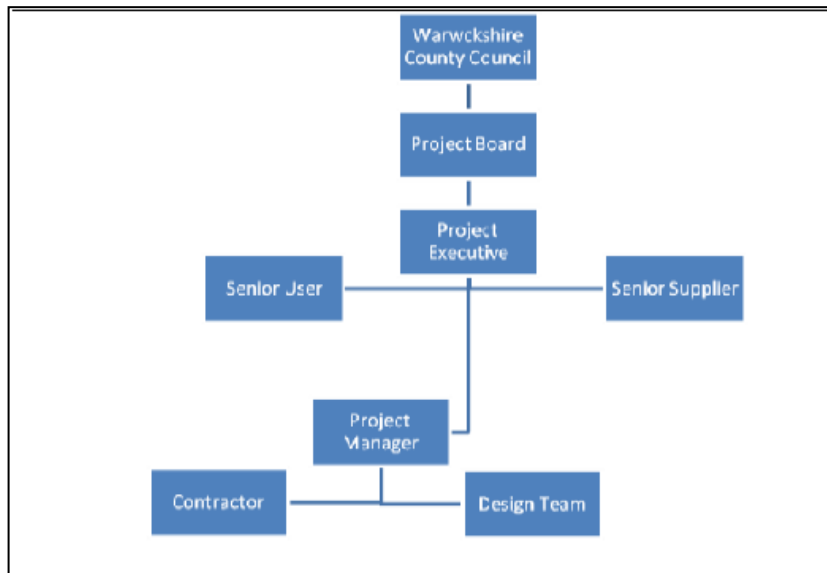


Figure 4: Project Delivery Organogram

B11. Management Case - Risk Management

All schemes will be expected to undertake a thorough Quantified Risk Assessment (QRA) and a detailed risk register should be included in the bid. The QRA should be proportionate to the nature and complexity of the scheme. A Risk Management Strategy should be developed and should outline on how risks will be managed.

Please ensure that in the risk / QRA cost that you have not included any risks associated with ongoing operational costs and have used the P50 value.

Has a QRA been appended to your bid? Yes No

Has a Risk Management Strategy been appended to your bid? Yes No

Risk documents are included in Appendix C

B12. Management Case - Stakeholder Management

The bid should demonstrate that the key stakeholders and their interests have been identified and considered as appropriate. These could include other local authorities, the Highways Agency, statutory consultees, landowners, transport operators, local residents, utilities companies etc. This is particularly important in respect of any bids related to structures that may require support of Network Rail and, possibly, train operating company(ies).

a) Please provide a summary of your strategy for managing stakeholders, with details of the key stakeholders together with a brief analysis of their influences and interests.

A high level communications plan will be developed to ensure that appropriate levels of correspondence are maintained, particularly at key stages in the scheme delivery (such as prior to the statutory consultation period, prior to works beginning on site etc.). This plan will govern how and when the stakeholders are informed of progress, and the most appropriate

communication methods (face to face briefings, written correspondence, the County Council's 'Transport and Highways' newsletter etc.).

The key stakeholders are listed below, along with their influences and interests:

- **Rugby Borough Council** – responsible for the economic activity of the Town, in addition to the planning of new development sites. They are keen to support scheme delivery in order to realise the benefits to the local economy as quickly as possible. They will also need to be consulted regarding the timing of the works and the mitigation of disruption to the town.
- **Coventry & Warwickshire LEP** – objective to ensure all private and public sector parties in the region are working together with a common, shared purpose – to make a difference to the economy and increase prosperity. The ability of the scheme to remove barriers to growth will be high on their agenda.
- **Stagecoach Warwickshire** – will be keen to realise the benefits of the reduced road traffic congestion for the reliability of their bus services. Interested in timing and coordination of the road works.
- **Rugby First** - responsible for promoting the economic activity of the Town. They will be keen to support delivery in order to realise the benefits to the local economy as quickly as possible. They will also need to be consulted regarding the timing of the works and the mitigation of disruption to the town.
- **Sustrans** – national sustainable travel charity keen to promote high quality, useable, pedestrian and cycle facilities at locations where current barriers to access are high. They will be interested in the design of the facilities and are keen to be involved in the detailed design works.
- **Rugby School** – key employer and 'service centre' in the town. Has a long history / heritage which will need to be maintained by the scheme. They will be keen to ensure the scheme is sympathetic to the fabric of the school and that disruption to access is kept to a minimum during the works.

b) Can the scheme be considered as controversial in any way? Yes No
If yes, please provide a brief summary (in no more than 100 words)

c) Have there been any external campaigns either supporting or opposing the scheme?
 Yes No

If yes, please provide a brief summary (in no more than 100 words)

d) For large schemes please also provide a Stakeholder Analysis and append this to your application.

Has a Stakeholder Analysis been appended? Yes No N/A

e) For large schemes please provide a Communications Plan with details of the level of engagement required (depending on their interests and influence), and a description of how and by what means they will be engaged with.

Has a Communications Plan been appended? Yes No N/A

B13. Management Case - Assurance

We will require Section 151 Officer confirmation (Section D) that adequate assurance systems are in place.

For large schemes please provide evidence of an integrated assurance and approval plan. This should include details around planned health checks or gateway reviews.

SECTION C – Monitoring, Evaluation and Benefits Realisation

C1. Benefits Realisation

Please provide details on the profile and baseline benefits and their ownership. This should be proportionate to the size of the proposed scheme.

Benefits realised upon completion of the scheme

Upon completion of the scheme, the following benefits will be realised:

- 1. Provision of a traffic- free route for pedestrians and cyclists through the Gyrotory to enable sustainable travel to and from the Town Centre in a safe and convenient manner;*
- 2. Total reduction in traffic delay on the local road network of an average 17.5 seconds per vehicle in the AM peak period;*
- 3. Total reduction in length of traffic queues by approximately 60 vehicles on worst performing approach in the AM peak period.*

Forecast benefits realised 5+ years post completion.

- 1. Total reduction in traffic delay on the local road network of an average 93.1 seconds per vehicle in the AM peak period;*
- 2. Total reduction in length of traffic queues by approximately 85 vehicles on worst performing approach in the AM peak period*
- 3. Total GVA benefit to the local economy of £14.653m*

The traffic modelling has shown that the scheme performs well up to, and beyond, 2033.

C2. Monitoring and Evaluation

Evaluation is an essential part of scheme development and should be considered and built into the planning of a scheme from the earliest stages. Evaluating the outcomes and impacts of schemes is important to show if a scheme has been successful.

Please set out how you plan to measure and report on the benefits identified in Section C1, alongside any other outcomes and impacts of the scheme

Planned outcomes in terms of reduced road traffic congestions and safety improvements will be immediately realised upon completion of the scheme.

Extensive surveys were undertaken during development of the Paramics traffic model and this information will form the baseline against which improvements can be measured. To achieve

this, key surveys will be repeated at regular intervals and Automatic Traffic Count (ATC) loop sites will be included as part of the scheme. All monitoring will be undertaken at the annual peak to ensure consistency in the 'before and after' comparison. The actual performance of the scheme will then be compared against the performance forecast in the traffic model.

The County Council will also monitor the success of the pedestrian and cycle improvements, through survey counts and will work to promote modal shift to local residents as businesses within the Town Centre as appropriate.

A fuller evaluation for large schemes may also be required depending on their size and type.

SECTION D: Declarations

D1. Senior Responsible Owner Declaration

As Senior Responsible Owner for [scheme name] I hereby submit this request for approval to DfT on behalf of [name of authority] and confirm that I have the necessary authority to do so.

I confirm that [name of authority] will have all the necessary statutory powers in place to ensure the planned timescales in the application can be realised.

Name:

Signed:

Position:

D2. Section 151 Officer Declaration

As Section 151 Officer for [Warwickshire County Council] I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that [Warwickshire County Council]

- has allocated sufficient budget to deliver this scheme on the basis of its proposed funding contribution
- accepts responsibility for meeting any costs over and above the DfT contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties
- accepts responsibility for meeting any ongoing revenue requirements in relation to the scheme
- accepts that no further increase in DfT funding will be considered beyond the maximum contribution requested and that no DfT funding will be provided after 2014/15
- confirms that the authority has the necessary governance / assurance arrangements in place and, for smaller scheme bids, the authority can provide, if required, evidence of a stakeholder analysis and communications plan in place

Name: JOHN BETTS

Signed:

