



PRCC.49 16/17

Prosperous Communities  
Committee

31<sup>st</sup> January 2017

**Subject: Strategic Transport Model and Development Study**

Report by:

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Purpose / Summary:

To support the procurement of a strategic transport model in the Gainsborough urban area for the purpose of promoting sustainable growth through improving traffic flows within the town whilst also maintaining connectivity from Nottinghamshire and South Yorkshire into the District safeguarding the economic benefits to West Lindsey of the primary routes to Scunthorpe, Lincoln and the coast. .

**RECOMMENDATION(S):**

1. That Members acknowledge the need for the procurement of the Strategic Transport Model and Development Study
2. That Members recommend to Corporate Policy and Resources Committee, to accept the commissioning and funding implications of the Strategic Transport Model and Development Study for West Lindsey as set out within the financial implications section of this report.

## IMPLICATIONS

**Legal:** The contract for the Strategic Transport Model and Development Study is with Lincolnshire County Council and therefore falls outside of normal procurement rules

Financial: FIN/118/17

The £271k cost of this Strategic Transport Model and Development Study will be a revenue expense which can be funded from General Fund Balances

It is estimated that a revenue budget of £35k will be required in 2016/17 to fund the survey works, scheduled to be undertaken in March, with the remaining £236k budget requirement in 2017/18

Due to expediency the service has had to raise a purchase order to protect our place for the traffic surveys which need to happen in March if we are to keep the traffic modelling resource that has been secured following this. Any slight delay now will have a significant impact on project delivery further down the line.

**Staffing:** Resources are already in place to project manage this study and all other resources required to undertake the work have been secured as part of the contract with Mouchel.

**Equality and Diversity including Human Rights:** This project has been developed to improve connectivity between Nottinghamshire and the wider district of West Lindsey promoting the delivery of sustainable and affluent communities and improving the quality of life of residents as well as supporting the regeneration programme for Gainsborough.

### **Risk Assessment :**

**Key Risk:** The success of this project is based on the timely delivery of the strategic traffic model so that it may be utilised effectively as part of the wider regeneration programme to facilitate the delivery of land use allocations (including sustainable urban extensions) identified in the emerging Central Lincolnshire Local Plan.

**Mitigation:** Ensuring that the project is managed robustly against the project plan, specifically in relation to the key milestones identified.

**Climate Related Risks and Opportunities:** The purpose of commissioning a new traffic modelling project is to improve traffic flows and access through the town and wider area, reducing the frequency and volume of queuing and idling traffic.

**Title and Location of any Background Papers used in the preparation of this report:**

Wherever possible please provide a hyperlink to the background paper/s  
If a document is confidential and not for public viewing it should not be listed.

**Call in and Urgency:**

**Is the decision one which Rule 14.7 of the Scrutiny Procedure Rules apply?**

i.e. is the report exempt from being called in due to urgency (in consultation with C&I chairman)

**Yes**

**No**

**Key Decision:**

A matter which affects two or more wards, or has significant financial implications

**Yes**

**No**

## **1 Introduction**

The Council's regeneration plans for Gainsborough and wider area are predicated on housing led economic growth which is formalised through statutory obligations to seek to deliver the emerging Local Plan. The scale of housing growth required is very ambitious with Gainsborough accounting for 12% of the overall housing growth planned for Central Lincolnshire.

Due to the position of Gainsborough and its relationship with the Trent Bridge River crossing it is important to consider the impact of any growth in the town on the wider District. Gainsborough because of the river crossing is considered a key gateway providing access routes from South Yorkshire and Nottinghamshire to Scunthorpe and surrounding villages on A156, to Lincoln and surrounding villages on the A159 and finally a popular route from Sheffield and Rotherham to the Coast on the A631 through Market Rasen.

In February 2016 members approved a Regeneration Delivery Plan for Gainsborough, this included an outline project for infra-structure delivery. In May of this year the Homes and Communities Agency funded an infrastructure study for the town. As part of this regeneration programme Mouchel were commissioned by ALTAS (Part of the Homes and Communities Agency) and West Lindsey District Council to produce the Gainsborough Infrastructure and Planning Delivery Strategy (GIPDS). The purpose of the GIPDS was to set out a clear strategy for the delivery of key infrastructure required in Gainsborough in the emerging plan period up to 2036 to support an ambitious growth agenda for the town and ensuring connectivity to the wider district is supported and improved.

The Nexus Mouchel study however only offers a high level understanding of Gainsborough's future growth's impact on the local and wider transport network and as such it was recommended that in the short term a more coordinated approach to assessing the impact of development on the highways network is undertaken, making specific reference to using a strategic traffic model for the town to ensure the cumulative impact of growth is captured.

As a partner of Lincolnshire County Council, Mouchel have been invited to provide a proposal, including a methodology and fee structure to undertake a more detailed study of a number of development related transport issues in Gainsborough with a view to safeguarding the gateway routes from South Yorkshire and Nottinghamshire into the District of West Lindsey, focussing specifically on connectivity and traffic flows.

## **2. Context**

As part of the Greater Lincolnshire devolution bid to Central Government in 2015 the 10 authorities commissioned Mott MacDonald to deliver a Greater Lincolnshire Strategic Infrastructure Delivery Plan (GLSIDP) with the core purpose of recommending how Greater Lincolnshire should prioritise and fund investment in infrastructure so as to realise the ambitious growth targets across the County.

The GLSIDP categorised 36 major infrastructure projects into short, medium and long term timeframes and used a multi-criteria analytical approach (MCA)

to assess the impact of projects based on the schemes costs and benefits. The methodology evaluated the strategic and economic impact of the project alongside the cost and deliverability of the scheme. It was determined that the Trent Bridge crossing from Flood Road onto Bridge Road/Bridge Street and Thorndike Way junctions were ranked 8<sup>th</sup> out of 36 demonstrating that this project was deemed both cost effective and appropriate, playing a key role in the delivery of the 4,350 homes proposed by the Central Lincolnshire Local Plan.

Alongside this work there has also been a further study into the Flood Road junction as part of the Local Development Order application. This study sought to establish whether a second river crossing was going to be necessary in order for the town to sustainably deliver the levels of growth allocated in the emerging Local Plan. The Traffic Assessment Study (June 2016) concluded that the Bridge would reach capacity by 2021, however it also provided alternative solutions to increasing capacity of the junction without the need for a second river crossing. The solutions proposed have helped provide developer confidence in the town and have finally confirmed that there is no need for a second river crossing.

Whilst it is acknowledged that devolution is currently no longer an option for Greater Lincolnshire we have been advised by the Commissioner for Place and Environment at Lincolnshire County Council that the methodology used to evaluate infrastructure projects remains the same and that it is important for projects detailed within the GLSIDP to continue development to ensure deliverability so that they can be considered for future funding. This approach has been demonstrated by the work undertaken previously by North Kesteven District Council who are now benefiting from £10m worth of road improvements in Sleaford following the commissioning of a Transport and Development Study.

The study proposed in this report goes further than just modelling solutions for the Flood Road, Bridge Road and Thorndike Way junctions, this is because it is acknowledged that whilst the Flood Road junction is a priority; ensuring traffic is also able to flow through the town is key to maintaining the economic benefits to the District via the primary routes to Scunthorpe, Lincoln and the coast.

### **3. Study Objectives and Project Approach**

The purpose of the commission is two-fold:

- To enhance the work undertaken on the GIPDS for the Gainsborough area and to support the future development of the town, including attracting investors, by clearly identifying what transport infrastructure improvements are required to facilitate the delivery of the land use allocations identified in the emerging Central Lincolnshire Local Plan and improve connectivity with the rest of the district.
- To build on the assessment work undertaken for the Flood Road, Bridge Road and Thorndike Way junction; providing more detailed proposals for junction improvements culminating in the provision of a full Option Assessment Report.

The project will be managed through three primary work streams which are broken down into:

- Work stream 1 – Project Management and Information Collation
- Work stream 2 – Strategic Model Development
- Work stream 3 - Flood Road, Bridge Road and Thorndike Way junction scheme development

The model identified for this project will be the SATURN highway model which is based on methodology supported by the Department of Transport, providing two key benefits. Due to the model methodology used the study provides a robust basis for future funding bids and grant applications. It also allows enhanced options assessments of specific junctions or other modes of transport e.g. cycling and walking to be overlaid ensuring a cohesive strategy which also considers the cumulative impact of development and traffic volumes.

### 3. Project Plan

Work stream	Stage	Product	Description	Week
1	Inception	Inception meeting	-	Week 3, January 17
		Project Initiation Document (PID)	Sets out key project management structures and processes for the project	Week 4, January 17
		Programme	Detailed programme for full project	Week 4, January 17
2	Strategic Model Development	Model Specification Report (MSR)	Sets out the detailed specification of the traffic model (this is a live document that is updated as the project progresses)	Week 2, February 17
		Traffic Data Collection Specification	Forms the basis for procuring traffic surveys	Week 2, February 17
		Traffic Data Collection Tender Documentation	Tender documentation for appointing survey contractors	Week 2, February 17
		Traffic Data Collection Report	Report on the process and outputs from the traffic survey	Week 2, April 17
		Local Model Validation Report (LMVR)	Key document reporting on the model development process and adherence of the model performance to required standards	Week 4, July 17
		LMVR Appendices (requirements TBC): <ul style="list-style-type: none"> <li>• Network coding</li> <li>• Demand data processing</li> <li>• Calibration and validation statistics</li> <li>• Journey Time validation</li> <li>• Realism tests</li> </ul>	LMVR supporting documentation	Week 4, July 17
		Uncertainty Log (Core scenario future network and development assumptions for each forecast year)	Log of committed and planned highway network and land use changes over the forecast years	Week 4, August 17
		Forecasting Report (FR)	Report of the traffic forecasting process and outputs	Week 4, October 17
		FR Appendices (requirements TBC): <ul style="list-style-type: none"> <li>• Demand Model responses</li> </ul>		Week 4, October 17

		<ul style="list-style-type: none"> <li>Reference Case statistics</li> </ul>		
3	Flood Street Scheme Development	Working Paper 1 – The Need for Intervention	Reporting on the early stages of Work stream 3 including current and future situations, the need for intervention and scheme objectives	Week 4, October 17
		Working Paper 2 – Option Identification and Initial Sifting	Reports on the long list of options and the sifting process to select a shortlist for further development	
		Option Assessment Report (OAR)	Overall output from Work stream 3 including development of preferred option/s	Week 4, March 18
		OAR Appendices (requirements TBC): <ul style="list-style-type: none"> <li>EAST (or other sifting tools for long-list and short-list)</li> <li>Do Something Scheme Performance (Flood Street Junction Improvements)</li> <li>Junction Model interface</li> <li>EAR (see below)</li> <li>Environmental Constraints mapping</li> <li>Scheme Costs</li> <li>Highway Design feasibility</li> </ul>	OAR supporting documentation	Week 4, March 18
		Economic Assessment Report (EAR)	Reports on the outputs from the economic assessment of the scheme/s	Week 4, March 18
		EAR Appendices (requirements TBC): TUBA user benefits COBALT Accident impacts	EAR supporting documentation	Week 4, March 18
		Stakeholder Report	Reports on stakeholder engagement undertaken during the commission	Week 4, March 18
All	All	Monthly Progress Report	-	Week 4 each month



#### 4. Project Costs

Below are the anticipated costs for the study outlined above. Whilst it is accepted that the overall cost could be considered quite high, there are a number of funding streams and in kind benefits already secured which make this option good value for money.

Work stream		Fee
Work stream 1 – Project management & information collection		£18,500
Work stream 2 – Strategic model	Traffic modelling	£146,000
	MPOD data (Allowance)	£5,000
	Traffic surveys (Allowance)	£35,000
Work stream 3 – Flood Road, Bridge Road & Thorndike Way Junction		£65,750
	Total	£270,250

Due to the specialist nature of the work entailed and the limited experience of this work within West Lindsey the Lincolnshire County Council have agreed to help client this work providing approximately £5,000 worth of consultancy fees in kind. As well as support from the Local Partnership fund from February which equates to approximately £1075 per day for 8 weeks.

From existing funding the Council has already secured £197k from the Homes and Communities Agency which helped fund the initial GIDPS carried out by Mouchel and £150k from the Local Development Order fund for the Riverside Gateway which has again been used to secure additional capacity for delivery.

The Authority has also submitted a bid to the Greater Lincolnshire Local Enterprise Partnership for the Housing Unlocking fund for £4million as part of the Gainsborough Growth Programme. £1.85 million of this is earmarked to accelerate the delivery of the Sustainable Urban Extensions in Gainsborough, specifically in relation to infrastructure. It is therefore anticipated that if successful an element of this funding will be apportioned to this study, reducing the liability of costs to the authority.

Finally, this model provides good value for money to the authority, notwithstanding the in-kind benefits from our partners this project has already attracted, this study also means that West Lindsey or other investors in the town may use the base data for their own specific traffic modelling solutions reducing future outlay and could be seen as an incentive for developers. Alternatively West Lindsey could potentially levy a small charge on those that wish to use the base data, creating a low level income stream, however a decision on the best way to utilise this data should be made at a later date within the context of the strategic growth aspirations of the authority.