

## Craven Spatial Planning Sub Committee 5<sup>th</sup> June 2017



## Craven Local Plan – Highway Modelling for Skipton

Report of the Strategic Manager for Planning and Regeneration

Ward(s) affected: All wards wholly or partly outside the Yorkshire Dales National Park

1. **Purpose of Report** - To seek Member acceptance of the Highway Modelling Report for Skipton to form part of the evidence base for the preparation of the Craven Local Plan.
2. **Recommendations** – Members are recommended to:
  - 2.1 accept the Highway Modelling Report for Skipton as set out in Appendix 1 to this report, subject to minor amendments, for publication on the Council’s website and as evidence base to support the Craven Local Plan: Pre-Publication Consultation Draft (Summer 2017).
  - 2.2 give delegated authority to the Strategic Manager (Planning and Regeneration) to make minor amendments to Appendix 1 prior to the forthcoming Pre-Publication Consultation Draft Plan.
- 3 **Report**
  - 3.1 Members will recall that the Council commissioned consultants Jacobs UK Ltd to undertake traffic modelling work to ascertain the traffic impacts of proposed development within the town of Skipton as part of the forthcoming Craven Local Plan. Appendix 1 of this report provides a copy of the final draft report of the Craven Local Plan Modelling Highway Impacts of Local Plan Development in Skipton.
  - 3.2 The results and recommendations of this study are supported, in part, by outputs from the Skipton strategic transport model (commissioned by North Yorkshire County Council in 2009) , which enables development impacts and proposed transport solutions on the highway network, to be identified. Traffic count surveys were carried out in 2015 at key locations across the Skipton area for the purposes of revalidating the base model to the interim forecast year 2015.
  - 3.3 In accordance with paragraph 32 of the National Planning Policy Framework (NPPF), the Craven Local Plan should take account of whether (amongst other matters) improvements can be undertaken within the transport network that cost effectively limit the significant impacts of any proposed development. In the light of

the emerging spatial strategy of the Local Plan which identifies Skipton as the primary focus for growth and the relatively low levels of growth proposed elsewhere in the Local Plan, such significant impacts are only likely in the Skipton area. The purpose of the Highway Modelling study is therefore to examine the overall impact of development in terms of travel demands and network performance, with a view to identifying the need for potential mitigation measures and junction improvements to complement the Local Plan growth strategy and support the Local Plan objectives.

- 3.4 The methodology used in the study for forecasting traffic growth between 2015 to 2032 is set out in detail in Section 3 of the report at Appendix 1, but in summary a Baseline 2032 forecast was established for background traffic growth and committed development sites in Skipton, i.e. minus any potential Local Plan development options. This would enable comparisons of traffic volumes and junction performance against the Baseline, once the Local Plan scenario was plugged into the forecast model.
- 3.5 The primary output of the study is an assessment of the impact on eleven junctions across the Skipton highway network. These are detailed in Table 5.1 of Appendix 1, which is reproduced below:-

**Table Error! No text of specified style in document.-1 Assessed Junctions**

Town	Junction Number	Junction Name	Type
Skipton	1	A65 / Gargrave Road / A629 / A59	Roundabout
	2	A6069 / Cavendish St	Priority
	3	A6131 / A6069 (Bottom High Street)	Roundabout
	4	A6131 / A65	Priority
	5	A6131 / Cawder Lane	Priority
	6	Skipton Road / The Bailey	Priority
	7	Water Street / Raikes Road	Priority
	8	Shortbank Road / Newmarket Street	Mini Roundabout
	9	Broughton Road / Carleton New Road	Priority
	10	Craven Street / Keighley Road	Signals
	11	Keighley Road / Carleton Road	Signals

- 3.6 The junctions identified were assessed through nationally accepted junction modelling software.
- 3.9 The key output of the junction assessment is the ratio of flow to capacity (RFC), which shows demand compared to the available capacity. The models present an RFC figure for each junction arm during the modelled period, which ensures any RFC 'spike' is captured and not overlooked by an average RFC across all junction arms. This is a standard nationally accepted way of measuring congestion at a junction.
- 3.10 RFCs are reported using a nationally accepted traffic light colouring system which works as follows:

- **Green** - RFC less than 0.85, junction is likely to operate without delays; 0.85 is an industry recognised level of congestion, where a junction starts to approach capacity
- **Amber** - RFC between 0.85 and 1, junction is approaching capacity and may be subject to minor delay
- **Red** - RFC greater than 1, junction is over capacity and delays will occur

3.11 The junction assessment results are set out in Table 5.2 of Appendix 1, but to summarise, the assessment forecasts that, without improvement, four of the eleven junctions in Skipton would operate over capacity in the Local Plan scenario. These are:-

- **Junction 1:** A65 / Gargrave Road / A629 / A59;
- **Junction 2:** A6069 Cavendish St; and
- **Junction 4:** A6131/A65.
- **Junction 9:** Broughton Road / Carleton New Road.

However of these, only **Junctions 1 and 4** will have more congestion than in the Baseline Scenario and will therefore require improvement to increase capacity to reduce this congestion.

3.12 The following two junctions are forecast to operate approaching capacity (85%-100%) in 2032 with Local Plan developments in place. Both will operate with more congestion in the Local Plan Scenario than the Baseline Scenario and will therefore require improvement to increase capacity to reduce this congestion.

- **Junction 7:** Water Street / Raikes Road
- **Junction 10:** Craven Street / Keighley Road

3.13 To add capacity to the highway network in order to reduce the congestion caused by the Local Plan development traffic, the following measures have been proposed, The cost for these improvements is estimated to be £695,000.

- Widening of Gargrave Road by 1.5m near the curve (Junction 1);
- Widening of A629 by 2m near the curve and 0.5m for the stretch beyond (i.e. approach road half width) (Junction 1);
- Widening of A6131 at A65 by 2m at an offset of 10m, 15m and 20m from the give way line (Junction 4);
- Remodel the priority of the Water Street / Raikes Road junction so that Raikes Road becomes the minor arm with Water Street and Mill Street having priority (Junction 7).
- Signal timing tweaks at the Craven Street / Keighley Road junction (Junction 10).

3.14 With the above mitigation measures in place the assessment show that the junctions in the Local Plan scenario will operate below capacity. Work to date on the necessary changes to key junctions on the network indicates that improvements to the traffic flows at these junctions are achievable

#### 4 **Implications**

- 4.1 **Financial and Value for Money (vfm) Implications** – The commissioning of the Highway Modelling evidence has already been included within the Local Development Framework Budget. The estimated costs of junction improvements to mitigate the impact of local Plan development will be sought from developer contributions.
- 4.2 **Legal Implications** – The preparation of the Local Plan is a statutory obligation under the provisions of the Planning and Compulsory Purchase Act 2004.
- 4.3 **Contribution to Council Priorities** – Adoption of the Craven Local Plan will provide a spatial strategy, development policies and land allocations for housing and employment in the area which will directly or indirectly contribute to all the Council's priorities.
- 4.4 **Risk Management** – Preparation of the local plan is a statutory obligation under the Planning and Compulsory Purchase Act 2004 and is the key mechanism for delivering development in the District to meet future community needs and demands. Significant delays in adoption of the plan may affect future New Homes Bonus payments. In addition the plan is a key corporate document that will be the spatial expression of numerous other corporate strategies, such as the Housing Strategy, Economic Strategy and Council Plan. Failure to deliver the plan will also result in these strategies not being fully realised.
- 4.5 **Equality Analysis** – – No new policy or procedure is proposed in this report which would give rise to a requirement for an Equality Analysis.

#### 5. **Consultations with Others** – Legal and Financial Services

**Access to Information : Background Documents** – Report by Jacobs UK Ltd titled Craven District Council Local Plan Evidence Base – Modelling Highway Impacts of Local Plan Developments in Skipton – May 2017

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Note : Members are invited to contact the author in advance of the meeting with any detailed queries or questions.

#### 8. **Appendices**

Appendix A – Craven District Council Local Plan Evidence Base – Modelling Highway Impacts of Local Plan Developments in Skipton – May 2017