Birmingham City Council Local Plan Hearings - Staffordshire County Council Position Statement.

Matter E Green Belt policy, The Langley Sustainable Urban Extension (SUE) allocation and the Peddimore employment allocation (BDP policies TP10 GA 5-6)

### Introduction

Staffordshire County Council (SCC) submitted three representations to the Pre – submission consultation in March 2014 with respect to Policies GA5 Langley, GA6 Peddimore and the related TP37 A Sustainable Transport Network. The substance of our representations was that the technical work supporting these two strategic allocations was not available. In the absence of this evidence, concerns regarding the potential impact from these developments on Staffordshire's transportation networks could not be addressed. This evidence base has now emerged and through continued engagement with BCC and other partner Authorities, the County Council now has sufficient comfort to agree that the potential impact on Staffordshire's Networks from Langley and Peddimore is likely to be small. The transport interventions being brought forward have been designed to maximise sustainable travel opportunities within the City and contain trips within the city.

We would therefore now like to withdraw our representations and support the Plan with respect to these Policies. We agree that Birmingham City Council has now discharged its responsibilities under the 'duty to cooperate' and the evidence base supporting these policies can be considered sound with regard to their potential transportation impact on Staffordshire.

# Evidence of Co-operation

Throughout 2014 Staffordshire County Council (SCC) has actively engaged with Birmingham City Council to establish the potential transport impact of proposed strategic greenbelt releases in Sutton Coldfield at Peddimore and Langley for employment (8129 jobs) and residential purposes (6250 homes), on our local highway and transport networks and the Strategic Highway Network. This has extended to joint working with Warwickshire County Council and the Highways Agency (HA). Regular meetings were attended in Birmingham between January 2014 and September 2014.

### Staffordshire's concerns were initially around

- The potential impact of generated traffic on our local strategic network at peak times principally along A5127 Birmingham Road to Lichfield, A5206 / A51 London Road / Upper St John Street Lichfield, A453 Tamworth Road, A51 to Tamworth, A4091 to Tamworth. All traverse the A5/A38.
- 2. Whether any improvements / reductions in connectivity for Staffordshire's travelling residents might result from the Green Belt Development Birmingham

Movement Infrastructure Plan, proposed to make the Development Plan proposals acceptable in transport terms within the Conurbation

3. Agreeing appropriate mitigation to the Highways Agency's Strategic Highway Network, particularly the A5 and M42 Junction 9.

A great deal of technical work has been undertaken by consultants to inform the development of the Submission Local Plan and specify interventions to mitigate transport impact within the City, the wider conurbation and adjoining Highway Authority Areas. Phil Jones Associates (PJA) and Mott MacDonald (MM) have both been principally involved with modelling the impact of the developments in question. Travel demand has been estimated by PJA, strategic modelling being undertaken by MM using PRISM. Additional VISSIM modelling work has been provided by JMP for the HA and BCC for M42 junction 9.

In order to assist us to form a view regarding 1 and 2, BCC provided

- PRISM An Introductory Guide (May 2010)
- BDP Green Belt Development Movement Infrastructure Plan (PJA Jan 2014)
- BDP Transport evidence Base Context Report (MM Jan 2014)
- 2031 PRISM model output for the Reference (without green belt development) and Development Cases (February 2014) relating to journeys to and from Staffordshire along the routes of concern.
- BDP Green Belt Travel Demand Report (June 2014)

Reviewing this work allowed us to understand how the data presented via PRISM may have been estimated in terms of the underlying assumptions, trip rates applied, trip purposes, modal split, trip distribution, trip containment, route assignment zoning details etc. A technical note was prepared summarising our comments regarding various inconsistences in the analysis that in our view, contributed to an underestimate of the impact of these proposals on Staffordshire's Highway Network. We then undertook a crude sensitivity test using our own residential and employment trip rates. However this showed that even with undiscounted trip rates applied and using the same routes assumed in the BCC analysis, the impact on Staffordshire is likely to be relatively small. Our technical note was recently reviewed by PJA on behalf of BCC. This acknowledged the methodological differences in the two assessments but concurred that even when robustly assessed, the development proposals do not have a significant impact on Staffordshire's highway network (appended).

Staffordshire's analysis also highlighted there would not be a demonstrable improvement in connectivity for our residents as a result of the improved public transport offer being delivered in conjunction with these developments. BCC helpfully commissioned PJA to respond and their technical note produced on 29<sup>th</sup> July concurred that no direct benefits were likely to accrue to Staffordshire.

'Whilst there are no physical improvements proposed within Staffordshire, the location of the proposed urban extension with the proposed infrastructure will ensure that growth is integrated within the City of Birmingham and external trip making is kept to a minimum'

Concerns around the impact of these development proposals on the operation of the M42 at J9 and the routes into Staffordshire and Warwickshire were resolved via a technical study undertaken and reported by JMP on behalf of the HA and BCC. A VISSIM model was used to demonstrate a package consisting of M42 J9 Roundabout lane revisions, Lichfield Road widening northbound, Lichfield Road / Faraday Avenue / Marsh Lane roundabout lane revisions and A446 Lichfield Road / M6 Toll diverge / A4091 roundabout lane revisions, would mitigate forecast traffic impact.

On the balance of evidence provided by BCC (and Partner Authorities) and our own sensitivity testing SCC has sufficient comfort to agree a position with BCC and withdraw ours transport representations for these policies. The County Council is however conscious that 2011 Journey to Work Census Data at Middle Layer Super Output Area level (MSOA) has just become available (with the prospect of more detailed Output Area data available in the near future) and recommends that at the planning application stage, this more current information be used to guide Transport Assessments for Langley and Peddimore, with route choice being determined by the PRISM model.

SCC / 11/09/2014 final



# **Technical Note**

**Project: Birmingham Green Belt** 

Subject: Response to Staffordshire CC Comments on PJA's Green Belt TDM

Client:	Birmingham City Council	Version:	2
Code:	PJA.1064	Author:	Matt Proctor
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#### Introduction

- As part of the Birmingham Development Plan, two strategic development sites are proposed in 1.1 green belt land to the northeast of Birmingham; Langley and Peddimore. Phil Jones Associates (PJA) has produced a detailed travel demand model (TDM) which assesses the transport impact of the proposed development.
- 1.2 This technical note has been prepared in response to comments made by Staffordshire County Council on the methodologies and findings of PJA's TDM in their technical note dated August 2014.
- The remainder of this note will be structured as follows: 1.3
  - Chapter 2: Clarification on PJA's methodology
  - Chapter 3: Comparison with Staffordshire CC's high level analysis
  - Chapter 4: Conclusion

#### 2 Clarification of PJA's Methodology

2.1 The model produced by Phil Jones Associates is a detailed and technical approach to calculating travel demand for what is a complex subject area. The model is based upon as much factual local data as is available and supplemented by empirical data from national surveys and census. This was subsequently reconciled with the West Midlands PRISM Model, which is an advanced demand and assignment model developed in partnership with the West Midlands Authorities and the Highways Agency. It is considered that the forecasts produced by these models are robust.

**EMAIL** 

#### **Trip Generation**

2.2 Person trip generation for the sites was generated using the industry-wide accepted TRICS database. Care was taken when choosing the parameters for the site selection so that the survey data obtained is representative of the proposed developments. Employment trip rates were calculated against the Gross Floor Area (GFA) of the survey sites, rather than the number of jobs provided at the site. It should be noted that a large proportion of the Peddimore employment site will be for B8 use, which generates a much lower level of traffic than B1 and B2 uses.

#### **Journey Purpose and Trip Distribution**

- 2.2.1 Trips from Langley were broken down by journey purpose using the NTEM database for the Sutton Coldfield area, with all trips to Peddimore were assumed to be for employment purposes.
- 2.2.2 Data from the most recent National Travel Survey suggests that the majority of trips undertaken to retail destinations are less than 2 miles long. In addition, most of the trips to retail facilities in the weekday peak hours would be to convenience stores rather than comparison stores, and lots of these trips would also be pass-by as part of journeys to other purposes.
- 2.2.3 As such, it was assumed that all trips to for retail purposes in the assessed peak hours will be to convenience stores within 2 miles of the development. This excludes large, mainly comparison sites such as Birmingham City Centre and Ventura Business Park; it is anticipated that typical retail trips to these sites would be made outside of the weekday peak period, such as in afternoons and on weekends.
- 2.2.4 The routing of trips generated by the site was calculated using online auto-routing software. Principally, trips between the Green Belt developments and Staffordshire will use the M42 or the A38.

## **Modal Split**

2.3 The modal split of employment journeys to each zone was calculated using existing journey to work data from the 2001 Census of population; the most recent data available at a sufficient level of detail. Similar sites local to the development were selected as proxies for the distribution of trips by mode.

# 3 Comparison with Staffordshire CC's High Level Methodology

3.1 Staffordshire CC provided a spreadsheet containing an overview of a comparison between PJA's trip generation forecasts and the forecasts derived from an alternative and high level methodology. Staffordshire CC's methodology calculated residential trip rates based on a

uniform vehicular trip rate for generic residential developments and employment trip rates based on a TRICS vehicle trip rate per hectare.

- 3.2 It was observed that the rates derived were comparable to the standard trip rate used for developments within Staffordshire. However we considered that trip rates need to be representative of development on the edge of a large conurbation with good quality public transport opportunities.
- 3.3 Understandably therefore a comparison of the two methodologies shows that the Staffordshire CC methodology forecasts a higher vehicular trip generation than the PJA methodology.

### 4 Conclusion

- 4.1 The forecasting methodology used by Staffordshire CC produces a marginally higher trip generation than the methodology used by PJA/Mott MacDonald. However we concur with the conclusions of Staffordshire CC that the development proposals do not have a significant impact on Staffordshire's highway network.
- 4.2 Any further comment on the travel demand assessment for the Green Belt development should be in reference to the "PRISM Hybrid Model", developed from PJA's TDM and Mott MacDonald's West Midlands PRISM simulation.