TECHNICAL NOTE

DATE:	16 February 2024	**CONFIDENTIALITY:**	Confidential
SUBJECT:	Amendments to Project Scope		
PROJECT:	70119618 - St Albans Local Plan Modelling	**AUTHOR:**	Neal Dyson / Shaista Farooq
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OVERVIEW

There have been a number of changes to the scope of work for the St Albans Local Plan modelling following the commissioning of the project and the inception meeting held on 11/1/24. The purpose of this technical note is to capture all of these changes and confirm the proposed approach and additional cost in relation to each change with Hertfordshire County Council (HCC) and St Albans District Council (SADC). A revised programme based on the scope changes will be provided shortly.

CHANGE 1: PLANNING DATA FOR FUTURE YEAR 2041

HCC has confirmed that the modelling should be based on a future year of 2041 to align with the horizon year of the forthcoming St Albans Local Plan. Previously it was intended to model 2036 as this is the current future year of the COMET model.

It has been agreed that the task to review and update planning data and infrastructure schemes in the model should be extended to cover all of the districts/boroughs in Hertfordshire (where previously it was assumed that only the St Albans and Dacorum districts would be updated).

WSP sent an e-mail to HCC/SADC on 22/1/24 which provided an estimated additional fee of £4,302 to cover additional work related to altering the future year in COMET from 2036 and 2041 and incorporating updated planning data across all districts/boroughs. This fee assumed that there was no additional infrastructure coding requirements of highway and public transport schemes between 2036 and 2041. The additional cost of coding infrastructure schemes across the other districts is covered separately by change 5.

The initial planning data provided to WSP was replaced with a revised dataset on 7/2/24 however work had already been undertaken in processing the original dataset. Table 1 and Table 2 provides the additional cost for processing planning data by tasks and staff time. The cost in Table 1 and Table 2 includes the additional cost due to the abortive work undertaken for processing the planning data.

Table 1: 2041 Planning Data Task Cost

Tasks
Processing planning data to 2041 for 8 districts
Additional time spent on planning data using the first dataset before revised dataset sent by HCC. Abortive time spent on processing that data and raising queries.
Total

CHANGE 2: NTEM 8

In the original proposal it was assumed that the planning data would be constrained to the NTEM 7.2 planning assumptions at the Hertfordshire county level, using COMET v7. However, it has now been agreed to adopt the NTEM 8 (core) planning assumptions for this process as NTEM 8 is currently the DfT's adopted growth forecast to be used.

The A10 SOC NTEM 8 spreadsheets will be used as a basis for this work. Therefore this change to the scope can be made without a change to the fee and programme.

CHANGE 3: EMPLOYMENT FLOOR AREA CONVERSION TO JOBS

In the original proposal it was assumed that the employment planning data would be provided as a change in the number of jobs, as this is how HCC have previously provided the data to WSP for other COMET model updates. However, HCC have provided the employment data to WSP as floor areas and HCC has requested that WSP undertakes a process to convert the floor areas to an equivalent number of jobs. HCC has provided previous conversion factors used for this process. WSP have consulted their wider team and suggests the following approach for the conversion from floor area to jobs:

1. For land uses where a conversion factor from the Employment Density Guide (EDG) has already been identified and used previously, this factor will be retained.
2. For land uses where there is no existing conversion factor in the EDG, WSP will use the TRICS database to derive a factor based on the floor area and number of employees for surveyed sites relevant to each land use.
3. Where HCC has an existing conversion factor but it does not have a source, TRICS and EDG will be used to derive new factors and compared against the HCC conversion factors. A decision will be made as to what is adopted for the purpose of this work. This will ensure that all factors are evidence-based and likely to withstand scrutiny.
4. Applications with 'Sui Generis' land use will be reviewed individually and allocated to the closest land use type which best reflects the development description. In some cases sites may be ignored if they cannot be reasonably matched with a land use type. For expediency, applications with a small floor area (e.g. less than 500 sq m) will not be considered as the equivalent number of jobs created/lost will be negligible.

Once the employment planning data has been converted to jobs and mapped to model zones it will be compared against the previous COMET 7 jobs data at the model zone level.

The additional cost to undertake the additional work described above is provided in Table 3 and Table 4 for task cost and staff time respectively.

Table 3: Job Conversion Task Cost

Tasks	
Develop methodology	
Obtain TRICS rates for missing land use types	
Analysis of Sui Generis applications	
Check against COMET 7	
	Total

SCOPE CHANGE 4: JOURNEY TIMES

In the original proposal it was stated that 17 journey time routes would be required for the reporting. However, it has now been confirmed that 21 routes are required.

Additionally, we understand that HCC would like WSP to reproduce the Aecom technical note ('JT SADC Final.pdf') for reporting the journey time results. This was not included in the original proposal so we did not previously allow a cost for producing this document. The additional cost to undertake this work is provided in Table 5 and Table 6 for task cost and staff time.

Table 5: Journey Time Task Cost

Tasks	
4 additional routes - extraction of nodes	
Set up graphs - extract additional distance data, create graphs in spreadsheet, work out method for timing points on graphs etc.	
Preparation of JT TN with graphs/maps - 21 routes, 3 time periods	
	Total

SCOPE CHANGE 5: CODING OF INFRASTRUCTURE

The original proposal excluded any cost for updating the highway and PT networks with additional infrastructure schemes because we did not know the extent of changes required. WSP are awaiting confirmation from HCC/SADC on the changes to infrastructure that will need to be included in the 2041 model and will provide a revised fee once this has been received.

SCOPE CHANGE 6: NATIONAL HIGHWAYS SRN REVIEW

Based on the COMET model review undertaken by National Highways[1] and the meeting between HCC/WSP/NH on 8th February 2024, it was agreed that WSP will provide additional information required by National Highways for their SRN review of the COMET model. The following information will be provided to complete the SRN review of the COMET model in St Albans and Hemel Hempstead:

- The model validation performance will be provided by comparing the 2014 observed and modelled flows for AM and PM peaks for total flows, where observed counts are available for SRN links and junctions approaching SRN and A414, A41, A405 and A1081
- A comparison of the 2014 and 2023 counts in the St Albans and Hemel Hempstead for AM and PM peaks for total flows to see the impact of Covid on traffic flows
- Journey time route comparison between 2014 observed and modelled flows where 2014 observed data is available for SRN routes including any which are on approaches to SRN
- Summarise the above information in a technical note

[1] NH response to Hemmel Gardens Modelling 10/01/2024

Table 7: NH SRN Review Task Cost

Tasks	
Table for count comparison between 2014/2023 data in St Albans and Hemel for AM/PM peaks in a	
2014 Observed and modelled flow comparison for count locations in study area for SRN links and A41, A414, A405 and A1081 where 2014 observed data is available.	
Tabulate the journey time data of the routes we have including any which are on approaches to the SRN	
Technical Note	
	Total

SCOPE CHANGE 7: BASE YEAR REVIEW

As part of the Local Plan evidence base it has been discussed that a base year review of the St Albans district is required. WSP recommends a Technical Note is developed which reviews the performance of the COMET base year model in the St Albans district. This would comprise of the following tasks:

- Reviewing the count and journey time performance between the observed and modelled data for all road links in St Albans district, where 2014 observed data is available
- Reviewing the network coverage in the St Albans district to ensure all key roads are represented
- Providing an overview of the changes in observed traffic flows between 2014 and 2023 to demonstrate how traffic has changed in the district since the base year has been developed
- Provide a comparison of 2014 modelled counts against 2023 observed counts in tabulated form
- Comparisons of 2014 AM, IP and PM peak link delay against 2024 google map typical traffic to compare how the COMET model is representing delays compared to current typical conditions in key routes in the district

This Technical Note will be an important evidence base to defend any challenges that come along relating to the COMET 2014 base year model being used as a basis of the Local Plan Forecasting. Table 9 and Table 10 provides the task cost and staff time for the base year review.

Table 9: Base Year Review Task Cost

Tasks
Reviewing the count performance between the observed and modelled data for all road links in St Albans district, where 2014 observed data is available
Reviewing the journey time performance between the observed and modelled data for all road links in St Albans district, where 2014 observed data is available
Reviewing the network coverage in the St Albans district to ensure all key roads are represented
Providing an overview of the changes in observed traffic flows between 2014 and 2023 to demonstrate how traffic has changed in the district since the base year has been developed
Provide a comparison of 2014 modelled counts against 2023 observed counts in a tablulated form
Comparisons of 2014 AM, IP and PM peak link delay against 2024 google map typical traffic to compare how the COMET model is representing delays compared to current typical conditions in key routes in the district
Technical note
Total

ADDITIONAL PROJECT MANAGEMENT FEE

The additional time required to manage the expanded scope of works for this project including additional meetings with HCC/ SADC and increased requirements for internal project management are outlined Table 11. Noting we assumed 2 meetings in our initial scope of works. The cost below assumes an additional 2 meetings with HCC/ SADC.

FEE SUMMARY

Table 12 summarises the additional costs described above and provides a revised total budget for the project. This does not include the cost of coding the infrastructure schemes as the final schemes to be coded have not been provided by HCC yet.

Table 12: Fee Summary by Task

Scope Change
Change 1: Planning Data 2041
Change 2: NTEM 8
Change 3: Job conversion
Change 4: Journey times
Change 5: Coding of infrastructure
Change 6: NH SRN Review
Change 7: Base Year Review
Additional Project Management
Total additional work (without change 5)

PROGRAMME

WSP are in the process of updating the programme and will provide it to HCC/ SADC w/c 19th February.