

Checklist for Strategic Transport Assessments

Introduction

This checklist provides advice to developers in relation to what City of York Council expects to be provided in Transport Assessments for strategic development sites identified within the Local Plan.

Developers should use this checklist to ensure that they have adequately covered all transportation issues pertinent to proposals. City of York Council will review Transport Assessments in accordance with this checklist and reserve the right to raise any additional issues not addressed within this document should they be considered necessary to determine the application.

Executive Summary

An executive summary should be included at the front of the Transport Assessment. This should be written in a clear and concise manner with intent to explain the main findings to members of the public without the need to assess the technical details contained within the main body of the report.

Travel Plan

The developer should engage in pre-application discussions with City of York Council to establish the level of detail required to be provided within Travel Plans.

For outline planning applications, it may be sufficient to provide a Framework Travel Plan that can be developed further at the reserved matter stage. A simple Travel Plan Statement, however, will not be acceptable to the Local Authority for this purpose.

Content of Transport Assessment

Table 1 summarises the content and structure that is expected in a Transport Assessment. The methodology and build up of assumptions should be clear and simple to follow.

Transport Assessments should be prepared in accordance with the recommendations of the National Planning Policy Framework and the *Travel Plans, Transport Assessments and Statements in Decision-Taking* section of National Planning Practice Guidance.

They should be structured in accordance with the recommendations previously contained within the Department for Transport document *Guidance on Transport Assessment*.

The principal focus should be on seeking to maximise travel opportunities by sustainable modes, before examining the impact of residual private car journeys (and demand management processes which may serve to reduce the impact).

Finally; highway mitigation measures should be considered, which are necessary to offset the impact of additional vehicular traffic movements forecast to be generated by the development.

Table 2 provides a suggested, more detailed approach, to undertaking forecasting for junction modelling assessments.

Steps 1 to 3 are a requirement of all TAs (although City of York Council may also request that Step 4 be undertaken as results of the assessment are presented for appraisal).

Table 1: Schedule of Requirements of Transport Assessment

Section	Requirement	Details
Proposed Development	Site Location	Establish the site in the context of its location / boundary (provide illustrations) and road characteristics of the surrounding highway network (within the entire study area agreed with CYC). Identify the administrative area (i.e. LSOA, MSOA, etc) that the development is located within.
	Historical context	Detail any previous planning history associated with the site and / or the site allocation within the draft Local Plan.
	Scale of development	Provide details of the site area in hectares and detail the development proposal in terms of GFA and planning land use class (i.e. A1 to D2). Identify the quantum of units proposed, any phasing of build-out and whether units are intended to be privately owned or leased. This should be consistent with the submitted planning application.
	Supporting Transport Infrastructure	Detail the proposed infrastructure which will be provided both internally and adjacent to the application site (on the surrounding local / strategic road network) that is likely to be delivered as part of the planning application. Discussions with CYC are encouraged to ensure that proposed infrastructure is appropriate and sufficient. This should include a summary of pedestrian, cycle, bus and vehicular access to the development proposal, in addition to providing details of how improvements are to be delivered, and the corresponding legal requirements. This should include mapping to illustrate how new links are proposed to connect with existing infrastructure.
	Parking Provision	Details on parking provision for all modes should be provided and be consistent with CYC maximum / minimum parking standards. This should include details on car / cycle parking design standards.
	Provision for non-motorised users	Provide details on the internal layout of the development and how it prioritises the needs of pedestrians, cyclists and public transport users.
Policy Framework	To review relevant national and local policy	<p>The following planning policy base should be referenced in order to assess the context of the application relevant to current legislation (note: this list is not exhaustive):</p> <ul style="list-style-type: none"> • National Planning Policy Framework • National Planning Practice Guidance • City of York Local Transport Plan 2011-2033 • City of York Publication Draft Local Plan • Any relevant Neighbourhood Plan which may be pertinent to the area in which the application site is located.

Section	Requirement	Details
Existing Conditions	Description of existing transport infrastructure	<p>Detail all existing transport infrastructure within the agreed study area, including walking, cycling, public transport and highway infrastructure. Photographs and mapping should be used to illustrate the assessment of existing conditions. This should include:</p> <p><u>Walking / Cycling</u></p> <ul style="list-style-type: none"> • Assessment of the catchment within an acceptable walking and cycling distance of the applications site. • Qualitative assessment of routes, including crossing points, surfacing, gradients, lighting, cycle lanes, etc. • Gap analysis of the available infrastructure and routes to identify deficiencies in the surrounding network, which could act as inhibitors to the successful uptake of active travel modes by end users. <p><u>Public Transport</u></p> <ul style="list-style-type: none"> • Map of nearby bus stops / rail stations and assessment of proximity, accessibility and facilities. • Service timetables (frequency, first / last services, and destinations). • Gap analysis of the available infrastructure and routes to identify deficiencies in the surrounding network, which could act as inhibitors to the successful uptake of public transport travel modes by end users. <p><u>Highway</u></p> <ul style="list-style-type: none"> • Identification and description of all highway links and junctions within the agreed study area. • Qualitative assessment of highway infrastructure, verges, speed limits, weight restrictions, street lighting, etc. • Details of any traffic regulation orders or restrictions on the local highway network.
	Review of traffic collision data	Detailed 'Personal Injury Collision' data (for all highway links and junctions within the agreed study area) should be collated for the most recent 5 year period available. Patterns or trends should be considered and analysed, with a graphical illustration or collision plot provided.
Future Conditions	Committed Development	A list of committed developments and highway schemes forecast to affect the study area should be presented alongside an evaluation of their anticipated impact on the local / strategic road network. Pre-application discussions should be conducted with CYC to ascertain the requirement for cumulative traffic impact assessments with other strategic sites.
	Traffic Growth	Establish the methodology and assumptions for deriving background traffic growth. A suggested approach for calculating traffic growth is set out in the 'Approach to Trip Generation and Scenario Management for Strategic Site Modelling'. Traffic growth should be in line with WebTAG Unit 3.15.2 guidance.
Assessment Methodology	Area of Assessment	Identify links and junctions to be assessed, with accompanying map and justification for any exclusions. As a guide this should include links and junctions which are affected by an increase in two-way peak hour traffic flow of more than 30-50 vehicles per hour. Potential impacts on AQMAs should also be considered. The final selection of junctions and links requires agreement with CYC. It is feasible that additional junctions and links could require inclusion following the scoping and initial Transport Assessment outputs as part of an iterative process.

Section	Requirement	Details
	Time Periods and Years	Establish time period and years of assessment. The selected parameters require agreement with CYC.
	Traffic Data	<p>Existing traffic flow data should be collected for the identified critical links and junctions within the study area, during a neutral / representative traffic month (in accordance with the recommendations set out in Paragraph 3.3.6 of WebTAG Unit M1.2). Manual classified counts are expected to be current and valid. Justification for use of old data must be provided to ensure that it is acceptable to CYC.</p> <p>Traffic flows should be utilised to establish the total quantum of vehicular traffic (including the number / percentage of HGVs using identified critical links and junctions) and to identify the operational peak periods on the road network.</p> <p>Additional surveys to record queue length, saturation flows, etc, should be conducted to facilitate the validation of traffic models by the developer.</p>
	Trip Generation	<p>Trip generation for each land use associated with the proposed development should be derived, with methodology and assumptions (including anticipated mode split) clearly stated.</p> <p>CYC will work with developers during the pre-application scoping stage to review trip generation assumptions. Developers should provide a range of scenarios from a worst case to target trip rates (as discussed in Table 2).</p> <p>If the site has an existing and valid use; a comparison of the existing and proposed traffic generating profiles may be appropriate. This should be agreed with CYC at the pre-application scoping stage.</p>
	Consideration of Sustainable Transport Measures	<p>Details should be provided of the impact, which the development proposal is anticipated to have, on existing public rights of way, established pedestrian links and local / strategic cycle routes. These should be retained and enhanced where possible to encourage the uptake of active travel modes. Diversions or extinguishments must be confirmed as acceptable by CYC.</p> <p>Details should be provided which relate to the strategy for serving the application site by means of accessible high quality public transport (if not already available) and the provision of reasonable connections to existing or proposed cycle routes.</p> <p>Detail should be provided, where applicable, of development proposal impacts on the reuse of disused public transport corridors or facilities and consideration of potential impacts to nearby transport interchanges.</p> <p>Detail should be provided of proposed mitigation measures to reduce car-based trips. This should be linked to the target trip rates presented under 'Trip Generation'.</p>

Section	Requirement	Details
	Trip Distribution	Generated traffic should be distributed across the road network within the agreed study area. The chosen methodology for developing the gravity model (including any assumptions made) should be documented and clear traffic flow diagrams appended to the TA, which show the origin /destination of all development generated trips. The CYC traffic model may be used to provide the distribution, subject to due diligence by the developer.
	Junction or Network Assessments	<p>The identified junctions and links should be assessed in line with the 'Approach to Trip Generation and Scenario Management for Strategic Site Modelling'.</p> <p>Traffic flows should be presented as the total number of vehicles (with the percentage of HGVs identified) or as Passenger Car Units (with the conversion factors clearly stated within the TA). The junction and link network should be subject to further assessment to consider the interaction of neighbouring junctions and links. For larger developments it may be appropriate to undertake micro-simulation or strategic modelling to assess this.</p>
Base Year, Do Nothing and Do Something Junction Assessments	Modelling of transport network identified for further assessment	<p>Appropriate industry-approved software should be used to model the highway network, with either 'Direct' or 'One Hour' traffic flow profiles used (in the case of Arcady and Picady). The use of a 'Flat' traffic flow profile will only be considered acceptable where the developer can demonstrate that the forecast profile will be identical during each quarter hour period throughout the identified operational peak periods.</p> <p>Summaries should be provided of junction and link capacity (i.e. Ratio of Flow to Capacity or Degree of Saturation), queue lengths and delay, in order to determine whether the quantum of traffic generated by the development will have a material impact upon the operational performance of intersections within the agreed study area.</p> <p>Roundabout assessments should account for unequal lane usage (where appropriate), with corrections applied to the geometrically calculated slope and intercept values in order to validate the junction models. Where multiple 'ahead' lanes are present on the approach to roundabout junctions, traffic survey data should be presented to identify the occupancy level associated with each lane (rather than a default assumption that equal lane usage is experienced).</p> <p>The form of modelling should be suited to the situation and the use of software which can reflect the inter-relationship of traffic across links and multiple junctions (e.g. micro-simulation software) is likely to be required in some circumstances.</p>
Mitigation	Review of any mitigation required to address issues identified in the assessment	<p>Following confirmation of the junction modelling results, the developer will be expected to identify whether highway mitigation measures are required for any of the intersections under consideration. It will be expected that mitigation is proposed at any intersection forecast to operate with an RFC of greater than 0.85 (or a DoS of greater than 90%) in order to achieve at least a position of nil detriment in operational terms. Details should also be provided of how these mitigation measures will be delivered. Any junction improvements or modifications should be modelled to assess their operational performance under design year traffic flow conditions and their acceptability confirmed with CYC.</p> <p>This section should link to any submitted Travel Plan, providing a full overview of the measures and agreed targets.</p>

Section	Requirement	Details
	Stage 1 Road Safety Audit	Undertake a Stage 1 Road Safety Audit (RSA) to ensure that highway safety aspects of the design are considered, with emphasis on the suitability of the proposal with regards non-motorised users.
	Proposed funding mechanisms	Summary of mitigation costs and proposed delivery of the infrastructure. To include a cost break-down and description of the anticipated funding stream where appropriate.
	Travel Plan	<p>A Travel Plan (prepared in line with best practice and national policy) should be submitted, which describes anticipated operations at the site and sets specific, measurable, achievable, realistic and time based targets which will be implemented at the development to reduce reliance on single occupancy car trips and encourage the uptake of sustainable travel modes from first occupation of the site.</p> <p>Proposed mitigation through the implementation of SMART Travel Plan measures should be linked to the trip rates used in the Transport Assessment.</p>
Engagement with Highways England	Where development traffic impacts upon the Strategic Road Network	<p>Engagement with Highways England should take place to agree assumptions regarding trip rates and distribution that impact directly on the Strategic Road Network.</p> <p>As a guide, the threshold for impact on the Strategic Road Network is 30-50 two-way trips per hour. Any modelling of junctions on the Strategic Road Network is subject to review by Highways England.</p>
Monitoring	Monitoring Strategy	Proposals should be set out relating to the approach which will be adopted in order to monitor the impact of the development proposal in terms of trip generation, traffic flows and mode shift towards the 'target' development trip rates set out within the Transport Assessment.

Table 2: Approach to Trip Generation, Scoping and Scenario Management for Strategic Site Modelling

	Trip Generation	Description	Outcome
Step 1 Identify trip rates	Target - Lower Trip Rates	<p>Target level of trip generation through sustainable trip reduction</p> <p>Considerations include assessment of site location relative to schools and employment centres, demographic profile, surrounding infrastructure, cycle / walking facilities and use of best practice relating to sustainable travel modes.</p> <p>Commit to Travel Plan measures to achieve target trip rates, which should be agreed with CYC and HE (where appropriate).</p>	<p>Assess the most appropriate trip generation rates for the Strategic Site for use in the Transport Assessment.</p> <p>Provide CYC with justification of trip rates derived by means of an evidence based approach.</p> <p>If no justification is provided, then CYC will require the use of 'Worst Case' 85th percentile trip rates from TRICS.</p>
	Most Likely - Between "Target" and "Worst Case"	<p>Most Likely level of trip generation with some level of sustainable trip reduction</p> <p>Assess the location and development mix. Use the TRICS database or other evidence to justify appropriate trip rates, which should be agreed with CYC and HE (where appropriate).</p>	
	Worst Case – 85 th Percentile Trip Rates from TRICS (or HE 85 th Percentile Trip Rates)	<p>Worst Case level of trip generation with no sustainable trip reduction</p> <p>Based solely on assessment of location and development mix. Use the TRICS database to justify appropriate 85th percentile trip rates, which should be confirmed with CYC and HE (where appropriate).</p>	
	Scope of Network Assessment Coverage	Trip Distribution and derivation of 'In Scope' network	
Step 2 Identify network coverage	Gravity Model or SATURN Modelling	<p>Gravity Model showing origins and destinations of AM and PM car driver trips to and from development. Trip distribution flow diagrams showing assignment of trips to the network. Provide a technical note on the derivation of the distribution and assignment assumptions to CYC for agreement.</p> <p>or</p> <p>Employ use of the City of York SATURN Model following due diligence by the developer.</p>	
	Junction Assessment Criteria	<p>Threshold number of 30-50 two-way trips on links / junctions to and from the development. Appropriate modelling software to be agreed with CYC.</p>	

	Modelling Scenario Management	Description	Growth to be Applied
Step 3 Modelled Scenarios	1. Existing Year Base Case Assumed to be the year of submission of the planning application.	Base year demonstrating existing conditions	None
	2. Future Year Reference Case Assumed to be full build out year (Intermediate year assessments to be considered for phasing of development)	Base + Committed Developments + Background Growth	Committed Developments - Use Existing TAs. Background Growth - For car driver growth use TEMPRO & NTM adjustment. Planning assumptions should be adjusted to reflect total Local Plan development, with assessed development removed. For LGV & HGV growth use NTM (all should be in line with WebTAG Unit 3.15.2).
	3. Future Year Reference Case + Development Assumed to be full build out year (Intermediate year assessments to be considered for phasing of development)	Base + Committed Developments + Background Growth + Development	Committed Developments - Use Existing TAs. Background Growth - For car driver growth use TEMPRO & NTM adjustment. Planning assumptions should be adjusted to reflect total Local Plan development, with assessed development removed. For LGV & HGV growth use NTM (all should be in line with WebTAG Unit 3.15.2). Development Traffic - Use trips generated by agreed trip rates and distribution in line with the agreed gravity model.

	Cumulative Impact Assessment of Adjacent Developments	Description	Growth to be applied
<p>Step 4</p> <p>Detailed Cumulative Impact Assessment</p>	<p>Future Year Reference Case (with adjusted Background Growth) + Adjacent Development + Development</p>	<p>Base + Adjacent Developments + Background Growth (adjusted for adjacent developments) + Development</p>	<p>Committed Developments - Use Existing TAs.</p> <p>Background Growth - For car driver growth use TEMPRO & NTM adjustment.</p> <p>Planning assumptions should be adjusted to reflect total Local Plan development, with assessed and adjacent developments removed.</p> <p>For LGV & HGV growth use NTM (all should be in line with WebTAG Unit 3.15.2).</p> <p>Adjacent Local Plan Developments (not committed) - Explicitly model trips from nearby Strategic Sites.</p> <p>Development Traffic - Use trips generated by agreed trip rates and distribution in line with the agreed gravity model.</p>
	<p>City of York SATURN Model outputs can be used to identify adjacent Strategic Sites to be included in the assessment</p>	<p>Threshold of 30-50 two way trips through any of the intersections within the agreed and scoped study area for assessment.</p> <p>Trip distribution to be estimated from the Strategic Sites by means of a gravity model or outputs of the Strategic Model.</p> <p>Trip rates to be used for adjacent Strategic Sites to be informed by development Transport Assessments (if an application has been submitted).</p> <p>Alternatively trip rates used in the City of York SATURN Model may be used (with advice provided by CYC) if this is considered desirable to adequately assess the impact of the development proposal.</p>	