St Helens Metropolitan Borough Council

Guidance Notes for the Submission of Transport Assessments

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TRANSPORT ASSESSMENT GUIDANCE NOTES

1 - Introduction

This document has been produced by St Helens Metropolitan Borough Council, Development Services Section to assist the Council in delivering an effective and efficient Development Control service. The document is intended to formalise guidance provided in the National Planning Policy Framework.

All **Transport Assessments** (TA) should address the objectives detailed within the following guidance and follow the basic layout described in Section 3.

Each TA should demonstrate how the development is accessible to key services, maximises sustainable transport opportunities and minimises single occupancy vehicle trips.

Where necessary, mitigation measures to improve sustainable transport provision and overcome any material impact on the highway network will be required. Full details of such measures should be included with the TA.

A development that does not overcome any material impact to the transport network or which is likely to increase accidents or conflict between motorised users and non-motorised users will be recommended for refusal.

Each TA should be preceded by scoping discussions or a scoping study to enable specific matters related to the development site to be discussed with Highways Officers. It would also be beneficial if the initial TA was submitted at pre-application stage to iron out any particular issues or concerns to be addressed at this stage, and so avoid delay determining the planning application.

Transport Statements (TS) are required for developments that have comparatively small transport implications. They should set out the transport issues in terms of the difference in existing and future conditions as a result of the development.

The scope of the TA or TS should be agreed with the Highways Officers prior to submission.

2 - Indicative Thresholds for Transport Assessments and Statements

The following thresholds are provided for guidance only and much will depend on the individual circumstances of the proposal. There may be site-specific issues or traffic sensitive locations that require a particular level of assessment that does not fall within the thresholds indicated.

Early discussions with the Transport Development Control Team are advised. The contact details for all relevant officers are provided at the end of the document.

Table 1: Thresholds for Transport Statements and Transport Assessments		
Type of Development	**Transport Statement required**	**Transport Assessment required**
A1 - Food Retail	250 - 800sq.m	>800sq.m
A1 - Non-Food Retail	500 - 1500sq.m	>1500sq m
A2 - Financial & Professional Services	1000 - 2500sq.m	>2500sq.m
A3 - Restaurants & Cafes	300 - 2500sq.m	>2500sq.m
A4 - Drinking Establishments	300 - 600sq.m	>600sq.m
A5 - Hot Food Takeaway	250 - 500sq.m	>500sq.m
B1 - Business, Office, Research, Light Industry	1500 - 2500sq.m	>2500sq.m
B2 - General Industrial	2500 - 4000sq.m	>4000sq.m
B8 - Storage or Distribution	3000 - 5000sq.m	>5000sq.m
C1 - Hotels	75 - 100 bedrooms	>100 bedrooms
C2 - Residential Institutions (Hospitals, Nursing Homes)	30 - 50 beds	>50 beds
C2 - Residential Institutions (Residential Education)	50 - 150 students	>150 students
C2 - Residential Institutions (Hostels)	250 - 400 residents	>400 residents
C3 - Dwellings	50 - 80 units	>80 units
D1 - Non-residential Institutions	500 - 1000sq.m	>1000sq.m
D2 - Assembly & Leisure	500 – 1500sq.m	>1500sq.m

For all other uses (e.g. stadiums, retail warehouses, clubs, amusement arcades, launderettes, petrol filling stations, taxi businesses, car/vehicle hire businesses, vehicle sales businesses, nightclubs, theatres, hostels, builders yards, garden centres, post offices, travel/ticket agencies, hairdressers, funeral directors, hire shops, dry cleaners), you should contact the Transport Development Control Team on 01744 676187 or 01744 671615 for detailed discussions.

In addition to the uses and thresholds listed above, a Transport Statement or Transport Assessment will also be required where the development meets one of the following circumstances:

1. It does not confirm with the adopted development plan.

2. It generates 30 or more two-way vehicle movements in any hour.

3. It generates 100 or more two-way vehicle movements in a day.

4. It proposes 100 or more parking spaces.

5. It generates significant freight or HGV movements per day (typically 40 or more two-way HGV movements per day) or significant abnormal load movements per year.

6. It is located where the local transport infrastructure is poor e.g. substandard roads, poor pedestrian/cyclist facilities or inadequate public transport provision.

7. It is located within or adjacent to St Helens' Air Quality Management Areas. At the time of writing two air quality management areas are identified:

    a) M6 motorway – a 3.7 mile continuous strip on both sides of the M6, incorporating J23 with the A580 East Lancashire Road.
    b) High Street, Newton-le-Willows – a linear air quality management area along High Street, Newton-le-Willows between the junctions with Ashton Road and Church Street.

3 – Layout of the Transport Assessment

All submitted Transport Assessments should follow the basic layout and headings presented below. Documents that comply with this framework will help enable the critical information within each Transport Assessment, which will enable Officers to make a speedy response; conversely documents that do not follow this layout could affect the timescales for response and may involve requests for additional information.

All Transport Assessments should be accompanied by a Framework Travel Plan, which should outline a variety of initiatives and measures to encourage travel by more sustainable modes of transport. Further guidance regarding travel plans is provided in the 'Guidance Notes for Travel Plans' document.

The basic structure of a Transport Assessment is:

a) Introduction
b) Site description
c) Policy context

d) Accessibility
e) Impact on the surrounding highway network
f) Mitigation
g) Summary and conclusions

4 – Transport Assessment Introduction

All Transport Assessment's should start with a brief introduction setting out the following:

- The location of the site;
- The existing use of the site (including planning use classes by gross floor area);
- The permitted use including details of the occupant and occupational characteristics, or the date that the site became vacant; and
- The proposed use of the site including planning use classes and GFA / size of for each use.

This introduction will provide a concise explanation of the development proposals including size of the development and operational characteristics.

The background to the project and details of any scoping/pre-application discussions should also be included here.

The appendices should include all plans, tables, calculations, capacity assessments etc.

5 – Site Description

This section should cover the detailed information relating to the site itself. Location and layout plans should also be provided.

Typical details would include, but not be limited to, the following:

- The location of the site relative to the wider area and the transport network;
- Details of the permitted and existing use of the site; including details of the existing occupants, operating characteristics (e.g. opening hours, number of staff on site etc.) or whether the site is vacant;
- Details of the land within the applicant's control, particularly in relation to the extent of the highway boundary;
- Operational aspects of the proposed site – hours of operation, uses of individual buildings / site areas, size of development and access proposals; and
- Details of proposed parking provision (including parking for cycles and motor cycles) including service provision.

6 – Policy Context

This should set out, in summary form the most relevant policies to the site and the proposed use. The policies to be reviewed will vary between applications but, as a minimum, should include National Planning Policy Framework, Merseyside's Local Transport Plan, St Helens Local Development Framework, as well as any Supplementary Planning Guidance Notes.

Large sections of text from these documents should not simply be copied and pasted in this section; instead, it should present the relevant policies and information with which the site is expected to demonstrate compliance.

7 – Accessibility

Consideration must be given as to how accessible a site is by sustainable modes to key services; this is compulsory for residential developments but should also be considered for staff employed at other types of development. Other types of development should show how accessible the site is in relation to transport hubs, residential areas and/or other targeted end users.

The four key services which should be accessible from the site are:

- Food retail
- Healthcare
- Employment
- Education

In order to demonstrate accessibility the use of accessibility mapping software is strongly encouraged. The Council can carry out the accessibility mapping on behalf of developers at a fixed fee of £450 (plus VAT).

Walking and cycling isochrones should be measured from the relevant access points of the development.

The accessibility maps produced should form the basis of more detailed analysis for access from the site to the key destinations identified within the isochrones and direct routes to/from the site to these key service areas and public transport facilities should be described.

Relaxations in sustainability accessibility are limited to appropriate re-use of existing sites in rural areas, such as farm diversification projects, to maintain the rural economy, in accordance with the NPPF.

Walking

The internal layout must be fully accessible on foot and be designed to encourage walking. The layout should provide direct pedestrian routes following future and existing desire lines, should have natural surveillance, and wherever possible avoid the need for pedestrians to cross large areas of parking, wide carriageways or areas that are likely to be obstructed.

Pedestrian access to the development must be analysed with consideration to the following:

- Identification of the key destinations within the walking isochrones, together with the appropriate public transport facilities (i.e. bus stops and railway stations) and the walking routes available to / from them.

- Analysis and comment on the physical elements of identified routes (i.e. available widths, quality of surfaces, provision of convenient and safe pedestrian crossings, provision and quality of lighting, personal safety and road safety hazards).

- Identification of shortfalls or issues along the routes which may discourage pedestrian movements, and details of required improvements.

- Analysis of points of conflict with vehicular traffic and any severance issues. This should include details of required improvements.

Cycling

The internal layout must be fully accessible for cyclists and be designed to encourage and facilitate cycle usage. The layout should incorporate direct routes through the site following likely desire lines which link the development to the road network and existing / proposed cycle routes, whilst minimising conflict between cyclists and motorised traffic.

Cycle access to the development should be analysed with consideration to the following:

- Identification of the key destinations within the cycling isochrone together with the facilities accessible to them. Analysis of whether the identified routes are adequate to meet the needs of cyclists.

- Identification and comment on the cycle parking provision at key destinations, including cycle parking proposals at the development site.

- Analysis and comment on the physical conditions of key routes e.g. available widths, quality of surfaces, provision of measures to avoid conflict, provision and quality of lighting, and road safety hazards.

- Analysis and comment on the directness, attractiveness and coherence of cycle routes.

- Identification of shortfalls along the routes and details of required improvements.

- Identification of any cycling improvements identified in support of the development proposals.

- Analysis of points of conflict with motorised traffic and any severance issues, and details of required improvements.

Details of cycle parking provision at both the development site and key destinations should also be included within this section. The majority of developments will be expected to include covered secure cycle parking in prominent visible locations which are convenient for building entrances and the provision of shower/changing and locker facilities.

The St Helens Cycle Map is available via the Council's website or on request.

Bus

Public transport should be an integral element of any development and it should be demonstrated how the issue of ensuring public transport usage as a realistic alternative to private car trips has been addressed.

Dependent on the size of the development, it may be appropriate for the internal layout to be designed to accommodate bus access. Early discussions should take place with the Transport Development Control Team to identify the precise requirements.

Bus access to the development should be analysed giving consideration to the following:

- Identification of the key destinations accessible by bus. This should include analysis of the bus services to these destinations in terms of frequencies and hours of operation.

- Locations of bus stops relative to the site should be identified, particularly those within 400m (walking routes to these should be analysed as part of the walking section).

- Assessment of the quality of the waiting facilities and service information available at the bus stops accessible from the site, with reference to the attractiveness to passengers, whether they offer adequate shelter, safety and facilities available to allow access for all.

- Details of any existing / proposed bus priority measures in the vicinity of the development site or along key routes.

Details of any discussions with Merseytravel or the bus operators should be provided within the appendices of the TA.

Rail

Rail access to the development should be analysed, with consideration given to the following:

- Access to the station on foot, by bicycle or using public transport. Convenient access by each of these modes should have been addressed in the relevant section of the report.

- Which principal destinations are served from the rail station.

- Details of the service frequencies and hours of operation to the principle destinations.

- Whether the station offers waiting facilities, shelter, safety and facilities to enable ease of access for all.

8 – Transport Impacts of the Development

As mentioned previously the extent of the highway network to be considered within the TA should be agreed in discussions with the Transport Development Control Team. This will identify critical junctions and provide details of any committed development or proposed highway works that may impact on the study area.

Existing Traffic Network

Traffic survey information should be provided detailing the existing road conditions over the area where development traffic would impact on the network.

Traffic flow data from previous recognised studies up to three years old can be used subject to suitable growth factors being applied; however, new surveys are always preferred. Where a network transport model is to be used, any origin-destination survey information should be no more than five years old.

Survey dates should be representative of typical conditions. Automatic Traffic Count surveys near the site access points will assist to confirm if manual survey days are truly representative of overall conditions.

Surveys should be carried out during the locally recognised neutral months of March to June and September to November (provided adequate lighting is available), although not during local school half-term dates. Surveys outside these dates may, in certain circumstances, be considered subject to applying agreed adjustments; this should be confirmed with Officers of the Transport Development Control Team prior to any surveys being commissioned.

Where junctions within the study area are known to be congested, queue length surveys should be provided alongside manual classified turning counts so that they can be used to validate the capacity analysis. The scope and timings of the traffic surveys should be agreed with the Transport Development Control Team prior to commissioning.

The peak hour periods should be clearly identified from the traffic surveys undertaken and not just assumed to be 08:00-09:00 and 17:00-18:00.

Assessment Years and Growth

Analysis should be carried out for the identified opening year of the development and for five years from the date of opening, except for assessments that affect the A580, the A570 or the A58 when ten years from the date of opening should be carried out.

Traffic growth figures should be clearly identified using TEMPRO and the latest datasets. Using alternative assumptions within the TEMPRO analysis may be considered in certain circumstances; full details of these alternative assumptions should be provided within the TA.

Trip Generation

Wherever possible trip generation rates should be identified prior to submission of any planning application so as to avoid analysis re-runs of disputed figures. These should be agreed with the Transport Development Control Team.

Trip rates should generally be taken from the TRICS database although a first principles approach may be considered in some situations subject to prior agreement with Officers from the Transport Development Control Team.

85th percentile trip generation rates should be used.

Trip rates within TRICS may already include sites with high levels of public transport access, restricted car parking and / or robust Travel Plans. If any reduction from the 85th percentile rate is proposed, this should be justified on the basis of the analysis of all person trips and mode share (taken from Census data) taking into account the existing sustainable infrastructure and / or any proposed sustainable improvements.

It should be noted that the intention to provide a Travel Plan will not in itself be justification for a reduction in trip rates.

Alternatively, a first principles approach should be adopted to identify the trip generation associated with the proposed development. Full details of the methodology and assumptions utilised within any first principles approach should be included within the TA.

Net trip generation will take into account trips from the previous use of the site where it has been active in recent years. If the previous occupant is still operational and the site is available for survey, its generation should be based on this. If the use of the site has declined, evidence must be supplied to back up any adjustments made to the survey data.

It should be noted that where a site has been vacant for over five years, or a long enough period for traffic growth on the adjacent highway network to equal potential trip generations, any permitted use for the land cannot be considered in the trip generation calculations and the site must be treated as a vacant use, unless there is direct evidence that the fall-back scenario is likely to materialise and can be put into effect without the need for additional planning consent. (A fall-back position can only be considered if there is a reasonable prospect of it being implemented if the current application is refused).

All TRICS analysis should follow the methodology of the latest TRICS Good Practice Guidelines, with particular attention given to the location type parameters. In terms of the regional selection, data from Greater London and Ireland should be excluded and in the stage 3 filtering, the population within 5 miles, over 500,000 should be excluded.

Any TA must clearly demonstrate that the numbers of vehicle movements generated in the relevant time periods clearly match the trip rates per unit from which they are derived.

All assumptions regarding modal split and the trips already on the network i.e. pass-by / diverted trips should be clearly outlined and backed up with evidence that they are relevant to the transport situation in St Helens.

Full details of the traffic generated by any appropriate committed development identified should also be included. The committed developments to be included should be agreed with the Transport Development Control Team prior to submission of the Transport Assessment.

Traffic Distribution and Assignment

The most appropriate method of distribution and assignment of traffic will depend on the scale, nature and location of the development but acceptable methods include isochronic distribution, gravity models and existing turning proportions.

The methodology used for the basis of distributing and assigning traffic to the network must be fully explained within the TA.

If a gravity model has been used, an explanation of the formula used and assumptions built into the model should be provided.

Committed development data should be assigned in accordance with the method used in the TA prepared for that development.

Clear diagrams showing the turning movements for vehicular trips should be provided for the following scenarios (as appropriate):

a. Base year traffic flows
b. Opening year traffic flows
c. Future year traffic flows
d. Committed development traffic flows
e. Opening year + committed development traffic flows
f. Future year + committed development traffic flows
g. Development traffic flows
h. Opening year base + committed + development traffic flows
i. Future year base + committed + development traffic flows.

HGV flows may be shown on the same diagrams or on a duplicate set of diagrams. It is preferred that the default 10% figure is used for HGV flows within the capacity assessment in order to provide a robust analysis of the HGV impact. Alternatively, all flows may be shown as PCUs if capacity analysis is done on this basis. Each diagram must be clearly labelled as to which flows it contains.

Capacity Assessment

The junctions to be assessed should have been identified and agreed at the scoping stage but if not then generally the study area should include all junctions where the development leads to a predicted increase in total entry flows of 30 or more vehicles in any hour or, if the junction already experiences peak hour congestion, an increase of 18 or more vehicles.

Full details of junction model runs (ARCADY, PICADY, LINSIG or TRANSYT) must be provided in the appendices so that input traffic flows, methodology and junction geometry can be checked as well the outputs examined in detail. Junction base traffic analysis should be validated against queue lengths where there is existing congestion.

In order to assist in checking the data, accurate large scale plans (1:500, 1:250 or 1:200) must be provided of each junction where the capacity has been analysed and working lines showing the flare lengths, entry angles and visibility distances should be marked.

Junctions assessments must take into account pedestrian/cyclist facilities at or adjacent to the junctions within the study area, including pedestrian phases, advanced stop lines and pelican / puffin / toucan crossings in close proximity.

Signal timing data can be obtained from the UTC department (contact details are available on the back on this note).

ARCADY and PICADY assessments will be checked by the Transport Development Control Team. Advice will be sought from the Council's Traffic Signal Unit when signalised junctions are involved and this may lead to an increased response time.

The TA should include a summary table of the results for RFC or DoS, queue length and average delay per vehicle for each junction arm in each test scenario.

Each junction should be discussed in terms of the impact of the development traffic and the analysis should identify whether the development leads to a material impact on the performance of the junction and the highway network.

A material impact is considered to be an increase in congestion at any junction within the study area, with congestion being considered as one or all of the following:

- Any queue lengths long enough to block another junction or traffic stream. Where peak queues already block another junction or traffic stream a nil-detriment or better mitigation scheme must be achieved.

- An increase in the ratio of flow to capacity (RFC) to above the 0.85 value. Where RFC values already exceed 0.85 a nil-detriment or better must be achieved.

- An increase in the degree of saturation (DoS) to above the 90% value. Where the DoS values already exceed 90% a nil-detriment or better must be achieved.

- Where the practical reserve capacity (PRC) is negative. If the PRC value is already negative, a nil-detriment or better must be achieved.

- Where there is an unacceptable increase in the average delay per vehicle.

Developments that result in a material impact that is not fully mitigated by highway measures, sustainable transport and demand management will generally be recommended for refusal. Where a small over capacity increase to one arm of a junction is outweighed by larger decreases to other congested arms, or there is no readily acceptable solution, some flexibility may be considered.

For larger developments and for developments affecting heavily trafficked routes an assessment of the link capacity should also be carried out.

Road Traffic Collision Assessment

Analysis of the recorded injury accident record over a three year period should be provided in the form of a plot on a map showing the locations and severities. This should be accompanied by further details of the collisions including dates, times and more detailed information. A discussion of any identified patterns or concentrations of accidents, particularly involving vulnerable road users should also be provided,

highlighting safety issues that need to be addressed. Road traffic collision data can be obtained from the Road Traffic Collision team (contact details are available at the end of this document).

Any junctions, bends or links with an accident rate greater than expected for the road type and traffic flows should be identified.

Mitigation measures will be required for any road safety problems that would arise from the development or that will be worsened by an increase in traffic generated by the development or where vulnerable road users travelling to and from the development may be endangered. This may include desirable and appropriate reductions in traffic speeds.

Parking

St Helen's car parking standards are outlined in the Supplementary Planning Document 'Ensuring a Choice of Travel'. The TA must demonstrate that the car parking capacity is in proportion to the parking accumulation predicted by the production and attraction of vehicle trips through the day in order to ensure that developments do not lead to problems of off-site parking. Residential developments are encouraged to maintain a proportion of unallocated parking to cater for visitors and deliveries.

The likely level of parking provision, in accordance with the Council's current standards, should also have been agreed with the Transport Development Control Team.

Environmental Impact

The environmental impact of the development must be assessed when one or all of the following apply:

- Increases in traffic flow of over 20% are predicted on any highway.
- New developments with more than 300 parking spaces.
- Proposals for lorry or coach parks.
- HGV movements are generated through a residential area or on a rural lane.
- The development is within or adjacent to a designated Air Quality Management Area.

The Transport Assessment must then comment on the environmental impacts of traffic related to the development including noise, vibration and emissions.

If an Environmental Impact Assessment has been prepared for the development, the TA need only refer to the information provided within it.

HGV Impact

When a development leads to a high proportion of HGV movements then, in addition to the peak hour capacity assessments, the impact of HGVs related to the development should focus on a technical appraisal of the routes vehicles will take

and the adequacy of the existing highway infrastructure to cater for the heavy, large and slow moving traffic generated. Consideration should also be given to the condition of the roads and whether their general state is likely to be affected by the passage of increased heavy vehicles.

Access Junction

All routes, access roads and junctions, particularly within the site, should be designed in accordance with the St Helens Street Design Guide – Highways for Adoption, Manual for Streets and Manual for Streets 2.

9 – Mitigation

It is intended that this section be used to provide a quick overview of the development and the implications arising from it.

This section should include reference in summary form to all of the issues identified within the previous sections of the TA, highlighting the net individual impacts of the development, whether positive or negative, and addressing any mitigation measures required or reasons why mitigation is not necessary.

Details of how the mitigation measures are likely to be secured should be also be provided.

10 – Summary and Conclusions

The TA should conclude with details of how the impact of the development has addressed the principles identified within National Planning Policy Framework to promote sustainable development. This will be achieved through:

- Reducing the need to travel, especially by car
- Tackling the environmental impact of travel
- Increasing the accessibility of the location
- Other measures which may assist in influencing travel behaviour
- Making best possible use of the existing transport infrastructure
- Managing access to the highway network
- Mitigating the residual impacts of development through demand management, improvements to the public transport network, walking and cycling facilities, minor physical improvements to existing roads, and through the provision of new or expanded roads

11 – Contact Details

For any further information and advice related to the submission of Transport Assessments/Transport Statements, the contact details of the relavant officers are provided below:

Transport Development Control Team:
Fiona Soutar – 01744 676187 / fionasoutar@sthelens.gov.uk
Dave Whittleston – 01744 6671615 / davidwhittleston@sthelens.gov.uk

Road Traffic Collision data: – Dave Wainwright - 01744 676404 / davidwainwright@sthelens.gov.uk

Travel Plans: Travelwise – 0151 330 1851 / www.letstravelwise.org

Noise & Air Quality: Tony Smith – 01744 676339 / tonysmith@sthelens.gov.uk

UTC Data: Ian McCooey – 01744 676407 / ianmccooey@sthelens.gov.uk

Merseytravel: Steve Cook – 0151 330 1304 / stevecook@merseytravel.gov.uk