North Somerset Council

Transport Assessment and Transport Statement
Supplementary Planning Document

Consultation Draft
February 2015
North Somerset Council
Supplementary Planning Document –
Transport Statement and Transport Assessment

Contents;

1. Introduction
2. Indicative thresholds for Transport Statement or Transport Assessment
3. Guidance on preparing a Transport Statement
4. Guidance on preparing a Transport Assessment
5. Abbreviations
1. Introduction

This Supplementary Planning Document offers guidance on the thresholds that determine where a Transport Statement or a Transport Assessment might be appropriate and guidance on the scope of a Transport Statement and a Transport Assessment.

Paragraph 32 of the National Planning Policy Framework (NPPF) requires that all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment.

The requirement to provide a Transport Statement or Transport assessment is determined by the scale of development. This document gives examples of the thresholds that determine where a Statement or Assessment might be appropriate. However, the authority emphasises these are only indicative thresholds for guidance. The authority will always reserve the right to request a Statement or Assessment dependent upon the nature of the proposed development. Developers should always discuss requirements with the authority’s Officers before embarking on any Statement or Assessment.

Paragraph 36 of NPPF states that all developments which generate significant amounts of movement should be required to provide a Travel Plan. Developers should consult Officers and refer to the council’s Travel Plans; Supplementary Planning Document

The programme for plan preparation is set out below.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of Consultation Draft by Executive Committee/ delegated authority</td>
<td>February 2015</td>
</tr>
<tr>
<td>Consultation (6 weeks)</td>
<td>February - March 2015</td>
</tr>
<tr>
<td>Consideration of responses received</td>
<td>April 2015</td>
</tr>
<tr>
<td>Adoption of SPD by Council</td>
<td>June 2015</td>
</tr>
</tbody>
</table>

This Consultation Draft is available for public comment for six weeks between 13th February 2015 and 27th March 2015. All representations received will be taken into account and, if necessary, the plan amended accordingly. If significant issues are raised and/or substantive changes proposed to the draft document then a further
period of consultation will be required. The decision on final adoption of the
document will be taken at a formal meeting of the Council.

This document refers to North Somerset Council (or the Council). In this context the
council is both the Local Highway Authority and the Local Planning Authority.

The document also refers to Highways England (HE), formally the Highways Agency. Only the M5 motorway within North Somerset falls within the jurisdiction of HE. Highways England’s requirement for assessment of the Strategic Road Network can differ from that of the Local Highway Authority, and it is recommended that early engagement is sought with HE if any development is likely to impact on the SRN. Circular 02/2013 ‘The strategic road network and the delivery of sustainable development’ provides details on how the Agency considers planning applications.
## 2. Indicative thresholds for Transport Statement or Transport Assessment

The table below sets out the indicative thresholds relating to Transport Assessments or Transport Statements.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Use / description of development</th>
<th>size</th>
<th>No assessment</th>
<th>Transport Study</th>
<th>Transport Assessment &amp; Travel Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food retail (A1) Retail sale of food goods to the public – food superstores, supermarkets, convenience food stores.</td>
<td>GFA</td>
<td>&lt;250 sq. m</td>
<td>&gt;250 &lt;800 sq.m</td>
<td>&gt;800 sq. m</td>
</tr>
<tr>
<td>2</td>
<td>Non-food retail (A1) Retail sale of non-food goods to the public; but includes sandwich bars – sandwiches or other cold food purchased and consumed off the premises, internet cafés.</td>
<td>GFA</td>
<td>&lt;800 sq. m</td>
<td>&gt;800 &lt;1500 sq.m</td>
<td>&gt;1500 sq. m</td>
</tr>
<tr>
<td>3</td>
<td>A2 Financial and professional services Financial services – banks, building societies and bureaux de change, professional services (other than health or medical services) – estate agents and employment agencies, other services – betting shops, principally where services are provided to visiting members of the public.</td>
<td>GFA</td>
<td>&lt;1000 sq. m</td>
<td>&gt;1000 &lt;2500 sq.m</td>
<td>&gt;2500 sq. m</td>
</tr>
<tr>
<td>4</td>
<td>A3 Restaurants and cafés Restaurants and cafés – use for the sale of food for consumption on the premises, excludes internet cafés (now A1).</td>
<td>GFA</td>
<td>&lt;300 sq. m</td>
<td>&gt;300 &lt;2500 sq.m</td>
<td>&gt;2500 sq. m</td>
</tr>
<tr>
<td>5</td>
<td>A4 Drinking establishments Use as a public house, wine-bar or other drinking establishment.</td>
<td>GFA</td>
<td>&lt;300 sq. m</td>
<td>&gt;300 &lt;600 sq.m</td>
<td>&gt;600 sq. m</td>
</tr>
<tr>
<td>6</td>
<td>A5 Hot food takeaway Use for the sale of hot food for consumption on or off the premises.</td>
<td>GFA</td>
<td>&lt;250 sq. m</td>
<td>&gt;250 &lt;500 sq.m</td>
<td>&gt;500 sq. m</td>
</tr>
<tr>
<td>7</td>
<td>B1 Business (a) Offices other than in use within Class A2 (financial and professional services) (b) research and development – laboratories, studios (c) light industry</td>
<td>GFA</td>
<td>&lt;1500 sq. m</td>
<td>&gt;1500 &lt;2500sq.m</td>
<td>&gt;2,500 sq. m</td>
</tr>
<tr>
<td>8</td>
<td>B2 General industrial General industry (other than classified as in B1), The former ‘special industrial’ use classes, B3 – B7, are now all encompassed in the B2 use class.</td>
<td>GFA</td>
<td>&lt;2500 sq. m</td>
<td>&gt;2500 &lt;4000 sq. m</td>
<td>&gt;4000 sq. m</td>
</tr>
<tr>
<td>9</td>
<td>B8 Storage &amp; distribution Storage or distribution centres – wholesale warehouses, distribution centres and repositories.</td>
<td>GFA</td>
<td>&lt;3000 sq. m</td>
<td>&lt;3000 sq.m</td>
<td>&gt;5000 sq. m</td>
</tr>
<tr>
<td>10</td>
<td>C1 Hotels Hotels, boarding houses and guest houses, development falls within this class if ‘no significant element of care is provided’.</td>
<td>Bedroom</td>
<td>&lt;75 bedrooms</td>
<td>&gt;75 &lt;100 bedrooms</td>
<td>&gt;100 bedrooms</td>
</tr>
<tr>
<td></td>
<td>C2 Residential institutions – hospitals, nursing homes</td>
<td>Beds</td>
<td>&lt;30 beds</td>
<td>&gt;30 &lt;50 beds</td>
<td>&gt;50 beds</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------</td>
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<tr>
<td>11</td>
<td>Used for the provision of residential accommodation and care to people in need of care.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>C2 Residential institutions – residential education</td>
<td>Student</td>
<td>&lt;50 students</td>
<td>&gt;50 &lt;150 students</td>
<td>&gt;150 students</td>
</tr>
<tr>
<td>13</td>
<td>C2 residential institutions – institutional hostels</td>
<td>Resident</td>
<td>&lt;250 residents</td>
<td>&gt;250 &lt;400 residents</td>
<td>&gt;400 residents</td>
</tr>
<tr>
<td>14</td>
<td>C3 dwelling houses</td>
<td>Dwelling unit</td>
<td>&lt;50 units</td>
<td>&gt;50 &lt;80 units</td>
<td>&gt;80 units</td>
</tr>
<tr>
<td>15</td>
<td>D1 Non-residential institutions</td>
<td>GFA</td>
<td>&lt;500 sq. m</td>
<td>&gt;500 &lt;1000 sq.m</td>
<td>&gt;1000 sq. m</td>
</tr>
<tr>
<td>16</td>
<td>D2 Assembly and leisure</td>
<td>GFA</td>
<td>&lt;500 sq. m</td>
<td>&gt;500 &lt;1500 sq.m</td>
<td>&gt;1500 sq. m</td>
</tr>
<tr>
<td>17</td>
<td>Other</td>
<td>TBD</td>
<td>Discuss with North Somerset Council</td>
<td>Discuss with North Somerset Council</td>
<td>Discuss with North Somerset Council</td>
</tr>
</tbody>
</table>

For example: stadium, retail warehouse clubs, amusement arcades, launderettes, petrol filling stations, taxi businesses, car/vehicle hire businesses and the selling and displaying of motor vehicles, nightclubs, theatres, hostels, builders’ yards, garden centres, POs, travel and ticket agencies, hairdressers, funeral directors, hire shops, dry cleaners.
**Thresholds based on other Criteria**

<table>
<thead>
<tr>
<th>Other Considerations</th>
<th>Transport Statement</th>
<th>Transport Assessment</th>
<th>Transport Assessment &amp; Travel Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Any development that is not in conformity with the adopted development plan.</td>
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<td></td>
<td>•</td>
</tr>
<tr>
<td>2. Any development generating 30 or more two-way vehicle movements in any hour.</td>
<td></td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>3. Any development generating 100 or more two-way vehicle movements per day.</td>
<td></td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>4. Any development proposing 100 or more parking spaces.</td>
<td></td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>5. Any development that is likely to increase accidents or conflicts among motorised users and non-motorised users, particularly vulnerable road users such as children, disabled and elderly people.</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Any development generating significant freight or HGV movements per day, or significant abnormal loads per year.</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Any development proposed in a location where the local transport infrastructure is inadequate. – for example, substandard roads, poor pedestrian/cyclist facilities and inadequate public transport provisions.</td>
<td>•</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Any development proposed in a location within or adjacent to an Air Quality Management Area (AQMA).</td>
<td>•</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Guidance on preparing a Transport Statement

Set out below are the Council’s expectations of a Transport Statement.

A Transport Statement should set out the transport issues relating to the existing site and details of the development proposals.

**Existing Conditions**
The developer should provide a full description of:

- Existing site information – describing the current physical infrastructure and characteristics of the site and its surroundings;
- Baseline transport data – background transport data and current transport infrastructure details.

This information should be accurately established to understand the context of the development proposal. The description should include as a minimum:

- **Existing site information**
  - A site location plan that shows the proposed development site in relation to the surrounding area and transport system;
  - The permitted and existing use of the site;
  - The existing land uses in the vicinity of the site, including development plan allocations, or potential future use in the case of undeveloped sites;
  - Existing site access arrangements including access constraints, where appropriate;
  - Whether the location of the site is within or near a designated Air Quality Management Area (AQMA);
  - Any abnormal load uses of the current site.

- **Baseline transport data**
  - A qualitative description of the travel characteristics of the existing site, including pedestrian and cyclist movements and facilities, where applicable;
  - Existing public transport provision, including provision/frequency of services, location of bus stops/train stations, park-and-ride facilities;
  - A description and functional classification of the highway network in the vicinity of the site;
  - An analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent three-year period, or five-year period if the proposed site has been identified as within a high accident area.

**Proposed Development**
The developer should provide a full description within the TS including, as a minimum:

- Plans and drawings showing the proposed site layout, particularly the proposed pedestrian and vehicular access points into the site;
- The proposed land use;
• The scale of development, such as numbers of residential units and/or gross floor area (GFA), subdivided by land use where appropriate;
• The main features (design layout and access points) of the development;
• The person-trip generation of the proposed development and distribution of trips across mode;
• A qualitative and quantitative description (based on recent site observations) of the travel characteristics of the proposed development, including pedestrian and cyclist facilities/movements, in the vicinity of the site;
• Proposed improvements to site accessibility via sustainable modes of travel, such as provision/enhancement of footpath and cycle path linkages, public transport improvements, and servicing arrangements where appropriate;
• A proposed parking strategy and internal vehicular circulation (including number of spaces, parking accumulation, parking layout in relation to other site elements, ratio of operational to non-operational spaces, method of car park operation, overspill parking considerations, disabled parking, motorcycle parking, cycle parking, taxi drop-off points);
• Residual vehicular trip impact;
• The transport impacts of site construction, including the requirements of abnormal loads in the construction, use and decommissioning the present development;
• The transport impacts of freight or service operations; and
• If the site of the proposed development has a current use or an extant planning permission with trip patterns/volumes, the net level of change that might arise out of the new proposals should be set out.
4. Guidance on preparing a Transport Assessment

Set out below are the Council’s expectations of a Transport Assessment.

Pre-application engagement
Where, using the above tables, the requirement for a TA is anticipated, Developers should enter into pre-application discussions with North Somerset Council Officers. The scope, methodology, data requirements and limits should be agreed before the Assessment commences.

The design of the development should address the following:

- Reducing the need to travel, especially by car – ensure that, at the outset, thought is given to reducing the need to travel; consider the types of uses (or mix of uses) and the scale of development in order to promote multipurpose or linked trips.
- Sustainable accessibility – promote accessibility by all modes of travel, in particular public transport, cycling and walking; assess the likely travel behaviour or travel pattern to and from the proposed site; and develop appropriate measures to influence travel behaviour.
- Dealing with residual trips – provide accurate quantitative and qualitative analyses of the predicted impacts of residual trips from the proposed development and ensure that suitable measures are proposed to manage these impacts.
- Mitigation measures – ensure as much as possible that the proposed mitigation measures avoid unnecessary physical improvements to highways and promote innovative and sustainable transport solutions.

EXISTING CONDITION
In preparing a TA, a full description of existing site information should be provided. These baseline conditions need to be established accurately to understand fully the context of the development proposal. This description should include as a minimum:

- Existing site information
  - Site location plan that shows the proposed development site in relation to the surrounding area and transport system;
  - The permitted and existing use of the site;
  - A detailed description of the existing land uses in the vicinity of the site, including development plan allocations or potential future uses in the case of undeveloped sites;
  - Existing site access layout and access constraints, where appropriate;
  - Whether the location of the site is within or near a designated Air Quality Management Area (AQMA);
  - Any abnormal load uses of the current site.

- Baseline transport data
  - the quantification of the person trips generated from the existing site and their modal distribution, or, where the site is vacant or partially vacant, the
person trips which might realistically be generated by any extant planning permission or permitted uses;

- existing public transport facilities (including provision/frequency of services, location of bus stops/train stations, park-and-ride facilities) in the study area; if available, the current level of patronage or usage on the public transport network in the vicinity of the site;
- parking facilities available in the vicinity of the site;
- existing pedestrian and cycle facilities in the vicinity of the site;
- pedestrian and cyclists movements in the vicinity of the site;
- a description and functional classification of the road network in the vicinity of the site;
- current traffic flows on links and at junctions within the study area;
- identification of the critical links and junctions on the highway network, with calibrated capacity tests to reflect existing conditions;
- for the study area, establish the current personal injury accident records for the most recent three-year period, or five years if this is considered to be more appropriate;
- a summary of planned transport improvements within the study area (including type of improvement, implementation schedule and sponsoring agency or highway authority);
- identify current peak periods on the adjacent road network and, as required, daily traffic flow data to and from the development site or in the vicinity of the site;
- levels for air quality and noise for the highway network at the site entrance and any other locations where statutory limits might be breached by additional development traffic;
- baseline carbon emissions data for the site, broken down by mode.

Public transport assessment

A key issue in seeking the most sustainable solution for a particular development is the need to encourage the use of public transport. An assessment should be made of the available capacity on the existing public transport infrastructure relevant to the development. The capacity of a public transport route or service is the maximum number of people that can be accommodated on the route within the licensing laws of that particular mode.

For major developments, it is important to identify the spare capacity on buses and trains in order to establish the ability of the public transport network to accommodate any increase in demand associated with a proposed development. This is particularly important when considering rail network capacity, which is generally more problematic to expand than the bus network.

Such assessments will inform later stages in the TA process in respect of determining modal split, travel plan objectives and in appropriate cases, public transport infrastructure enhancement as part of an overall mitigation package.

A suggested methodology for assessing the capacity of the public transport network includes the following:
• Identify the analysis period, particularly the peak hours of the development and/or the entire transport system;
• Establish the total person trip generation from the proposed development for all travel modes;
• Estimate the likely modal split for the public transport network (buses, rail and tram);
• Identify the public transport services relevant to, and in the vicinity of, the proposed development;
• Estimate the existing capacity of the bus/train/tram service by multiplying the number of services by the maximum passenger capacity for each mode (bus, train carriages);
• Estimate the current level of patronage or usage on the public transport network, using the most comprehensive data publicly available;
• Estimate the spare capacity on the public transport network;
• Identify measures to address any shortfall in capacity, where applicable.

The methodology suggested above is intended to provide a general framework for assessing the capacity of the public transport network. It is important that further guidance is sought from council Officers and public transport operators.

Walking/cycling assessment
Another key issue in assessing the sustainability of a development’s location will be its accessibility for those walking and cycling. An assessment should be made of the available capacity of the existing cycleway and footpath network in the area of the development. This assessment will help to inform the later stages of the TA process in respect of determining modal split, and travel plan objectives. It will also indicate what enhancements, if any, are required to the local cycleway and footpath network. These assessments should be undertaken using the appropriate analytical tools and methodologies, as agreed with council officers.

Road network assessment
An assessment of the available vehicular capacity on the road network in the vicinity of the site should be undertaken in order to establish the potential impacts from the development, as well as the likely mitigation measures that may be required to sustain the development.

Consideration should be given to the available parking facilities in the vicinity of the site and the impact that development could have upon them. This assessment should be made in the context of the parking strategy set by North Somerset Council.

These assessments should be undertaken using the appropriate analytical tools and methodologies, as agreed with council Officers.

Traffic data and traffic forecast
The assessment should include recent counts (normally surveyed within the last three years) for peak period turning movements at critical junctions. In certain instances, for example, where there is known to be a significant level of heavy goods
vehicles (HGV) traffic, a classified count should be provided. Additional counts that may be required could include:

- manual turning counts (should be conducted at 15-minute intervals) to identify all relevant highway network peak periods;
- 12-hour/24-hour automatic traffic counts (ATC);
- queue length surveys at signal junctions to establish demand and actual traffic flows;
- journey time surveys;
- freight counts;
- abnormal load counts;
- pedestrian and cyclist counts.

The traffic data should reflect the normal traffic flow conditions on the transport network (e.g. non-school holiday periods, typical weather conditions etc.) in the vicinity of the site, and should be valid for the intended purposes. It should also take account of holiday periods in tourist areas, where peaks could occur in periods that might normally be considered non-neutral. The recommended periods for data collection are spring and autumn, which include the neutral months of April, May, June, September and October as described in DMRB Volume 13, Section 1, Part 4.

The criteria for the use of historical traffic data in a TA should be agreed by council officers at the pre-application stage.

Where there is a need to project existing or historical traffic data for future year assessments, the preferred option is the use of appropriate local traffic forecasts (such as TEMPRO), provided they offer a robust assessment.

The use of any area-wide traffic models or background growth rates should be agreed with council Officers at the pre-application stage.

**Safety considerations and accident analysis**

The assessment should identify any significant highway safety issues and provide an analysis of the recent accident history of the study area. The extent of the safety issue considerations and accident analysis will depend on the scale of the proposed development and its location. The need to minimise conflicts between vehicles and other road-user groups should be adequately addressed.

Critical locations on the road network with poor accident records should be identified. This is to determine if the proposed development will exacerbate existing problems or, if proposed, whether highway mitigation works or traffic management measures will help to alleviate the problems. The accident records at a particular location should be compared with local average accident rates.

Site inspections should be conducted to determine if the proposed location and design of access roads (including visibility/sight distance restrictions) would create an increased potential for accidents. North Somerset Council will require road safety audits where appropriate.
PROPOSED DEVELOPMENT
A detailed description of the proposed use or uses of the site should be provided. This should include as a minimum:

- site plan – provide plans and drawings showing site location and site layout and use;
- describe all the proposed land uses;
- scale of development – such as the number of residential units or gross floor area (GFA) of development – subdivided by land use where appropriate;
- site area in hectares;
- hours of operation – specify a weekly profile, including weekends where appropriate, over a 16 or 24 hour period. If the operation is seasonal, then this also needs to be specified;
- proposed access – describe arrangements, locations and method of linkage to existing transport infrastructure for all modes of travel (private cars, public transport, cycling, walking);
- servicing arrangements – describe routes and facilities for service vehicles;
- the traffic impacts of site construction works, including the requirements of abnormal loads in the construction, use and decommissioning of the present development;
- proposed parking strategy (number of spaces, parking accumulation, parking layout in relation to other site elements, ratio of operational to non-operational spaces, method of car park operation, overspill parking considerations, establishment of/proximity to controlled parking zones, disabled parking, motorcycle parking, cycle parking);
- development phasing (where applicable) – provide years of first and full occupation, as well as intermediate years if appropriate.

When preparing a Transport Assessment, the applicant should have consideration of the following:

Accessibility
Developers or promoters of sites should undertake accessibility modelling to establish the level of accessibility of the site, and the results should be included within the TA.

The accessibility issues that should be assessed include:

- access to the transport system – locating access points and links for pedestrians and cyclists to the wider transport network;
- access to the local area – providing transport nodes or interchanges for the proposed development that will benefit other developments and the local community as a whole;
- community severance – ensuring that the development does not create barriers to access within the local community.

In order to determine the level of accessibility (in respect of public transport, cycling and walking) for a specific site, or relative levels of accessibility for multiple sites, the preferred methodology would be to undertake accessibility modelling. This can be
achieved by using a standard assessment tool such as ACCESSION, or any other appropriate tool.

**Safety**
The safety issues that should be assessed, including and in addition to the highway accident statistics, include:

- the potential for development-related or other transport accidents in the vicinity of the site; and
- perception of personal insecurity in and around the development site.

**Economy**
The economy issues that should be assessed include:

- Government regeneration objectives (e.g. use of brownfield sites);
- non-motorised road users’ journey time;
- motorised road users’ journey time reliability;
- user costs;
- the construction, land, preparation, supervision and subsequent maintenance costs of development proposals (including mitigation works).

In addition to public transport and pedestrian/cycle accessibility, accessibility modelling tools may be used to calculate vehicle journey times as an extension to the work undertaken by developers to address accessibility issues in their TA.

**Environment**
The environment issues that should be assessed include:

- nuisance to people caused by transport-related noise and vibration generated by the development;
- the emission of greenhouse gases as a result of the transport implications of the development and the impact of changes in local air quality on people;
- the transport-related impacts of the development on areas of designated landscape importance;
- whether the site is in an air quality management zone or is likely to cause a breach of current legislation;
- the transport-related impact of the development on areas of nature conservation or biodiversity and Earth heritage interests (such as geology) where they interact with roads;
- heritage of historic resources where they interact with development-generated transport and/or proposed mitigation measures;
- the transport-related impact of the development on the townscape;
- appraisal of the transport-related impacts of the development on the water environment;
- the impact of the transport implications of the development on physical fitness;
- journey ambience.

The potential for environmental impacts that would breach a statutory limit should be addressed. North Somerset Council and HE have a statutory duty to prevent a breach of statutory limits (e.g. air quality) due to incremental change of volumes of vehicular traffic on their networks.
If a development is likely to generate significant vehicle trips on the council’s network, which in turn would be likely to cause a breach of statutory limits, the council could be held legally responsible if a breach were to occur. In these circumstances, the developer may be required to propose mitigation measures that will avoid such a breach. If a breach remains likely, this could be a material consideration in the assessment of the planning application and may result in the refusal of planning permission.

Therefore, where a development proposal is likely to generate significant traffic-related environmental impacts, the TA should address such matters. Alternatively, if the development requires a formal environmental impact assessment (EIA), which deals with these issues separately, this should be cross-referenced in the TA.

In any event, it is likely that the developer would be required to provide mitigation measures to address any adverse environmental impacts arising from the proposed development and not simply those where breaches of statutory limits may be likely to occur.

Integration
The integration issues that should be assessed include:

- the potential for the development to influence interaction among all transport modes (motorised and non-motorised), either in isolation or in combination with other developments;
- interaction between the development proposal and wider issues of Government policy such as environmental sustainability and health;
- integration of the development proposals with local, regional and national land use policies;
- bringing communities together/social inclusion;
- separating communities as a result of cutting off existing movement paths – severance/social exclusion.

Assessment years
The assessment year(s) in respect of capacity analysis for the transport network should be consistent with the size, scale and completion schedule of the proposed development, and that of other major developments in the vicinity of the site, as well as planned improvements to the transport system.

The appropriate horizon assessment year should be agreed with the council Officers during pre-application consultations.

In addition to the opening year, one or two further assessment years should be considered. For the local transport network, a development should be assessed with regard to the Core Strategy, and for a period of no less than five years after the date of registration of a planning application. Should the development take place over a longer period, it would be appropriate to extend the length of the assessment period.

The assessment years should consider person trips from all committed developments that would impact significantly on the transport network, particularly where they substantially overlap, such as at the same junctions and/or on roads as...
the proposed development. The committed developments will typically include
development sites that have extant planning permission as well as development plan
allocations in an adopted or approved plan. Developments that have been completed
but not fully occupied should be included in these assessments. The inclusion or
exclusion of committed developments in the assessments should be agreed with
council Officers at the pre-application stage.

Analysis Period
The analysis period should reflect the person trip generation characteristics of the
proposed development, as well as conditions on the adjacent transport system. It
should be related to known and anticipated peak patterns of demand both for the
transport system and development-generated trips.

A TA should normally consider the following analysis periods:
• weekday morning and evening peak period trips for the adjacent transport
  system, with particular focus on the peak period traffic flows on the road
  network;
• weekday morning and evening peak period trips for the proposed
development;
• an off-peak period selected to assess level of greatest change resulting from
  the development;
• weekend peak period if the development is anticipated to generate significant
  levels of new trips at weekends or the adjacent transport system suffers from
greater levels of congestion than during weekdays.

The analysis period should also include an assessment of the combination of
development-related and non-development-related trips.

The analysis period should be agreed with the council Officer at the pre-application
stage.

Development trip generation
The first step in quantifying the impact of a proposed development on the transport
system is to provide an estimate of the person trips (for all modes) that are likely to
be generated by the development.

In preparing trip estimates, the travel characteristics of the proposed development
should be established, and this should be based on a multi-modal assessment that
identifies the number of person trips by mode and time period.

There is a range of trip rate database tools available that contain national, or in some
cases more local, trip rates measured for typical land use sites. However, obtaining
an accurate comparison is not always straightforward, especially for atypical
developments. In these instances it is recommended that, unless there is a clear
valid comparable situation, the assessment trips should be constructed from first
principles based on a detailed analysis of the daily operation of the proposed
development.
In all cases, analyses of development-related trips by using an appropriate database or an alternative methodology should be agreed with council Officers, as this will form the major element of the TA.

Typically, trip generation assessments are based on the identification of suitable (person or vehicle) trip rates, having regard to industry standard databases such as TRICS, GENERATE and TRAVL. These trip rates should be derived on the basis of site-specific details of the proposed development – for example, proposed gross floor area, number of dwelling units, number of hotel rooms, availability and accessibility of non-car modes of travel, provision and nature of travel plans.

If sites with comparable accessibility as well as scale and location cannot be found when using a standard database system, 85th percentile trip generation rates should be considered as a starting point for assessment of the baseline trip generation. The reasons for this are:

(i) since the level of public transport and non-car mode travel for sites within such trip databases is often unknown, a true like-for-like comparison is unlikely to be achieved; and
(ii) it is considered that the use of average trip rates with deductions for sustainability measures could result in overly optimistic trip rates for the proposed development.

In cases where the degree of comparability of source data sites to the development proposals is difficult to determine, it may be appropriate (in consultation with council Officers) to undertake a sensitivity analysis using both 85th percentile and average (50th percentile) trip rates to inform the process of the differences between these two assumptions.

Calculating vehicular trip generation

As certain types of development, particularly retail, can have a significant effect on vehicular traffic, consideration may be given to the different types of vehicular trips that are likely to be generated, such as:

- **New trips** – these are trips that do not appear anywhere on the road network prior to the opening of the development. For many types of development, this element of generated trips can be relatively small; however, it is customary to consider all trips from residential developments as being new to the network.
- **Pass-by trips** – these are trips that are already present on the road network directly adjacent to the point(s) of access to the site, which will turn into the site. This type of trip is likely to be relevant only where the site is located on a major arterial route within an urban area. If it can be clearly demonstrated that there will be a proportion of true ‘pass-by’ trips that were already on the network, then these can be deducted from the calculated generation for the development.
- **Linked trips** – these are trips that will have multiple destinations either within the proposed development site. Examples include trips to food and non-food retail, between both the development site and existing adjacent sites or between the development site and an established town centre. Where there is a high probability that there will be a proportion of linked trips between two uses on a development, it is customary only to ‘count’ those trips once for
the development as a whole, and not effectively double-count them by attributing two visits and departures affecting the sections of highway network being assessed.

- **Diverted trips** – these are trips that are already present on the local road network but not the road(s) from which site access is taken and will divert from their existing route to access the site. These are similar to pass-by trips, but they have to deviate to make use of the development under consideration. It is important to identify the potential for such diversion to occur so as to ensure that the correct flows are assessed at specific junctions on the highway network. Diverted trips will tend to return to their original route after visiting the development under consideration.

- **Transferred trips** – these are trips that are already present on the local road network, accessing similar existing sites in close proximity to the proposed development and will have the potential to transfer their destination to the proposed development. Slightly different from diverted trips, these wholly transfer from using an existing development to a new one, e.g. shoppers switching to a new supermarket that is more conveniently located for them.

The level of reduction in vehicular trip generation based on the mix of trips, as set out above, will be to a degree subjective and dependent on the specific characteristics and location of the proposed development. The methodology for deriving the development’s vehicular trips and appropriate level of trip reduction, if any, should be agreed during the pre-application consultations.

For large developments, the impact of construction traffic will require separate consideration. The assessment of construction traffic should identify the time period(s) during which construction activities will take place, the numbers of trips likely to be generated, the vehicle type and, for heavy construction traffic, an appropriate diversion route or a traffic management plan to minimise local impacts.

**Adjustment of development vehicular trips**
In some circumstances, the extent of access by non-car modes of transport may suggest an adjustment of development-generated vehicle trips. This is likely to be the case where new sustainable transport infrastructure, such as cycleway or bus services, is proposed by the developer. It may also be appropriate when a proposed development is located where there is a particularly high-quality and accessible existing public transport system.

The work undertaken to analyse public transport network capacity will be important at this stage, to ensure that assumptions are not erroneously made regarding the ability of existing services to cope with development trips. At this stage the TA should identify whether the intended level of public transport trips from the development can be met by existing services, or whether the development mitigation package should enhance the level of service.

Where a development proposal includes significant improvements to non-car infrastructure, it is more likely that the council will accept reductions in car-related trip estimates, discuss with Officers.
The element of development trips that is likely to be the least sustainable is single occupancy private car. Hence it would be beneficial to place significant emphasis on reduction of this category of trips throughout development proposals and the TA preparation.

It is important that the appropriate level of reduction, if any, should be agreed at the pre-application consultation stage.

**Trip distribution and assignment**

Prior to the distribution and assignment of development-related person trips, it is important to establish a development catchment area and identify the main population zones within it. This catchment area should be discussed and agreed with the council Officers from the outset. It is important to note that proximity to the highway network and, in particular, the SRN or other higher standard routes may have a significant impact on the extent of the catchment area to be considered.

It is recommended that the distribution of development-related person trips be based on an appropriate methodology. These include, but are not limited to, the use of Geographical Information Systems (GIS) based census data analysis, a gravity model, existing traffic flow patterns, area-wide traffic models (if available) and, by analogy, travel patterns for similar developments in the vicinity of the site.

The agreed trip distribution should then be used to assign development trips to the transport network, taking due account of the impact of the various trip types, as noted earlier.

**Environmental Impact Issues**

The environmental impacts of any significant development need to be addressed. This might be covered by a separate Environmental Statement (ES), which involves an assessment of a development’s potential environmental implications, including those that are transport-related. This will help ensure that the significance of the predicted impacts and the scope for mitigating them are properly addressed at the outset.

As part of the scoping exercise for the ES, it may be decided that an assessment of air quality and noise impact is required. Such an assessment should identify, in particular, traffic data such as peak hour traffic flows, 18-hour traffic flows, Annual Average Daily Traffic (AADT) flows, percentage of HGVs, traffic speeds for the surrounding highway network and daily traffic generation forecasts for the development proposal. Where appropriate, daily traffic generations of the extant or historic site use may also be required.

North Somerset Council will require assessment of the environmental impact from any increase of traffic on the highway network where statutory limits might be breached. The same is true if any highway mitigation measures were to be proposed as a result of the development. Further details on environmental assessments can be found in Circular 02/99.

**Promoting smarter choices via Travel Plans**

Supplementary Planning Document – Transport Statement and Transport Assessment
Version – Consultation Draft
Smarter Choices are techniques for influencing people’s travel behaviour towards more sustainable options, such as encouraging school, workplace and individualised travel planning. They also include measures such as individualised marketing, personalised journey plans, public transport information and marketing initiatives, car sharing schemes and car clubs, plus measures that reduce the need to travel, such as video conferencing and teleworking.

A travel plan (TP) is a package of site-specific initiatives aimed at improving the availability and choice of travel modes to and from a development. It may also promote practices or policies that reduce the need for travel. TPs are becoming an increasingly important tool in the delivery of sustainable outcomes. They provide, together with transport assessments, the mechanism for assessing and managing access to sites. In addition, they can help improve accessibility, both to and from the site, and to local amenities and services.

Paragraph 36 of NPPF states that all developments which generate significant amounts of movement should be required to provide a Travel Plan. The requirement for a TP should be established at the pre-application stage. The TP should be tailored to address the site-specific issues relating to the proposed development.

During the pre-application consultations the use of an area travel plan and co-ordination with travel plans from adjacent developments should also be considered. The use of area and site-specific travel plans is an important mechanism in the underlying aim to manage vehicle trips at source. Whenever a site-specific TP is proposed, the developer should ascertain the existence of an area-wide TP. Where one exists, the site-specific TP should integrate with the area-wide TP.

Detailed guidance on other Smarter Choices techniques and the promotion of sustainable transport modes more generally, is provided on the DfT’s web site. The council’s specific guidance on Travel Plans; Travel Plans; Supplementary Planning Document

Transport impacts and mitigation measures

Government transport policy is, wherever possible, to seek alternative solutions to building new roads, by reducing the impact of road users on each other and the environment, improving road performance through improved network management and facilitating smarter journey choices. The presumption should be to give preference where possible to solutions other than the construction of new roads.

The information provided at the pre-application stage and in the TA will be reviewed by the council with the aim of determining the type and scope of mitigation measures to be provided.

The TA, along with other supporting documents, will form the basis for the council’s response to a proposed development and, in particular, the type or level of mitigation that will be required. Typically, mitigation could be required where the proposed development is likely to impact adversely upon the transport system and/or result in breaches of statutory environmental limits.
Where mitigation is proposed, following agreement on the scope of mitigation to be provided, the council will require that appropriate conditions be attached to any planning permission granted. The conditions or obligations will specify the improvements that will be required to accommodate the proposed development’s trips by all modes. They will also ensure the safety of all road users, including non-motorised users or vulnerable users. Conditions or obligations may require that necessary mitigation measures be completed before first occupation of units on the site, or before work on the development site itself commences if construction traffic is a major issue.

In all cases, the transport mitigation plan or package of measures will focus on maximising sustainable accessibility to the development. At the outset, the mitigation plan should consider measures such as: improvements to development site layout to facilitate walking and cycling as well as accessibility to the local public transport infrastructure; improvements to walking and cycling provisions in the vicinity of the development site; and improvements to the local public transport network.

If the TA confirms that a development will have material impact on the highway network, the level of impact at all critical locations on the network should be established. A particular example of material impact would be a worsening of congestion. In congested areas, the percentage traffic impact that is considered significant or detrimental to the network may be relatively low (possibly below the average daily variation in flow), and should have been determined in discussions with council Officers.

If the mitigation measures require physical improvements to the highway network, the developer should ensure that, in any design of mitigation works, appropriate design guides and parameters are used. Road Safety Audits may be required for any development-related highway works and, when produced, should be conducted in compliance with the relevant standards.
### 5. Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AADT</td>
<td>Annual average daily traffic</td>
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<tr>
<td>AQMA</td>
<td>Air quality management area</td>
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<td>ATC</td>
<td>Automatic traffic count</td>
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<tr>
<td>CLG</td>
<td>Communities and Local Government</td>
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<tr>
<td>DETR</td>
<td>Department of the Environment, Transport and the Regions</td>
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<tr>
<td>DfT</td>
<td>Department for Transport</td>
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<td>DLTR</td>
<td>Department for Local Government and The Regions</td>
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<tr>
<td>DMRB</td>
<td>Design Manual for Roads and Bridges</td>
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<tr>
<td>EA</td>
<td>Environment Agency</td>
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<td>EIA</td>
<td>Environmental impact assessment</td>
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<td>ES</td>
<td>Environmental Statement</td>
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<tr>
<td>GFA</td>
<td>Gross floor area</td>
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<tr>
<td>GIS</td>
<td>Geographical Information System</td>
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<td>GTA</td>
<td>Guidance on Transport Assessment</td>
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<td>HE</td>
<td>Highways England</td>
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<tr>
<td>HGV</td>
<td>Heavy goods vehicle</td>
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<td>HOV</td>
<td>High occupancy vehicle</td>
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<td>IHT</td>
<td>Institution of Highways and Transportation</td>
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<td>ITB</td>
<td>Influencing travel behaviour</td>
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<td>ITS</td>
<td>Intelligent transport systems</td>
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<td>LA</td>
<td>Local authority</td>
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<tr>
<td>LDD</td>
<td>Local development document</td>
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<tr>
<td>LDF</td>
<td>Local development framework</td>
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<td>LHA</td>
<td>Local highway authority</td>
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<td>Local planning authority</td>
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<td>LTA</td>
<td>Local transport authority</td>
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<td>LTP</td>
<td>Local transport plan</td>
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<td>NPPF</td>
<td>National Planning Policy Framework</td>
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<td>NRTF</td>
<td>National Road Traffic Forecast</td>
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<td>NSC</td>
<td>North Somerset Council (Highway Authority and Planning Authority)</td>
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<td>ODPM</td>
<td>Office of the Deputy Prime Minister</td>
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<tr>
<td>PPG</td>
<td>Planning Policy Guidance Note</td>
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<td>PPS</td>
<td>Planning Policy Statement</td>
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<tr>
<td>RPB</td>
<td>Regional planning body</td>
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<tr>
<td>RTS</td>
<td>Regional transport strategy</td>
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<tr>
<td>SRN</td>
<td>Strategic road network</td>
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<tr>
<td>TA</td>
<td>Transport assessment</td>
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<td>TAG</td>
<td>Transport analysis guidance</td>
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<td>TP</td>
<td>Travel plan</td>
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<td>Transport Statement</td>
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This publication is available in large print, Braille or audio formats on request.

Help is also available for people who require council information in languages other than English.

Please contact 01934 426 809