

Appendix C: Assessing the transport impacts of development proposals

Section TAG1: Introduction

- 1.1 It is necessary to carry out a proper assessment of the impact a development will have on highways and transportation to establish if it can be satisfactorily integrated into the existing infrastructure network. PPG13 also makes clear that the assessment of new development proposals should include their accessibility by a range of transport methods and developers are required to demonstrate how they will reduce travel to the site by car. So a thorough, properly-prepared transport assessment (TA) is often essential to support a development proposal.
- 1.2 This guidance is based on the Department for Communities and Local Government and the Department for Transport document 'Guidance on Transport Assessments' (GTA). You should read it with Part 2 of this document. Among other things, Part 2 gives guidance on the level of assessment - transport statement or transport assessment – that will normally be required for a range of different development types.
- 1.3 The general purpose of these guidelines is to set out clearly to you and your consultants what issues you may need to cover in either a transport statement or transport assessment. They are intended to help you prepare assessments that will allow us and the planning authority to properly understand and consider your development proposals. The aim should always be to reach agreement on transport issues before you submit any planning application; this reflects the emphasis placed in the GTA on the value of early pre-application discussions including both the highway and planning authorities. This should then avoid abortive work (work that doesn't produce the intended result) and unnecessary delays in determining any planning application.
- 1.4 Despite this guidance, it is difficult to impose rigid rules on the scope and content of a transport assessment, as this will depend on the circumstances which exist at each development site. You should always hold early discussions with us to agree site-specific requirements.
- 1.5 1.5 When you prepare a transport assessment (whatever the level), you consider the following:

Encouraging environmental sustainability

- **Reducing the need to travel, especially by car.** Development should be located close to the services that a community needs, to seek to reduce the number and length of journeys made by car.
- **Tackling the environmental impact of travel.** Improve transport choices and make it safer and easier for people to access jobs, shopping, leisure facilities and services by public transport, walking, and cycling.
- **The accessibility of the location.** Consider how accessible a site is, or could be, without using a car. This is particularly important for large developments that create a big demand for travel.
- **Other measures which may help to influence travel behaviour (ITB).** Reduce car usage (particularly journeys with just one person), by measures such as travel plans, free bus passes and so on.

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Managing the existing network

- Making best possible use of existing transport infrastructure. **Improve the local public transport network and use advanced signal control systems, public transport priority measures (bus lanes), or other forms of Intelligent Transport Systems (ITS) to improve how the highway network operates.**
- Managing access to the highway network. **Take steps to make the development 'fit' within the available highway capacity. This can be done by managing travel habits through travel plans, supported, as necessary, by measures to manage access from developments onto the highway network.**

Mitigating any remaining impacts

- **Through demand management.** Use traffic control measures across a wide network to regulate flows.
- **Through improvements to the local public transport network, and walking and cycling facilities.** Provide new bus routes, extend existing bus routes and increasing bus frequencies, and design sites to make walking and cycling as easy as is possible.
- **Through physical improvements to existing roads.** It may be possible to improve the capacity of some existing roads by physical changes such as improving the geometry of junctions and so on.
- **Through providing new or expanded roads.** This is particularly where this would provide relief to existing roads to provide increased capacity for buses, walking and cycling

You should consider these matters at an early stage in preparing a development proposal. The work you do on developing the transport assessment can then be used as a basis for discussions about the location of the site and the scale and mix of uses proposed.

- 1.6 We are currently preparing our own travel plan guidelines, but this appendix includes some general interim guidance.

Section TAG2: General requirements

- 1.7 The purpose of this section is to explain the general requirements for the different types of transport assessment and for scoping reports. As part of the pre-application discussions, you should agree with us the type of assessment required before you start to prepare it. Please refer to Section TAG5 for more detailed guidance on assessment criteria and Section TAG6 for general guidance on travel plans.

Transport statements

- 1.8 A Transport statement (TS) should set out the transport issues relating to a proposed development site (existing conditions) and details of the development proposals (proposed development). Table PDP1 ([link](#)) gives a general indication of the types and scales of development where a TS will normally be required.

Existing conditions

- 1.9 A TS should be based on a sound analysis of existing conditions. You should provide a full description of:
- existing site information - describing the current physical infrastructure and characteristics of the site and its surroundings; and

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- baseline transport data - background transport data and current transport infrastructure details.

This information should be accurately established to show how the development proposal fits in to existing conditions. The description should include at least the following:

Existing site information

- a location plan that shows the proposed development site and its surrounding area and transport system;
- the existing permitted use of the site;
- the existing land uses near the site, including any development plan proposals, or possible future uses in the case of undeveloped sites;
- existing site access arrangements including access restrictions, where appropriate;
- whether the location of the site is within or near a designated Air Quality Management Area (AQMA); and
- any use of abnormal loads on 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 these apply;
- a review of existing public transport, including which services are provided and their frequency, location of bus stops and train stations and park-and-ride facilities;
- a description and functional classification (that is what is a particular roads main function, such as carrying long distance traffic, local traffic, main bus route and so on) of the highway network near the site; and
- an analysis of the injury accident records on the public highway near the site access for the most recent three-year period, or five-year period if the proposed site is within a high accident area.

Proposed development

1.10 A TS should clearly demonstrate how you are going to provide safe and satisfactory access to the development for pedestrians, cyclists (and if appropriate) public transport. As well as the site access junction, it should also consider any barriers to walking, cycling or using public transport in the immediate vicinity of the site access. Barriers can include:

- a lack of footway;
- the need for a length of cycleway;
- a poor bus service;
- no bus stop; or
- poor facilities at existing bus stops.

The TS should contain a full description of the proposed development including the following.

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- Plans and drawings, which clearly show the development's size and layout, particularly the proposed pedestrian routes, cycle routes and vehicle routes, and, as necessary, bus access points.
- An estimate of the total number of trips your proposal will generate, including how people will make these trips (such as walk, cycle, use a bus or car). You should support this with details of any proposed improvements required to improve access to the site (for example a new footway or cycle path, bus stop improvements or works to make sure access to the site is safe and satisfactory).
- Proposed parking provision and any proposals for how on-site car parking will be managed.
- Construction traffic details, such as likely numbers of lorries and their routes to and from the site.

1.11 1.11 The above is not a complete list of requirements. In certain circumstances it may be necessary to expand the scale and scope of a TS, for example:

- in areas of existing traffic congestion;
- in areas of existing on-street parking problems;
- where there are road safety problems;
- in areas poorly served by public transport;
- where the development involves HGVs which could affect 'sensitive' areas, such as residential areas or areas with weight restrictions;
- Air Quality Management Areas (link to appendix H); and
- other 'sensitive' areas, including where development traffic may affect a school or an area where there are significant numbers of vulnerable people.

You won't necessarily have to consider all the above matters for a proposed development that requires a TS. So, you should always discuss and agree with us the requirements for your site before you begin to prepare a TS.

1.12 We will not normally require a draft travel plan as part of a TS. As indicated in Part 2, Table PDP1, we will normally only require a concept proposal 'as standard' to support a TS for a residential development, and then normally only for those developments with more than 25 dwellings. Where we do require a concept proposal, it should fit together, clearly, consistently and logically with the TS, with any assumptions in one reflected in the other. For example, it will not be acceptable for the TS to state that occupiers will make a large number of cycle trips without the concept proposal demonstrating how you will provide good, safe, cycle access and facilities in practice.

1.13 You should always discuss and agree the site requirements with us before you begin to prepare a TS.

Transport assessments

1.14 A transport assessment (TA) will normally be required for larger developments likely to have impacts over a wide area. Table PDP1 in Part 2 of this document gives a general indication of some of the types and scales of development.

1.15 A TA is more comprehensive than a transport statement (TS). Figure TAG1, which is based on extracts from the GTA sets out the general steps which you could typically need to follow when preparing an assessment and the basic components in the process of producing one.

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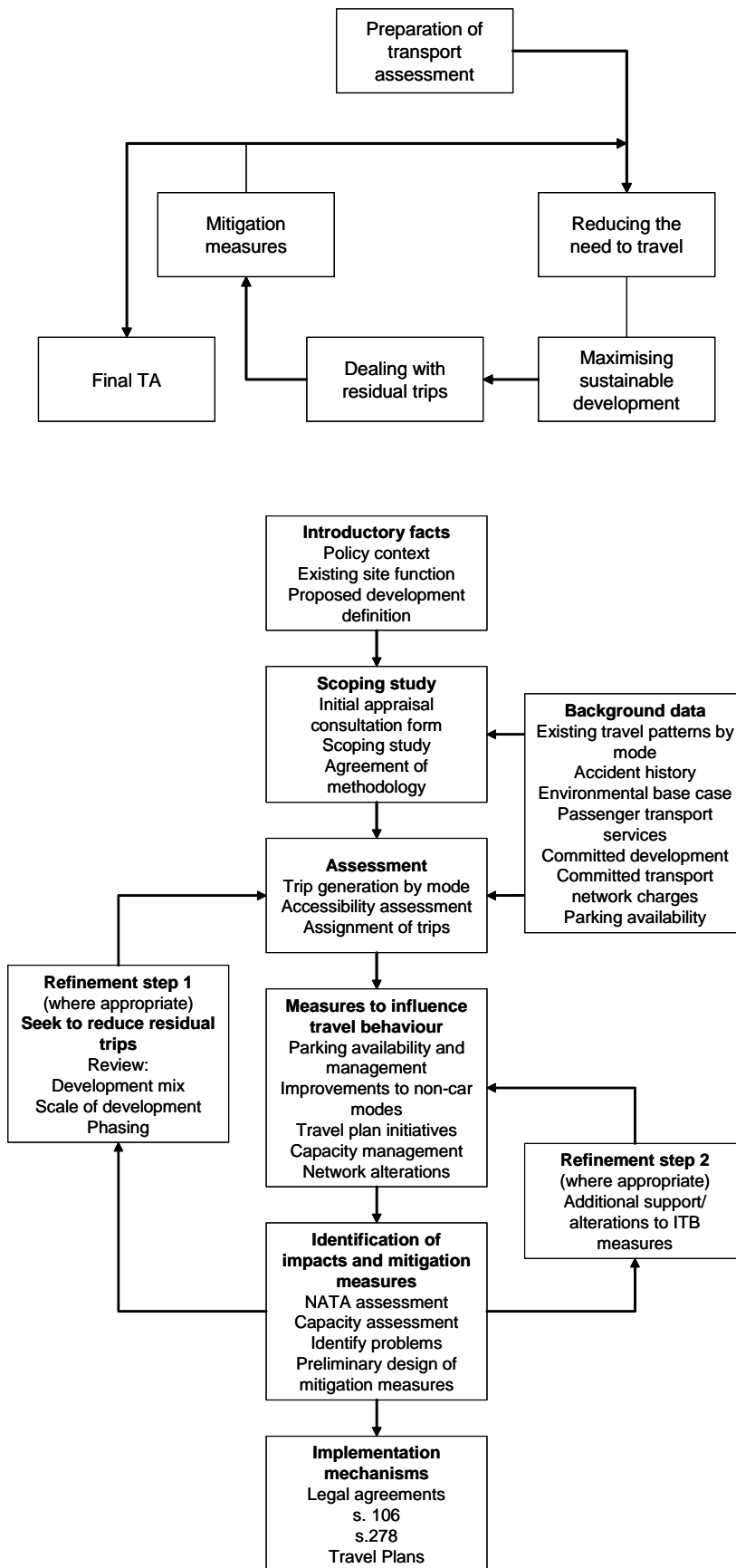


Figure TAG1. Typical Assessment Process. This Figure is based on GTA Figure Fig 4.1 and Fig 4.2. The Guidance on Transport Assessments is copyright of the Department for Transport and Department for Communities and Local Government.

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You should discuss the site requirements with us as soon as possible. A TA should normally deal with the following issues:

- Reducing the need to travel, especially by car. Make sure from the beginning that you think about:
 - reducing the need to travel;
 - the types of uses (or mix of uses); and
 - the scale of development;

to promote multipurpose or linked trips.

- Sustainable accessibility. You should:
 - 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. You should:
 - provide accurate quantitative and qualitative analyses of the predicted impacts of residual trips from the proposed development; and
 - make sure you propose suitable measures to manage these impacts.
- Mitigation measures. Make sure as far as possible that the proposed measures to reduce the impact of the development promote innovative and sustainable transport solutions.

1.16 A draft travel plan should normally form part of a TA. As indicated in Part 2, Table PDP1, residential developments requiring a TA will normally also require a concept proposal. For retail, general employment, office, warehousing and other types of development requiring a TA, you should discuss and agree the need for a concept proposal with us.

1.17 The TA, draft travel plan and any concept proposal should fit together clearly, consistently and logically, with any assumptions in one reflected in the others. For example, it will not be acceptable for the TA to state that occupiers will make a large number of cycle trips without the concept proposal demonstrating how you will provide good, safe, cycle access and facilities in practice. And, the draft travel plan should set out supporting measures and incentives to encourage cycling.

1.18 You should normally first prepare and agree a scoping report with us to determine the TA requirements for your site.

The scoping report

1.19 PPS13 states that you should hold early discussions with us to clarify whether we are likely to accept your proposals in principle in transport terms and to 'scope' (identify) the requirements for any transport assessment. The Government's 'Guidance on Transport Assessments' (GTA) also highlights that wherever pre-application consultation (discussion before an application is submitted) identifies a need for a TA, it is good practice to agree, as part of the pre-application consultation, to prepare a scoping report before you begin the TA.

1.20 You will normally need to prepare a scoping report (SR) before you prepare a TA. The purpose of the SR is to establish key factors that will influence later stages of work. These include an assessment of highway capacity, safety implications and the nature of improvements and measures which might be required to off-set the proposed development's impacts on the surrounding highways and transportation infrastructure. Establishing these key factors should avoid the possibility of you carrying out abortive work, based on incorrect assumptions, at the later stages. You should discuss and

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agree the SR with us before you prepare the TA and it should normally cover the following.

- There should be an estimate of traffic that will be generated by the proposed development. You should establish this by using TRICS or other data such as a traffic survey of where the new development will expand an existing similar use. For assessing traffic distribution on the network it is important to consult with the Local Highway Authority (LHA) as to whether there are any local models that would need to be used. Whichever data source you use, you should provide details of the sites you used to form the basis of the predicted traffic generation. Where you use TRICS or other databases, the sites you choose should be appropriate and relevant to the proposed development, and the SR should clearly demonstrate this. Also, the 85th %ile trip rate should be used in the TA.
- You should include details of:
 - the proposed traffic distribution and the method used to calculate it;
 - traffic assignment to the network; and
 - an appraisal of other committed development that you may need to include in the assessment.
- You need to provide a percentage impact assessment on the surrounding highway network, including links and junctions, by turning movement. You should provide an estimated percentage impact of traffic flows for the year you expect the development to open. You should present this:
 - for the development on its own; and
 - as part of a cumulative percentage impact where other committed development is involved.

Depending on the nature of the development, you may need to provide a breakdown of vehicle type.

- The SR should include an analysis of available traffic and accident data over a five-year period within the proposed 'area of assessment'. This will be used to identify traffic patterns (including peak-flow periods) and safety issues to be taken into account in the TA.
- Any major highway schemes or Local Transport Plan initiatives or any other proposed improvements that may be relevant should be identified.
- The SR should examine how safe and convenient access to the site is for public transport connections, bus route destinations, cycle routes and pedestrian routes. This should include an initial assessment of how adequate existing facilities are to help in determining what additional assessment maybe required as part of the TA.
- The SR should also propose the capacity assessments that will be required, and the assessment years (the years for which the assessments need to be carried out).

Section TAG3: Existing conditions

1.21 Based on the Government's guidelines (GTA) a TA should normally include at least the following:

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Existing site information:

- a location plan showing the proposed development and its surrounding area and transport system;
- any existing permitted use of the site;
- a detailed description of the existing land uses around the site, including any development plan proposals or possible future uses in the case of undeveloped sites;
- existing site access arrangements and access restrictions, where appropriate;
- whether the location of the site is within or near a designated Air Quality Management Area (AQMA); and
- any use of abnormal loads on the current site.

Base transport data:

- summary of person trips from the existing site and their modal distribution (that is trips split by how a person travels to or from the site at the moment – do they go by bus, walk, use a car and so on), or, if the site is empty or part empty, the person trips that might be generated by any current planning permission or permitted uses;
- a review of existing public transport, including which services are provided and their frequency, the location of bus stops and train stations and park-and-ride facilities in the study area;
- the current level of use on the public transport network around the site, if available;
- parking facilities available in the area around the site;
- existing pedestrian and cycle facilities in the area around the site;
- pedestrian and cyclists movements in the area around the site;
- a description of the road network in the area around the site;
- current traffic flows on links and at junctions within the study area;
- capacity tests that reflect existing conditions at critical links and junctions on the highway network;
- the current accident records for the most recent five-year period;
- a summary of planned transport improvements within the study area (including the type of improvement, when it is likely to be carried out and the sponsoring agency or highway authority); and
- current peak periods on the road network and daily traffic flows to and from the development site or in the area around it.

1.22 This may not be a complete list for your particular development. You should discuss site specific requirements with us at the earliest opportunity and agree the necessary details when you submit your scoping report.

Section TAG4: Proposed development

1.23 Based on the Government's guidelines (GTA) a TA should normally include at least:

- site plans - plans and drawings showing the site location and site layout and use;
- a description of all the proposed land uses;
- details of the scale of the development - such as the number of residential units or the gross floor area (GFA) of the development - subdivided by land use where appropriate;
- the site area in hectares;
- the hours that the development will operate (that is people will be working) - specify a weekly profile, including weekends where appropriate, over a 16 or 24 hour period, and state if the operation is seasonal;
- the proposed access - describe arrangements, locations and means of linking to the existing transport infrastructure for all modes of travel (private cars, public transport, cycling, walking);
- the servicing arrangements - describe routes and facilities for service vehicles;
- the highway impact of the site construction works, including details of any abnormal loads and how any present development will be demolished;
- a proposed parking strategy including
 - the number of spaces;
 - parking accumulation (how the numbers of cars that are parked is likely to rise and fall over a day);
 - parking layout in relation to the layout of buildings and other proposed features on the site;
 - ratio of operational to non-operational spaces;
 - how the car park's operation will be monitored;
 - any overspill parking considerations;
 - proximity to existing on-street controlled parking zones or the need to create new controlled parking zones;
 - disabled parking;
 - motorcycle parking and
 - cycle parking.
- how the development will be phased (where this applies) from the first years of occupation to full occupation, including intermediate years if appropriate.

1.24 This may not be a complete list for your particular development. You should discuss site specific requirements with us at the earliest opportunity and agree the necessary details when you submit the scoping report.

Section TAG5: The criteria for assessing the development's impact

1.25 The purpose of this section is to detail assessment criteria.

1.26 The criteria below set down our normal requirements for the various aspects of assessing impacts. You should discuss and agree details about specific sites with us before you prepare any scoping report or any type of transport assessment.

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The capacity assessment year

- 1.27 The site junction:** This includes new junctions on to the highway network and existing junctions either in their current form or in an improved form. In all cases, junctions should normally be assessed at least:
- for the year the development is expected to open (that is fully completed and occupied);
 - for a period of not less than five years after you have submitted your last planning application - this could be a 'reserved matters' application. The actual period for a particular development will depend on a number of factors including:
 - local development plan documents;
 - the timescale for the full completion of the development; and
 - if there are limits on the volume of traffic the road network can manage within the vicinity of the site); and
 - any time in between the above where the traffic situation may be worse.
- 1.28 The surrounding network:** Existing junctions and links within any assessment area should normally be assessed in line with paragraph 1.27.
- 1.29 Proposed highway improvements:** Where any improvements are required they should normally be assessed in line with paragraph 1.27.

Existing traffic data

- 1.30** We will require counts for peak-hour turning movements at existing junctions. In certain circumstances, for example, where the number of HGVs is an important consideration, we may need these counts classified. We may need other counts, for example:
- off-peak;
 - 12-hour;
 - for pedestrians and cyclists; and
 - to coincide with the peak traffic generated by the proposed development such as shopping and leisure developments;
- in certain circumstances depending on the scale, nature and location of the development.
- 1.31** The scoping report and transport assessment should justify that the base traffic data reasonably reflects the normal, general current circumstances on the road network serving the site, and is valid for assessment purposes.

Traffic growth

- 1.32** Assessments should normally include at least committed development traffic. Committed development will normally include development plan allocations and other development sites with a current planning consent.
- 1.33** It may also be appropriate to allow for general traffic growth. This will be assessed on a site-by-site basis, and will depend mainly on the constraints on the surrounding road network.

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- 1.34** Where you need to project forward existing traffic flows, you should normally use either the National Road Traffic Forecasts (NRTF) or TEMPRO. In certain circumstances, however, we may have survey data that would enable you to establish a growth rate local to the site.

Existing land uses on a development site

- 1.35** If a development site has or had an existing use, it may be appropriate to offset the likely traffic impacts of the proposed development against the site's existing traffic impacts when considering its redevelopment.
- 1.36** If this is acceptable to us in principle, you will need to quantify the traffic impacts of any existing uses for the assessment periods. Where an existing use is still in full operation, you should normally establish its traffic impacts by up-to-date traffic counts at the site accesses.
- 1.37** For existing uses not in full operation, it may still be appropriate to carry out traffic surveys and then agree with us how much the increase in traffic is likely to be if the site is redeveloped (but see paragraph 1.38).
- 1.38** We will consider each site separately, particularly where the existing land uses no longer operates. We will, where appropriate, take into account the validity of increasing the site's operation or bringing the existing buildings back into operation without needing planning permission.

Trip generation of the proposed development

- 1.39** You should first work out the total trips – that is by all modes of transport (including walking) – that you expect the proposed development to generate. You can usually do this using TRICS or other data such as a traffic survey, where the new development is an expansion of an existing similar use, or a survey of a similar development in the same area. Where you use TRICS or other databases, the sites you choose should be appropriate and relevant to the proposed development, and the transport assessment should clearly demonstrate this. Whichever data source you use, you should include details of the sites used to form the basis of the predicted trip generation in the assessment.

*Note: Where TRICS or other appropriate databases do not contain enough information on similar sites, you will normally have to base the trip estimate on a detailed analysis of the proposed daily operation of the development.

- 1.40** 85th %ile trip generation rates should normally be used as a starting point, as the GTA ([link to the new glossary entry](#)) recommends, but see also paragraph 1.42 ([link](#)).
- 1.41** For retail developments, you should normally split trips by vehicles in to different types such as:
- new trips – these do not appear anywhere on the road network before the development is opened
 - pass-by trips – these are already on the road network directly next to the proposed development and which will turn into the site
 - linked trips – these are trips to several different destinations, which may be within the development site or between the development site and nearby facilities (for example a trip to a supermarket followed by a trip to another shop in a nearby town centre);
 - diverted trips – these are trips which are already on the road network but are not currently using the existing lengths of road next to the proposed development; and

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- transferred trips – these are trips which are already on the road network and accessing similar developments close by to the proposed development (for example shoppers who switch from an existing supermarket to one that has newly opened).

You should agree with us the percentage of each type of trip as part of the scoping report. (link to para' 1.19)

1.42 Sometimes, it is suggested that the level of predicted vehicle trips can be reduced to reflect proposed improvements to public transport and walking and cycling facilities ('sustainable transport'). We will normally only consider a reduction where:

- the development and the transport improvements are to be delivered at the same time;
- there is a realistic prospect of people using 'sustainable transport' to the degree suggested; and
- you can clearly show in the TA that the 'sustainable transport' network will be able to accommodate the increased numbers of trips.

1.43 For any committed developments, you should use data from the transport assessment prepared for that development where it is available. Otherwise, you should establish traffic generation as described in paragraph 1.39.

Traffic distribution and assignment

1.44 Depending on the scale, nature and location of the development appropriate methods might include:

- distribution based on existing traffic surveys;
- for expansion of an existing development, distribution based on existing occupier data;
- distribution based on census data;
- a gravity model; or
- a traffic model.

1.45 You need to explain your methodology for distributing and assigning trips to the network. If you have used a traffic model, you should set out the basis for the model assignment and include the following information:

- the type of model;
- the type of assignment (that is demand or actual and AM or PM);
- the date of the model validation; and
- the allowance you made for committed development.

1.46 If you have developed a manual gravity model, you should explain the formulae you have used and the assumptions you have built into the model.

1.47 If any committed developments are to be included in a transport assessment, where possible you should use available data from the assessment prepared for that development. Otherwise, traffic should be distributed in an appropriate method to be agreed with us.

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Area of assessment

- 1.48** The normal area should generally include all junctions where the increase in any traffic turning movement is:
- 5% or more during the year the development is expected to open; or
 - less than 5% where the junction is already or likely to be beyond capacity during the year the development opens.
- 1.49** Even where the overall traffic impact may be relatively small, you may still need to expand the area of assessment beyond the above to cover other parts of the road network, for example:
- areas of existing parking congestion;
 - where there are road safety problems;
 - where HGV movements are an issue;
 - Local Air Quality Management Areas; or
 - in other sensitive locations, such as near a school, pedestrian zone or shopping area.

The capacity analysis

Note: In the following ‘base traffic’ means:

- existing traffic; plus
- any committed development traffic (see paragraph 1.32); plus
- any general traffic growth (see paragraph 1.32); plus
- any adjustments for valid land use removed from the site as a result of the proposed development (see paragraph 1.35 onwards).

- 1.50** The highway capacity analysis should normally include at least:
- assessments of the current road network and existing traffic situation validated against surveyed queues and delays; and
 - assessments of the road network for both base traffic and base traffic plus proposed development traffic at the year the development opens (that is when it is fully completed and occupied), a minimum of 5 years after you have submitted your final planning application, and at anytime in between when the traffic situation may be worse.
- 1.51** The site access should normally be of a standard that will safely and satisfactorily accommodate whichever situation in paragraph 1.50 gives the worst traffic impact. Where further highway works are required on the network serving the development, they should normally be to a standard that ensures traffic conditions are no worse at any time during the period than if the development had not taken place.
- 1.52** There may be circumstances where the improvements needed to meet the normal requirement might not be appropriate. Examples might include:
- where the scale of the improvement would be out of balance with the capacity of the adjacent road network, taking account of any programmed improvements where appropriate;

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- cases in which the improvements would be more extensive than we would promote given local circumstances and in particular taking account of their environmental impact; and
- cases where improvements affect lower standard roads, for example, an unclassified road.

1.53 We may be prepared to consider accepting a lower standard of improvement in such circumstances. We may, for example, accept a solution that, during the year that the development opens, leaves conditions no worse than if the development had not taken place. However, we will apply a graduated approach to accepting any lower-standard solution, similar to the approach of our highway access policy. Also, we will only accept a solution in a location where highway safety is not affected. We will seek to resist developments, for example by recommending refusal of any planning applications, where they would result in congestion that causes safety and environmental problems.

The safety analysis

1.54 Any type of transport assessment should normally include an analysis of the previous five years' accidents. We hold accident data which we will provide to you for a fee. As well as a summary of accident types and numbers, the assessment should also normally include a comparison of accident rates with national casualty rates and, where available, local county rates. It should also include reference to any identified 'cluster' sites.

1.55 In addition to the current situation, the transport assessment should also take into account our casualty-reduction targets. By 2010, we aim to:

- reduce the number of killed or seriously-injured road users by more than 40%;
- reduce the number of killed or seriously-injured children by at least 50%; and
- reduce the rate of slight casualties by 10%;

compared to the average for 1994 - 98.

1.56 Where there are identified areas in the road network with safety problems, you should assess how any additional traffic may make existing problems worse. You should include your findings in the transport assessment and propose possible measures to reduce the problems where appropriate. We will resist development proposals that could adversely affect road safety and threaten our casualty-reduction targets.

1.57 Where new junctions, improvements to existing junctions or other highway improvements are required as a result of the development, we will normally require road safety audits.

Section TAG6: Travel plans

1.58 Where the nature, location and scale of a development proposal require a travel plan, a draft plan should form part of the transport assessment. You can find a general indication of some of the types and scales of development in table PDP1 in Part 2 of this guidance.

1.59 A travel plan is a package of measures or agreed outcomes aimed at reducing reliance on the private motor vehicle and reducing congestion. It is a process rather than a policy document. Indeed, completing the document itself is only the start of the process. A successful travel plan involves continuous monitoring (for example, surveys), review and improvement over time. So it does require a high level of debate about transport problems, options and future action, as well as a high-level management commitment. But where a plan is likely to deliver significant reductions in

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the use of private cars, this could reduce the scale of highway works required to off-set the development's traffic impacts and could, in certain circumstances, result in the need for less off-street parking.

1.60 We are currently developing our own guidelines on preparing travel plans. In the meantime, before you prepare a transport assessment or scoping report, you should discuss likely draft plan requirements with us. Examples of likely broad issues to be considered and agreed include:

- the plan's intended aims and objectives;
- the need for setting targets and what targets are appropriate;
- the need for imposing an alternative solution to targets or some form of penalty where any targets are not met and what those penalties might be;
- long term management and co-ordination of the plan, particularly for developments occupied by a number of different organisations or residents;
- monitoring, including establishing the baseline modal split position and assessing the long-term effectiveness of any measures;
- establishing the current situation of public transport services (not just frequency of services, but bus-stop locations, route details and whether or not the services operate commercially or receive financial support) and the standard of provision for pedestrians and cyclists;
- the need for or likely nature of any on-site and off-site works and measures required to complement and support the plan. For employment or commercial development, you should consider measures at the pre-opening or staff-recruitment phase;
- the need for or the likely content of employee and resident transport packs (for example, time-limited free bus passes, public-transport timetables and walking and cycling maps indicating local facilities);
- the need for any on-site or off-site parking management to complement the plan.

Section TAG7: Securing mitigating works and measures

1.61 Where mitigating works and measures are required (to off-set the impact a development has on highways and transportation), these will normally be secured through planning conditions or appropriate legal agreement. The scale and nature of the works and measures will normally determine the appropriate approach.

1.62 Where improvements are required to the existing road network, these are normally carried out under a Section 278 agreement of the Highways Act. Please refer to Part 6 of this document.