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List of Abbreviations

DMRB  Design Manual for Roads and Bridges
EIA   Environmental impact assessment
LTP   Local Transport Plan
MfS   Manual for Streets
MIPPS Ministerial Interim Planning Policy Statement
PPW   Planning Policy Wales
RTP   Regional Transport Plan
SA    Sustainability appraisal
SEA   Strategic environmental appraisal
SPG   Supplementary planning guidance
TAN   Technical Advice Note
TIS   Transport implementation strategy
WSP   Wales Spatial Plan

Please note that the English language web version published on 29 March 2007 contained incorrect paragraph numbers from paragraph 9.8 to end of section 9. This error has now been corrected with paragraphs 9.10 to 9.26 renumbered to become 9.9 to 9.24.
1. Introduction

1.1 This Technical Advice Note (TAN) should be read in conjunction with Planning Policy Wales (2002) which sets out the land use planning policies of the Welsh Assembly Government (the Assembly Government). Planning Policy Wales (PPW), Ministerial Interim Planning Policy Statements (MIPPS), Local Development Plans Wales, Technical Advice Notes, and circulars should be taken into account by local planning authorities in the preparation of development plans. They may be material to decisions on individual planning applications and will be taken into account by the Assembly Government and Planning Inspectors where relevant to the determination of called-in planning applications and appeals.

1.2 Documents listed in the Reference column in the margin provide information, which should be read in conjunction with the TAN.
2. Integration between Land Use Planning and Transport

2.1 An efficient and sustainable transport system is a requirement for a modern, prosperous and inclusive society. However, transport, in particular road traffic, can also have negative impacts on human health and the environment. Road traffic growth is a cause of increased local air pollution, green house gas emissions contributing to global warming and climate change and, in some areas, congestion, which can affect economic competitiveness.

2.2 In responding to such challenges, the Assembly Government adopts a sustainable development approach as the overarching framework within which strategies and policies are developed. PPW and the Wales Transport Strategy both aim to secure the provision of transport infrastructure and services, which improve accessibility, build a stronger economy, improve road safety and foster more sustainable communities. This includes:

- integration of transport and land use planning;
- integration between different types of transport;
- integration of transport policy with policies for the environment, education, social justice, health, economic development and wealth creation.

2.3 Integration of land use planning and development of transport infrastructure has a key role to play in addressing the environmental aspects of sustainable development, in particular climate change and the outcomes identified in the Assembly Government’s Environment Strategy. Integration can help the Assembly Government achieve these environmental outcomes, together with its wider sustainable development policy objectives by:

- promoting resource and travel efficient settlement patterns;
- ensuring new development is located where there is, or will be, good access by public transport, walking and cycling thereby minimising the need for travel and fostering social inclusion;
- managing parking provision;


• ensuring that new development and major alterations to existing developments include appropriate provision for pedestrians (including those with special access and mobility requirements), cycling, public transport, and traffic management and parking/servicing;
• encouraging the location of development near other related uses to encourage multi-purpose trips;
• promoting cycling and walking;
• supporting the provision of high quality, inclusive public transport;
• supporting provision of a reliable and efficient freight network;
• promoting the location of warehousing and manufacturing developments to facilitate the use of rail and sea transport for freight;
• encouraging good quality design of streets that provide a safe public realm and a distinct sense of place; and
• ensuring that transport infrastructure or service improvements necessary to serve new development allow existing transport networks to continue to perform their identified functions.

2.4 The inter-relationships between land use planning and transport are complex and varied. The development of land is dependent, in part, upon transport infrastructure and services to function efficiently. By influencing the location, scale, density and mix of land uses and new development, land use planning can help to reduce the need to travel and length of journeys, whilst making it easier for people to walk, cycle or use public transport.

2.5 To achieve a more sustainable pattern of development it is necessary to understand the interactions and linkages between land use and transport and devise integrated strategies, objectives and policies at the national, regional and local levels. At regional level, collaborative work by local authorities is seen in area work for the Wales Spatial Plan (WSP) and through Regional Transport Plans (RTPs). At local level, this means ensuring that strategies, objectives and policies in community strategies, development plans, health, social care and well-being strategies and other relevant strategies and plans are consistent, complementary and integrated.
2.6 It is intended that regional based transport plans will replace Local Transport Plans (LTPs) during 2008. The change reflects a need to plan transport improvements on a regional basis recognising that many transport issues across Wales raise cross-boundary issues for local authorities. RTPs are intended to address these cross-boundary issues and provide a local policy framework for transport that delivers the Assembly Government’s integrated transport strategy. Each of the four regional transport consortia will be responsible for preparing a plan, having regard to guidance issued by the Assembly Government.

2.7 WSP area projects will identify strategic transport requirements which will need to be reflected in development plans and RTPs, while Community Strategies will also identify local visions and priorities for transport. The link between land use and transport means that development plans and RTPs will have a significant interaction. Many transport schemes promoted in RTPs will have direct land use implications but also indirect effects on land use, such as widening market catchment areas or influencing travel-to-work patterns with consequential land use pressures. Development plans will in turn influence RTP strategy through requirements for infrastructure to enable or accommodate new development.

2.8 There are potentially three sources of transport scheme which will influence how they are integrated into development plans (see also the section 8 on Transport Infrastructure.

**National Priorities**

The Wales Transport Strategy and WSP will generate two types of scheme: nationally important schemes, such as improvements to the trunk road network; and those of regional importance developed through the WSP area work. Development plans have a role in safeguarding land necessary to implement nationally important schemes and also to develop policies to maximise the benefits of such schemes while adapting to any land use changes that may result. Regional schemes developed through the WSP will be described in more detail in RTPs and again development plans have a safeguarding and promotional role to ensure such schemes are developed and the benefits of the scheme maximised for the local area. Both types of scheme need to be identified in development plans, with timing and funding...
information as background and a safeguarding policy applied if required. Detailed justification is not required.

**Local Development Plans**

The development plan could generate a requirement for transport schemes to support the implementation of the plan strategy and enable development. Such proposals should be covered by one or more policies, supported by an evidence base, including the extent to which the plan is dependent on the proposals and the risks involved in its delivery. The evidence should include an indication of the funding source and where there is a requirement for developer funding this should be made clear in the plan. Where planning permission will be required for a road scheme, its inclusion in the plan should normally provide the means to examine both the need for, and the alignment of, the route. In setting out policy for minor improvements, authorities may appropriately deal with detailed planning considerations or programme issues through supplementary planning guidance (SPG), which is related to an adopted plan.

**Regional Transport Plans**

A transport scheme also may result from RTP or local transport planning activity, addressing network issues, such as accessibility, capacity, environmental and social impacts and safety. Development plans should include one or more policies that set the framework for the determination of planning applications for transport proposals. Cross-references can be used to provide background or justification, although planning authorities should be mindful of the dynamic nature of RTPs to avoid the links becoming out of date.

2.9 Policies and proposals in development plans should address the overall development of the transport network and related services, including public transport, interchange facilities including park and ride, multi-modal freight facilities, rail depots, roads, cycleways, pedestrian routes, inland waterways, harbours/ports and airports (including safeguarding zones)\(^6\)\(^7\).

2.10 It is important that planning authorities, including the National Park Authorities, are fully engaged in the development and ongoing review of RTPs and maintain a constructive dialogue with regional transport groups to ensure local ideas and views from a land use planning perspective inform the transport strategy. Regional

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transport groups in turn should contribute to development plan preparation, for example in regard the preferred strategy, accessibility considerations and parking policy. Local authorities will need to establish efficient internal working arrangements between land use and transport planning professionals to maintain an integrated approach at local level. The overall aim of all parties should be to ensure consistency between RTP and development plan objectives and policies.

**Demand management**

2.11 The Transport Act 2000 includes powers that allow local authorities to tackle pollution and congestion in their areas. Two of the most significant measures are road user charging and workplace parking levy and these will normally be addressed in RTPs. Careful consideration will need to be given in development plans to the potential pressure for dispersal of development away from charged areas\(^8\). Traffic management powers are covered in Paragraphs 5.14 to 5.17, while advice on assessing the impact of development is contained in Paragraphs 9.1 to 9.7 and Annex D.

**Local air quality**

2.12 Clean air is an essential ingredient of a good quality of life. Transport emissions contribute significantly to climate change and poor local air quality. The Environment Act 1995 requires local authorities to review and assess air quality in their areas to determine whether the air quality objectives set in the Air Quality Strategy for England, Scotland, Wales and Northern Ireland and the Air Quality (Wales) Regulations 2000\(^9\) are likely to be met. Where it is found that air quality objectives are unlikely to be met, the local authority must declare an air quality management area and develop and implement an action plan to work in pursuit of these objectives. When preparing development plans and considering planning applications, planning authorities should take into account statutory air quality objectives, together with the results of air quality reviews and assessments and any Air Quality Management Area Action Plans that may have been prepared\(^10,11,12\).
2.13 The Road Traffic Reduction Act 1997 (the 1997 Act) obliges local authorities to review current levels of traffic on local roads, forecast the anticipated growth in traffic levels and specify any targets for reducing the levels of road traffic or its growth. Local Authority Reports under the 1997 Act were included in the first round of LTPs prepared in 2000. Development plans should provide a clear land use policy framework for achieving local authority road traffic reduction targets, where they are set and assessing the transport implications of planning applications\(^\text{13}\,\text{14}\).
3. Location of Development

3.1 The land use planning system can impact on travel patterns, by guiding the location, scale, density and mix of new development and controlling changes of land use. In this way, transport and land use interact and can have an effect on the emission of greenhouse gases, the health of the local population, social inclusion and the costs of congestion. Changes in travel patterns brought about by land use change in the future are likely to be incremental, but over the medium to long term could significantly reduce the need to travel and ensure that effective use is made of public transport options, walking and cycling. Planning authorities should ensure that their development plan strategy is compatible with the aim of reducing the need to travel and provides greater choice of means of transport other than the private car.

Accessibility

3.2 In determining an appropriate development pattern, local planning authorities should seek to maximise relative accessibility rather than ensuring everyone can travel everywhere (mobility). Accessibility is the relative ability to take up services, markets or facilities. Focussing on accessibility is important in addressing social exclusion and for maximising choice in services, employment and recreation opportunities, remembering in most cases transport is a means to an end. Relative accessibility is likely to be part of the Sustainability Appraisal/Strategic Environmental Assessment process applied to Local Development Plans. It may be useful as one of the many considerations material to the development control process to assist in demonstrating sustainability. Where a development proposal is assessed as having relatively poor accessibility this may be sufficient grounds to refuse planning permission where this does not support the accessibility objectives set out in the development plan. Further guidance on accessibility planning can be found in Annex A.

Major travel generating uses

3.3 The location of new residential development has a significant influence on travel patterns as the majority of trips start or finish at home. Housing is also usually the most extensive land use in settlements. As a consequence, the relationship between homes and other land uses will influence travel demand in terms of mode of travel, length of journey and the potential for multi-purpose trips.
It should be a key aim of development plans to identify residential sites that are accessible to jobs, shops and services by modes other than the car and where public transport services have the existing or planned capacity to absorb further development. Local authorities should seek to achieve a broad balance between housing and employment opportunities to minimise the potential need for long distance commuting.

Accessible housing development

3.4 Settlement policies and residential allocations in development plans should therefore:

- promote housing development at locations with good access by walking and cycling to primary and secondary schools and public transport stops, and by all modes to employment, further and higher education, services, shopping and leisure, or where such access will be provided as part of the scheme or is a firm proposal in the RTP;

- ensure that significant new housing schemes contain ancillary uses including local shops, and services and, where appropriate, local employment;

- include policies and standards on density, and parking to achieve higher residential densities in places with good public transport accessibility and capacity;

- encourage residential layouts that incorporate traffic management proposals such as home zones, calming measures and 20 mph zones and where appropriate, layouts that allow public transport to pass through easily; and

- require layouts and densities, which maximise the opportunity for residents to walk and cycle to local facilities and public transport stops.

3.5 Local planning authorities should ensure that the design and density of new residential development facilitates viable and effective bus services.

3.6 Development plans and related SPG should outline the information required in residential applications or design statements to demonstrate appropriate levels of access by walking, cycling and public transport for new residents and the wider community to local services. Developers should be able to demonstrate that:

- the development will facilitate access by new residents to public transport stops, local shops and facilities by walking and cycling;
• new or existing walking and cycling routes provide direct and safe links to public transport stops, local shops and facilities;

• any public transport routes through the development are suitably direct, are of a geometry to avoid obstructions and that any features that give buses priority (e.g. bus gates or bus only routes) are shown;

• where new public transport facilities or services are proposed, there are effective arrangements for maintaining facilities and funding services (e.g. will an initial or ongoing subsidy be required and how this will be secured);

• the walking, cycling, public transport and car routes through or adjacent to the site are integrated in accordance with expressed principles and in the context of their relationship with parking areas and public recreation spaces.

Where larger housing development applications require a transport assessment the above information should be incorporated within them. The above points can contribute to Transport Implementation Strategy objectives (see paragraph 9.4).

Other major travel generating uses

3.7 The location of major travel generating uses including employment, education, shopping and leisure can significantly influence the number and length of journeys, journey mode and the potential for multi-purpose trips. Development plans should seek wherever possible to identify locations for such developments, which offer genuine and easy access by a range of transport modes and therefore:

• allocate major generators of travel demand in city, town and district centres and near public transport interchanges, as a means to reduce car dependency and increase social inclusion by ensuring that development is accessible by public transport for those without access to a car;

• contain policies which direct facilities for which there is a regular need to be located close to their users in local and rural centres, ensuring easy access for all, especially by walking and cycling; such facilities include primary schools, doctors surgeries and local convenience shops; and
• consider the potential for changing existing unsustainable travel patterns, for example through a co-ordinated approach to development plan allocations and transport improvements.

3.8 Locations that are highly accessible by a variety of travel modes offer significant opportunities to make travel patterns more sustainable. When preparing or reviewing development plans, planning authorities should identify all potential development sites which have high levels of accessibility to non car modes. Care should be taken to ensure that allocations in these locations are at sufficient densities to fully utilise the accessibility potential of the site and to including housing with other uses where appropriate. Development sites which are car dependent and unlikely to be well served by new public transport, walking and cycling should only be allocated or reallocated in development plans for uses which are not travel intensive.

3.9 Where planning applications are submitted for development on unallocated land and are likely to generate a substantial number of trips then, subject to the policies of the development plan, refusal of such applications may be warranted where the principles of paragraph 3.7 are not fulfilled.

Rural areas

3.10 The distinctive characteristics of rural areas including low population densities, the dispersion of job opportunities and the concentration of services in larger settlements restrict travel options. The car is important for accessibility in rural areas and is likely to remain so for the foreseeable future. However significant population groups including women, the young, the elderly and those with low incomes, who do not own a car or have limited access to a car can experience severe problems of social exclusion. Improving accessibility for these groups will help to promote social inclusion and reduce rural isolation.

3.11 Development in rural locations should embody sustainability principles, balancing the need to support the rural economy, whilst maintaining and enhancing the environmental, social and cultural quality of rural areas. Most development should be located in places accessible by a range of travel modes. As part of the settlement strategy of the development plan, planning authorities should consider identifying key local service centres17. These centres may comprise a market town, large village or closely associated group of villages. Such service centres should be
the preferred locations for most new development including housing and employment provision. The identification of key service centres will help to promote the use of public transport, walking and cycling and minimise the need for journeys to larger centres.

**Rural car parking**

3.12 A significant challenge for local authorities in rural areas will be to facilitate parking provision that adequately serves the rural hinterland, maintains the vitality and viability of the service centres while at the same time avoids undermining both the ability to provide public transport and the incentive to walk and cycle within the service centre. The extent and type of possible parking restrictions will play a key role. The development plan process should ensure co-ordination between any local authority controlled parking in a centre and parking provided through development requiring planning permission. Good design is just as important in rural areas as it is in urban areas. The location of new car parking available to the public (including on-site parking for supermarkets, leisure developments, etc.) should not undermine walking, cycling or public transport facilities/routes to the centres. Engagement with local retailers, transport and other service providers will be essential. Further advice on parking for rural and urban areas can be found in section 4.

**Proximity to urban areas**

3.13 Transport issues in rural areas will vary depending on the relative isolation from major urban centres. Long distance out-commuting from rural areas raises sustainability issues given the length of the journey and the rural location means that conventional public transport is unlikely to be viable in response. Local authorities should therefore consider whether different policy approaches are required depending on the proximity of rural areas to urban centres. For example, the development plan strategy may require a more decentralised approach to employment location in order to minimise overall private car mileage in an area without strong functional linkages to larger settlements. For a rural area close to a large urban area for example, development serving local needs may be directed to settlements to provide sufficient demand to enable public transport services to extend from the main centre.
**Farm diversification**

3.14 Local authorities should adopt a positive approach to development associated with farm diversification in rural areas, irrespective of whether farms are served by public transport (PPW paragraph 7.3.3). This type of small-scale economic development is attached to existing farm businesses that are often situated in relative rural isolation. It is important that a realistic assessment of the transport impacts is made, with a view to reconciling traffic issues with the benefits of encouraging diversification. In the majority of cases, it is expected that any transport problems should be capable of being resolved by appropriate minor junction or other highway modifications. Exceptionally, there may be cases where the anticipated increase in traffic cannot be reasonably accommodated. Such developments are more appropriately located on allocated industrial/commercial sites, if available in the locality, or in or adjoining local service centres where the highway network is more robust.

**Tourism**

3.15 Tourism proposals, particularly in rural areas, should demonstrate access by a choice of modes to avoid locking in the requirement for travel by car. Even small-scale tourist facilities that rely on car based travel can offer public transport information or arrange pick-ups from rail stations or coach/bus stops. In rural areas a lack of public transport access needs to be balanced against the contribution tourism makes to the rural economy in the specific area.

3.16 Local authorities should identify rural areas under particular pressure from car-reliant tourism and adopt policies that mitigate the negative effects of future development while promoting economic development opportunities. Undertaking a transport assessment for proposed tourism developments is important within areas of identified tourist pressure. Requirements for transport assessment in such areas should be identified through the development plan and cross-references made to relevant RTP proposals or initiatives (see also paragraph 9.3).
4. Parking

4.1 The availability and price of car parking are key elements in managing car use and a major influence on the choice of means of transport. Car parking can take up large amounts of space in developments, which decreases density and therefore can represent an inefficient use of land. It can also generate considerable additional trips if located in an area without public transport. Poor design and layout of car parking can also make it more difficult to provide effective, walking, cycling and public transport links.¹⁸

Regional Parking Frameworks and Local Parking Strategies

4.2 A co-ordinated approach to parking provision should be pursued at both regional and local levels. Regional parking frameworks should be developed as part of the RTP to support both the transport strategy of the RTP and the development strategies of the corresponding development plans. The frameworks should be based on robust evidence to ensure a sound approach to addressing demand management whilst being sensitive to local needs and differences in accessibility.

4.3 Local planning authorities should use the regional framework as a common starting point and then identify parking issues of a local nature to be addressed in the development plan (and SPG), including any justification for departing from the regional framework.

4.4 Local parking strategies have a role in setting maximum parking standards within the parameters set by the regional framework, or a default role if regional maxima are not set. Local parking strategies will also have an important role in relation to decisions on parking charges, again within the context of the regional framework.

The full range of issues local strategies could address are:

- maximum parking standards for various uses;
- the need for new parking provision for the public;
- balancing on and off site parking provision and managing the effects of displaced or ‘over-spill’ parking;
- planning obligations relating to parking management and provision;
- local disability and cycle parking standards; and
- parking design/dimensions.

4.5 The development of parking frameworks and strategies should be undertaken in an open and collaborative way. Regional transport groups and their constituent local planning authorities should collaborate with neighbouring regional groups and English authorities to assess the impact of parking proposals on the competitive position between centres. They should also consider competition between town centres and peripheral developments, taking care to avoid creating incentives for development to locate away from town centres. Development plans should include policy relating to how the parking strategy will be applied to development, providing the link to any SPG, and where necessary, indicating any spatial differences in parking standards.

Maximum parking standards

4.6 Maximum car parking standards should be used at regional and local level as a form of demand management. Turning minimum standards into maximum standards will not necessarily be appropriate. Therefore evidence based on the likely effects of different parking levels for each land use should be considered, including consideration of the relative locations of land uses and their consequent accessibility. Required parking for those with disabilities should be fully specified in any adopted parking strategy in terms of space dimensions and proportions of the total number of spaces. Further national guidance on inclusive parking will be found in guidance on design and access statements due to be published in 2007 (see Traffic Advice Leaflet 5/95, Parking for Disabled People).

4.7 In determining maximum car parking standards for new development, regard should be given to:

- public transport accessibility and opportunities or proposals for enhancement;
- targets and opportunities for walking and cycling;
- objectives for economic development including tourism;
- the availability in the general area of safe public on- and off-street parking provision; and
- potential for neighbouring or mixed use developments sharing parking spaces, for example at different times of the day or week.
Town centres

4.8 The provision of public car parks can have an important role in supporting the vitality and viability of town centres against damaging competition from out of town sites but planning authorities should be careful to avoid creating incentives for travelling to town centres by car or undermining the viability of public transport. Where there is consideration of park and ride on the edge of towns, provision in these sites and town centre parking numbers and pricing policy need to be combined as part of an overall strategy for access to the centre.

4.9 Private non-residential parking is an important component of parking provision in town centres. Authorities should, where appropriate, seek to encourage appropriate redevelopment or re-use of existing private parking to bring provision down to maximum standards and refuse planning permission for public and private car parks which do not meet the strategic aims of the development plan and RTP.

4.10 Rural centres are likely to have different parking requirements than urban areas due to a greater reliance on car travel and this may be reflected in parking policy depending on the evidence used to inform the regional parking strategy. Paragraphs 3.10 to 3.16 provide advice on development in rural areas, including managing car parking.

Parking charges

4.11 Parking charges and limits on provision or time have an important role in managing congestion and the impact of traffic on residential amenity. Overall parking provision within towns will affect traffic levels as will the cost of parking. Parking charges may be used as an instrument to encourage the use of alternative modes, and to target particular forms of travel for restraint, such as commuter journeys.

4.12 Management agreements that cover parking charging and limits on provision or time may be appropriate as part of a condition or obligation with planning permission, where this complements land use policies, contributes to the reduction of congestion, safeguards amenity and encourages use of alternative transport modes. Charges or time restrictions in town centres should discourage all day parking but encourage short-term parking for visitors such as shoppers, especially those from the rural hinterland. These should be backed up by adequate enforcement measures.
4.12 Parking charges and enforcement of parking restrictions should not appear as policies in development plans unless they relate to the use of planning obligations. However charging and enforcement can be included in the reasoned justification in support of land-use policies and proposals for the management of traffic. They should be incorporated with any local parking strategy that is adopted as SPG.

Implementation of parking within new developments

4.13 Where appropriate, the local parking strategy should link parking levels on new development sites with either the existence or introduction of on-street control regimes. Maximum parking standards should not be applied so rigidly that they become minimum standards. Maximum standards should allow developers the discretion to reduce parking levels. However, a particular concern with reduced on-site parking is the potential for problems associated with ‘over-spill’ parking. Local planning authorities when developing the local strategy or applicants when undertaking a transport assessment should assess the extent of existing on-street parking pressures and the impact of new development. Where on street space is at a premium, local planning authorities could seek contributions from developers towards the implementation of on-street parking controls or refuse permission for developments where despite controlled parking, unacceptable road safety or congestion issues will probably remain.

4.14 Planning obligations are likely to play a key role in managing on- and off-site parking, for example securing shared use. (The basis for planning obligations should be set out in the development plan and should satisfy the relevant policy tests19. Paragraphs 9.20 to 9.24 offer further advice on their application to transport.) Where the introduction of controlled parking or its amendment is required to facilitate development, local authorities should be supportive of developers’ requests to make or amend Road Traffic Regulation Orders where this is appropriate.

Residential car parking

4.15 Some car free housing development may be appropriate in locations with good walking, cycling and public transport links and in areas where parking is controlled. On-site cycle and parking provision for those with disabilities will be required if such on-street parking cannot be provided. Planning obligations will have a role
to play in ensuring residents do not own cars in such developments. Purpose-built student accommodation is an example where such agreements can be effective. It is essential that, prior to occupation, the future residents should be made aware of the car free status of the development. To ensure this, the role of travel plans, including personal travel planning initiatives such as MODUS\(^{20}\) should be considered by planning authorities.

4.16 Local planning authorities should give greater weight (than if considering non-residential uses) to the potential adverse impacts likely to result from on-street parking when the design and layout of the street is unlikely to satisfactorily cope with additional residential parking pressures. A site’s location and its relative accessibility should inform guidance on maximum standards and the potential lifestyle of occupants should be considered, both at the forward planning and development control stages. A mix of housing types with a similar mix of parking provision should be provided across the plan area to cater for anticipated differences in lifestyle. The two key points that local planning authorities should consider are the accessibility of the housing site by modes of travel other than the car and ensuring that quality is achieved in the design of the street layout (see paragraphs 3.4 and 5.4).
5. **Design of Development**

### Inclusive Mobility and Access for Disabled People

5.1 The Disability Discrimination Act 1995 (as amended)\(^{21}\) requires that people with all types of disability should be treated no less favourably than others. Public transport and the pedestrian environment should be accessible to people with disabilities, however it must be recognised that for some disabled people, if mobility is to be retained, there is no substitute for the private car\(^ {22, 23, 24}\). Adopting an inclusive culture helps to ensure that access issues are taken into account at an early stage\(^ {25}\). Local planning authorities should incorporate inclusive design and access considerations in the preparation of development plans by consulting disability interest groups, possibly through formal access panels\(^ {26}\). Development plan policies (or supplementary planning guidance) that identify local design and access statement requirements with regard to access and transport matters should be included for consideration. Where there are no such groups, local authorities should encourage their formation to ensure effective consultation.

5.2 Local authorities, developers and transport providers should work together to meet the needs of all people, including those with disabilities, for equality of access by:

- identifying their needs in terms of parking, in particular ensuring that adequate numbers of suitably designed parking spaces are provided in appropriate locations;

- ensuring that their needs are taken into account in the layout, physical conditions and interrelationship of land uses. Particular care needs to be paid to town centres where shop mobility schemes could be considered and to public spaces to ensure that they are well designed and safe for all pedestrians, especially those who are blind or partially sighted\(^ {27}\); and

- ensuring that transport infrastructure and interchanges, are designed and located to be safe, accessible and functional for all.

5.3 Access Statements are required to accompany all planning applications except householder applications and changes of use\(^ {28}\). Design Statements to accompany some applications will become a legal requirement in 2007. Specific guidance on the content of design and access statements will be issued by the Assembly Government by the end of 2007 and will provide further advice on

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\(^{21}\) Disability Discrimination Act 1995 (c. 50) (as amended)

\(^{22}\) Reducing Mobility Handicaps - Towards a Barrier Free Environment, Institute of Highways and Transportation, 1991

\(^{23}\) Traffic Advisory Leaflet 5/95, ‘Parking for Disabled People’


\(^{27}\) Inclusive Projects: A guide to best practice on preparing and delivering project briefs to secure access. Disabled Persons Transport Advisory Committee 2003.

\(^{28}\) SI 1995/419 The Town and Country Planning (General Development Procedure) Order 1995 – Article 4D (inserted by SI 2006/3390 (w.310))
these issues. Where both a design and access statement and a transport assessment is required to accompany an application, the design and access statement should cross refer to the design aspects of the Transport Implementation Strategy produced as part of the Transport Assessment. Paragraph 9.1 provides guidance on Transport Assessment.

**Street design**

5.4 The layout and detailed design of development can be critically important in providing genuine alternatives to car travel and achieving quality in the environment as a whole. Transport infrastructure should contribute to a sense of place and community within a development and the design of streets has a crucial role in this regard. A distinction can be made between roads and streets. Roads are essentially highways whose main function is accommodating the movement of traffic. Streets are typically lined with buildings and public spaces, and whilst movement is still a key function, the place function is the most important. Streets have five principle functions:

- place;
- movement;
- access;
- parking; and
- utilities (including drainage and street lighting).

5.5 Streets should be designed to:
- help to build the communities they serve;
- meet the needs of all, by embodying the principles of inclusive design;
- form part of a well-connected network;
- be attractive and have their own distinctive identity;
- be cost-effective to construct and maintain; and
- be safe.

5.6 Streets should not be:
- primarily designed to meet the needs of motor traffic;
- bland and unattractive;
- unsafe and unwelcoming to pedestrians and cyclists;
- difficult to serve by public transport; and
- poorly designed and constructed.
5.7 Technical Advice Note 12: Design (TAN 12) provides overall guidance on the design of new development and the need for design statements. It should be read in conjunction with the Manual for Streets (MfS) 2007, which replaces Design Bulletin 32 and provides technical guidance on street design and should be referred to by all organisations and professions engaged in designing new development, which includes streets\(^{29}\). There is a place for local standards and design guidance, particularly in respect of creating and preserving local distinctiveness and these should be reviewed in light of MfS and incorporated in local guidance on the content of design statements. The relevant design standard applicable to Trunk Roads remains the Design Manual for Roads and Bridges (DMRB).

5.8 Highway authorities normally undertake an assessment of the relative importance of particular urban routes in terms of movement\(^{30}\). Ideally, planning authorities should collaborate with highway authorities to combine this movement assessment with an assessment of place. The resulting matrix can be used to set policies or objectives for different parts of the network and to set appropriate design criteria for new streets within that network. The resulting matrix, objectives and design criteria could be set out in SPG or through individual site briefs for use by developers.

5.9 Joint working between all organisations and professions involved in street design is the only way that quality places will be achieved. Using a multi-disciplinary approach, planning authorities should consider how walkable neighbourhoods can be achieved within settlements through new development. This approach should also be used to consider how to ensure effective access for public transport. Guidance on what contributes to a walkable neighbourhood can be found in MfS. Direct linkages are important but must be achieved in a way that minimises the possibility of crime and disorder. Other important neighbourhood design objectives include residential amenity, accommodating parking, and enabling safe cycling.

5.10 The design of new streets should be considered in the context of the particular location. Carriageway widths should be appropriate to the particular context and the street character. Tracking should be used to ensure vehicles (including emergency and service vehicles) can move within streets while enabling the space between kerbs or buildings to be varied. Shared surfaces and home zones should be
used with great care to avoid problems and concerns over safety for those with disabilities. Streets should be designed to control vehicle speeds naturally rather than having to rely on traffic calming measures that involve vertical deflection.

5.11 New junctions must have adequate visibility and further advice is set out in Annex B.

5.12 Connected street networks should generally eliminate the need for drivers to make three point turns. Where this is required, the turning space provided must relate to the environment within which it is placed. To keep the vehicle track clear of parked vehicles, adequate parking should be provided in suitable locations if controlled parking is not in operation.

5.13 The location of both on- and off-street car parking spaces will be critical to the design quality of streets. Where on-street car parking is not controlled planning authorities should recognise that residents will seek to park as close to their homes as possible and should ensure the street layout mitigates against inappropriate parking and avoids the obstruction of pedestrians or emergency access. The following key principles need to be followed when considering the design and location of car parking:

- The important role of the street in creating a liveable neighbourhood;
- There is no single best solution; a combination of on-plot, off-plot and on-street will often be appropriate;
- The street can provide a very good car park. On-street parking is efficient, understandable and can increase vitality and reduce speeds;
- Parking in the back of a block is recommended only the after provision of parking at the front and on-street has been fully considered. Rear courtyards need to support on-street parking, not replace it; and
- Car parking needs to be designed with security in mind. Advice on this issue is contained in ‘Safer Places’.

Traffic Management

5.14 Traffic management measures should complement locational policies and support other transport policies. Without such measures, policies to reduce the need to travel, for example mixed-use development and increased urban densities, may have the effect of increasing traffic congestion within existing urban areas. Local authorities
should adopt an integrated approach to traffic management in RTPs and their development plans. They should consider how different measures can complement each other and contribute to the achievement of wider planning and transport objectives including their network management duty.  

5.15 Well designed and implemented traffic management measures can help to secure planning objectives in a number of ways, including:

- reducing community severance, noise, local air pollution and traffic accidents;
- promoting safe walking, cycling and public transport;
- improving the attractiveness of urban areas by helping to avoid or manage congestion;
- controlling on street parking (including resident parking schemes) in areas of high parking demand;
- promoting safer road conditions leading to improved opportunity for children’s safety and play; and
- promoting safer road conditions in rural areas and reducing the impact of roads on the environment whilst maintaining access for rural businesses.

5.16 Within town centres and other mixed-use locations, priority should be given to maximising the opportunities for creating safe, attractive and accessible pedestrian environments. Local authorities should consider schemes, which reduce the impact of vehicles and reallocate road space to encourage walking and cycling and give priority to public transport.

5.17 Accommodating pedestrians, cyclists and public transport within or adjacent to business or industrial development is just as important as designing efficient arrangements for deliveries and freight movements if employees are to be encouraged to travel to work by non-car modes.
6. Walking and Cycling

6.1 It is imperative that local authorities take into consideration the needs of walkers and cyclists in all development planning decisions, in line with the Assembly Government’s strategy for Walking and Cycling\(^{36}\). Development plans should integrate policies and objectives for walking and cycling, with policies for development design, traffic management, protecting and enhancing green spaces, and safeguarding routes in urban and rural areas for walkers, cyclists and horse-riders.

Walking

6.2 Local authorities should promote walking as the main mode of transport for shorter trips through the use of their planning and transport powers. Consideration should be given to ways in which areas and developments can be made more attractive and safer for pedestrians through the arrangement of land uses and design policy\(^ {37\ 38} \). When preparing development plans, design guidance, master plans and in determining planning applications authorities should:

- ensure that new development encourages walking as a prime means for local journeys by giving careful consideration to location, access arrangements and design, including the siting of buildings close to the main footway, public transport stops and pedestrian desire lines;
- ensure that pedestrian routes provide a safe and fully inclusive pedestrian environment, particularly for routes to primary schools;
- ensure the adoption of suitable measures, such as wide pavements, adequate lighting, pedestrian friendly desire lines and road crossings, and traffic calming;
- promote the reallocation of road space to pedestrians;
- consider the needs of all pedestrians in the design of town environmental improvement schemes, which may involve pedestrianisation and restricted access schemes;
- support the use of public rights of way for local journeys; and
- identify and protect existing and proposed routes suitable for the use of cyclists and walkers. These may include recreational or commuter routes alongside river banks, canal towpaths and disused railway lines.

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38 ‘Encouraging Walking: Advice to Local Authorities’, DETR, 2000
Cycling

6.3 Cycling has potential to act as a substitute for shorter car journeys in urban or rural areas, or form part of a longer journey when combined with public transport. The Walking and Cycling Strategy sets a target to triple (based on 2000 figures) the number of cycle trips in Wales by 2010. At the local level, local authorities have been required to produce a local cycling strategy as part of the LTP\textsuperscript{39}. RTPs will include a regional walking and cycling strategy. Local planning authorities will need to contribute to its development and assist in its implementation.

6.4 Local authorities should aim to develop an effective network of cycle routes, including safe routes to schools. Development plans, design guidance, and master plans should include encourage cycling through\textsuperscript{40-42}:

- identification of new cycle routes utilising existing highway (including public rights of way where appropriate), disused railway lines, space alongside rivers and canals, parks and open space;
- ensuring that new development encourages cycling by giving careful consideration to location, design, access arrangements, travel ‘desire lines’ through a development, and integration with existing and potential off-site links;
- securing provision of secure cycle parking and changing facilities in all major employment developments, including retail and leisure uses, town centres, transport interchanges, educational and health institutions;
- securing provision of cycle routes and priority measures in all major developments;
- adopting minimum cycle parking standards within their parking strategies - for commercial premises these standards should include cycle parking for both employees and visitors; and
- ensuring new residential developments provide storage for bicycles so they are easily available for everyday use while secure enough to be left unattended for long periods of time.

\textsuperscript{39} ‘Guidance on Local Transport Plans in Wales’, The National Assembly for Wales, 1999

\textsuperscript{40} ‘Cycle Audit and Cycle Review Guidelines’ Institution of Highways and Transportation, 1998


\textsuperscript{42} Traffic Advisory Leaflet 3/05 ‘Cycling Bibliography’, Department for Transport, 2005
7. Public Transport

7.1 New or improved public transport provision has the potential to provide alternatives to private vehicle use and to change existing travel demands. Where enhanced public transport services or infrastructure is necessary to serve new development, but provision on a commercial basis is not viable, a contribution from developers towards an agreed level of service or infrastructure provision may be appropriate. In most cases where new public transport provision is required, it should be in place before the development is occupied. Where major development has been permitted in phases, reasonable public transport provision should be in place before occupation of each phase to ensure travel by car is not necessary at the outset.

7.2 Local authorities should use their planning and transport powers in co-operation with public transport providers and operators to improve public transport provision in ways, which reinforce the effectiveness of locational policies in the development plan.43 44 45 Public transport providers and operators need to be involved at early stages of the planning process so that proposed developments are suitably located and designed to ensure public transport routes are viable.

7.3 When preparing development plans or supplementary planning guidance, and in determining planning applications, planning authorities should where appropriate:

- indicate where buses will be given priority and the measures which will be taken to support this;
- consider the potential, and identify any proposals, for new routes, including the new opening and reuse of rail lines, or creation of additional stations on existing lines, light rail or guided bus routes;
- provide for interchange facilities with bus, rail and taxi services located close together;
- establish and apply design principles for transport infrastructure and associated links that will ensure all can access the facilities and feel safe;
- establish and apply design principles to ensure buildings are sited to provide convenient access to local public transport whether walking or cycling;
- consider the need for better or new public transport access to new development areas;
- consider the role of any waterways for public transport purposes; and

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43 ‘From Workhorse to Thoroughbred’, DETR 1999
44 ‘Road Based Public Transport - Best Practice Guidance Note 1 Welsh Transport Advisory Group 1999’
45 ‘Providing for Public Transport in Developments’, Institute of Highways and Transportation, 1999
consider the need for local community transport operations.

Transport interchange

7.4 The development of safe and efficient public transport facilities where different modes of transport intersect, including cycling, is essential for the integration of transport provision. These may be identified as part of the RTP. Concentrating development around existing interchanges, or creating new interchanges, can provide a focus for development that is accessible and sustainable. When preparing development plans and in determining planning applications, planning authorities should where appropriate:

• consider the need for additional transport interchange locations, ensuring that proposed sites are well related to travel intensive uses;

• identify improvements that need to be made to existing public transport interchanges that could improve their use; and

• in rural areas, identify key local service centres and appropriate locations within them, as locations for transfer between local and long distance public transport services.

Park and ride

7.5 Where the RTP has identified a requirement for park and ride facilities, planning authorities should include proposals for them in the development plan. Carefully planned park and ride facilities can encourage the use of public transport and improve the accessibility of urban areas but park-and-ride should not be considered in isolation. It forms one element of a comprehensive planning and transport strategy designed to improve the relative attractiveness of public transport and reduce congestion in town and city centres. Park and ride schemes must be supported by parking restraint policies and traffic management measures to help maximise their effectiveness. The potential impact of increased traffic flows to and from park and ride facilities on surrounding access routes, particularly through routes, needs to be assessed when identifying suitable locations for park and ride facilities. Park and ride facilities should be carefully designed and sensitively landscaped to help to reduce their visual impact.
There are traditionally two types of scheme:
- those providing parking at railway stations on routes serving town or city centres; and
- those providing parking on the fringe of towns or cities for bus routes to the town centre.

7.6 The first type can have the effect of reducing the amount of travel undertaken by car, though by improving access by longer distance rail commuting it may increase travel distances. In these cases it is important to ensure that parking is secure and that the location of the car park does not deter easy pedestrian or cycle access to the station, or remove the possibility for high density housing or employment development adjacent to it.

7.7 The second type of scheme is usually designed to avoid traffic congestion and might increase the total public parking stock. The siting, design and security of such schemes should be considered in any planning proposal. To ensure their effectiveness, such schemes should be accompanied by public transport priority measures and high quality service provision, such as regular services, comfortable buses, short waiting times, and quick access to the town or city centre. However, care should be taken (for example through tariff structures) to avoid generating additional commuting travel by car. Sites that encourage flows both into and out of town centres are advantageous to successful operations. For this reason, if development requiring car parking is exceptionally permitted in edge of town or edge of centre locations, consideration should be given to using the car park as a park and ride location where this is supported by the RTP.

7.8 Encouragement should be given to the development of new forms of park and ride schemes, which maximise the opportunity for achieving accessibility in a sustainable manner in rural and urban areas. For example, new park and ride schemes may seek to maximise the opportunities presented by bus and water bus interchanges. ‘Park and share’ sites where car users can meet and leave cars, continuing the journey in a shared vehicle, is another example where sustainability benefits are gained through reducing single occupancy journeys.
8. Planning for Transport Infrastructure

Roads

8.1 The Assembly Government is responsible for trunk roads in Wales, which consist of a core network of nationally important strategic trunk roads and other trunk roads. Strategic trunk roads and motorways have a national and international role, providing a network of high quality roads carrying long distance traffic between major centres. The highway authority for other roads is the unitary authority, referred to as the “local highway authority”.

8.2 In national parks, land use planning is the responsibility of the national park authority while the highway authority remains the unitary authority. Close co-operation is required between the planning and highway authorities to ensure the efficient operation of the road network is maintained while the environmental impacts of traffic and road improvements are minimised and the purposes of the national park designation respected.

8.3 Planning authorities should use development plan policies and development control decisions to reduce the need to use trunk roads and other through routes for short local journeys, particularly where they form part of the strategic network. Development plans should specify the primary route network, including trunk roads and separately identify the core network. Annex C provides further advice on the definitions of highway routes. Developments in the vicinity of trunk roads and local roads of strategic importance, or their junctions, can add significantly to local traffic movements and reduce the effectiveness of the road network. Planning authorities should identify these through routes as corridors for movement adjacent to which development will be resisted.

8.4 The Highways Act 1980 provides the statutory framework for the consideration of proposed trunk road and motorway schemes. Such proposals should be included in development plans as they can have an important influence on patterns of development. Plans should include all schemes in the published trunk road programme giving an indication of their timing, where known. Development plans should address any land use pressures created by these routes, including those associated with environmental protection and mitigation requirements. However, examinations of development plans should not duplicate debate possible under the 1980 Act about trunk roads and motorway proposals. Circumstances
where objections to trunk road and other schemes may be disregarded by the planning authority are defined in the Planning and Compulsory Purchase Act 2004\(^51\).

8.5 Schemes which already have planning permission may not be the subject of development plan objections. Consideration of schemes during preparation of a plan is therefore confined to local highway schemes, which have not yet received planning permission. However, if planning permission for a scheme has expired then the proposal should be assessed through the development plan process, unless the scheme is abandoned.

8.6 Local authorities must apply for planning permission for their own development proposals such as road schemes. Such applications must be published and where they affect existing or proposed trunk roads local authorities should consult Transport Wales within the Assembly Government. Where local highway authorities seek to grant themselves planning permission for development that consists of, or includes, the construction of a new road scheme, which:

- has not been subjected to development plan procedures; or
- is in conflict with the development plan,

they are required to notify it to the Assembly Government in accordance with The Town and Country Planning (Development Plans and Consultation) Directions 1992\(^52\)\(^53\)\(^54\).

8.7 The need for motorway and roadside service areas should be addressed within the development plan, and clear criteria should be set out against which applications will be assessed. This may require co-operation between neighbouring authorities to determine optimum locations. Guidance on minimum facilities, access and the spacing of motorway service areas is given in Welsh Office Circular 34/94\(^55\).

Major transport infrastructure projects

8.8 Certain major transport infrastructure projects (other than roads), such as schemes relating to the construction or operation of railways, tramways and other guided transport systems, inland waterways, and works interfering with navigation rights, may be authorised through an Order made under Sections 1 and 3 of the Transport and Works Act 1992 (the 1992 Act)\(^56\)\(^57\). Orders may provide for the carrying out of works, land acquisition and ancillary matters. The promoter should apply...
to the Assembly Government for an Order via the Transport and Works Processing Unit in the Department for Transport. Any planning consent, which is required may be sought separately by the promoter of the Order. However, if the promoter seeks planning consent when applying for the Order, the Assembly Government can if it makes the Order, direct that planning permission is deemed to be granted. Once the Order is made, the proposed route should be shown in any adopted development plan.

8.9 Depending on the range and nature of objections, schemes may be considered at a public inquiry, at which the planning aspects can be fully considered before any Order is made. Where the scheme is of UK significance, the Transport and Works Act provides for Parliament to debate the principle of the application. The Assembly Government may not make an Order to authorise a scheme of national significance unless both Houses of Parliament have passed a resolution approving the proposals in principle.

8.10 Procedure rules made under the 1992 Act require an Environmental Statement to accompany applications for Orders to carry out works of a type in respect of which the European Council Directive on Environmental Impact Assessment applies. The applicant for an Order may ask the Assembly Government for a decision on whether an environmental statement is required or for an opinion on the scope of an environmental statement.

Freight

8.11 Land use planning can have a significant impact on distribution, through policies and decisions on patterns of development and transport infrastructure. RTPs will develop regional actions to implement the Wales Freight Strategy. Such work may assist planning authorities in considering the strategic significance of freight access to industry and commerce when reviewing development plans and determining planning applications. Wherever possible, planning authorities should promote the carriage of freight by rail, water or pipeline rather than road where it forms a feasible alternative for part or all of the journey. Specific advice on freight transport by rail or water is provided in the sections on railways (paragraphs 8.13 and 8.14), shipping (paragraph 8.15) and inland waterways (paragraphs 8.16 and 8.17).
8.12 Development which attracts substantial movements of freight (including large scale warehousing, distribution and manufacturing which uses bulky raw materials or produces bulky products) should be located away from congested inner areas and residential neighbourhoods. Development plans should identify and allocate sites for distribution, warehousing and bulk-consuming/producing manufacturing which have direct access to the rail network and/or to the local distributor road network, trunk or principal road network. Wherever possible new freight facilities should be located adjacent to railways and/or ports to promote modal transfer of freight. Smaller scale freight movements, particularly those serving developments near residential areas or in town centres, need to strike a balance between the need to protect the vitality of the local economy, and the overall quality of life for local residents. Local authorities may wish to consider the potential for attaching conditions restricting hours of access when determining such applications.

Railways

8.13 Local authorities, when preparing development plans and RTPs, should consider the potential for promoting increased use of the railways for both passenger and freight movement. Where development plan/RTP proposals identify a need to open new stations or routes or improve the frequency of services, local authorities will have to negotiate with Network Rail, the train operating company, the Department for Transport and the Assembly Government’s Rail Division.

8.14 When preparing development plans and where appropriate in determining planning applications, planning authorities should:

- allocate land for rail infrastructure including new or enhanced stations, park and ride, and public transport interchange facilities;
- avoid permitting development that would prejudice programmed improvements to rail infrastructure;
- consider the need for multi-modal transfer facilities between rail, sea and road freight and where appropriate identify sites in development plans;
- where possible locate employment and distribution sites adjacent or close to the rail network to maximise the potential for carriage of freight by rail;
• safeguard from development unused or underused rail sidings and access to them where there is a possibility that they could be used for transport purposes in the future;

• ensure that disused railways are not severed by new development and that essential structures such as bridges and tunnels and line-side clearances, are retained if there is a realistic prospect for their use for transport purposes in the future; and

• make provision for the interim use of disused rail alignments as open space corridors for walking and cycling routes.

Shipping

8.15 Coastal shipping in conjunction with the major navigable waterways provides an environmentally friendly means of moving freight. This is dependent on the provision of wharves and harbour facilities able to handle and distribute the goods. Planning authorities should work with the port and shipping industries when preparing development plans and determining planning applications. They should seek to retain or provide appropriate wharf and harbour facilities for such developments and protect or provide rail and/or road access to them, by designating sites in development plans. The provision of these facilities needs to be weighed against environmental considerations, such as the loss or erosion of estuarine habitats. Where sites are no longer required for port uses, including former rail yards, local authorities and developers should initially consider sustainable transport uses and only if not required for this purpose consider other uses which will promote regeneration. Local authorities should take care to ensure that developments intended to regenerate ports are not incompatible with any nearby port operations.\(^6\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!##
waterway. Proposals for waterside development should seek to enhance the use, enjoyment and setting of the adjacent waterway\textsuperscript{64}.

8.17 Development proposals, development plan policies, or the construction or improvement of infrastructure including roads should be assessed for any impacts on inland waterways. In particular, care should be taken to avoid severing or adversely affecting inland waterways. Local authorities should, where appropriate, consult the British Waterways Board (BWB), or other relevant navigation authority. They should also consult the Environment Agency, local waterway interest groups and the Inland Waterway Association (IWA).

**Aviation**

8.18 Airports range in scale from large regional airports, such as Cardiff International Airport with scheduled commercial services, to smaller General Aviation (GA) aerodromes in more rural areas, serving local business needs, the training of pilots and recreational flyers. The Aviation White Paper identified Cardiff as an airport of national significance\textsuperscript{65}.

8.19 Development plans should take into account the contribution of air traffic to the local and Welsh economy and the benefits of having suitable ancillary or dependent facilities. However this should be balanced against the environmental impact on surrounding areas in terms of road and rail access, traffic and noise generation or floodplain protection. Existing sites, including redundant military airfields and airfields with established uses, will often present the best opportunities for acceptable aviation related facilities in so far as neighbouring development has reflected the existing use. Planning conditions may be necessary to limit use of sites to acceptable levels, and this should be made clear in the development plans where appropriate\textsuperscript{66}.

8.20 Airports can also become major generators of traffic and attract a range of unrelated developments. When preparing development plans and in determining planning applications planning authorities need to give careful consideration to the extent to which proposed development is related to the operation of the airport, and is sustainable given the existing and planned levels of public transport. The Department for Transport can assist planning authorities, and should be consulted on development plan proposals relating to airports and aerodromes.

\textsuperscript{64} Waterways for Tomorrow, DETR, 2000

\textsuperscript{65} 'The Future of Air Transport', Department for Transport, 2003

\textsuperscript{66} Welsh Office Circular 35/95 ‘The Use of Conditions in Planning Permissions’
8.21 When determining planning applications, planning authorities should also have regard to the need to consult the Ministry of Defence (MOD) on any specified categories of development located within designated safeguarding areas. Where the planning authority propose to grant planning permission against the advice of the MOD, or not to attach conditions which they have recommended, the planning authority must notify the MOD in sufficient time to enable them to request that the Assembly Government call-in the planning application for determination.

Safeguarding land and planning blight

8.22 Where local planning authorities wish to safeguard land for particular transport proposals, including road, rail, light rail or interchange schemes, they should do so through a proposal in the development plan. When the precise route of a proposed new or improved road is known at the time of preparation of development plans, this should be shown on the proposals map as the route to be safeguarded. When the precise route is not known, but where proposals are sufficiently advanced the authority may define on the proposals map the area of land over which it intends to apply a safeguarding policy. The use of diagrammatic lines on the proposals map to illustrate the route should not be used where it would be misleading.

8.23 Blight should be kept to a minimum by including in plans only firm schemes on which work will commence within the plan period. Planning authorities should consult with the relevant transport infrastructure authorities to ensure the feasibility of a scheme commencing within the lifetime of a plan. This timescale limitation does not apply to the safeguarding of disused railway lines or disused inland waterways where their re-use for transport purposes may be a realistic possibility after the end of the plan period. The process of preparing or amending development plans should review transport proposals and remove or revise proposals, which have previously been safeguarded and are now revised or abandoned.
9. Assessing Impacts and Managing Implementation

Transport assessment (TA)

9.1 Transport assessments provide the information necessary to assess the suitability of an application in terms of travel demand and impact. The transport assessment process should include the production of a ‘Transport Implementation Strategy’ (TIS) for the development. This should set objectives and targets relating to managing travel demand for the development and set out the infrastructure, demand management measures and financial contributions necessary to achieve them. The TIS should set a framework for monitoring the objectives and targets, including the future modal split of transport to development sites. Annex D sets out more detail on TAs.

9.2 Developers should be required by local authorities to submit transport assessments to accompany planning applications for developments that are likely to result in significant trip generation (see Annex D for suggested thresholds). This requirement should be defined and secured through a policy in the development plan with relevant detail in SPG. The precise scope and content of each TA will depend upon the scale, travel intensity and characteristics of the proposal. In general TAs should, as a minimum, provide information on the likely modal split of journeys to and from the site. The TIS should detail the measures proposed to improve access by public transport, walking and cycling and reduce the number and impacts of motorised journeys associated with the proposal.

9.3 Early discussions between developers and the relevant planning and highway authorities are essential before planning applications are submitted, to ensure agreement is reached on the scope of the TA, including geographical extent, and to establish what data exists or what surveys are required. Annex D provides additional guidance on the application and scope of transport assessments.

9.4 TIS objectives should be based on development plan policies and strategy relating to movement. The objectives should also support the overall plan strategy, transport and parking policies as well as other relevant plans and strategies such as the RTP or the Health, Social Care and Well-being Strategy. Planning authorities may want to provide guidance on how TIS objectives are likely to vary depending on the location of the development within the plan area, for
example to reflect the different needs of urban and rural areas. This could be highlighted within the development plan but any matters of detail should be incorporated within SPG.

9.5 The monitoring and enforcement of TISs is an important element that should be achieved through the appropriate use of planning conditions and obligations.

9.6 The submission of TIS with a planning application does not necessarily mean the development is acceptable. The inherent sustainability of the location should be the primary consideration, prior to considering the achievement of sustainable movement patterns through the application of the TIS.

9.7 TISs resulting from the TA process are intended to incorporate all the components of a travel plan and ensure these are integrated with design elements of the new development. Various best practice guidance on travel plans can be used to inform TIS production in addition to best practice guidance on urban design and traffic management (see paragraphs 5.4 to 5.13).

Environmental Assessment

9.8 Strategic Environmental Assessment is required for future RTPs and Local Development Plans. Environmental Impact Assessment (EIA) is required for major transport proposals, such as motorways, long-distance rail lines and most aerodromes. For other transport proposals, EIA is required if the particular development would be likely to have significant environmental effects. Where EIA is required for local road schemes, the local highway authority must prepare an environmental statement (ES) and submit it with the planning application. The ES and representations from consultees and the public must be taken into account before planning permission is granted.

9.9 EC Directive 85/337/EEC, as amended by Directive 97/11/EC and Directive 2003/35/EC is implemented in Wales by the Town and County Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. Additional guidance is provided by Welsh Office Circular 11/99 Environmental Impact Assessment. TAs should be incorporated into an ES where the transport impacts of an application are ‘significant’ within the scope of the EIA regulations.
Mitigation of environmental impacts

9.10 Adverse impacts associated with transport infrastructure projects, on the natural, historic and built environment should be minimised. Wherever possible new routes should follow existing gradients, using existing landforms and landscape features to reduce noise and visual impact, subject to safety environmental and economic considerations. Transport schemes should where necessary provide mitigation measures to minimise the impacts caused by the construction and operation of transport infrastructure. Such mitigation measures should be secured by the use of planning conditions or obligations. Specific advice has been provided on the construction and maintenance of roads in upland and lowland areas of Wales, which should be taken into account when considering the choice of route and design of road proposals.

9.11 The adverse impact of transport infrastructure on the environmental, social and economic wellbeing of urban areas, towns, and villages also requires careful consideration. Local authorities should provide developers and others with information on the standards of design, layout and construction which they would expect new roads to follow, especially where the road is to be adopted. Over-engineered access standards should be avoided where possible. The design and standard of such access roads should have regard to the local surroundings, and to fitness of purpose so that developers and future users are not unreasonably burdened with costly and/or inappropriate access roads.

Travel Plans

9.12 A travel plan may already be in operation by the occupiers at a site where there are proposals to extend or redevelop. The existing travel plan should therefore be integrated into the TA process where significant additional trips are likely or significant effects on the surrounding transport networks could occur. The existing travel plan would therefore contribute to the baseline assessment.

9.13 Developers may voluntarily submit a travel plan with a planning application, for example to illustrate existing promotion of sustainable travel activity at the site. However, in order to determine the necessity and effectiveness of the travel plan, it is preferable that a TA is undertaken and the travel plan developed as a component of the TIS. The weight to be attached to a travel plan when determining a planning application will depend upon the extent to which it (or parts of it) can be secured through a planning condition or obligation and the extent
to which it affects the acceptability of the development proposed. Development that is unacceptable should never be permitted because of the existence of a travel plan if the implementation of that plan cannot be enforced.

9.14 Travel plans not linked to planning applications remain an important tool to raise the awareness of the impacts of travel decisions. The Assembly Government wishes to promote the widespread adoption of travel plans by businesses, schools, hospitals, tourist attractions and other significant travel-generating uses. In order to demonstrate the benefits to sustainable transport that can be achieved by the adoption of travel plans, local authorities should consider producing their own plans. Travel plans should relate to targets for the reduction of road traffic and the promotion of walking, cycling and public transport contained in the local RTP.

9.15 Travel plans may be prepared, individually or jointly, by the owners and operators of existing or proposed developments. Joint travel plans can be part of a TIS, and both travel plans and TISs should set out proposals for the delivery of more sustainable travel patterns.

Access to roads

9.16 Many proposed developments will require access to the existing highway network. The number of accesses permitted will depend upon the type and nature of the road. Similarly, the type of access provided should reflect the type of road and the volume and character of traffic likely to use the access and the road (taking into account the street design guidance in paragraphs 5.4 to 5.13). It may be appropriate to require major road or junction improvements if the volume or character of traffic or type of road warrants it. Other options may include traffic calming or other traffic management measures. The combining of individual access points along a road should be encouraged to help improve road safety. Whatever the access, good visibility is essential for drivers and non-drivers alike. Technical advice on visibility can be found in Annex B.

9.17 As the highway authority for trunk roads, the Assembly Government requires that works to a trunk road resulting from a development are constructed to the standards applied to its own schemes. Local highway authorities are free to adopt their own policies in respect of non-trunk roads. Consultation procedures to be adopted when dealing with planning applications affecting roads are contained in Annex E.
9.18 The extra trips generated by a proposed development may bring forward the need for transport improvements in the vicinity of the scheme, and beyond. To the extent that highway improvement works are necessary to enable a proposed development to go ahead, conditions may be imposed on the permission, making its commencement/occupation subject to completion of those highway works. Alternatively, a developer may be invited to conclude an agreement under section 278 of the Highways Act 1980 for the provision of highway works. In some circumstances the use of planning obligations may be appropriate to ensure improved transport provision. Annex F gives more details of appropriate conditions for works in the highway.

Planning conditions

9.19 Planning conditions may legitimately be imposed on the grant of planning permission to secure transport measures and facilities as part of the proposed development. All conditions must be clearly justified and be in accordance with the policy tests. Some examples of matters that can be covered by conditions include:

- the provision of safe and convenient cycle and pedestrian routes both on and off site, where the need for off-site routes arises from the development;
- secure cycle storage and changing facilities on site;
- on site or off site infrastructure for public transport including bus stops, lay-bys, and real time passenger information systems;
- the provision of information to promote access to the development by public transport, walking and cycling;
- inclusive access arrangements on or off site;
- mitigation of environmental impacts, including agreements and engineering details;
- the supply, management or use of car parking spaces (on site);
- details on deliveries to the site which may include vehicle specification, hours of operation, lorry parking and turning spaces;
- junction and road layouts (see also Annex F); and
- TISs and travel plans.
Planning obligations

9.20 Planning authorities may use planning obligations to secure improvements in roads, walking, cycling and public transport, whether as a result of a proposal on its own or cumulatively with other proposals and where such improvements would be likely to influence travel patterns, either on their own or as part of a package of measures. Development plans or SPG should identify the likely nature and scope of transport contributions that would be expected as part of the development of key sites in the plan, linked to the transport priorities of the area and referring to the RTP where appropriate. Pooled contributions towards infrastructure capacity issues may be appropriate when a number of individual developments create a combined need or an unacceptable cumulative impact. Such requirements should be set out in advance through the development plan.

9.21 Circular 13/97 sets out the way in which planning obligations can be applied, but practical examples relating to influencing movement to a site include the funding of additional or improved bus services, commuted sums towards new or improved bus and rail interchanges, and improvements to pedestrian or cycle routes which go near the site or make it easier to access the site. The TIS produced through TA will provide an integrated approach to addressing movement to a site and its implementation, enforcement and monitoring may be secured through planning obligations. Paragraphs 9.1 to 9.7 provide further guidance on TA.

9.22 The links between the development and the need for infrastructure should be demonstrated and contributions should be fair and reasonable in scale relative to the infrastructure required. This will provide developers with greater certainty as to what will be expected as part of development proposals and provide a firmer basis for investment decisions.

9.23 The objective of using planning obligations in relation to transport should be to secure satisfactory accessibility to sites by all modes with the greatest degree of access being achieved by public transport, walking and cycling. Where improvements to off site transport are necessary before development can take place, a contribution from the developer (payable to the local authority) may be appropriate.

At the time of writing, the UK Government was considering the use of a Planning Gain Supplement, which could be introduced from 2009 and which could have an impact on the scope of planning obligations.

Welsh Office Circular 13/97 ‘Planning Obligations’
9.24 Maximum parking standards mean it is inappropriate for commuted sums to be required in lieu of reduced levels of parking at a site without establishing that harm would be caused by lower provision of parking. However, planning obligations do have a role in managing any off-site impacts resulting from displaced or 'over-spill' parking. Obligations can fund mitigation measures such as controlled parking where over-spill may otherwise unacceptably affect amenity or facilitate joint use of car parks to complement local strategies. Where access or parking problems may result from a development, contributions could be sought for park and ride schemes, including public transport routes still in the planning stage but intended to be brought into operation during the life of the development plan.

10. Cancellations

10.1 Technical Advice Note (Wales) 18: ‘Transport’, (July 1998) is hereby cancelled.
Accessibility

A.1 Accessibility planning has the potential to contribute to a number of Assembly Government priorities including addressing climate change and social exclusion, ensuring sustainable development and contributing to the health and wellbeing of the population of Wales. In order to contribute to these priorities, accessibility planning is not something that should be confined to land use or transport planning but should be incorporated into service planning by a wide range of service providers. The Wales Spatial Plan provides a suitable framework to support this work and RTPs will include accessibility planning. Local planning authorities will need to engage with its public sector partners to ensure its success.

A.2 Accessibility can be measured in respect of reaching many destinations from a given origin, (origin accessibility), or the ease with which a given destination can be reached by potential visitors (destination accessibility). Different accessibility measuring techniques may be appropriate depending upon local circumstances and the nature of the plan proposal or planning application. Techniques include simple measures of travel time, Geographic Information System (GIS) based tools and complex calculations of accessibility based on transport models. Detailed advice on measuring accessibility has been issued by the DfT and similar guidance for Wales is likely to be part of the RTP guidance. Accessibility planning undertaken for the RTP will be useful to inform planning policies and decisions.

A.3 Accessibility profiles may be prepared for people and freight for all modes to determine whether a location has the potential to minimise travel particularly by private car. The profiles should relate to both access from housing and access to employment and other destinations. The profiles should reflect the catchment area served and the quality of service resulting in relative indicators of accessibility for different sites. Accessibility profiles are a useful tool in sifting candidate sites in development plans and planning authorities may choose to undertake such work themselves or require it from promoters of sites. If the latter approach is taken then clear methodology should be provided by planning authorities, to ensure consistency and enable comparison. Accessibility profiles should be included as part of transport assessment accompanying a planning application. Methodology should be agreed in the scoping discussions between the applicant, planning and highway authorities.

87 ‘Guidance on Accessibility Planning in Local Transport Plans’, DfT, 2004
Visibility Standards

B.1 The visibility provided along a link will affect the speed at which drivers choose to travel. Therefore the prevailing traffic speed can be influenced by the design of the environment.

Stopping sight distance

B.2 Stopping sight distance (SSD) is defined as the minimum distance that drivers need to be able to see ahead of themselves, in order to stop if confronted by a hazard. SSD is usually related to the actual (for existing streets) or design (for new streets) 85th percentile wet weather speed of vehicles on the major link.

B.3 Recommended SSD are included in Tables A and B. Table B is designed for roads in built up areas where actual or design speeds are 60km/h or below (not applicable to trunk roads). Figures in Table B may be interpolated from this table or calculated as in Manual for Streets. SSD will be affected by gradient and should be adjusted accordingly.

Table A

<table>
<thead>
<tr>
<th>Where road traffic speed known: (85th percentile wet weather)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed traffic speed (kph)</td>
</tr>
<tr>
<td>(mph)</td>
</tr>
<tr>
<td>SSD (metres)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where road traffic speed not known:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed limit (mph)</td>
</tr>
<tr>
<td>SSD (metres)</td>
</tr>
</tbody>
</table>

*Includes an allowance for motorists travelling at 10 kph above the speed limit

Table B

<table>
<thead>
<tr>
<th>85th percentile wet weather speed (kph)</th>
<th>60</th>
<th>50</th>
<th>48</th>
<th>45</th>
<th>40</th>
<th>32</th>
<th>30</th>
<th>25</th>
<th>24</th>
<th>20</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>(mph)</td>
<td>37</td>
<td>31</td>
<td>30</td>
<td>28</td>
<td>25</td>
<td>20</td>
<td>19</td>
<td>16</td>
<td>15</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>SSD (metres)</td>
<td>56</td>
<td>43</td>
<td>40</td>
<td>36</td>
<td>31</td>
<td>22</td>
<td>20</td>
<td>16</td>
<td>15</td>
<td>12</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Manual for Streets

Visibility splays at junctions

B.4 Visibility splays at priority junctions and crossroads enable drivers and other road users to see one another at points of conflict. The visibility splay is formed from two right-angled triangles of X and Y dimensions, defined as follows:
• **X-distance** is the distance back along the minor arm of a junction. It is generally measured from the give way line (or the point where the line would be placed if no line markings are actually provided). The X-distance is normally measured at the centreline of the minor arm, but in some circumstances (for example where there is a wide splitter island on the minor arm) it will be more appropriate to measure it from the actual position of the driver.

• **Y-distance** represents the distance that a driver who is about to exit from the minor arm can see to the left and right along the main alignment. For simplicity it is measured along the nearside kerb line of the main arm, although vehicles will normally be travelling a distance from the kerb line of the main arm. The measurement is taken from the point where this line intersects the centreline of the minor arm (unless, as above, there is a splitter island in the minor arm).

When the main alignment is curved and the minor arm joins on the outside of a bend, another check is necessary to make sure that an approaching vehicle on the main arm is visible over the whole of the Y distance. This is done by drawing an additional sight line which meets the kerb line at a tangent.

Some circumstances make it unlikely that vehicles approaching form the left on the main arm will cross the centreline of the main arm - opposing flows may be physically segregated at that point, for example. If so, the visibility splay to the left can be measured to the centreline of the main arm.

### X-Distance

**B.5** A minimum X-distance of 2.4 metres should normally be used in most situations, as this represents a reasonable maximum distance between the front of the car and the driver’s eye.

**B.6** A minimum figure of 2m may be considered in some very lightly trafficked and slow speed situations, but using this value will mean that the front of some vehicles will protrude slightly into the running carriageway of the major street. The ability of drivers and cyclists to see this overhang from a reasonable distance, and to manoeuvre around it without undue difficulty, should be considered.

**B.7** Using an X-distance in excess of 2.4m is not generally required in built-up areas or other areas in circumstances when junction capacity is not a relevant consideration. X-distances on non-trunk roads should be kept to the minimum necessary for safe operation where harm is likely to be caused to the landscape or historic environment, especially in National Parks, Areas of Outstanding Natural Beauty and conservation areas.

**B.8** Longer X-distances are not safety critical. They enable drivers to look for gaps as they approach the junction. This increases junction capacity for the minor arm, and so may be justified on this basis in some circumstances, but it also increases the possibility that drivers on the minor approach will fail to take account of other road users, particularly pedestrians and cyclists. Longer X-distances may also result in more shunt accidents on the minor arm[^88].

Y-Distance

B.9 Requirements for Y-distance should be based on SSD criteria. Recommended values for SSD on streets in built-up areas are given in Tables A and B above.

Obstacles to Visibility

B.10 Defined parking bays should be provided outside the visibility splay. The impact of other obstacles, such as street trees and street lighting columns, should be assessed in terms of their impact on the overall envelope of visibility. In general, occasional obstacles to visibility that are not large enough to fully obscure a whole vehicle or a pedestrian, including a child or wheelchair user, will not have a significant impact on road safety.

B.11 Where planning applications are submitted within an existing development site and served by an existing substandard access, there should be scope for a limited redevelopment that incorporated a substantial access improvement, even though the improved access would still be below standard.

Visibility along the Street Edge

B.12 Vehicle exits at the back edge of the footway mean that drivers emerging from properties will have to take account of people on the footway. The absence of wide visibility splays at private driveways will encourage drivers to emerge more cautiously. Consideration should be given to whether this will be appropriate, taking into account the following:

- the frequency of vehicle movements;
- the amount of pedestrian activity; and
- the width of the footway.

B.13 When it is judged that footway visibility splays are to be provided, consideration should be given to the best means of achieving this in a manner sympathetic to the visual appearance of the street. This may include:

- use of boundary railings rather than walls; and
- omission of boundary walls or fences at the exit location.
 Definitions of Highway Routes

Trans European Transport Network (TEN-T)

C.1 A network of European highways, the ‘E’ routes are of international importance and link the principal ports with the major cities. They are made up of selected trunk roads and motorways.

Strategic Highway Network

C.2 The Strategic Highway Network (SHN) comprises motorways and trunk roads and supporting principal county roads providing main through routes between centres of population, industrial areas, ports and airports, tourism centres, military establishments and agricultural centres.

Trunk Roads

C.3 The trunk road network is a system of strategic routes of national importance which cater for the through movement of long distance traffic. The network comprises motorways (‘M’) and all purpose roads (‘A’). Where part of an all purpose road is developed to appropriate standards and motorway regulations are applied, the letter ‘M’ is added to that part of the road e.g. A48(M).

C.4 A core network of nationally important strategic trunk roads has been identified to help determine future priorities for investment, both in maintaining and improving the network. This core network comprises the key east-west links in North Wales (A55, and A550) and South Wales (M4, M48, A40, A48(M), A465, A477 and A4076) together with vitally important north south links (A470, A449, A483 from Newtown northwards, A487 north of Maentwrog and A4060).

Primary Routes

C.5 The primary route network is made up of the most important traffic routes in urban and rural areas and includes all the trunk roads and a large proportion of principal roads but does not include motorways. The routes are clearly distinguished by directional signs with a green background having white letters and yellow route numbers. These are agreed by the Assembly Government after consultation with the highway authority.

Categories of County Roads

Classified Principal Road Network

C.6 These are highways which have more than local importance and are an essential route for traffic, particularly between or off trunk roads. They act as regional and district distributor routes and complement the trunk road network. The network is almost entirely made up of all-purpose roads (‘A’).
**Classified Non-Principal Roads**

C.7 These are a subsidiary system of roads of more localised value giving access to industrial, commercial and residential sectors. Sometimes for ease of traffic direction and route continuity, these are denoted by the letter ‘B’.

**Unclassified Roads**

C.8 These are feeder roads comprising minor rural roads as well as urban estate roads.
Transport Assessment

D.1 Transport assessment (TA) should clearly set out what the impact of a proposed development, or redevelopment, are likely to be so that they are easily understood. It should be based on the person and freight trips generated by the development and include analysis of potential effects on existing movement patterns. The output of the TA should be a Transport Implementation Strategy (TIS) that addresses relevant transport objectives for the site, guided by the development plan and the issues identified in the analysis of person movements.

D.2 The aims of undertaking the TA and producing a TIS are to:

- understand the transport impacts of the development;
- clearly communicate the impacts to assist the decision making process;
- demonstrate the development is sited in a location that will produce a desired and predicted output (for example in terms of target modal split);
- mitigate negative transport impacts through the design process and secured through planning conditions or obligations;
- maximise the accessibility of the development by non-car modes;
- contribute to relevant development plan and RTP objectives relating to accessibility of services and modal share.

Application

D.3 Planning authorities should set out in their development plans the circumstances in which TA will be required to accompany planning applications. They may also include policies relating to specific land use types where evidence shows movement patterns are likely to result in significant local impacts.

D.4 TAs should be secured for developments (including extensions or changes of use) that generate significant levels of movement or are likely to have significant effects on existing patterns of movement. The following table sets out suggested thresholds above which TA should be required, except where planning authorities set out in SPG different ‘scale of development’ triggers that are locally sensitive, or where they highlight particular locations in the plan area where the transport network is particularly sensitive and consequently thresholds for requirement assessments will be lower.
### USE

<table>
<thead>
<tr>
<th>USE</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food retail</td>
<td>&gt; 1,000m² gross floor area</td>
</tr>
<tr>
<td>Non-food retail</td>
<td>&gt; 1,000m² gross floor area</td>
</tr>
<tr>
<td>Cinemas and conference facilities</td>
<td>&gt; 1,000m² gross floor area</td>
</tr>
<tr>
<td>Leisure facilities</td>
<td>&gt; 1,000m² gross floor area</td>
</tr>
<tr>
<td>Business</td>
<td>&gt; 2,500m² gross floor area</td>
</tr>
<tr>
<td>Industry</td>
<td>&gt; 5,000m² gross floor area</td>
</tr>
<tr>
<td>Distribution and warehousing</td>
<td>&gt; 10,000m² gross floor area</td>
</tr>
<tr>
<td>Hospitals</td>
<td>&gt; 2,500m² gross floor area</td>
</tr>
<tr>
<td>Higher and further education</td>
<td>&gt; 2,500m² gross floor area</td>
</tr>
<tr>
<td>Schools</td>
<td>All new schools (see D5 below)</td>
</tr>
<tr>
<td>Stadia</td>
<td>&gt; 1,500 seats</td>
</tr>
<tr>
<td>Housing</td>
<td>&gt; 100 dwellings</td>
</tr>
<tr>
<td>Hotels</td>
<td>&gt; 1,000m² gross floor area</td>
</tr>
</tbody>
</table>

### D.5

All new schools should be subject to TA. The level of analysis should provide the decision maker with suitable data regarding the accessibility of the site by all modes and the impacts on movement patterns likely to occur. The level of detail should be proportionate to the scale of the development. The objectives of the TIS should as a minimum include the creation or improvement of safe cycling and walking routes, restricting car access around schools, providing adequate cycle storage, and a framework for future school travel planning activity.

### D.6

Hospitals can generate substantial volumes of traffic and it is therefore important to undertake robust transport assessment. For hospitals and other health care facilities the TA should clearly set out how the proposed location meets sustainability principles. The TIS in turn should include measures to promote non-car access to the site especially for staff and visitors and should set out robust access arrangements that are sensitive to the differing needs of its users. For example the access arrangements should cater for varying levels of personal mobility and recognise the different times that access is required such as to cover staff shifts, visiting periods or day patients. The robustness of access arrangements is important to promote non-car access; so for example if a car share scheme is proposed in a TIS then it should be backed up by a 'taxi home scheme'. Early morning or late night access must be given particular consideration and measures considered necessary to permit the development in that location should be secured through planning conditions or obligations.

### D.7

Where a number of small developments are proposed in close proximity to one another it may be more appropriate to undertake one overarching assessment and this could be done as part of a master-planning exercise. Local planning authorities may be able to anticipate such applications and assess the cumulative transport effects through the development plan.

### D.8

All developments will require service access at some time during their operational life. Service access for freight or delivery vehicles should be integrated into the analysis and subsequent implementation strategy. For some industrial and warehousing proposals, freight movement will be more significant than person trips.
Process

D.9 The TA process is envisaged to contain 8 elements, four of which should be incorporated into a document to accompany planning applications. The stages are outlined in Figure 1.

Scoping

D.10 Early discussions between developers and local authorities are essential to agree the scope of the assessment and the data required to inform the assessment in order to avoid delays in determining the application. Discussion should include:

- the location, type and scale of the development;
- whether the development is in line with national guidance and development plan policy;
- whether alternative locations should be considered (or if the developer only has one site, what other type or scale of development may be more appropriate);
- the content and level of detail of the transport assessment;
- any extension of the design assessment date;
- objectives for the TIS;
- data requirements for the assessment and subsequent monitoring arrangements;
- the requirements of any planning obligation.

It may be useful to set arrangements for future contact to discuss any amendments to proposals that emerge.

The Transport Assessment Document

D.11 The report detailing the TA that accompanies a planning application should be clear and understandable. Appendices should be used for technical evidence backing up the statements made in the main text. The level of analysis and detail included within the report should be proportional to the scale, complexity and potential impact of the development proposals and this should be agreed in the scoping stage. Figure 1 provides an example of what they should contain.

D.12 Transport evaluation should contain some consideration of site accessibility. General advice on accessibility is set out in Annex A. Guidance on assessing traffic impacts of a development has been set out by the Institute of Highways and Transportation (IHT)\(^89\). General advice and guidance on the content of transport assessments is contained in Appendix A of ‘Transport Assessment and Implementation: A Guide’ (2005) produced by the Scottish Executive (Note that this qualifies parts of the IHT Guidance).

Figure 1 - Transport Assessment Process

**Scoping**
Discussions between the applicant, planning and highway authorities clarifying the geographical extent of assessment and data collection requirements.

**Baseline surveys**
Collection of relevant survey data either through undertaking site surveys or collating existing survey information.

**TA DOCUMENT consists of:**

**Development proposals**
Description of the proposed development, including a record of any alterations resulting from iterations of the assessment process.

**Transport evaluation**
A brief description of current movement patterns in and around the site including accessibility by different modes, the size and extent of the likely catchment area and a prediction of numbers travelling by each mode.

**Transport implementation strategy (TIS)**
Set objectives for the development referring back to the development plan. Set out the measures to achieve those objectives. Identifies the impacts that will be mitigated by the strategy including proposed enforcement through conditions or obligations. Details for monitoring the scheme.

**Assessment of TIS**
Consideration of the potential impact of the development against the baseline, and a clear description of the impacts of the development with the TIS against the baseline.

**Decision making process**
Formal determination of planning application.

**Monitoring**
Monitoring undertaken with regular reporting to the local planning authority on performance against TIS objectives.
Transport Implementation Strategy (TIS)

D.13 The TIS is intended to achieve three things:

- identify what policy objectives and requirements are set by the development plan in terms of access to the development and movements in and around the site;
- identify what access arrangements are required for a successful development (meeting the needs of the developer, end user, addressing impacts on neighbours and existing movements surrounding the site); and
- specify the package of physical, management and promotional measures needed to accommodate the requirements identified above, such as physical infrastructure, the design and location of buildings, parking management, financial incentives and dedicated travel plan co-ordinators.

D.14 TIS should contribute towards the aims of the development plan. This includes any specific development plan objectives to overcome particular localised difficulties e.g. for an area of particularly significant congestion, an historic area requiring protection or an air quality management area.

D.15 Transport objectives for the development will also need to consider commercial requirements and environmental constraints. The TIS should include a package of measures needed to achieve its objectives. These should include physical measures including the site layout, management and promotional measures such as demand management through parking restrictions or the provision of information or the employment of a travel plan co-ordinator.

D.16 Travel plans have in the past concentrated on the promotion of non-car modes. A TIS is an opportunity to not only replicate such previous success but also to strengthen integration of these measures with the physical design of the development. Travel plans still have a role to play as they may be a specified component of a TIS especially for speculative development when the end user is unknown. Measures such as improvements to public transport, walking and cycling provision and car sharing schemes may be suitable for inclusion in the package.

D.17 The TIS may include financial information relevant to the implementation of the strategy. It should also propose suitable conditions or obligations to secure implementation. The proposed scheme of monitoring also needs to be set out as part of the TIS. The need for monitoring is discussed in paragraph D20.

Assessment of TIS

D.18 Once the package of measures is assembled the proposal should be tested against the objectives of the TIS. This will involve forecasting the change in movement patterns that would result from the implementation of the TIS compared to the baseline situation and that predicted for the initial transport evaluation.

Decision making process

D.19 The transport assessment document incorporating the TIS should be a key aid to the decision making process. As such it should be written in a clear and understandable manner.
Monitoring

D.20 If granted planning permission, monitoring by the developer and future occupiers will be important to allow local authorities to check whether TIS objectives are being met by the development, and if not, whether they provide evidence to guide a response by either the developer, local planning authority or other bodies. It is anticipated that for a small number of the larger developments, a requirement might be placed on developers to undertake certain actions depending on the movement characteristics of the development (trigger points). However, for the vast majority of developments, monitoring will be useful in order to learn from both the developer’s perspective in terms of the efficiency of the development and from the local planning authority’s perspective, informing the direction of future policy, particularly in terms of development plan and RTP policies relating to transport assessment.
Planning Application Procedures

Consultations with Highway Authorities

E.1 The highway authority for trunk roads and motorways is the Welsh Assembly Government. The highway authority for other roads is the unitary authority.

E.2 Local highway authorities are consulted if a planning application consists of or includes:
   a. the formation, laying out or alteration of any means of access to any road for which it is the highway authority;
   b. any other development which appears to the local planning authority to be likely to result in a material increase in the volume or material change in the character of traffic entering or leaving a classified or proposed road or to prejudice the improvement or construction of such a road; or
   c. development which consists of or includes the laying out or construction of a new street.

E.3 The Assembly Government must be notified (and a copy should be sent to the relevant trunk road agent) of any application for planning permission for development which consists of or includes:
   a. the formation, laying out or alteration of a means of access to any part of a trunk road which is subject to a speed limit exceeding 40 miles per hour; or
   b. any other development of land within 67 metres (or such other distance as may be specified) from the middle of a highway for which the Assembly Government is responsible or intend to construct or improve.

E.4 The Assembly Government is also consulted where it appears to the planning authority that the development is likely to create or attract traffic which will result in a material increase in the volume or material change in the character of traffic entering or leaving a trunk road or using a level crossing over a railway. Details should be sent both to Transport Wales and its relevant trunk road agent. The trunk road agent will then provide advice to the Assembly Government. The operator of the rail network is also consulted where development will affect the use of a level crossing. Apart from interchanges with other parts of the trunk road network, the point at which traffic enters or leaves a trunk road could range from a simple farm access, to a major county road, which connects into the network at a roundabout or grade separated junction. When assessing whether or not to consult the Assembly Government under Article 10 (1)(e) of the GDPO, local planning authorities must give full consideration to the effects a development’s traffic would have at the junction particularly in respect of the additional turning movements this will create. As a broad guide the Assembly Government would regard an increase in turning movements in the order of 5% as material in most cases, that is, a 5% increase of traffic using any link of the junction. Where the capacity of the junction is, or is near to being exceeded, a smaller percentage increase on a link would normally be material, as would any additional turning movements which in

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90 A “classified road” is defined in the Town and Country Planning (General Development Procedure) Order 1995 (S.I. 1995/419); in practice, it is an A, B, or C road that is not a trunk road.

91 These provisions are set out in Article 10 of the Town and Country Planning (General Development Procedure) Order 1995.
the case of, for example, heavily laden slow moving vehicles, might have serious safety implications for trunk road users.

E.5 The Assembly Government has the power to direct the local planning authority to refuse an application for planning permission or to apply specified conditions to a planning permission. In planning appeal decisions, the Assembly Government, or the Inspector, will apply appropriate weight to representations made by Transport Wales, irrespective of whether they have been conveyed by direction to the local authority or not.

E.6 Planning authorities may not decide an application on which consultation with highway authorities is necessary until at least 14 days after receipt of the notice by the highway authority or 14 days after receipt of a copy sent direct to the consultee by the applicant, whichever is the earlier. Where the Assembly Government and trunk road agent have been notified of an application under Article 15 of the GDPO, the local planning authority may not decide the application until 28 days after notifying the Assembly Government.

Efficient Procedures

E.7 Outside national parks, local government reorganisation brought local planning and highway functions together within unitary authorities. This has provided an opportunity for consultation procedures to be integrated and the efficiency of handling planning applications to be increased. For planning applications within national parks or affecting trunk roads, external consultations with the appropriate highway authority will still be required although the principles of efficient working are equally as relevant.

E.8 Consultations are a potential cause of delay to a planning authority’s decision on a planning application. There are steps which the parties concerned may take to minimise the risk of delay. Highway authorities should take a positive and helpful attitude towards pre-application enquiries from applicants. They should aim to deal with notifications from planning authorities as quickly as possible, and should advise the planning authority as soon as possible if they foresee any delay. Statistics should he maintained for management purposes of speed of response to those notifications. The workload in both highway and planning authorities can be reduced if highway authorities define types of application on which they do not wish to be consulted. Streamlining of procedures may also be achieved by close liaison between highway and planning authorities, including the use of a liaison officer to inspect applications, provide routine comments and refer the most complex cases to experts in the highway authority.

E.9 Planning authorities should notify highway authorities of applications as quickly as possible, and should ensure that sufficient information is included in the notification to enable the highway authority to consider the matter quickly. A TA will enable highway authorities and others where relevant to reach a view on the likely impact of development proposals on transport in the vicinity and wider area if appropriate. Paragraphs 9.1 to 9.7 and Annex D give further guidance on transport assessment. Planning authorities should be strict in applying deadlines for consultation and notification and should monitor speed of response from highway authorities. If applicants have not already sent a copy direct to the highway authority they might be asked for an extra copy of the application documents, on the basis that this will assist a speedy decision. Planning authorities should flag especially urgent applications. They should also bear in mind that Transport Wales is prepared to offer general advice on road safety matters on all types of road.
E.10 Applicants should have particular regard to highway issues in formulating proposals, in order to avoid lengthy negotiations on an application, or the need for the local authority to meet highways problems by devising conditions to attach to the permission. They should contact the highway authority as early as possible in the formulation of their development proposals if they think the proposals may involve consultations or the possibility of direction by the Assembly Government. It will also be helpful to discuss proposals to carry out work in a highway with statutory undertakers whose apparatus (for example pipes and cables) may be affected, and to send copies of applications direct to the highway authority and any other statutory consultees.
Conditions Requiring Works in the Highway

F.1 Planning authorities may grant planning permission subject to a condition that development should not be commenced or occupied until some obstacle to the development has been surmounted (a ‘Grampian’ condition). This may include the carrying out of highway works. A ‘Grampian’ condition may be necessary where works must be carried out in an existing highway in order to safely and efficiently accommodate traffic created by a development. In the case of a new access to a warehousing development, for example, it might be necessary to widen the existing highway and lay out a ghost island in order to maintain capacity of the existing road or address a safety risk. However, in the case of a new superstore so much traffic might be generated on an existing minor road that a new roundabout or other improvement is needed at its junctions with a major road. In some instances it may also be necessary to provide increased capacity on, or other improvements to, roads affected by the proposed development but away from its immediate vicinity.

F.2 ‘Grampian’ conditions should not be imposed unless planning permission would have to be refused without them but in all other respects the proposal is acceptable in planning terms.

F.3 Developers will be required to pay the cost of any highway improvements where the need is directly created by their development. They should not, however, be required to pay for improvements to deal with existing deficiencies in the road system which would not be made worse by the development. Works which are programmed for improvement by the highway authority may be brought forward to enable the development to proceed, but a financial contribution from the developer is generally required.