



75

PLANNING FOR TRANSPORT





SCOTTISH EXECUTIVE
Development Department

Planning Advice Note

PAN 75

Planning for Transport

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PLANNING SERIES:

- **Scottish Planning Policies (SPPs)** provide statements of Scottish Executive policy on nationally important land use and other planning matters, supported where appropriate by a locational framework.
- **Circulars**, which also provide statements of Scottish Executive policy, contain guidance on policy implementation through legislative or procedural change.
- **Planning Advice Notes (PANs)** provide advice on good practice and other relevant information.

Statements of Scottish Executive policy contained in SPPs and Circulars may be material considerations to be taken into account in development plan preparation and development management.

Existing National Planning Policy Guidelines (NPPGs) have continued relevance to decision making, until such time as they are replaced by a SPP. The term SPP should be interpreted as including NPPGs.

Statements of Scottish Executive location-specific planning policy, for example the West Edinburgh Planning Framework, have the same status in decision making as SPPs.

The National Planning Framework sets out the strategy for Scotland's long-term spatial development. It has the same status as SPPs and provides a national context for development plans and planning decisions and the ongoing programmes of the Scottish Executive, public agencies and local government.

Important Note: In the interests of brevity and conciseness, Scottish Planning Policies do NOT repeat policy across thematic boundaries. Each SPP takes as read the general policy in SPP1, and highlights the other SPPs where links to other related policy will be found. The whole series of SPPs should be taken as an integral policy suite and read together.

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INTRODUCTION

1. This Planning Advice Note (PAN) accompanies SPP17 Planning for Transport. Reference should be made to SPP17 for guidance on policy.
2. Delivery of Scottish Executive policy depends, to a large extent, on action at the local level. The PAN provides good practice guidance which planning authorities, developers and others should carry out in their policy development, proposal assessment and project delivery. The document aims to create greater awareness of how linkages between planning and transport can be managed. It highlights the roles of different bodies and professions in the process and points to other sources of information.
3. The information provided and the examples given in this PAN are not exhaustive. It is intended to be used as an initial reference point. Local flexibility, appropriate to particular circumstances, would be appropriate.
4. Annex A provides links to useful data sources. The remaining annexes are summaries of recent research findings and provide more detailed information on topics covered.

INTEGRATING TRANSPORT

INTEGRATION

5. The aim of Scottish Ministers is to create an accessible Scotland which has a safe, reliable and sustainable transport system.¹ Integration is key to delivery. The integration of land use planning with transport, taking account of environmental aims and policies, and policies on economic growth, education, health² and the objective of a fairer, more inclusive society, is crucial. Planning authorities should identify relevant national and stakeholder strategies and consider their co-ordination.
6. One focus of SPP17 is to achieve better and earlier integration between transport and land use planning at national, regional and local level. Integration can reduce the need to travel and offer more sustainable travel choices. To achieve sustainable development the objectives of SPP17 must be considered in the context of other planning policy and guidance.
7. The intention is for new developments to be user focused and for the transport element to promote genuine choice, so that each mode contributes its full potential and people can move easily between different modes. Consideration should be given to freight logistics as well as person travel.
8. Effective working practice involves different professions understanding and working with one another, either within or outwith planning. Land use planners

¹ Scotland's Transport, Scottish Executive, 2003.

² Improving Health in Scotland: The Challenge, Scottish Executive, 2003.

and transport professionals should work together to develop complementary and co-ordinated policies and proposals which contribute to integration within and between different modes of transport.

9. Table 1 is a generalised indication of the statutory and non-statutory responsibilities of key stakeholders. For policies and proposals to be successful in practice, a willingness to work together across the range of interests is essential.

Table 1 Generalised Responsibilities

<i>Professional</i>	<i>Responsibility³</i>	<i>Body</i>
Development Policy Planner	Policy development	Local authority
Development Management Planner	Proposal assessment	Local authority
Transport Planner/Engineer	Regional Transport Strategy	Regional partnership e.g. SESTRAN
Transport Planner/Engineer	Local Transport Strategy	Local authority
Trunk Road Network Management	Trunk Roads	Scottish Executive Transport Group
SPT	Public transport strategy and project delivery	West Central Scotland
Planning and Transport Consultants	Advice & information to individual clients	Private Sector

TRANSPORT STRATEGIES^{4 5}

10. The 4 regional transport partnerships across Scotland have all developed transport strategies covering their region. These are the product of voluntary joint working between local authorities (including SPT in the west of Scotland) and other stakeholders. Following the Transport White Paper, statutory regional transport partnerships covering the whole of Scotland have been proposed. Regional Transport Strategies will take a strategic approach to transport across the region. They should be closely related to local transport strategies and to structure and local plans.⁶
11. Local Transport Strategies (LTSs) are not statutory, but all local authorities have chosen to produce one. They set out the local authority's objectives, strategies and implementation plans for transport in their area. They should be consistent with the latest guidance from the Scottish Executive Transport Group, SPP17 and up to date development plan policies. They should also closely relate to strategies produced by regional transport partnerships.

³ Implementation of the rail review and other institutional changes will alter future responsibilities in transport.

⁴ Scotland's Transport Future: Proposals for Statutory Regional Transport Partnerships, Scottish Executive, 2004.

⁵ Scotland's Transport Future: Guidance on Local Transport Strategies, Scottish Executive, 4 March, 2005.

⁶ Development plan references in this PAN refer to structure and local plans, but will apply as appropriate to any strategic or local development plan that may be implemented as a result of future legislation

DEVELOPMENT PLANS

12. Development plan policy has a role in implementing transport strategy while transport strategy should take account of development plan commitments. Transport strategies and development plan policies should therefore be developed having regard to one another.
13. The strategic aims of policy need to be implemented by influencing the attitude and behaviour of every individual. Policy development and implementation can be informed and achieved by targeting the reasons why people travel, the mode by which they have the opportunity to travel and their travel preferences and behaviour.
14. A number of practical measures, both qualitative and quantitative, can be used to deliver successful transport outcomes. This PAN provides examples of good practice guidance on these measures through publicising recent research.

ASSOCIATED REGULATORY MECHANISMS

15. Transport aspects of land use planning will also need to have regard to:

Air quality regimes: the National Air Quality Strategy; the statutory air quality objectives; and designated air quality management areas.

Noise quality regimes: the noise impact of new transport infrastructure on existing land uses and any noise constraints that existing transport infrastructure impose on new development should be taken into account in development management decisions supported by general policies in development plans.

Water quality regimes: SEPA have lead responsibility for sustainable urban drainage (SUDs) techniques. These should be used for handling run-off from built development including transport infrastructure in such a way as to protect the quality of watercourses and the aquatic environment. Land use aspects should be reflected in development plans.

Road traffic reduction targets and safety concerns for all transport users.

Landscape quality: land use and transport planning should take into account impacts on landscape and use of the countryside.

CO-OPERATIVE WORKING

16. The early involvement of interested parties will positively inform transport planning by building consensus and minimising potential future areas of objection. Consultation and feedback to those who have contributed is crucial. Co-operation is the responsibility of ALL groups. In addition to those listed above, other groups may include:

- Other relevant internal and external local authority departments;
- Local authority consortia i.e. Regional Transport Partnerships;
- Freight Transport Association/Hauliers;

- Strategic Rail Authority;⁷
- Rail and bus operators;
- Ferry operators;
- Transport user groups;
- British Waterways, port and airport operators;
- Special purpose implementation bodies e.g. Transport Initiatives Edinburgh (TIE);
- Local business communities;
- Urban designers;
- Disability groups;
- National and area based environmental organisations e.g. SNH;
- Police;
- National Park Authorities.

TRANSPORT MODELLING

17. Modelling is usually undertaken by transport planners in policy development and assessment of proposals. Modelling can assist decision making by basing projections on quantitative data and it can be used for different types of assessment, for example mode choice, trip generation and land use interactions.
18. Joint transport and land use models are being developed which dynamically represent the interaction between transport changes and land use patterns rather than simply requiring land use data as a manual model input. These models, if used with care, can be very useful in strategic land use planning. In simple terms they use modelled transport outcomes to generate elements of future year land use planning data.
19. A number of Scottish transport models already exist. These range from strategic models covering large areas to relatively small but detailed single junction simulation models. The Transport Model for Scotland (TMfS) is a strategic level model now available for use by local authorities. It covers 90% of Scotland's population, including the central belt and up to and including Aberdeen. It is related to the TELMOS model which uses an economic land use model input, covers the whole of Scotland and contains planning data from all 32 planning authorities.
20. The intermediate level of models are the more detailed transport assignment models, such as the Saturn type model. At the most detailed level are the micro-simulation models, for example PARAMICS.

⁷ Implementation of the rail review and other institutional changes will alter future transport responsibilities in transport.

POLICY DEVELOPMENT

21. Analysis of the existing situation or base case is a crucial element in understanding and influencing change in the type of journeys people take and how they make them. It provides a benchmark against which future options can be measured. In developing their policies planning authorities should have regard to the following mechanisms and factors.

ACCESSIBILITY ANALYSIS⁸

22. Good accessibility will be achieved where many people are linked to opportunities by networks of regular, reliable and affordable travel. Accessibility analysis is a useful technique in assessing development as it focuses on individual travel rather than on different transport modes. It can be used as an alternative or alongside other techniques to underpin policy development and to inform mode share targets for individual proposals. It allows the quantitative consideration of links between transport and other issues and helps to ensure that the most efficient resource allocation is made to focus development in sustainable locations. The science of logistics incorporates accessibility analysis for freight movements. Further information on the implementation of personal accessibility analysis (approaches, features and examples) is given in annex B.

LOCATION POLICY⁹

23. In development planning, and for developers choosing sites for proposals, the starting point should be Scottish Planning Policy. Sites which do not conform to the relevant SPP are unlikely to be sustainable transport accessible sites. Within that framework, the assessment of accessibility by different modes should ideally be undertaken for a number of possible sites before decisions are made on possible locations and site layouts.
24. Development plan policy should encourage development of significant travel generating proposals at locations which are key nodes on the public transport network, that have a potential for higher density development and a potential for mixed use development with an emphasis on high quality design and innovation. These locations should encourage modal shift of people and freight by providing good linkages to rail, walking and cycling networks and with vehicular considerations, including parking, having a less significant role. Mixed use development, for example the inclusion of local shops and services within larger housing developments, can encourage multi-purpose trips and reduce overall distances travelled by car by bringing together related land uses.
25. Planning authorities, through development plan policy, should give greater recognition to the potential of sites where accessibility can be improved by developer or public funding. Advantages can be gained by different interest groups including greater accessibility for employees and service industries, a reduction in congestion and the stabilisation of traffic growth creating good conditions for further investment. Assessment of such locations should be

⁸ Accessibility: Review of Measuring Techniques and their Application, Scottish Executive, 2000.

⁹ Key Sites Appraisal Methodology for Development Planning, Scottish Executive, 2001.

based on comparative analyses of accessibility together with an assessment of other land uses and local plan policies. During the assessment process planning authorities must be aware of the realities of local economic and social conditions relating to development.

26. Key locations designated in development plans should aim to be destinations in their own right, with a sense of place created through an emphasis on quality. Urban design is a crucial aspect of placemaking.¹⁰ Designation of such locations will identify opportunities and give confidence to stakeholders.

MODE SHARE TARGETS (MSTS)¹¹

27. Depending on the intrinsic accessibility of a location or wider area, measured using accessibility analysis, and based on the sustainable transport objectives of the authority, an assessment can be made of desirable mode shares for transport movements to and from that location or area. In order to meet the objectives of that assessment, mode share targets can be set for a given time period. Targets which promote modal shift are valuable in encouraging developers and operators to look innovatively at possibilities for increasing accessibility. The Transport Assessment process should then establish ways to accommodate or mitigate the impacts of less sustainable transport modes in order to meet the mode share targets. Further information is provided in annex C.
28. Mode share targets are applicable to new development, change of use proposals and extensions to existing developments. They can be set for:
- The authority area as a whole, a sub-area and for categories of development as specified by the authority.
 - Any large new re/development area where there is a design statement¹² planning brief or master plan.
 - Any development for which a travel plan is required.
29. 'No-net-detriment' is a useful aim in setting mode share targets. No-net-detriment means for example, no net increase in travel time or risk of accident as a result of the development. More restrictive targets are however desirable, for example an increase in public transport mode share over a given period.

PARKING STANDARDS

30. Parking policies should support the overall locational policies in the development plan. The availability of parking, for both cars and cycles, influences the choice of transport. Parking policies must be handled sensitively and adapted to particular local circumstances, for example through the development of a local authority's own maximum and optional underpinning minimum parking standards.

¹⁰ A Policy Statement for Scotland: Designing Places, Scottish Executive, 2001 and Housing Quality, Scottish Executive, 2003.

¹¹ Planning for Mode Share in New Developments, Scottish Executive, 2001.

¹² Planning Advice Note 68 Design Statements, Scottish Executive, 2003

31. The method for deriving the standards should consider local characteristics, including:
- Accessibility analysis, particularly by non-car modes;
 - Economic development factors, in terms of levels of activity;
 - Levels and targets for walking and cycling;
 - Levels of car ownership, use and movement patterns;
 - Need for traffic restraint;
 - Levels of pollution;
 - Potential over-spill impacts;
 - Neighbouring authorities' standards;
 - Availability of alternative parking (on and off street); and
 - Potential for shared use of spaces.
32. For implementation at a local level a zonal approach is recommended. Measures that can influence parking can include:
- A maximum number of parking spaces being provided, underpinned where appropriate by a minimum to avoid undesirable off-site overspill parking;
 - On site parking charges/permits to discourage long term parking;
 - Parking located closer to the building for short stay, mobility impaired and late night/shift work;
 - Dual use car parks serving both new stores and wider town centres;
 - Encouragement of car-sharing by using a database and preferential parking spaces;
 - Establishment of car sharing or a car pool;
 - Complementary restrictions, i.e. on-street restrictions in the surrounding area;
 - Secure, covered cycle parking.
33. Monitoring of use and effects is important after implementation. This should take account of experience, evolving objectives and changing patterns of characteristics. A review of standards should be undertaken at intervals no greater than 5 years. Any changes in car parking policies should not impact negatively on spaces allocated for disabled people, parents and children and car sharing schemes.

DESIGN

34. All new and re-development proposals should be designed for safety and the convenience of all users. Good design and layout of a development can significantly improve the ease of access by non-car modes, for example:
- Entrances to be as close as possible to pedestrian routes and bus stops; and
 - Links to cycle networks, with secure parking near the main entrance.
35. Proposals should be specifically tailored to local circumstances, aspirations and priorities, for example speed management strategies, attractive green space and landscaping, in order to bring a wide range of social and community benefits and improve quality of life. Design of public transport facilities should be user friendly and attractive as well as functional to encourage and retain modal shift. Consideration should also be given to the opportunities afforded by mobile and broadband communication to enable substitution of choices, for example home working.
36. The Dutch Home Zones (Woonerfen) are a leading example of the use of design measures to integrate transport and land use.¹³ In Britain Home Zones have evolved in the context of regeneration projects, though the general design principles are also relevant to and more easily applied to the design of new housing layouts.¹⁴ Local authorities can assist in such initiatives with the production of design guides, local design statements and development briefs.

COMMITMENTS

37. Schemes in committed programmes and/or those at an advanced stage of preparation, where work is expected to commence within the plan period, should be included in the local plan proposals maps. This will include schemes upon which the development strategy depends even if the method of funding is uncertain at the outset. Other schemes should merit only a description in the text, the level of detail dependent on the degree of commitment.

BLIGHT

38. Safeguarding for transport schemes where proposals are now unlikely to be taken forward should be removed, thus removing the effects of blight. This is especially important for proposals, such as major road widening, which affect large numbers of existing properties. Clearly, any significant development proposals which were dependent on the scheme will have to be reviewed and alternative transport arrangements made.

¹³ Home Zones: Guidance Consultation, Scottish Executive, 2002.

¹⁴ PAN on Residential Streets, to be published Summer 2005.

DEVELOPMENT MANAGEMENT

39. Decisions made in respect of specific planning proposals should aim to put into practice the policies of SPP17. The following section provides good practice advice on some practical mechanisms to achieve successful outcomes.

TRANSPORT ASSESSMENT

40. SPP17 requires a transport assessment to be produced for significant travel generating developments. Transport Assessment is a tool that enables delivery of policy aiming to integrate transport and land use planning. Reference should be made to "Transport Assessment and Implementation: A Guide" for detailed information on this process.¹⁵ Further information is also given in annex D.
41. All planning applications that involve the generation of person trips should provide information which covers the transport implications of the development. The level of detail will be proportionate to the complexity and scale of impact of the proposal. This will provide an indication of whether a transport assessment should be carried out. As a change of use could result in different travel characteristics a transport assessment should be requested where the change is likely to result in a material change in trips. For smaller developments the information on transport implications will enable local authorities to monitor potential cumulative impact and for larger developments it will form part of a scoping exercise for a full transport assessment. Development applications will therefore be assessed by relevant parties at levels of detail corresponding to their potential impact.

TRAVEL PLANS¹⁶

42. Travel Plans are documents that set out a package of positive and complementary measures for the overall delivery of more sustainable travel patterns for a specific development. Their ability and success in influencing travel patterns is dependent upon the commitment of the developer and occupier of a development. Travel plans should be implemented to encourage a shift in transport mode for those travelling to and from a development. More detailed information on travel plans is provided in annex E.
43. Travel plans have been demonstrated to be applicable to a wide range of establishments, such as schools, businesses, hospitals and airports, and their various travel requirements, for example staff travel, customer/visitor travel, business travel and freight and logistics. These should specifically consider travel for those whose mobility is impaired. For residential land uses, travel plans may set out measures which will be used as an incentive to house purchasers to

¹⁵ Transport Assessment and Implementation: A Guide, Scottish Executive, 2005.

¹⁶ Travel Plans: An Overview, Scottish Executive, 2002.

use non-car travel modes, but setting targets is generally not practicable for this land use. Sustainability in housing should come through design in relation to walking, cycling and public transport networks.

44. It is recommended that the appropriate use of travel plans should be determined by considering the potential contribution a development can make to sustainable travel. All applications meeting the threshold for a transport assessment should require a travel plan; developments below the threshold may nevertheless contribute to sustainable travel. As planning applications can be submitted as detailed or in outline it is recommended that travel plans should also follow a two stage process. A travel plan framework should be agreed at the planning application stage.

Outline Applications

45. Where the occupier is speculative or unknown the planning conditions which would be associated with the travel plan should include physical/infrastructure facilities to encourage walking and cycling, for example adequate storage provision, showering facilities, links to wider walking and cycling networks and possible provision of additional public transport facilities. The plan at this stage should concentrate on output measures e.g. the number of trips by different modes that can be accommodated on the network. Any outline permission given should pass on the commitment to develop a full travel plan to the end user and enable future development and modification of the travel plan.

Detailed Applications

46. Where the occupier is known measures should be more robust. The travel plan should incorporate a variety of measures and targets to encourage sustainable travel, such as MSTs, an implementation time scale and an agreed monitoring and review process. The setting up of a working group to oversee the travel plan is also encouraged, as is a trust fund for additional remedial measures if targets of the plan are not met.
47. If the planning authority is minded to grant consent for a development proposal which will be supported by a travel plan, a detailed indication of the contents of the travel plan should be submitted along with the planning application. This would include a statement of commitment, intentions for the survey, targets and basic measures and monitoring procedures.
48. To ensure compliance with targets, 'correction procedures' should be incorporated into the section 75 legal agreement. The consequences of not meeting the targets set should be agreed and defined clearly in any agreement. They may take the form of remedial action or may be related to suspensive

conditions on further development related to the proposal. The procedures should always be specific to the development proposal, to which the travel plan relates.

Monitoring

49. The monitoring of the operation and implementation of a travel plan are key elements. Monitoring should not be an afterthought but incorporated into the design of the travel plan from the outset to ensure efficient and consistent review of the process. Those carrying out the monitoring should be identified in the means by which the travel plan is enforced: the condition to the planning consent or the section 75 planning agreement. Monitoring should commence from the occupation of the development and be an on-going process leading to an annual review and update of the travel plan. It should be in line with the review of the Local Transport Strategy.

PLANNING AGREEMENTS¹⁷

50. Planning agreements can be used to overcome obstacles to the grant of planning permission. By securing developer contributions, proposals can be made acceptable in land use and transport terms, for example through the provision of public transport infrastructure.
51. Conditions, possibly suspensive conditions, can be applied in respect of those aspects of the transport assessment which represent physical transport infrastructure to be undertaken as part of the overall development e.g. footpath and cycle access, bus laybys, parking for disabled people. Section 75 agreements can be used where funding is essential for less directly linked infrastructure e.g. improvements to the surrounding public road network, part funding of a new rail station. A requirement to create a travel plan for end users can take the form of a condition on the planning consent or be specified within a section 75 agreement. If an agreement is to be used, it must relate to a travel plan that is in all its essentials defined as part of the planning application, as the agreement will form part of the consent granted. The agreement will then be recorded in the Register of Sasines or the Land Register and will be a burden on the land, regardless of the occupier, unless discharged by agreement. This will ensure that it is legally binding on subsequent holders of title in terms of its definition, application and implementation, monitoring and review.
52. Using an agreement in this way need not mean that the travel plan is a fixed document. When the intention is to influence occupiers' behaviour to achieve sustainable travel objectives, the travel plan has to be capable of being changed in relation to monitoring. So the original travel plan should set objectives and targets, focus on outcomes in terms of mode share and traffic volumes, and

¹⁷ Circular 12/1996 Planning Agreements & the Use and Effectiveness of Planning Agreements, Scottish Executive, 2001 sets out principles of purpose, relationship to the development, scale and reasonableness.

define the best estimate at the outset of what measures are required to achieve these objectives. But it should also define what action will be required if reality diverges from the desired outcomes, and what mechanisms will be used to revise proposals to achieve the objectives. The agreement will therefore be a combination of developer measures, statements of what they are expected to achieve, and understandings of what action will be required to correct divergence.

ENVIRONMENTAL ASSESSMENT

53. Circular 15/1999 explains The Environmental Impact Assessment (Scotland) Regulations 1999. The regulations apply to projects which require planning permission, certain trunk road projects comprising construction and improvement authorised under the Roads (Scotland) Act 1984, and drainage works authorised under the Land Drainage (Scotland) Act 1958.
54. Schedule 1 projects (including motorways, lines for long distance railway traffic and aerodromes with a runway length of 2100 m or more) are always required to follow the environmental impact assessment procedures. For other transport projects which are listed in Schedule 2 (including a road, an aerodrome, canalisation, a tramway, elevated or underground railways, or a modification to a Schedule 1 development) EIA will be required if the project is likely to have significant environmental effects. If a project requires an EIA under the Regulations, any permitted development rights are withdrawn and planning permission must be sought.
55. A further Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (commonly referred to as the Strategic Environmental Assessment (SEA) Directive) applies to development plans and programmes from 21 July 2004. Technical and informal queries may be directed to SEPA, SNH and Historic Scotland and all other queries, including those relating to screening and scoping procedures should be directed to the SEA team within the Scottish Executive.¹⁸

¹⁸ E-mail SEA-Gateway@scotland.gsi.gov.uk. Telephone 0131 244 5094.

PROJECTS AND PROPOSALS

SCOTTISH TRANSPORT APPRAISAL GUIDANCE¹⁹

56. It is a requirement of the Scottish Executive that all transport related projects which require its approval or for which it provides funding shall be appraised in accordance with the Scottish Transport Appraisal Guidance: STAG (except for projects which were before Scottish Ministers before July 2001).
57. It is recommended to local authorities and consultants that STAG is used for the appraisal of transport projects for which they have responsibility. It should be used by all organisations developing transport projects or policies for all types and sizes of transport planning exercises, from the development of a rural bus scheme to a multi-modal corridor study.
58. STAG provides a comprehensive source of advice on all aspects of the project development process from the earliest stages, through appraisal and implementation to ex-post evaluation. STAG sets out required practice. It is therefore to be used as a first reference point when commencing an appraisal of potential transport developments. It is intended that transport appraisal techniques will continue to develop over time. It is therefore expected STAG will be updated periodically.
59. Significant development proposals may potentially require new access infrastructure or enhancements to existing infrastructure, or otherwise result in potential pressure on key national transport infrastructure or resources without a fundamentally STAG-based assessment having been undertaken. Such proposals, either at development planning or developer-led stages, will require to demonstrate a particularly robust case including STAG appraisal of the transport effects. It will normally be necessary to look at the accessibility of the site and its transport impacts in line with the advice in this PAN. A thorough study of the options (e.g mixed modes) including those on land not owned by the developer should be made, with alternatives to solely road-based direct access to trunk roads or motorways factored in. It cannot be assumed that development can consume public infrastructure resources without this level of justification. Such proposals will require to be assessed using STAG if any approval of or funding by the Scottish Executive is necessary.

¹⁹ Scottish Transport Appraisal Guidance, Scottish Executive, 2003.

ROADSIDE SERVICES

60. Policy on roadside services is contained within SPP17. Annex F to this PAN sets out the background definitions and conditions under which development can be signed as roadside services on the trunk road and motorway network.

INFLUENCING TRAVEL MODES

61. Influencing the choice of travel mode an individual takes requires knowledge of how people travel and understanding why people travel the way they do. The use of measures and resources can then be targeted directly and efficiently to influence behaviour.

General

62. SPP17 refers to the contribution different travel modes make to sustainable personal access. In order of preference and as priorities for integrated land use and transport planning they are walking, then cycling, public transport and finally motorised modes. A variety of measures can be implemented that encourage the use of alternative modes of transport other than the car.²⁰
63. The implementation of the variety of measures given below will be more effective through consultation with interested parties. Both public and private sectors need to demonstrate innovative and entrepreneurial thinking along with a willingness to try alternatives. Linking with voluntary and community schemes can prove successful and provide good value solutions to local needs. Ideas can be developed to suit particular circumstances, for example, subsidised taxis for targeted groups.
64. When designing a proposal these measures can be built into the development as incentives and disincentives to reduce or alter trip making decisions and behaviour. The measures can be specific to a particular mode, examples of which are given below, or they can be more broadly applicable, for example:
- The use of urban design principles;²¹
 - Setting up of a Transport Working Party for larger proposals;
 - Appointment of a Travel Co-ordinator.

²⁰ Barriers to Modal Shift, Scottish Executive, 2003.

²¹ PAN68 Design Statements, Scottish Executive, 2003.

Walking

65. Walking is the most sustainable mode and requires relatively little investment to make it attractive, particularly if planned and designed into a new development from the outset. Planning can encourage walking to become the prime mode for shorter journeys through arranging land uses, by utilising urban design and encouraging specific schemes, such as Safer Routes to Schools. Local pedestrian networks should be analysed to provide the basis for network-wide improvement programmes. Evaluation of new and existing pedestrian routes should consider:
- Is the development likely to be a significant attractor and generator of trips on foot, e.g. a school, college or stadium;
 - Is the development located on existing or potential pedestrian links e.g. between a housing estate and shops;
 - What are the likely level of pedestrian flows, at peak and off-peak times e.g. a cinema's peak flows will be at different times to most shops;
 - What types of pedestrians are likely to use the routes e.g. are flows predominantly the young, elderly, women or mobility impaired.
66. Planning authorities should include proposals to make appropriate areas and developments safer and more attractive to people on foot. Individual proposals should encourage walking by ensuring that pedestrian routes:
- Form networks with destination land uses, for example housing, local neighbourhood facilities and centres and consider the destination's special design requirements, for example potential flows, desire lines, time of use and pedestrians' need to avoid steep inclines;
 - Are of a high quality design, including directness, signage, lighting, vegetation, drainage and surfacing (material and width) for all users; and
 - Provides for personal security and links safety with other modes.
67. The SNH Access Forum supports the development of networks of paths, trails and green spaces for walking, cycling and horse riding both in and around settlements. The Land Reform (Scotland) Act 2003 requires local authorities to draw up a network of Core Paths to give the public reasonable access throughout their area. These networks should wherever possible be linked to rail and bus stations, bus stops and existing car parks.

Cycling²²

68. There is no single correct method for developing suitable cycling infrastructure and for the foreseeable future most cycling will be on the existing road network. Much therefore remains dependent on the effective integration of cyclists' needs into the broader objectives of local authorities' transport proposals, including reallocation of road space. The aim is to provide and maintain a safe, convenient and attractive cycle network for users. Consideration, if relevant, should be given to the local authority's cycle strategy and thought should be given to the encouragement of:

- Cycle lanes and networks, especially those radiating direct from proposals;
- Cycle crossing points being provided;
- Covered, secure and well located cycle parking;
- Changing facilities;
- Utilisation of areas free from motorised traffic, such as former railways, canal paths and bridleways; and
- Suitable maintenance regimes.

Public Transport

69. Quality of public transport has to be high if motorists are to be enticed out of their cars. A change in mode can be encouraged through:

- Ensuring that new developments are well served early on;
- High quality infrastructure, with regard to interchanges, quality of vehicles and waiting areas and integration with walking and cycling networks, Park and Ride schemes and new railway stations;
- Diversion of existing services to a new development;
- Bus priority measures on main public transport corridors to the site;
- Good on-site access, stops and shelters and information;
- Tendering or provision of new and/or additional bus services and journeys to extend coverage by time of day, day of week;
- Demand responsive services to fill gaps in public transport coverage;
- Discounts on travel passes.

²² Cycling by Design, Scottish Executive, 1999.

Inclusive Mobility

70. Everyone in society should have the opportunity for independent mobility. Measures should therefore be encouraged to make travel easier and more convenient for those who have additional mobility needs. Planning authorities are encouraged to consider developing supplementary planning guidance relating to accessibility for all. Such guidance could consider:
- Ensuring that local pedestrian networks are fully accessible;
 - Clear and accessible timetables;
 - Provision of parking spaces for those with physical disabilities, with children and the elderly in a location where passengers do not have to cross the road to reach their destination;
 - Enforcement to ensure these spaces are not utilised by those who do not need to use them;
 - Left luggage lockers for those with luggage/heavy shopping;
 - Appropriate lighting and surveillance.

Waterways

71. Inland waterways are increasingly used for recreation and land alongside can provide walking and cycling routes. They are important for their heritage and environmental value as well as for water supply and flood defence. They are however, an operational estate therefore access or diversion routes cannot be guaranteed and developers wishing to use the amenity of the canal system could be expected to make contributions towards facilities and its maintenance. Their potential to retain or return to a transport role should be assessed in liaison with the appropriate body, for example British Waterways, and any requirements incorporated into development plans. Severing or adversely affecting inland waterways should be avoided. New marinas and moorings should be located with good public transport services, walking and cycling access.

CONCLUSIONS

72. This PAN reinforces the principles and policy set out in SPP17. By aiming to provide a greater choice of transport modes, land use and transport planning can assist in influencing attitudes and changing the behaviour of individuals.
73. The integration of land use and transport planning is a key element of realising sustainable developments. By prioritising involvement at the earliest possible stage in the design process consensus can be built and experience gained that will enhance future planning. Linking the development plan and transport strategies taking into account all other necessary considerations in a context of co-operative working will greatly assist in achieving successful transport outcomes.

ENQUIRIES

74. Enquiries about the content of this PAN should be addressed to Carrie Smith, SEDD Planning, Area 2-H, Victoria Quay, Edinburgh, EH6 6QQ (0131 244 7529) or by e-mail to carrie.smith@scotland.gsi.gov.uk. This PAN and other SPPs, PANs and a list of Circulars can be viewed on the Scottish Executive website: <http://www.scotland.gov.uk/planning>.

ANNEX A

INFORMATION SOURCES

- A1. When putting transport analysis into practice and when making choices on transport measures for travel plans various information sources will be useful. Those of particular relevance are set out below.

The Census

(<http://www.gro-scotland.gov.uk/grosweb/grosweb.nsf/pages/censushm>)

- A2. Origin-Destination Statistics provided by the Census attempt to analyse flows of people, for example travel to work. Such data can then be expanded on to include the method of travel and age patterns. Of particular use would be the following data sets: Standard Tables, Census Area Statistics and Special Travel Statistics.

The Scottish Household Survey

(<http://www.scotland.gov.uk/about/SR/CRU-oclnc/00016002/SHShome.aspx>)

- A3. This survey of around 15,000 households per year across Scotland aims to provide accurate and up-to-date information on characteristics, attitudes and behaviour of Scottish households and individuals on a wide range of issues. Particular sections provide information on travel and transportation, for example household car availability; cycling, walking and use of public transport; travel to work and school. The survey also collects "travel diary" information. Results are available annually for the larger local authorities, and every 2 years for all authorities. These are based on interviews with a minimum of 500 or so households in each authority in each two-year period. Local authorities can obtain anonymised copies of the SHS data from COSLA, and the data are also deposited at the UK Data Archive.
- A4. The SHS's transport-related results are published in three series of statistical bulletins:
- *Household Transport* – main results for Scotland;
 - *Transport across Scotland* – main results for local authority areas;
 - *SHS Travel Diary results* – includes some figures for local authority areas.

These are available from the Stationery Office Bookshop and the Scottish Executive Web site. For information or questions on Transport, contact Transport Statistics: Tel: 0131 244 1457.e-mail: transtat@scotland.gsi.gov.uk.

Scottish Transport Statistics

(<http://www.scotland.gov.uk/about/CSU/DD-EAS-Trans/00015845/STS.aspx>)

- A5. This annual report looks at the trends over the last 10 years and provides information on different modes of travel (for example road, rail and air). It also provides specific statistics on related topics such as finance and injuries. Most of the figures relate to Scotland as a whole: only a few tables provide figures for local authorities. Copies are available from the Stationery Office Bookshop and it can also be found on the Scottish Executive Web site.

TRICS Database

(<http://www.trics.org>)

- A6. This is a database containing site and development information for some 1,800 development sites in the UK. In each of these developments traffic entering and exiting is recorded, and from this information trip rate calculations are carried out, which can be used to estimate traffic flows for a variety of development types. This is becoming increasingly useful as it focuses less on traffic and more on multi-modal transport.

Local Travel Information

- A7. In the preparation of Development Plans and Regional and Local Transport Strategies travel surveys will be undertaken by local authorities. They may be for the whole area or site specific. Collating and monitoring details of travel plans may also provide good base line data. Such information also enables comparisons to be made between sites in an area dependent on local circumstances. These are a valuable source of local information which can be utilised.

Other Organisations

- A8. Local authorities are not alone in collecting data on travel characteristics. Other agencies may be of assistance on more detailed aspects of travel, for example: neighbouring authorities, rail and bus operators, port authorities, Civil Aviation Authority, local businesses, walking and cycling groups, disability groups.

Research Documents

- A9. Research completed at both a national and local level will provide useful information as will case studies where similar work has been undertaken elsewhere.

ANNEX B

PERSONAL ACCESSIBILITY ANALYSIS

- B1. Personal accessibility can be affected by a number of factors including:
- An individual's own mobility;
 - By the physical disposition of destinations relative to the individual;
 - By the availability of means of transport;
 - Or by a combination of the three.
- B2. There are 3 overlapping types of approach that can be used in accessibility analysis. All accessibility approaches relate to a specific location – an origin or a destination – and include zoning aspects and opportunity and deterrent features. All three approaches have a role to play in policy and project appraisal since different decisions require information to be presented in different ways.
- B3. The choice of appraisal technique for any individual decision needs to be of an accuracy appropriate to the particular situation, with the resources devoted to the analysis being commensurate with the scale of the circumstances. Examples are given in Table 2 overleaf. Analysis to support practical decision making will usually benefit from a more rigorous multi-criteria framework approach. Local authorities may wish to develop supplementary planning guidance relating to accessibility.
- B4. Clear policies relating to a group of people for a particular purpose can be analysed in a straightforward manner. Accessibility analysis can though become complex and confusing if the question being asked is not identified at the outset. It is important therefore for all analyses to define problems clearly, gather the required supporting information and involve the relevant stakeholders. Consistent and rigorous techniques can assist in building consensus between various stakeholders.

Simple Approach:

- B5. Isochrones are used to demonstrate the geographical distribution of impacts. This is the most commonly used approach internationally. It simplifies a given problem by defining thresholds. For the approach to be useful the choice of thresholds must accurately reflect some aspect of travel behaviour which is specific to local characteristics. This is because measures of accessibility have different values in different areas.

Opportunity Approach:

- B6. This sums all the available opportunities and takes into account a measure of deterrence related to how easily opportunities can be reached. Opportunity indices are relatively easy to interpret.

Value Approach:

- B7. This measure considers the attractiveness of the available opportunities to represent their value as a transport choice in terms of time or cost. These indices measure efficiency but are less descriptive.

Zoning Aspect:

- B8. This is a variable element. The level of detail is dependent on the policy/proposal being examined. Strategic issues will utilise wider geographical areas resulting in a more coarse zoning system. Larger zones provide a valuable overview of areas. Local issues will utilise more detailed localised representation. This will be much more time consuming and in some cases uneconomic.

Opportunity Features:

For example;

- Population: Total number of people; employment status; and age;
 - Employment: Number of employees by location;
 - Health: Presence or absence of a facility;
 - Supermarkets: Floorspace in square footage;
 - Banks/Building Societies: Numbers of branches up to a maximum of 5 representing the availability of choice;
 - Chemists: Presence or absence of a facility;
 - Petrol stations: Presence or absence of a facility;
 - Post offices: Presence or absence of a facility.
- B9. Origin accessibility considers opportunities available to an individual or business. The opportunity is therefore based on the land uses at alternative destinations.
- B10. Destination accessibility considers catchments for a destination. The opportunity is therefore based on land uses and types of traveller at alternative origins.

Deterrent Features:

For example;

- Time,
- Cost,
- Distance,
- The need to carry goods and/or other people.

B11. These features affect the perceptions of travel and therefore influence real behavioural patterns. It is recommended that deterrence features of car available **and** non-car available trips is considered as many trips involve a number of modes and for non-car available trips the car options are excluded from the calculation.

Table 2. Types of Accessibility Analysis

<i>Index</i>	<i>Description and Uses</i>
Simple Measures	
Catchment/ Contour Indices	These <i>count</i> the number of jobs, shops etc within a thresholds travel cost (distance/time etc) from a defined location. They are used for a whole variety of planning purposes for both land use and transport infrastructure and are often used by developers to consider the commercial viability of a potential development location.
Access to Public Transport	These <i>measure</i> walking access time to the public transport services. Walking time or distance thresholds to the public transport services are set and summed across all the available services. The quality of public transport being accessed is categorised on a scale which takes account of service frequency, mode and reliability. (Simple but limited scope).
Peripherality Indices/Rural Accessibility	These identify <i>thresholds</i> in terms of cost, distance, time etc from defined types of opportunity. They are usually calculated from major centres of population (incl. towns or services such as hospitals)
Time Space Geographic Measures	These measures simplify travel behaviour and choice in terms of the opportunities available within a limited travel budget time. The threshold is therefore travel time available for an individual or group.
Opportunity Measures	
Hansen Indices	The simple measures above are all special forms of Hansen indices incorporating thresholds to simplify data or analysis requirements.
Shimbel Measures	Similar to above but here all specified opportunities are assumed to have the same weighting. The measure is simply the sum of the cost (time etc) to each of the opportunities.
'Economic Potential' Measures	Where the opportunities being considered in the Hansen index are regional incomes, and the deterrence function is measured in distance, then the accessibility index is sometimes describes as the economic potential of a location.
Value Measures	
Utility Based Measures	These measure the value to an individual or group of the choices available to them. The main difference to those above is that additional opportunities only provide an increase in accessibility if they provide some additional value. If there is already a surfeit of opportunities adding more will result in little change in the index. The normal units of measurement are generalised cost or time.

- B12. In considering the results of the accessibility analysis it should be remembered that the measures are intended to give only a general indication of levels of accessibility. They are thought of assistance in identifying practical solutions and delivering schemes that will be of real benefit.
- B13. Planning authorities should establish 'accessibility profiles' for sites taking into account the elements below. The profiles should reflect the catchment area served, likely quality of service and result in relative indicators of accessibility for different sites.
- Transport system accessibility by population sector to an opportunity:
 - A transport improvement or an increase in the number of opportunities will increase accessibility.
 - The scale of change is not easily assessed through qualitative comparisons.
 - Accessibility to public transport services:
 - This is particularly useful if public transport services can be classified accurately in terms of their frequency or destination.
 - Obtaining detailed data on origins, destinations and routes of services can be a major exercise.
 - For accessibility of housing to public transport the recommended guidelines are less than 400m to bus services and up to 800m to rail services.
 - Accessibility can be categorised, for example weak or strong.
 - Accessibility to local facilities by walking and cycling:
 - A maximum threshold of 1600m for walking is broadly in line with observed travel behaviour.
 - If there is a significant population within 800m then improvements to the quality of walking and cycling networks will increase accessibility.
 - Ratios comparing accessibility for different mobility groups:
 - One of the most useful measures is the ratio of accessibility for car available to non-car available people.
 - These ratios allow consistent comparisons to be made between locations.
 - Accessibility for freight:
 - This is best undertaken using logistics management software.
 - It is usually undertaken at an individual company level.

ANNEX C

MODE SHARE TARGETS

- C1. MSTs are currently most commonly used in travel plans, particularly for employment land uses. Wider use of them is though encouraged, in particular for them to be utilised for other land uses and in the development management process. They should therefore be acknowledged within local plans, transport strategies and development management procedures.
- C2. MSTs need to be defined at the appropriate regional/local level with individual development proposal targets set within this context. At a broad level MSTs form one aspect of a transport strategy. An overall MST will be dependent on changes in travel to existing development as well as new development. These strategic MSTs need to be directly translatable to individual site MSTs and therefore be realistic and achievable.
- C3. The achievement of MSTs is influenced by differing local characteristics. This means there will be differences between and within local authority's MSTs. MSTs should take into account local levels of transport accessibility, types of development and car parking controls. They should also consider the provision of amenities i.e. crèches, banks, level of local retailing and fitness centres, the availability of convenient and affordable public transport and existing incentives and disincentives to influence travel choice.
- C4. Individual development proposals will derive MSTs from the local authority's local transport strategy. New development is likely to be only a small proportion of total travel but this travel may be easier to influence. As MSTs may have a significant effect on the shape and form of the development they should form a vital part of the original development concept. The targets should be set in ranges rather than absolutes.
- C5. Discussions regarding MST requirements are encouraged between developers and appropriate local authority planners at an early stage. This is particularly important where the development is large or likely to generate significant travel as it will avoid unnecessary work and potential delays.
- C6. The methodology for predicting MSTs for a particular development should consider the wider targets as noted above as well as the following:

Site Location and Accessibility by Different Modes

- C7. In this context accessibility is site specific and is calculated and expressed as an accessibility index. Absolute accessibility measures are of little value in assisting with the evaluation of MSTs. Relative accessibility is a more important measure that will influence the mode share at the development.

Different Trip Making and Mode Share Characteristics of the Proposed Development

- C8. Here mode choice characteristics are being used to shape development content and mode share to meet a target. This happens as negotiations on the development progress and can be assessed relative to other similar developments. In practical terms the policy will be to reduce car use rather than meet individual non-car MSTs.

Transport Improvements to Change Underlying Accessibility

- C9. Where a development proposal does not initially meet its MST there may be value in considering improvements to transport services to change underlying accessibility in such a way as to assist in meeting the required target. Where improvements get close to achieving the MST it may be that additional measures involving travel incentives and disincentives could prove to be effective.
- C10. Where they are implemented MSTs should be comprehensible, robust but simple to use and be capable of wide application to a range of situations. They should be realistic and practical in that they take account of what can be achieved in a given context.
- C11. Where the monitoring and review of MSTs is to be done by the planning authority, a charge for this could be included in a planning agreement. Monitoring should be at regular intervals, ideally every 2 years and for a minimum period of 5 years. If MSTs are included as part of the planning consent in the form of a condition, the condition must meet the necessary criteria of being reasonable etc. so that it is enforceable.
- C12. In practice Transport Working Parties have been set up and Travel Co-ordinators have been appointed to set, achieve and review MSTs. They can oversee the targets in which ever form they take, for example:
- Regional: e.g. employers in a region can work towards a target for average vehicle ridership.
 - Rule of Thumb: Targets that have been adopted from a key piece of literature or advice, e.g 30% reduction in single occupant car trips over 3 years.
 - Site Based: Targets based on requirements, characteristics and constraints of a site e.g lack of parking availability.
 - Transport Based: Targets based on local transport circumstances, related to the desire to keep trip generation below levels that will detrimentally effect the local road network.

ANNEX D

TRANSPORT ASSESSMENT

- D1. Transport Assessment concerns person trips, not car trips. It is a comprehensive assessment that should enable all the potential transport impacts of a proposed development or redevelopment to be fully understood. The objective should be to encourage sustainable travel in relation to the transport mode hierarchy. The assessment should be presented in clear language so that lay people can understand the implications.
- D2. The assessment should present all the transport implications of the proposal but also aim to balance detailed analysis with simplicity. A comprehensive approach will provide more useful information for decision-makers but may well be an excessive burden on developers. A simple approach may be easier for developers, but not provide sufficient information for effective decisions to be taken.
- D3. The development thresholds requiring a detailed Transport Assessment are set out in Transport Assessment and Implementation: A Guide but each application is considered on its own merits. Local authorities may lower the thresholds where appropriate, i.e. areas particularly sensitive to impact of additional traffic.
- D4. These standards should form the basis of discussion and negotiation with a developer. Discussion between a developer and a local authority at an early stage should highlight any additional requirements or changes that may be needed to the layout and design of the proposal. On-going liaison will assist in reaching agreement so that later, and generally more expensive, changes will not be needed.
- D5. Transport assessment should aim to provide supporting evidence to accompany the planning application to demonstrate that the development is sited in a location where current and likely future travel behaviour will produce a desired and predicted transport output.
- D6. Transport Assessment should initially provide information on the proposal's compliance with key site policy. It should set out proposed methods of mitigation designed to reduce adverse transport impacts. Assessments should therefore include the following three main elements:
- An assessment of travel characteristics;
 - A description of the measures which are being adopted to influence travel impacts of the proposal;
 - A description of the transport impacts of the development in a broader context and how these will be addressed.

The transport assessment process also incorporates scoping, travel planning and monitoring.

ANNEX E

TRAVEL PLANS

- E1. The national thresholds given for the requirement of travel plans (in relation to transport assessments) are based on development type and unit size. At the local level greater innovation can be used to assist decision making by generating an 'accessibility map'. This would identify general zones of high, medium and low accessibility for a given area. These must also be justified by carrying out an accessibility analysis for the development plan area, which can be undertaken as part of a local plan review. Any local variation in thresholds should be documented in the local plan. The local plan should also identify specific sites for which the planning authority considers a travel plan will definitely be required.
- E2. A travel plan is a site specific package of practical measures (for example targets and initiatives) which minimise negative impacts of travel and transport and aims to co-ordinate transport with wider policy issues (such as the environment and social inclusion) into a co-ordinated strategy. These measures provided by the developer and/or occupier can be categorised as:
- Basic e.g. car pooling/cycle leasing.
 - Organisational e.g. flexi time.
 - Disincentive e.g. parking management.
 - Luxury e.g. company buses.
 - Communication/marketing e.g. leaflets/posters to disseminate information.

Further information on travel plans can be found in 'Travel Plans: An Overview' (Scottish Executive, 2002) at:

<http://www.scotland.gov.uk/library5/transport/tpao.pdf>

- E3. Those aspects of travel on which individuals place the highest significance should be incorporated into the measures chosen to influence mode, for example time and convenience. An initial survey will identify the current behaviour of staff and their opinions for possible change. The plan should consist of a package of complementary 'carrot' and 'stick' measures that act as incentives and disincentives.

- E4. The content of a travel plan should be agreed in conjunction with the Local Authority and reflect the aims and objectives of the Council as a whole. The use of measures is to meet targets which have been derived from the transport assessment or the Local Transport Strategy. Without targets a travel plan becomes an act of good faith.
- E5. The plan should encourage change in a manageable way for those it is targeting. It should be practical and realistic in its aims. Most people are already multi-modal in their travel behaviour therefore this will often mean small incremental changes for which the travel plan should have mechanisms in place to ensure the change is sustained in the long term.
- E6. It is not always the case that the most resource intensive travel plans have the most effect on mode share. Research has demonstrated that travel plans:
- Containing only marketing and promotion are unlikely to achieve any modal shift.
 - With car-sharing and cycle measures may achieve 3-6% reduction in drive alone commuting.
 - Works buses may achieve around an 8-13% reduction in drive alone commuting.
 - The combination of all the above measures plus disincentives to car use may achieve a larger (15-20%+) reduction in drive alone commuting.
- E7. An example of exceptional commitment would include:
- An annual budget for measures per employee of £200.
 - Senior management being prepared to lead by example, giving up reserved car parking spaces and changing mode.
 - Support from the developer for a network of buses to serve the proposal, coupled with fare reductions of at least 30%.
- E8. Local authorities are encouraged to develop a weighting for different trip reduction measures relevant to their local circumstances, that they and developers can utilise when designing a proposal. A generalised example is given below, however in practice figures will be dependent on the specific context of the proposal.

<i>Measure</i>	<i>Score</i>
Major new public transport infrastructure	3
Minor new infrastructure i.e. bus stops, cycle racks	1
1-2 new or enhanced public transport services	2
More than 2 new or enhanced public transport services	2
Reductions in prices of public transport services by 30% or more	3
Restrictions on effective parking availability	5
Annual budget for measures per employee or (retail/leisure) 50m GFA	
• Not stated	0
• <£10	1
• £20-£50	2
• £50-£100	3
• >£100	4
Promotional activities i.e. green transport week	1
Consultation with staff	2
Public transport information	1
Car sharing scheme:	
• paper based (notice boards)	1
• computer access and self registration	2

E9. The score indicates a likely level of car trip reduction that can be achieved with those measures at sites in the local area. They should be based on empirical local evidence on the effectiveness of measures. The scores and resultant levels in single occupant trip reduction are then calculated as follows:

- 8 or less: 3 – 5%
- 8 – 16: 5 – 10%
- 16+, which must include parking restrictions: 10 – 15%.

ANNEX F

ROADSIDE SERVICES

	<i>Motorway</i>		<i>Dual Carriageway</i>	<i>Single Carriageway</i>
	<i>Direct Access</i>	<i>Junction Access</i>		
Service Area	Free short term parking for both commercial and private vehicles, including those only wishing to rest and not to use any facilities			
	Fuel			
	Free toilets			
	A picnic area with picnic tables available during daylight hours			
	All facilities accessible to disabled people			
	Telephones			
Other facilities for operators to offer in the light of demand and arrangements made with other bodies e.g. tourist boards	Catering on all sites (not only from automatic vending machines) but not necessarily open during all service area opening hours			
	A retail unit on all sites but not necessarily open during all service area opening hours; it is recommended that provision be limited to a single unit of up to 200 square metres net floorspace to be treated as a maximum prior to planning authorities setting actual limits in development plans dependent on local circumstances, e.g. for service areas in particular locations of national tourist significance more or larger retail units may be permissible where this will not conflict with environmental objectives; all retail activity is to meet the reasonable needs of travellers only			
	Tourist information, manned at appropriate times or otherwise available			
	Limited vehicle repairs			
	Cash dispenser			
	Overnight accommodation (which may be particularly desirable for example on the main tourist routes)			
	Special parking facilities such as secure overnight accommodation for which charging may be appropriate			
	In locations near popular climbing and walking access points it may also be appropriate to include facilities providing information or telephone access to local weather forecasts, mountain rescue and similar services			
	All facilities are to be provided primarily to meet the reasonable needs of travellers and the scale of provision should be consistent with these needs			

	Motorway		Dual Carriageway	Single Carriageway
	Direct Access	Junction Access		
Minimum Requirements in Addition to Above	All the services mentioned in the Service Area definition should be provided on both sides, or if on one side only, connected to the other by an overbridge or underbridge incorporating adequate sight lines, entry and exit splays and safe gradients; if the overbridge or underbridge is for pedestrians only, there must be an adequate parking area and fuel supplies on each side of the road	A driver's view of direction signs at a junction should not be impeded by service access or signs	All the services mentioned in the Service Area definition should be provided on both sides, or if on one side only, connected to the other by an overbridge or underbridge incorporating adequate sight lines, entry and exit splays and safe gradients; if the overbridge or underbridge is for pedestrians only, there must be an adequate parking area and fuel supplies on each side of the road.	The siting of the service area should not result in increased traffic problems which would exacerbate existing urban congestion or be to the detriment of safety or the environment. A driver's view of direction signs at a junction should not be impeded by service access or signs. Siting should minimise the need to make detours off the trunk road. Full account should be taken of land use policies and of urban conservation interests as set out in Local Plans
	These facilities should all be available every day of the year for 24 hours a day		These facilities should all be available every day of the year for between 12 and 16 hours a day. On trunk roads agreed with the Scottish Executive as being essentially tourist routes these opening hours will apply from 1 March to 31 October but not necessarily in other months with the exception of routes accessing winter sports areas	
	There is no sale of alcohol on the site			

	Motorway		Dual Carriageway	Single Carriageway
	Direct Access	Junction Access		
	Sufficient parking should be provided for 0.5% of the predicted light vehicle flow, 0.35% of the predicted heavy vehicle flow, and, for coaches, 0.1% of the predicted heavy vehicle flow, all measured as a proportion of the annual average daily traffic flow 15 years after opening	Sufficient parking should be provided for 0.5% of the predicted light vehicle flow, 0.35% of the predicted heavy vehicle flow, and, for coaches, 0.1% of the predicted heavy vehicle flow, all measured as a proportion of the annual average daily traffic flow 15 years after opening. ²³ It may also be necessary to consider the effects of non-motorway traffic on parking requirements	Normal traffic management principles for access, visibility, manoeuvrability on site, proximity to other junctions, etc., should be met. Design and layout should respect the character and nature of the surrounding urban fabric	

²³ The predicted traffic flows are those provided on application to the Scottish Executive. Developers will not necessarily be required to provide the full 15 year parking levels as soon as the site opens, but will be expected to achieve:

- Planning permission in respect of land able to accommodate the whole 15 year figure,
- Have legally enforceable rights to acquire the necessary land to build up to the final provision in 5 year stages, and
- Have a landscape setting and development framework capable of accommodating the phased development.



	<i>Motorway</i>		<i>Dual Carriageway</i>	<i>Single Carriageway</i>
	<i>Direct Access</i>	<i>Junction Access</i>		
	<p>The Scottish Executive will maintain its strict policy of restricting accesses to the motorway. Safe and clear accesses conforming fully to national standards are an essential part of any MSA development bearing in mind that motorists will be accustomed to motorway driving conditions. It will be particularly important to avoid the risk of congestion or interference with the free flow of traffic on the main carriageway. Locations will require to take account of satisfactory weaving distances in relation to existing or proposed motorway junctions. MSAs should not be used as routes from the motorway through to other nearby developments or act in any way as junctions between the motorway and the all purpose road network.</p>		<p>Any direct access by slip roads off the trunk road should be away from a side road connection, junction or roundabout to permit adequate sightlines and weaving distances. The access must be separate from any break in the central reservation to avoid encouraging traffic to cross the road.</p>	<p>Access should not infringe existing overtaking provision. Visibility in either direction from the accesses must be adequate on the trunk road. Preferably the site should form one of a pair on both sides of the road with the near-side one seen first by approaching traffic.</p>
	<p>Any rear access roads connecting to the local road network will require to be restricted to staff, deliveries and the emergency services.</p>			
General Policy	<p>The Scottish Ministers will be advised to agree access to the motorway or other trunk road in the following circumstances :</p> <ul style="list-style-type: none"> • Where all the services are to be provided and made available as set out in the service area definition (it is appreciated that hours of opening cannot be enforced under planning powers but "Services" signs will not be allowed on the trunk road unless this requirement is complied with); and • Where the site is sufficiently large to deal with its customers clear of the road and, where reasonably practicable, is designed for one-way working through the service area with fuel pumps sited as near the exit as possible to ensure that waiting vehicles will not stand on the carriageway. 			

	<i>Motorway</i>		<i>Dual Carriageway</i>	<i>Single Carriageway</i>
	<i>Direct Access</i>	<i>Junction Access</i>		
	<p>The Scottish Ministers are prepared to install, at developers' expense, 'Services' signs giving advance warning of service areas. They will however retain their discretion to remove such signs should, in their opinion, any aspect of the operation of a service area be detrimental to the free flow of traffic or to safety on the road network or should the minimum requirements to qualify as a service area not be maintained. Details of these signs have to be agreed with the Scottish Executive.</p>			
	<p>The Scottish Executive believes that an element of competition on site, between different caterers, for example, will lead to improved standards to the benefit of the travelling public. Where traffic volumes do not support competition within a site, an operator may still wish to consider using the resources of the local community in the catering and retail outlets to help in promoting the local economy.</p>			
	<p>Planning authorities, in defining opportunities for service areas and other facilities on trunk roads, should take into account the provisions of Scottish Executive Circulars and SPP's. Where appropriate Scottish Natural Heritage and Historic Scotland should be consulted in this process. If the development has potential implications for water quality e.g. potential run-off from parking areas, The Scottish Environment Protection Agency should also be consulted.</p>			
	<p>At a strategic level development plans should:</p> <ul style="list-style-type: none"> • Indicate where on the motorway and other trunk road network there are opportunities for service areas; • Indicate which lengths of the trunk road network are constrained by environmental and other considerations; • Indicate where there is a need for other facilities short of service area provision; and • Set out strategies for enhancing and promoting the facilities in wayside and bypassed settlements to contribute to meeting the needs of travellers. 			
	<p>At a local level development plans should:</p> <ul style="list-style-type: none"> • Identify specific sites for new or improved facilities in accordance with the strategic framework; and • Set out design guidance and operational criteria. 			



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