ACCESSIBILITY STANDARDS RESEARCH PROJECT

Contents

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Executive Summary

Introduction

This report is the product of a short research project commissioned by the DETR in early 1998, to examine the case for introducing accessibility standards into the planning system, in support of the policies set out in planning guidance (especially PPG's 1, 6 and 13). Accessibility is defined as the general ease of reaching or being reached, and not the specific meaning attached to discussions of accessibility for those with disabilities.

Context of the research

The Ove Arup study into the implementation of PPG13 indicated a lack of progress by authorities in implementing limits on car parking in developments and improving accessibility by other modes. New standards for accessibility should address these difficulties and influence the development planning process so that private and public sector interests are channelled in the same sustainable direction.

Accessibility standards would also be consistent with other possible policy changes and mechanisms currently under consideration by the Government, including the possibility of a commitment to reduce the absolute level of road traffic, and fiscal and planning mechanisms for delivering it. They could lie at the heart of an integrated approach to land use and transport, and be a major contributor to its effective implementation.

A new accessibility standard

The proposed concept is for a "Mode Choice Minimum" or "MCM" standard, which provides a framework for determining applications for non-residential development. It would ensure that developments are planned so that access by non-car modes does not fall below a specified minimum. The MCM would require all developments to operate on a multi-modal basis, thus serving the whole community, and would exclude the possibility of schemes which rely wholly or largely on the private car for their viability.

The MCM is seen as a device not only for limiting the environmental and social impacts of individual developments, but also for encouraging developments of the appropriate type and location to avoid car dependence, and to boost the development of accessible brownfield sites.

Development applications would include a calculation of mode split to show how the MCM standard is to be met. This would be part of a Transport Assessment which included wider aspects of transport and traffic impact. Parking would be based on the MCM, taking off-site provision into account.

Social inclusion

In addition to environmental and urban revitalisation objectives, the study paid particular attention to the objective of social inclusion. The eradication of social exclusion is an important Government objective, though transport does not always figure very prominently in the debate. The report describes how current development practice contributes to social exclusion, by cutting off substantial sections of the population from access to facilities of all kinds. It also argues that development schemes based on deliberate social stratification are reducing the quality of facilities available to those with fewer mobility options, including those with disabilities.

Attention is given to the social exclusion impacts of certain health and education policies, and the authors call for a review within the health and education services of the accessibility impacts of service planning and provision.

From parking standards to accessibility standards

Parking standards based on keeping cars off the street continue to mean that car dependence is “built in” to development schemes. Policy guidance advocates restraint-based parking standards, but implementation has been poor. Put simply, if a local authority wants to limit the number of parking spaces in a development and promote alternative modes, it faces the prospect of a different authority offering more parking and not asking for contributions for other modes. Developers may then withdraw a scheme, or go elsewhere. The fear and the threat of this happening significantly weakens the negotiating position of local authorities.

Access standards could be more effective in promoting developments which are not dependent on the car, and which are accessible by more sustainable modes of travel. Some local authorities, e.g. Nottingham, are already looking for a new approach which is better related to sustainable transport objectives.

A national minimum for mode choice

The actual figures to be included in the MCM standard must be set according to policy objectives. The suggestion is for a minimum of 50% of person trips to developments to be made by means other than the car, and a concomitant ceiling of 50% person trips by car (or private motorised transport). This will halt the excesses of car growth that at present are fuelled by most developments in non-central locations, and will in addition counterbalance “background” traffic growth.

A ceiling of 50% for car drivers and passengers is a manageable change from the current national average of 60%. At 50%, the MCM would set in train significant restructuring within the development process, in line with PPG13 policies. In addition, incentives should be provided to encourage development which operates with car access below the ceiling. Three mechanisms can potentially achieve this, namely fiscal mechanisms, such as the

recommended Parking Space Charge, planning policies such as the PPG6 sequential test, and the response of market forces to the new accessibility regime.

How does the MCM relate to wider strategies?

The MCM fits with accessibility levels by different modes, in order to guide development to appropriate locations: “the right business in the right place”. In the formulation of development plans, area-wide accessibility profiles may reduce the need for individual MCM calculations. The MCM standard would also give added weight to, and benefit from, voluntary mechanisms to promote more sustainable travel choices, such as local Travelwise campaigns and Green Travel Plans.

Mode split of trips as the key indicator

The report explores in some detail the benefits of using mode split of trips as the key accessibility indicator. Although mode share of distance travelled may be a more direct indicator of traffic impact, the problems of data collection outweigh the advantages. Moreover, a case is made that traffic impact is in fact more closely related to trips than is generally acknowledged.

Variations of the MCM?

The authors see no convincing case for variation of the MCM by location or by region. Almost all the (land use) problems arising from current methods of traffic restraint relate to the powerful tendency for developers to avoid restraint measures by migrating to areas where restraint is not applied.

A distinction should be made between the value of flexibility to take account of local circumstances, and flexibility which is used to gain competitive advantage in attracting private sector development. The latter is regarded as wasteful, and leads to less sustainable development solutions.

Within the MCM standard, however, there would be considerable scope for variation at the implementation level, in particular the split between the non-car modes, and the manner in which parking is provided.

Specific business needs

Exceptions should be as few as possible, to avoid loopholes in the system. There will, however, be certain types of development for which the MCM standard would be inappropriate. Motorway service stations would be an obvious example. Businesses such as haulage and distribution which are best located near to the non-urban road network also will need to be taken into account. Further consideration will need to be given to whether MCM standards should be varied according to land use, or whether exceptions to the standard are more appropriate. The role of the General Development Order, and the case for its revision will be relevant to such further study.

Enforcing and monitoring the MCM standard

The MCM will require a calculation of the intended and predicted mode split of trips to developments. Following completion, it will be necessary to ensure compliance with the MCM. The report discusses important issues concerning data collection, and the use of appropriate mechanisms including planning conditions for monitoring and enforcement, including funding.

Residential accessibility standards

Good planning practice requires housing to be provided with primary school, food shopping and other facilities within easy walking distance, and for employment and more specialised urban facilities to be within easy reach by public transport. Consideration has been given to developing criteria for ensuring a minimum standard of accessibility by non-car modes. The authors conclude that it is neither feasible nor desirable to attempt to enforce particular travel or mode choices at the point of origin (i.e. housing). Also, since many local authorities already plan successfully for the provision of local facilities, there is less need for a national standard. Nevertheless, in a an annex to the main report, a “proximity standard” is described which could be further developed and applied by local authorities.

Feasibility of the MCM standard

If the MCM standard is to be introduced as a means of improving the implementation of sustainable development, there will be little point in setting it at a level which produces no discernible change in development practice. Acceptance of the principle is therefore a precondition.

The likely responses of developers, local authorities and individuals are discussed. The relative impacts on development in urban and rural situations are also reviewed. The broad conclusion is that the MCM standard will introduce a positive force in the development process, and remove many of the difficulties inherent in current practice whereby sustainability objectives are perceived to be at odds with those of economic and urban regeneration.

Initial resistance from the development industry is likely, but would not signify inability to adapt to the new framework created by the MCM. The new mechanism will not simply force restrictions on an unchanging development market, but will provide a positive incentive for developers to bring forward schemes that contribute to the desired trends. This would be crucial in harnessing market forces to move in a sustainable direction.

There is no doubt that there will need to be a major shift in attitudes, and a period of adjustment to the new framework, but the increased certainty and the consistency which the national standard will offer are believed to outweigh the difficulties.

The resource cost implications of a change in access patterns are likely to be favourable, or at least neutral, since more efficient use will be made of road

and other infrastructure, and there should be less need for public support of public transport. More efficient use of land will result, and there will be less need for investment in road and parking infrastructure.

Implementation

Consideration must be given to the appropriate mechanism for implementing the MCM. Revised planning guidance alone is unlikely to be effective, given the patchy compliance with current guidance. Other options include:

- Strengthened planning guidance (e.g. by policy guidance being given precedence over non-conforming local policies in the determination of planning applications and appeals);
- New ways of drawing in private sector money to secure accessibility improvements;
- Issue of a Statutory Instrument governing the application of MCM;
- Primary legislation, e.g. an Accessibility Act or an amendment to the Planning Act or Road Traffic Reduction Act.

Implementation of the MCM standard will require or prompt changes and responses both within and outside the land use planning system. These may include:

- Guidance on methods of accessibility measurement;
- Guidance on s106 agreements to secure accessibility improvements;
- Appointment of a local authority transport officer to coordinate the transport and planning functions implicated in the MCM;
- Development of data on accessibility including, for example, the development of a national database on development types and mode split;
- Greater local authority control or influence over public transport, at least the ability to enforce “quality partnership” agreements with local operators;
- A more comprehensive approach to parking control, especially mechanisms for easier introduction of CPZs;
- Revision and strengthening of PPG13 to incorporate the MCM;
- Need to ensure that the new PPG11 on Regional Planning Guidance incorporates the MCM;
- Consideration could be given to setting up special technical units to help both public and private sector bodies in preparing schemes which accord with the MCM.

SECTION 1 CONTEXT AND PURPOSE OF ACCESSIBILITY PLANNING

Introduction

This report is the product of a short research project commissioned by the DETR in early 1998. The work has been carried out by Tim Pharoah, with Keith Buchan of the Metropolitan Transport Research Unit, and Kate Mansell of Llewelyn-Davies.

Project definition

This project examines the case for introducing accessibility standards into the planning system, in support of the locational policies set out in Planning Policy Guidance notes (especially PPG's 1, 6 and 13).

In examining the case for accessibility standards, this report focuses on the character of such standards and their purpose, how they would work in practice, their feasibility, and what other mechanisms or policies might need to be developed or changed in order for the new standards to operate effectively.

Definition of terms

The term **accessibility** as defined in this study relates to the general "ease of reaching" or the "ease of being reached", and should not be confused with the rather more specific application of the term in relation to the requirements of people with physical or other disabilities (see David Simmonds Consultancy et al, "Accessibility as a criterion for project and policy analysis", Interim Report to DETR, September 1997, page 5).

Much of the work is concerned with the use of measures and standards in relation to mode split of trips and travel. The focus is on the proportion of trips and travel undertaken by individual motorised transport (mainly cars), and the objective of reducing this in the overall transport mix. The term used in this report is "**car share**" or "**non-car share**". This is not to be confused with car sharing, a term which is used variously to describe shared vehicle systems (such as the German Statt Auto schemes or the Edinburgh city car Club scheme), but also the sharing of cars for common journeys, for which we prefer the north American term "ride-sharing".

Context of the research

We take as a starting point the problems which have arisen in the implementation of recent planning policy guidance directed at reducing the need to travel, reducing dependence on the car, encouraging alternatives to the car, and reducing the rate of growth of road traffic. These problems have been described in the report on PPG13 implementation by Ove Arup and

Partners for the DETR, published in December 1997. The problems considered particularly relevant to this study include:

- Reluctance in the private sector and in some local authorities to make significant changes in light of the new guidance, which is perceived as "going against the grain" of the market;
- Lack of regional guidance and standards (e.g. parking standards) to ensure consistency, and to avoid poaching of development;
- Measures are needed outside the planning system and outside local authority influence to support the new policies, including fiscal measures to limit vehicle use; and improvement of public transport in the context of privatised and deregulated facilities.

New standards for accessibility will need to address these difficulties, and ideally should influence the dynamics of the development planning process so that private and public sector interests are channelled in the same favourable direction.

It must be noted that the current planning policy framework is itself an element within the integrated transport planning policy framework, and this is currently subject to major review. A number of possible policy changes and implementation mechanisms are relevant here, though not all are discussed in this report:

- The Transport Reduction Act 1997, and the Transport Reduction Bill. The latter in particular would appear to herald a new policy of reducing absolute levels of road traffic (as opposed to "influencing" or "reducing" the **rate** of traffic growth as in policy statements to date);
- Possible tax on Private Non Residential parking (see Annex 2 which discusses an alternative Parking Spaces Charge);
- Possible road pricing ;
- Possible levy or tax on "greenfield" development, with or without disbursement to aid brownfield development;
- Possible application of a "sequential test" for housing.

Consideration has also been given to wider objectives that lie behind the development of policy at the national level, in particular the formulation of integrated transport policies. The following objectives are pertinent to accessibility standards (taken from "The Road Traffic Reduction Act 1997, Draft Guidance to Local Traffic Authorities Public Consultation Exercise", DETR January 1998):

- Promoting environmental objectives;
- Promoting economic development across all parts of the country;
- Promoting greater efficiency in the use of scarce resources including road and rail capacity;
- Enhancing the vitality of town and city centres;
- Meeting the needs of rural areas;

- Reducing social exclusion and taking account of the basic accessibility needs of all sectors of society, including disabled people.

This last objective is less well understood in terms of land use and transport planning, and is therefore further discussed below.

The objective of social inclusion

The eradication of social exclusion is an important objective of Government policies. It is discussed usually in terms of providing incentives or removing barriers, so that people will not be excluded from employment, health, education and social opportunities. Transport does not always figure very prominently in the debate about what causes social exclusion, or about what can be done to reduce it. Here we attempt to show, in very broad terms, how current land use development practice contributes to social exclusion, by cutting off substantial sections of the population from access to facilities of all kinds. It also argues that land use decisions based on deliberate social stratification are causing progressive decline in the facilities that do remain for the socially excluded.

Social exclusion is a consequence of the way many developments are planned. With certain private developments, such as supermarkets catering for the upper end of the market, and some leisure facilities, market research is undertaken to check if the drive-time catchment contains sufficient population of the right characteristics to make viable a particular scheme at a particular location.

These days this is not just simply a question of finding sufficient people in, say, social groups A B C, but involves extremely sophisticated matching of population profiles to product and advertising preferences. In the retail sector this involves analysis of customer purchases. Thus it is possible for retailers to judge not only the overall viability of a superstore, but to determine what particular products should fill the shelves to maximise their store's revenue and competitive position.

Rather less consciously, but no less relevant in terms of the exclusion effect, many employment, leisure and other facilities are planned in relation to motorways and road access, and land sufficiently cheap to provide free parking.

All of these developments are located and planned with the target users and employees assumed to be car users. It is not uncommon as a matter of company policy for people without cars to be excluded from consideration when jobs are offered. In terms of customers, it is of little concern to the promoters of such schemes that non-car users cannot easily reach them, since the schemes are viable in any case without their custom. In fact, there may be a more sinister aspect, that by excluding non-car users, one can at the same time exclude people who may be seen as undesirable from a marketing perspective. For example, people with young children, people from

ethnic minority groups, elderly people, or even people whose dress or demeanour indicates low income or status.

Social exclusion, or at least deprivation, is also an outcome of health and education policies for the location of facilities. The trend towards larger and fewer health facilities has been widely acknowledged (though less widely researched) as having had a negative impact in terms of accessibility for precisely those groups of people who need and use such facilities most, particularly the elderly. Until recently, policies relating to health provision were devised and implemented with scant regard for how people would reach the facility. Responsibility was seen as beginning and ending at the front door.

More recently, there have been favourable revisions in Health Policy, including a move away from large general hospitals towards primary care facilities, including community hospitals, multi-practices and local clinics. If this policy is continued, it could help to undo some of the damage to local health care access that has occurred over recent decades.

In education, a rather different story can be told. The moves of the previous government to widen parental choice in effect accepted that some schools were better than others were, and that parents should be free to send their children to schools further away if they were judged to be better.

As a result, travel to school has increased, and has often meant that journeys that previously would have been made on foot now involve a car escort journey.

In some parts of the country, notably in London, the failure of many state schools has prompted considerable expansion of private schools, and this too has increased school travel. Thus in education the issue is not whether a school is accessible, but whether a school of sufficient quality is accessible.

In all of the cases described above, the impact of facilities that are provided primarily for those with access to cars have negative impacts on those people without access to cars.

Firstly, by removing a social segment of the population from facilities located in town centres or near to people's homes, the range and quality of such facilities inevitably will be reduced. An example is the tendency for down-market supermarkets to survive in high streets, whilst stores offering higher quality goods or a wider range of products are confined to out of town stores. This impact is quite distinct from the general loss of trade which new competitive facilities inevitably produce (for given population and activity levels).

Secondly, the transfer of customers from local or town centre facilities to car based facilities elsewhere, means that the transport facilities available to non-car users are less well patronised and hence become of poorer quality. In addition to this, the car traffic generated by such "access segregation" often

passes through the traditional areas, creating greater severance and environmental nuisance for those people who continue to rely on them.

Towards accessibility standards

Overall purpose of parking and accessibility standards

History

The purpose behind setting parking standards, which are usually found in an Appendix in County and Local Plans, was originally to ensure that developments provided the parking needed to serve their business. The standards were conceived as **minima** and implicit within them was the idea that all potential demand to access development by car would be catered for. Developers were also asked for contributions to local road capacity increases where needed. Any new proposals to replace the old standards must recognise that there is a considerable legacy of car based developments, even within large cities, and especially just outside them.

Some authorities, particularly in city areas, realised some time ago that traffic congestion was a serious and growing problem and that non-car travel, particularly public transport, could provide at least part of the access requirements of a site. This led to agreements to fund public transport improvements (usually capital) and the idea of "commuted payments" where the developer paid for parking spaces but these were located in park and ride sites or in public car parks outside the development site.

Current problems

As the need for car demand management and sustainable policies has spread throughout the country, the system has been modified and stretched but not reformed. There is thus still an easy "ready reckoner" for car access (parking spaces per sq. metre) but no equivalent for public transport, walking or cycling. Demand restraint parking standards can be found in some Local Plans, but even where present, individual developments are often granted an exception. This is usually because local authorities are afraid that an alternative location would offer the parking and thus "poach" the development. Within the development industry, prevailing attitudes are such that demand led car parking provision is necessary to ensure the viability of a scheme. While there has been some modification of this view amongst retail developers (and to some extent leisure), financial institutions still are interested primarily in commercial developments where unrestrained car access is assured. A high proportion of housing is also developed with ample off-street parking to accommodate residents’ and visitors’ cars.

Overall the picture is one of inconsistency and a general failure to implement parking space restraint as part of local planning and transport strategies.

There is a need for a new framework which addresses these problems and fits with the new integrated approach to transport planning. The idea of package bids has given local authorities some experience in developing integrated strategies, but they have had a range of problems in producing them. Leaving aside the major move away from scheme led policies to objectives led strategies, and the ever present problem of resources, there are two obvious structural difficulties at the local level.

The first is that outside London there have been severe limitations on what local authorities can do to ensure a stable network of integrated public transport services, ticketing and information. On the latter there have been many efforts to do so, and the idea of "Quality Partnerships" between local authorities and operators has been introduced. Nevertheless, deregulation of the buses has placed councils in a very weak position.

If the positive long term improvement of public transport has been severely limited, the key measures which would push people towards alternatives to the car have also been seriously lacking. Leaving aside road pricing, there is one obvious way in which car use can be discouraged: charging for or limiting the number of parking spaces. In some city centres the policy is for no increases in parking supply, although this is rare.

The reason for this is well known: if an authority wants to limit the number of parking spaces in a new development and promote alternatives, it faces the prospect of a different authority offering more parking and not asking for contributions for other modes. This may be enough to persuade developers to withdraw a scheme, or switch to an alternative location. The fear and the threat of this happening significantly weaken the negotiating position of local authorities. There are of course exceptions - for example, a large free-standing town serving as a regional centre where there is significant local catchment and no immediate alternatives. Even these are threatened by greenfield development. Such development near an existing town or city centre is seen as an even worse threat: the argument is that at least if development is in the existing centre it will do less harm, even if parking spaces are permitted which will lead to congestion and environmental damage.

This is a simplified version of the daily problems faced by local authorities who desire development, environmental improvement, and health and vitality for their existing commercial centres and communities. Parking controls of various kinds are the main tools available on the restraint side of demand management in transport. The idea of standards is being redirected to achieve the opposite of what was originally intended. Inevitably this has run into serious problems and, even where regional guidance is clear, as in London, many boroughs either have ignored it, or at least have been tardy in amending and implementing their parking standards. In Outer London the argument is that immediately beyond the Greater London boundary there are plenty of willing recipients for development with standards which are weaker than those in London.

Clear guidance and a consistent pattern of appeal decisions needs to be created (the latter may have already begun) and there should be a reduction in the risk factors associated with appeals. Perhaps the best example of this is where local authorities can lose what they negotiate as part of a planning agreement if the appeal goes against them. This alone weakens their negotiating position.

From parking standards to access plans

The difficulties of relying on parking standards has led to some local authorities looking for a new approach which is better related to the new objectives of sustainable transport policies. An example of the new approach being attempted is provided by Nottingham City, where the question of replacing parking standards with accessibility planning has been considered (1995). A transitional arrangement was felt to be appropriate, and thus in the revised Local Plan there are parking standards, modal split targets and the requirement for developers and occupiers to work out a company travel plan.

This latter requirement (which is novel for a Local Plan) points the way to reforming the current system so that it creates opportunities for both private and public sectors to move in a sustainable direction. The company travel plan may be seen as an early version of providing a full accessibility plan for developments, instead of simply checking whether enough parking has been included or whether the scheme generates too much traffic for the area to cope. The challenge is to make the preparation of such plans comprehensible, flexible, affordable and (ultimately) enforceable. Above all the plan should encourage the process of working in partnership towards a common goal - in this case sustainable development.

The concept of an accessibility plan meets the Government's requirement to address transport planning in an **integrated** manner, moving away from considering modes in isolation from one another. Integration of course is not just internal to transport, but includes integrating transport with land use and other policy areas, for example regeneration, social inclusion and personal health. However, as part of its move towards a new balance in transport use and choice, it will also be important to guarantee some level of change, while allowing as much flexibility as possible at local level to produce tailor made solutions when required. This fits with policy themes such as subsidiarity and the development of new regional and local government structures.

While the maximum amount of innovation and partnership to achieve new objectives should be encouraged by the accessibility based approach, it will also be necessary to underwrite the need to tackle traffic reduction, and to protect the efforts of an individual authority from being undermined by a non-sustainable policy implemented by a competing authority. Such a guarantee will also be needed in the context of the Road Traffic Reduction Act where again local targets and solutions are encouraged, but the overall direction must have some consistency across authority boundaries.

So far the discussion has centred on passenger travel, and this is by far the largest component of vehicle traffic. The provision of parking for goods vehicles will have to be considered at the same time as car parking, however. There are ways of identifying such vehicles already, and local authorities are involved in regulating them. Not only do they control where heavy vehicles are allowed to go, they have formal rights of objection to the operating centres where HGVs are kept. Defining such operational parking, and separating it out from employee and visitor parking should be part of a fully worked out accessibility approach. Dealing with specialised requirements such as freight distribution centres or vehicle servicing is discussed further in Section 2.

In addition, there is a range of vehicles which comprises a fast growing element of traffic but which is under-researched. This includes vans and light goods vehicles which may be carrying service personnel and spare parts or other small loads such as samples or local deliveries. Sales representatives nowadays often use cars in any case. It is difficult to define exactly what needs to be done, but again the requirement is to separate operational use and personal employee use such as commuting. The two basic types of vehicle use are: moving people and moving goods. Accessibility covers both, and there are ways of reducing travel from both, but they need separate study.

In addition, it is possible to separate out the two ends of private vehicle journeys. The following sections of this report focuses on ***destinations*** such as retail centres, offices, health or leisure centres on the one hand. ***Origins***, most commonly residential in nature on the other, are mostly discussed in Annex 4.

SECTION 2 NEW ACCESSIBILITY STANDARDS AND LIMITS

This section sets out scenario proposals for accessibility-based planning instruments designed to tackle the problems discussed in the previous section. It is recognised that these proposals mark a radical departure from past and current practice, but are nevertheless in line with current thinking on the promotion of sustainable transport and development. This section focuses on non-residential developments (accounting for the majority of "destinations"), where there are clear opportunities for an accessibility based approach to be implemented. The study also includes draft proposals for access standards applied to residential development (accounting for a substantial proportion of "origins"), but these need further research, development and discussion. They are discussed in Annex 4.

Non-residential development access standards

Concept

The proposals which follow address several specific objectives. Obviously the first one must be to reduce traffic, in turn for the purposes of reducing congestion and environmental pollution, and improving living conditions and alternatives to the car. At the same time as guaranteeing some level of improvement, the idea is to allow as much flexibility as possible within the overall requirement, and to work with market forces and support existing initiatives and partnerships. The most difficult task is to create effective arrangements which allow for an individual mix of transport access to different sites, without recreating the current difficulties. At present this "flexibility" has resulted in both inconsistent standards and their inconsistent application which is the hallmark of the existing system.

The concept put forward here is for a "Mode Choice Minimum" or "MCM", which provides a framework for determining development applications based on more sustainable access patterns. It is designed to ensure that all developments can be reached by a minimum choice of modes, and thus can serve the whole community. This is achieved by requiring that all developments operates on a multi-modal basis, and by excluding the possibility of development which relies wholly or largely on the private car for its viability. The minimum of choice is provided by the requirement of at least half of access being met by means of transport other than the car. Flexibility is provided in terms of the split between the non-car modes.

The MCM is seen as a device not only for limiting the environmental and social impacts of individual developments, but also for encouraging developments of the appropriate type and location to avoid car dependence.

The MCM would be submitted as part of a development application, using Government guidance on the appropriate methodology. It would be part of a Transport Assessment that included wider aspects of transport and traffic impact. Parking requirements would be calculated from the MCM, and proposals for the breakdown of parking provision included as a required part

of the application (e.g. the split between on-street, off-street existing and on-site, and between private and public).

Operational parking varies according to specific businesses and should be discussed with the local authority. The main requirement is for precise definitions of business use, particularly for goods vehicles and firms whose dominant trade is to service vehicles. Motorway service stations would also need to have their own standard! This study cannot resolve all these issues in detail, but the ones identified so far are clearly amenable to treatment through the existing planning system, for example through the use classes order. Where operational parking and loading space is provided, it should not be available for employee and visitor parking, and this would be a condition of planning permission.

In order to illustrate what the developer, occupier and local authority would be working towards, we set out below a draft Mode Choice Minimum table. There are two basic parameters:

- The first is to ensure a minimum level of non-car modes, but allowing for wide variation between them. Car ride sharing is included in the overall response to reducing car use (equivalent to car driver mode) but the true non-car modes are protected;
- The second (car driver share) parameter limits the use of cars and effectively guides the provision of parking spaces.

Both of these have been chosen to represent what is needed to make clear progress, but also with reference to existing mode share, taken from the most recent National Travel Survey, and targets such as those from the London Advisory Planning Committee, and the Royal Commission on Environmental Pollution.

The scenario proposal is set out below.

Mode Choice Minimum

	Private motorised (Car, LGV, HGV)	Walk	Bus	Rail	Cycle
Employees (work on site), plus visitors and customers	Ceiling 50% *of which* *ceiling of 30% driver*	Minimum 50%			
Employees whose main work is in vehicle	Ceiling 60% *of which* *ceiling of 50% driver*	Minimum 40%			

Note: The two rows distinguish between goods access and person access, or between operational and non-operational users.

A number of issues raised by the “MCM” concept are discussed below, in the form of questions and comments. The following sections of the report examine in more detail issues of measurement, feasibility and implementation.

Why an accessibility standard?

The justification for an accessibility standard is that management of travel demand is not concerned solely with limiting car use, but with the planning and provision of a wide range of transport facilities and management systems. Reliance on restraint-based parking standards, for example, would be unlikely to encourage a sufficiently positive response to the diverse range of planning and transport issues that have to be addressed. By contrast, the accessibility standard would be at the heart of a more integrated approach to land use and transport.

Why a ceiling on car access?

A “ceiling” on the proportion of access by car is seen as better than a standard, because the aim will be to achieve better results, and not to encourage a standard level of car access.

Why a separate ceiling for car driver and car passenger access?

The aim of a ceiling on car driver access within the overall car access ceiling is, firstly, to encourage higher levels of car occupancy and, secondly, to provide an indication of the maximum parking requirement.

Why a particular ceiling?

It must be made clear that the MCM is a component of a wider integrated transport and land use strategy. The actual percentage to be adopted is a matter for political determination, taking into account the policy objective of reducing the growth of car traffic and (perhaps) reducing the absolute level of car use. While the actual target percentage may in one sense be arbitrary, calculation of the mode split resulting from a development is not, and the techniques are discussed in the next section, and also in Annex 3.

An overall figure higher than the existing national average for private motorised travel will increase the rate of car growth, which is contrary to policy. This suggests that the upper end of the range of possibilities would be 60% for car access in total. (The national average access by private motorised travel including drivers and passengers is 60%, and 38% for car drivers alone.) It must be recognised, however, that if the ceiling was set at this level, the growth in car traffic would not be halted, since over time existing developments below 60% could be replaced by developments with 60% car access. In addition, so called “background” car growth will continue to existing destinations not subject to the access limit due to increasing car ownership and other factors.

An overall figure lower than the existing national average for private motorised travel will halt the excesses of car growth that at present are fuelled by the majority of developments in non-central locations, and will in addition provide a counterbalance to car growth caused by non-land use factors. How much lower is, of course, a matter for debate. A ceiling of 50% for car drivers and passengers is a manageable change from the current national average of 60%, although it implies a more significant change for out of town development, where car use is dominant. There is little doubt that the 50% requirement would be sufficient to cause significant restructuring within the planning and development process, exactly in line with the policies set out in PPG13.

It is interesting to note the recent LPAC recommendation for leisure developments, which is for an upper limit for the proportion of person trips by car of 45% in inner London and 60% in outer London. These are seen as interim targets based on existing mode split so that “access arrangements and parking should not cater for a greater proportion of person trip access by car than is currently the case”, but more restrictive levels are anticipated as part of traffic reduction targets currently being developed. (LPAC Executive Sub-Committee, 20th January 1998, Report 8/98, “Large Commercial leisure Developments in London: Draft Supplementary Advice”.)

What incentives can be provided to encourage development that operates with car access below the ceiling?

The ceiling will not in itself provide an incentive to plan for car access below this level. There appear to be three mechanisms that can (at least potentially) achieve this:

1. Fiscal mechanisms, such as the recommended Parking Space Charge (see Annex 2).
2. Planning policies that relate development to accessibility and location, such as the PPG6 sequential test.
3. Market forces in response to the new accessibility instruments, whereby land accessible by non-car modes becomes more sought after (easier planning permission), and hence more valuable. This in turn will encourage developers to minimise parking provision on site, enabling better access by non-car modes.

Why mode split of trips as the key indicator?

The MCM will operate by measuring the car component of the mode split of trips attracted to a development (both car drivers and passengers). All other modes are grouped into what can be described as the “environmental combination” including walk, cycle, public transport and “paratransit” (shared vehicles, specialist minibuses etc.). It is debatable whether taxis should be included in the “environmental combination”: on the one hand they generate more car miles per person trip than private cars, but on the other hand they have a lower parking requirement, and they help to support use of public transport and walking modes, and hence may suppress car ownership. Also,

taxis are a form of transport where there is an in-built price disincentive to excessive use. On balance, taxis are probably best included as public transport.

The justification for using mode split of trips rather than distance is explored in section 3. Relevant experience from the Netherlands is discussed at Annex 1. The use of Transport Assessments in the assessment of travel patterns, and comparison with TIAs is discussed in Annex 3.

Regional variations?

We can see no convincing case for regional or locational variation of the MCM. Almost all the (land use) problems arising from current methods of restraint relate to the powerful tendency for developers to avoid restraint measures by migrating to areas where restraint is not applied, and for local authorities to try to attract development by making as few conditions as possible. Currently this problem is experienced mostly in relation to parking restraint, but road pricing would also produce the same undesirable trend towards dispersal if prices were highest in congested areas. This important aspect is discussed more fully in Section 4.

There is, in our view, a distinction to be made between flexibility in decision making for the purpose of responding effectively to local circumstances, and flexibility which is used for the sole purpose of trying to gain competitive advantage in attracting private sector development. The latter is hard to justify, and should certainly not be encouraged by providing latitude in the application of MCM standards.

Within the MCM, however, there would be considerable scope for variation at the implementation level. This would include, in particular:

- The way in which parking is provided (e.g. the mix of on and off street, public and private, free and charged, type of control applied, dedicated or communal);
- The particular mix of non-car access which is planned for, and way in which it is planned (e.g. public transport modes being more important in cities, and greater reliance on walk and cycle in smaller settlements);
- Within the total of car access allowed, there would be scope for variation (by developers/occupiers) as to who should make use of it, and on what terms. For example, retailers might give preference to customers over staff, and employers might give preference to visitors or “hot desk” users and car-poolers over regular car commuters. Such variation in management need not, however, be a matter relevant to the planning decision, except insofar as it affects the validity of accessibility predictions presented with the planning application.

Specific business requirements

The MCM standard will work for the main stream of development, but there will be some exceptions. These should be as few as possible. The obvious

ones are where the business is specifically geared to the motor trade, or to the car as a specific mode of travel, for example motorway service stations. Haulage and logistics firms would be covered, however, with commercial vehicle access included in the operational parking category, but with strict conditions preventing its use for other vehicles such as commuter cars.

In the Dutch ABC system, “C” locations are those where road access predominates, and these are seen as appropriate for businesses and services with a low labour and/or visitor intensity and a high rate of car-dependency and/or a high dependency on road haulage of goods. Further consideration should be given to whether the MCM should be varied to take account of such activities, or whether exemptions can be provided for certain specified activities. In both cases, there may be implications for the appropriateness of the Use Classes Order and the General Development Order, in order to prevent change of use becoming a way of avoiding the provisions of the MCM.

The principle at work can be called the "right business in the right place" and this can be illustrated as follows. If locating a distribution depot in an area with high levels of public transport would reduce commuting, but increase heavy vehicle flows through residential or shopping streets, a balance has to be struck. In such cases it would make sense to locate distribution on the freight network (essentially motorways and links, the freight railway network and the inland/coastal shipping network (not leisure canals!). This in turn may need a slightly higher level of car use. Parallel to but different from the Dutch system, the use classes order would define such types of business, but still require some effort to reduce car dependency. For example, many car based business and industrial parks are developing green commuter plans and green business travel plans.

Enforcement and monitoring?

The MCM will require a calculation of the intended and predicted mode split to the development. The manner in which this is done is discussed in Section 3. Following completion of the development it will be necessary to ensure compliance with the MCM. There are important issues here about data collection, and the use of appropriate mechanisms for monitoring and enforcement. This is dealt with in Section 5.

An important aspect of monitoring and enforcement would be to ensure that the aims of the MCM were not being undermined by occupiers “trading” car access. Consideration has been given to the possibility of (legitimate) tradable permits, but the conclusion is that these would be counterproductive. This is discussed in Annex 5.

How will parking off-site be dealt with?

Off-site parking will be an integral part of the consideration of whether a development meets the MCM. On-site parking will be less than 50% of demand (how much less depends on car occupancy rates), and drivers will try

to park nearby. The MCM calculation must therefore be based on all parking available to users within a walk catchment. This means that the extent of walk catchments must be defined, and these are likely to vary between different uses. It may be acceptable to simplify this to, say, 400 metres for shopping development, and 800 metres for all other developments, and perhaps 200 metres for all developments below a certain threshold size

A development which is predicted to lead to undesirable parking within these catchments, for example long stay use of a shoppers' car park, or parking in residential streets, would be refused, unless controls can be implemented, perhaps funded by the developer (see Section 5).

What about existing developments and consents?

Planning powers to implement the MCM can be used when applications are received for alterations and extensions for existing properties. The MCM would also be triggered when temporary permissions and lapsed planning consents come forward for renewal.

How does the MCM relate to wider strategies?

In the formulation of development plans, the MCM provides a framework for the identification of accessibility levels by different modes, in order to guide development to appropriate locations: "the right business in the right place".

Policies can be drawn up for areas deficient in local facilities where development will be encouraged, and for deficiencies in non-car transport facilities which can be addressed through transport investment programmes.

Additional non-statutory action can be taken by local authorities to promote adjustment to the access-based planning framework, and changed travel habits and patterns. Examples are the various Travelwise programmes, encouragement of Green Travel Plans, and the establishment of "mobility centres" providing personalised help in achieving more sustainable travel choices.

SECTION 3 INDICATORS AND MEASUREMENT

Measuring the Mode Choice Minimum (MCM)

Use of the MCM in determining planning applications will require a prediction of the mode split of trips attracted to the site, and its "end stage walk catchment".

Essentially, the MCM will mean that developments cannot be larger than can be supplied from a combination of the "non-car catchment area", and the "car catchment area", and the latter cannot account for more than 50% of trips attracted. This will cause catchments (and developments) to shrink compared to present averages.

The relationship between catchments and mode split is discussed later in this section.

What about linked trips?

The calculation of mode split to a site will have to take account of linked trips. In particular, it should not be possible for people to drive most of the way, and then record the mode as walk by virtue of the final trip stage, as might happen if the car were to be parked at a nearby site.

The definition of linked trips in this context is important. Multi-stage car trips or trip-chains by car are not wanted (because they imply car dependency, and generate multiple parking requirements). Multi-purpose trips where the different activities are linked on foot are desirable, however, such as a single (return) trip to a town centre, serving multiple activities undertaken on foot.

The calculation of accessibility to a site is concerned primarily with the car and non-car split. Included in the car share should be anyone who, in the course of reaching the site from home (or other starting point) on that day, uses a car as the main mode. This will apply whether or not other purposes are undertaken on the way, or at other sites nearby before the return trip is made. This provides a simple way of ensuring that linked trips or purposes are not used as a means of avoiding the limit on car accessibility.

The use of trip mode split as the accessibility indicator

In tackling the problems generated by motorised private transport, the aim is largely to reduce the distance travelled by private cars. Some caveats may be necessary, but these do not undermine the validity of this general statement.

- Certain problems, notably noise, pollutants directly damaging to health, and severance of communities are related mainly to distance travelled in built up areas. It is not possible, however, to dismiss mileage in non-built up areas, because other problems concern these areas too, such as CO2 emissions and road danger.

- Private motorised travel includes motorcycles and commercial vehicles, and a few other categories of vehicle. Motorcycles generally represent a small proportion of the total travel, while the other categories are arguably less susceptible to either unnecessary traffic generation or degeneration, because their users are mostly engaged on business.

If car mileage is therefore accepted the main target of traffic limitation policies and mechanisms, we can move on to consider why mode split of trips may be taken as a reasonable proxy for it.

Two strands the argument need to be addressed: First, is mode split of trips a satisfactory indicator or predictor of mileage undertaken by private cars? Second, why not use travel distance as the indicator when this is the main object of the policy intervention? We tackle each in turn.

Mode split of trips as an indicator of travel distance

Figure 3.1 shows that distance travelled depends on a person's access to a car. To the extent that the new MCM mechanism will reduce car ownership, (or stabilise its growth) this is likely to lead to a reduction of distance travelled.

We can also hypothesise that if a generated trip is made by a mode other than the car, the length of that trip will be less. This is because all other modes are slower than the car, and daily travel time budgets are mostly constant. (Rail and air are faster for some long distance trips, but these account for a very small proportion of total travel and total trips.)

In terms of the car trips which are generated by a new development (i.e. up to the 50% ceiling), we must be able to argue that car distance will be significantly less than if the car share was not limited.

We are interested in two aspects:
1. Total distance travelled
2. Distance travelled by car driver (and to a lesser degree, distance as car passengers).

The main aim of the car access ceiling is to reduce car (vehicle) mileage. It can also be argued, however, that a reduction of car trips is also a valid objective, since they undermine other modes in terms of patronage and quality of service, independently of distance travelled. An important part of this argument is that even short car trips generate significant problems, for example the inconvenience to pedestrians and other road users when parking and de-parking acts occur at the trip ends, and the disproportionate rate of pollution from short trips due to cold-engine running. Also, a higher proportion of the car mileage on short trips is likely to occur on urban streets rather than the open road.

If car share in the mode split is used as a proxy for distance we need to consider likely errors, and whether such errors are in a positive or negative

direction, and of sufficient magnitude to undermine the use of the mode split proxy.

A positive (desirable) error or distortion would be where a percentage reduction in car trips produces an equal or greater percentage reduction in car miles.

A negative error or distortion would be where a percentage reduction in car trips produces a smaller percentage reduction in car miles. If car trip reduction was counterbalanced by longer journey lengths of the remaining car trips, use of the trip mode share proxy for distance would have to be rejected.

Hypothesis 1: Car mileage will reduce to a smaller extent than the reduction in car trips (i.e. reduce as compared to absence of the standard):

- A higher proportion of car trips will be from outside the smaller non-car catchment. Therefore average car trip length will increase. It is possible that this effect may be deliberately encouraged by occupiers if, for example, parking spaces were allocated on the basis of need.
- Car drivers use car for the first trip stage (to park and ride or, possibly worse, kiss and ride).

What is the chance of car mileage reduction being negligible or zero?

One or both of the following would have to occur:

- Car drivers would have to come from a bigger catchment (that is further away on average to counterbalance the reduced share of trips being made by car). This is not possible because they would be competing with an ever larger group of potential car drivers for parking space.
- Drivers circumvent the restrictions on parking. For example, they do a deal with private parking nearby. (This could be picked up in monitoring, providing that people answer questionnaires truthfully.) Thus monitoring (and prediction) must be on main mode to the site, and any car stage of a trip which is greater than non-car stages would count in the car share.

Hypothesis 2: Car mileage reduction will be greater than car trip reduction (ideal):

- Car trips are taken to include trips by car passengers, and hence the car driver share in the mode split is smaller than the overall share of car trips. This means that the percentage reduction in car mileage will be greater than the percentage reduction in car trips. For example, if car trips were limited to 50% of all trips, with an average car occupancy of 1.3, the car driver share would be only 38%.
- Development catchments will shrink in response to a limit on car access. Assuming that the non-car catchments remain the same, the average car trip length may be reduced, thus producing car mileage reductions that are greater than implied by the car trip reductions.

It is difficult to predict the orders of magnitude in relation to the points made above, and the relationship between car trips and car mileage in response to limits on car access would need to be studied further. This cannot easily be done until the MCM is in place.

Reasons for not using travel distance as an indicator

There are a number of difficulties in measuring distance. First, people rarely know the exact distance of the trips which they undertake. This is likely to be especially true of trips which do not figure in people's location decisions (because the calculation of distance is of no practical benefit), and of short to medium distance trips (variation of which would have minimal impact on household budgets), and of trips where employers pay all or most of the costs. Indeed, it is easier to say that the only trips where people are likely to know the distance with any reasonable precision are those made on a regular basis (especially work) and those which determine decisions as to where to locate (again especially work).

Thus distance requires careful data collection, and often involves secondary analysis, such as computing distance from address information. Mode split is very easy to determine by comparison, especially by "main mode", with most respondents being able easily to answer consistently according to the definition of main mode used in the NTS.

These conclusions are consistent with experience in the Netherlands, where trips mode split has been adopted in preference to distance. Some details of the approach are provided at Annex 1.

Relationship between access mode and catchment

For destinations the proposal is to define catchments for a development by each separate mode, with the objective of showing that at least 50% of the employees and visitors to a site have a viable alternative to the car. These catchments can be defined by setting an acceptable travel time to the site and calculating how far the catchment area extends for each different mode. The area can then be translated into potential visitors/workers using population data. Clearly the travel time will vary somewhat according to the type and size of development. To illustrate the point about how modes are used, Table 3.1 shows modal split by journey length.

Accessibility assessments

The availability of parking is known to be a key determinant of mode choice. An assessment will therefore be required of the level of parking available to proposed developments. This will involve an assessment of all parking availability within the walk catchment of the site (suggested as 400 metres for retail and 800 metres for other developments). This will be an important factor in determining what on-site parking (if any) can be provided.

In time local authorities should be able to develop GIS databases showing all parking availability by type.

In the meantime case-by-case assessment will be required. This would involve the preparation of Transport Assessments (TAs), which would assess access by all modes, and the likely split between them, using the catchment method described below. A discussion of TAs, their content and application is included at Annex 3. TAs will be the responsibility of developers to provide.

The catchments will need to be determined for each category of development, and the following further factors will need to be taken into account.

- Define walk catchment
- Access profile of zones and sites.
- Park and ride
- On street parking and including charges and controls
- Off-street parking publicly available
- Off-street private parking potentially available
- Public transport
- Walk and cycle quality
- Changes planned in any of the above

The catchment process for each mode is described in more detail below.

Walk catchment

From Table 3.1 (at the end of this section) it is clear that walk dominates the short distance travel market, with 81% of trips under a mile (1.6km). This equates to about 15-20 minutes walk time. Naturally this share declines rapidly up to 2 miles (to 24%) with only 4 % of trips on foot for distances between 2 and 5 miles. Walk time is calculated door to door.

The shape of the catchment relative to the site will usually be roughly circular. Exceptions will be where there is a major obstacle such as a river, a railway or a highway. It should be noted that sites which are poorly located from the pedestrian access viewpoint will show up immediately through this analysis.

Cycle catchment

While cycling speed is relatively fast and in very congested areas may equal or exceed car speed, the physical effort and deterrent impact of danger and weather mean that it should not be taken on time alone. Nationally, the cycling share of trips peaks between 1 and 2 miles but in both cases is very low (2-3%). However, cycling is subject to very considerable local variation, with some cities scoring mode shares in the mid-teens, for example Hereford, Norwich and York.

For this reason the proposal is to allow a 6% share by cycle for journeys up to 5 miles. This is in line with the national cycling target. However, there will be

local instances where cycling has been promoted effectively or is particularly well established and Accessibility Guidance should be flexible where there is clear evidence that the cycling share will be higher. This would in itself encourage the promotion of cycling as an aid to development.

Bus catchment

As with all modes, travel time is calculated door to door and thus the bus time has several components. This is illustrated in Table 3.2 below, although local values would be used and, in general terms, the time catchment will vary according to the size and nature of the development. In addition, it would be possible to exempt development from calculating motorised travel catchments where public transport provision passes a threshold level for frequency and quality. This can occur in well served areas of larger towns and cites and conurbations. Creating such high public transport accessibility areas through local transport programmes and plans would become attractive for local authorities, working in partnership with operators, developers and occupiers.

Table 3.2
Route X: Bus access time 30 minutes *(illustrative only, all times in minutes)*

Walk to stop	6 (about 0.5 km)
Wait	6 (Reliable 12 minute service)
In bus time	16 (about 6 km @ 24kph)
Stop to site	2

This analysis is easy to calculate using local values for bus speed, reliability and stop location, and produces a catchment related to the direction and route of individual services. This will go beyond the walking catchment but be shaped (for central locations) like a starfish with the fingers extending along the routes with circular mini-catchments around the stops. (For off-centre sites, the bus catchment will be sparser, with perhaps one or two fingers only.) Intermediate modes such as trams or guided bus can be treated similarly but with their own wait and travel times. Interchange with other routes can only be included where the total travel time is within the time budget.

A useful aspect to this process is that it is also enables developers and local authorities to see how much the catchment can be increased by bus frequency or bus priority (faster speed and less waiting) or both. An example of how this change would be assessed is shown in Table 3.3.

Table 3.3
Route X: Bus access time 30 minutes: 10% improvement through bus priority
(illustrative only, all times in minutes)

Walk to stop	6 (about 0.5 km)
Wait	5.4
In bus time	16.6 (about 7.4 kms @ 26.6 kph)
Stop to site	2

The shape of the catchment will also show gaps where potential patronage is not being achieved, and where any new services proposed to support development will increase the catchment. A constraint to be added to this process is that the numbers assumed to be able to travel by bus cannot exceed the carrying capacity of the system (e.g. seats per hour).

Rail catchment

Rail becomes more important as distance increases, but if development is close to a station, the rail catchment can be calculated on an identical basis. In this case it may well take the form of roughly circular catchments around each station on the line serving the development's closest station. The access time to the station provides another opportunity for variation. If a station access plan is available at the remote station, for example park, cycle or bus and (train) ride, this would extend the catchment. The rail equivalent to Tables 2 and 3 would then be as in Table 3.4.

Table 3.4
Rail access time 30 minutes
(Illustrative only, all times in minutes)

Access to station	6 (varies according to station access plan)
Wait	5 (assumed timetable service)
In train time	14 (about 14 kms @ 60 kph)
Station to site	5

Rail access is the least smoothly graded of all the catchments with a change in travel time band or exact station location bringing a whole group of travellers within the catchment. There are various ways to represent the real life access times to stations (which may vary significantly around the average in the Table) and it should be an option for the development promoters to undertake a slightly more detailed analysis where rail is relevant. As with bus, the number of people who travel to the site by rail should be constrained by the available seats per hour (possibly with an allowance for a peak hour standing factor).

Car catchment

Car journey times can be calculated on the same door-to-door basis as other modes. Clearly there is unlikely to be much of a time penalty from home to car, although this could have an effect for short distances. More important is the distance from parking place to true destination. For some this will be small but in a large car park this can amount to several minutes. The car access time (Table 3.5) is shown below. Again, local values for road speed should be inserted.

Table 3.5
Car access time 30 minutes
(illustrative only, all times in minutes)

Walk to car	1
In car time	27 (about 22 kms @ 50 kph)
Car park to site	2

How well will the alternatives perform?

While this provides a simple method for assessing catchments for different modes and in particular enables an assessment of the potential for serving the site by non-car modes, there remains the question of how many people will choose the alternative.

For walking the share will be very high and in any case there are at least two alternatives (walk or cycle). For bus there is a real issue about what would happen in a new approach to site access where bus use was encouraged, for example by company travel plans, and car use discouraged, for example by pricing or scarcity of parking. If genuine door to door times are comparable, the present charging and taxation system is still very likely to favour the car on cost grounds. Comparing the marginal cost of car use plus free parking with any season ticket makes the point. Thus some motivation in any new approach will be needed to encourage bus use, probably including a cost equalisation package and the removal of free car parking as a perk.

To put this in perspective using national figures, doubling public transport's share of journeys in the 1-5 mile category, together with the doubling of cycle use, would bring non-car modes up to 47%. Given the spare seat capacity on the bus network and new incentives to use them, this is not unreasonable. If development is targeted at sites with large local catchments and good public transport access, achieving the 50% target is realistic. Development in the wrong places, for example areas with low walking catchments and low levels of public transport, would find it extremely difficult to meet the 50% target without major expenditure on alternative modes. Overall this would be exactly in line with the policies in PPG13.

Figure 3.1 Distance travelled per person per year, by access to a car

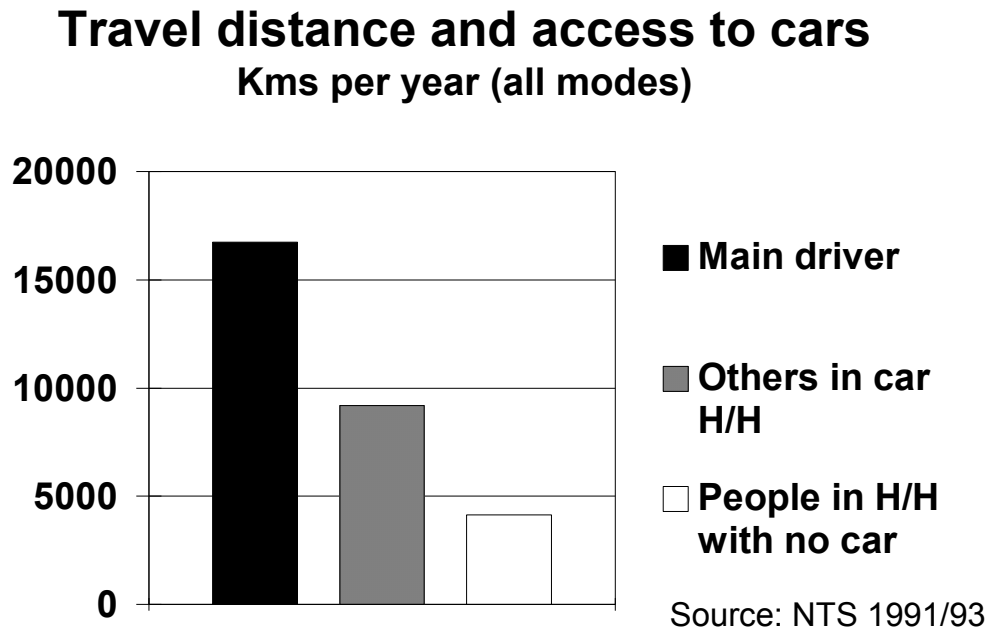

Table 3.1 Journeys per person per year by distance and main mode
(NTS 1994/96)

Journeys per person per year										
	Under 1	1 to	2 to	5 to	10 to	25 to	50 to	100	All	Distance
	mile	under 2	under 5	under	under	under	under	miles	lengths	per person
		miles	miles	10	25	50	100	and		per year
				miles	miles	miles	miles	over		(miles)
Walk	247	43	12	-	-				303	172
Bicycle	5	6	5	1	-				17	37
Private hire bus	-	-	2	1	1				6	100
Car driver	28	64	127	81	57	14	6	3	379	3,133
Car passenger	19	41	79	45	30	9	4	2	229	1,934
Motorcycle	-	1	1	1	1		-	-	4	29
Van driver	1	2	4	4	4	1	1		17	211
Van passenger	-	1	2	1	1	1	-		6	87
Other private	-	-	1	1	-	-			3	29
Bus in London	1	3	7	2	-				13	45
Other local bus	2	10	25	10	3				52	215
Express bus	-	-	-	-	-				1	43
Excursion bus			-	-	-				1	52
LT Underground			2	3	2	-	-		6	52
Surface rail	-	-	1	2	4	2	1	1	10	334
Taxi/ minicab	1	3	5	1	-	-	-	-	10	37
Other public	-	-	-	-	-	-	-	-	1	60
All modes	304	175	272	155	105	28	12	6	1,057	6,570
1985/86	335	187	250	133	84	22	9	4	1,024	5,317
1989/91	319	195	279	151	101	28	12	6	1,091	6,475

SECTION 4 FEASIBILITY AND IMPACTS

This section explores a number of issues that are relevant to assessing the feasibility and acceptability of the MCM instruments set out in Section 2.

Response to the recommended standards

Political acceptability

It must be made clear that if accessibility standards are to be introduced as a means of improving the implementation of sustainable development, there would be little if any point in setting them at a level which produced no discernible change in development practice. It would therefore seem sensible to first gain political acceptance of the principle, rather than expecting to avoid potential sensitivities by adopting ineffective standards.

The acceptability of introducing the Mode Choice Minimum before local authorities have mode split targets or traffic reduction targets might be questioned. This can be countered, however, by pointing out that much existing development operates with mode split patterns better than the MCM standard. Also, not all businesses necessarily rate parking availability (and hence car access) as highly as might be inferred from developer preferences. For example, the East Midlands Parking Study (para. 6.3.1) found that parking availability did not rank in the top five reasons given for the choice of current site.

Furthermore, it should not be assumed that initial resistance from the development industry signifies inability to adapt to the new framework conditions created by the MCM. The retail industry, for example, and more recently the indoor leisure industry, has shown itself capable of quite rapid adaptation to PPG13 and PPG6 policies, especially through the use of the sequential test.

Unlike the parking space charge (discussed in Annex 2), there is no merit in introducing the MCM in stages, since it relates to new development, and adjustments therefore are not necessary. The desired standards should therefore apply from the start.

The aim is to change the dynamics of development from a negative outcome in terms of car dependence and car use, to a positive outcome where car dependence is minimal and car use at much lower levels than would otherwise have been the case.

The new mechanism must not simply force restrictions on an unchanging development market, but should provide a strong incentive for developers to bring forward schemes which contribute to the desired trends. These trends can be summarised as follows:

- Social exclusion is reduced
- The need to travel is reduced
- Dependence on the car is reduced

(the three above may be regarded as social aims)

- Location as in PPG13
- Car traffic is reduced (environmental and safety aims)
- Avoiding increased use of cars for non-work trips, which might result from the switch from car commuting caused by the town centre parking control policies advocated in PPG6.

We can now consider further the possible responses from different groups in the planning and development process.

Response of financiers, developers and end-users to limit car access

Interest of the three groups is linked and the links are themselves represented by a fourth group, namely property consultants.

Financial institutions want to see a secure return on investment, which means viability of the development. Viability is currently perceived to be linked to access by car. This perception does not relate to any absolute truth, however, and is influence by factors that could change:

- Long term, increased congestion undermining the viability of schemes that rely on car access;
- To this may be added long term real increases in motoring costs;
- Perceptions of other financial institutions;
- Need to convince developers of viability who themselves share the car access philosophy;

Developers are in two broad groups, those who rely on investment institutions and those who develop on their own behalf. In both cases there is direct concern about ability to “get development away” in order to realise a reasonable return on land or other investment.

Getting development away means having willing end users of the scheme. If end users believe parking and car access is necessary then developers will push hard to get it, being attracted to locations where it is economic to push it and where planning consent is easy to achieve.

Again, perceived importance of parking is subject to influence and variation. Where land values are high and public transport is good, developers will often be prepared to limit parking, and indeed, sometimes seek to minimise parking provisions, especially in central London.

Competition is a key factor here. Developers will limit car access, in response to land prices or parking limits for example, if everyone else in that location is in the same position. If they can secure a share of the market for a particular type of use by locating where car-based schemes can be developed, then that

is what they will do. The retail and leisure sectors have demonstrated this most clearly over the past ten to twenty years.

If no competitive edge can be achieved, for example because parking and car access is limited, then other competitive factors will be come into play. If planning consent can more easily or quickly be achieved for mixed uses and for smaller scale developments, then developers will start to switch their portfolios in this direction (see below), and will also persuade financial institutions, or make necessary adjustments to ensure viability for the end user.

End users are directly interested in the operation of the scheme, be it leisure, retail, employment. "How will people get there?" becomes a matter of discussion and investigation. We can no longer just assume that everyone comes by car, though this only applies for certain types of end user. For example, there are many retail chains that look only for non-car access and whose shops invariably have some parking.

A further issue concerns the international dimension of responses, mostly financial institutions and global corporate interests. In terms of major inward investment (e.g. Japanese car manufacturers) it seems likely that analysis of labour markets is a good deal more sophisticated at this level than is the case with the development of a local "business park" or "leisure complex". Development potential will rest on access but this is not the same as access by car. Again, the problem appears to be more related to scale and location.

Developers' response

Provided that the scope for avoidance of the new access standards is limited (see below), developers will seek new ways of ensuring speedy planning consent, and viability of development proposals.

For non-residential developments they may:

- Look for non-car catchments
- Reduce car catchment, that is drive time, to meet 2:1 ratio of car catchment size to non-car catchment size.
- Seek accessible locations
- Review development expectations for land held in inaccessible locations
- Reduce the scale of proposed developments
- Contribute to park and ride, and other non-car transport facilities (to make site more accessible, or to increase the scale of development)
- One of the results of the MCM will be effectively to "knock out" development proposals that do not accord with the PPG6 sequential test. It will also provide a robust and clear basis for ensuring that development proposals comply with the policy for accessibility by a choice of means of transport, for example for out-of-centre sites (PPG6 paragraph 1.11).

Existing businesses

In the short term, application of the MCM can be expected to increase the relative value of existing properties where the standard will not apply. Thus the market will change giving a premium value for premises where car access is unrestricted, but whose number will be in decreasing supply over time. In time, businesses with requirements of high car use (as opposed to habits of high car use!) will shift to premises where the MCM standard does not apply. In the long run it is likely, however, that the relative value of business locations that are highly accessible by non-car means will increase.

Occupiers of pre-MCM properties with ample parking may re-consider the value of their property. If the parking is not needed, then they could sell the premises on to businesses seeking to avoid the MCM that would apply to new premises. Provided that the new business occupying the property was within the same land use category, and no change of use or other development permission was required, the MCM requirement would not be triggered by the transaction.

Thus some redistribution of businesses would occur according occur according to the need for car access. This is wholly in accord with getting the "right business in the right place" (as the Dutch A B C policy is titled).

Where a change of occupation of a building involved a change of use requiring planning permission, then the MCM would be triggered.

If existing businesses do not want to move, they might nonetheless want to trade parking space (which now will become more scarce). Developers might wish to negotiate PNR spaces, not to increase the overall parking availability (which would not be allowed) but to reduce on-site requirements and hence achieve higher intensity of development. This is in accordance with sustainable development principles, and promotes the efficient use of land.

Local authorities will also want to encourage changes in existing business operation to bring them within the MCM, for example to meet their traffic reduction targets. Many businesses are already operating within the MCM standard, of course, but it will be necessary for local authorities to identify locations and businesses in their areas that are in serious breach of the standard set by the MCM. The kind of surveys undertaken in the East Midlands Joint Parking Study would help in this process.

The fact of not being able to move to new premises to get higher levels of car access may encourage firms to get better non-car access to their existing sites. (This already happens in areas with restraint-based parking standards.) This will be likely to make them more receptive to local authority campaigns for green travel plans.

Applications for more parking at existing premises will trigger the MCM. Applications for expansion of existing properties or change of use will also trigger the MCM. This could result in an increase in the car share at

businesses where the car share is currently below the MCM standard, depending on the scale of the proposed change.

Local authority response

Having become accustomed to equating car parking with economic viability of new developments, considerable adjustment of attitude will be required. The main concern is likely to be whether application of the new standards will stifle development, especially in areas where economic regeneration has a high priority. There may be differences to be overcome between planning officers who are trying to promote PPG13 objectives, and elected members who wish to retain as much flexibility as possible to attract inward investment, especially employment generating investment. A period of consultation and discussion during which these concerns can be aired will be needed in order to avoid a backlash. The link between the new measures and the objectives of sustainable development will need to be carefully explained.

There are two questions here. First, will reduced car access to new developments result in accessibility problems (i.e. people not being able to reach facilities)? This will depend on the availability of alternative modes, and should therefore prompt more constructive thinking about the improvement of non-car modes. Second, will reduced car access cause diversion of development to neighbouring or competing authorities? This depends on whether variation or flexibility within the MCM is allowed. As argued elsewhere in this report, there is no case for variation or flexibility in the application of the MCM.

The importance of the plan-led system will come to the fore in ensuring a smooth transition to the new accessibility instruments. The appropriate scale and location of developments can be researched and set out in the Development plan, providing certainty for developers and encouraging consistency at appeals.

Local authorities will also want to be sure that accessibility assessments are practicable and robust and suitable for determining planning applications (see section 5).

Response of individuals

In the long run, individuals will have different expectations about the use of cars, and will become more accustomed to using alternative modes. This is already encouraged by many Councils through Travelwise programmes, while “Green Commuter Plans” are also changing perceptions.

People responding to new developments in accordance with the new MCM standard may:

- Seek to live nearer to their work
- Seek jobs nearer to home
- Seek jobs accessible by public transport or by bicycle

These changes, if they result in a smaller proportion of household trips being made by car, will enable people to live with less cars for a given level of activity. Some may dispose of their car (especially the second or third cars in a household). Given the long term effect of the MCM, it is more likely that the growth in car ownership would be stemmed, rather than existing car ownership being reduced.

Implications for health and education

As discussed in Section 1, there is an important social dimension to accessibility to public facilities for which other Government departments are ultimately responsible. The MCM should apply equally to these public facilities, of which the most important are likely to be health and education facilities. It is widely recognised that polices which result in the concentration of services into fewer but larger sites creates problems of access for users and staff alike, by increasing trip lengths, and (depending on the location) creating trip patterns that cannot be served by non-car modes.

The policy shift in the health service towards primary care and the provision of community-based facilities is consistent with the policy dynamics created by the MCM. Although accessibility has not been the main motivator of this policy shift, there are signs that decision making in relation to large hospitals is taking greater account of accessibility issues (for example, a recent refusal of a hospital expansion in Greenwich which included excessive dependence on the car), and some existing hospital trusts are actively planning to reduce car use to their sites, notably in Nottingham and Southampton. Even so, new community hospitals, multi-practices and local clinics do not seem yet to have been developed sufficiently to result in the reduction of large general hospitals. There is a strong case for a review within the health service of all aspects of accessibility and service provision.

The response to accessibility standards in education provision will vary between primary, secondary and tertiary facilities. At the primary level, the Proximity Standard (or PS, see Annex 4) will help in the planning and location of schools to take full account of access opportunities on foot. The policy objective of maximising parental choice of schools is, however, difficult to reconcile with the objectives that lie behind the PS. An education policy that ensures high standards of education at all schools, which appears to be emphasised in recent Government initiatives, would reduce the need for choice, and would thus help to ensure that parents sent their children to the nearest school. The accessibility benefits of more even levels of educational standards in schools could be made more explicit in Department of Education policy statements.

At secondary level, similar considerations apply, though in most areas choice is less of an issue due to inaccessibility of more than one or two schools. Because of the much larger catchments for secondary schools and colleges, walking is less of an issue and access by other modes is more important.

At tertiary level, the MCM should be applied, and the PS is less relevant, not only because of the much larger catchments required to support the higher levels of specialisation, but also because the users of such facilities are of driving age. The same applies (though to a lesser extent) to 6th form colleges.

As with health, there seems to be strong case for a full review of the accessibility implications of education policy, especially the impact of parental choice and the role of the private sector. In the planning of education facilities locally, accessibility should become a central aspect of the decision process, and the PS and MCM instruments could be effective in promoting this change.

Impact on mode share

The 50% (MCM) would, if achieved throughout the country, result in car share reductions for most trip purposes other than education (which still has a car share below the MCM ceiling), and "Visit friends at home" and "Holiday/Day Trip" (on which the MCM would have little impact). This is shown in the right-hand column of Table 4.1. Since the car share is typically much higher than average in new developments, application of the MCM for new developments will tend to reduce the car share average, and certainly reduce the rate of growth.

Table 4.1 Current car share by trip purpose (NTS 1994/96, Table 2A)

	Car driver trips per person/year	% of all trips	All private motorised as % of all trips (includes car passenger)
Commuting	90	57	71
Business	28	74	82
Education	3	0	34
Escort Education	18	37	49
Shopping	74	33	55
Other pers. Business	87	45	71
Visit friends at home	51	36	68
Visit friends other	11	24	53
Sport/Entertainment	22	31	71
Holiday/day trip	11	34	81
Other inc. just walk	1	2	4
All purposes	**396**	**37**	**61**

Variation

The accessibility based approach put forward in this report is designed to set a few parameters that will ensure the achievement of land use planning objectives, but to allow local variation according to site requirements.

In the case of the (MCM) for non-residential developments, variation is focused on the non-car modes, while a ceiling on the car mode is proposed to

avoid, or at least constrain, the difficulties created by excessive flexibility and inconsistencies in the present system of parking standards that have already been highlighted.

There should also be inducements to reduce the role of the car in accessing new developments as far below this ceiling as possible. These inducements may be provided by the planning system (e.g. higher densities in return for less parking) or by non-system fiscal or other devices. A key question is whether the minimum mode choice (or the car access ceiling) should vary by location type (for example rural, suburban, town, regional centre, conurbation) or by region. For example should the South East have a high proportion of access by non-car modes, while the North East should have less choice of non-car modes?

Regionally there is great scope for individual policies for alternatives to the car. For example one region may have a strong rail based strategy, another one may be more bus based. Fares, travelcards, concessions, information and staffing are all capable of local variation. Some regions have a stronger culture of cycling on which to build. Even the level and role of park and ride can vary considerably.

Within the MCM standard, individual occupiers can be left to determine the mix of people who access the site by car, i.e. between customers, staff, visitors. Operational vehicle visits can be included in the overall total of car access, with the possibility of goods loading areas being included in the total.

It is also possible to vary the inducements, although a national parking space charge (PSC) should be at a flat rate (this is a separate issue discussed in Annex 2). There could even be a discretionary local addition to PSC, ring fenced for transport. This would be a similar arrangement for any surplus generated by local authorities on their parking income and enforcement account. Variations would include the level of support for commuter plans, for business travel plans, and for other demand management initiatives such as free home deliveries or smart public transport tickets including entrance to leisure facilities or shopping discounts. It is strongly suggested that such elements are developed further in a "tool box" approach to Guidance and Good Practice Notes.

Variation may be desirable for certain types of land use, with or without restrictions on location, scale etc. For example, in order to encourage haulage and distribution companies to locate away from central sites and near to good road access, higher proportions of access by car could be permitted subject to the balance between vehicle and person generation. This reflects practice in the Netherlands where attempts are made to match the access profile of a company with the access profile of the location. Whether such variation should be in the form of exemptions from the standard, or variation in the standard itself is a matter that deserves more detailed consideration.

Variation of the ceiling itself is the most difficult issue. The most rational way to approach this is to assess why regional variation might be desired. This is

only a problem one way - more car use. Why would this seem attractive? The answer is that certain key players in the development process believe that some development might be attracted to an area by the lure of more parking, and that the economic viability of certain kinds of developments depends on the provision of ample parking. At present, any authority wishing to offer less parking is immediately faced with the fact that other areas offer more. If accessibility standards within an objectives based transport strategy were being used, with national limits precisely to avoid wasteful competition, any significant varying of parking or MCM would seriously undermine the credibility of the new system.

This applies equally to variation within regions by area type. A rural development could be planned and the argument put forward that it is too expensive and difficult to serve it by public transport. Allowing more car access, most obviously through more parking spaces, may attract development because urban areas cannot offer the same level of parking, not only for congestion reasons, but also because of the cost and low availability of the land needed for parking. The question that must be asked, however, is whether an area that is inaccessible by public transport is suitable for large developments. Why should the dynamics of the planning system encourage development into rural areas away from existing towns and cities? The important principle at work is that certain types of development are suited to certain types of locations.

Rural development of an appropriate scale serving local needs need not be penalised within this framework, and indeed could be encouraged since there will be less competition from car-based facilities.

Policy dynamics - rural and regional impact

This issue of transport and planning policy dynamics is very important in the development of accessibility limits, standards or targets. If rural areas are perceived as having poor public transport and therefore needing more car access to be catered for, this will reinforce car use and encourage it. If development is linked to public transport provision, the pressure will be for local and regional authorities to encourage and organise more of it.

This also raises the issue of social inclusion and variation (see also Section 1). For example, the rural "problem" is often characterised as more low-income households with cars and higher car mileage. While it is certainly the case that rural low-income groups undertake more car travel than their urban counterparts, the real reason behind high average rural car travel is the high income car user. For many of them it is possible to "buy" a better environment and, freed from urban congestion, absorb the marginal cost of much higher car mileages. This does nothing to address the issue of low rural incomes.

Understanding the way that a rural area works, and in particular the relationships between the small settlements and the market towns which are integral to it, is essential in planning for transport. In a sense the abandonment of rural areas to car dependency is to harm urban settlements

by encouraging greenfield development instead of urban development, and to harm rural life at the same time. Car dependency in rural areas places a burden on the poor who are forced to own cars or simply cannot afford to do so. It also begs the question of whether some places are and should be by their nature remote and thus less accessible. This returns the transport debate to its roots in a fundamental planning issue - what exactly is the role of the countryside? What is appropriate development in rural, semi-rural and suburban areas?

Summary of changes needed to support MCM

The feasibility of the standards discussed in this report will be affected by a number of changes and responses both within and outside the land use planning system. These include:

- Guidance on methods of accessibility measurement;
- Guidance on s106 agreements to secure accessibility improvements;
- Development of data on accessibility including, for example, the development of a national database on development types and mode split;
- The time lag between policy guidance and the adoption of revised development plans will need to be addressed, for example by policy guidance taking precedence over adopted local policies (where the latter were formulated prior to the guidance) in the determination of planning applications and appeals;
- Greater local authority control or influence over public transport, at the very least the ability to enforce the implementation of “quality partnership” agreements with local operators;
- A more comprehensive approach to parking control, especially mechanisms for the rapid introduction of CPZs, and their funding via S106 agreements.
- Revision and strengthening of PPG13 to incorporate the MCM;
- Need to ensure that the new PPG11 on Regional Planning Guidance incorporates the MCM;
- Development of expertise in the field of accessibility measurement, both in local authorities and in the private sector. Consideration could be given to the appointment of a transport officer in local planning authorities whose role allowed the transport and planning functions to be more effectively coordinated in the implementation of the standards;
- Consideration could be given to setting up special technical units to help both public and private sector bodies in preparing schemes which accord with the MCM. This device has been deployed in Oregon, USA, for example, to aid short-term transition to a new traffic reduction policy.

SECTION 5 IMPLEMENTATION

The final element of this study considers the implementation of the MCM accessibility standard within the framework of the current planning system and to indicate where changes to the planning process may be needed.

The planning framework

The MCM concept is concordant not only with sustainable development planning mechanisms, most comprehensively outlined in PPG13, but also with non-planning strategies such as National Air Quality standards that seek to reduce levels of air pollution, to which road traffic is a major contributor.

It seems probable that the aims of policy guidance will increasingly be reinforced by the adoption of national and local targets, most notably for road accidents, air quality and traffic reduction. This creates the need for more effective and rapid implementation of policies in national planning guidance notes. Accessibility standards have potential to secure the more effective meeting of these targets, and should be evaluated and developed in this context.

The implementation of PPG13 is widely recognised as disappointing. The principal concerns include:

- Within Local Authorities, a differing awareness amongst officers and members and between planning and transport committees of PPG13 objectives;
- Amongst local business and developer interests, a poor knowledge of the implications of PPG13;
- A varied response from the development sector essentially dependent upon land availability and demand; in sectors that hold large land banks with low demand the response to PPG13 was unsurprisingly low.
- Concern amongst Local Planning Authorities about the effect on attracting investment of adopting specific PPG13 policies such as reduced parking provision;
- Little progress on the measures to monitor the effects of PPG13
- A need for a greater understanding on certain policy areas such as the transport effects of higher densities in urban areas.

The rationale for this failure in implementation has some useful learning implications for introducing accessibility standards into the planning system.

Implementation of MCM

The context of this section is the implications for the planning system as a whole, both Development Control practice and the development of Local Planning Policy. The main implications considered in this section are:

- Policy co-ordination;
- Data requirements;
- Data interpretation;
- Development Plan policy and review;
- Development Control mechanisms;
- Thresholds for modal split assessment;
- Planning Conditions;
- Planning Obligations;
- Monitoring mechanisms;
- Timing;
- Changing attitudes;
- Incentives;
- Incidental changes

Policy Co-ordination

In the national context, one of the fundamental problems of PPG13 is its perceived urban bias and the implications for economic prosperity. Economically deprived urban authorities in the North and Midlands that included rural fringe areas, for example, are more likely to continue the designation of poorly located green-field sites for development to attract investment and employment.

To overcome the problems of competition between authorities it is assumed that the MCM and PS are implemented as a national policy. There will be a need, however, to provide guidance on those aspects of accessibility planning where variation and flexibility at the regional and local level are appropriate.

The Ove Arup report on PPG13 implementation reveals the requirement for specific action at the regional level. This is equally applicable to the concept of Accessibility Standards; for example, their applicability to rural areas, or in areas covered by other planning restrictions such as National Parks or Areas of Outstanding Natural Beauty.

Accordingly, the following measures are recommended:

- Regional advice and guidance on the development of region specific strategies within a National framework;
- The establishment of regional consultative discussion forums to encourage Local Authorities at regional and sub-regional levels to develop co-ordinated and comprehensive development strategies. The regional Government Offices provide a good divisional basis.
- Liaison between County and Districts to achieve a "corporate" approach.

At the local level, there is a need for further detailed advice in terms of:

- Implications for the local development plan in terms of developing an overall strategy to clarify the position in specific areas

- Criteria on how the specifics of particular proposals will be judged within the framework of the plan in term's of parking standards or public transport access.
- Encourage local authorities to work together
- Promote a strategy for the development of local forums with business and developer interests.
- Areas where mixed use and higher density are appropriate, and where a specific MCM can be drawn up, for example the concept of Transport Development Zones around transport nodes as proposed by the RICS.

Data Requirements

The implication of limiting car use is to encourage or insist upon use of alternative and more sustainable modes of transport. The implementation of MCM will require primary data in terms of:

- Total travel generation to the site;
- Mode split data for employees and other users of the site.

The techniques for calculating this information are discussed in Section 3, while the role of Transport Assessments is further discussed in Annex 3.

The principal issues to be resolved include:

- Who is responsible for collecting data?
- Who is responsible for determining the potential modal split of the proposed development?
- Who is responsible for interpretation?
- At what stage in the planning process is this information required?
- How will the mode split be checked?
- Right of access to the site to collect data.

Data collection should be the responsibility of the Developer. Given the budgetary constraints on most Local Planning Authorities and the generally stretched resources, it is unlikely that Local Authorities have the available personnel to undertake the collection or monitoring of data. The concerns of the development sector in this respect need further consideration, especially the provision of a consistent and acceptable methodology.

At what stage in the development process is the data required? To assess whether a proposal conforms to the requirements of the MCM standard, it is fundamental that an assessment of mode split is submitted with the application. It is proposed that further advice is required in terms of revised national Planning Policy Guidance Notes to include the need for this type of information as part of the planning process.

Given the likely impact of the MCM there are significant advantages in reinforcing the significance of pre-application negotiation. It is suggested that the Government could redefine the role of pre-application negotiations. The

value of consultation between developer and Local Authority at this stage is to clarify the purpose of the MCM and elucidate what is required of the developer.

To assist both public and private sector in meeting the MCM data requirements, consideration should be given to the establishment of a national database on modal split in terms of:

- Nature of development by land use;
- Development changes e.g. the mix of development, changes in location or how public transport provision can affect modal split;
- Different areas e.g. rural, semi-rural, urban fringe, out of town, local centre, town centre.

This would allow analysis of the factors affecting mode split and other aspects of local travel patterns. It would also be helpful in determining accessibility profiles for areas within Development Plans, and accessibility profiles of different kinds of land use.

Data interpretation

The MCM should be examined in the same context as present TIA's, and their future development (as recommended in Annex 3) into Transport Assessments. It will therefore be appropriate for the assessment of the authenticity of data to be the responsibility of the Local Highway Authority, bearing in mind that this may or may not be coincident with the Local Planning Authority.

Given the need to integrate transport and land use issues more closely, and the role of accessibility standards in achieving this, it is suggested that a local transport officer could be appointed to oversee the application of the new standards, and to ensure that appropriate techniques and methods are used.

Development Plan Policy and Plan Review

The accessibility standards will need to be incorporated into the Development Plan. Of particular importance are:

- Timescales involved in the review process;
- General refinement of policy intentions;
- Review of location policies in relation to accessibility;
- Review of parking and design standards e.g. density standard, acceptability of mixed-use development.

Development Control Mechanisms

Development Control is key to the implementation of accessibility standards, and the following will need to be addressed:

- The required content of development applications
- The use of standard and ad hoc planning conditions
- The scope and value of planning obligations
- Monitoring and enforcement (see below)

The concept of accessibility standards at this stage is applicable to development proposals. There are two practical issues here:

What threshold sizes of non-residential development will trigger the need for a mode split assessment to meet the MCM requirements?
What threshold size of residential development will trigger the need for an assessment of local and urban facilities in order to meet the requirements of the Proximity Standard.
How does this relate to existing or modified TIA's?

Thresholds for modal split assessment

Local authority practice in relation to TIAs is influenced by the IHT guidelines. The threshold sizes included in those guidelines provide a starting point for the discussion on this point.

Given that the MCM and PS standards are designed to promote development with greater local accessibility, it may be sensible to exempt small schemes from the assessment requirements. It will be important, however, to avoid a trend of small car-based schemes coming forward instead of fewer large car-based schemes, and so exemption may need to be dependent on the proposed level of car parking, i.e. exemption granted for schemes with zero parking or operational parking only.

Exemptions from assessment may also be possible in areas defined within the Development Plan as being appropriate for the particular use or density, such as the Transport Development Zones already mentioned, or the mixed use zones already in place in some plans. Again, exemption would be dependent on zero or minimal parking provision.

Planning conditions

The successful implementation of the MCM is dependent upon the collection of primary data on which to assess mode split, and the ability to monitor the accuracy of this assessment. Thus a significant element of any planning condition is to provide right of access to the site by Local Authority representatives or their agents for the purpose of data collection, including interview surveys. This right will need to extend well beyond the completion date, and in the case of certain developments, before completion also.

If modal split information is key to whether the proposed development would conform, then it is surely reasonable and necessary to require the information above, relevant to both planning and the development in question. One of the key problems is whether conditions such as that set out above are

enforceable, indeed, Circular 11/95 stresses that a condition should not be imposed unless it is enforceable.

In principle, planning permission runs with the land and any conditions imposed on the permission will bind successor in title. By reason of logic alone, if the relevant conditions are applied, to permit access to the site post planning permission, any condition to monitor data should then be enforceable.

Planning Obligations

The planning obligation (Section 106 agreement) is a further measure available to the planning system to ensure the collection of appropriate modal split data. The advantage of an obligation is that it may be entered into by means of a unilateral undertaking by a developer as well as an agreement between a developer and Local Planning Authority. The use of the term obligation therefore implies that obligations can be created other than by agreement between the parties.

The determinants of a planning obligation are essentially that of a planning condition in terms of being reasonable, necessary, relevant to planning and the development.

It is currently appropriate by way of a planning obligation to expect a developer to pay for infrastructure that would not otherwise be required were it not for that development. It is also acceptable to contribute towards new improved public transport facilities such as rail/bus stations, park and ride scheme or measures to encourage cycling and walking. This is a practical measure to encourage a reduction in use of the private car and is appropriate as a complementary tool to achieving the MCM standard.

Improvements to accessibility

It is currently appropriate by way of a planning obligation to expect a developer to pay for infrastructure that would not otherwise be required were it not for that development. It is also acceptable to contribute towards new improved Public Transport facilities such as rail/bus stations, park and ride scheme or measures to encourage cycling and walking.

What is required in respect of the MCM standard, however, is a refinement of the process to achieve infrastructure improvements, for example to answer the following questions:

- What level of accessibility by non-car modes is required to make an inappropriate scheme acceptable?
- How to word planning obligations to achieve the appropriate transport provision?

Application of the MCM will involve greater use of Controlled Parking Zones, and these can also be funded by developer contributions.

Monitoring mechanisms

The monitoring of the MCM is fundamental to its' successful implementation. Indeed, an important conclusion here is the key role to be played by planning conditions and obligations in the collection and monitoring of data. Accordingly, monitoring mechanisms will largely depend upon the ability to enforce.

A planning condition will not be enforceable if it is, in practice, impossible to detect. This may be problematic in imposing conditions on modal splits on a day to day basis. However, given that there is no right of appeal for a Breach of Condition Notice, it seems appropriate that further research is needed to examine the legal implications of planning conditions requiring data collection and access to a site for reasons of travel and user surveys.

A planning obligation is enforceable if the developer is in breach of a requirement to carry out works on the land. The issue that needs to be addressed is whether the collection and monitoring of data is applicable as "carrying out works". Again, further research is required in this respect.

Timing

Having established the need to carry out travel surveys and studies, there are matters of timing requiring further consideration, including:

- Timescales for data collection in advance of the planning application;
- The implications for individual applications in terms of 8-week; determinations. The need to gather and process data is likely to impinge on this timescale, and it may be necessary initially to allow some flexibility within the system, including feeding this information into the Appeals process;
- The requirement for data collection following completion of the development to check compliance with the MCM, for example what minimum and maximum periods should elapse before the survey, and at what intervals should repeat surveys be undertaken?

Changing attitudes

A qualitative study by Llewelyn-Davies for London Transport involved discussions with developers and funding institutions that revealed the primary economic value placed upon the car and thus on parking provision within the current planning framework. It also revealed that developers will generally 'work within and to the boundaries of the system' so long as it is a level playing field.

While general attitudes to mobility and the role of the car may change only slowly, the principle of accessibility standards is concerned with development proposals, and ensuring that they meet the needs of future generations. As a result, the new standards will instigate a process of adaptation to which

developers and investors will necessarily comply. It will then theoretically feed through the system in terms of altered supply and demand for different levels of accessibility.

To assist with the process of adaptation, consideration could be given to setting up special technical units to help both public and private sector bodies in preparing schemes which accord with the MCM. A similar device has been deployed in Oregon, USA, for example, where technical help is provided on preparing or modifying schemes so that they accord with new policies and targets for traffic reduction.

Incentives

Local authorities (and developers) should ideally have incentives to operate the new accessibility standards. The desire to achieve better implementation of current policy guidance is clearly an incentive in itself.

Beyond this, there may be scope for linking the standards to Government funding via the TPP system, and for "rewarding" developers' compliance through development permissions which produce better return on investment, e.g. through higher densities, or lower requirements for S106 contributions.

National annual awards for the most imaginative or effective solutions within the MCM framework could provide an informal incentive.

The following points are also relevant here:

- The introduction of the MCM ceiling on car access would reduce the opportunity for developers to avoid town centres and to build on inaccessible sites;
- The MCM promotes local development rather than large 'drive-time' development to the benefit of the local population.
- The MCM provides a clear framework for negotiation between the Developer and Local Planning Authority.
- The standards will level the playing field of development opportunity and viability on a National scale.
- Reduce the potential for differential values on comparable sites in different locations.

Incidental changes

Some incidental changes are likely to be necessary, for example:

- Changing Part 3 of a planning application form to include basic modal split data
- Research into the application of Compulsory Parking Zones
- Changes to the Town and Country Planning (Permitted Development) Order 1995 to remove Permitted Development rights for the conversion of front garden or amenity space into parking space. This could also be

controlled through amendments to the Highways Act, requiring permission for the creation of new vehicle crossovers (over footways).

References in Section 5:

Planning Policy Guidance on Transport (PPG13) Implementation 1994-1996,

Ove Arup and Partners, University of Reading and DETR December 1997

Draft of “Planning for Public Transport”: Llewelyn-Davies for London Transport (March 1998)

Sustainable Residential Quality: new approaches to urban living, Llewelyn-Davies for LPAC, GOL and DETR (1997)

Annexes

Annex 1

DUTCH "AUTO RATIO"

Description

The thinking behind this initiative from the Dutch Ministry of Transport is to help business travel planning. It acts as a means of:

1. Establishing a starting position so that targets for change can be set; and

2. Allowing progress towards these targets to be monitored.

It takes the form of a pack for businesses which includes a simple introduction, draft survey forms and instructions on how to calculate the "auto-ratio". This is basically a type of car mode share but designed to be easy to survey and cover car driver and car sharer in one measure. This is achieved by assuming that a car used for more than one person to travel to work (all other trips are excluded) has an average occupancy of 2.3. They therefore count each occupant (including driver) as 0.4 for the purposes of calculating the auto-ratio. It seems that the adjustment should be .435 (but they wanted to keep it **very** simple!). The calculation is illustrated below.

If 1 person drives to work in a car with no passengers who are travelling to work they count as 1 for the auto ratio. (Passengers are included even if they do not work at the same place)

If 1 driver and 1.3 passengers go to work in the same car:
If they all work at the same place and are all interviewed: 2.3 X 0.4 = 0.92
If only one works at the place being surveyed, 1 X 0.4 = 0.4

The survey method is simple, with only two questions asking whether people work at the site and how they got to work. Car solo driver and car pool are the two most important modes. **All** people entering the site must be counted, although only a sample need be interviewed (see below).

The auto ratio is calculated by adding together the solo drivers and the adjusted car poolers, and dividing by the total number of people surveyed.

The survey sample is worked out using a simple formula which decreases the sample (percentage) needed as the total number of workers increases. Using this the Table below has been produced.

Table: Sample sizes according to total people entering site
Formula: N/(1+((N-1)X.0026))

Entrants	Divisor	Sample
10	1.0234	9.8 (10)
100	1.2574	79.5 (80)
1000	2.5974	385

Commentary

This idea has come forward because the Dutch were having problems getting firms to measure vehicle kilometres travelled by car and car poolers. They are effectively substituting trips for distance. This is less accurate in terms of traffic, but increases the likelihood of getting the surveys done. In many cases the ability to calculate distances (e.g. through a traffic model) or to survey them, will not be present or may be too costly. Similar conclusions have been reached in the UK, and even when traffic models can be used broad brush factors are used which are effectively trip based.

The car pool adjustment seems a little complicated, and subject to inaccuracies deriving from the average car occupancy figure. More seriously it might be a source of monitoring problems if car pooling increased. It would not be very different to identify car poolers who came with another person working at the site and create another category for those who get a lift from someone working elsewhere. This should give an accurate site specific measure which could change from one survey to the next without distorting the car share calculation.

Conclusion

This proposal is interesting because it confirms the need to provide simple and practical methods and this almost certainly means using trips as a base.

If it were to be used in the UK, it would probably need to be amended to include two categories of car pooler.

Finally this particular initiative is deliberately targeted to work trips; multi-purpose car trips (e.g. school then work) are included as solo driver if only the driver is travelling to work after dropping off other family members for non-work purposes.

Annex 2

Parking Space Charges and their relationship to Accessibility

Introduction

The research into accessibility standards is focused on instruments that can be implemented through the land use planning system, and this excludes fiscal instruments such parking space charges. As discussed in the main report, however, fiscal measures have an important role to play in supporting land use policy mechanisms. An important issue is how to promote developments that produce mode-split outcomes that are better than the national standard, or limit. This is where fiscal instruments are especially important, and hence the inclusion of this Annex.

For several years MTRU has been working on the development of parking space charges and has had considerable opportunity to discuss it with a wide range of interests in the public and private sectors. This has ranged from small seminars to company interviews. The proposal was set out in draft in a report for Nottingham City Council and the Transport 2000 Trust, and this also generated useful feedback. The idea has now gained a wider public profile and it is clearly among the proposals being considered as part of the Integrated Transport consultation. How such a proposal would work in practice, and what the implications are of the different options for such a charge has not yet had a comparable level of debate. This annex summarises the options and draws some conclusions based on our researches to date.

Before exploring the details of such a charge, it is important to bear in mind the objective of implementing such a proposal. The role is to act as part of an integrated strategy to reduce road traffic, and this reduction is in turn is to achieve quality of life objectives by improving both the natural and the socio-economic environment in which we live.

This in turn means that a parking space charge should be designed to integrate with and support a sustainable access strategy for new and existing land uses. It should complement any planning requirements and not be seen as a stand alone revenue raiser. This issue is discussed in more detail below.

The rest of this Annex discusses a series of such detailed questions as follows:

1. Which spaces would be covered by the charge?
2. Should the charge be at a national rate or varied locally?
3. What would the revenue be used for?
4. How much would be charged?
5. How would the charge be collected?
6. Do we need any other policy instruments?

1. Which spaces?

Selection by area

The idea behind discouraging the supply and use of parking spaces is to reduce traffic. It follows therefore that charging for them in one part of the country and not in another is unlikely to reduce car use overall, although it may shuffle the traffic around a bit (or even increase it). Thus charging for city centre car parking spaces alone may increase the cost of parking there, reducing traffic and pollution, but would contribute little to meeting national air pollution targets. In addition it would add to the already faster than average traffic growth in non built-up areas.

The justification for regional exemption or (low rates) would again seem weak. In areas where economic development is a priority, transport spending needs to be focussed on sustainable systems and this new infrastructure will become the selling point for new development, as well as strengthening the position of existing businesses. The funding of such projects could come from the Parking Space Charge **(PSC)**, justified by the lack of alternatives to the car. This is discussed in more detail in the level of charge section below.

Selection by type of development

Discussion under this point usually focuses on whether consumer as well as commuter parking should be charged.

Traditionally the journey to work has been the main focus for traffic reduction. The idea of "Green Commuting" is the first of the new generation of demand management policies which are now coming forward. Parallel initiatives for other purposes such as shopping are at least two to three years behind. An integrated policy approach however should identify where the problem is worst (highest levels of traffic, fastest growing traffic) and apply the charge accordingly. While commuting is indeed an important component of traffic (typically over a quarter), it is not growing nearly as quickly as car use for shopping, leisure and "personal business". This suggests that any exclusion for these areas would reduce the effectiveness of the charge. After all, it is easier to discourage a change **to** car than cause a change **from** car.

In addition, there is clearly some "leakage" between workplace parking and other uses. In an MTRU study of 12 firms in North East London, two were already using supermarket car parks for employees during the week (in one case paying for them).

In general terms the definition of different categories of parking space, particularly if exemptions were widespread, would undermine the comprehension, acceptability, implementation and effectiveness of a parking space charge. Thus in relation to selective charging, the overall conclusion is that exemptions should be few and highly specialised, if there are any at all.

2. National or local rate?

There are two important considerations in proposing a new charge. First, as mentioned above, it should be easy to understand and easy to implement. Secondly it should be focussed on achieving its objective, rather than raising money by taxing the specific value of a space. This latter point is important because it illustrates the clear difference between a tax and an environmental charge. The dynamics of a charge which reflected the value of a parking space may well make matters worse not better. What would happen is that in town and city centres, the value of land is higher and the charge would be higher. On edge of town or green field sites the value would be lower and the charge lower. It is obvious that that would tend to decrease car use in the towns and cities, but more by encouraging development elsewhere and reducing town centre activities. In view of the evidence to date, it is hard to believe that the planning system alone could fully resist such pressure, and in any case there are many outstanding permissions and existing available sites.

A tax would reflect the value of the parking space, a charge reflects the desired outcome. This is a further reason for a national flat rate charge. This happens to also simplify hugely the administration and collection of the charge. The easiest way to do this would be to add it to the Uniform Business Rate (UBR). For most developments parking spaces are already separately identified, although there is some choice as to whether the spaces are valued separately, or included less specifically by raising the value of the development as a whole. This would not affect how the new charge was collected.

Too often, financial instruments are seen as static: everything carries on as before but money is raised, or there is a one off change due to the change in cost. As an instrument of an integrated policy, it is the dynamic effect of the charge, especially in conjunction with other policies, which counts rather than a one off cost impact. A parking space charge would point towards more development in town and city centres, more smaller developments, and large developments which were designed with public transport infrastructure integral to them. These effects can be enhanced by the way the revenue is spent and by integration with planning policies.

3. What would the revenue be used for?

Tax or Charge

The principle adhered to by the British Treasury is that taxes are collected for general revenue and are not earmarked (hypothecated) for specific spending such as transport or health. Each Government Department bids for money every year, including within this process a DETR bid for local transport spending. This process is undermined if each Department of State were to become a sort of "profit centre" in its own right. There is clearly some merit in the "no hypothecation" principle, for example it allows national priorities such

as health or education to be properly reflected in national spending programmes.

There is less objection to the idea of ring fencing revenue if money collected from one group of people on the grounds of achieving policy objectives is mostly recycled back to them. In this case it is not so much a tax as a charge, and in the case of PSC it is a pollution charge and the long term aim is to change behaviour and thus zero revenue for general taxation.

In fact the idea of non-profit making for the Exchequer is at the heart of a true environmental "tax" which throughout this Annex is referred to as a "charge". After all, what is the point of raising a lot of money from undesirable activities if they continue unabated? Without getting involved further in these arguments, it is clear that a charge can be devised which has three key attributes:

1. the long term impact on public finance is neutral;

2. approximately the same group of people from whom the charge is raised benefit from the income so that there is no surplus;

3. within the long term aim there can be "windfall" income to fund transitional costs from damaging behaviour to environmentally sound behaviour.

Following these three guidelines should convince most people that the charge is genuinely of the "polluter pays" type. Specific examples of how this might work are given in the last section of this Annex.

One final comment is that financial principles are in practice always being fine tuned. For example, DBFO for road schemes is carefully constructed to avoid looking like a capital expense and thus stay out of the PSBR. Interestingly, if local or central government guaranteed any other sort of expenditure in the way it guarantees DBFO schemes the capital would count as public capital expenditure. The construction of DBFO finances illustrates the subtle interplay between policy priorities and the financial rule book.

A second example, this time outside transport, is the land fill tax. This was clearly associated with a reduction in National Insurance Contributions, and there is also a trust fund mechanism to help alternatives such as recycling. Again this has helped to stimulate a rethink in waste disposal (though not always reaching the desired conclusion). The important point is that the objective of the tax is to encourage change towards more sustainable policies, and that it is being partly recycled to the producers of waste (businesses) and partly to fund more directly a transition from land fill to recycling. A parallel system would make the PSC clearly **not** a new tax.

What would happen to the income?

Earlier it was suggested that income from an environmental charge should be recycled at least approximately to the people from whom it was collected, but in a way which encouraged a change to less polluting behaviour.

The proposal put forward here is that the long term aim should be to recycle money collected from business back to business, partly in a direct way and partly indirectly. The most obvious direct route is to give a flat rate rebate or discount to all businesses who pay the UBR. Why?

The first reason is to recycle the money back to those from whom it is collected. The reason for adopting a flat rate is that this differentially helps small local businesses which tend to generate less traffic from customers and employees. The second reason is that many organisations will be able to avoid the charge or at least partly offset it by reducing their car parking. This can be encouraged by "fast track" planning permission to switch it into alternative uses.

It would be possible to vary this proposal slightly by giving a discount instead of a flat rate. Thus the first few hundred or a thousand square feet would be subject to a rebate per square foot. Further views from businesses on how this would work should be sought as part of a consultation exercise.

The less direct method of recycling the income is to put it into encouraging change and absorbing transition costs from one policy era to another. It is assumed that by now most people appreciate that transport policy is undergoing a huge shift of this type, and not just in the UK. Thus income can be recycled into local transport packages to achieve modal shift and implement initiatives such as Company Travel Plans, Green Shopping, Bus Priority, Cycle Priority and creating streets in which people want to walk. In some areas major investment in light and heavy rail schemes could also be considered. This would need to do some DBFO-style footwork to avoid the PSBR trap, perhaps using a Charitable Trust mechanism borrowing for specific purposes on the bond market.

It could be argued that such spending will only be needed for the period of transition, although this is likely to take up to ten years. The environmental charge can be very flexibly applied, so that income can be mostly taken for specific transport purposes in early years, and more for the UBR rebate/discount in later years. An example is given in the Graph and Table at the end of this Annex for a ten year programme, with the charge rising in the first five years and then staying the same. There is a fall in gross income because it is assumed that parking spaces will be given up at the rate of 5% per year. In the first year all the income is given to transport, by year 5 it is equally divided, and by year 10, 62.5% is going to the rebate. These proportions can of course be discussed and subject to proper consultation.

4. How much would the charge be?

The level of charge set in the above example (£100 rising to £500 per year) is comparable to the typical cost of renting a parking space in a town but not a major conurbation. If fully passed on to the user it would thus double the cost. For those who receive free parking, the cost would exceed the cost of most annual public transport season tickets outside London. If the payment of this charge were considered a taxable perk, the cost to companies of not passing on the charge to employees would increase by 10% and the person parking would have to pay tax at their top rate + National Insurance (about a third of the charge) in any case. Multi-user public car parks, where there are many users per space, would be affected to a lesser degree, but there would still be cost per user and this is likely to be passed on.

The remaining question is whether retailers would pass on such a charge. To some extent this does not matter, because the profitability of one sort of store against another would change if it were not passed on. The same goods would be sold at a higher profit in stores with less parking, encouraging more "Metro" type retail outlets.

The most important factor determining the level of charge is that it is effective, and that it is phased in on a fixed timetable to allow people time to adjust. It is thus possible to set out the basic parameters which should guide the level at which the charge is made.

Parameters in determining the level of charge

1. Large enough to impact on businesses' transport arrangements and make it likely that charges will be passed on.
2. Sufficient phasing in to allow firms time to adapt and thus reduce transition costs.
3. If fully passed on to car users sufficient to make parking costs approach or exceed typical public transport fares.
4. Income sufficient to make a difference to small firms receiving rebate and to fund transitional and set up costs for alternatives to the car.

5. How would the tax be collected and distributed?

This is an area where the final decision will depend on a number of factors outside the scope of this study. However, in order to validate the proposal, a practical method of implementing PSC has been devised, benefitting from discussions with the Revenue and others.

With the above caveat a possible method would be to treat the charge as an add on to UBR and use the existing Valuation Agency. The simpler and more universal the charge the less likelihood of complex administrative procedures and inevitable appeals. This alone makes a site by site valuation unattractive. Fortunately both transport policy and the practicalities of implementation point

in the same direction. The cost of collecting the tax on this basis would be less than 1% of total revenue.

If the rebate proposal were adopted it would again be as a discount or flat rate rebate against companies' UBR bills. The spending on transitional costs to adapt the transport system for lower car use is slightly more complex.

Local transport spending

There are three basic possibilities for this transport element in the recycling of PSC revenue:

1. Collect with UBR and spend locally (ring fenced to non-car transport);
2. Collect with UBR and distribute via DETR (mainly through Package Bids);
3. Give a proportion up for discretionary local use, but ring fenced for non-car transport (comparable to the surplus from borough parking accounts) and channel the rest through a regional or centrally administered system, again ring fenced for enhancing alternatives to the car.

The principles of the redistribution of rate income according to need which is the basis of the British system would be maintained under 2 or 3, providing local discretion was not too big a proportion in 3. The local authority could also have the discretion **not** to spend. The main problem will be sorting out which type of authority gets what money because Unitaries, Counties and Districts all spend money on transport. This argues for a requirement that all spending is within an agreed local transport plan such as a Package Bid or equivalent.

6. Do we need any other policy instruments?

There are two types of complementary measures which will be needed to accompany a parking space charge:

1. policies which ensure that undesirable side effects do not occur;

2. policies which work with the PSC towards the same objectives.

Avoiding problems

The most obvious problem which can occur in relation to parking controls, either by limiting the number of spaces or through charging, is for people to find somewhere else to park within walking distance of their destination. This can be illustrated taking two extreme examples.

The first would be a business in an urban area with few on-street parking controls. If a charge was introduced and the firm converted parking for another use, employees might simply use local streets. This effect can easily extend up to half a mile and beyond. In these circumstances the local parking regime needs to be made consistent with urban areas where controlled

parking zones **(CPZs)** and waiting controls are in force. This cost should be met in full and with very simple vetting procedures and not included in the normal calculations of local authority transport spending. There will be sufficient revenue to meet this from any meaningful level of charge.

The second example would be a retail store on a greenfield site. Here the problems are different, and adjacent local roads may have space to park and have no reason for an urban style CPZ. Waiting controls would impose an enforcement burden on the local authority, although those who manage their own parking would find such parking an easy target. It could also be argued that people are less likely to want to carry shopping down the road - convenience would be severely diminished. In these circumstances the use of local traffic calming and road narrowing would offer environmental and safety benefits as well as containing illegal parking. Again such treatments should be fully funded.

The point is that as long as authorities are prepared and have the money with few strings the problems will be minimised by tailor made local solutions. For new developments, access would be designed from the start with such considerations in mind. There are already several examples of CPZs funded by developer contributions.

Complementary measures

One of the interesting aspects of parking space charges is that they deal with the problem of existing developments. They also encourage developers to look beyond parking as the only relevant factor in thinking through how employees and customers would get to and from their sites. Setting limits on the level of parking in new developments would reinforce PSC, and the charge would work with limits by encouraging people to be even less car-dependent than the limit would suggest.

However, there are other arguments for the use of supporting policies in the planning sphere, in particular the move from parking standards to a broader requirement to emphasising an accessibility plan for new development. Within this there may still be a parking space limit but this would not be the key to enabling development to proceed.

In a sense the use of accessibility planning, and how to measure and monitor it, is the province of the rest of this project. In relation to PSC the position can be summarised in relation to the well-known transport metaphor of "sticks and carrots".

PSC is a stick. The money flowing back to business and transport investment is carrot like, but rather unfocussed. The use of accessibility as the basis for developing land provides the positive framework that is needed to prioritise spending, whether from PSC revenue, Section 106 agreements or central government grant.

The requirement for developers to think about access is a challenge because to date life has been simple: either provide the parking so that everyone drives in; make a commuted payment, possibly for spaces in a park and ride scheme; or locate somewhere so accessible by public transport that parking is not needed. The latter is probably limited to areas like central London where some commercial and residential developments have no parking apart from taxi dropping off space and lorry delivery bays.

The old system was designed to ensure that a private development paid for the extra parking needed to provide access to that development. The new system needs to be equally clear but with new objectives. Within it there will be the sticks of ceilings on parking in new developments, no spillover on to local streets and charges on the car parking that remains. The carrots will be a simple method for assessing accessibility that provides pathways to improving it without increasing car dependency. This is perhaps the strongest argument for replacing parking limits with a broader access based system plus a charge. Simple measures of how developments are served by all modes of access, and how that non-car access can be improved, would work with a PSC to produce a pattern of development that is economically active and vibrant but less intensive in its use of road based transport.

Annex 3

Transport Assessments

This Annex discusses TAs which should be produced to supersede the current Traffic Impact Assessments, under the following headings:

1. Planning Context
2. Current practice
3. The role of TAs
4. The content of TAs
5. Feasibility

1. The Planning Context

PPG 13 makes the overall aims of Government clear, namely

- Reduce growth in the length and number of motorised journeys;
- Encourage alternative means of travel which have less environmental impact; and hence
- Reduce reliance on the private car.

PPC13 outlines policies that would achieve these aims, and states that (para 2.12) “local authorities should consider carefully the impacts on travel demand of all new developments before planning permission is granted”.

The onus is on local authorities to formulate - and adopt - development plans that reflect the ambitions of PPGl3 (and other guidance), and for developers to undertake detailed assessments of travel impact. In other words, the planning framework should encourage development proposals which are based on non-car travel, while developers are required to demonstrate the efficacy of their proposals in this respect by means of a travel / transport impact assessment.

2. Current Practice

Current practice in assessing development proposals focuses on the capacity of existing infrastructure and how it can cope with additional demands likely to be placed on it by the proposed development. Current Traffic Impact Assessments mostly concentrate on access by car, and the ability of road and parking infrastructure to cope with the predicted demand. Consideration of non-car modes is patchy. Travel patterns are often predicted on the basis of comparison with similar but pre-PPG13 developments, thus perpetuating the car-based outcomes that PPG13 seeks to end. Consequently current practice is out of step with policy to reduce car dependence and also to reduce motorised traffic.

The PPG6 sequential test may not lead to developers changing their aspirations as to the type of development they wish to propose. Investment in many sectors is still weighted towards development that relies heavily on car

access, while investment in developments which are based on non-car access is limited.

Some developers perceive a mismatch between the aspirations expressed in the PPGs and the policies in approved Development Plans (or their interpretation by the respective local authorities). An example is where a developer may be prepared to reduce the level of car parking associated with the development to comply with PPG13 aims, only to receive an objection from the highway authority on the basis that the provision falls short of an adopted car parking standard. On the other hand insistence on outdated standards could be open to challenge.

Traffic Impact Assessments for the appraisal of travel by car are now well established, in line with the approach of “predict and provide”. However, there is little guidance on how to assess accessibility by non-car modes, even in terms of dealing with the 'adequacy' of existing or proposed facilities. Even less is there any established method for assessing developments in the emerging policy context of “predict and avoid” in relation to car use. There is no agreed method for judging the extent to which development is likely to encourage (or discourage) use of modes other than the private car, though expensive multi-mode models are available for the largest developments.

Since not all local authorities have grasped the new policy agenda, or yet understood its implications for development policy and control, developers prepare assessments of non-car accessibility (if at all) in a policy vacuum. Planning authorities - and certainly the Planning Inspectorate - tend to adopt a cautious approach to such evidence submitted by developers as part of a TIA.

Moreover, most local authorities do not set targets, standards or criteria relating to the aims of PPG13 against which proposals can be assessed, and the value of TAs will therefore tend to be limited to local impacts rather than contribution to wider sustainability goals.

In addition to the policy gap already identified, there is a lack of reliable data on the usage of non-car modes particularly at the local level. Most authorities face considerable difficulties in, firstly, understanding existing travel behaviour and, secondly, formulating appropriate land use development control policies which would achieve better travel outcomes in particular local circumstances.

3. The role of Transport Assessments

Development plans can potentially alter travel patterns in a way consistent with the aims of PPG13 over a period of time through the planning decision process. The role of TAs should be to enable local authorities to assess the extent to which the proposal is likely to contribute to (or detract from) these aims.

An important issue is the extent to which TAs, or even the wider planning process, should be seen as a mechanism for influencing the location, scale, content or operation of proposed developments. Although the planning

system is now more firmly policy driven (since Section 54A), it still depends largely on reaction to private sector initiatives. The future role of TAs is therefore related to the future scope of planning intervention.

The reactive position might be “predict travel by all modes and provide for them” (an improvement on predicting and providing for car travel only). A more pro-active position might be “permit development only if the resulting pattern of travel is in line with specified targets”.

Assuming that the pro-active stance is required, two levels of specification can be identified:

- Where the developer must show that development proposals do not generate additional car traffic, or no more than allowed by specified targets or limits. This is consistent with a policy of reducing road traffic (Road Traffic Reduction Act 1997).
- Less radical is for the developer to show that the proposal does not depend on the car for its viability. In this case it must be demonstrated that potential customers, visitors, and employees or residents can carry out their activities with less use of a car compared to some specified baseline. This does not necessarily mean that these people will not use cars, only that they do not have to. This is line with PPG13 policy of reducing dependence on the car, but insufficient by itself to achieve traffic reduction.

From a developer's point of view the TA should demonstrate:

- The extent to which the proposal is reliant on different modes of transport (but necessarily how it is dependent solely on non-car modes).
- The steps which are being taken to ensure that alternative modes to the private car are both available and adequate for the use proposed,
- The impact the level of likely usage will have on existing facilities or infrastructure; and
- The extent to which the developer is prepared to ameliorate any adverse effects and/or contribute to measures which enhance accessibility by non-car modes.

Many of these measures are relative and, in the absence of a local 'benchmark' of what is currently the situation, and what can realistically be achieved through the development control process, it is difficult for the developer to provide a definitive measure of the 'sustainability' of the proposal as part of a TA.

4. The Content of Transport Assessments

It is beyond the scope of this paper to produce a fully worked out method, and further work would be needed on both the scope and detail of future TAs.

Site accessibility can be considered at two levels.

A. Accessibility from surrounding areas

This concerns travel to and from the site by customers, visitors and employees within a development's catchment - whether this is by car, public transport, cycle or foot. This is the normal domain of TIAs and - of late - 'accessibility' studies, though these are very much in their infancy.

'Drive times' are widely used, but comparable measures for other modes are in their infancy and there is little consensus regarding the efficacy. For example, LB Hammersmith & Fulham's PTAL methodology may provide an approach for assessing public transport accessibility, but this has not yet been agreed as appropriate for the rest of London, let alone outside London.

Methodologies need to be developed to accurately - and realistically - determine catchment areas for non car modes. These will need to reflect the current and potential levels of non-car mode usage at the local level.

Similarly, in considering 'modal split' targets (whether in relation to development plan policies or in relation to specific development proposals) careful consideration has to be paid to existing patterns of usage, how these might realistically be changed by local planning policies - and the time-scales over which any change may occur. It has to be recognised that, in most cases. the developer of an individual site may - in isolation - have only limited influence over model shift change. Even if the developer is willing to accept conditions which are designed to assist modal shift (e.g. progressive reductions in available car parking) actual changes are more likely to be effected by other ' factors (e.g. national fiscal changes or investment in quality public transport) which are essentially beyond the individual developer's control.

B. Accessibility at the 'micro' level

This is where the relationship of the development to nearby land uses is considered, including the design and arrangement of the development itself. It is this dimension where the importance of linkages on foot are paramount - particularly if the aspirations of PPG13/PPG6 for multi-functional trips are to be realised.

There is a tendency to place great emphasis on the physical relationship between uses (the 300-400m test, footpaths etc.). In practice, much of this may be irrelevant as the factors which influence or affect movement on foot at the local level are more subtle. For example, insufficient regard is generally paid to the nature of the linkages (including gradients or those factors which might encourage pedestrian links to be made), the relative 'gravity' of the uses, any psychological barriers which might inhibit linkage. Without sufficient regard to these issues physical provision is unlikely to 'create' the linkages envisaged.

Accessibility studies should therefore consider - in far greater detail than they do at present - what opportunities exist to both enhance exist linkages or create new ones between land uses.

The content of TAs that would meet the requirements discussed above must inevitably be the subject of further research and debate. Some work is already in hand in London, and the questions drawn up by MTRU for LPAC (and subsequently included in LPACs “Advice on a walking strategy for London” (June 1997, page 10) are reproduced below.

Questions to be addressed by travel audits or TAs:

1. What is the size and density of the development?
2. What activities will take place?
3. What person and goods movement will be attracted and generated?
4. What mixture of activities and uses will there be?
5. What is the degree of specialisation of the activities? (local, district, city, regional, national/international)
6. As a result of 1-5, what will the catchment area be, both for employees and visitors/customers?
7. What proportion of employees/visitors/customers live within walk (and cycle) distance?
8. What proportion of them can reach the site with a single public transport journey?
9. How does the design cater for those on foot? Is the main entrance direct onto the footway?
10. How many units of pedestrian interest per 100 metres of frontage (doorways, window displays) will result?
11. Will there be zero private parking? What demand will arise for public parking?
12. What demand will arise for loading/unloading goods? Can this be done from public space?
13. What vehicle footway crossovers will be created? How will the use of existing crossovers change?
14. What is the visual connectedness between activities inside and outside the buildings?
15. What time of day/week will activity be taking place?
16. How will the development contribute to “exchange/circulation” use of adjacent/nearby public realm?

5. Feasibility of Transport Assessments

There are a number of obstacles to the introduction of a successful TAs, most of which have been noted already.

1. The policy gap due to Development Plans not reflecting PPG policy.
2. Many local authorities are not yet interested in limiting the role of the car. Most concerns are about road safety, congestion, and avoiding car parking on the street.

3. Even where there is an enthusiasm for the new policy context, there is a lack of expertise in its implementation. In the context of “predict and provide”, planners could rely on engineering colleagues to assess the requirements. The new policy context means that the requirements are themselves determined by planning policies.
4. Local authorities will need more data than are currently available about current travel patterns, including mode split of all trips and all kilometres travelled. It also means that they will need targets showing where trend lines should be at specified dates in the future.

In bringing about the new TAs, considerable further work will be needed, for example consideration of the following:

- The trigger for requiring TAs (size/ type of development).
- Transport assessment of Development Plans. A study is being carried out on this by the University of Westminster commissioned by the RTPI. Could such assessments reduce the need for or simplify individual TAs?
- Relevance of existing TIA methodology and practice?.
- The role of public transport audits and PTALs?
- The role of development classification, such as the Dutch A B C classification of non- residential development and related location and parking standards.
- The role of targets for mode split, environmental standards, the quality of public transport or other facilities.
- Data requirements. Rights of LA to gather survey data on private premises?

6. Application of TA results

The role of Transport Assessments should be broadened compared that of conventional traffic assessments in three main respects.

1. The TA will provide information on which to assess whether the location, scale or type of development is suitable in terms of targets and limits on traffic generation. Permission would be refused where the assessed travel patterns would cause a breach of specified targets or limits. In practice this will almost always be due to excessive car use.
2. The TA will provide an assessment of travel by all modes in connection with the development, not just car traffic. This will enable decisions to be made about infrastructure improvements or other complementary transport measures that will be needed to ensure that the assessed travel patterns will materialise. This goes beyond the local highway measures required in conjunction with most conventional TIAs.
3. The TA will provide information on measures that will be needed on completion of the development related to the management of travel and traffic. These measures would include company travel plans, parking management systems, and any restrictive conditions that bind any successor in title.

The TA will thus be an important tool for implementing transport and land use objectives, and give a greater degree of certainty and robustness in planning decisions, and their defence at appeal. A paper prepared by Keith Gardner for LPAC suggests that the outcome of a TA would include the following:

- The adverse impact is too great, and refusal is the only conclusion.
- The development would become acceptable if scaled down.
- The modal split can be changed by, for example, reduced parking provision, providing improved public transport, or by a “green travel plan”.
- Improvements should/could be made to the highway (including bus, pedestrian and cycle facilities).

Conclusion

The TA, as specified above, could provide the mainstay of access management, including the proposed Mode Choice Minimum. Unlike the conventional TIA, which is used primarily to resolve traffic management and highway issues, the TA will provide a robust basis for refusal or modification of a development application on the basis of adverse travel impacts in relation to the MCM and locally determined mode split or traffic targets. This differs from Traffic Impact Assessments, where refusal or modification is usually justified only on the basis of car traffic generation and its impact on the local road network.

Annex 4

Residential accessibility standards

Overall purpose

There are four important aims behind the suggested residential accessibility standard:

- Sustainable housing, including higher densities and efficient use of land;
- Building housing in such a way as to avoid generating more car traffic than implied by the MCM in non-residential development (see Section 2 of the main report);
- Ensuring or promoting the development of local facilities which are accessible by non-car modes;
- Ensuring that major new housing is located where residents can reach urban facilities without reliance on the car.

A number of possibilities have been considered, including restraint based residential parking standards. For example, parking spaces per dwelling or per site area could be limited, or parking spaces could be subject to the Parking Space Charge described in Annex 2. There are also design and layout considerations that can help in securing efficient use of land, such as requiring communal rather than dedicated parking. Such instruments do not, however, directly address the issue of accessibility to facilities, and are better left to consideration of parking standards per se.

Strict logic would suggest that if there is a ceiling on the proportion of travel by car to trip destinations (as in the proposed MCM), housing should be developed to ensure that car travel from trip origins is no greater. In most situations, however, there is no way of matching residential and non-residential developments in this way. Residents will want to have a choice of destinations, many of which will continue to operate above the ceiling set for new destinations.

The principle of residential access standards thus differs from that for destinations. Neither the choice of destinations nor the mode split of trips from housing can be regulated or enforced, and it would be unreasonable to attempt it. The principle instead should be to arrange housing, facilities and transport to reduce dependence on the car; that is by making it possible for people to reach a range of facilities by other modes, without compelling them to do so. This is entirely consistent with PPG13 key aim to “reduce reliance on the car”. Active encouragement through Travelwise or other campaigns can help achieve the desired travel patterns, but even this approach will work only if the possibilities for non-car travel are built into the scheme.

It is important to consider how well a housing development will function when wider (mostly non-planning) measures become effective in reducing the relative attraction of car use, such as real increases in fuel prices and various forms of road and parking charging.

Historic precedence

The concept of residential accessibility planning is similar to the "neighbourhood planning" concept applied in most of Britain's New Towns. A distinction was usually made between on the one hand employment and major (town centre) facilities, usually deliberately separated from residential areas, and on the other hand, local facilities to be provided within easy walking distance of people's homes. An example from Harlow New Town master plan (reproduced at the end of this Annex) shows four residential neighbourhoods, each with a "major residential centre", several "sub shopping centres", and primary schools within walking distance.

Present accessibility

Current travel patterns, even in new residential areas with highly mobile populations, appear to support the continuing relevance of this distinction between local and urban scale facilities. For example, in the study of new residential areas in small Oxfordshire towns by Headicar (1996), less than 20% of journeys to work, but more than 50% of journeys to other facilities, were within the home town. (Headicar (1996) "It's not size but location that matters", paper to TRICS conference, London, September 1996.)

Travel patterns nationally suggest a major difference in terms of locality (proximity) between employment and business as compared to other journey purposes. The average length of commuting journeys, for example, is three time that for education, and more than twice that for shopping and other personal business. Entertainment and public activity journeys are of similar average length to commuter journeys, reflecting the more specialised nature of such activity. These relationships hold good for all areas except small towns and rural areas, where the average length of non-work journeys is nearer to that for work journeys.

"Proximity Standards"

A framework is suggested to assess the proximity of various facilities to new residential developments, as a basis both for helping to determine the merits of a scheme in relation to PPG13 objectives, and for assessing what contributions might be required from the developer. Contributions might either be to provide facilities as part of the scheme, or to contribute towards the improvement of non-car transport access to facilities off-site.

The framework is designed to allow "proximity standards" (PS) to be applied at two levels. The first level is for local facilities, and the second level would be for more specialised or "urban scale" facilities. An example of the PS framework is set out at the end of this Annex.

Proximity to facilities can be calculated as follows:

Require local facilities to be extant or to be provided within a walk catchment

A list of local facilities can be drawn up. A points system can be devised to reflect the relative importance of different facilities. A possible framework is set out below. The points weighting is based on frequency of trips for different purposes. Primary schools should be given a higher weighting in view of the importance of children being able to walk. Similarly, day centres or other facilities for the elderly might also be given higher weighting. Scores can be related to walking distances.

Require "urban scale" facilities to be accessible via public transport

It is also necessary to ensure that residential areas have access via a public transport system to more specialised facilities at the urban scale. A similar points system can be devised, taking account of walking distance to public transport, which in turn gives access to urban level facilities, within an overall door-to-door journey time. The calculation of the public transport element will be similar to that used in the PTALS technique, except that additionally the places served by the public transport route(s) will need to be included. It is suggested that use of park and ride for access to urban facilities should be excluded, because it is primarily a means of solving traffic problems within a town, not encouraging car-based housing outside the town.

Scoring the Proximity Standard

To meet the proximity standard (PS), the scheme should achieve a minimum score. Each level can be scored separately, or alternatively a minimum combined score could be required. In the example below, separate scores are required. The various facilities identified should if possible relate to the Use Classes Order and the General Development Order, modifications to which might help to preserve the longer term validity of individual proximity scores.

There is considerable scope for further study of each aspect of the proximity standard, for example:

- Walk times and distances, and variations by facility
- Facilities included and excluded from the calculation
- Relative scores of different facilities
- Measuring points within the housing scheme, and at the facilities end
- Allowances for waiting times and quality of public transport facilities
- Taking account of changes (planned or unplanned) in facilities

A third "level" of special facility might be identified which could in some circumstances counterbalance lack of proximity to standard facilities included in the framework. Examples might be housing associated with specific employment such as forestry. In such cases the reduction in commuter travel by locating housing nearby could be greater than the increased travel to other facilities generated by the residents of such housing.

In presenting the concept of Proximity Standards (PS), it should be made explicit that a result of such measures, at least in the long run, will be a reduction of individual car ownership, and particularly multiple car ownership. This may be aided, and to a degree counterbalanced, by shared car ownership systems such as Statt Auto and similar other local vehicle renting systems. A sample of the Proximity Standards (PS) for residential development is shown in Tables A4.1 and A4.2. Clearly there is a need for further work to establish the most appropriate range of facilities to be included, and their relative scores.

The PS scores accessibility only by non-car modes. For local facilities, walking will be the main mode. For urban scale facilities, public transport will be the main mode to bring them within reach, but the quality must be of a good standard. The journey times will therefore be scored on the basis of off-peak levels of service. Cycling would only be included as a substitute for public transport where safe and good quality routes were available.

Acceptability

The Proximity Standard (PS) for residential development would be a mechanism for extending and formalising what is already best practice. Local authorities concerned about the quality of residential development already require or seek to negotiate the provision of local facilities. For example, the new Essex Design Guide includes a requirement for all housing schemes with more than 500 units to include both retail and employment facilities. A national PS could strengthen implementation of such policies.

Developers of new housing are also concerned to ensure that facilities are accessible to residents. Formalising such accessibility through the PS mechanism may encourage developers to:

- Give greater consideration to brownfield sites and conversion projects within urban areas;
- Bring forward higher density housing schemes, especially since a high proportion of new housing is likely to be taken up by small households;
- Find locations where public transport access is good, and where car parking requirements can be reduced;
- Propose mixed use developments;
- Include local facilities in larger schemes;
- Contribute to the improvement of non-car transport linking the scheme.

The assessment of existing provision

The principle or residential car-restraint is essentially to reduce the need to travel or improve public transport and non-car modal accessibility to so-called desirable facilities such as shops, banks, GP's libraries, primary schools.

To implement this strategic approach to residential development will require three principal stages:

1. A mapping exercise of the Borough or District to identify locations that are considered "accessible" to services.
2. A review of housing policy to incorporate a policy argument for requiring developers of residential schemes to give primary consideration to site location in respect of accessibility. It is likely that this approach is appropriate to the possibility of sequential approach for housing recently announced by Richard Caborn.
3. A review of housing density particularly in urban areas. Reference is made to the recent debate on Sustainable Residential Quality (SRQ).

Urban potential

The SRQ report into urban development potential adopted the approach of "ped-sheds" - an area within 800 metres (approximately 10 minutes walking distance) from a town centre which provides people with an opportunity to walk to jobs, local facilities, services and to public transport interchanges serving other destinations.

This is a simple and effective method to identify the most accessible sites for potential residential development especially when combined with detailed design information to illustrate a the potential to increase residential density, where appropriate by reducing parking.

However, it is unclear at present how this approach would relate to rural areas or marginal urban areas. Further research is required in this respect.

Meeting appropriate levels of accessibility

If a proposed development does not meet the "sufficient points" criteria in terms of accessibility to local facilities, consideration must be given to measures that enable the development to meet the standard by:

1. Requiring the provision of new local facilities within a proposed housing development or;
2. Ensuring improvements to accessibility by public transport or non-car modes of transport.

Scenario proposal for Proximity Standard

Table A4.1 Local facilities PS scores

	5 min walk	10 min walk
Shops (food/convenience)	10	5
Shops Non-food 1-2 units 3+ units	3 5	2 3
Post office	2	1
Bank/BS/Cashpoint	2	1
Other personal business (each)	1	1
Health facilities (points each for GP, primary services, dentist)	2	1
Open space	2	2
Children's play area 3-6 years	3	1
Children's play area 6-12 years	3	3
Nursery school	5	3
Primary school	10	8
Day centre	5	5

Minimum points needed to meet the PS:
Urban areas: 25 points Rural area/small town: 20 points

Note: the target scores will ensure that all housing has food shopping and a primary school within easy walking distance.

Table A4.2 Urban facilities PS scores

Type of facility	**Maximum door-to-door journey time by non-car modes**	
	20 min	**40 min**
Employment High Medium Low	8 4 2	6 4 0
Major shopping centre	8	6
Regional centre	12	12
Cinema	6	3
Swimming/Leisure centre	6	3
Outdoor Recreation	6	3
Intercity Rail Station	6	3

Minimum points needed to meet the PS:
Urban areas: 20 points Rural area/small town: 15 points

Note: The target scores will ensure that residents in new housing in urban areas (the urban envelope will need to be defined in development plans) will not be dependent on cars for access to the main facilities of the town or city.

Annex 5

Tradable Permits

During consultations in the course of the research project, it was suggested that the concept of tradable permits might be applied in the context of accessibility standards. This Annex explains why this concept has been excluded from the recommended instruments.

There are two assets that could be traded, namely parking or car access. In order to have a tradable quantity of either, it would be necessary to decide on a maximum amount for the site rather than pressing for the minimum. The trade would probably be one-way, namely from inner urban sites to outer urban and rural sites. This would mean the car access share going up in those areas, and this defeats the point of the MCM standard.

Essentially, the MCM defines a maximum car share, but the aim would be to reduce this in areas wherever accessibility by non-car modes is better. There is therefore nothing to trade. Any surplus parking would by definition involve a breach of the principle and therefore should be avoided.

Another possible argument is that existing car access rights, whether supported by parking provision or not, could be traded with occupiers of new or extended developments, or those with material change of use permission. This might run as follows: we are an existing user whose access is better than standard (i.e. less than 50% of people come by car). You, as an occupier subject to the new access standard can have some of our unused car access to boost your own. Again, such a provision runs counter to the principle.

A different argument might be: we aim to reduce our car access and the savings we make can be traded with you. Again, this undermines the principle. Any reduction in car access should be “consumed” as a community benefit and not simply lead to different sources of community disbenefit.

This does not prevent market forces working in harmony with the new approach. For example, there would be some natural market reallocation of businesses, which found it most difficult to respond to reduced car use, to existing sites which had large-scale car parking. This would operate through the market pricing of different sites, influenced by any parking space charge (see Annex 2).

It would also be possible for developers to "trade" between sites within, for example, business parks to provide sites with below average car parking and some above. This would allow a mix of more and less car dependent sites for different occupiers, but within the overall ceiling and targets for the development as a whole. The market would allocate such sites by price. In the longer term any premium on sites with more car parking would fall as alternatives improve. This would be enhanced by other fiscal instruments, for example parking space charges or even road pricing.