Managing **Travel Demand**

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1 *Introduction*

1.1 *Scope and content of the report*

1.1.1 SEERA is responsible for producing a revised Regional Transport Strategy (RTS) as part of Regional Planning Guidance (RPG) for the South East. A key aspect of the revision being undertaken in 2001-02 is the production of a travel demand management framework to assist local authorities and others in meeting sustainable development objectives.

Such a framework is required by PPG11 and has been identified by DTLR as having been insufficiently robust in the first round of RPG. For the present revision of the RTS the spatial strategy in RPG9 of March 2001 is taken as "given".

1.1.2 SEERA appointed Llewelyn-Davies with MTRU to provide advice on the production of a suitable demand management framework that will feed into the consultation draft of the revised RTS.

1.1.3 This is the final report of this commission. The Executive Summary following this introduction focuses on the main study conclusions. The advice to SEERA on the recommended content of the demand management framework is given in Sections 7 - 9, while the other Sections provide a range of contextual and supporting material, and the reasoning behind the core advice. Terminology can be an important factor in achieving understanding between different parties, and Section 10 focuses on key phrases and words which require definition or explanation. An outline of the study method and the various working papers produced is given in the final Section 11.

2 *Executive Summary*

2.1 *Demand management in the South East*

2.1.1 The South East region is under intense pressure from rising road traffic levels, which threaten economic vitality and undermine environmental quality. The road system, and in many respects the rail system also, are operating close to or beyond their capacity limits, especially when quality of travel is taken into account.

2.1.2 There is no reasonable prospect of solving the imbalance between supply and demand for road space by increasing road capacity. We cannot build our way out of the problem. Even if it were acceptable in environmental terms, such a solution would be ruled out on cost grounds. What are the alternatives? One is to let congestion be the main determinant of demand. It is unlikely that the road network would "grind to a halt", and traffic mostly would find its own level. This approach at least has the merit of not fuelling supply-led traffic growth. The main problem with this approach is that it is inefficient. There is no ready means whereby valuable trips (whether by car, bus or lorry) can be given priority over other trips.

2.1.3 The other approach is to manage demand for the road network more effectively, to bring benefits to the whole community. Demand management is also necessary to enable the full benefits to be extracted from transport investment. Building major new road capacity without demand manage management simply buys a few years of traffic growth, and recreates the present problems on a larger scale, making them still harder to solve.

2.2 *Getting the message across*

2.2.1 Demand management has a negative perception except perhaps amongst transport planning professionals. This arises for two reasons. First, there is a paucity of understanding of the purpose of demand management. Second, it requires some individuals to alter their travel choices, to enable quality of life improvements for everyone. Of course the expectation is that the amount of benefit to the many must exceed the amount of disbenefit to the few, but rarely has this led to the taking of the necessary political risks or the development of reasonable compensation mechanisms.

2.2.2 It is necessary for the RTS to mount a detailed promotion of the benefits that will flow from moderated travel demand. The reasons why demand management is necessary and why it is desirable need to be explained and widely disseminated. There is no intrinsic merit in demand management. It is purely a means of achieving the sustainable development objectives already agreed within regional guidance.

2.2.3 Emphasis must be placed on achieving high quality benefits. The quality of schemes for the environmental improvement of town centres, for roadspace reallocation, for cycle and walking provision, and so on must be sufficiently good to persuade people of the benefits of reduced road traffic and making greater use of non-car modes of travel.

2.3 *Guiding principles*

2.3.1 Key principles have been set out in the study. The first is that the demand management and other measures in the RTS should complement each other. The absolute orders of magnitude of the effects of individual measures are less important than the need to ensure that they are all acting in concert, and contributing to the regional objectives.

2.3.2 A second principle is that the RTS should fill the gap between national and local policy, and should focus on those aspects where local authorities are unable to act alone. In essence this is the subsidiary principle.

2.3.3 A third principle is that the region should not expect a “hole in one” from the demand management aspects of the RTS. Some aspects of demand management are untested and untried, and it will be necessary to learn about and adjust the programme as time proceeds. The report therefore charts an evolutionary path for demand management over the 15-year period of the RTS.

2.3.4 A fourth principle is that a range of measures will be required. Just as one would formulate a recipe, the various ingredients must be carefully chosen for their availability and compatibility. To some extent ingredients can substitute for one another. For example, less emphasis on charging mechanisms can be counteracted by more emphasis on, say, parking controls.

2.3.5 A fifth principle is that the detailed demand management measures should reflect regional distinctiveness, intra-regional differences, and the need for consistency with neighbouring regions.

2.4 *A demand management framework*

2.4.1 The packages of measures are presented in two scenarios, one which includes a gradual extension of charging mechanisms, and one which emphasis other measures.

2.4.2 Rectifying the deficiencies of the existing charging regime is seen as the most desirable option. A phased approach is envisaged for achieving this:

- Years 1-5 Integrated public parking tariffs
- Years 6-10 Workplace parking charges (some areas)
- Years 11-15 Road user charging (some urban areas)

2.4.3 The framework should in addition include measures designed to limit damaging competition between authorities in their quest of development and trade. A key element here will be the application of lower levels of parking provision in new developments to support the region's location and spatial policies.

2.4.4 Travel planning is an existing mechanism that can be strengthened. However, its effectiveness requires considerably more encouragement through a clear demand management strategy than has so far been forthcoming. It also requires monitoring and enforcement mechanisms to be strengthened.

2.4.5 The framework in addition should include robust mechanisms for implementation, including resources and mechanisms to ensure those local authority plans comply with the regional framework.

2.5 *Exemplary towns and a new Transport Skills Partnership*

2.5.1 While progress can be made with demand management and the delivery of associated benefits throughout the region, it is probably unrealistic to expect measures to be "rolled out" across the entire region. Apart from

the need to gain experience of measures such as workplace parking charges before extending to all locations, there is the practical issue of the availability of the necessary skills.

2.5.2 The report proposes that there should be the opportunity for a limited number of local authorities to act as exemplars. They would be encouraged in this through a range of incentives applied at the regional level. Amongst these incentives would be access to a "Transport Skills Partnership", or expert group who would work alongside the chosen authorities to formulate and implement and market demand management measures in their areas. Crucially, they would also benefit from targeted investment resources.

2.5.3 The partnership, which would include the region's leading teaching institutions and businesses would also identify the gaps in the region's transport skills base and work together to meet future needs

2.6 *Regional responsibility*

2.6.1 Finally, the study has concluded that in the delivery of sustainable transport and planning objectives, the region has a considerable burden of responsibility. Demand management is a mechanism that needs to be strengthened in the South East, and yet local authorities will be unable to pursue it with the necessary vigour without a strong lead from the RTS. The Government has set the broad policy, and has delivered some useful legislation. It is now for the region to use its position to catalyse action on this front.

2.6.2 There are a number of specific areas where the study recommends a strengthening of the regional role, and these carry resource implications.

1 First, there is the establishment of the Transport Skills Partnership, as described above.

2 Second, an increased role for Travel Plans is a consequence of PPG13 and the new Transport Assessment process, but local authorities are anxious to secure additional resources especially for monitoring of Travel Plan outcomes. There may be a lower overall demand for such resources if Travel Plan monitoring is coordinated at the regional level.

3 Third, and probably the most resource intensive, is the need for more comprehensive monitoring and enforcement of LTPs and development plans to ensure compliance with regional targets and strategies. Of particular importance is the monitoring of those aspects of transport planning where there may be local political incentives for delaying or avoiding action, such as the implementation of PPG13 parking maxima, or the sequential approach to land use location.

4 Finally, there will be a need for input at the regional level to ensure the contribution of local parking strategies to RPG objectives.

2.6.3 The study also concludes that the demand management framework should include measures that aim specifically to deter wasteful or damaging competition between authorities. These include “mode share maxima” for car driver trips to new non-residential developments, and parking provision maxima that are lower than those set out in PPG13.

3 *The Demand for Demand Management*

3.1 *A litre in a pint pot*

3.1.1 Why would anyone want to manage or reduce the demand to travel? The obvious answer is to avoid or prevent many of the side effects of increases in travel. These are usually interpreted as environmental problems (local, national or global) and delays and inefficiency that arise when travel demand exceeds the capacity of the infrastructure. Freight issues parallel those for passenger transport, but these will be considered later in this section.

3.1.2 In fact, there are other reasons for wishing to manage demand which are far more positive. These are associated with the enabling of social and economic activities rather than their limitation. How can it be that management (which must include at least the possibility of restraint) enables growth? If this is true, why is it not better publicised, or more widely understood?

3.1.3 The reason is that the fulfilment of quality of life objectives has become closely linked to the need for extra travel, and use of the preferred mode (car) itself creates barriers (such as congestion, community severance or danger) which inhibit the achievement of those same objectives. Thus the increased availability of cars, and, for those who acquire them, the immediate surge in the accessibility of places previously out of reach, is not a stable long term answer to people's travel needs.

3.1.4 For example, if nothing had been done by way of traffic management and road capacity increases, congestion would have had a major restraining effect far earlier in the towns and cities of the South East and in a far wider range of places in the more rural and the suburban parts of the region. Without the major trunk road and motorway programme beginning in the 1960s, the increases in inter-urban travel would have been less and would have been undertaken by other modes. Those other modes would, by implication, also have received much more investment than in fact took place.

3.1.5 In the early years of car ownership growth, the extra traffic to a large extent used up the slack in the road network. Then, for a time, capacity increases and management techniques squeezed more traffic through where congestion became a problem. This was, however, a losing battle because the increases in capacity needed to grow in real terms every year to keep up with a constant percentage increase traffic. When there were only 500 kilometres of motorway in Britain, a 10% increase could be achieved in a year. When there are 3,000 kilometres such a percentage

increase is difficult to envisage. There are over 16,000 kilometres of classified roads in the region - how much would this need to be expanded and how much would it cost? Even if the number of kilometres added to the network increases by the same amount each year, this will represent a declining percentage increase. Traffic growth, however, tends overall to increase by a relatively stable percentage each year. Thus the gap between the traffic demand and network capacity is increasing – and is visible to all through increased congestion and journey time unreliability. In addition, the physical and environmental capacity of the region, let alone the financial cost, means that increased road provision cannot provide a long term solution. All of these arguments have been accepted by the Government during the course of the last decade.

Table 3.1 Additions to road network in the South East

South East		1984	1989	1994	2000
All Roads	Kms added	262	260	158	312
	% of network	0.65%	0.63%	0.37%	0.66%

Source: Transport Statistics for Great Britain special tabulation

3.1.6 In a highly developed area such as the South East region the only viable solution is to reduce the amount of travel (especially but not necessarily only travel by car) needed to support the social and economic activities which add up to a high quality of life. This is often referred to as "reducing the transport intensity of social and economic activity" or simply "reducing the need to travel". Thus demand management which aims to reduce transport intensity is positive rather than negative especially for those who want to use a car. Improving other modes is particularly helpful to those who do not have access to a car and have become disadvantaged because activities are increasingly car based. While demand management, improving alternatives to car and lorry and subsequent mode shift are intimately connected, this is still a crucial distinction.

3.1.7 As regards the South East, by now the system has already been pushed to the limit in many places at many times and some users have had to suffer. Space has been allocated to cars away from pedestrians and cyclists, especially by limiting crossings, reducing pavements and severing networks. Buses have been caught up in the traffic and become

even less attractive and less able to compete with the car. To say this is nothing new, but what receives less attention is the serious unreliability created for car users by running the network too close to the limit. In addition, in an already congested area, each new car user imposes a time burden on all existing users. This adds up to a huge total cost, including delays to buses and essential goods vehicles as well as cars. For example, the time delay and other costs imposed on existing road users by a new user is often many times the time and cost of a journey undertaken by the new traveller. This is particularly so in the SE region, where congestion is more widespread.

3.2 *Less is more*

3.2.1 In many ways the main beneficiaries of demand management are car users. If demand is reduced, the journeys for which the best alternative is available will have to be switched from the car. However, those car journeys that remain will be more reliable. They may not be faster because the corollary of asking people to forgo a few car journeys is that the alternatives should be improved. This will often involve reallocating road space and parking space to people who walk, cycle or use the bus.

3.2.2 If such a policy is not pursued, what happens in the congested areas? The answer is that travel will be curtailed by the lack of capacity. There will be all the observable effects of re-timing journeys away from the peak hours, or people simply accepting a slow but inevitable increase in their journey times. At the same time, people will begin to relocate their jobs, where they shop, where they undertake leisure and, eventually, where they live. This will be mirrored by the location decisions of those who provide employment, retail outlets, leisure centres and housing. For business in particular there will several levels at which decisions are affected. For example a multi-national company may choose between a location in South East England and one in North East France or elsewhere in Europe. Others may choose between the South East and other regions of the UK. Many will choose between a traditional town centre and a greenfield site.

3.2.3 Congestion is thus a natural instrument of demand management. The reason for intervening to prevent it is simply to do better than the natural outcome - in other words to achieve greater efficiency (both in reducing the third party effects and in the overall use of the transport system). This allows for more growth in activity than would otherwise be the case and avoids excessive low density urbanisation. As said before, this is

sometimes referred to as reducing the transport intensity of activities such as work, shopping or leisure. The reduction in the energy intensity of economic activity since the 1970s through improved efficiency and conservation (i.e. energy demand management) succeeded in removing the key obstacle in achieving economic growth.

3.2.4 In fact, greater throughput in the transport system is often achieved at the expense of reliability, and the introduction of new high capacity alternatives may be held up because the existing network is stretched and investment in new means of travel is delayed. This leads to an increase in the amount of "fire fighting" and one-off improvements and an increase in the rate of spend which would be required for longer term solutions. This in turn makes the decision to proceed even more difficult and likely to be delayed. For those who do not manage to get on to the car ownership ladder the result is a disaster - the alternatives get worse, the environment gets worse, and they are increasingly intimidated by traffic at home or when travelling. Meanwhile their need to travel increases when the local shop and post office closes because former users now drive to a supermarket or retail park. This pattern is now common in rural areas throughout the South East. While congestion does occur in rural areas, their environmental capacity tends to be low. In addition there are many levels of rurality and the South East also contains much suburban development. In such places car use can cause congestion hot spots associated with commuting or large scale car based retailing. The need to support local centres and the means of accessing them, for example through new ideas like quiet roads and demand responsive transport, is critical for the local economy, social inclusion and to avoid safety and congestion problems.

3.2.5 The result of such trends is a system under great pressure, with under-investment in public transport, all road users competing for space and experiencing unreliable, unpleasant and often unsafe conditions of travel. Meanwhile the external effects of motorised travel may be reduced by new technology, but in most cases cannot reach an "acceptable" level without demand management. Perhaps the only compensation for road users is that the congested slower speeds make accidents less serious.

3.2.6 Unfortunately, this broad brush description is just about where the South East transport system is today.

3.3 *Demand management as an enabling force*

3.3.1 Thus, if the region is to continue to compete, let alone grow, the general argument for demand management is inescapable. The difficulty comes in two main areas:

1 Implementing the detailed packages, financial charges and concessions, and re-prioritising local schemes; and

2 Explaining how the implementation is linked to the achievement of an improvement for all transport users.

3.3.2 The latter is further complicated because in many instances there is a transfer of benefits from one user to another at least in the short term. The “short term pain for long term gain” was long used in relation to road building. Should it now be applied to reallocating road space back to pedestrians, cyclists and bus users?

3.3.3 The following sections describe in more detail the key issues for implementing demand management in the South East, including both content and presentation. The main focus is on the role of the regional authority and its need to act in three important directions at the same time.

1 The first is to the local authorities in the region who have much independence and direct responsibility, for example on planning gain and parking. Some may be grouped together, effectively acting as a sub-region.

2 The second is the relationship with other regional authorities, both in a UK context and with a special need to consider the boundary effects.

3 The third is the need to look to the national and European dimension, both in terms of being proactive and influential on that level of governance and in terms of understanding what regional activities (health, transport systems including freight, business location) need to be considered in a wider context.

3.3.4 In addition to these levels of interaction with other players there is a need to address demand management in the context of the region's role as a international gateway for air, rail and road. This in turn is entwined with London's dual role as a functioning capital region and, like the South East, as a national and international gateway. This alone makes a

case for demand management rather than a congestion restraint or *laisser faire* approach. The issue of regional distinctiveness and the relationship between neighbouring areas within and without the region are discussed further in the following section.

3.3.5 Figure 3.1 is an ideogram showing the relationship between demand management success and the strength and quality of the demand management measures applied. It arises from the consultation process I this study. There is a danger that piecemeal, weak measures will irritate people while not delivering worthwhile benefits. This can provoke a reaction against the whole programme, as represented by the downward trajectory in the diagram. By contrast, the application of vigorous and effective demand management measures will enable visible and valued benefits to be delivered, and thus help to garner support for further implementation.

Figure 3.1 Ideogram of reactions to demand management

4 *Regional Distinctiveness*

4.1 *The need for a distinctive framework*

4.1.1 Lack of regional distinctiveness was a key criticism of the first round of RTSs: There is little point in RTSs simply re-stating guidance or policies from central Government. The demand management measures to be included in the revised RTS for the South East must therefore address the specific circumstances of the region. Indeed, the entire RTS must be tailored in this way.

4.1.2 In what ways will the demand management measures be distinctive for the South East? There are two overarching possibilities.

4.1.3 First, the South East RTS is currently the only one where demand management has received significant attention. The revised RTS could build on this kind of distinctiveness. The South East could be distinctive by pro-actively encouraging the introduction of demand management measures. In other words, the distinctiveness comes from the political choices made within the region, rather than from the particular physical, social, economic or environmental circumstances of the region.

4.1.4 This choice could be attractive if it is argued that the main demand management issues are common to many if not all the English regions. For example, all regions arguably have or will in future have an excess of traffic demand over road capacity at certain times of day on both urban and inter-urban networks, and continued growth of traffic at both peak and off peak times. The RTS could therefore take the stance that "all regions have similar problems, but the South East has decided to tackle them positively by extending demand management measures".

4.1.5 Second, there may be characteristics peculiar to the South East which either add to or diminish the case for particular demand management measures. This section attempts to explain what these characteristics are, and to suggest the ways in which they could or should affect the formulation of the RTS in general, and demand management in particular.

4.2 *Inter-regional distinctions*

4.2.1 Comparing the regions of Britain (excluding London), what emerges is a picture of the South East as the most successful region on many of the standard indicators of quality and well-being. The importance of this is

emphasised by the fact that the South East also has the largest population at 8 million.

4.2.2 Some standard indicators of success are that the South East has:

- The highest employment rate in the UK (although there are fairly large intra regional variations)
- The highest per-capita GDP (16% higher than the UK average)
- Higher than average household income (18% higher than UK)
- Higher than average car ownership (483 per thousand population compared to a UK figure of 410)
- A crime rate almost a fifth lower than the UK average
- Well below average unemployment
- Well below average mortality rates

4.2.3 On the other hand, the South East suffers from considerable road congestion and rail overcrowding, especially at weekday peak hours. The impact of traffic on the environment is also excessive in many urban and rural areas. These negative impacts are perceived to be more severe than in most of the other English regions.

4.2.4 The transport network in the South East is operating closer to its capacity than in most other regions. This results partly from high income and car ownership levels in the South East, producing the highest per capita car travel in the country (see Table 4.1 below). But also important is the position of the South East between much of the rest of the country and both London and key international gateways (Channel Tunnel, south coast ports and London's two main airports).

4.2.5 This both reinforces the case for demand management, and diminishes the prospect of meeting rising demand through increased provision of capacity. As one workshop participant put it, "building roads in the South East does no more than buy a few years' traffic growth".

4.2.6 It may be noted from Table 4.1 that although per capita car travel in the South East is higher than elsewhere, car travel as a proportion of total travel is similar to other regions. Per capita public transport travel is also of the same order of magnitude as in other regions, but the proportion undertake by rail is very much larger, reflecting travel to London I particular, while the proportion by bus is commensurately smaller.

Table 4.1 Travel by car and other means in the different regions

	Kilometres per person per year				
Mode **Region**	Car (% of total)	Bus	Rail	Other	Total
NORTH EAST	7839 (81)	626	431	748	9644
NORTH WEST	7908 (82)	409	383	930	9630
YORKS & HUMBERSIDE	8500 (81)	489	584	971	10544
E MIDLANDS	8933 (82)	401	800	793	10927
W MIDLANDS	8619 (85)	441	600	535	10195
EAST	11118 (84)	158	1088	804	13168
SOUTH EAST	**11131 (85)**	**224**	**824**	**925**	**13104**
SOUTH WEST	10452 (86)	264	568	1932	12216
LONDON	5823 (66)	518	1524	931	8796
Average, England	8985 (82)	373	716	2935	11009

Source: Transport Statistic Bulletin, National Travel Survey 1998/2000 Update.

4.2.7 Apart from quality of life indicators, there are a number of other characteristics that are potentially important in formulating the RTS. These include:

4.2.8 A focus of commuting and certain other traffic that is outside the region itself, namely London. Only the Eastern region is similar in this respect.

4.2.9 Home-work data in the 1991 census shows that the South East (which at that time included the East region) had by far the highest proportion of its employed residents commuting out of the region to work. Unsurprisingly the proportion was highest in the area closest to London (the Outer Metropolitan Area). Some comparisons are given below.

Table 4.1 Employed people working outside their region of residence

Region (1991 boundaries)	% of employed residents working outside the region (1991)
Outer Metropolitan Area	22%
Outer South East (ROSE)	12%
South West	3%
West Midlands	3%
Yorkshire & Humberside	3%
North	2%

Source: 1991 Census

4.2.10 The South East (and the east) region is like a segment of a ring doughnut, with two important cross-boundary relationships – the inner boundary with London, the outer boundary with other regions which probably exert more influence on the outer South East areas (e.g. Oxford-West Midlands; Newbury-Swindon; Southampton-Bournemouth). The doughnut is completed, of course, by the East of England Region.

4.2.11 A large role as a gateway between Britain and Europe, including major ports, the Channel Tunnel, and Gatwick airport within the region, and Heathrow approximately at the centre of gravity of the SE geographical area. As a result of this, there is a significant volume of road and rail, passenger and freight traffic, that is passing through the region as a result of the gateway function. Some other regions have important port functions, but not to the same extent.

4.2.12 More than a third of the region is designated as of high landscape or environmental quality, and a fifth is Green Belt. This means that almost any new transport infrastructure tends to meet with stiff opposition, with the CTRL and Twyford Down being examples that have attracted notoriety.

4.3 *Intra regional distinctions*

4.3.1 Despite these characteristics that mark out the South East from other regions, the South East is not homogeneous in character. The following aspects can be singled out.

4.3.2 A loose coalition of settlements in the Thames Valley that together include much of the South East's high-tech industry and employment. It is the subject of a Multi-Modal study. The Thames Valley is also identified economically with the "western wedge", which extends into Greater London. The economic success of this sub region is seen as both important for the South East and indeed the national economy as a whole. But it is also said to suffer from "overheating", which in general parlance seems to boil down to having congested roads. It is also sometimes said that the Thames Valley suffers from a shortage of sites for employment and housing, leading to high land prices, though it is not clear why this is a problem per se.

4.3.3 The Thames Gateway is an area seen as having major development potential, and being an appropriate receptacle for economic growth that cannot or should not occur in the Thames Valley area. Notionally there is a more plentiful supply of land and labour, though the land more often than not requires significant remedial work to bring it into use, while the labour characteristics do not necessarily match the skills sought by the desired high-tech or other modern industries.

4.3.4 A preponderance of small to medium sized towns, and the absence of any large city or conurbation within the region. In this respect it is similar to Eastern, South West, and perhaps East Midlands regions. There are 30 towns with a population over 50,000, but only Southampton and Brighton (when Hove is included) exceed 200,000.

4.3.5 Three substantial urban concentrations, namely the Medway towns, Brighton and Hove, and Southampton-Portsmouth. Each of these has a significant amount of high density and high intensity activity capable of supporting significant accessibility by local public transport and walking. For example Portsmouth has the highest population density in the South East at 4720 people per square km. (Milton Keynes has a large population but does not share the characteristics mentioned.)

4.3.6 A number of medium sized historic towns that could or do "punch above their weight" on account of their attraction to tourists (Canterbury, Oxford, Winchester and Windsor).

4.3.7 The rest of the region, and by far the largest in area, is rural areas with small towns and villages. The term “rural”, however, has a very different meaning in the South East from, say, Cornwall or Cumbria. The residents are much more likely to be dependent on larger urban areas for employment and services, and to have above average incomes. “Rural” in the South East may reflect personal choice of residential location rather than indigenous or non-urban lifestyles.

4.3.8 In terms of patterns of transport and travel, different layers can be distinguished.

- In terms of shopping, education and day to day services, there is likely to be a strong degree of local self-containment, i.e. towns by and large serve their own catchment population, plus people from the their rural hinterland. This creates a complex pattern of hubs spokes.
- In terms of employment and the journey to work, radial movements to London are important, for rail as well as road travel, while there is a significant degree of criss-crossing from one town or rural area to another. This produces more of a cat’s cradle pattern of demand.
- In terms of long-haul freight and international personal travel, routes cutting through the region to Heathrow and Gatwick airports and to the Channel ports and tunnel form a significant pattern. These routes include the M25 and London focused radial motorways and Trunk roads. The resulting pattern resembles “skewers” through the region, as shown in the figure below.

4.3.9 There are a few areas with significant problems of unemployment, low incomes and low economic growth, especially in the eastern parts of Kent and Sussex, and some of the older urban areas such as Portsmouth and Slough. The Isle of Wight is also appears economically weak.

4.3.10 The south coast towns from Ramsgate to Southampton are sometimes referred to as having a common identity. It is not clear what this might mean in transport terms, however, since the towns serve different functions and generate different travel patterns. (Some are ports, some are retirement areas, some are dormitory towns for London, some are wealthy, some are not, and so on.) It is noted that the multi-modal study has failed to identify any significant “south coast” travel demand, as distinct from the more important demands focused on the individual towns.

4.3.11 It should be noted that there are a number of sub-regional organisational groupings that could potentially be important in delivering the RTS. These include the North Kent Thameside Partnership, and groupings for transport purposes in areas adjacent to the South East (outer London partnerships SELTRANS, SWELTRAC, WESLTS). There are other local authority groups that have an interest in the topic, such as the Association of Councils of the Thames Valley Region (ACTVaR), which produced an "Interim Sub-regional Transport Strategy" in January 2000.

4.3.12 Also worthy of note is the benchmarking partnership for improving the quality of LTP preparation, of which Milton Keynes is a member.

4.4 *The objectives of distinctiveness*

4.4.1 The need to identify sub regional areas for the purpose of demand management is not self-evident and will need full justification. Fragmentation of policies (and guidance) to smaller sub-regional parcels would call into question the role of the region in formulating and delivering a transport strategy, and would at the same time appear to undermine the strategic transport role of the counties.

4.4.2 Formulating policies that are distinctive at the sub-regional level could be justified on either of two grounds:

1 To meet the demand management requirements of an area that are not shared by other areas;

2 To provide a mechanism for implementing demand management measures where local government structures are ill suited to the task.

3 To provide a mechanism where local authority boundaries do not fit with "natural" transport boundaries, including where such natural areas cross regional boundaries.

4.4.3 Policies and measures may also be drawn up that are distinctive in terms of not so much geographical coverage, but transport sector, an example being roads to the ports.

4.5 *Proposals for sub-regional distinctiveness*

4.5.1 *The Thames Valley*

4.5.2 The Thames Valley area is distinct from other parts of the South East and could benefit from the preparation of a sub-regional demand management strategy. This could be justified on both the grounds given above. The Thames Valley lies within the Western Policy area identified in RPG9. The proposed "western charging area" would relate to this area, but its definition would need to be the subject of the definition of "transport areas" as discussed elsewhere in this section.

4.5.3 The area experiences high levels of traffic congestion and traffic growth, many if not all of its towns suffer from a high degree of environmental degradation due to heavy traffic and road infrastructure. In this way the area could be said to have become a victim of its own economic success. Whether or not future additional activity can be steered toward other parts of the South East, residents and businesses in the Thames Valley already have reason to demand environmental and other improvements associated with demand management.

4.5.4 The Thames Valley also, arguably, has distinctive potential for demand management, and for the upgrading of public transport and other alternatives to the car. This potential includes, for example, a range of fairly substantial settlements that can or could supply most services without the need for long journeys; a fairly dense rail network that could be upgraded to "regional metro" status; proximity to central London served by high intensity rail services.

4.5.5 There may also be good organisational reasons to devise a Thames Valley strategy.

4.5.6 First, the break-up of Berkshire county has fragmented the represented of strategic transport interests, only partly compensated by ACTVAR.

4.5.7 Second, the unitary authorities that replaced the Berkshire two-tier arrangements, in common with other new unitary authorities have so far not demonstrated strong leadership in transport, and would be unlikely to be able to develop a demand management strategy on their own account. There are acknowledged difficulties for unitary authorities acquiring and retaining sufficient qualified staff in transport.

Table 4.1 LTP performance of unitary authorities in the South East

Unitary authorities in the South East	**DTLR grading for transport performance**
Bracknell Forest *	Well below average
West Berkshire*	Well below Average
Reading*	Average
Windsor & Maidenhead*	Well below Average
Wokingham*	Well below Average
Brighton & Hove	Average
Isle of Wight	Average
Medway	Average
Milton Keynes	Below Average
Portsmouth	Average
Southampton	Average

* Former Berkshire authorities

Source: Local Transport Today, 3rd January 2002.

4.5.8 Third, transport in the Thames Valley is heavily affected by factors outside the influence of the individual authorities, notably the relatively dense network of Trunk and Motorway roads managed by the Highways agency, and the proximity of Greater London in general, and Heathrow airport in particular.

4.5.9 Fourth, for these and other reasons, a multi-modal study has been commissioned for the Thames Valley which, even if it does not result in the formulation of a demand management strategy, will at least provide a considerable body of knowledge upon which such a strategy could be based.

4.5.10 What would such a strategy consist of? The following objectives could be considered:

1 Ensure that shopping and other services can be accessed by a range of modes, and without the need for long travel distances. For example, definition of a sub-regional hierarchy of retail and service centres, based on the accessibility of existing town

centres, and land use policies to focus property investment in these centres. The ongoing debate on the re-development of Bracknell town centre is pertinent.

2 Revitalise the town centres by reducing the dominance of car traffic and parking. Such town centre improvement would require demand management measures to be effective. These would aim to reduce the number of town centre journeys being made by car, either for work, or for shopping or both. Complementary measures would be needed to ensure that these trips would transfer to other modes, not other centres.

To achieve this, a charging strategy should be developed, covering the "western wedge", including if possible outer west London and Heathrow. Workplace parking charges coordinated across the authorities could be a medium term measure, spurred by regional incentives to act. As one workshop participant said, "imposed workplace parking charges would be enormously helpful in the pressured areas of the Thames Valley".

3 Reverse the trend of traffic growth on major roads in the Thames Valley, including Trunk roads and motorways. This would benefit users, and halt the demand for road capacity expansion that is expensive, damaging, and (in the absence of demand management measures) self-defeating. While this objective may not be unique for the Thames Valley, the density of the road network and the future pressures upon it could justify distinctive action for this area.

4.5.11 *Kent Thames-side*

4.5.12 The area of north Kent adjacent to the Thames lies within Kent and is the South East region portion of the Thames Gateway area identified in RPG9. Kent County Council is the key transport authority, and moreover there is an existing sub-regional partnership body whose aim is to implement the Thames-side strategy, which in turn is part of the vision for the wider Thames Gateway area. Therefore there would be no organisational justification for a sub-regional demand management strategy.

4.5.13 The role of the region will therefore be confined to setting out any distinctive demand management requirements for this area, which the existing local authorities are in a strong position to implement.

4.5.14 The key characteristic of the area is the large amount of land that is available for development. It is one of the largest areas of brownfield land in the South East, and part of the Thames Gateway area which RPG emphasises as having potential for major economic and housing development. However, both local and "strategic" road networks in the area have insufficient capacity to carry significant traffic increases. Development can only occur therefore is one or more of the following are implemented:

- A major increase in local and strategic road capacity (including crucially the A2/M2);
- Demand management measures relating to areas of new development to limit the generation of additional traffic;
- Demand management measures in existing settlements in the area to reduce existing traffic levels, avoid further growth from this source, and hence release capacity for use by occupiers of the new development.

4.5.15 Much work has already been done in Kent Thames-side to address this issue, including the preparation of a development framework and a transport strategy including a new high quality public transport system (Fastrack). Significant work has also been undertaken by the Bluewater regional shopping centre to increase the number of people coming to the centre by public transport.

4.5.16 There have, however, been a number of difficulties encountered in implementing the Kent Thames-side strategy where stronger regional guidance may assist.

4.5.17 These could include:

- Prioritisation of Fastrack amongst regional transport schemes;
- Car parking maxima designed to level the playing field for developers throughout the South East. This is based on the assumption that developers may seek to avoid restrictive maxima in the Thameside area, but will be less likely to pass up opportunities to develop in the South East;
- With similar logic, the introduction of further parking or road charging measures in Kent Thames-side would avoid turning developers away is they were similarly applied in other areas of development potential;

- Travel planning and marketing initiatives tailored to the sub-region, in particular aimed at new as well as existing residents and businesses, since these account for a substantial proportion of the area in future.

4.5.18 There are two opposing thoughts on the appropriateness of charging measures in KTS.

4.5.19 On the one hand, the area is not a favoured one for development (unlike the Thames Valley), and the concerns are currently about how to encourage development. Charging measures, even if technically a sound option, may meet with very severe opposition from existing local interests.

4.5.20 On the other hand, the area in the long run will be dominated by development that currently does not exist. Charging measures can therefore be designed in an integrated way with housing densities, road capacity, public transport and other non-car modes, and parking provision. A large proportion of the people who will live in this regime will be newcomers, and hence the system can be implemented and marketed as a new "product". The benefits and the (demand management) means of achieving them can be explained without the need to overcome local prejudices or resistance to change.

4.5.21 *The South East conurbations*

4.5.22 The term conurbation has acquired a negative pejorative interpretation that was not intended by its inventor, Sir Patrick Geddes. It was intended to describe a collection of urban settlements that have grown to the extent that their boundaries have coalesced.

4.5.23 The South East has (depending on definition) three such areas. (Eastern parts of the Thames Valley might be described as a conurbation, but we have discussed the Thames Valley separately.)

1 The Medway towns (principally Strood, Rochester, Chatham and Gillingham);

2 Brighton and Hove and adjacent coastal towns;

3 Southampton-Portsmouth

4.5.24 Of these, the latter is by far the largest. A substantial portion of their areas are covered by unitary authorities, though Brighton and Hove

excludes towns that are physically attached such as Southwick and Shoreham-by-sea.

4.5.25 In theory the unitary local authorities should have sufficient powers and incentive to pursue local demand management strategies. However, there is the problem already noted of unitary authorities having insufficient expertise, and enthusiasm for demand management has not yet emerged.

4.5.26 In this respect there is perhaps a mismatch between the authorities with the expertise and political will to pursue demand management, and the authorities where such measures are likely to be most useful and needed.

4.5.27 A good example of this is the Southampton-Portsmouth conurbation: it has a sufficiently high density and intensity of activities to allow demand management to produce significant social, environmental and economic benefits, and a well developed public transport network soon to be augmented by light rail and possibly monorail systems. Yet it is now longer administratively part of Hampshire, whose county authority has committed itself as member of the Government's "charging partnership".

4.5.28 A tentative conclusion from this is that for the three conurbations, the regional framework should include a mechanism for bringing together the necessary expertise, including that required to raise awareness of the need for demand management, and to devise local measures that fit local circumstances. In this sense, the unitary authorities could retain "ownership" of the strategy, but have a more solid technical and political foundation with which to take it forward.

Spatial integration

4.5.29 There is a further potentially important element of RPG with regard to the three conurbations, namely the impact on travel patterns of spatial development solutions. It is well established that both the proportion and the length of trips made by car is lower in large settlements than in small ones. Research in Oxfordshire, for example, indicated that the most effective way of limiting future traffic growth was to add to and intensify the development of Oxford itself, rather than to expand the small market towns in the county. It also found that although it had been county policy for many years to focus new housing development in four market towns, in practice 45% of all growth had occurred outside these towns, mostly dispersed throughout the rural areas and villages. Moreover, while the market town growth policy was reaffirmed in the

latest revision of the structure plan, the forecast distribution of new housing also envisages 45% outside the designated towns.

4.5.30 Assuming these principles to be generally applicable, the South East RPG could have a substantial impact on reducing traffic levels (or more likely reducing the rate of growth) if it sought to concentrate new housing and other development in the larger settlements, such as the three conurbations.

4.5.31 Scenarios should be explored for enlarging and intensifying the largest settlements in the South East, and for strictly limiting the amount of development elsewhere.

4.5.32 This, it may be postulated, will at the same time create the conditions necessary for a better balance between car travel, accessibility and environmental quality in the large towns (using demand management tools amongst others), and diminish the need to establish demand management regimes in the rural areas and small towns where the difficulties are legion.

4.5.33 This scenario is based on a concept of a dual or parallel system of development and transport. Demand management is pursued vigorously where densities and transport alternatives allow, and pursued lightly where development is too sparse or dispersed for there to be any prospect of general alternatives to the car. The desired outcome (of lower traffic levels and all that that brings) is achieved not by insisting that everyone or every area makes an equal contribution, but by ensuring that the areas that contribute are those which grow more and faster than those that don't.

4.5.34 Returning to the three conurbations, the argument is that they should be encouraged to intensify and grow to become more significant cities rather than large towns. As such they will get the lions share of resources for transport and other infrastructure. There are, however a few other towns where intensification could be pursued to good effect. Examples are likely to be Reading (which has recently set about trying to shift the focus of growth from out of town to in town), Maidstone, Milton Keynes and the Thanet towns.

4.5.35 Such a scenario could be further investigated in due course as part of a future revision of the spatial strategy for the South East.

4.5.36 ***The smaller towns and rural areas***

4.5.37 The strategy for the remainder of the South East will need to ensure that it does not become a "bolthole" for development interests seeking to avoid the sustainability criteria that are to be applied in the major towns and cities. The policies may be distinguished from those for the other areas discussed, but they are unlikely to require regional policies that are geographically distinctive. County authorities will be expected (as now) to pursue demand management measures for their areas, and will need regional "level playing field" support. The aspirations for traffic reduction will usually, however, need to be less ambitious than in the other areas discussed above.

4.5.38 Rural development strategies can help to provide local employment and services and hence reduce the need to travel. On the other hand, residential development in rural areas produces a higher degree of car dependence than equivalent quantities of development in urban areas. Thus to the extent that rural development initiatives increase the proportion of people and activities that are located in rural areas, there will be an encouragement of traffic growth.

4.5.39 For the same reason rural areas can become generators of traffic growth if people choose to move out of town, taking up opportunities for working at home for part of their working week. An instance was described during consultation of someone swapping a daily commute journey in town of around 5 miles (25 miles per week) for a rural home/work location involving a single weekly commute trip to the office of 150 miles. Such trends could significantly weaken the effects of demand management measures that do not involve distance-related charging.

4.5.40 Figures 4.1 to 4.3 illustrate the spatial aspect of some of the transport distinctions discussed I this section of the report. It is recommended that further research is undertaken to identify transport areas more precisely. This should be carried out as part of the development of specific demand management strategies within and required by the overall RTS framework.

Figure 4.1 “Skewer” movements to international gateways through the South East ring around London

Figure 4.2 Areas for sub-regional and local demand management

5 *Marketing and promotion*

5.1 *Getting the message right*

5.1.1 Earlier in this report it was emphasised that the implementation of a deliberate demand management strategy is the only real alternative to letting the natural mechanism of restraint by congestion have its effect. The reasons for wishing to do so are clear - congestion is inefficient and may inhibit social and economic activity and cause pollution. It has to be said, however, that congestion is equitable, this is because it has a greater impact on people who value their time more highly. The drawback is that this means the economic impact is greater on any conventional measure. On the other hand it is clearly true that many of the most congested areas are the most popular - their attractions outweigh the difficulties of getting there. Also the most congested routes are not always those without alternative rail transport, with the main radial routes into London being the prime example. In this sense there is a "case to answer" that congestion is always and necessarily a problem that must be solved. Acceptance of a degree of congestion may allow consideration of more effective solutions to a wider range of transport problems. This may not be an easy message to convey, but objectives need to be based on the reality of how people behave.

5.1.2 The obvious response to congestion of individuals is to seek work or to fulfil other activities outside congested areas if at all possible, and the providers of jobs and services will have a parallel reaction in their location decisions. This is probably why the emphasis in many policy documents is on beating congestion rather than saying "look at all this traffic - aren't we successful". The message is straightforward - the only way to stop traffic bringing itself to a halt and stopping everyone getting where they want to go is to reduce congestion.

5.1.3 The first problem occurs in creating the link in the public's mind between reducing congestion and demand management. It is often said that in transport surveys people will say they would like to see less traffic but also say they would like to see more parking. This is not totally illogical - the hassle of parking is another rather indirect and unsatisfactory method of discouraging car use. It just happens to be rather effective and readily available. People are likely to be able to experience less parking hassle in a reduced traffic environment, providing the hassle is not the main instrument of restraint. There is extensive public attitude work from the 1980s to 2001 with many conclusions consistent throughout the period.

5.1.4 The link is also weakened by the continuing ambivalence among policymakers over road capacity increases, especially road building. It is very difficult to get across the message that the demand to use cars has to be managed at the same time as pursuing policies to make car use faster and easier. In marketing terms this is like recommending one's own product and then reminding people that they ought to buy the rival product as well. It will only be possible to engage the public in the process of demand management and to get them to own it if this self contradictory message is avoided. Recent national policy has been particularly confusing in this regard and has probably lost, at least in part, the opportunity to engage public support created by the emphasis on integration and demand management which developed so powerfully in the 1990s.

5.1.5 In fact demand management in a congested area or one where there is unmet potential for car use is an essential prerequisite of any policy to use capacity increases (whether new roads or the removal of bottlenecks) to address congestion. Without it all such increases will be rapidly consumed in extra travel. With its high income, high car owning and congested characteristics, a strong demand management framework is not a worthy add-on, it is a necessary first step in any regional transport strategy for the South East.

5.1.6 In this report, roads which are needed for creating access to developments are not considered to create general capacity increases, although some larger developments are used to fund road schemes that will. The impact of access roads to new or existing development depends on the number of parking spaces associated with them.

5.1.7 The second issue concerns the interpretation of demand management from the general to the specific. To the extent that demand management measures have not been introduced and have been resisted, it is because they are perceived (or "branded") as "anti-car", and therefore a threat in some way either to the freedom of individuals, or to the popularity of their elected representatives, or most likely both. Demand management measures are neither designed for nor likely to result in "people having to give up their cars". The outcome of demand management measures will be "some people deciding to make a proportion of their journeys by means other than the car". This is a very different proposition.

5.1.8 Marketing tools might usefully exploit a common experience of people living in the South East region, which is that trips to central London (especially regular work trips) are almost always made by rail. These

people have access to cars, and use them for a wide range of purposes, in fact to an extent that exceeds the amount of car use by people in most other regions. The demand management measures applied in central London are therefore a good example of how they impinge on a proportion of trips, and not an entire lifestyle or "travelstyle".

5.1.9 The third key marketing problem is the association in decision makers' minds between regeneration and car use. In many areas that have seen decline or which need investment the lack of travel generally is an important indicator. The issue is whether the provision of roads or car parking is essential to attracting investment and users. The first brainstorm involved lively discussion over this issue and revealed little confidence that in reality these were key factors. Environment and particularly the streetscape were seen as important (walkability was thus a key factor) but in traditional transport terms other road user improvements (car, bus, cycle) were seen as less important. A tram system was the only transport infrastructure that had support for its regenerating properties! We note, however, that evidence for the regenerative effects of light rail is far from conclusive.

5.1.10 The association of parking and regeneration feeds into the ambiguity of the message about curing congestion through demand management. For example, should areas which are recognised as being deprived be allowed more parking provision in new development? If they are, what will be the impact on areas which have to have stricter controls? Is this a sensible way of trying to encourage regeneration? Furthermore, does it make sense to have higher levels of parking provision in areas where car ownership rates (by definition) are lower?

5.1.11 In fact the experience of the past few decades is that local authorities will not stand for this sort of distinction and areas which may have a strong policy on demand management will consider "each case on its merits" (i.e. waive the policy) if they believe another area will poach a development. This is not to allocate blame to them - their behaviour reflects exactly what they are supposed to do - protect and support the area for which they are responsible.

5.1.12 The final important issue is the political fear, fuelled by the revolt over fuel duty, that "knocking the motorist" is to be avoided at all costs. Few of even the most avid fans of demand management would have any desire to appear anti-car. However, the issue is how far this becomes an obsessive fear of doing anything which might be interpreted as such. This is not, however, the whole story. It is true to say that people, like

donkeys, prefer carrots to sticks, but more subtly that they like to see the stick applied fairly and the carrots given with a clear sense of purpose. Since the late 1980s all the work testing people's attitudes to road user charging showed how these were influenced by how the money was spent. Tangible benefits close to the people who were paying the new charges moved the acceptability much higher.

5.2 *Clarity and purpose*

5.2.1 In view of the above it is now possible to set out the basis for the marketing of demand management. The basic structure would be:

1 Set out the key non-transport high level objectives and show how demand management can help achieve them.

2 Consider the main alternatives (attempting to meet demand or doing nothing) and set out the reasons for choosing demand management.

3 Explain the need for a clear choice and how going in several directions at once will not work.

4 Set out the individual elements of the package and explain why they are included and what the hoped for result will be.

5 Define the target audience and ensure that marketing specifically addresses their concerns. In particular the case for demand management needs to be spelt out separately for the commercial/business sector and the individual or household sector.

6 Explain that demand management aims to adjust people's travel patterns, not cause them to give up their cars. (c.f. Mercedes advertisement: "if you're intelligent enough to buy a Mercedes, you're intelligent enough to know when to use it".)

7 There may be merit it targeting the higher income or social groups. It will at least be important not to foster any perception that making less use of cars is somehow an inferior lifestyle choice.

5.3 *Objectives*

5.3.1 First there is a need to set out the key purposes - even though these may have been stated before. Demand management is not something that planners want to do for its own sake, it only has meaning if it is aimed at achieving key objectives that everyone accepts. For example, it is possible to reduce air pollution significantly through technology, but not carbon dioxide emissions. Nor is it possible in many areas to reach "safe" levels. For some pollutants there is no safe level. These messages seemed very clear in the 1990s - air quality was at the heart of much policy making but seems to have become a less powerful message and confused by an over-focus on technologies which address individual components. The holistic, integrated approach has been obscured. Other health objectives such as exercise (particularly for the young) point directly to demand management and to associated policies, for example proper direct and segregated cycle routes which are genuinely safe.

5.3.2 The LTP and RPG system is objectives led and the high level goals need to be related directly to demand management. Even for economic activity, management is essential if the inefficiencies of congestion are to be avoided.

5.4 *Alternatives*

5.4.1 Increasing road capacity often appears to be an attractive solution - the reasons why it cannot work in the South East therefore may need to be repeated at every opportunity. Sufficient parking and road space to meet everyone's demands is not within our financial means nor could it be fitted into the region's landscape or existing urban areas. What is more, extra capacity generates more demand and is thus at least partly self-defeating. These were very widely accepted as being true in the 1990s, but nationally the message has now become blurred.

5.4.2 This issue has become bound up with the misleading distinction drawn between capital and revenue expenditure on transport. Increasing track capacity (road, rail or air) requires significant capital investment, but this is somehow seen as a "Good Thing". In fact the transport outcomes that are desired from capacity increases can usually be achieved by a range of different packages, many of which have a lower cost but one which is revenue based. Buses and intermediate tram/bus schemes suffer from this bias when compared to increased parking or road capacity.

5.4.3 One particular difficulty is that even when the general argument is accepted, there are difficulties in applying this at the level of a specific location or route. While a series of junction schemes may appear less contentious than an entirely new road, if these schemes release bottlenecks in the network, they could result in the generation of as much new traffic as a wholly new route.

5.4.4 In this context the Multi-Modal studies (mostly based on road corridors) and the resurrection of the bypass as transport saviour send the message that car travel is still to be encouraged on a "predict and provide" basis. Despite the intentions behind the two Traffic Reduction Acts, at national level traffic reduction as an objective has been replaced by the less precise aim of congestion and pollution reduction. There are difficulties with this. For example, what is congestion reduction? Is it less people stuck in traffic jams but stuck for similar amounts of time as today, or car journeys getting faster? Either would result in time savings, but the former suggests traffic reduction and switching to alternatives, the latter could be achieved by general capacity increases or demand management.

5.4.5 There remains a strong argument that traffic reduction is a good proxy for reducing the multiple negative effects of traffic. Just as the national road safety targets succeeded in promoting strong action amongst local authorities, so broad traffic reduction targets could galvanise action on demand management. The Government has set its face against such targets, but it remains open for them to be adopted at the regional (and local) level.

5.4.6 The marketing of positive messages and good news is equally, if not more important than marketing the demand management measures themselves. Indeed, there are instances of cities that have successfully introduced demand management that have relied almost exclusively on marketing the benefits and alternative modes. Copenhagen and Zürich are notable examples. By contrast, "selling" demand management, even when part of a carefully thought out package, may be difficult, and the infamous "Dennis" agreement in Stockholm is a good example of this.

5.5 *Clarity of choice*

5.5.1 A key problem for any marketing campaign is cynicism within the target audience. This is created by mixed messages, by patronising people and concealing problems from them, and by those promulgating the message themselves adopting what appears to be a cynical approach. Frankness,

openness and genuine engagement is the key. For example, assuming most people would like to improve their health or their environment, how would they do it without managing demand? Reaching out through campaigns under the Travel Awareness banner can be useful - but field work in schools and workplaces is needed to create real acceptance and to generate new ideas.

5.5.2 There is a need for technical clarity as well. We know of a town in the South East which has adopted as matter of policy a target to reduce traffic by 20% (below current norms) in areas of major suburban expansion. Detailed studies showed this to be wholly unrealistic, especially since the local council was at the same time significantly expanding the provision of parking in the town centre. It was put to us by one critic that the council was "talking the talk, but not walking the walk!"

5.6 *Elements of the package*

5.6.1 The next section considers what the contents of a demand management framework and package could be. However, one point is important from a marketing view. The combination of different elements is a key to creating understanding. For example, some charging regimes which appear negative may be closely tuned to creating a more positive impact. People are often deeply suspicious that anything which raises revenue will soon be seen simply as extra income for whichever level of Government applies it. Indeed a hundred years of tax history tends to support their view. Addressing the context and purpose within a package is critical to some of the more difficult aspects of demand management implementation.

5.7 *Understanding the audience*

5.7.1 A final point is that different sections of the population will experience different impacts from any schemes which are implemented. For example, charging for workplace parking affects employers and developers more than the population generally. Employees may or may not be directly affected. The workplace is the focus for outreach marketing. If an area licence scheme is proposed, different groups need to be contacted and engaged. People need less of the high power sales pitch and more of the engagement and challenge approach. After all, it

will always be hard to sell doing less of something, yet the experience with smoking campaigns shows that it can be achieved. Achieving a better and healthier environment is attractive - as long as people see their changed actions will really achieve it.

5.7.2 This is not to say that the true marketing approach (defining customer requirements as well as encouraging specific behaviour) should not be applied. If our public spaces and walking routes in towns and cities had the same attention paid to their design quality and safety as most car manufacturers give to their vehicle interiors there might be more people out in them.6. Packaging of measures

6 *Formulating the Regional Framework*

6.1 *Creating the package of demand management measures*

6.1.1 In recent years much has been made of the "tool box" approach to demand management in which a series of measures are set out which can be introduced in sort of "mix and match" according to local circumstances. The original intention of the tool box was to provide a helpful resource for transport planners without being over prescriptive.

6.1.2 Unfortunately the use of this approach has resulted in some instances in an undermining of an effective implementation process. This is because the easiest tools to implement have been selected rather than those with the required impact. Opportunities for synergy between measures have been lost for the same reason. It should be remembered that the overall objective is to achieve certain outcomes, rather than simply extracting a few attractive options from the box and implementing those. The aim of moving towards more sustainable patterns of development and travel modes is a challenging one and the tool box was meant to provide a range of elements which, if implemented as a whole, would achieve real change.

6.1.3 Thus the first point to be made is that the objectives, targets and desired outcomes should be placed at the centre of the process, and the right blend of measures pursued together in an integrated package. One of the consultees suggested that the difference between the toolbox and the package was same as the difference between a shopping list and a recipe. The analogy would be that ingredients for a cake recipe need to be compatible and complementary. To stretch this further the recipe needs to be baked - hence the package needs an implementation plan!

6.1.4 Other cake-making analogies might apply here. There is a need for complementarity with other areas of policy besides transport, so the issue is not just the demand management cake, but other cakes. And just as the taste of a cake that has not been baked before is not known, so the outcomes of demand management measures cannot be accurately predicted. Reliance must be placed on experience, and of course tasting and adjustment next time round.

6.1.5 Rather than list a range of elements here, some of the various measures which could be included to form a demand management toolbox are set out in Working Paper 2. However, three key elements, parking, charging and travel planning are discussed in detail in the section following this one (7 - Formulating the Regional Framework).

6.2 *Alternative transport and choices*

6.2.1 While it is possible to measure change, for example in the relative cost, reliability or safety of the different modes, it less easy to predict how these changes will influence individual travel choice. This is particularly so for moves towards sustainable modes because there is little evidence of strategic changes. For example, some people are sensitive to congestion but not price. Others are sensitive to price but less sensitive to congestion. Consequently, if demand management measures reduce congestion by encouraging a proportion of people not to travel by car at peak times, another set of people may be attracted onto the system by the less congested conditions. It is impossible to predict what the net effect would be in terms of traffic levels or their spatial or temporal distribution. Consequently the progress of demand management should not be dependent on modelling. The theory is strong enough, what is needed is practical experience.

6.2.2 Having said this, it is possible to place assumptions into traffic models about reduced car use, for example due to travel plans, but these will always be subject to judgements about the quality and the extent of such plans. Simple spreadsheet models are best suited to this approach, where a wide range of “what if” assumptions can be tested quickly and cheaply and with some chance of being understood by the public. Such exercises need neither dictate nor delay the introduction of demand management measures

6.2.3 During the course of this study there has been considerable discussion of the "modelability" of demand management. The two key difficulties identified were:

1 Most modelling compares static states while the real world works dynamically and is constantly changing;

2 Transport in particular has major effects in the non-transport world, for example business location; personal choice of home, workplace, school or shopping; balance between local and distant activity.

6.2.4 It was therefore suggested that scenario building with a multi-layered approach was preferable and that identifying the directions of change and their rates of progress was the key.

6.2.5 Cost and benefit analyses were not ignored, however. For example, one of our participants estimated their cost of attracting a car commuter into a car share scheme at about £200 initially and less than half that annually thereafter. This is less than 25p a car journey!

6.2.6 It is also true that the interplay between choice of home, work, shopping, leisure and travel mode is far more complex than models based on motorised travel have had to assume. For example, one of the key factors in increasing traffic is that when people switch from walk or cycle to car use, they change their choice of destination at the same time. In other words, people who used to walk to the local shop drive to one further away. This may have created choice, but the real price of such a choice is not reflected in the cost to the individual.

6.2.7 Mode and destination switches are most likely to occur when some other lifestyle change occurs: a new job, getting married, having children and so on. It is at these key stages in life that decisions are made that impact on or are influenced by travel considerations. People can be influenced in their decisions about how and where to travel not only by the physical availability of facilities, but also the relative prices. This is why the financial framework, not just road user or workplace charging schemes but fares and public parking costs, must be included in the demand management package.

6.3 *The spatial planning contribution*

6.3.1 The issue of choice, and how changing mode often means changing destination too, leads directly to how travel choice is influenced by the location of the places they wish to get to relative to their homes. It is fairly straightforward to assess residential areas, for example, on two basic criteria:

- Walk access to the public transport network
- Walk or cycle access to local facilities.

6.3.2 There are also newly revised techniques for assessing walkability and producing easy to understand maps, similar to those produced by PTALs.

6.3.3 The key to an integrated approach is to consider both residential locations and how to ensure local walkability and local facilities, and also the places that people wish to access in terms of their catchments by

different modes. This is considered in more detail in Section 8 (Accessibility). Quite clearly the encouragement of car based development causes a two way hit on sustainable transport. First and most obvious it attracts car users, but secondly it undermines the viability of local shops and local centres. The planning system will therefore play a crucial role.

6.4 *Phasing and timing*

6.4.1 One of the key phrases that has become entangled in the sustainable transport debate is that "no demand management should be implemented until the alternatives are in place".

6.4.2 This statement is based on dangerous assumptions - for example that we need to move from one fixed state to another and that we know exactly what people's reactions will be to demand management in advance and can therefore put in place the "right" alternatives. Both of these are misleading - demand management is a continuous process which influences millions of travel decisions at the individual level. It is highly personal and the overall results can be surprising. Before the only significant area licensing scheme in the world (Singapore) was introduced, many new buses were bought and new routes were planned on the basis of how people drove to the city centre. In fact, people crowded onto the existing services rather than the new ones and fortunately the buses could be diverted onto these. The new rapid transit system was planned but not built prior to the area licensing scheme.

6.4.3 If demand management is considered as a shift in emphasis over a longer period, the importance of monitoring and responding to changes in demand becomes far greater than predicting the precise results in advance. In this context it is possible to implement demand management in smaller steps, but in rapid succession. Good examples of this are the gradual removal of car traffic from large areas in cities such as Copenhagen or Bologna.

6.4.4 Further justification for phasing and concurrent implementation of alternatives (rather than pre-implementation) is provided by the fact that one of the most important ways of improving alternatives is the reallocation of road space. In the case of bus priority this is at its most visible and has most effect on car traffic. Undertaking reallocation for this purpose without implementing service improvements virtually at the same time is likely to lead to protests from those who will be

inconvenienced. The problem is again one of framework and explaining to those affected how the scheme fits within an overall improvement to a route, who it will benefit and by how much.

6.4.5 The necessity for this clear explanation also derives from the fact that disbenefits often occur at locations which are distant from where the benefits accrue. Thus the people affected are different and the places where they are affected are also different. This illustrates the need for simplicity, clarity and for explanation overkill rather than any reticence about which groups of travellers are affected. In the case of bus priority, for example, the emphasis should be on route performance and for walk and cycle it should be on local areas and access to local facilities. In all instances implementation of reallocation or other more difficult parts of the package should be linked to specific concurrent improvements. In the case of new bus priority these would include service improvements, in the case of new crossings associated links should be improved as a mini-package, and cycle provision could have supportive activities such as repair/maintenance sessions in the area when the scheme opens, circulation of area maps etc.

6.5 *Which comes first, the chicken or the egg?*

6.5.1 Commonly, demand management is seen as a sub-optimal solution to the problem of excess traffic demand over supply. Not only is this based on a misconception of the aims and potential of demand management, it also helps to explain why so little progress has been made. Attitudes need to change, and the RTS is a good mechanism for doing this.

6.5.2 The common approach to resolving the demand/supply imbalance is as follows:

1 First, make better use of existing road capacity;

2 Second, because you cannot fully "build your way out of the problem", apply demand management;

3 Third, because you "cannot demand-management your way out of the problem", it is necessary to invest in all modes at once.

4 Fourth, where the political difficulties prevent demand management being implemented, there is strong investment in alternatives instead.

6.5.3 This approach can be challenged on four important grounds.

- Making “better use“ of existing capacity may well be undesirable in the context of the South East. Squeezing more and more traffic through the system results in less reliable levels of service, and erodes the „quality margin“ that is needed to allow safer and more pleasant driving conditions.
- Demand management is not a “second best“ solution, it is a positive measure to enable a range of economic, environmental and social objectives to be achieved. It is necessary whether or not road capacity is expanded. Indeed, the need for demand management has probably been increased due to the traffic generating effects of past attempts to cater for growing demand.
- In some respects you can “demand management your way out of the problem“. Traffic can be reduced without necessarily providing for a substitute mode. Within 10 years most people will have changed their home location, or their work location, or both. demand management can influence these location choices, so that former car trips are replaced by shorter ones and/or trips by other modes.

6.5.4 This is not to say that improvements to alternative modes can be avoided. The alternatives to car travel can probably be justified on the basis of existing users, at least for walking, bus and rail. Significant switch to cycle, however, is likely to require a step change in the quality of provision.

6.5.5 It is nevertheless not necessary to delay or hold back on demand management on the basis that alternatives should be improved first. This can now be seen as a politically popular way of avoiding the implementation of demand management.

6.5.6 Finally, investment in improved conditions for the many car journeys which remain is too risky without an established and effective demand management package.

6.5.7 There was interesting commentary on these issues at the stakeholder workshops. The participants felt strongly that demand management should be marketed as a positive element, and its impact and how it fitted within the strategy should be sold “up front”. A regional lead was seen as beneficial in persuading local elected members to “think strategically” about demand management and in persuading business leaders that they had to participate - they would need to feel that

"everyone jumped together". In this context parking limits have pushed travel planning strongly up the corporate agenda.

6.6 *Implementation: broad brush or shining examples?*

6.6.1 The final issue to be considered for the regional framework is how to roll out demand management (or indeed the RTS as a whole). There were two different approaches discussed and this report considers that they are not mutually exclusive.

6.6.2 The first approach is to set the framework and try to ensure that as planning, policy and implementation decisions are made as many players as possible work within the framework. Thus there is less competition between centres on the basis of generous parking provision (or tram systems) and a common pricing framework is pursued (not just new mechanisms such as WPC or RUC but parking cost). The key issue then becomes how to monitor and enforce and perhaps most importantly how to discern when a genuine "one off" variation is required. This approach can be applied at a sub-regional level, for example resulting in a "Thames Valley" framework for road user or workplace parking charges.

6.6.3 The other approach is to recognise that not every area can proceed at once and at the same speed. There are many reason for this, one of which is the local quality of implementation, upon which the popularity or otherwise of many demand management measures depends. There is not only a skills shortage, but also a skills mismatch within the transport profession in relation to many aspects of demand management. Obvious examples are lack of knowledge and experience of urban design and walkability, or the marketing and people skills needed to implement workplace, school or leisure centre travel plans.

6.6.4 Thus it would be helpful to create a centre of excellence or "Transport Skills Partnership" for demand management at the regional level whose main function would be to identify and then implement exemplary demand management packages in specific areas. Such a team would work in partnership with chosen "flagship" authorities for a given period. This would create good practice and public confidence. It should guarantee that the design quality and the required range of skills would be available. This would also build on the work done in areas where progress in individual components of demand management has already been made. Co-operation in London between TfL and the teaching institutions is at an early stage but shows how a region can create a

valuable partnership to improve the transport skills base. It may be noted in this context that there are two transport teaching and research university departments in the region, both of which have an established reputation in relation to demand management issues.

6.6.5 The conclusion is that there should be clear exposition of the reasoning behind any package, the importance of implementing all the elements as a whole, an open discussion of who will gain and lose and why, and smart phasing so that associated and supporting improvements are timed to coincide with the more difficult elements of any package, especially roadspace reallocation. In other circumstances implementation can also be progressed in smaller steps but in rapid succession.

6.6.6 Charging regimes also allow for gradual phasing in a way that is more difficult for physical changes such as the quantity of parking in new developments or the introduction of street priority for the sustainable modes. Increments to existing charges (mostly parking) can be made in line with wider objectives, and the regional framework should specify how these should be done. New charges (WPC or RUC) will be more difficult, but likewise are flexible in terms of the charge levels applied.

7 *A Demand Management Framework for the South East*

7.1 *Guiding principles*

At this point it is necessary to bring together the key principles that should be followed in preparing a demand management framework for the South East region. Most of these points have been discussed more fully in preceding sections.

- Guidance should be governed by the subsidiarity principle, whereby the RTS framework includes only measures that cannot be undertaken or decided by the local authorities acting alone.
- Demand management measures should be complementary and integrated with both with one another, and with other areas of policy notably spatial planning, but also others such as health and education. (A recipe is required, not a shopping list).
- Demand management is not an end in itself, but a means to achieving economic, environmental and social objectives.
- Demand management should be implemented and promoted as a positive means of achieving objectives, not as a second best option. There is an urgent need to raise awareness and understanding alongside preparation of the technical case;
- Demand management measures should relate to the benefits intended, and if necessary be formulated at sub-regional level.
- Demand management measures are not intended to move from the present situation to a static or "snapshot" situation at some future date. The aim is to set the trends in a desirable direction. This does not lend itself to conventional modelling as a decision tool.
- There is a need to set out an "evolutionary path" for the extension of the role of demand management over time.

7.1.1 The study brief requested that attention should be paid to four particular aspects of demand management (which have also been identified by DTLR as requiring further guidance at the regional level):

1 Charging

2 Parking

3 Travel planning

4 Accessibility criteria

7.1.2 Charging is a major component of parking, and also potentially a part of Travel Planning, as well as other aspects of transport such as public transport planning. Presentation of charging as though it were a new and separate demand management issue should therefore be avoided in the RTS as far as possible.

7.1.3 A further point of presentation is that "accessibility criteria" are not regarded as a direct demand management measure, but as an over-arching technique to assist in the implementation of demand management and other policies. Accessibility is also of potentially great importance in delivering the switch from "predict and provide" to a more normative planning approach. Because of this, the issue of accessibility criteria is dealt with separately in the next section of the report.

7.2 *Possible Demand Management Scenarios*

7.2.1 *Introduction*

7.2.2 In this section two broad brush scenarios have been developed to illustrate how the conclusions reached in the report would find expression in a demand management approach in the RTS. The two scenarios are drawn up on the basis of the importance given to development of the transport charging regime.

7.2.3

7.3 *Scenario One: Balanced Demand Management*

7.3.1 In this scenario there is a balance between elements and, as with the other scenario, it is divided into three 5-year sections. Some of the work described here is happening to various degrees in individual authorities already.

7.3.2 *First trimester*

- Parking maxima set as a range of 50 to 70% of PPG13;
- In partially developed areas with poor public transport, full parking is provided but under public control;
- Index of mode comparisons set up and published by year 2;

- Target to move to time/cost parity (including reliability) for 50% of car journeys by year 5 (see footnote [1]);
- Reallocation of roadspace programme with concurrent improvements to walking, cycling and bus priority;
- Regional travel planning framework and steering/monitoring group established, good practice guide and one-stop advice service set up (in partnership with local authorities), new service requirements generated by stakeholders;
- Targeted action research projects looking at individual travel choice, e.g. young persons travel initiative;
- Creation of "Transport Skills Partnership";
- Planning with SRA for integration with rail schemes;
- Sub-regional area charging schemes prepared for WPC with income allocated to supporting travel plans and specific new bus services;
- Regional fostering of innovative forms of public transport;
- First tranche of exemplary area schemes implemented by year 5.

7.3.3 *Second trimester*

- Sub-regional area charging schemes for WPC implemented;
- New bus services introduced concurrently;
- Parking maxima set at 40-60% of current PPG13;
- Reallocation of roadspace with concurrent improvements to walking, cycling and bus priority;
- Negotiations on new rail improvements with SRA;
- Target to move to time/cost parity (including reliability) for 60% of car journeys by year 10;
- Regional travel planning continues with greater emphasis on leisure travel;

[1] The idea of this target is to focus on the key requirement to bring about a change in the mode of travel chosen. Measuring the comparative performance of modes can be achieved by taking a sample of door to door journeys and testing their cost, reliability and time. This will be influenced by two factors: performance of the modes themselves and land use patterns. In the first instance, it is suggested that just the performance is measured. This should be undertaken at two levels: first on a sample basis in different parts of the region, on a rolling programme; and second as individual packages are implemented. This would provide a "before and after" picture for the schemes, a "before" picture for area studies, and an overview for the region. The latter should have a sample that is significant at the sub-regional level.

- Review of first tranche leading to implementation of second tranche of exemplary area schemes by year 10.
- Review of need for RUC at sub-regional level light of mode comparisons;
- Review of necessary supporting schemes for RUC schemes.

7.3.4 *Third trimester*

- Possible implementation of RUC and associated schemes;
- Implementation of new rail services and supporting links;
- Parking maxima set at 30-50% of current PPG13;
- Target to move to time/cost parity (including reliability) for 70% of car journeys by year 15;
- Regional travel planning continues;
- Review of exemplary schemes and demand management package roll out across remaining areas.

7.4 *Scenario Two: Charging options removed*

7.4.1 In this scenario, extensions to the charging mechanism are avoided. There is no certain way of telling how far other policies will need to be strengthened, but the key differences are shown in bold italics:

7.4.2 *First trimester*

- ***Parking maxima will have to be set lower from the start, at least at 40-60% of PPG13 instead of 50-70%, but possibly at 30-50%;***
- ***New bus service improvements programme funded through precept/central government/S106;***
- In partially developed areas with poor public transport, full parking is provided but under public control;
- Index of mode comparisons set up and published by year 2;
- Target to move to time/cost parity (including reliability) for 50% of car journeys by year 5;
- Reallocation of roadspace programme with concurrent improvements to walking, cycling and bus priority;
- ***Fares discount scheme;***

- Regional travel planning framework and steering/monitoring group established, good practice guide and one-stop advice service set up (in partnership with LAs), new service requirements generated by stakeholders;
- ***Significant budget for financial inducements for travel plan participants*;**
- Targetted action research projects looking at individual travel choice, eg young persons travel initiative;
- Creation of "Transport Skills Partnership";
- Planning with SRA for integration with rail schemes;
- Regional fostering of innovative forms of public transport;
- First tranche of exemplary area schemes implemented by year 5.

7.4.3 *Second trimester*

- ***Parking maxima set at 30-50% of current PPG13 (if not done before);***
- ***New bus service improvements programme funded through precept/central government***;
- Negotiations on new rail improvements with SRA;
- Target to move to time/cost parity (including reliability) for 60% of car journeys by year 10;
- ***Fares discount scheme continued***;
- Regional travel planning continues with greater emphasis on leisure travel;
- ***Significant budget for financial inducements for travel plan participants***;
- Review of first tranche leading to implementation of second tranche of exemplary area schemes by year 10.

7.4.4 *Third trimester*

- ***Further bus service improvements programme funded through precept/central government;***
- ***Fares discount scheme continued***;
- Implementation of new rail services and supporting links;
- Parking maxima set at 30-50% of current PPG13;

- Target to move to time/cost parity (including reliability) for 70% of car journeys by year 15;
- Regional travel planning continues;
- Review of exemplary schemes and demand management package roll out across remaining areas.

7.5 *Commentary on the above scenarios*

7.5.1 It is clear from these outline scenarios that the key difference between them is that without charging, more effort is required to achieve change in the comparative performance of the modes, for two separate but closely related reasons.

7.5.2 The first relates to the problem that public transport users pay the average cost of their journey while car users pay the marginal cost (and this is poorly perceived). Without pricing related to car use the only alternative is to introduce fares discount schemes which create a low marginal cost. This has considerable financial (and legal) implications.

7.5.3 The second problem is that money from charging would go into improvements to the alternatives. This money will also have to be found if the mode comparison index is to be changed.

7.5.4 The next feature is that roadspace reallocation will have to be more extensive for buses if demand management is weak. This is because congestion will be worse - although there will be some compensation because all traffic suffers the delays. However, the disruptive impact on bus reliability is the key reason for assuming that more reallocation would be needed.

7.5.5 Finally the problem of supporting travel planning initiatives will be exacerbated by the lack of financial incentives on the employers and employees. Again this is likely to need significant levels of funding.

7.5.6 *Relationship with other policies and innovation*

7.5.7 First it is important to raise again the issue of how non-transport influences can be of major importance. Land use is perhaps the most obvious example. Technology and the way it is used can also change dramatically, and the interplay between travel and communications is key. For example, the use of mobile phones and web-based public transport information is underdeveloped, while stable patterns of home-

working are really only just beginning to emerge and may move in new directions. Internet shopping has had high profile failures, but the remaining companies are at last turning into viable businesses. Such developments may change patterns dramatically, for example reducing commuting but increasing other journeys or replacing the journey by car to the supermarket with an internet order and home delivery. The transport effects of changes in our lifestyle will mean that the RTS in general, and demand management in particular, will have to be responsive and even fleet footed. Such changes may be caused by technology (such as the Internet) or a new understanding which opens up change in travel behaviour (for example the greater understanding of global warming). They may also be a response to congested travel conditions, or to demand management measures themselves.

7.5.8 At present there is also a certain reluctance to adopt ideas outside the narrow run of current practice. Such innate conservatism has led to a reluctance to look at innovative local bus services, whether in their own right by local operators or as part of a reorganisation of the significant amounts of local authority transport in education, health and social services. The existing amount both in terms of vehicle kilometres and expenditure is considerable. Linking in to workplace and school travel planning, the potential to achieve quality services at relatively small increases in total expenditure are well recognised but high profile good practice schemes are long overdue. A final example of non-lateral thinking is the resistance to rethinking the way the clocks are changed between summer and winter. With all the social changes that have taken place since it was first introduced, the need for an early morning winter sunrise has vanished. Making the evenings lighter into the period when everyone is coming home from school and work would be a one off boost to the sustainable modes, would prevent accidents and would cost nothing. Darkness is the key factor which deters women from walking or walking to bus stops and stations.

7.5.9 Moving on from this illustration it is possible to go back to the objectives of the RTS and ask whether there are other ways of approaching the task of sustainable transport planning. Of course it would be possible to achieve at least some air quality objectives locally by only permitting the use of zero-pollution vehicles in built up areas. These could also be limited in size (as with some local runabouts already) to reduce the roadspace and parking requirements. Such vehicles could be encouraged in a joint ownership format by residential car clubs and station depots. Costs would be higher than bus fares. Bus use, walking and cycling could be encouraged by reducing the amount of

parking and reallocating it to footways, cycle use and bus priority. The strict application of parking standards could be in conventional car units.

7.5.10 The generation of such ideas (above is only one) has two effects. First it may actually reveal an area where development is needed. Second it will illustrate the testing of alternatives to a wider audience. The key problem in the current debate is that a myth has grown up that public transport is so poor that if it were only improved all would be well and people would desert their cars in droves. In some urban areas in the South East and for some journeys this may be true. In broad terms the improvement of public transport must go hand in hand with a change in the marginal costs of travel or mode shift will not occur. Discounting fares is so costly, and generates so much travel as well as switching it, that transport economists tend strongly towards charging motorists. Understandably those who can't afford a family home in the urban areas where they work feel forced to use their cars and distinctly unhappy about facing an extra cost. The "green" impetus of the nineties has slowed in the public mind and new initiatives to reach out on this subject are now urgently required - locally as well as regionally.

7.5.11 The remainder of this section outlines advice regarding the three key areas highlighted by SEERA in the study brief, namely charging, parking and travel planning. This is followed by advice regarding implementation mechanisms. (The issue of accessibility criteria is dealt with in the next section of the report.)

7.6 *Charging evolution*

7.6.1 The charges (prices) paid to use transport facilities are a major determinant of mode and travel choices. The current charging regime, however, is not always designed to achieve sustainable transport outcomes. It is widely understood, for example, that the marginal price of car use does not reflect the full marginal costs of car use, and that the predominance of fixed prices (car purchase, insurance etc.) actively encourages car use even when suitable alternatives are available.

7.6.2 It is therefore recommended that within the scope of the RTS, the charging regime should be developed to serve sustainable transport and development objectives, and to support and reinforce the spatial strategy.

7.6.3 There are actions that can be taken in the short term, but the most effective measures will take time, and it is necessary to set out an

evolutionary path for the period of the RTS. This begins with acknowledging the role that transport charging and pricing play in demand management at present. The next step is to make more effective use of the current charging regime to serve RTS and spatial strategy objectives. Beyond that there lies the opportunity to introduce new measures including workplace parking charges and road user charges. Beyond that still is the possibility of tolls or charges for use of the strategic road network.

7.6.4 There will always be objections raised when new charges or increased charges are proposed, and so the benefits must be both clear and clearly presented. Points that need to be emphasised are:

- We already have a charging regime, but it falls short of the ideal;
- The consequences of not tackling demand through pricing are likely to be higher costs elsewhere in the system (for both individuals and business);
- The revenues from charging can be targeted at improvements better related to where the problems occur.
- Further charges, or raised charge levels, do not have to result in overall increases in charges for car use, though controlling global charge levels is only really possible at the national level.

Table 7.1 An evolutionary path for the development of charging

	Charging regime
Present	• Fixed licensing and duty charges (national) • Variable (fuel) duty charges (national) • Public parking charges • Residents (etc.) parking charges • Bridge and tunnel tolls • Revenues not necessarily available for transport strategies
Short term (0 – 5 years)	• Public parking charges and controls integrated with transport and land use policy, and related to public transport fares

	• Revenues used for transport improvements
Medium term (5-10 years)	• Workplace parking charges • Pilot local road user charging in major town(s) • Revenues used for transport and environmental improvements
Long term (10 – 15 years)	• Road user charging (local networks) • Road user charging (HA network) • Revenues available for related transport or environmental schemes

7.6.5 A system of incentives and disincentives should be established to avoid perverse effects of charges, such as trips diverting to locations without charges, and development attempting to migrate away from areas where direct charges apply. Land use planning controls will be important in this respect, but they need to be reinforced. The main support for ensuring the right development in the right place will come through the Transport Assessment process, including the provision and enforcement of Travel Plans, and developer contributions for transport and access improvements.

7.7 *Parking strategies*

7.7.1 Local authorities should produce parking strategies for their areas. The LTP guidance states:

> "Local authorities need to develop an integrated strategy on parking, utilising planning policies and transport powers. In doing so they should have regard to the approved RTS. Parking is likely to be a key element in managing demand for car use. We will expect all LTPs to set out how parking policies are to be used to encourage motorists to use alternative means of travel… This will be essential where authorities are looking to us for support for significant investment in public transport."[2]

[2] DTLR, 2000, "Guidance on full Local Transport Plans", page 47.

7.7.2 The RTS can play an important part by setting out what should be included in local or sub-regional parking strategies. The following points are seen as important to stress:

- The parking strategy should deal with all types of provision (on and off street, surface and structured, public and private, controlled and uncontrolled, shared and dedicated, charged and not charged).
- All aspects of parking should be included, even those where control or influence are perceived to be weak, such as private non-residential parking. In this respect the parking strategy should:
    - Ensure that the town/area functions in its own right (e.g. getting the balance right between users, prices and supply);
    - Set out the role of parking (including charging, supply and regulation) in demand management;
    - Avoid perverse development or travel outcomes (i.e. enhance the relative attraction of locations accessible by a range of modes);
    - Avoid predatory pricing, and set out ways in which pricing levels take account of neighbouring or competing centres;
    - Define the appropriate role (if any) for Park and Ride, including both urban and regional Park and Ride.
- Strategies should explicitly contribute to and be consistent with the objectives of both the LTP and the Development Plan. For example, demand management policies in the LTP should not be undermined by generous parking provision in new developments.
- Strategies should explicitly state how any surplus parking revenues will be spent. Where LTP funding is sought, parking revenues should not be diverted to non-transport purposes as happens at present in some authorities.
- The strategy should set out ways of increasing, over time, the proportion of parking provision in the "most desirable" category, and decrease the proportion in the least desirable category (see table below).

Table 7.1 Parking attributes

Most desirable	• Subject to LA control

attributes	• Available for general use • Charges and controls consistent with parking and demand management strategy • Designed to minimise environmental impact and land under-utilisation
Least desirable attributes	• Private and outside LA control • Dedicated to single or named user • Physically tied to use of single occupier (e.g. garage as part of dwelling) • Designed in ways that intrude on the environment or waste land (e.g. surface car parks).

7.7.3 Parking strategies will be the responsibility of the transport authorities (county and unitary authorities), but must be compiled and agreed with District authorities in two-tier areas. In addition, the strategies must address cross-border issues, and consultation steps and the resulting agreements must be made explicit. All authorities that have been party to the development of the parking strategy and are agreed to it should be signatories to the document. This will give added weight to the strategy.

7.7.4 The Institution of Highways and Transportation is currently preparing, with DTLR sponsorship, a comprehensive guide to parking practice. It is expected to be available in Spring 2003, and is likely to provide invaluable assistance to local authorities in preparing their parking strategies.

7.8 *Parking provision in new developments*

7.8.1 At the regional level, the key objectives of a parking strategy are:

- Support the objective of concentrating development in urban areas and promoting the “urban renaissance“;

- Contribute to and not conflict with the DM strategy for the region and (if applicable) sub region; enable DM measures that are difficult for local authorities acting alone;
- Avoid wasteful competition between centres.

7.8.2 The recommended regional policies for both residential and non-residential developments are dealt with below.

7.8.3 *Parking in new non-residential developments*

- Reference should be made to "levels" of parking, or parking "maxima", not "standards".
- Conurbation and larger town centres, maximum levels of provision will be 50% of PPG13 maxima. Actual levels should be determined in relation to the overall strategy, and subject to appropriate controls and conditions of use.
- For developments outside these centres, but agreed within the sequential approach, also 50% of PPG13 maxima.
- For these purposes all categories of land use that attract person trips will be subject to the sequential approach. The sequential approach will be based on that set out in PPG6, but further elaborated to include accessibility criteria, rather than the more general „town centre", „edge of centre" and „district and local centre" criteria. Standard accessibility criteria for non-residential uses will be developed for the South East that will relate to accessibility to a site from its catchment.
- Other developments in all other areas, provision no higher than 70% of PPG13 maxima, up to a maximum level equivalent to that calculated for 5,000 square metres (retail and leisure) or 10,000 square metres (offices and light industry) Gross Floor Area or Net Site Area.
- In large areas of new development, a phased approach can be used, whereby all parking is shared, and full allocation is provided in phase one. Later phases of development include no further parking, so that when fully built out, the area conforms to the maximum levels set out above. This approach must form part of an adopted Development Plan or SPG; it cannot be used on an ad hoc basis for individual planning applications. The proposed development for Ebbsfleet provides an example of this approach, and this could be extended to other parts of the South East where major development occurs.

- All parking associated with new developments should be presumed to be shared, except where individually justified (e.g. on the basis of special needs or security).

7.8.4 *Parking in residential developments*

- The PPG3 maximum (average 1.5 spaces per unit) will apply on a scheme by scheme basis. Higher levels of provision in rural areas cannot be justified on the basis of lower provision elsewhere.
- Provision includes bays provided adjacent to street carriageways or access roads (in other words, total provision available).
- All residential parking provision should be communally arranged. Dedicated spaces can be made available as a management measure on a contract basis.
- A market for parking spaces separate from the market for dwellings should be encouraged as far as possible.
- Standard accessibility criteria will be established for the South East, which will rate the accessibility from development sites to a range of employment, shopping and other facilities.
- Parking maxima will be related to three broad levels of accessibility, carrying a maximum provision (on a scheme by scheme basis) of 0.5, 1.0 and 1.5 spaces per dwelling respectively.
- Residential developments will be allowed to compensate existing areas for a shortfall of residential parking where: First, there is an existing on-street parking problem; second, all provision will be communal; third, the resulting provision will not exceed the PPG3 maximum; fourth, justification is provided through the Transport Assessment for the new development. The potential contribution of Car Clubs must be included in the justification for such increased provision.

7.8.5 All of the above reflect:

- Proximity to London, and availability of public transport;
- The need to encourage less use of cars
- The need to provide direct incentives to improve the alternatives, including through developer contributions and Travel Plan conditions;
- The need to encourage development formats that serve local catchments, or that are located at public transport hubs.

7.8.6 *Role of the RTS in parking strategies*

7.8.7 The RTS should ensure that local parking policies make the fullest contribution, and the following measures should be taken at the regional level.

- Involvement with the development of parking strategies including dissemination of best practice.
- Assistance through flagship schemes and regional demand management "Transport Skills Partnership".
- Alignment of LTP funding settlements with compliance with RTS, including incentive funding.

7.9 *Travel Planning*

7.9.1 There is a range of measures that can be implemented under the general heading of travel planning, from general awareness raising at county level (such as the Travelwise initiative), to targeted travel planning at the individual and household level.

7.9.2 The role of the RTS should be to:

- Emphasise the need for local authorities to support the travel plan initiatives taken by private sector companies and other organisations (for example through support for public transport services and improvements and walk and cycle infrastructure improvements);
- Provide assistance to local authorities through flagship schemes and the regional demand management "Transport Skills Partnership";
- Align regional investment priorities to support sub-regional areas with strong travel planning measures;
- Align LTP funding to promote an appropriate mix of infrastructure and travel planning measures that will meet the stated objectives of the LTP;
- Include resource for monitoring travel plan outcomes as part of LTP eligible expenditure (although private sector resources may be appropriate in the case of new developments);
- Promote the development of public and private data resources for benchmarking travel patterns (mode split etc.) at sites in the South East. This will be increasingly important for the preparation and

monitoring travel plans as part of the Transport assessment procedures for new developments.

7.9.3 Research documents made available to the study team provide estimates of the potential contribution of travel planning measures to traffic reduction nationally. The estimates suggest a very small contribution in terms of overall travel by car, suggestion relatively small benefits in terms of environmental pollution. However, the concentration of work and school trips in peak hours suggests a more significant contribution in terms of congestion reduction. Examples of the estimates provided are:

- Workplace Travel Plans could reduce overall car travel by 0.6%;
- School Travel Plans, assuming results in the most successful schemes to date (where use of car to school has reduced by 30%), would reduce overall car travel by 0.4%;
- Individualised marketing of alternative to car travel, as in sample areas of Perth (Western Australia) and Helsinki could reduce car travel by 11-13% amongst the people subject to the marketing scheme. If such marketing targeted 10% of the population during the 15 year RTS period and produced similar outcomes, car travel could be reduced by around 1%.

7.9.4 An overall contribution of Travel Planning initiatives implemented on a broad front could therefore be expected to provide a traffic reduction of around 2% in 15 years. Clearly this would be insufficient to counter the current traffic growth trend in excess of 1% per annum.

7.9.5 This further reinforces the study conclusion that charging carries the best prospect of delivering major benefits.

7.10 *Freight*

7.10.1 *Key Issues*

1.1.2 The movement of freight and the choice of mode is the secondary result of a series of factors including:

- the level of economic activity;
- the balance between recycling/repair and new consumption;
- the cost of storage, particularly at the point of consumption (factory or shop);

- the service level required; and
- the cost of movement.

7.10.3 For example, when storage costs are high at the point of sale, and movement costs are cheap, systems such as “just in time” develop which require a high service level. Slow modes such as water and some forms of rail need a predictability of flow and cannot offer the flexibility of road. However, some of the latter is only achieved if it is assumed that the largest vehicles are allowed to use the narrowest of roads. Comparing rail and water networks (the latter including coastal waters) with the motorway network gives a different picture of the freight "track".

7.10.4 Road freight is nevertheless essential to most everyday activities. The issues are:

- How much damage it does to road infrastructure ("track costs");
- How much damage it does to the environment;
- Whether it meets its costs in these respects;
- Whether the method of payment for those costs is fair between modes or creates the most efficient use of resources; and
- How far low-cost road freight encourages fewer, larger, depots and units of production, influences choice of port, and thus generates more road freight.

7.10.5 ***Creating a regional framework for freight***

7.10.6 The main policy emphasis should be to ensure that all modes have a level playing field in terms of meeting costs and the way in which charges are perceived by the user. There are many parallels with car use. Road freight has high entry costs (vehicle purchase, tax and insurance) and relatively low marginal costs. Its marginal use can, however, be very damaging, much more so than cars. Rail is less damaging but users pay more of an average cost.

7.10.7 As for water, the capital cost is very high and the marginal cost very low indeed. The barrier to entry is one of the key problems - not just the investment but more importantly the availability of wharfage. The latter should be dealt with in the SDS.

7.10.8 The demand management strategy should aim to ensure the right level of charges for road freight and a system of collection that maximises

environmental and economic efficiency. Thus the emphasis should be on charging for use rather than a one-off payment. The simplest approach to this is the distance charge option proposed in the document "Modernising the Taxation of the Haulage Industry" and this is strongly supported. This should be related to carrying capacity or gross weight. Previous, complex methods of calculation of axle loading no longer apply to modern articulated lorries. A three-axle trailer or tractor can raise one of its axles when not required and thus all combinations over three axles have far lower differences in road damage.

7.10.9 Significant improvements have been made in environmental performance although heavy lorries remain one of the most damaging forms of road transport, both to other motorised road users and to pedestrians and cyclists, and in terms of certain emissions such as particulates.

7.10.10 If a weight/distance charge were to replace the annual licence fee this would itself assist in the more rational use of resources, including the long term location of depots. If reflected in charging to the user, local sources of supply would become more attractive - it would be less worthwhile to drive 50 miles to save 50p a tonne. Such a system would not cause any diversion as would be the risk with motorway tolling. The region should press the Treasury to implement the distance-based option, varied to take account of capacity and environmental damage. If motorway tolling is brought in, lorries should not be overly charged in relation to cars. Instead they should be charged through the weight/ distance tax.

7.10.11 Controlling lorries through routing or bans is usually considered at a more local level. Given the experience of wider routing proposals these should be based on the availability of a road network and access points which are not environmentally sensitive, rather than designating networks which may be unsuitable in many places in order to allow for most lorry movements. Again this creates more of a level playing field with other modes. Thought should be given in the SDS to prioritising suitable sites for transport uses, in particular freight and warehousing close to the motorway network. Key in this will be the need for multi-modal interchanges for regional traffic, while encouraging the policy of moving international freight (including trailers/piggyback) by rail or water for as much of its journey as possible.

7.10.12 ***Facilitating road freight***

7.10.13 If the charging system is right, and vehicle access is matched to the road infrastructure and the surrounding area, there are several ways in which road freight can be facilitated. In this sense demand management for freight is also a benefit to freight users and operators. The ways in which road freight could be assisted include:

- Lower charges in toll or RUC schemes than would otherwise be the case;
- Existing tolls (e.g. on motorway bridges) reduced;
- Priority lanes for lorries;
- Traffic signal recognition (as for buses) to ensure access to and from industrial sites;
- Improved facilities for drivers, in association with the SDS and a policy for transport land.

7.10.14 *Likely Outcomes*

7.10.15 If the financial and environmental access framework is properly in place there is no need to intervene directly in the pattern of warehousing, for example through additional compulsory transhipment. Most goods are already transhipped several times and it is best left to the logistics industry to explore its own solutions within the new framework. Another key area is the balance between efficiency through return loads, and service, expressed as the short notice given for a specific delivery. Many systems are already in place and charging by use would consolidate some and encourage others. The industry is always changing and the key will be to monitor change and to develop lines of communication with users, operators, local authorities and public interest groups.

7.10.16 From the industry point of view the key will be a phased introduction and support for developing new ideas. For example, the SRA is currently working on initiatives such as a new small freight train, which can run in between passenger services. Night-time deliveries could be encouraged if vehicles and the delivery process itself could be made quiet enough. There is certainly scope for schemes such as these, which a single authority may not have the resources to embark upon. Regionally this becomes a possibility.

7.11 *Land use and economic development*

7.11.1 Concentrating development in urban areas is part of the spatial strategy. This needs to be reinforced by not allowing development outside urban areas. At present a large part of housing growth is met in rural areas (often on so-called "windfall" sites). The rural strategy needs to be tightened in this respect.

7.11.2 A future review of the spatial strategy should consider both the potential for increased intensification of development in the larger conurbations, and for a positive role for rural areas and small settlements.

7.11.3 Land use change can be slow to materialise. However, travel patterns as determined by trip origins and destinations can change rapidly within an existing land use structure. DM measures therefore should be seen as an input to decisions about location choice of individuals and businesses.

7.11.4 Two of the Priority Areas for Economic Development are urban conurbations, where conditions are favourable to DM. The other two contain urban and rural areas, and arguably will pose more of a challenge in terms of DM (Isle of Wight and East Kent).

7.11.5 There are specific aspects of development that should be addressed through DM. An example is the suggested improvement of access to Southampton port, and "peripheral" areas such as Hastings and East Kent. The conflict between such improvements and local traffic and environmental conditions is well known. DM offers a resolution of this conflict.

7.11.6 The main conurbations in the South East (Medway, Thanet, Brighton, Southampton-Portsmouth) should be given incentives to exploit the DM opportunities that their urban form provides. The RTS transport investment priorities should include provision tied to DM performance through the LTP funding process, tied to land use development strategies (Development Plans).

7.11.7 To the extent that the two major growth areas (Milton Keynes and Ashford) require transport investment to be provided from public sources, the same incentives should be created for those areas.

7.11.8 In devising development strategies, the precise role of rail should be defined. If local travel is expected to be by rail, the assurance of adequate track and operational capacity must be part of the strategy.

Mere presence of a station near a development area will not be accepted as justification for the location of that development.

7.11.9 During consultation, there was a clear feeling from the local authority practitioners that land use driven change needed to start early because it would take time to work through. Some of the ideas were liked, for example accessibility analyses and consistent parking maxima, but there was concern about whether all this would "hold up" in the face of local pressures and individual developments. The need for a regional level framework was strongly supported, as was the recognition that sub-regional groupings would be needed to allow greater consistency between areas which were in reality continuous, but crossed regional boundaries. For example, Oxford had a relationship with the West Midlands, Reading and the Berkshire unitary authorities had a relationship with the rest of the Thames Valley and outer London.

7.12 *Implementation measures*

7.12.1 In addition to the topic-specific measures for demand management such as parking controls, charging schemes and travel plans, there are a number of implementation measures that can be taken within the overall ambit of the RTS. These have either been raised by, or commented on by the stakeholder and expert groups consulted during this project.

7.12.2 *Regional "Transport Skills Partnership"*

7.12.3 It is recommended that the regional assembly sets up a "Transport Skills Partnership" of experienced and respected professionals in the field of demand management to assist local authorities (or groupings of authorities) in formulating and implementing demand management strategies. This would have the following attributes:

- The "Transport Skills Partnership" would consist of a small team of professionals specially recruited for period initially of, say, 5 years.
- The team would include marketing and consultation expertise as well as demand management, transport and land use expertise.
- The team could include secondees from local authorities or private sector consultancies, and from academic departments.
- The team would be allocated to an area agreed as a flagship demand management area, to help the authority (or group of authorities) formulate a demand management strategy as part of their overall

integrated transport and planning strategy. They would remain engaged with a project during implementation.

- Flagship areas would be decided following requests by local authorities or groupings of local authorities. Requests could be prompted by offering funding or other incentives through the LTP process.
- The team would be able to monitor and develop the transport skills base in the region.
- By working with (or including) those in the region who train transport professionals, the team would help to forge constructive links between local authorities and academic research and training departments. It should be noted in this context that there are two cities in the region with major teaching and research functions in transport planning (Oxford and Southampton).

7.12.4 *Regional investment priorities*

7.12.5 Regional investment priorities should reflect and be consistent with demand management expectations for the region. They should deal with the balance of expenditure between:

- Large and small schemes
- Different modes (including freight)
- Rural and urban
- Urban and inter-urban (otherwise referred to as strategic and local)

7.12.6 For example, if the expectation is that demand management in the short term will focus on urban rather than inter-urban travel (strategic road network), then investment in alternative modes in urban areas would be expected in the same timescale.

7.12.7 It will be necessary to ensure that regional transport investment priorities are consistent with and supportive of local authority demand management strategies, including provision to meet any specific diversion of demand from car to other modes.

7.12.8 A further important aspect is that road and other schemes that were devised in the pre-demand management era need to be re-appraised. To some extent this is being carried out through he various multi-modal studies, but the RTS must provide the overall view as to content, timing and context of the investment programme. The key test of any scheme is

that it should shift the balance of time, cost and reliability towards the more sustainable modes of travel.

7.12.9 *Involvement of RDA*

7.12.10 The case for demand management, and for the specific measures recommended in this study, should be shared as far as possible by commercial interests and development agencies. SEEDA has an important role to play in this respect, being well placed to promote the need for development and regeneration, and the role of demand management in achieving it.

7.12.11 *Integration with other agencies and policy areas*

7.12.12 Consultees emphasised the importance of ensuring that non-transport sector policies were consistent with the aims of the RTS, and support or do not work against the demand management component of the RTS.

7.12.13 An example is education policy that advocates parental free choice of schools, which is believed to have contributed to a major increase in school travel, especially school escort travel by car. Also in education, there is a tendency to relocate further and higher education establishments away from urban centres, thus increasing car dependency and travel. Another is policies in the health sector that concentrate facilities into fewer but larger facilities.

7.12.14 Negotiation on such matters is likely to be more effective if the regional bodies are involved alongside local authorities, and this mechanism should be part of RTS guidance.

7.12.15 *Planning enforcement*

7.12.16 The RTS should emphasise the important role of local authority enforcement of planning decisions. The demand management framework should specifically identify the importance of those aspects of planning decisions that play a key role in demand management, and which developers may be tempted to infringe, or neglect. Two aspects can be mentioned:

- ***Parking levels***. Local authorities must ensure that the amount and nature of parking is clearly identified in the planning permission and conditions. The number of spaces specified must not be exceeded. Any conditions or obligations regarding control over the use of the

spaces must be complied with, and remain so over time, and be transferred to subsequent occupiers.

- ***Travel plans***. Local authorities need to make arrangements for monitoring the outcomes of travel plans, especially for those required to be implemented as part of a planning consent. Funding of such monitoring can be met through developer contributions, even if the monitoring itself is undertaken by the local authority, or a third party.

7.12.17 *Local authority compliance with regional guidance*

7.12.18 There have been delays in the implementation of policies contained in planning policy guidance, notably PPG13 in relation to maximum parking standards and related land use location policies. The review of LTP Annual Policy Reviews undertaken as part of this study revealed a lack of information on progress towards implementation. It is suggested that closer involvement in this issue is required at the regional level to ensure better and more prompt compliance with guidance. This will become imperative once the revised RTS is I place. It is important to acknowledge that the "new" policy framework represented by PPG13 is one which some local authorities are tempted to resist, often due to local political fears that development will be discouraged. This means that there is a much greater need than in the past for regional monitoring and "enforcement".

7.12.19 LTP funding in the South East should be decided in such a way as to provide incentives for the implementation of demand management. It is acknowledged that this proposal will require some expansion of resources at regional level. For example, ways of achieving this could include:

- Providing a higher percentage of grant or credit approval bids to local authorities with demand management strategies certified as consistent with the LTP and Development Plans, and with other RTS criteria. The criteria will include:
    - Consistency of demand management measures with both LTP and Development Plan strategies;
    - Consistency between demand management measures for the area in question and neighbouring or competing areas, including those across the regional boundary;

- Clear indication of stakeholder input in the formulation of the strategy, including statements of support or dissent;
- Complementary actions secured through other agencies such as public transport, health and education providers.

- Consideration could be given to the use of additional incentive resources from a regional "super-fund" for local authorities who have demonstrated exemplary practice, for example by:
  - Securing agreement to their demand management strategy from neighbouring authorities or stakeholders;
  - Emphasising provision of high quality benefits from demand management schemes;
  - Demonstrating innovation or boldness, for example by "calling developers' bluff" in response to threats to relocate because of demand management, or by pro-actively seeking cooperation with local businesses or residents in reducing car use.
- Provision of Demand Management "Transport Skills Partnership" resources to such authorities, especially if associated with flagship status.
- Withholding of grants or credit approvals from local authorities which do not meet the criteria. In two-tier areas this might be confined to resources being withheld for particular District authorities whose policies or practice did not comply with County demand management requirements. Such sanctions could be applied even where the inconsistent proposals (most likely new road schemes) are being funded from developer contributions.
- Requiring any authorities not meeting the criteria initially, to formulate demand management measures with input from the Demand Management "Transport Skills Partnership" as a pre-condition of future LTP funding.
- Use of Government planning application call-in powers as a means of restricting bad practice.

7.13 *Barriers to understanding and implementation*

7.13.1 There is currently no overwhelming political force driving demand management forward. This is due either to a lack of understanding about

the necessity for demand management, as discussed above, or a lack of confidence on the part of government in its abilities to convey this message to those who deny it. Either way, the perception of demand management issues by decision makers too often is that it is something to be avoided. It has been the subject of what was is termed in the USA "NIMTOOism", or "not in my term of office".

7.13.2 In the consultation for this study, we encountered "NUFNOOOism", or "Not Us First and Not On Our Own"!

7.13.3 A number of points were clear from the stakeholder workshops. Although there was a fair measure of agreement amongst transport professionals on the need for demand management, this came with a number of provisos:

- Demand management must be integrated with improvements to the alternatives;
- The objectives (benefits) of demand management must be clear;
- Demand management needs the support of business and economic development agencies.

7.13.4 In promoting the demand management agenda, it will be necessary for the regional bodies to deal with various counter-perceptions that act as barriers to acceptance and successful implementation of demand management measures. Examples are given below:

- The remaining "gaps" or bottleneck in the road network need to be dealt with before we can have demand management.

  It is argued in the study that this is the wrong way round. Investment in road capacity will be poor value unless demand management measures are in place that will avoid traffic growth.

- We can't have demand management until public transport is able to supply a reasonable alternative.

  This standpoint effectively rules out demand management altogether, since public transport could never offer a complete substitute for the current pattern of car travel.

- We can't have demand management because other authorities, or even other countries, will take advantage of us.

  A principal aim of both national and regional guidance is to set a framework that will reduce the risk of predatory competition

between authorities. International competition affects relatively few development types, and a judgement must be made on a case by case basis.

- We can't impose demand management in the form of charging because this will disadvantage the poor, or the less well off motorist.

  The present regime has adversely affected people on low incomes, by encouraging development in accessible locations, by marginalising the role of public transport, making it less frequent and more expensive, and through high traffic levels making walking and cycling conditions unsafe and unpleasant. A charging system that produces revenue to improve alternatives to car travel will have a progressive effect, not least by encouraging the developments that are located in more accessible locations. There will be some specific categories of car user where charging will impose increased motoring costs, for example low-paid hospital shift workers, but is it reasonable to expect transport policy to attempt to solve problems of wealth distribution?

- We can't have demand management until the effects of the measures have been accurately modelled and predicted.

  This too would effectively rule out demand management, since the effects of substantial demand management measures lie outside our present range of experience.

- There may be undesirable and unintended consequences.

  As a statement this is true, but as a counter argument to demand management it is weak. Unlike the unintended and undesirable effects of building new road capacity, any such effects of demand management measures are reversible. (In this regard, it is important that measures are given time to settle in, and not withdrawn in reaction to immediate short term adverse criticism.)

- We can't have demand management because we cannot get agreement on which types of trip should be targeted.

  We need "flexibility" in the introduction of demand management. Flexibility is needed in order to adjust demand management measures in the light of experience of their effects once they are introduced. But flexibility for local authorities in terms being able to choose whether or not to introduce demand management is likely to lead simply to inaction.

8 *Accessibility: the New Spatial Planning Paradigm*

8.1 *The role of accessibility criteria*

8.1.1 There has been a shift away from the "predict and provide" approach to transport and planning towards a more "normative" approach. That is to say that policies and proposals are assessed on the basis of their contribution to a stated set of objectives.

8.1.2 There may be general objectives such as "to improve the environment", or "increase mode choice", perhaps better referred to as aims. The Governments broad aims are now enshrined in the New Approach to Transport Appraisal (NATA) and relate to accessibility, safety, economy, environment and integration. More specific objectives may be translated into targets, such as a reduction of traffic on a particular road or network by a certain amount by a certain date.

8.1.3 In formulating plans, policies, proposals and schemes it is necessary to have criteria on which to judge their effectiveness (as well as value for money). Accessibility criteria are now seen as the main instrument, and are to be applied in both individual planning decisions (through the new Transport Assessment procedure) and in development planning.

8.1.4 Accessibility criteria should be used in:

- Residential and non-residential development proposals (through Transport Assessments);
    - For non-residential schemes, criteria should relate to access ***to*** the site from its catchment;
    - For residential schemes, criteria should relate to access ***from*** the site to employment, retail, education, leisure and other facilities;
- Land use strategies through the development planning system;
- Specifying ***maximum*** levels of parking provision in new developments (but with only limited variation between the most accessible and least accessible areas to avoid perverse development pressures);
- Parking and other charge levels, with access criteria helping to relate these to public transport quality and fare levels.

8.2 *Accessibility criteria for residential developments*

1.1.1 The RTS could set out a method for assessing accessibility from residential developments to various facilities. It is suggested that a scoring system might be easiest to use, and adequate for the purpose of determining individual schemes. Major town extensions would require more extensive investigation in relation to masterplan objectives.

8.2.2 The following tables provide a scenario for residential access criteria.

Table 8.1 Local facilities access 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 an acceptable planning standard:
Urban areas - 25 points
Rural area/small town - 20 points
Note: the target minimum scores will ensure that all housing has food shopping and a primary school within easy walking distance.

Table 8.2 Urban facilities access scores

Type of facility		Maximum door-to-door journey time by non-car modes	
		20 min	**40 min**
Employment	High	8	6
	Medium	4	4
	Low	2	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 an acceptable planning standard:
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.

8.3 *Non-residential development access criteria*

8.3.1 The forthcoming DTLR guide to Transport Assessments provides sufficient guidance on the techniques to be employed in assessing the transport and travel outcomes of new developments. The RTS could play an important role by setting out access levels that should be achieved.

8.3.2 Such regional target levels could take one or both of the following forms:

- ***Benchmarking mode split criteria.*** The mode split of travel to the development should not result in a raising of the average share of travel made by car driver mode. The average might be that given in the National Travel Survey or (when data become available) for the locality in which the development is situated.

- ***Area based mode split criteria.*** In this case a target ***car driver*** mode share could be required for different types of area, such as 30% maximum in town and city centres, 40% maximum in other urban areas, 50% maximum in rural areas.

8.3.3 Car (driver) mode share maxima are inputs to the Transport Assessment process. Local authorities will need to define their own target maxima (no higher than, and where possible lower than) for centres, other urban areas, and rural areas. They will also need to define the boundaries or criteria for distinguishing between these areas. With this framework in place, developers will be required to show, using catchment mapping and analysis, that they have a reasonable prospect of employees and visitors being able to reach their development by means other than the car. The techniques involved are described in the forthcoming DTLR guide to Transport Assessments.

8.3.4 Other criteria can be introduced as a means of improving development practice. An example might be public transport information standards in new developments, including individualised marketing of public transport services to new occupiers. This could equally apply to new residential developments.

9 *Other Key Issues*

Other issues have been identified during the course of the study that need to be addressed in the RTS. These issues, which are dealt with in this section, include:

9.1 *Phasing and Timing*

9.1.1 There is currently little consensus about the type and strength of demand management measures that are appropriate in the South East, and still less is there agreement on the timing and phasing of extensions to demand management such as workplace parking charges and road user charging.

9.1.2 A widely held view is that demand management should not be extended unless and until the public transport and other alternatives are improved. In other words, sticks should not be applied until after the carrots are available. While there are undoubtedly many deficiencies in the transport system, waiting for its improvement before seeking to moderate demand for road use is largely untenable for a number of reasons.

1 Most public transport travel is by bus, and the provision of better bus services almost always requires the provision of spatial or temporal road capacity that is free from the disruptive effects of other traffic. We thus have a chicken and egg situation in which buses cannot be improved until traffic is reduced and (so it is argued) traffic cannot be reduced until the bus services have been improved.

2 Where “carrots” consist of increased general road capacity, the absence of demand management measures in congested areas such as the South East makes it impossible to extract the maximum value of the investment. This is due to the release of suppressed and latent demand; so-called “induced traffic”. We note that the Orbit (M25) MMS has offered a similar view.

3 The pattern of demand by car has to a very large extent arisen because of the flexibility offered in terms of origin and destination choice, and the higher (door to door) journey speeds offered. Taken in the round, it is unrealistic to expect public transport to ever provide sufficient quality and capacity to meet this car-oriented pattern of demand. Overall, a reduction in demand for car use will almost certainly be associated with a reduction in total travel. Claims that public transport must be

improved first reveal a poor understanding of both the purpose of demand management and the likely responses to it.

9.1.3 Given these factors, it is recommended that demand management should be introduced as soon as may be, and in terms of timing should not be linked to or dependent on either road building or public transport or other improvements.

9.1.4 Table 9.1 below sets out a phased programme for extending the role of demand management.

9.1.5 The other key timing issue concerns marketing. It will be of benefit to undertake widespread marketing of the benefits of demand management alongside or in advance of any measures.

Table 9.1 Framework for Demand Management Implementation

	Year																
RTS			02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
LTP	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14		
1st LTP	- Parking Strategies - TAs and TPs - Set up demand management structures - "Flagship" bids - Marketing benefits																
2nd LTP						- Charging Strategies - Flagship demand management towns - WPC - demand management "Transport Skills Partnership" - (Govt. legislates for HA road charging) - Enhanced programme of investment using charge revenues											
3rd LTP											- RUC in Western Wedge + Conurbations - M'way and Trunk Road Charging - Enhanced programme of investment using charge revenues						

9.2 *Developer contributions*

9.2.1 With the move from the "predict and provide" approach embodied in the old system of Traffic Impact Assessments to the normative approach associated with PPG13 and the new Transport Assessments, the system of developer contributions has radically changed. The following points can be noted:

- The system of "commuted payments" in lieu of required parking that cannot be provided on site in new developments is no longer relevant. This is because parking standards are now maxima, and developers cannot be compelled to provide more parking than they themselves wish (PPG13 policy). This removed an important source of revenue for many authorities.
- Other forms of developer contribution negotiated through S106 agreements are currently less certain, and practice varies widely between authorities and between type of development. Local authorities have argued for more standardisation to reduce the need for negotiation on a case by case basis. The Government has responded to this in a recent consultation paper on the future of planning obligations. It is proposed to introduce a system of tariffs, and to make the system more transparent by making public decisions, and by publishing expenditure outcomes.
- Experience with negotiated contributions towards transport and access improvements, both on and off site, suggests that local authorities have been more successful where a clear transport strategy has been in place. For example, developers have contributed to a specific Park and Ride service related to the site.
- There are concerns, however, that local authorities are tempted to allow developments in locations that are contrary to planning policy, because they can bring significant developer contributions. For example, developers can often gain more development surplus from the development of greenfield sites than from brownfield sites, and thus are willing to contribute more as part of greenfield development permissions.

9.2.2 From a regional perspective, the key issue relates to the use of Transport Assessments and accessibility criteria in ensuring that developments are reachable by a choice of modes of travel, and that there is a reasonable prospect of mode split targets being met in practice. Developer contributions should be related to the achievement of this objective. So

whether individually negotiated or part of a tariff system, the contributions must relate to the regional demand management framework and the targets embedded in it.

9.2.3 A further point relates to the use of developer contributions for the provision of schemes which conflict with the RTS, such as road schemes that would have a traffic impact that runs counter to the demand management objectives. The scrutiny at regional level of LTPs and development plans should be alert to such cases, and should if necessary lead to the imposition of funding or other penalties.

9.3 *Reducing vehicle kilometres travelled (VKT) or trips?*

9.3.1 The choice of demand management measures, as discussed earlier, should be based on a clear understanding of the objectives. There are choices to be made, for example, between measures which reduce the demand for car trips (regardless of their length) and measures which act more directly on the total kilometres travelled.

9.3.2 Targeting short trips may result in a relatively small impact on total VKT, but the benefits may be larger:

- A greater proportion of short car trips is undertaken in built up areas, where safety and environmental costs tend to be highest;
- Many short trips (such as morning school escort trips) occur during peak periods, and their reduction can have a significant impact on congestion;
- Short trips (especially those under about two kilometres) are susceptible to switching to walking or cycling, for which little alternative investment may be necessary;
- Short car trips can generate disproportionate pollution due to increased emission levels from “cold starts”.

9.3.3 Longer car trips, however, are responsible for the majority of congestion and other costs on the strategic road network. The West Midlands draft RTS refers to reducing longer car journeys for this reason.

9.3.4 The impact of parking charges tends towards discouraging shorter car trips, since the parking charge would be a higher proportion of the

overall trips costs, and alternative modes are more likely to be available to urban rather than rural residents.

9.3.5 The same may be true of workplace parking charges, although this is by no means clear. On the one hand employers faced with the parking charges would seek to ensure that available spaces were available for the most "valuable" employees. Value in this sense might be those with no public transport alternative (e.g. late shift workers) or those with higher status in the organisation. In these cases there may be no correlation with the length of the journey to work.

9.3.6 On the other hand, charges could encourage an allocation of spaces on the basis of distance travelled.

9.3.7 Research will be needed to determine the impacts once schemes are implemented.

9.3.8 Road user charging on the strategic or inter-urban network would act directly on VKT, provided that it was implemented on a distance travelled basis. This has been proposed for freight vehicles, as discussed elsewhere in this report. Other systems, for example annual season tickets or permits, might have little impact on VKT, since they would tend to encourage ticket holders to undertake more travel.

9.3.9 Road user charging for urban networks, might be expected to act first on short trips, though they could encourage more trips to be made outside or between urban areas, and thus have the perverse effect of increasing VKT outside the charging area. For example, someone resident outside the charge area who is deterred from driving into the charge area may leave the car at home, thus making it available for other household members to use. Again such effects can only be monitored once schemes are implemented. There are likely to be too many imponderables for predictive modelling to be useful.

9.4 *Cumulative impact of smaller developments*

9.4.1 Concern was expressed during the consultation for this study about the tendency to regard schemes of regional significance as being only large schemes. An accumulation of numerous small developments can have an impact on travel patterns and costs every bit as great as a few large scale developments.

1.1.2 The difficulty is that the regional bodies cannot get involved in numerous small schemes. But it does serve to emphasise the importance of ensuring that local planning policies are consistent with regional guidance, and that effective enforcement steps are taken when their implementation falls short of what is required.

9.5 *Compliance and Enforcement*

9.5.1 In the application of demand management policies enforcement is a key factor in three main areas:

- traffic regulation
- parking maxima
- planning conditions.

1.1.2 The first and most familiar is in traffic regulation, where on-street parking, vehicle safety, pollution and the observance of speed limits and bus lanes are examples. Regional policy should encourage and explore methods of equitable enforcement, and acknowledge ways in which purpose guides the application of traffic regulations. An obvious example is parking, where local authorities which have adopted decriminalisation are being seen as seeking profit rather than reducing congestion. This perception needs to be addressed, particularly in view of the earlier comments in this report about transparency and public attitudes.

9.5.3 The second and third areas are very difficult because the transport planning authorities are often not those who grant planning permission. At the regional level some sort of consistency needs to be created, and this is set out in PPG13 as follows,

> "A consistent approach on parking should be set out in the RTS to avoid wasteful competition between different locations based around the supply or cost of parking, to the detriment of sustainable development." (Para 50)
>
> "Car parking charges should also be used to encourage the use of alternative modes. The RTS should set out the context for parking controls and charges by each local authority." (Para 57)

9.5.4 While PPG13 places the burden of responsibility at the regional level, it is not clear how this will be organised or how compliance of local authorities with guidance will be enforced.

9.5.5 The existing system for parking maxima, where regional offices can call in applications, does not have the capacity to enforce them. This needs to be remedied in the new regional arrangements. Once a ceiling has been set, any application which exceeds it should be called in and refused. This ceiling has to be set at the level needed for the region as a whole and not varied by an amount sufficient to alter a location decision from one area to another (i.e. "wasteful competition to the detriment of sustainable development"). Such variation by definition can only be relatively small.

9.5.6 Instead of seeking more parking, developers will have to improve accessibility by sustainable modes, or ensure that their schemes serve more local catchments that can be served by means other than the car. An appropriate legal and financial framework must be in place to ensure this happens, or it would be more honest not to have parking maxima at all.

9.5.7 As regards planning conditions (which apply to developments) for items such as travel planning, there needs to be some mechanism for relating performance of the plan to a stick or carrot (or both). However, it must be noted that a development which has demand management levels of parking, combined with parking controls which mean no invasions of surrounding residential areas by car driving employees, will have to seek alternative means of travel. The local authority and transport operators should find a more welcoming attitude in these circumstances. They will, however, need support and this may well be provided or at least supported at regional or sub-regional level.

9.5.8 Beyond this there are obviously financial contributions to transport access by sustainable means which could be secured instead of commuted payments. The difficulty is where the site is insufficiently attractive to generate the money required. In this case the local and regional authority may wish to contribute, and this would be a more positive way to encourage regeneration and distribute any income from charging.

9.5.9 There are, therefore, two levels of enforcement of planning decisions. One is the requirement for local planning authorities to ensure that developers carry out their schemes and conditions (for example,

including amounts of parking and travel plans) according to the planning permission, and to take enforcement action where this is not done. The other is for the county and/or the regional authority to ensure that the local planning authorities are making decisions in accordance with guidance. Parking maxima is an area where it is known that District councils frequently act contrary to guidance, yet frequently no action is taken against them.

9.5.10 Compliance with guidance is seen as crucial to the success of demand management measures. Local authorities must be seen to act consistently in order to demand management measures to be accepted by the public at large. This is already acknowledged with regard to Travel Plans. Most local authorities recognise the need to "put their own house in order" before exhorting local employers to implement Travel Plans.

9.6 *The role of targets*

9.6.1 Target setting in relation to objectives is always problematic. Targets which are too ambitious will lead to loss of confidence, cynicism and failure, on the other hand those which would be achieved anyway have no real point. The aim is therefore to find challenging but achievable targets.

9.6.2 Two types of target can be distinguished, and each is potentially important:

1 Aspirational targets, which encourage and spur action. An example is the national headline target to reduce road accidents;

2 Operational targets, which may take the form of performance indicators, and which have the potential to be tied to financial penalties or incentives. Operational targets may relate either to outputs or to outcomes. An example of an outcome target might be for traffic reduction. An example of an output target might be the number of bus stops audited for safe waiting annually.

9.6.3 This is closely related to defining meaningful performance indicators which are an essential prerequisite. Targets are simply met when an indicator reaches a defined level by a set date.

9.6.4 Such indicators have received considerable attention from transport planners and the number proposed in some instances calls into question

the level of resources required, the real meaning and comprehensibility of the indicators as a whole and the relationship between the indicators and higher level objectives. Some indicators reach the heart of the problem - for sustainability the relative performance of the different modes in terms of time, cost and quality is the key. Surprisingly this is rarely measured - the modes are often given their own indicators in a separate box. Thus relative cost of parking compared to bus fares could be calculated for town centres, as could access time bands for such centres by car, walk, cycle, bus and train. Defining how many car journeys could be reasonably undertaken by a sustainable mode is more difficult, but would allow measurements of change over time. Within quality the issue of security is an obvious indicator but difficult to define. Here process or output targets for auditing and improving parts of the network may be more appropriate (see below).

9.6.5 The aim therefore is to change the relative performance in favour of sustainable modes. This can be done by either improving alternatives, or raising the (generalised) cost of car use. Improving all modes at once cannot be at the heart of a transport policy led by sustainable development. Only in the context of improved alternatives and the controlling influence of a demand management policy can road improvements take their place in the transport strategy. Here again, in a special sense, demand management is an enabling force and not hostile to use of the car.

9.6.6 Thus the key targets will be for the improvement of alternatives to the car and the relative performance of all modes. New indicators will be needed but there is considerable work available, for example the development of “walkability” indices using digital mapping and quality indicators. In the case of walking and cycling, an increase in absolute levels is desirable on health grounds, but only if safety issues are fully addressed. Thus the implementation of proper, safe cycle and walking provision must be integrated with policies to get people back on their feet or cycles. There is no parallel need to increase public transport or other motorised travel as an objective in its own right. The targets in the Government’s 10 year plan to increase travel by bus and rail without tying this to reductions in travel by car serve no useful purpose.

9.6.7 While the key targets for outcomes are based on encouraging sustainable modes, targets are also needed for outputs and processes. Examples would be the number of employers and employees covered by approved travel plans, or the length of bus priority or cycle lane. These are all vulnerable to the low quality, high quantity syndrome. An example of

this is the London Cycle Network, which has spread through many kilometres, but much of it is of very poor quality. Thus there will have to be some definition of the quality, for example continuous segregated lane for bus or cycle. Regional guidance through the RTS could have a very valuable role in this regard. Similar quality issues apply to travel plans and to street quality audits.

10 *Terminology and Interpretation*

Much of the difficulty in resolving issues in what is a complex and often controversial area is concerned with arriving at a common understanding of the issues. Terms may be used is a very loose way, creating confusion through lack of definition and understanding, or they may be used in way that deliberately attempts to shield realities, or to avoid adverse reactions. The term "spin" is now commonly used to describe this deliberate manipulation of language.

This section attempts to unravel some of the terms used in the field of "demand management", including demand management itself.

10.1 *Demand Management*

> *"The words 'demand management' are those left over after all sensitive words relating to changing people's travel behaviour have been removed."* (Quote from consultee)

10.1.1 Demand management is not the same as traffic reduction – but traffic reduction might be an outcome of demand management measures. (Agreed at Workshop A)

10.1.2 Does not include traffic management measures that are designed to increase traffic capacity, or which are likely to have the effect of increasing demand for car use.

10.1.3 Without the explicit meaning of reducing car use, "demand management" provides sufficient ambiguity or obfuscation for local authorities (and other) to use it in policy documents without provoking unwanted political consequences from motoring or other interests.

10.1.4 The definition of objectives is more important than the definition of "neutral" terms like demand management and traffic management. For example, measures to reduce demand on motorways (ramp metering, tolling etc) may have the effect of increasing demand on other routes, and as such cannot be simply described as demand management in the sense used above.

10.2 *Traffic Management*

10.2.1 Is a generic and non-pejorative term to describe techniques to manage the movement of road users. Such techniques may result in reductions in car use, either directly (e.g. reallocating road space from car to bus) or

indirectly (e.g. speed reduction measures). If deliberately used for this purpose the term demand management is probably more appropriate.

10.2.2 There are many traffic management techniques and objectives that are not primarily or significantly related to demand management. Road safety measures and one-way systems to reduce blockages in narrow streets are examples.

10.2.3 Some traffic management measures work directly the sort ob objectives that are normally associated with "demand management". An example would be techniques which result in significant increased traffic capacity, and hence carry the risk of inducing more traffic. Lower speed limits on motorways and real time traffic information systems, or "auto-guide" technologies are potential examples.

10.3 *Sustainability*

10.3.1 There are many meanings and definitions. The simplest meaning is "ability to continue in perpetuity". Environmental sustainability normally carries a further burden of present activity and behaviour not undermining the quality of life of future generations.

1.1.2 Transport sustainability in these absolute terms is unrealistic, and not helpful. The supply of oil, fior example is finite, so its use is by definition unsustainable if the strict simple definition is used.

10.3.3 A more useful definition is "a situation in which adverse trends are reversed". Examples would be reduction in levels of congestion and pollution. This may be related to reduction in traffic volumes, though adverse effects of traffic volumes other than congestion and pollution are not universally acknowledged (e.g. visual intrusion, socio-psychological impacts, secondary social exclusion impacts etc)

10.4 *Travel Planning*

10.4.1 Travel Planning has emerged from earlier concepts of "green travel plans", "green commuter plans", and "school travel plans". The term has now gained the Government's stamp of approval and appears in recent LTP and planning guidance notes. Travel planning is acknowledged to be an important part of the planning process, and specifically the

Transport Assessment process (as set out in PPG13, 1994, and the forthcoming DTLR guide on Transport Assessments).

10.4.2 The term can, however, refer to a wide range of different techniques and procedures:

- Travel plans drawn up or adopted by individual companies, local authorities or other organisations such as schools, colleges, hospitals;
- Services offered to assist individual organisations to establish Travel Plans (for example the travel planning networks promoted under the Government's energy efficiency best practice programme);
- Schemes that encourage changed travel decisions by residents of an area, whether undertaken at the level of the area, or individual households.

10.4.3 The latter practice is sometimes referred to in other countries as mobility planning or mobility management (but this tends to be inappropriate in the UK due to confusion with planning for the mobility of disabled people). The term "travel blending" is also sometimes used.

10.4.4 "Soft measures" is a European term that refers to measures such as awareness campaigns and travel plans that may influence travel behaviour or demand, but which do not rely on physical infrastructure measures. Fiscal measures are sometimes included in the definition of soft measures.

10.4.5 The term "micro measures" sometimes replaces "soft measures", which sounds weak.

10.4.6 Micro measures imply action at local or site specific level, or the level of households or firms. In this sense it is appropriate in relation to travel plans.

10.5 *Travel behaviour*

10.5.1 Changing travel behaviour – a phrase that suggests that current travel behaviour is sub-optimal, and should therefore be changed.

10.5.2 Commission for Integrated Transport (CfIT) has argued in its latest report that the Government should take a more "pro-active" stance on changing travel behaviour.

10.6 *Traffic limitation*

1.1.1 This phrase goes back to OECD documents of the early 1970s, when government bodies were trying to get to grips with the concept of reducing road traffic demand as an alternative to providing additional road space supply (which had become deeply unpopular in almost all major urban areas).

10.6.2 It is useful in that it provides a generic term covering all aspects of intervention (or even non-intervention) which modifies traffic behaviour from what it would otherwise be. It covered everything from decisions about the minimum driving age, to road pricing.

10.6.3 Taken literally, the term is policy-neutral, though the word "limitation" is likely to appear too negative to be welcomed into the current technical lexicon.

10.7 *Parking provision maxima*

10.7.1 Local authorities have had great difficulty coming to terms with the idea of parking maxima. Having spent the best part of 50 years requiring developers to provide minimum amounts of parking space, the concept of not allowing developers to provide more than a certain maximum has been a big challenge. The concept was introduced formally by the 1994 version of PPG13, although it had been around long before that. Indeed, central London authorities adopted maximum parking standards in 1970.

10.7.2 Part of the difficulty of adjustment has been due to the fact that it has been contrary to the wishes of developers (outside central city areas at least), and hence unacceptable to elected members whose priority is top attract development.

10.7.3 There is also poor understanding of the word "maximum", which is "the highest amount possible". If an amount can be exceeded, then by definition it is not a maximum.

10.7.4 But a corollary of a maximum amount is the possibility of a smaller amount. PPG13 2001 makes it clear that the parking maxima are just that, and that lower amounts of parking space are expected in appropriate circumstances. Yet frequently development proposals are referred to as being acceptable because they meet PPG13 maximum parking "standards", without any discussion of whether the provision

could or should be less than the maximum. This highlights the difficulties associated with the term “standards”. The terms “parking maxima” and “levels of provision” are less likely to be misinterpreted.

10.8 *Parking levels*

10.8.1 The amount of parking provided in a new development should be an output of the Transport Assessment process. As such the term “parking levels” may be more appropriate than “parking standards”, which is less reflective of a process and more akin to a rule.

10.9 *“Reduce the need to travel”*

10.9.1 This is an example of a phrase coined to sound appealing to some while avoiding difficult issues that would make it unappealing to others. Specifically, it was a response to those advocating traffic reduction which avoided expressing any commitment to reducing traffic. As a piece of wilful obfuscation along these lines it has been incredibly successful!

10.9.2 The word “need” is critical to understanding the phrase “reducing the need to travel”. The need to travel can be reduced without travel being reduced. For example, homes and workplaces can be planned closer together, but it does not ensure that people will relocate their home or workplace in order to reduce the journey to work. Hence if the objective is to reduce travel, a reduced need to travel may be seen as a necessary but not pre-condition. The word need was convenient because it shifted the objective away from social engineering (politically unpopular especially in previous Conservative administration) towards one which left open “freedom of choice” (altogether more appealing).

10.9.3 Also important is whether the coiners of the phrase really meant “travel”, or whether they meant “car travel”. There may be good reasons to reduce other forms of travel such as by rail or bus, but these are less obvious, and indeed national targets in the 10 year transport plan are to increase the distances travelled by these modes. Also, there has to date been no mention of reducing travel by air. The term “travel” was chosen because it sounded neutral, and was a reaction to the perceived political necessity of not being seen as “anti car”.

10.9.4 The word “travel” also is not without ambiguity in the popular use. In transport planning terms, travel is usually distinguished from “trips” or “journeys”. Monitoring techniques often focus on mode split, which does not measure travel. Monitoring traffic volumes can be related to total travel (distance), but less easily to total trips. In any case, neither address the issue of “need”.

10.9.5 Finally (as if this wasn’t enough) the word “reduce” requires careful use. Reference is often made to reduced travel or traffic, for example with regard to new developments, without the base from which reductions are to be measured being specified. (Similar confusion surrounds the term “mode switch” in relation to new developments. Mode switch in this context is a meaningless phrase since before the development is occupied there are no trips being made, and hence no switch of mode can occur. The term would be relevant if reference were being made to a benchmark mode split in “typical” or “similar” existing circumstances, but such benchmarks usually are not made explicit.)

10.9.6 The word “reduce” has also been spun so that it can also mean “increase but not by as much as might have happened if…”. In other words, a level of travel (or traffic or trips) that is higher than at present, but lower than some forecast higher figure, can be said to be “reduced”. This amended meaning of the word “reduced” is now common in local authority planning and transport documentation. Those who drafted and steered the Traffic Reduction Acts through Parliament are in no doubt of the original intention: namely an absolute reduction of car traffic compared to past or present baseline levels.

10.9.7 On a more positive point, “reducing the need to travel by car” is a phrase that accurately reflects the role of land use planning in reducing or avoiding car use. Locating “the right development in the right place” creates the conditions whereby people are ***able*** to travel less; it is a valuable but not sufficient condition for reducing travel.

10.10 *Increasing choice*

10.10.1 Secretary of State Stephen Byers has said that he favours choice rather than attempting to determine how people should travel.

10.10.2 While this may be politically attractive, it is not particularly helpful in deciding transport policy. There is a very large difference between choice at a community level and individual choice. Arguable there is no

other area of daily human activity in which individual choice impacts so heavily on everyone else. Individual choices as to how to travel do not result in outcomes that would themselves be likely to be chosen. They are chosen in the knowledge that better choices are not on offer, and also in the knowledge that unilateral; attempts to achieve better outcomes (i.e. by foregoing car use) have no impact on wider environmental or other outcomes.

10.10.3 There is a further problem with the objective of increasing transport choice. For many people without access to cars, increasing travel choice will often mean enabling to have access to cars. For those with cars, and whose travel needs are reasonably satisfied (i.e. with parking space available and tolerable levels of congestion) increasing travel choice will often be irrelevant. The additional choice of a bus or a cycle track may have no appeal, unless of course those facilities are to be used by others who might otherwise occupy scarce road and parking space.

10.10.4 The term "increased transport choice" must therefore be specified in terms of whether it relates to individual choice or community choice.

10.11 *Charges, prices and costs*

10.11.1 In this report "charges" are seen as individually identifiable components of the overall monetary amount that people have to pay for transport services, especially roads and parking. Where the whole system of charging is dealt with (consisting of a range of charges such as vehicle excise duty, fuel duty, parking charges, tolls and so on) the term "charging regime" is used.

10.11.2 It is usual for payments of the use of public transport to be referred to as fares, but there is no conceptual difference from other transport charges.

10.11.3 The term "prices" may be used, but these normally refer not to the charge mechanism (parking charge, road user charge etc.) but to the actual amount charged. Thus the terms "price levels" or "charge levels" are used.

10.11.4 In this report emphasis is given to the need for "getting the price right" for transport services, in order both to achieve a more efficient balance between supply and demand, and to achieve other objectives such as reduced environmental or other impacts of travel.

10.11.5 The “right price” is seen in terms of a price that equates in some way with the costs of the travel being undertaken. In transport, however, the way in which this price is charged has a major role in its effectiveness. To be effective, two requirements have to be met:

- The price has to be perceived by those paying it, in order to impact on their travel decisions. Thus company car users are less affected by prices than motorists who pay their own way.
- The price has to be related to the (marginal) costs of undertaking particular trips. In this way people can save money by not travelling. This often applies to public transport users (who pay according to the journeys they make), but not to car users because most of the charges for car use are paid in lump sums in advance of travel, and are largely unavoidable however little use is made of the vehicle. This “two-part tariff” of fixed and variable charges acts as a direct price incentive for car owners to make as many of their journeys as possible by car.

10.11.6 Finally, the “costs” of supplying transport or travel to users include not only those monetary costs that can be identified in Government or local authority accounts, but a wide range of non-monetary costs that are borne by both individuals and wider groups or communities. These include the costs of environmental damage, accidents and dangers, and the costs of delays to users when facilities are congested.

11 *Study Method and Reports*

11.1 *Overview of Method*

11.1.1 The study method can be divided into two stages. The first involved a review and synthesis of issues in relation to travel demand management in the South East, and the appropriate level and type of guidance to be included in the revised RTS. Since the output required "ownership" by stakeholders for whom regional guidance will be provided, this stage also included an element of consensus building through consultation and workshop activity.

11.1.2 The second stage included the development of specific RTS content, relating to the four key travel demand management issues highlighted in the study brief. A further workshop addressed specific technical and policy issues, and continued the consensus building of Stage 1. This then fed into the preparation of the study final report.

11.1.3 These stages are described in more detail below.

11.2 *Stage One: Review and synthesis*

11.2.1 After agreeing key issues with SEERA, we reviewed the policy content, with regard to demand management in the South East, of national policy including targets, regional frameworks and strategies, and the European policy framework.

11.2.2 We also reviewed key studies and plans undertaken in the South East (and adjoining regions where necessary). These included inter alia the Local Transport Plans and their Annual Progress Reports, multi-modal studies, Thames Gateway and GLA congestion charging studies. We also reviewed policies of, and consulted with, adjacent regions (London, South West, East Midlands, East England).

11.2.3 Once this existing information was synthesised, we held the first of two key-actor workshops which aimed to identify and create "ownership" of the issues, and to elicit from participants what sort of framework they would find most helpful in implementing demand management policies.

11.2.4 The first workshop focused on the overall need for demand management, the needs and concerns of local authorities, developers, and others, and the appropriate level of guidance for inclusion in the RTS.

11.2.5 Over 28 individuals were invited to attend, ranging from local authority officers from transport and planning departments, the private sector including consultants and commercial businesses, quangos, environmental groups and members of the road lobby.

11.2.6 Of those invited 13 attended, representing six local authorities, two private consultants, two environmental groups, one road user's organisation (the AA) and the Highways Agency.

11.2.7 The workshop looked firstly at the nature of travel demand management, and the general commitment to it as a concept. Discussion then moved on to Demand Management measures themselves. The key points that emerged were:

- Uncertainty as to the role of the RTS
- Dealing with different situations across the region
- Cross boundary issues
- Difficulty in scale – local versus regional
- The role of LTPs and S.106 agreements

11.2.8 Following the workshop, a paper was produced of the review and consultation findings, providing pointers to how the four key issues will be addressed in Stage 2. This was presented to an Expert Review Panel of academics with expertise in pan-regional economics, transport policy, implementation, and the potential role of internet and IT technology. The aim was verify and thereby to provide weight to the findings.

11.2.9 The Panel consisted of Professor Phil Goodwin (University College London), Dr. Glen Lyons (Southampton University), and Professor Roger Vickerman (University of Kent).

11.2.10 The concluding task of Stage 1 was the production of an interim report to the client, based on the findings up to this point.

11.3 *Stage Two: Report and recommendations*

11.3.1 The second stage of the study was to prepare the final report. The stage included policy development and technical justification carried out by the consultant team, augmented by further inputs from a second stakeholder workshop and scrutiny by the expert panel.

11.3.2 The draft recommendations were the main subject for discussion at the second stakeholder workshop. All those that attended the first workshop were asked to participate in the second workshop. In addition, a further six organisations and local authorities were invited.

11.3.3 10 in total attended the second workshop - six from local authorities, one environmental group, one airport authority, the Highways Agency and the Strategic Rail Authority. Six of these had also attended the first workshop, providing a useful degree of continuity.

11.3.4 Since the study brings forward new "policy products", the workshop was regarded as a "market testing" exercise, providing insight to the level of "ownership" of the recommendations, and helping to ensure that they were both technically robust and acceptable.

11.3.5 Following the workshop, a draft final report was prepared, which drew together all the technical and other study material to date, and which was the basis for the second Expert Review Panel.

11.3.6 In particular, the Panel discussed the relative balance between charging and other demand management measures, and the need for all measures to work in concert. Phasing and timing was another prominent issue in both the Panel and Workshop meeting in Stage 2.

11.3.7 In addition, during Stage 2, members of the consultant team made a presentation of the findings and conclusions at two seminars organised by SEERA with the RTS reference group. These were held in Maidstone and High Wycombe, and enabled the consultant team to gain a fuller understanding of intra-regional issues prior to the preparation of the final report.

11.3.8 The present report is the main product of the study. It is supported by a number of working papers submitted to the client during the course of the study. These are:

Working Paper 1	The justification for demand management
Working Paper 2	Demand management Methods
Working Paper 3	Policy and Studies Review
Working paper 4	Review of LTP annual reviews in the South East
Working Paper 5	Terminology (now subsumed within this report)

The final task was the production of the final report and submission of copies to the client group as specified in the study brief.