THE TRANSPORT PLANNING SOCIETY

AGENDA for CHANGE for the New Government June 2016

CONTENTS

1 Introduction and Summary of Recommendations

2 Context: a Time of Change

Spending and governance

The failure of bus deregulation outside London

Major growth in rail passengers

Private road transport and 'Peak Car'

Implications for CO2 and air quality

National modelling and forecasting

Walking

Cycling

Smarter Choices and other demand management policies

Freight

3 Moves in a New Direction

Linking up with land use planning: new transport and planning guidance

New governance and funding

Transport planning and health

New appraisal and evaluation

The role of car use

The freight and logistics logjam

Demand management for car use

National policies and major infrastructure investment

Annex 1 Map of UK journey to work areas

Annex 2 Summary of key findings and recommendations from the Eddington report

1 Introduction and Summary of Recommendations

The Transport Planning Society and the approach to preparing this Agenda for Change

The Transport Planning Society (TPS) enables professional development and provides a meeting place for all those working in the transport planning sector, and takes a leading role in responding to emerging policy challenges. We are dedicated to facilitating, developing and promoting knowledge, understanding and best practice in transport planning. We work closely with other professional bodies in transport and planning, who are represented on our Board of Directors. TPS provides the professional qualification for transport planners (the TPP) jointly with the Chartered Institution of Highways and Transportation and runs the industry-wide Professional Development Scheme (PDS) for transport planners.

Before the 2010 election, we produced a 'Manifesto' setting out general principles. Following the 2015 election, we want to explore in more detail some of the issues which we consider the incoming administration should begin to tackle, with the idea that this will provide the framework for a constructive dialogue between the Society and the new Government. In preparing this 'Agenda for Change', we have referenced a range of appropriate sources, including the following.

- Recent policy responses by TPS to Government consultations.
- Proceedings of relevant events from the TPS 2014/15 programme covering areas such as: aviation policy and the Davies Commission; appraisal and modelling; transport and health; and a variety of consultation meetings focused specifically on the draft 'Agenda'.
- The results from the TPS Annual Member Survey undertaken at the end of 2014.
- Reports produced as part of the TPS Bursary scheme where young professionals produce a short research report on a specified theme. The 2014 topic was what an incoming Government should do to improve planning for transport.
- Direct input from TPS members on the draft 'Agenda' through our website and discussion forum.

Before providing detail on the key areas that have emerged, we want to set out some overall principles that have underpinned much of the Society's policy work since it was founded.

Key principles

Firstly, we consider that the Department for Transport in the UK should set out:

- clear high-level objectives that transport can help achieve, to enable rational decisionmaking;
- a coherent framework within which transport decisions can be made by all actors, including private companies and individuals, national funding Departments and agencies, and local authorities.
- standards for the design, assessment and monitoring of the impacts of transport planning interventions, and procedures to ensure that the skills and quality controls are in place to achieve the intended outcomes.

Secondly we consider that planning for the UK's transport must be based on three key tenets:

- the need for land use and transport to be planned in a genuinely integrated manner the disposition of land uses creates potential transport demand and the provision of transport networks creates opportunities for new land uses
- the need for transport networks to be well maintained and managed, and for demand for their use also to be managed, is integral to ensuring they achieve their wider objectives
- there must be real and significant reductions in transport-related external (non-user) costs,
 from local townscape to global climate change the environment is no longer a 'free good'.

Key issues and recommendations

This Agenda for Change covers the whole context within which transport (and spatial) planning should be discussed. In such a wide ranging document, not every detail of every problem, or subtlety in terms of solutions, can be covered; and neither can each individual member's position can be fully represented. As a Society, we have tried to set out a fair representation of our members' views and concerns while going beyond a set of generalisations which might be hard to disagree with, but which would do little to directly address the key transport planning issues we face.

What follows in section 2 is an account of the Context within which this Agenda for Change is set. In section 3, we establish and address a series of key questions under the heading 'Moves in a new direction'. These questions, and the recommendations we arrive at, are as follows.

1) How can we link up transport with land use planning – with new transport and planning guidance and combined powers?

Our key recommendations are:

- a) New guidance is needed to promote growth not only in terms of development, but also in terms of the sustainable transport networks which are needed to maintain it.
- b) The scale and location of all development should be related to the accessibility of the site by sustainable modes
- c) If developers wish development of a larger scale, then the planning application should include proposals for a corresponding increase in site accessibility by sustainable modes.

2) What new governance and funding is required, especially in England? What about combined authorities, Highways England and beyond – fewer competitions and more consistency and integration?

- a) A compatible approach for smaller scale spending, and to schemes with high revenue content, to that for large scale capital spending, where the argument for greater longer term consistency of funding seems to have gained ground. The former is often the key to sustainable transport schemes and demand management.
- b) Much greater coherence between transport and land use planning, both through national guidance, and at local level, either through new and binding duties to cooperate across authority boundaries to comply with that guidance, or the creation of combined authorities at least for these functions.
- c) Without a new "top down" total reform of local government, the evolution of a simpler and accountable structure for transport spending, across capital and revenue, building on the emerging combined authorities and city deal arrangements, but ensuring the inclusion of sustainable transport at its core.

3) Transport and Health – how do we recognise the importance of transport and active travel, but include the disbenefits of inactive travel?

Our key recommendations are:

- a) A systems-based approach is needed to addressing the adverse health impacts of transport, with all impacts being considered in combination
- b) There needs to be a long-term strategy and funding for addressing transport-related health issues
- c) The health benefits of reduced car dependency need to be recognised and fully taken into account in project appraisal
- 4) A new approach to appraisal how do we create a realistic approach to economic, health and social benefits but without double counting? How can transport forecasting be made more transparent, recognise the value of demand management, and engage with the profession to understand changes in demand on a whole journey basis?

Our key recommendations are:

- a) The Government needs to encourage a more structured and integrated approach to transport planning with multimodal strategies being developed to address a wide range of problems in an area. All elements of the strategy then need to be implemented within a consistent timescale, not just selected schemes
- b) We need a more fundamental approach to understanding the impact of transport changes on economic growth, and to ensure that benefits claimed for one scheme are not simply being abstracted from another area
- c) The benefits of Smarter Choices and demand management need to be fully taken into account in appraisal and in national traffic forecasts
- 5) Intelligent motoring building on the TPS submission on Motoring of the Future what is the role of the car? Within that, how can we support car use where needed?

- a) More work needs to be done to reduce the external disbenefits of car use (safety, health, environment, land needed for parking)
- b) Some aspects of car use, particularly parking, could be made easier to access using new technology without compromising sustainability
- c) The benefits of car use can be made more available using schemes such as car clubs while enabling more sustainable choices overall
- d) Land use planning must recognise the need to reduce car dependency
- e) A clear national policy on parking provision is needed, balancing the need for car use where it is essential with discouragement of car use where more sustainable alternatives are or can be provided
- f) Any expansion of road capacity should take full account of changing lifestyles, new technology and the potential for demand management to reduce car use.

6) How do we give freight issues the focus they deserve - better planning for interchanges including ports as well as rail, being pro-active on vehicle sizes and standards, and Lorry Road User Charging - achievable in a Parliament and a game changer for demand management?

Our key recommendations are:

- a) Port strategy and port development should take full account of the implications for land transport of goods to and from the ports, most notably congestion and environmental issues.
- b) Lorry Road User Charging should be introduced as a means of compensating for the external costs of HGV movement, encouraging a better match between vehicle and load size, and imposing fairer costs on foreign hauliers

7) **Demand management:**

By price? National user charging may not be achievable but parking is an obvious alternative – what is the long term plan to replace fuel duty?

Travel behaviour change in its own right: can this be reinstated in national forecasting and funding and in the planning system at local level?

How can we promote non-motorised travel? Is there is a need to understand differences between walking (which has many non-travel benefits) and cycling, and that the creation of active travel through these modes has many benefits?

Our key recommendations are:

- a) Demand management of motorised passenger transport must be an integral part of any overall transport strategy
- b) Government must make a realistic estimate of future carbon reductions, loss of fuel tax revenue, and any change in user pricing which is required
- c) The impacts of travel behaviour change must be fully recognised and there should be a sustained and funded programme to implement it
- d) As required by the Infrastructure Act, the Secretary of State should implement a Cycling and Walking Investment Strategy
- 8) Do we need a national spatial and transport strategy? For major infrastructure investment in air, rail and road how do we know where and how much to build if we haven't implemented demand management yet?

- a) Transport strategy must embrace maintenance, management and improvement
- A national framework for spatial development and long-distance travel embracing all modes is needed, but one within which local and regional bodies can function effectively and which respects the progress of devolution as it proceeds
- c) The recommendations of the Eddington Report are as important now as they were 10 years ago, and should be a key driver of national transport policy and major transport infrastructure development.

2 Context: a Time of Change

As a prelude to our Agenda recommendations, we explore a number of current issues which are of concern to our members and which provide a context for our discussion of key issues.

Spending and governance

In the current Parliament, transport has been undergoing yet another political upheaval, both in terms of its funding and its governance. This looks set to continue into the next. Currently, we have no fewer than 5 ministers of state for transport covering items such as the huge HS2/3 investment, trebling the strategic road network programme, making the Highways agency semi-autonomous in implementing that programme, scrapping most of the planning and transport guidance for development, putting aside the Local Transport Plan process and no longer monitoring it, and giving new money and powers to loosely structured Local Enterprise Partnerships (LEPs). In addition, in the last 5 years over £600million has been given, through a series of competitive bidding rounds, to local authorities for innovative but short term schemes under the Local Sustainable Transport Fund (LSTF). However, at the same time, local authority budgets have been cut, leading to significant problems ranging from a road maintenance backlog to the loss of bus services and, often ignored, a loss of transport planning expertise. Overall their ability to moderate the impact of new development on the transport networks has been weakened. From left field has come the challenge presented by the Scottish Referendum – how should transport be organised in England in general and in our major cities outside London in particular? What can we learn from the London governance model?

The overall picture is one where a lot of money is being spent and committed, but there is no coherent multi-modal plan for transport, nor for its close interactions with land use planning. Thus we have a National Policy Statement for the National Road and Rail Networks, but this is limited to use "as the primary basis for making decisions on development consent applications". Within it are policy-like statements, but no clear overall policy framework.

The diverse geographical coverage of LEPs, and their variable capacity in terms of transport planning, is also a source of major concern¹, however some local authorities have taken the opportunity to press for further change in transport governance, and this has been encouraged by the debate over what to do about England (and Wales and Northern Ireland) now that Scotland is receiving even greater local autonomy. There is a real prospect of devolved transport and other powers in at least some major conurbations, beginning with the establishment of five "combined authorities". Such a move has strong support among TPS members, with over 70% supporting this option, as opposed to either restoring previous regional bodies (13%) or local authorities creating their own joint arrangements (also 13%).

This has led to a public discussion about the transport connections between the Northern cities as a functioning area or areas, although this is often proceeding on a mode by mode basis rather than a combined transport and communications approach. Cities across the UK also seem to be being treated differently, for example there are plenty of issues in the South West as much as the North West. In particular, there has been rapid progress in Greater Manchester, where there are

While LEPs were felt to be somewhat positive on economic development overall, they were considered to be somewhat negative on supporting healthy lifestyles and a pattern of development which reduces the need to travel, and on carbon emissions.

proposals, with cross party support, to appoint and then directly elect a Mayor and to create bus franchising similar to the London model. A combined authority has already been established.

The failure of bus deregulation outside London

In this context of devolving powers to urban areas there seems to be a new cross party consensus emerging that in major cities there must be a better way to organise public transport services, and that bus deregulation, at least in the conurbations, has failed. The chart below illustrates the point. Since 1986/87 bus use in London has more than doubled (+105%) while, despite a small rise last year, in the former Metropolitan areas² it fell 44%, and in other parts of England fell 17%. The latter is despite the introduction of free bus travel for pensioners in 2008, which in itself now costs over £900million a year³. Outside the cities a third of bus travel is through the concessionary pass.

Billion journeys Change on 86/87 2.5 London 105% 2.0 1.5 Non-met area 1.0 Met areas 0.5 Note: Break in time series outside London in 04/05 due to change in estimation method 0.0 86/87 00/01 04/05 08/09 13/14 De-regulation Statutory free Transport for outside London concessionarytravel London (local 06/07, national 08/09) created

Number of bus passenger journeys since 1985/86

Reproduced from: Annual Bus Statistics 2013/14, DfT, September 2014, England only

However this is only part of the story. First, there was a major long term decline in bus use before deregulation, despite a levelling out just prior to 1985. In addition, in London the financial support for bus as well as tube has been far higher than elsewhere. This has been combined with the advantages of a comprehensive public transport offer and integrated ticketing. Thus it is dangerous to adopt a simple "deregulation bad, franchising good" approach. Some city bus operations are profitable and could respond well to franchising, but many urban and rural operations are not, and in such cases Government will have to make much more support available if the integrated franchise model is to succeed.

There have been a couple of notable long term examples - Nottingham and Brighton – where bus use is significantly higher per head than any other city except for London. Both had very successful municipally run companies which formed the basis for local commercial companies after deregulation and continued worked closely with their local authorities⁴. Meanwhile in other places the impact of local authority cuts is being felt – a 7% fall in supported bus mileage from 2013 to 2014 with the erosion of marginal services particularly affecting rural areas.

London 288; Brighton and Hove 167; Nottingham 160; Tyne and Wear ITA 125; West Midlands ITA 106

² Tyne & Wear, Merseyside, Greater Manchester, West Midlands, South Yorkshire and West Yorkshire

³ Core national scheme – local authorities supplement this so the total figure is over £1billion

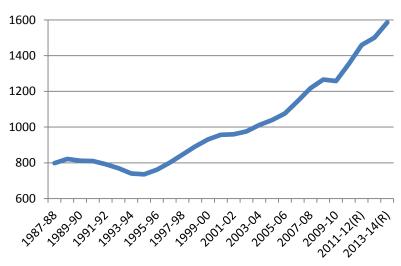
Top 5 authorities for bus use per head (DfT stats as used for the TPS NI submission):

Major growth in rail passengers

While bus use has provided a mixed picture, since the mid-nineties use of the railway has continued to grow to levels completely beyond most national and other mainstream forecasts. Journeys have grown by over 60% in ten years, with half of that since the recession. Growth in rail freight has also occurred and this is considered later in this document.

There remains some doubt as to exactly why this passenger growth has occurred. However, the productive use of train time through laptops, smartphones and WiFi is an obvious contender but not the only one. Thus similar growth has been experienced on the London and South East network, where journey distances are much shorter, and for commuters the services are often overcrowded. It has also taken place in the context of fare rises consistently above inflation, as successive Governments have sought to transfer costs from the taxpayer to the train user.

Franchised rail passenger journeys: Great Britain



Source: Office of the Rail Regulator (ORR), LENNON database 2014

There is considerable demand management by the train operators, through large price differentials between peak fares and highly competitive offers such as non-variable advance tickets on the web at less popular times, as well as traditionally cheaper "walk up" off peak tickets. While this growth phenomenon is clearly established, and evidence that it is from new as well as existing users, it is an area where further understanding is required⁵.

While car travel is still dominant, and will remain so in many areas, rail is now in a market position to offer sufficient reductions in traffic to have a significant impact on road congestion on the strategic and key urban networks. Since, in already congested conditions, congestion rapidly increases with small traffic increases, marginal changes can have a major impact. As well as the speed flow curves used in much transport modelling, this was illustrated by the DfT congestion indices during the recession⁶, where a modest decrease in traffic (around 3%) resulted in the congestion measure falling by 15%. The issue for rail then becomes one of how to provide the capacity for growth both from an increasing population and any transfer from car.

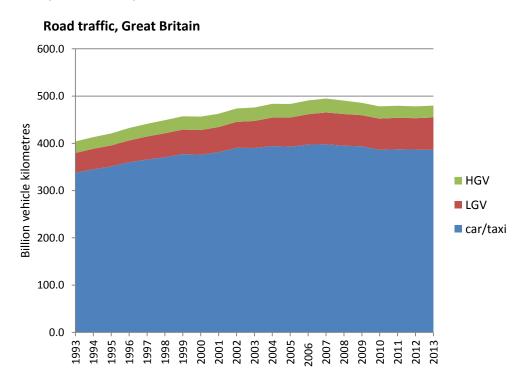
For more details see regular quarterly bulletins from the ORR: Passenger Rail Usage

⁶ Table CGN0101: Average vehicle delay on the slowest 10% of journeys on the Strategic Road Network

Private road transport and 'Peak Car'

In relation to road traffic, one of the key debates has been whether some sort of saturation level for car use is being reached, and while some insights have been gained through recent research⁷ this is still an area of disagreement amongst professionals. In summary there is agreement that car trips per person seem to be falling, as is licence holding amongst people in their student and early working life (particularly men). There is, however, a continuing upward pressure on the traffic forecasts from population growth. One area of disagreement is whether that growth will be in cities with lower car use rather than more uniformly spread, and whether the recent EU migrant and non-EU immigrant populations will continue to have different travel patterns into the future. In the long term, it is argued by DfT, patterns will return to the historically normal levels of car use. Other commentators believe that a peak has been reached, and that this is reflected throughout the developed world.

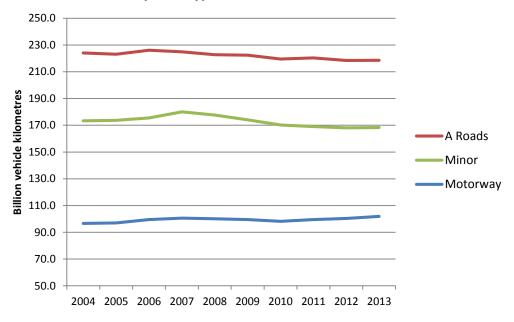
The data certainly shows that over the decade car use has fallen slightly in absolute terms, and appears to have begun to fall before the recession. On the other hand, van traffic has grown strongly – surely explained at least in part by the huge growth in internet shopping. The recession had a major impact, particularly on HGV traffic which has not recovered and is still about 15% lower than its pre-recession peak. The chart below summarises DfT national traffic counts.



While car traffic over the last decade is slightly lower overall, there has been growth on the strategic road network, with balancing falls on local authority roads. This is shown in the following chart.

See for example "On the Move" Peter Jones & Scott Le Vine, RAC Foundation 2012, "Peak Travel, Peak Car and the Future of Mobility" Phil Goodwin, ITF, November 2012, "Peak Car" David Metz, January 2014

Vehicle traffic by road type, Great Britain



Source: DfT traffic counts

Given this disparity it is surprising there has not been more analysis of this effect and its implication for transport policy. For example, earlier DfT research⁸ showed that 50% of car kilometres are produced by car trips over 20 miles, although these are only about 10% of car trips. These same journeys produced 45% of the CO2 emissions from car use overall. TPS has previously called for evidence based policies which would set out the framework for longer distance travel⁹ within the UK and to the EU – this is still conspicuously missing, for example in the proposals for a new framework for the strategic highway network. Unsurprisingly 93% of TPS respondents in the 2014 Member Survey supported a national transport policy framework within which all other policies could sit. As part of this, 90% believed that demand management should be prioritised. There are many options for this, with or without use of pricing, whether for road use or parking. Smarter Choices can provide a wide range of incentives to be applied, creating a "push-pull" or "stick and carrot" package. While most are applied at local level, many local journeys use the strategic network. The use of several elements at once tends to be more effective, while moderating the impact of any single element and creating wider choice. This approach is, however, missing from national policy statements and the transport forecasts on which they are based.

Implications for CO2 and air quality

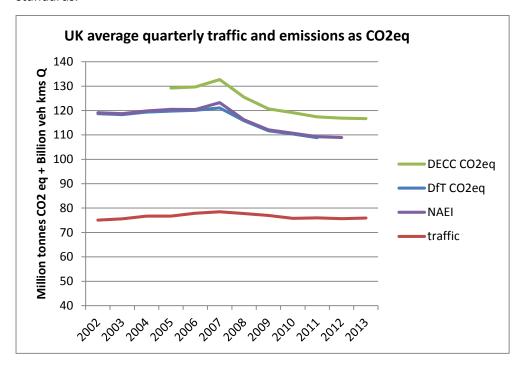
On the related subject of CO2, 85% of TPS members in the same survey did not believe the DfT's forecasts for carbon reduction could be achieved if the traffic forecasts were correct¹⁰. The CO2 data goes some way to explaining this lack of confidence. Government has several sources for this and the DfT data only goes as far as 2011. The chart which follows shows the other Government data sets which go up to 2013 and reveal clearly the lack of progress in reducing greenhouse gas

⁸ Carbon pathways analysis, DfT, June 2008

For example see the *TPS response to consultation on HS2*, August 2011, and *TPS response on the aviation framework consultation*, October 2012

However, 67% did not believe that the national forecasts were likely to come about in urban areas.

emissions from road transport (including all emissions but measured as CO2 equivalent). This is despite a one off fall due to the recession and an improvement in the efficiency of new cars being sold. It must be remembered that it takes 15-20 years for all vehicles to reach current emission standards.



Sources: DfT, Department of Energy and Climate Change (DECC), National Air Emissions Inventory (NAEI)

The fall in CO2 from road transport associated with the recession, which has not so far bounced back, is due at least in part to the fall in HGV traffic (see above) and thus emissions. Obviously the emissions per vehicle kilometre for the largest HGVs are far higher than for cars or LGVs. A recovery in HGV traffic could actually cause emissions to rise.

Of course carbon emissions are not the only cause for concern in relation to road traffic, and again TPS Members have reflected the growing awareness across the profession of the potential for positively linking transport and health policies. These are explored in more detail later in the next section of the Agenda and are informed by our event on transport planning and health¹¹.

National modelling and forecasting

In addition to concerns over different patterns of growth on the networks, and the risk of failing to tackle emissions, there is widespread acceptance that the current national traffic forecasts are not capable of describing the interactions between modes, in particular road and rail, nor the impact of land use planning or demand management such as "Smarter Choices". The current national model is itself the product of a long history of add-ons and adjustments and suffers from the fact that it has not been opened up at least to researchers and modellers. DfT have now begun to engage with the profession and this is very welcome, but the lack of integration with other modes and policies and of access to the national model has led inevitably to a lack of confidence. Even more importantly it has led to a lack of the testing of alternative policies. Again this is reflected in the annual TPS Member Surveys, most recently only a minority (38%) of respondents thought DfT appraisal methods

11

Better together: integrating transport and health policy and practice, TPS Event 21 January 2015

satisfactory or completely satisfactory (1%). A significant minority (16%) believed decisions were political and appraisal was redundant. Many respondents mentioned the failure to assess a wide range of alternatives, and impacts on land use, health and the economy.

Overall the DfT needs to engage more fully on this issue, not just supplying information (which is of itself welcome) but responding to the comments it receives and sharing its modelling and data to a greater extent. The National Travel Survey in particular remains an incredibly valuable source of data for transport planners and is widely used. The National Traffic Model is at best extremely complex and thought must be given to releasing some of the core relationships within it, even if it is not released as a whole functioning unit.

Walking

Walking remains the dominant mode for short journeys (especially less than a mile) and represents about a fifth of all trips¹². It has major additional functions – footfall is the key to successful town centres, and, less well understood, it is key to agglomeration benefits in knowledge based industries and a major factor in many others. It also remains outside most national and local modelling and forecasting, partly because of the lack of reliable data on short, especially walk, trips. However, it is also because trip lengths are short and thus have a low share of distance travelled. Distance travelled remains the key input to most transport appraisals. This again illustrates the reasoning behind the links between land use and transport planning referred to earlier. Developments which reduce the need to travel, for example through higher densities, use of brownfield sites, and provision of local facilities, will effectively shorten trip distances and enable walking to fulfil them. In a sense walking is the key illustration of the need for such links.

The benefits of walking in terms of transport, health, and the environment are widely understood but poorly represented in appraisal and scheme implementation. This is reflected in the TPS survey, in response to the question: "Which do you think should be the top priorities for transport spending in the next 5 years?" - members put walk and cycling top.

The health benefits of walking (and cycling) are well established, to the extent that they can now be included in cost benefit based appraisals. This has led to a major change for prioritisation within any budget for non-motorised modes or for competitive bidding such as the LSTF, but is rarely used to compare between modes. Indeed, the negative impacts of motorising travel on health are not currently included in formal appraisal, either at local or national level.

Cycling

Cycling suffers from similar neglect to walking, but this conceals important inherent differences between the two. In terms of function, cycling fulfils an important role for journeys over a mile with a more conventional mode competition role – for example with car and bus. It is an important feeder mode for rail. It shares the requirement for on-road space and for parking provision with other road modes.

Perhaps the most important observation is how variable cycle use can be between similar areas – nationally around a 2% share of trips but into double figures in some cities¹³ and showing some very

National Travel Survey 2013, walking 22% of all trips

¹³ Cambridge had a mode share of 18% cycling for the journey to work in the 2011 Census

high growth rates (for example London). This makes policy formulation and consistent national implementation of cycling policies at each local authority level extremely difficult. The picture is one of great potential but limited roll out and "mainstreaming". As a non-motorised mode, land use planning is again a key factor, as is the need for a comprehensive approach to demand management. In recent policy, the tendency for cycling (as with walking) to be mostly funded through competitive short to medium term bids plays against this need for consistency, although it has enabled some schemes to be implemented, and some innovative ideas to be tested in action.

Smarter Choices and other demand management policies

A significant amount of the Local Sustainable Transport fund (LSTF) has been spent on projects to promote walking and cycling as well as some for public transport. It has also funded many travel behaviour change schemes collectively known as Smarter Choices. In a question which asked for up to 5 priority policies, walking and cycling were most frequently included in the spending priority list for TPS Members (58%), with non-high speed rail capacity second (55%) and Smarter Choices third (52%). The diversity and innovation of LSTF has been very welcome, but in many cases there is a lack of long term "mainstreaming" of what has been achieved. The series of competitive short term funds (most recently one year extensions), with the added complexity of match funding and of inflexibility between revenue and capital spending, has both distorted the bids and obstructed long term planning. This contrasts strongly with the continuity offered to the new Strategic Highways Company in the form of 5 year planning periods and regional investment strategies (parallel with those for Network Rail).

One concern, considering TPS members view on the need for sustainable travel packages, is the difficulty created by having a national rail network with many places where there are weak links to local policymaking. One of TPS criticisms of the new "Highways England" company structure for the strategic road network is that it might not be responsive to local needs. Looking at this from the other side, the sweeping away of planning controls means that development which will have a detrimental impact on congested national networks is more likely to go ahead.

In 2012, the largest scheme to manage demand, albeit for a limited period was undertaken by TfL in relation to the Olympics. This demonstrated on a large scale the potential for comprehensively planned demand management and traffic management, working together to reduce traffic, up to 35% in some instances¹⁴. TfL has an ongoing commitment to implementing such policies, which work as part of the strategy which has seen London's population and economy grow, but road traffic fall. This brings us full circle to the issue of governance, powers and funding, and how the debate over new powers for Scotland may lead to some of the advantages of the London devolved model being available in other areas of the country.

However, demand management is not just about improving alternatives and people's access to them. The issue of fair pricing for road use is one which has been debated for decades, with a strong professional consensus that pricing should reflect costs in real time, not simply an average collected through fuel duty. For passenger car use the issue of pricing has been somewhat obscured by the

This was fully set out in the presentations to the TPS Olympic event in London on 17th October 2012. One of the presenters, Emma Osbourne, TfL Central London Zone Transport Manager for the Olympics, was made TPS Transport Planner of the Year for 2013.

significant gross amount collected from users in tax as traffic has grown. There are, however, major differences between passenger and freight modes.

In terms of recent changes, it is clear that, if the Government achieves its targets for carbon reduction through vehicle technology, income from car use (eg fuel duty) will fall dramatically, either requiring even more cuts to public services, or new ways of raising revenue from road use. A key issue for transport planners is how this would influence traffic patterns, and thus both forecasts and appraisals. Successive Governments have so far failed to create the level of understanding needed to have a rational debate about the issue and, perhaps even more importantly, explained that other methods of raising revenue will have to be deployed.

In this sense the use of the workplace parking levy, itself a diluted form of overall parking space charging, is an option which has aroused interest but only one implemented scheme in Nottingham. Its success in funding the new tram system has encouraged other cities to revive their interest but it remains to be seen if other schemes will come forward. The need for land use planning controls to accompany such schemes only highlights the lack of effective governance structures and the consequent lack of an integrated approach.

Freight

While a great deal of attention is given to passenger transport, freight is less well represented in data collection, forecasting and modelling, although there are important long term annual surveys for Heavy Goods Vehicles (HGVs) which provide an important data source¹⁵. However, road freight should include both the local home deliveries which are growing, almost certainly as a result of more internet shopping, and the larger scale transport of items which range from raw materials to retail goods and food. An added complication is the growth of light goods vehicle use for service calls, both for domestic and business purposes.

In relation to the heaviest vehicles (such as the standard articulated HGV), imports and exports which use containers have grown, and different forms of unitisation are also widespread for domestic transport, both between ports and depots and between depots. This is an area of strong competition between road and rail.

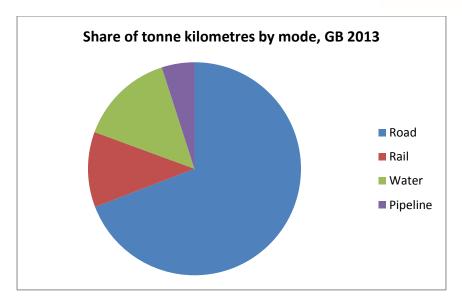
This is not the only area of competition, domestic coastal shipping¹⁶ is still important to the UK, just more in terms of tonne kilometres to rail. This is despite a major decline associated with the recession which has not been recovered. Rail data to 2013 shows a slow rise in tonne kilometres overall, but within that some decline in bulk goods and consistent increases in unitised (intermodal) traffic. This has grown 86% in the last decade. Some of the data for road freight has not been available¹⁷ until the final draft of this report, and there has been considerable change to data collection in recent years. Thus it was not possible to provide a reliable multi-modal summary chart over time. Road freight is still about 70% of national tonne kilometres¹⁸, with the rest shared between rail, water and pipeline. The figures for 2013 are shown below

¹⁵ Continuing Survey of Road Goods Transport: CSRGT, CSRGT Northern Ireland, International Road Haulage Survey

Excluding oil but including transport of HGV trailers

Data for 2013 was available at the end of February 2015 and for 2014 is planned for Summer 2015

¹⁸ Excluding local deliveries in LGVs



It should be noted that the road figure does include all freight in HGVs of all sizes and on all roads. Much of this is in two and three axle rigid vehicles on the local network – 45% of all goods by weight travel less than 50 kilometres. It does not include Light Goods Vehicles (LGVs).

It should be said that the industry itself has been affected by the recession, with the public haulage sector suffering particularly badly. Conversely there now appears to be a shortage of UK HGV drivers, who have a tightly controlled qualification regime¹⁹. Competition has always kept rates very low, including that from hauliers and drivers based elsewhere in the EU.

One of the key issues is the external costs of road freight which are not currently reflected in user costs. This is to a small extent compensated for by grants for rail and water facilities, although they have a fixed budget. The TPS member Survey showed Lorry Road User Charging (LRUC) in second place as a means of raising transport revenue, behind only higher VED for the most polluting vehicles. This topic is considered further in the next section of the Agenda, which lists areas where more specific policies could be implemented.

⁹ Since September 2014 they require an additional certificate of professional competence (CPD)

3 Moves in a New Direction

In this section we gather together some of the key proposals from the Agenda process. Some could be implemented very quickly, and some would need to go through a process which could take several years, but are possible within a Parliament. We have deliberately chosen topics which offer major benefits, although the ease of implementation varies and several measures could be progressed within each topic.

The purpose of this list is not to give complete answers, but sufficient detail to provide an Agenda for Change which could be accomplished within a five year period. The topic is list is as follows:

- 1) How can we link up transport with land use planning with new transport and planning guidance and combined powers?
- 2) What new governance and funding is required, especially in England? What about combined authorities, Highways England and beyond fewer competitions and more consistency and integration?
- 3) Transport and Health how do we recognise the importance of transport and active travel, but include the disbenefits of inactive travel?
- 4) A new approach to appraisal how do we create a realistic approach to economic, health and social benefits but without double counting? How can transport forecasting be made more transparent, recognise the value of demand management, and engage with the profession to understand changes in demand on a whole journey basis?
- 5) Intelligent motoring building on the TPS submission on Motoring of the Future what is the role of the car? Within that, how can we support car use where needed?
- 6) How do we give freight issues the focus they deserve better planning for interchanges including ports as well as rail, being pro-active on vehicle sizes and standards, and Lorry Road User Charging achievable in a Parliament and a game changer for demand management?
- 7) Demand management:

By price? National user charging may not be achievable but parking is an obvious alternative – what is the long term plan to replace fuel duty?

Travel behaviour change in its own right: can this be reinstated in national forecasting and funding and in the planning system at local level?

How can we promote non-motorised travel? Is there is a need to understand differences between walking (which has many non-travel benefits) and cycling, and that the creation of active travel through these modes has many benefits?

8) Do we need a national spatial and transport strategy? For major infrastructure investment in air, rail and road - how do we know where and how much to build if we haven't implemented demand management yet?

1 Linking up with land use planning: new transport and planning guidance

Government has been trying to simplify planning guidance but this has often taken the form of scrapping it. The shorter replacement, the National Planning Policy Framework (NPPF), is generalised and open to different interpretations. Our submission on the draft NPPF (together with many others) suggested amendments which would have achieved clarity without making it any longer. However, only minor modifications were made. The lack of effective controls over the transport impact of new development (and re-development) is storing up problems for the future and failing to address the congestion of today.

By contrast, the package of policies often called Smart Growth, which began in the US, sets out an agenda for planning and transport to support and encourage development while at the same time reducing the need to travel and generating economic benefits. The latter include "agglomeration" which is basically the grouping together of businesses and support services in very close proximity to each other. This encourages higher density centres which need to be served by high capacity rapid transit links²⁰. To an extent this in opposition to the lower density "garden city" approach.

For transport planners the idea that the scale of development should be limited by the accessibility of a site by sustainable modes is not new. In fact the last decade has seen the development, with the support of the DfT, of easy to use software²¹ to show how accessible sites are and TPS suggested accessibility based planning should be used to set parking limits in a recent policy response²². Combined with land use information this could be incorporated into simple guidance which would be the true replacement for the maximum parking limits set in the old PPG13. The implications of this must, however, be made clear. Sites with lower levels of sustainable accessibility (which includes population within walking distance) must have very much lower levels of development (and not higher levels of car parking provision). Proposals for less accessible sites would only be permissible if the site can be made more accessible, and funded proposals to do this should be an integral part of the planning proposal. Such an approach supports the idea of transit led development. Funding to make sites accessible by high capacity public transport which has an element of permanence (unlike conventional bus services) could be sought on the basis of a levy on future development. Again this funding option is strongly supported in the TPS Members' Survey.

In addition, the relative accessibility of different sites, and changes in accessibility caused by, for example, creating bigger but fewer facilities for health, leisure and business, should also be part of the planning process. Such an approach would finally bring together the land use and transport criteria in any application. It is over 20 years since the then DoE undertook research to show how effective this approach could be. Individual developers cannot be expected to take the lead in predicting such impacts and this must be a key role for the local transport and planning authority.

In practice, the criteria are more likely to be met on brownfield sites (supporting regeneration), and next to railway stations or rapid transit stops. Such sites are often favoured in policy statements, but less so by developers due to unrealistically low green-field costs. This approach would work with the market to make development more sustainable. Local authorities and developers could be more pro-active in promoting public transport or higher density settlements associated with employment, education, and other facilities. In one of the Agenda seminars, a local authority elected representative said, "All we do now is choose between a number of unsuitable fields and hope to

Often called TOD or Transit Oriented Development

²¹ Accession (now Visography TRACC)

TPS submission to DCLG on parking controls and the planning system

avoid the worst". He also said that in his area there were several possible locations to create a new station on an existing railway line which could serve, and be financed by, new housing. It is interesting that this would have implications for transport governance and the relationship between local authorities, Network Rail and the train operating companies.

Such examples mean that opportunities to create genuinely sustainable development (as the NPPF says is its main aim) are being lost. The other key to achieving greater co-ordination between transport and land use planning is to ensure they are conducted in a new governance framework. This is the next area of action for this Agenda.

Our key recommendations are:

- 1) New guidance is needed to promote growth not only in terms of development, but also in terms of the sustainable transport networks which are needed to maintain it.
- 2) The scale and location of all development should be related to the accessibility of the site by sustainable modes
- 3) If developers wish development of a larger scale, then the planning application should include proposals for a corresponding increase in site accessibility by sustainable modes.

2 New governance and funding

There are three key areas where TPS members have called for change²³. The first is support for a roll out of a governance model for transport and land use planning more akin to the London arrangements (although a directly elected Mayor is probably not a necessary condition). This would begin with the major conurbations, but not confined to the old Metropolitan areas. For example, places such as Bristol, Stoke, Nottingham, Leicester, Teesside, Coventry, Brighton and Hove, Bournemouth and Poole all have significant urbanised populations and transport planning needs. Of course their state of readiness and willingness will vary, but in principle some of these areas could be set on the path to integrated city provision in the next Parliament and some would be capable of achieving it.

In this sense the development of Combined Authorities for transport, economic, and possibly spatial planning is moving towards this goal, and creating bodies which will be more coherent and democratic than LEPs. This is not just happening in urban areas like Manchester, Birmingham and Teesside, proposals for an Oxfordshire, Buckinghamshire and Northamptonshire authority have been published by the three counties²⁴.

This focus on self-governance would in itself create the scale needed to recruit and develop transport skills. The outsourcing of local authority functions, including transport provision and even transport planning, requires the maintenance of internal expertise to maintain the role of an "intelligent client". Without this, the value for money of tenders to undertake such services cannot be assessed, and the preparation of the tenders themselves may be flawed. Tender outcomes also need to be monitored to ensure value for money and delivery within budget, and this again requires in-house understanding of transport – as one TPS member put it "it's not the same as ordering paper clips". This is critical to the efficient functioning of local authorities in their transport role.

²³ TPS Members 2014 survey

See *Public Finance*, 17th December 2014, *Local Transport Today*, 5th February 2015

One key requirement is for the areas of responsibility to be defined, and for some clear criteria to be set out. In transport terms, the functioning of a larger urban area requires a travel catchment beyond its immediate boundaries. It is possible to define this and then to give clear powers to harmonise, for example, parking standards between centres and off centre sites. TPS has also suggested the use of sustainable transport access mapping to guide development across boundaries, as set out above. In this sense the governance proposals would support the integration between land use and transport planning which we consider essential.

We suggest that new transport authorities need to emerge, first from the cities and other conurbations, either as combined authorities or as city authorities where this is a problem. Both would have wider powers outside their boundaries, both in terms of larger scale land use planning permissions and in extending transport networks to fulfil the needs of their wider catchment areas. One of the TPS 2015 Bursary research papers²⁵ showed how many different local authorities operated within the ONS-defined travel to work areas (TTWA)²⁶ – catchment areas for the journey to work. Of the 179 TTWAs in England and Wales, 85% have more than 10 local authorities working on relevant planning and transport issues within them, over 40% have more than 20.

This analysis is confirmed by the complexity of powers and responsibilities, and the many different routes for funding local transport. Many of these, particularly for sustainable transport, have been on the basis of competitive bidding for short term (2-3 year) funding. This has caused problems including:

- High cost overhead for preparing bids: complexity of related bids and match funding
- Some bids for revenue or capital only where most projects need a proportion of both
- Outcomes not designed to be "mainstreamed" spending and staff kept separate from ongoing expenditure.

The 2012 Audit Commission report²⁷ found the position for transport expenditure alone very complex, even without taking into account powers such as parking and planning. Only the unitary local authorities (only 25% of total expenditure) had powers which potentially allowed transport and land use planning to be co-ordinated. The position has in fact become more complex since then, especially with the emergence of LEPs.

A final interesting move has been the agreement of "city deals" which are essentially bids for funding over a longer period and usually have a strong transport element. These are longer term, and use what may well be the precursors of new centres of governance. For example major support has been agreed for the "Sheffield City Region" including £500million for transport over 10 years. This is actually led by the LEP, but a combined authority is being created which will take it on in future. Outside the Metropolitan areas, the Greater Cambridge Region (city, district and county councils) has been promised £186million over 5 years with further funding in the next 5. A new "City Deal Assembly" has been formed since there is no agreement for a combined authority, although the County will have to lead on much of the capital investment, which is dominated by bus priority.

The city deals also illustrate an issue which needs to be resolved in relation to inequalities in access to local finance, for example in areas where the local tax base is weak or where regeneration is required. There are also significant differences in size and nature of the emerging authorities.

Space and Flow: How can the Government better link Land Use and Transport Planning? Ward Alsafi, TPS Bursary report, January 2015

²⁶ See Office for National Statistics TTWA

Funding for local transport: an overview, NAO, October 2012

However, there is also a debate over how far inequalities have not been addressed in the current centralised system, and whether the act of unifying and localising the system would lead to better value for money in itself.

Our key recommendations are:

- A compatible approach for smaller scale spending, and to schemes with high revenue content, to that for large scale capital spending, where the argument for greater longer term consistency of funding seems to have gained ground. The former is often the key to sustainable transport schemes and demand management.
- 2) Much greater coherence between transport and land use planning, both through national guidance, and at local level, either through new and binding duties to co-operate across authority boundaries to comply with that guidance, or the creation of combined authorities at least for these functions.
- 3) Without a new "top down" total reform of local government, the evolution of a simpler and accountable structure for transport spending, across capital and revenue, building on the emerging combined authorities and city deal arrangements, but ensuring the inclusion of sustainable transport at its core.

As we have recommended elsewhere²⁸ this approach should be reflected nationally by the creation of a unified Ministerial responsibility for spatial planning.

3 Health

TPS Members have reflected the growing awareness across the profession of the potential for positively linking transport and health policies. TPS held an event on this topic in January 2015 to help formulate its views²⁹. The discussion takes place in a situation where local air quality is still seriously compromised in many urban areas, and lack of a baseline level of exercise is contributing to a wide range of health problems, not just related to obesity.

The first key conclusion was that the Government needs to adopt a systems-based approach to addressing transport problems if it is serious about addressing the health impacts. This means that specific issues such as air pollution should not be considered in isolation but should be an integral part of policy solutions which deliver a range of positive outcomes. Such an approach would probably have avoided the situation we are in now where the encouragement of diesel vehicles as a response to climate change commitments has contributed to our current air quality problems. If the Government had focused instead on encouraging modal shift, for example, through promoting good urban design and better infrastructure for walking and cycling, there would be significant benefits in terms of reduced congestion as well as delivering a much wider range of health benefits as a result of the increase in active travel.

The second conclusion was that it takes sustained effort and a long-term strategy to deliver a step-change in healthier travel habits. A lack of longer-term funding is a major barrier to developing and delivering comprehensive sustainable transport programmes rather than one-off initiatives. Now that there is longer-term security of funding for roads through the Roads Investment Strategy, the Government should commit to longer-term fund for sustainable transport measures.

See the 20 year strategy: A Vision for Transport Planning, Chartered Institute of Logistics and Transport (CILT) and the Transport Planning Society (TPS), October 2014

Better together: integrating transport and health policy and practice, TPS Event 21 January 2015

Both of these are in tune with the other findings expressed earlier and link through to the idea of reforming appraisal, which we examine next. There has been some recognition of health benefits in appraisal of non-motorised schemes. However, the next logical step is to include the health disbenefits of car dependency, and to integrate this with both transport and land use planning³⁰. This would promote health impacts from a non-quantified footnote to inclusion on an equal footing with other elements of an appraisal. This could be as qualifying condition ("showstopper" at the option development stage), as well as in a monetary form in a traditional cost benefit appraisal, as is undertaken for non-motorised travel at present.

Our key recommendations are:

- A systems-based approach is needed to addressing the adverse health impacts of transport, with all impacts being considered in combination
- 2) There needs to be a long-term strategy and funding for addressing transportrelated health issues
- 3) The health benefits of reduced car dependency need to be recognised and fully taken into account in project appraisal

4 New appraisal and evaluation

TPS members have called for reform in the way that projects are appraised³¹, and in October 2014 an event was held in London to debate the issue³². There is support for detailed changes, for example a move away from time savings to measure value, which in reality are translated into other changes in travel and land use patterns after a few years. It should be borne in mind that a majority of benefits for transport schemes are in the distant future, from 30 to 60 years. There is also strong support for structural reform, it was noted at more than one meeting that strategic rail and road plans would provide an opportunity to bring together at least some transport spending – could this be extended?

A structured approach

The Agenda meeting in Birmingham in February crystalised this view in an extensive discussion on appraisal, which could be summarised as "the right appraisal for the right level". It highlighted the need for a multi-layered approach as well as detailed reforms. For example, if a number of transport problems were defined across a wider area (such as the combined authorities) a package of proposals could be set out to deal with them and subjected to appraisal, including multi-modal forecasting and modelling. This should generate and assess alternative options from which the most effective combinations would emerge to best achieve local and national objectives. These would need to be at a suitable level of detail to allow public scrutiny and discussion. In broad terms this is effectively Part 1 of the Webtag process. Such high level appraisals have not been undertaken in England since the multi-modal studies (MMS) of over a decade ago.

Individual schemes within the strategy would then proceed to detailed design and modification as at

One of the 2014 TPS Bursary reports What should an Incoming Government do to Improve Planning for Transport? By James Rhodes, began to explore this issue by looking at car use and cardio vascular disease
TPS Annual Member Surveys

Are our Appraisal Methods and Schemes Fit for Purpose? October 3rd 2014. Available on: http://vimeo.com/icegroup/review/106823343/7016bdc1f6

present, without a need to argue that a car based alternative to a pedestrian or cycle scheme, or a Smarter Choices alternative to a road scheme, should be considered at the local level. Without the first stage, individual schemes will inevitably require more detailed, time consuming and expensive modelling, as at present, and often stimulate acrimonious debate. One problem with the MMS approach is that schemes need to be implemented as whole and not cherry picked, as has happened in many cases. A further problem is that people are less engaged at the "strategic" level and may feel surprised when a specific local scheme is planned which strongly affects their everyday lives. There may be no easy answer, but principles of transparency, evidence based scrutiny and fairness (not assisted by the adversarial and legalistic nature of some parts of the system) need to form the basis of any reform.

The way transport is heading is interesting in that some broad areas with longer timescales are being defined, for example the 5 year³³, route based, rail plans from Network Rail and the new 5 year, route based road investment plans which will guide Highways England³⁴. Long term franchises for rail are also being recast to deliver new objectives. City deals tend towards the same timescale of 5 years with another 5 years forward planning. It should also be noted that the Infrastructure Act requires a national cycling and walking strategy, but there is not one for transport as a whole, or for other modes so that these can be co-ordinated.

We have therefore identified three key missing elements:

- local authority, LEP and other local planning and spending over a parallel timescale (the LTP process is no longer monitored or with a clear future role, LSTF is short term)
- 2) an agency or other authority which has responsibility for the planning and co-ordination of demand management and sustainable transport, again over comparable timescales
- 3) a multi-modal analysis to ensure, for example, that investment in one mode does not undermine investment another and that genuine alternatives are generated and appraised.

Measuring value

In relation to more detailed comments, a strong contender for better long term measures of value would be changes in the price of land brought about by transport investment, although this is not problem free. There is also an acute awareness that double counting is a real danger if land values are used in conjunction with time savings, and that the latter would need to be replaced and not simply added together. The meeting in Leeds in particular discussed the description of some calculations as "Wild West appraisals" by Professor Peter Mackie³⁵, one of the signatories to the open letter to the Secretary of State sent in January 2013 which itself pointed to the need for a more robust approach.

There is another profound issue to be dealt with in appraisals which seek to measure value for money across the country. It is that the national economy may be little affected (and either positively or negatively) by the location of development, whereas local economies which attract development from elsewhere will count this as a benefit. Importantly they will not count this as a loss in the location which is likely to lose the development. To use the attraction of jobs to a

Network Rail Control Period 5, 2014-2019

https://www.gov.uk/government/speeches/investment-planning-for-the-strategic-road-network-route-based-strategies

Local Transport Today, November 13th 2014

location as a net national benefit is simply wrong and DfT makes some attempt, through the use of national employment and trip totals³⁶ which are used to "constrain" local forecasts.

In practice this is extremely difficult to implement because local models do not reflect national changes properly, for example moving jobs around within a region or between regions. This is compounded by models moving jobs between areas which are modelled to different levels of detail. This can be accompanied by time saving benefits from areas which lose jobs.

DfT has just published a piece of research relevant to this subject³⁷, intends to do further work in 2015 and is actively engaging with the profession on this subject. There is already a Webtag Unit on wider impacts but we suggest this needs further work and DfT should review the practical implications for modelling, forecasting and appraisal and how to avoid the problems. There are already several warnings about the difficulties and limitations of using wider impacts in the Unit. In addition there is the assumption that any increase in the effective density of business activity is the same for any distance and mainly relates to motorised modes. In fact, beneficial densities tend to be effective for many activities at a local scale and are closely related to walking (East London's "Silicon Roundabout" is a case in point). This is an area where we do not underestimate the task and its implications. However we do suggest that the debate over economic and job creation benefits needs to be taken to a more fundamental level. Without this their inclusion may lead to over optimistic appraisals and poor value for money.

While the "wider impacts" of transport in terms of the economy are recognised there remain areas where impacts are underestimated, as we have identified for health disbenefits as well as benefits. In particular there remains a difficulty over Smarter Choices and modelling, particularly since nationally there appears to be a disconnect between demand management and the national traffic forecasts. DfT has undertaken work on this subject, consulted with the profession including TPS, and produced a Webtag Unit. However, the Society's view is that this has yet to make sufficient impact on appraisals generally³⁸. This is, for example, apparent in the way that alternatives are considered, and the forecast levels of traffic for major scheme appraisals, which are constrained to national totals, do not sufficiently reflect local demand management.

The fair consideration of alternatives for major schemes is an essential prerequisite for appraisal at the heart of Webtag, and weak compliance may link back to governance. As set out earlier, it is important to consider strategy over an appropriate area, with local schemes generated to achieve the overall objectives. Many could be assessed using simpler methods. Overall this could lead to a simpler, cheaper, and more transparent structure for transport appraisal.

Our key recommendations are:

The Government needs to encourage a more structured and integrated approach to transport planning with multimodal strategies being developed to address a wide range of problems in an area. All elements of the strategy then need to be implemented within a consistent timescale, not just selected schemes

The National Trip End Model - NTEM

Understanding and Valuing the Impacts of Transport Investment (UVITI) DfT December 2014

³⁸ See TPS Member Survey, October 2014

- 2) We need a more fundamental approach to understanding the impact of transport changes on economic growth, and to ensure that benefits claimed for one scheme are not simply being abstracted from another area
- 3) The benefits of Smarter Choices and demand management need to be fully taken into account in appraisal and in national traffic forecasts

5 The role of car use

As car use has become more available it has widened the travel horizons of many people, both for work, leisure and visiting friends and relatives. The way in which the labour market has become more flexible has been facilitated by the car, and has also generated more travel, for example by allowing housing to be further away from employment, and dispersing friend and family networks as individuals change jobs more frequently and over a wider area. In addition, the advantage of door to door travel in terms of comfort, and with a personal space which is often under the sole control of the driver, is immensely attractive. In rural areas car use has become an essential part of life, although in large cities such as London, and for many younger people, it has actually become less so.

As well as the role of the car, the basic technology is undergoing fundamental change, with electric propulsion entering the mainstream and autonomous vehicles undergoing large scale testing. Before discussing this in more detail, it is important to set out an approach to the current patterns of car use, and how they can make a positive contribution to transport objectives.

There are four basic issues which currently need to be addressed. The first is how to extend the benefits of car use without having to own one – one emerging option is through the expansion of car sharing and car clubs. Others include internet based car sharing, various types of taxis and small scale demand responsive transport. Approaches will vary between urban, suburban and rural areas.

The second is how to minimise or remove the range of third party effects (including safety, health, local environment and climate change) which are widely studied and discussed and can be measured to varying degrees of accuracy. Some have been referred to already but the idea of reducing them does not seem controversial, even if the means may be.

The third is how to avoid any counter-productive impacts on land use, such as the use of high value land and the creation of development which is low density and car dependent. This is just as important for car users as anyone else – longer journeys and fewer local facilities will negate the advantage of having a car and reduce choice of mode. However, dispersed patterns of employment, family and friends are unlikely to be reversed in the short term.

The fourth is how to avoid the impact on alternative methods of travel for people who do not have access to a car. This not just because no car is owned, for example licence holding among young people is falling. It should be noted that people can also be excluded from public transport, for example through cost (as with young or recently unemployed people starting a job) or poor access for people with mobility problems.

Too much traffic – not enough parking!

TPS members are well aware of some of the paradoxes in transport planning that make public engagement necessary but challenging. For example, is congestion the result of too much demand or not enough capacity (or possibly a complex mixture of both)? The answer will of course also differ from place to place. From the car user's point of view, places which are not designed for easy

car access will suffer when compared to those that are, and this has led to a cycle of decline for traditional, compact local centres in particular. The control of parking in town centres and even residential areas has become a constant public complaint, even leading to the phrase "war on the motorist". The difficulty is that parking is the main method of trying to match car demand to the capacity of any centre to absorb it and the reality of this is not properly understood. This has not been helped by a previous lack of proportionality in setting complex rules for parking and dealing with what people see as accidental small scale infringements. Sometimes it feels as though a few over-zealous tickets have been allowed to bring a whole policy into disrepute and actually causing national guidance to be relaxed. However, in the longer term this leads to more congestion and even to less parking turnover, causing frustration for the same drivers who wanted to remove traffic wardens. This is a very difficult area for transport planners because there is an ambivalence in the motoring public, often revealed in survey work. This can be summarised as the same respondents saying that there is "too much traffic and not enough parking".

Local authorities bear the brunt of this and will have to continue to mediate. Although there could be more widely publicised and complete sign up to the concept of 'proportionality' in terms of parking, the situation could be most helped by national policy makers taking a more measured and evidence based approach³⁹. In the land use section we suggested that site accessibility needs to lead development and parking should be controlled in new and existing developments. This could provide a route to addressing the problems of poor accessibility by alternative modes. In several discussions there was a feeling that positive elements also needed to be leading any demand management in a linked up package – improvements in terms of travel choice, the local environment and health.

We also consider that there could be more positive steps to make some car journeys easier, for example schemes which allow parking spaces to be pre-booked in the context of web-based data on current and future occupancy. This is now common for certain types of private parking⁴⁰ and the Government should consider funding pilot schemes for local authorities on an area wide basis for on and off street. This would have the added benefit of exploring another area of transport technology and building expertise. Demand management and travel behaviour change is not just about reducing traffic – the journeys for which the car is needed most will be facilitated if such policies are successfully introduced.

In this context it is important to undertake evidence based thinking beyond extending current patterns of use. The internet is already causing great change in shopping habits, and this in turn is changing shopping centres, not always negatively. One aspect which appears obvious is a reduced demand for car use for bulk shopping and an associated rise in small delivery vehicles. More evidence may be needed, but surely this needs to be included in any forecast for the future of the road network? The idea of scenario testing as well as conventional forecasting which extends the past into the future should be explored by the DfT, particularly in light of the falling car trip rates, surge in LGVs, and differences in use of local and strategic networks.

Of course no discussion of road use is complete without the issue of expanding road capacity. This may take the form of managing the network to maximise efficient use, junction improvements, or of

For example at the time of writing the Government is standardising the 10 minute leeway rule for parking overstays in parking bays which some authorities have introduced

Airports and arenas are obvious examples

building new capacity. In the Annual Survey TPS members do not prioritise new capacity, instead favouring sustainable modes and demand management. However, it is important to understand that this is not just a matter of whether, in a country such as the UK, it is impossible to build ones way out of congestion. The key issue is whether, if the full range of demand management policies were pursued, congestion would occur in the same places at the same times. For example, if policies to reduce car commuting by improvements to alternatives and proactive measures such as the workplace parking levy, are implemented and effective, the peak demands on the road network in employment areas at peak times will be reduced. A major concern is that new capacity will be provided in the wrong places —investment will be wasted. This parallels members' views (about 30%) that a review of airport capacity should wait until proper pricing for its environmental and other impacts are in place.

Our key recommendations are:

- More work needs to be done to reduce the external disbenefits of car use (safety, health, environment, land needed for parking)
- 2) Some aspects of car use, particularly parking, could be made easier to access using new technology without compromising sustainability
- 3) The benefits of car use can be made more available using schemes such as car clubs while enabling more sustainable choices overall
- 4) Land use planning must recognise the need to reduce car dependency
- 5) A clear national policy on parking provision is needed, balancing the need for car use where it is essential with discouragement of car use where more sustainable alternatives are or can be provided
- 6) Any expansion of road capacity should take full account of changing lifestyles and the potential for demand management to reduce car use.

6 The freight and logistics logjam

Freight policy in the UK has been fraught with problems: lack of a comparable approach between modes (including coastal shipping), lack of a strategy for freight or for ports, and even some public disagreements between what are perceived as road, rail, and environmental interest groups. Thus there is no proper charging for HGV external costs; size and weight limits are the subject of bitter wrangling; and rail (and to a lesser extent coastal shipping) receives some compensating but not comprehensive subsidies. The latter are subject to cash limits and need continuing EU approval for the scheme as a whole. In rational terms, using a subsidy to compensate for a market price failure is usually less effective and costs more than correcting it.

One aspect which is seldom considered is the importance of how goods enter and leave the UK, mainly by sea but with important traffic by air, sometimes with freight only flights. East Midlands Airport is a major centre for such traffic. As regards ports, they are important for two key reasons. The first is that goods are often handled through ports with a weak relationship to their origin or destination – in other words maximising inland transport. This results in congestion and pollution which would otherwise be avoided⁴¹. The second is that ports could act as part of a multi-modal

There are obviously other factors influencing port choice in particular size of berth

freight framework – coastal shipping, including road trailers as well as containers, is an underestimated part of UK freight⁴².

The National Policy Statement on Ports does not seem to recognise the need for a framework, nor the benefits in terms of reduced congestion and pollution which it could bring. In terms of the market, the charging of true marginal costs to HGVs would encourage a more efficient pattern of port use — although we consider that this should be combined with a positive approach to developing new opportunities for logistic companies (such as PCL). These are already highly organised but need to be engaged in the pursuit of a freight system that not only delivers the goods, but delivers reduced congestion and environmental impacts as well.

This is one of the reasons why TPS ordinary members, as well as specialist transport economists, strongly support the idea of charging the heaviest vehicles for the externalities they cause. These are in fact the justification used to the EU for the UK's rail and water freight access grants. Many countries in Europe, including Germany⁴³, Switzerland⁴⁴, Austria, Poland, Slovakia, and the Czech Republic have already introduced a distance tax applied to different HGV sizes and varied by pollution characteristics. Others, such as France, are in the process of doing so. There is an EU regulation which seeks to ensure that all the electronic systems are compatible and can work across borders. It is suggested here that the current UK system – a simple and low cost "vignette" which has no relation to distance travelled – should be replaced by a system compatible with others in the EU. These are proven both in terms of practicality and beneficial impacts. In the UK one of these could be to raise income to fund the substantial local authority road maintenance backlog.

If this is implemented properly, it should encourage a better matching of vehicles to the very varied tasks demanded of HGVs. Vehicles best suited to low density loads will be well below maximum permitted weight, while high density loads will leave empty volume. In this context, the UK should reconsider the restrictions on size and weight, although this will also need to be co-ordinated with EU partners (either as a whole or individually).

If demand is priced properly, it will reallocate itself, both within and across modes, and the road freight industry will become more efficient in terms of reducing empty⁴⁵ and part load running. It is difficult to know the potential for this because of the great variety of road freight operations, and the fact that there are many highly organised specialised services with key aims (for example security or precise timing) which may conflict with achieving full loads.

It is also highly likely that there would be some reallocation between ports to import or export goods closer to their origin or destination. Overall this would produce congestion benefits for all road users and reduce environmental impacts.

Thus there is a real prospect of real external and internal benefits, lower public subsidy, and significant additional short term revenue. At least some of this could be used to support the road

The concept of "Port Centric Logistics" (PCL) is an example, see the ITC report "Improving the efficiency of freight movements", July 2014

The MAUT – one of the first and now being extended after 10 years operation

See: http://www.ezv.admin.ch/zollinfo_firmen/04020/04204/04208/index.html?lang=en

⁴⁵ Currently about 29% for HGVs as a whole

freight industry in terms of vehicle improvements (safety and environmental) and raising skills. There is now, for example, a reported shortage of trained HGV drivers⁴⁶.

If implemented successfully, a scheme for LRUC could also transform the nature of the debate about national road user pricing.

Our key recommendations are:

- Port strategy and port development should take full account of the implications for land transport of goods to and from the ports, most notably congestion and environmental issues.
- 2) Lorry Road User Charging should be introduced as a means of compensating for the external costs of HGV movement, encouraging a better match between vehicle and load size, and imposing fairer costs on foreign hauliers

7 Demand management for car use

In a developed country such as Britain there will tend to be a mix of spending on national transport infrastructure including demand management, investment in new or improved networks, and maintenance of the existing networks. This mix is similar to other infrastructure such as energy and water. Expenditure in each category should not be considered in isolation or money will be misallocated – there is always an interplay between them. This is another reason for the TPS emphasis on the need for a genuine spatial and transport planning strategy and framework. This section expands on some of the different methods of demand management for passenger transport. The most important observation is that, in a package of demand management with several elements, each individual element has to do less work and may be more acceptable. This is even more the case in a package with demand management and other positive elements.

Pricing

National road user charging has become a politically difficult area in view of public opposition. However, if it is not achieved, other policies will need to be pursued and some involve pricing. The most obvious of these is parking, but this is not exactly a popular alternative (see above). Use of the workplace parking levy in Nottingham may finally open up possibilities in other areas, for example Bristol, Cambridge and the West Midlands. The Nottingham scheme was opposed by some businesses but has been unambiguously linked to the provision of a new tram network and such a visibly positive outcome has improved public acceptability.

Beyond this, TPS members have identified two related issues to be considered. The first is the serious loss of tax income which would be caused by the rapid introduction of electric and plug in hybrid cars. This is complicated by the fact that, if the Government is successful in its carbon reduction aims, it will lose revenue extremely quickly. If the transfer is slower, they need not worry so much over the tax losses but the carbon target won't be achieved. The TPS meetings emphasised that the Government should publish up to date figures for carbon emissions (they seem to have been somewhat delayed in recent years) and for fuel duty and VAT income. In the long run there must be a plan to replace them. In the longer term the introduction of autonomous vehicle technology may allow new patterns of use, and more efficient use of at least the strategic network.

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See *The Loadstar* 13th January 2015

It needs to be made clear that the development of new systems should include the capacity to deploy national road user pricing.

Travel behaviour change (Smarter Choices)

One aim of TPS has been to confirm a leading role for behavioural change in national forecasting and funding and in the planning system at local level. This is not a question of being only "local" in impact. Most journeys on the strategic road network begin and end on the local network and the strategic network is used extensively by local traffic. The failure to recognise the value of such policies in combatting congestion at the national level, for example in the national traffic forecasts or the National Planning Policy Statement, is, in the view of TPS, one of the most serious mistakes in transport policy. Paradoxically, Government has encouraged a wide range of innovative projects often using demand management using the Local Sustainable Transport Fund (LSTF).

This funding has been time limited and competitive, and with sometimes odd rules about revenue or capital spending. There are two key points to be made:

- while innovation and action research should still be encouraged, it is time to mainstream these policies as part of the established repertoire of all transport planners; and
- they need to be funded consistently over the longer term, and rolled out across the nations. The precise balance between the various tools in the Smarter Choices tool box will vary from area to area, but the basic framework and funding should be put in place.

While it seems that most of the transport planning profession is convinced there is a strong evidence base for the impact of Smarter Choices (they usually top the list of the most effective measures in the TPS annual survey), there are still some who can't reconcile them with the use of traditional transport models. In these, the so called "soft" measures seem always downplayed and inadequately (sometimes wrongly) represented.

For smaller scale schemes this is not a problem. Existing evidence on traffic flows can be used as a baseline, and by looking at numbers of people affected, for example by a workplace travel plan, a level of reduction from existing plans in similar situations can be applied. The reduction in traffic from this can then be applied to the number of trips which will be affected.

This benchmarking approach is recognised by the DfT Webtag Unit on modelling Smarter Choices, but other parts of the unit seem to recommend a variety of more traditional approaches to large scale analysis which are not really suitable for this type of impact⁴⁷. At the very least, in the context of scenario testing, benchmarking could provide an answer to the question of "how effective would Smarter Choices be if we applied them across the nations?"

Above all we need to understand that Smarter Choices changes behaviour more directly and not as a result of network wide, averaged costs or assumptions.

Promoting non-motorised travel

One issue is that using benchmarking in a traditional area model, or the National Traffic Model, means that the local impacts can be lost in calibration, constraint to national trip ends, and in variable demand modelling (VDM). Any or all of these may interact with and negate the specific impacts of the travel plan in an unrealistic way. It is likely to be very difficult to check how far this is the case. This is why TPS said in its submission to DfT that transparency in how the model was behaving was essential, and that in most cases it would be important to run the model after it had stabilised and results presented with reassignment only. Further research using real modelling situations is needed on how to do this effectively.

There is a need to understand differences between walking (which has many non-travel social and economic benefits) and cycling, nevertheless the creation of active travel through both these modes is a shared objective. The slightly unexpected acceptance of the amendment to the Infrastructure Act to include the setting up of a national strategy on walking and cycling has fulfilled what one of the TPS recommendations would have been. In addition to setting up the strategy and reporting on progress, the Act states that:

- (3) A Cycling and Walking Investment Strategy must specify
 (a) objectives to be achieved during the period to which it relates, and
 (b) the financial resources to be made available by the Secretary of State for the purpose of achieving those objectives.
- and goes on to state that:
- (6) In considering whether to vary a Cycling and Walking Investment Strategy the Secretary of State must have regard to the desirability of maintaining certainty and stability in respect of Cycling and Walking Investment Strategies.

This essentially puts walking and cycling more on a par with the strategic road and rail networks in terms of security of longer term funding. There is also a five year review period mentioned. This has many implications for transport funding for other modes and yet again points to the need for a framework within which spending (both revenue and capital) can work together to achieve the most effective outcome. It is also essential if transport's relationship with other areas (such as health, safety and the environment) is to be defined and money spent most effectively across sectors to achieve social and economic objectives.

Our key recommendations are:

- 1) Demand management of motorised passenger transport must be an integral part of any overall transport strategy
- 2) Government must make a realistic estimate of future carbon reductions, loss of fuel tax revenue, and any change in user pricing which is required
- 3) The impacts of travel behaviour change must be fully recognised and there should be a sustained and funded programme to implement it
- 4) As required by the Infrastructure Act, the Secretary of State should implement a Cycling and Walking Investment Strategy

8 National policies and major infrastructure investment

The implication of much of this document is that there should be a new level of responsibility for land use and transport between national and local levels. The spatial geography for this needs to reflect factors such as travel to work areas, the need for regeneration, or support for new development. There will need to be some measure of equalisation to support areas where local resources have been depleted, for example by the loss of key industries. Beyond this there will be a need for a national strategy with two key elements.

The first is the need for a framework within which different levels of governance can work: for example local and regional policies and programmes will need to be co-ordinated to be cost effective, have some commonality and ease of understanding from a user point of view, and not undermine each other (for example through conflicting pricing or parking policies).

The second is that some infrastructure needs a national assessment framework, especially ports and airports, and long distance domestic passenger and freight. The latter can be modest numbers of trips, but high volumes of travel (passenger or tonne kilometres). For example, the 10% longest car trips produce 50% of the car passenger kilometres⁴⁸, and the 14% of goods which travel more than 200 kilometres account for 42% of the tonne kilometres⁴⁹.

One of the TPS bursaries explored the issue of what form a national approach should take, including consultation with some key external organisations⁵⁰. While it seemed clear that an approach which included land use and transport in a National Spatial Strategy, the balance between supporting local development, for example housing, in a national or regional or local framework was an area of potential conflict. It would need a coherent and mutually supportive structure from national to local levels to avoid an over centralised approach. During the TPS discussions the Eddington report from 2006⁵¹ was often mentioned as an under used resource in terms of the evidence gathered from all stakeholders and a structured approach to national infrastructure. This recommended:

- the introduction of full congestion and environmental pricing;
- reforms to local and regional governance;
- a national framework of clear objectives and rigorous appraisal;
- over the next 20 years strategic priority for
 - o congested and growing city catchments
 - o the key inter-urban corridors
 - o the key international gateways; and
- consideration of the full range of modal options and recognising the high value for money of small scale schemes.

All of these are very much in tune with this Agenda. (A fuller summary of the Key Findings and Recommendations of the Eddington report is reproduced as Annex 2.)

TPS therefore considers that it should be within the context of a national framework that those major infrastructure proposals which are Government led should be pursued. This applies as much to HS2 and the rail freight network as to ports and airports policy, and to the motorway network (although this also has major local significance). What is conspicuous is that, rather than a strategy for longer distance travel (both within the UK and beyond) there is both modal isolation and a lack of connection between the planning, maintenance and operation of local and strategic networks. This is repeated in terms of potential conflicts with economic and spatial planning policies. This applies across the board, with key international gateways competing for international traffic without consideration of current or future feeder networks. This is likely to lead to unnecessary congestion and pollution, to the under use of current or future assets in some places, and to inefficient allocation and use of the limited resources available.

⁴⁸ Carbon pathways analysis, DfT, June 2008

Goods are by weight. Source DfT freight statistics, Table RFS0127, *Vehicle activity by length of haul and mode of working, 2013*

Planning our Nationally Significant Transport Infrastructure: time for a re-think or business as usual? John Bradburn, December 2014

The Eddington Transport Study: the case for action, report to the Chancellor and Secretary of State for Transport, Sir Rod Eddington, December 2006

This returns to the TPS theme of understanding current and future demand better, including factors such as the demand management and travel change implicit in the proper pricing of congestion and pollution for transport. And the inter-relationship between travel/transport demand, economic development and land use

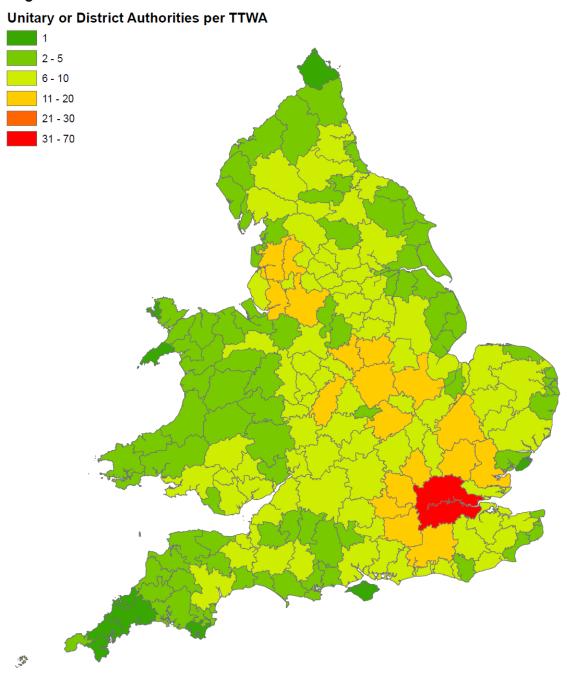
In addition, the need for the tripartite approach to transport networks of maintenance, management and investment *in that context*, has never been more important, given that public money is in such short supply. A national spatial strategy would allow these key issues to be addressed.

- 1) Transport strategy must embrace maintenance, management and improvement
- 2) A national framework for spatial development and long-distance travel embracing all modes is needed, but one within which local and regional bodies can function effectively and which respects the progress of devolution as it proceeds
- 3) The recommendations of the Eddington Report are as important now as they were 10 years ago, and should be a key driver of national transport policy and major transport infrastructure development.

Annex 1

This was produced by plotting TTWAs from the 2001 census and then the 2011 authority boundaries of every Unitary Authority and District Authority (so therefore each Local Planning Authority). The number of authorities falling within each TTWA can then be counted. There obviously is double and even triple counting of the authorities, wherever they cover more than one TTWA.





Source: ONS data analysed by 2014 TPS Bursarian Ward Alsafi

Annex 2

Extract from: The Eddington Transport Study: the case for action, Sir Rod Eddington, December 2006

KEY FINDINGS AND RECOMMENDATIONS

- 1. To meet the changing needs of the UK economy, Government should focus policy and sustained investment on improving the performance of existing transport networks, in those places that are important for the UK's economic success;
- 2. Over the next 20 years, the three strategic economic priorities for transport policy should be: congested and growing city catchments; and the key inter-urban corridors and the key international gateways that are showing signs of increasing congestion and unreliability. These are the most heavily used and economically significant parts of the network;
- 3. Government should adopt a sophisticated policy mix to meet both economic and environmental goals. Policy should get the prices right (especially congestion pricing on the roads and environmental pricing across all modes) and make best use of existing networks. Reflecting the high returns available from some transport investment, based on full appraisal of environmental and social costs and benefits, the Government, together with the private sector should deliver sustained and targeted infrastructure investment, in those schemes which demonstrate high returns, including smaller schemes tackling pinch points;
- 4. The policy process needs to be rigorous and systematic: start with the three strategic economic priorities, define the problems, consider the full range of modal options using appraisal techniques that include full environmental and social costs and benefits, and ensure that spending is focused on the best policies; and
- 5. Government needs to ensure the delivery system is ready to meet future challenges, including through reform of sub-national governance arrangements and reforming the planning process for major transport projects by introducing a new Independent Planning Commission to take decisions on projects of strategic importance.