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What role do targets have in transport planning?

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Abstract

The Treasury requires all Government departments to set out a number of targets against which progress can be measured. The Department for Transport has adopted 6 key targets which are based on those set out in the 10 Year Plan. However, progress towards the targets has been slow and the targets have also been criticised.

At a local level, local authorities have been required to develop five-year local transport plans that also include targets for the same period. The targets for each local authority are to be tailored to local circumstances. As such, there is little comparability between the targets and it is difficult to compare the value for money of investment in different areas.

This paper reviews the evidence on the impacts of target setting in transport. It provides a comparison of targets across different local authorities and also compares national targets in transport with those from other areas of Government. The paper concludes that the use of targets as a means to drive and reward performance is a relatively new discipline with little behavioural understanding. However, what evidence there is suggests that targets do have an impact on decision-makers and that having the right sort of targets is therefore important, to avoid perverse incentives. The paper also raises significant questions about what is meant by performance and how this can be judged against the different external factors and base conditions which each local authority faces.

Introduction

> "*Performance measurement is an integral part of modern government. It stands behind the creation of targets, contracts and agreements that control service delivery. Good performance information can help Departments to develop policy, to manage their resources cost effectively, to improve Departmental and programme effectiveness and to report their performance to Parliament and the general public, so promoting accountability for public resources.*" (NAO, 2001, p1).

The 1990s has seen a significant change in the way in which Government performance is measured and assessed. The Local Government Act 1992 gave the Audit Commission the duty to specify indicators to allow comparison of performance across local authorities.[1] In 1997, the New Labour administration promised a significant programme of improvements across all public services, which it believed had been significantly under funded. The Treasury wanted to ensure that the increased expenditure by Government Departments was indeed matched by service improvements. It therefore established a series of Public Service Agreements (PSAs) with Departments that set out how they would achieve their objectives and how this would be assessed. The PSAs are set for three years (1999-2002 and 2001-2004) and reviewed on a two-yearly cycle coinciding with the Spending Review.

Developments in transport mirrored those of other Government departments. The idea of setting targets against which performance could be measured proliferated the thinking of the Department of Environment, Transport and the Regions. The 1997 Road Traffic Reduction Act placed "an obligation on UK local authorities to assess current levels of traffic activity on all roads for which they are a highway authority, to forecast expected levels of future traffic growth and to set targets for reducing existing traffic levels or stemming growth". (Turner et al., 1999, p186). At a national level, the PSA targets agreed by the (now) Department for Transport are broadly the headline targets set out in the 10 Year Plan for Transport (DETR, 2000(a)) as shown in Table 1.

[1] These indicators, known as Best Value Performance Indicators are measures of performance and cost effectiveness. They are not targets as such and therefore are not discussed further in this paper. However, many BVPIs are used to monitor progress towards targets.

Table 1: Department for Transport PSA Targets 2001-2004

1. Reduce congestion on the inter-urban trunk road network and in large urban areas in England below 2000 levels by 2010
2. Secure improvements in rail punctuality and reliability with a 50% increase in rail use in Great Britain from 2000 levels by 2010
3. Secure improvements to the accessibility, punctuality and reliability of local public transport and increase use by more than 12% by 2010 compared with 2000 levels
4. Cut journey times on London Underground services by increasing capacity and reducing delays (specific targets to be agreed by Mayor after the PPP has been established)
5. Reduce the number of people killed and seriously injured in Great Britain in road accidents by 40%, and the number of children killed or seriously injured by 50% by 2010 compared with the average for 1994-98, tackling the significantly incidence in disadvantaged communities
6. Improve Air Quality by meeting our National Air Quality Strategy objectives for carbon monoxide, lead, nitrogen dioxide, particles, sulphur, benzene and 1-3 butadiene. Joint target with DEFRA
7. Achieve annual 2.5% efficiency improvements across the Department

The Department for Transport has attracted significant criticism from the transport profession, Parliament and the media for its failure to demonstrate progress against many of these targets (CFiT, 2003, Goodwin (2002), HoC (2002(a))). Indeed it has acknowledged that the congestion target will not be met (DfT, 2002) and the Strategic Rail Authority accepts that the rail use target is also unlikely to be met (SRA, 2003). It is clear that targets are having an impact on the way in which policy is made and implemented. Much debate concentrates on how to improve progress towards targets and whether more targets are required to ensure other aspects of policy are given due weight and attention (HoC, 2002(b)).

At a local level, the Transport Act 2000 placed an obligation on English local authorities to prepare and submit Local Transport Plans (LTPs), documents setting out 5 year transport strategy and expenditure for local areas to help meet the aims of the 1998 Integrated Transport White Paper (DETR, 1998). The Guidance issued to local authorities set out the requirements for monitoring performance:

> "*LTPs must include a set of indicators for measuring performance against targets and other outputs which can be used to assess whether the LTP is delivering the stated objectives.*"

The author estimates from a recent review of a sample of LTP annual progress reports that there may be over 5000 targets (including headline, secondary and process targets) for transport across all local authorities in the UK. A recent review of the LTP process by consultants Atkins found that most authorities have provided a clear set of targets but that there is little evidence that they are "realistic and challenging". Many authorities also felt that too much emphasis was given to monitoring and targets and that it was too early to judge the outcomes of the plans (Atkins, 2003).

This paper does not propose to add to the debate about why the 10 Year Plan is or is not on track. Nor does it seek to repeat the evaluation of the LTPs discussed above. Instead it asks a series of more fundamental questions:

1. What is the purpose of targets?
2. What behaviours do they induce?
3. Are current targets appropriate?
4. How do other sectors approach target setting?
5. Where next for targets in transport planning?

Targets and Performance Measurement

What is a target?

Before it is possible to discuss the role of targets, it is instructive to have a common understanding of the definitions of terms commonly used in this area. The National Audit Office provides one set of definitions shown in Table 2.

Table 2: Glossary of terms

Term	Definition
Objective	A succinct statement of the key goal(s) being pursued over the medium to long-term, reflecting the key components of the intended strategy
Input(s)	The resources that contribute to the production and delivery of an output.
Output(s)	The immediate result of Government activities e.g. numbers arrested, numbers treated by NHS
Outcome(s)	The ultimate impacts on, or consequences for, the community of the activities of Government. For example, reduced crime, higher educational awareness
Performance measure	Establishes the basis or means by which performance can be demonstrated against a robust scale
Performance indicator	Provides a proxy, where it is not feasible to develop a clear and simple performance measure
Target	The level of performance that the organization aims to achieve for a particular activity e.g. a reduction of 5 per cent over a stipulated period.

Source: NAO (2001), p67

Outcomes are an important measure of the change in the quality and performance of the transport system and its usefulness to users. Measuring outcomes (e.g. users perception of safety) as well as inputs (e.g. amount of money given to road maintenance) and outputs (e.g. number of new bus stops built) is an important part of assessing performance. However, whilst we know the overall cost for achieving the various outcomes is, it does not tell us whether the value of the outcomes exceeds the costs (does the marginal benefit of public expenditure exceed the costs?). This is a crucial piece of information for presenting any justification for increased spending in public spending (McCarthy, 2003(a)). Nor does it tell us whether the outcomes achieved were those which were desired or expected.

Targets could therefore be defined as a quantified measure of progress towards achieving the aims (outcomes) of an organization. They are set at the planning and design stage. In effect, targets are a contract for achievement which the organization sets. The starting point for the development of a strategy is a series of objectives which the public sector organization wishes to achieve, such as those in the Integrated Transport White Paper.

A Government department/local authority then has to develop a strategy that tries to ensure that the *inputs* it has buy the right *outputs* that deliver *outcomes* that achieve its *objectives*. The principles of systems analysis present a logical structure against which objectives can be converted into strategies with expected outcomes. This is shown in Figure 1.

Under such a framework, the logical stage to develop targets is at the strategy selection stage (prior to implementation). At this stage, it should be clear to the decision maker what the impacts of the strategy are likely to be and how they can be measured. *Targets* are therefore a reflection of *expected outcomes*. The public can then be informed and kept abreast of progress towards these targets. This is essentially the process that was undertaken with the 10 Year Plan and with some Local Transport Plans. The limitations of the actual implementation of these processes will be discussed later. May et al. (KonSULT, 2003) suggests that “the strategy ought to determine the target rather than the targets determining the strategy”.

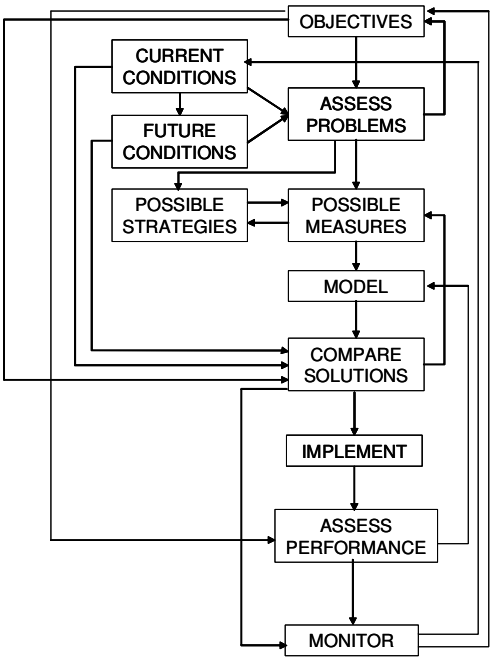

Figure 1: Systems Analysis Approach to Transport Planning (Source: KonSULT, 2003)

The above discussion makes a number of assumptions if the optimal outcomes are to be achieved. It assumes for example, perfect knowledge and a level playing field across different disciplines. Several Departments may contribute to one target which raises the issue of interacting and relative contributions. Other objectives are more difficult to measure or model but may hold equal importance in the decision making process. However, this is how many targets have been defined for the transport sector.

National Targets

Transport

Previous Experience

Whilst PSA targets are new for transport, the idea of targets is not. The safety strategy of 1987 set a target "to reduce road casualties by one-third by 2000 compared with the average for 1981-85".

The safety strategy has largely been viewed as a success. The numbers of road deaths has fallen by 39% and serious injuries by 45% over this period (DETR, 2000(b)). However, the number of road casualties fell by one per cent (set against an underlying rate of traffic growth of 55%. The targets were agreed by consensus amongst key stakeholders about what needed to be done and what was practicable. All partners were able to work towards an objective that it is difficult to disagree with – reduced accidents and fatalities.

However, the focus on the more achievable target of reducing the number of KSIs has not been without problems. Solutions which have enabled this to happen have included extensive pedestrian segregation from roadways with barriers and cattle-pen crossings. It has been argued (Hillman et al., 1991) that child pedestrian accidents have fallen primarily because children are discouraged, on safety grounds, from walking. Tight et al. (1998) suggest that instead of casualty reduction targets should be set for danger reduction. More recently, an OECD report on transport and the elderly (OECD, 2001) suggested supporting elderly drivers for as long as possible partly because they were more likely to die as pedestrians than drivers. Such an approach ignores the wider benefits of walking to the health and well being of the elderly. Exercise is the single most effective protective factor for coronary heart disease, a significant Department for Health target. McCarthy (2003(b)) notes that "Regular moderate exercise can cut the death rate to two-thirds that of people who do not take any exercise". The health and transport approaches to reach their respective targets would appear largely incompatible.

The success of the accident targets was reflected in the 1996 National Cycling Strategy target to quadruple cycling use by 2012. Progress towards the target is shown in Figure 3.

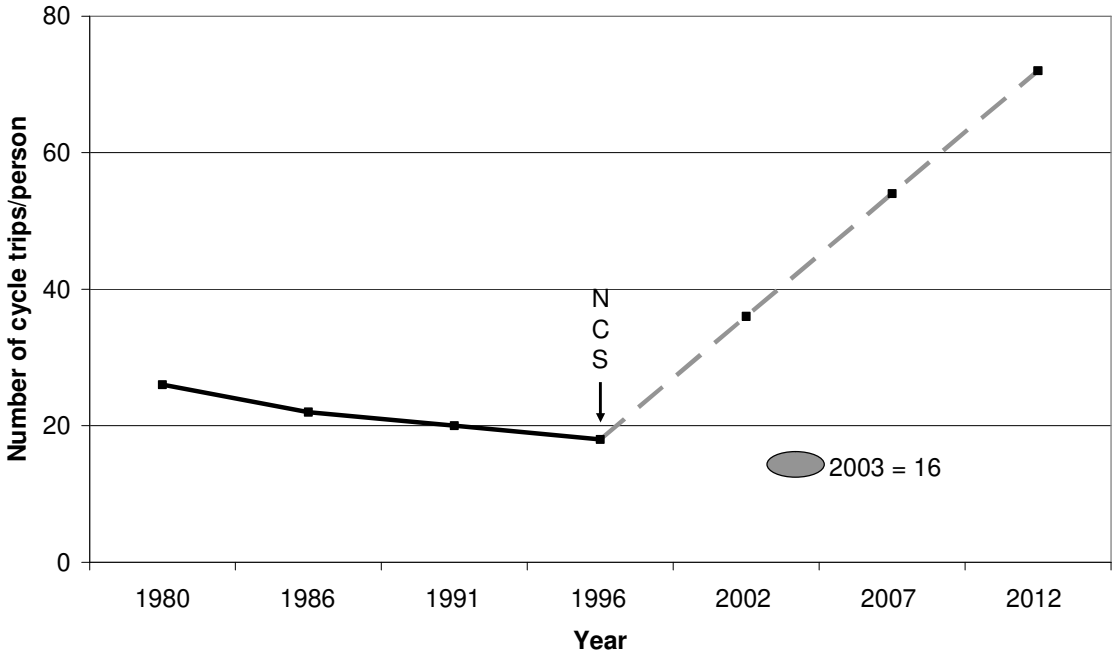

Figure 3: Progress towards the National Cycling Strategy target

Again, it is difficult to disagree with the basic premise that more people should cycle, promoting health and more sustainable forms of transport. However, the rationale for quadrupling cycling is unclear. Such a target might, as in the case of safety, galvanise all parties to improve cycling conditions. However, this does not appear to have happened casting question marks over the strategy itself. It is worth noting that this target was not adopted as one of the Department's PSA commitments.

A modelling study undertaken at the University of Leeds has compared the targets and cost-benefit approach to optimizing transport strategies (Emberger, 2003). It found that whilst the target based approach is simpler and more transparent it ignores the cost-effectiveness perspective and can de dominated by individual targets. It is striking that the target regime (which is supposed to reward good performance) might produce strategies which give lower value for money.

National PSA targets

The Department for Transport's National PSA targets (see Table 1) are unique amongst government departments as they are all (with the exception of the mandatory value for money target) outcome based targets.[2] Only 68% of targets in the 2001-2004 spending review across the whole of Government were outcome based (NAO, 2001). As stated previously, the outcome-based approach is largely a result of the 10 Year Plan exercise which followed some of the elements shown in Figure 1.

The Plan itself was based around the National Transport Model which had recently been developed. The Model however, was not fully multi-modal and so separate forecasts were made of the potential improvements in rail and bus use and these were all subsequently integrated (for full details see DETR (2000(c)). The Plan proposed a number of policy measures that could be applied to help achieve the main objectives of reducing congestion and pollution (such as congestion charging, widening trunk roads, light rail schemes). However, there was no evidence from the Plan analysis that a range of different scenarios had been analysed and that the figures that were therefore proposed were a 'best strategy'. Indeed, the document itself acknowledged that the details would be provided by the Local Transport Plans, Multi-Modal Studies and the investment strategies of the Highways Agency and the Strategic Rail Authority.

As events transpired, the railway industry has been through a period of upheaval which could not have been predicted at the time of the 10 Year Plan. In addition, there has been a significant

[2] An example of an outcome target is "to reduce congestion by 10% by 2005"
An example of an output target is "to increase the number of train miles run by 10% by 2005"

downgrading in the expectations for numbers of light rail schemes and the take-up of congestion charging and workplace parking levies in major cities. The congestion definition on which the Plan is based and which forms the main stay of the Department's strategy has yet to be adequately defined and the Department is therefore not yet measuring progress against this (www.hm-treasury.gov.uk/performance).

This therefore leaves the existing PSA targets subject to the following caveats:

1. The model that underpinned their definition was not fully fit for purpose
2. The assumptions which underpinned the Plan (particularly rail and congestion charging take-up) have changed
3. The balance of schemes now being proposed is different to that within the Plan
4. The main target 'congestion' is not yet measurable.

It is clear that these difficulties have damaged the credibility of the targets process for transport.

The significant changes highlighted above lead to further questions about the appropriateness of some of the remaining PSA targets. The original estimates of increases in bus, rail and light rail patronage came from discussions with interest groups and some integration with the National Transport Model. However, the targets are only useful in so far as they contribute to the achievement of a reduction in congestion and pollution or any of the other objectives (safety, accessibility, integration). Increasing the use of public transport for its own sake would appear to fulfill few policy objectives and would be unlikely to be good value for money. Is a 50% increase in rail use still a good outcome given the increase in input costs to the industry? If the intention of the 50% increase was to take some cars off the road, is there not a more cost-effective way of achieving this?

Performance in context

If the Treasury wishes to use the PSA targets as a means to measure performance, it must understand the context (factors external to government) in which the improvements are made. For example, the underlying decline in bus use is related to the growth in car ownership across the country. There are considerable regional differences that will make performance uneven across the country. What does a single national target for bus use tell the Treasury about how well the transport allocation is being spent?

The forecast growth in rail use is, for a large part, based on continued economic growth. The 10 Year Plan sets out an expected 34% increase purely as a result of economic activity. This is constrained to 23% without improvements and could increase to 51% with the plans put forward. The current expectation from the industry is for a 20 to 30% growth by 2010 raising very big questions about the value of the current rail spending plans.

Health

The Department for Health has set 12 national targets. 5 of the 12 national targets are output related targets relating to the time for outpatient appointments and accident and emergency admission for example (HM Treasury, 2002). These targets have come in for particularly heavy criticism, with the Trusts accused of devising ways in which their procedures can meet these criteria (e.g. redefining a trolley as a mobile bed). This is a cross-cutting theme in target setting whereby the target steers the system and not the other way round. Targets can lead to perverse incentives. There are also a significant number of more detailed targets set for Ambulance Trusts, Acute Trusts, Mental Heath Trusts and Primary Care Trusts through the NHS plan and monitored by the independent Commission for Health Improvement. Whilst by no means a blueprint for good practice, the Commission offers a common framework against which performance is assessed.

The Department of Health also sets 6 outcome targets including "Improve the quality of life and independence of older people so that they can live at home wherever possible, by increasing by March 2006 the number of those supported intensively to live at home to 30 % of the total being supported by social services at home or in residential care." (*Ibid*.) This is likely to have some, as yet unrecognized, implications for transport. Perhaps more interesting is the target to "reduce the under-18 conception rate by 50% by 2010". This target is a matter of public policy but is quite interventionist. A comparable transport target would be to "reduce the under 21 driving license rate by X% by 2010" (not that the author is suggesting this...).

Education and Skills

The Department for Education and Skills has set 11 targets with an almost equal split between outcome and output targets. The educational attainment outcome targets are perhaps the most controversial. Standards are set for increasing the numbers of students achieving particularly educational qualifications (e.g. A to C grades at GCSE). Schools are also ranked according to the achievement of their pupils – the infamous 'league tables'. Fitz-Gibbon (1996) argues that any system that ranks students based on performance must take account of the starting point of the pupil. Ranking on attainment at a particular point in time alone does not take account of the intake characteristics and therefore does not provide a true indication of the extra benefit attained from the education received (the 'value added'). Whilst perhaps not directly analogous with transport, this approach has some parallels to comparing outcomes against a 'do-minimum' scenario. However, a comparison of different local transport plan scenarios was more often than not carried out at a conceptual rather than analytical level and so this information has not been available (Wootton and Marsden, 2001).

Environment, Food and Rural Affairs

The Department for Environment, Food and Rural Affairs (DEFRA) has 11 targets. A key target affecting transport is to promote sustainable development in line with the key indicators set out in the headline indicators for sustainable development. It is worth noting that the headline indicator for transport is "road traffic levels", which is a target which the Department for Transport has reviewed and rejected in favour of reducing congestion and pollution.

DEFRA is also responsible for the achievement of the UK's climate change emission targets under Kyoto (12.5% of 1990 levels by 2008-2012). Transport's commitment to this is set out in the UK Climate Change Strategy. However, the recent review of the 10 Year Plan acknowledges that it is unlikely to deliver the reductions in emissions originally anticipated (DfT, 2002). As yet, no alternative strategy has been proposed. Whether any further reductions should come from transport at this stage is an interesting question. Without information about the cost-effectiveness of further reductions from each of the participating Departments, this is difficult to answer.

Office of the Deputy Prime Minister

The Office of the Deputy Prime Minister has seven performance targets. Many of these targets could or should have some impact on transport strategy development (although the Department for Transport's performance will not be judged against the achievement or otherwise of them). These include:

- "Promote better policy integration nationally, regionally and locally; in particular to work with departments to help them meet their PSA floor targets for neighbourhood renewal and social inclusion.
- Make sustainable improvements in the economic performance of all English regions and over the long term reduce the persistent gap in growth rates between the regions, defining measures to improve performance and reporting progress against these measures by 2006 (joint with HM Treasury and DTI).
- Achieve a better balance between housing availability and the demand for housing in all English regions while protecting valuable countryside around our towns, cities and in the greenbelt - and the sustainability of existing towns and cities.

Tensions between the aims of the DfT and ODPM might for example result from increasing housing in the congested south east of England. The extent to which the DfT should give priority to issues against which its performance is not measured is also uncertain.

Local Transport Plan Targets

The Guidance for Local Transport stated "Authorities will need to establish appropriate arrangements for monitoring LTP performance indicators. Given that performance against targets will be considered in confirming indicative allocations of resources, the Department and local

authorities will wish to ensure that monitoring is robust and a reasonable measure of performance". (DETR, 2000(d), p26) There have now been 3 rounds of Annual Progress Reports (APRs). The current Secretary of State indicated his commitment to link future resource allocations based on performance:

> "*I announced last year that with the capital money that local authorities would get in future, we would look for ways of skewing money towards those that actually did things away from councils that did not. At the moment, we are looking at the methodology because we have to be fair when we start doing this."* (Alistair Darling MP, House of Commons, 10 September 2003, Transport Committee)

It is clear that performance against targets at a local level will therefore be used as a main tool against which progress is assessed and subsequent funding allocated. Whilst, at face value this seems like a sensible proposition it raises the Department for Transport is still unclear how to do this.

As mentioned previously, an analysis of a small sample of Annual Progress Reports found an average of just over 60 targets per local authority (ranging from 41 to 90). Scaling this up to the 85 plans submitted in England implies somewhere around 5000 targets. Appendix 1 shows the headline targets from three LTPs from authorities that were recognised as having prepared LTPs of a good standard (Wootton and Marsden, 2001).

The three authorities shown are of a very different nature. Bristol is a unitary authority responsible solely for transport within the city of Bristol. Surrey is a large county authority with strong interconnections to London based travel and Devon is a large county which is predominantly rural.

Some issues which arise from comparing the targets are listed below:

- There are mode-specific targets (e.g. for bus, rail, cycle and walk)
- There are differences in definition (e.g. accessibility)
- Performance indicators vary across the plans
- There are differences in measurement approaches/techniques (e.g. traffic levels)
- The accident targets are almost identical, despite differences in character
- Land-use and freight are given only cursory treatment
- Highway improvements are based on structural surveys
- There are no implicit congestion/efficiency targets
- There are no firm commitments on climate change or noise
- Many of the targets (particularly from Devon) are output based

It is clearly concerning from the point of view of comparative performance that measurement strategies and performance indicators are different. It is also noticeable from reviewing the LTPs and APRs that different levels of baseline and historic data are provided. This is essential for determining the relative ambition of the different targets even were the targets, performance indicators and measurement systems to be consistent

The ability of some local authorities to be more specific about their targets (e.g. for bus use) stems partly from the availability of transport models for their areas. Bristol City Council has for example made extensive use of the BRITES model to look at the implications of a range of strategies. The final strategy chosen aims to meet their overall objectives and the targets reflect its expectations of the impacts of the measures which were tested in the model. This 'needs-based' approach reflects that taken by LPAC in examining the London traffic reduction targets (Turner et al., 1999). However, as was pointed out from the research at Leeds target led strategies are not necessarily cost-effective even if they are developed in this way.

It is not reasonable to expect authorities of such differing characters to have consistent targets for issues such as accessibility and bus use. However, the existence of such a large range of targets and the substantial differences between many of them makes the assessment of comparative performance a minefield. It also provides no clear steer on how the plans contribute to a more sustainable transport system.

Local PSA Targets

There is one further layer of targets that has also been established since 2000. These are "Local PSA Targets". The Government describes them as follows:

"*Local Public Service Agreements (Local PSAs) are voluntary, three year, "something for something" agreements between local authorities and central government. Led by Office of the Deputy Prime Minister and HM Treasury, Local PSAs are designed to raise performance in priority public services at levels beyond existing expectations and reward improvements in performance.*

Local authorities set targets in key areas at levels above which we would normally expect them to achieve. In entering into a Local PSA, an authority may benefit from freedoms and flexibilities in delivery, where they have identified inhibitors to achieving high, 'stretched' performance in the target areas, and receive additional resources in the form of a pump priming grant and performance reward grant." (www.standards.dfes.gov.uk)

These agreements therefore place a monetary value on the achievement of different levels of performance. The extra money is dependent on achievement over and above the current expected targets. This is further evidence of the direct link between performance and financial reward which the Treasury is keen to encourage. The agreements also include some extra freedoms or commitments from Government to remove barriers to progress.

Up to 12 targets can be set of which at least seven come from the national list, the remainder can be local priorities. A number of authorities have taken up these agreements and included some form of transport target within this. A sample is shown in Table 3.

Table 3: Local PSA Targets

Local Authority	Stretch Targets	Financial Incentive	Comment
York City Council	Reduce KSI by 45% and achieve a 14% reduction in slight casualties (compared to 40% and 10%)	£1 million government 'pump priming' across 12 targets £280k performance reward per target (pro rata)	
	To increase bus patronage on seven core high frequency bus routes by 28%		Includes 'walking buses' and personalized travel planning
	To increase number of 6-9 year olds normally cycling to school from 5.8% to 10.3% (1% higher than the previous target		
	To halt the overall deterioration and improve the condition of the city's footpaths		47.25kms being renewed per year instead of 36kms
Worcestershire County Council	To achieve National KSI and Child KSI targets by 2005 (40 and 50% reductions) instead of 2010	£100k pump priming required £780k performance reward	Appears better value for money than York/Manchester safety commitments
Manchester City Council	To reduce KSIs by 21% by 2004 compared to 18% without extra funding	£60k pump priming £984k performance reward	Over 3 year period may save 20 additional KSIs (note cost of fatality >£1million)
London Borough of Islington	To reduce KSIs by 9% by 2005 compared to a 1% increase without extra funding	£48k pump priming £516k performance reward	Over 4 year period may save 30 additional KSIs
Durham County Council	To reduce number of total KSI by 22% by 2004 compared to 18% without extra funding	£50k pump priming safety	Over 3 year period may save 20 additional KSIs
	To halt the deterioration in the condition of local roads and eliminate the backlog (% principal roads needing strengthening reduced to 8.8%	£100k pump priming for maintenance	

	from 11.1% and non-principal roads to 10.3% from 13.5%)	£1050k performance reward per target	

The extra safety commitments appear to offer very good value for money to the Treasury. If the improvements are achieved then, taking the London Borough of Islington as an example, 20 KSIs may be saved for a cost of around £100k pump priming (central Government funds matched by local contributions) and a performance reward grant of £516k. This totals £616k and could save 30 lives over a 4 year period. The true cost-benefit analysis depends on the profile of performance in the number of lives saved but with each fatality valued at £1.05m and each serious injury at £117k, this will clearly outweigh the costs.

What the table does demonstrate (although a more thorough comparison is required) is that different local authorities are being rewarded to different degrees for equivalent levels of performance. Why for example should Durham stand to collect £1m for saving perhaps 20 lives over a three year period and Islington £516k for saving 30 lives over four years.

The Department for Transport has agreed values for different types of casualties against which to compare the agreements set out above. The cost-benefit of the bus improvements in York or the pavement and road improvements in York and Durham remain less easy to unpick although it would appear unlikely that such an analysis would come up with answers any closer than those presented on safety.

The Local PSA targets at least present a first attempt at formalising the link between performance and reward. However, such a programme merits much greater examination before it could be seen to be a reliable and cost-effective tool. In presenting this discussion however, the motivational aspects of working towards a 'bonus' have been put to one side (Greely, 2002). This too merits further investigation.

Conclusion

This paper has reviewed the very swift development of the 'target culture' in central and local government over the last 6 or so years. Under the current government it appears that targets will become increasingly important as a form of contract of commitment to improving public services on which, increasingly, funding will be awarded. At the start of the paper five questions were posed about the role targets in transport planning. These are answered, based on the research to date, below.

What is the purpose of targets?

Two broad classifications of targets emerge from the review. The first is a 'needs-based' approach where international (e.g. climate change) or national (e.g. air quality) commitments might form the basis around which a strategy is developed. Other 'needs-based' approaches could be developed out of the overarching transport objectives (e.g. reducing fatalities on the grounds of societal acceptance). Such objective related targets should serve to drive overall policy in a particular direction.

The second type of target appears to fulfill the role of assessing performance on the basis of a given strategy having been accepted. This type of target proliferates national and local target setting approaches at the moment in the UK. As yet however, such targets have not been used to demonstrate value for money as we do not yet compare cost/outcome with benefit/outcome at this scale.

What behaviours do they induce?

There is limited objective evidence about the extent to which targets influence behaviour. A surface analysis suggests that targets are influencing strategy development, the types of measures deployed and the way in which outcomes are measured and presented. There appears to be quite significant potential for the creation of perverse incentives. The limited research to date also suggests that target-led strategies are sub-optimal and could give worse value for money than traditional approaches. However, this is an area which is very significantly under-researched from

motivational, institutional and decision-making perspectives and is clearly a missing link in understanding the benefits of the target regime.

Are current targets appropriate?

If one compares the Department for Transport's PSA targets with the key national policy commitments (e.g. sustainability) and the objectives set in its own White Paper, there are considerable inconsistencies. The targets, even taking account of other considerable difficulties, seem unlikely to be driving performance in the best direction.

Local targets are developed on the back of national targets and associated guidance. It is even less surprising that the targets at a local level are often further removed from 'needs-based' objectives. This is particularly the case where local authorities are not of a sufficient size or density to have a strategic transport model for their area against which to develop such strategies and targets. There are too many targets to get a clear picture of overall progress.

How do other sectors approach target setting?

Despite the difficulties identified throughout this paper, it is important to acknowledge that the national transport targets are, for the most part, an example of current best practice. The most important concept to be gleaned from the review of other sectors is the issue of 'value-added' which has been researched in the field of education for over a decade.

There is little or no meaningful comparison of historic trends and base-line performance between different local authorities to enable the Department to be able to determine what constitutes good/bad performance. Without careful consideration of the starting point of each local authority it will not be possible to determine the 'value-added' of the investment made. Not every local authority produces a do-minimum scenario in any detail and it would appear in the interests of anyone doing so, to make the baseline performance as low as possible. If we wish to reward progress and performance through the funding allocations, this must become much more transparent. There is evidence from the Local PSA target regime that better performance does not necessarily mean bigger rewards.

Where next for targets in transport planning?

One of the main unanswered questions is "what are the real targets that we need to aim for?" Sustainability implies improvements to the environment, reduced resource use and the maintenance of a reasonable standard of living across the generations. The Government aims to have a sustainable transport policy. How can the two be combined? It seems unlikely that targets for bus or rail use, or congestion in 2010 will really show whether we are becoming more sustainable. It would therefore appear that a smaller number of more needs-based and sustainability related targets would provide a better framework for policy development.

We also need to develop a much stronger understanding of how to measure performance across the wide variety of different local authority contexts that exist. Without a clearer understanding of performance it will be difficult to provide an equitable assessment on which to base financial allocations. There appears to be, as yet, little understanding of the costs of buying different outcomes across the local authorities. This would appear to be a fundamental step in this process.

The use of targets as a performance driving and measurement tool is becoming increasingly popular across the globe. It seems likely therefore, and particular with increasing moves to devolved decision making, that performance measurement will remain an important part of the process of local and national government. This paper has highlighted some of the knowledge gaps that need to be filled before this can be a fully constructive and transparent process.

REFERENCES

Atkins (2003) Local transport plans – policy evaluation: Part 1 – Final Report, Report to the Department for Transport, London, March 2003.

CFiT (2003) 10 Year Transport Plan: Second assessment report, Commission for Integrated Transport

DETR (1998) A New Deal for Transport: Better for Everyone, Department of the Environment, Transport and the Regions, Cm 3950, July 1998, The Stationary Office

DETR (2000(a)) Transport 2010: The 10 Year Plan, Department of the Environment, Transport and the Regions, July 2000.

DETR (2000(c)) Tomorrow's Roads: Safer for Everyone, Department of the Environment, Transport and the Regions, March 2000.

DETR (2000(c)) Transport 2010: The Background Analysis, Department of the Environment, Transport and the Regions, July 2000.

DETR (2000(d)) Guidance on Full Local Transport Plans, Department of the Environment, Transport and the Regions, March 2000.

DfT (2002) Transport Ten Year Plan 2000: Delivering better transport - progress report, Department for Transport, December 17, London.

Emberger (2003) The Design of Optimal Transport Strategies, Task 3 Overview Paper, Institute for Transport Studies, University of Leeds.

Fitz-Gibbon, C. (1996) Value Added, Chapter 14 in Monitoring Education Indicators, Quality and Effectiveness, Cassell.

Goodwin, P. (2002) Relaunching the 10 Year Plan for Transport: Fundamental Revision or Comestic Adjustment, Transport Planning Society Annual Lecture, Institution for Civil Engineers, 22nd July 2002, www.tps.org.uk

Greely, J. (2002) Local PSAs: A way of matching national and local priorities?, New Economy, 4, p36-40.

Hillman, M. et al. One false move: a study of children's independent mobility. London, Policy Studies Institute. 1991.

HM Treasury (2002) 2002 Spending Review: New Public Spending Plans 2003-2006, Cm 5570, London, July 2002, The Stationary Office.

HoC (2002(a)) 8th Report of the Transport Local Government and the Regions Committee, The 10 Year Plan for Transport, HC(2001-02) 558 – I

HoC (2002(b)) 8th Report of the Transport Local Government and the Regions Committee, The 10 Year Plan for Transport, HC(2001-02) 558 – II, evidence from METRO (West Yorkshire Passenger Transport Executive)

KonSULT (2003) The KonSULT Knowledgebase. (www.transportconnect.net/konsult)

McCarthy, M. (2003) Health Impact Assessment of Transport, Department of Epedemiology and Public Health, UCL London.

McCarthy, V. (2003) Performance Measurements and Targets, Internal House of Commons seminar, Scrutiny Unit, London.

NAO (2001) Measuring the Performance of Government Departments, National Audit Office, HC 301, Session 2000-2001, The Stationary Office.

PROSPECTS (2003) Developing Sustainable Urban Land Use and Transport Strategies: A Decision Makers Guidebook, European Commission (EESD), January 2003

OECD (2001) Ageing and Transport: Mobility Needs and Safety Issues, Organisation for Economic Co-operation and Development.

SRA (2003) Strategic Plan 2003: A Platform for Progress, Strategic Rail Authority, London.

Tight, MR et al (1998) Casualty reduction or danger reduction : conflicting approaches or means to achieve the same end? Transport Policy 5(3)

Turner, D., Dix, M., Gardner, K. and Beevers, S. (1999) Setting traffic reduction targets for London, Traffic Engineering and Control, 40 (4), 186-94

Wootton, J. and Marsden, G. (2001) The Local Transport Plan Submissions, A report to the Public Policy Committee of the RAC Foundation, www.trg.soton.ac.uk