
We recommend you cite the published version.
The publisher’s URL is: http://www.utsg.net/web/

Refereed: No

(no note)

Disclaimer

UWE has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

UWE makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

UWE makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

UWE accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

PLEASE SCROLL DOWN FOR TEXT.
Assessing the Local Sustainable Transport Fund Submissions in Relation to Disruption

Mr David Williams
PhD Student
University of the West of England

Dr Tim Chatterton
Senior Research Fellow
University of the West of England

Prof. Graham Parkhurst
Professor of Sustainable Mobility
University of the West of England

Abstract
The Local Sustainable Transport Fund (LSTF) is a £560m investment by the UK Government in local authority transport schemes in England (excluding London). The fund will be matched by local authorities’ own investments from their transport budgets, meaning a total spend of over £1bn. The schemes are a mix of capital and revenue projects designed to cure a panacea of societal issues, including: enabling economic growth, reducing carbon emissions, improving safety and increasing physical activity. This paper reviews LSTF bid documents to identify how and why bids were chosen for funding in relation to Government objectives and to identify the spread of funding across the country, comparing this funding to highway infrastructure funding for the same period. The paper undertakes a detailed review of the measures that will be implemented in the LSTF process to identify whether they go far enough in attempting to change travel practices and whether ‘disruptive’ transport measures have been included in any of the bids as a delivery tool. Previous research found that disruptive measures such as the closure of traffic routes had the effect of removing car trips from the network and altering the practices associated with travel. Network closures may become more common in future due to extreme weather events and growing funding gaps for repair and replacement of network assets, so it is important that local authorities understand how best to manage these closures, whilst promoting the benefits of sustainable travel options.

Introduction
In 2010, the Minister for Local Transport Norman Baker announced that a significant fund had been set aside by the UK Government for English Local Transport Authorities (LTA) outside London to deliver schemes designed to enhance sustainable travel options within local communities (Department for Transport [DTT], 2010a). As part of the LSTF, LTAs could apply for a range of funding for: Small Projects (SP), Large Projects (LP) and Key Components (KC) (as quick implementation aspects of the LP bid). Small bids were for schemes up to £5m and applicants were notified of the funding decisions in two tranches: Tranche 1 announced SP and KC bids in May 2011 (DTT, 2011a), and Tranche 2 announced in May and June 2012 (DTT, 2012a, DTT, 2012b). LP bids were for schemes between £5m and £50m and the successful bids were announced in June 2012 (DTT, 2012b). As of June 2012, £560m has been provided to LTAs (which has been matched from LTA budgets to total over £1bn) to deliver capital schemes to provide new infrastructure and revenue schemes designed to inform the public how to travel sustainably, and to enable change by providing schemes including personalised travel planning and adult cycle training. The funding for revenue schemes is a move away from the traditional capital-led transport
planning model and provides an opportunity to engender a change to travel practices in the UK which could lead to a reduction in the use of cars on short (local) trips and by replacing cars with low carbon alternatives, such as public transport, walking and cycling.

The focus of the LSTF is on encouraging individuals to change to sustainable travel modes (DfT, 2010a). However, it is difficult to know to know whether any potential changes in the way people travel through the LSTF will be maintained in the longer-term. The LSTF follows on from two successful trial schemes. Sustainable Travel Towns (Sloman et al., 2010, pp.166) and Cycling Towns and Cities (DfT, 2012c). Both projects had an evaluation period of just one year after the completion of the project. It is therefore difficult to know what the long-term impact of such schemes is and, in the case of the LSTF schemes, what will occur once the funding ceases and the local authority support is no longer available to provide individuals and business with high levels of support, post 2105. This paper considers these schemes through the sociological lens of ‘social practice theory’ in order to assess the potential for these schemes in changing the way we travel, rather than through the sum if changes made by individuals.

**Social Practice Approach**

Practice-based approaches to interpreting behaviour differ from traditional psychology-based (individualist) approaches of behaviour change in that they do not focus on the individual, but rather the wider framing of activities at a societal level. From this viewpoint, individuals are seen not as the ‘originators’ of practice, but ‘carriers’ of practice (Darnton et al. 2011). For example, the practice of commuting was derived from the development of first the railway network and then the motorcar. Developments in the transport system increased accessibility and land values, whilst commuting made possible particular spatial forms so that lifestyles based on low residential density, and the physical separation of work activities and home activities became possible (Williams et al., 2012). Commuting is now necessary to sustain such individual lifestyles and wider social practices. Analyses through practice theory suggest that if we wish to reduce the carbon impact of travel, we should focus not on individuals, but rather the elements of the social and physical world that retain and support high carbon travel (Darnton et al. 2011). By focussing on the practice of travel rather than on the individual actions of the ‘carriers’ of the practice it may be possible to identify measures that ‘disrupt’ current practices and reconfigure them to lock-in long-term changes that reduce the carbon emissions associated with travel.

The three basic elements of a practice are: materials, competences and meanings (Shove et al., 2012). Connections between these three elements shift and vary over time. Whilst a practice such as driving a car is seen by many people as relatively static, it has actually undergone many changes over time. Shove et al. (2012) use the example that, where once people could be amateur mechanics, modern engines are now a ‘closed box’ requiring qualified technicians and specialist diagnostic equipment to fix. When the connection between two elements is broken, for example by a disruptive event or a local authority intervention, travel practices such as driving have to flex or change to accommodate or account for the disruption. In many cases this can be a shift from car travel to other modes, or the decision not to travel at all. Local authorities have the opportunity to break the links between elements or remove elements that sustain high carbon travel practices through interventions, creating new links to low carbon options. This can be achieved through alterations to the materials (e.g. transport infrastructure, cars and bicycles), competences (e.g. reading maps and timetables, learning to drive or cycle), and meanings (e.g. where and when people can drive, walk or cycle).

The paper will look at whether any long-term changes have been included in the funded schemes as a means of reducing carbon emissions. Such changes to the network can potentially have a bigger long-term impact on whether travel is undertaken sustainably. For example, Cairns et al. (2002) found that a disruptive measure such as the closure of sections of the network resulted in the removal of car trips from the wider network, and although not captured in the research, are likely to have altered the practices associated with travel. Shove and Walker (2010) found that where, when and how we move can be influenced by transport policies that disincentivise car travel, such as the London Congestion Charge.
Network disruptions may become more common in future due to a greater incidence of extreme weather events (Solomon et al., 2007) and growing funding gaps for repair and replacement of network asset due to austerity budgeting (Osborne, 2010). It is therefore important that local authorities understand how best to manage any potential closures, whilst investigating any potential benefits this will have for the way people travel. This paper will investigate whether any of the LSTF schemes are seeking to provide sustainable travel benefits through a focus on disrupting the option of driving.

The paper is part of a wider study into the impacts of disruption on travel and how it is managed at a local level, with the aim of providing a long-term low carbon travel network (www.disruptionproject.net). This novel approach looks at interventions in the existing network that are designed to enable, incentivise/disincentivise or disrupt travel practices. Enabling interventions are ones that make it easier to undertake a specific mode of travel or link up various modes of travel, such as the building of a pedestrian link, or provision of a new bus service, where this option has not previously existed. Incentives can be both financial and non-financial in nature. Financial incentives offer a reward or saving to the person who is travelling by a particular mode: whilst non-financial make a particular mode or modes of travel easier, such smart-ticketing, which covers a journey on several modes of travel. Disincentives and disruption vary in that disincentives are schemes that deter a certain practice that has been deemed as undesirable by the policy maker. In comparison disruptive schemes remove an element (material, meaning or competence) or a link between the elements, altering how a practice is undertaken. For example the closure of a bridge for maintenance will change the competence of how someone navigates an alternative route or possibly their choice of mode (material) by which they choose to undertake the journey. The closure may alter the meaning of the journey and determine whether it is essential or non-essential to the person travelling. If it is deemed non-essential and the detour is too onerous the decision may be made not to travel at all.

The paper provides a brief summary of transport policy in the UK before discussing the analysis framework that will be used in assessing the bid documents. The paper will then compare government funding of LSTF schemes in comparison to highway infrastructure schemes four period of the LSTF project (2011/12 – 2014/15). The paper will then review the funded and non-funded LP and SP Tranche 1 bids to identify what made a bid suitable for funding and review the extent to which disruption is evident as a tool to change travel practices within the LSTF proposals in England. The paper concludes with the key points and the discussion of the implication of the findings.

Local Transport Policy - UK
To assess how the LSTF was developed it is important to understand local transport policy in England in the thirteen years prior to 2011, as they form the basis of the policy goals the LSTF is designed to deliver. The concept of a Local Transport Plan (LTP) was first discussed in the 1998 Transport White Paper – A New Deal for Transport: Better for Everyone, and this passed into legislation as part of the Local Transport Act 2000 (Marsden et al., 2012). LTPs outline how LTAs would manage their transport budgets in the delivery of new infrastructure and other schemes designed to enable movement of people through the network. As of 2012 there have been three rounds of LTPs: 2001/06, 2006/11 and 2011 onwards. LTAs were also able to apply for Major Scheme funding for large-scale projects that could not be funded through the budgets available for LTPs (DfT, 2004). The first two LTP periods were five years by statute. With the introduction of LTP3 the document has become a more strategic vision of transport change with a 15-year horizon, rather than its previous form as a working document. To fill the void created by the change in focus of the LTP from a delivery mechanism to a strategy document other means of funding and delivering schemes have been required to deliver transport projects at LTA level.

With the change of Government in 2010 and the subsequent move towards ‘localism’ through the Localism Act 2011 (Parliament, 2011), transport policy in England has changed to include the delivery of schemes that could be classed as ‘local’ and ‘sustainable’. The Sustainable Transport White Paper 2011 was an attempt to meet the government objectives “to help create growth in the economy and to tackle climate change by cutting carbon emissions”, (DfT, 2011b).
The LSTF is the policy instrument that the government has been set up to attain the dual goals of the 2011 white paper. Hall, 1993, identified that policymaking comprised three variables: “Overarching goals that guide policy; the policy instruments; and the precise settings of these instruments”, (Hall, 1993, pp. 278).

The recent history of UK transport policy provides a background to understand what the LSTF is designed to achieve which was codified by DfT in providing bidding authorities with a list of objectives that would provide the overarching goals for the LSTF:

- Support for the local economy through reducing congestion, increasing journey time reliability and predictability and improving access to employment;
- Reduction of carbon emissions through the provision of walking and cycling measures;
- Delivery of wider social benefit such as accessibility and social inclusion;
- Improved safety;
- Improved air quality; and
- The promotion of physical activity, (DIT, 2011c pp.13,14).

Analysis Framework
The objectives and scheme descriptions of SP Tranche 1 and LP Bid documents have been reviewed to identify where the overarching goals have been included within the bid documents. The number and type of schemes included in LSTF bid submissions will be analysed to understand the differences (if any) between funded and non-funded schemes. Whilst the government’s spend on sustainable measures does not equate to understanding what their impact on travel will be, it will provide a useful indication of what measures are deemed ‘sustainable’ by government. It is assumed that the strength of the link between proposals and the overarching goals was the primary reason bids were selected for funding.

In the current context, it might be logical to argue that to achieve a reduction in carbon emissions a reduction in the number of trips by car would be a desired outcome from any sustainable transport project. Therefore, as a secondary assessment, the bid documents have also been analysed to identify whether the schemes have elements that would be ‘disruptive’ to travelling by car. A sustainable transport network should also be able to meet the external pressures through moving to a transformed state that has reduced levels of travel by car.

Comparative Investment in LSTF and Highway Capital Expenditure
The announcement of the LSTF funding has been given by region, despite the abolition of a regional focus on development as part of the Localism Bill 2010 (BIS, 2010). Therefore the results have been assessed at a regional level. The results show that the South East received the highest overall amount of funding from the LSTF, £111m, but per head of population both the West Midlands and South West are higher, with spend between £13.55 and £16.55 per head of population compared to £12.90 in the South East.

When the breakdown of funding for the LSTF is compared to the government funding for highway schemes for the four year LSTF period (2011/12 - 2014/15), the results in Table 1 show that government has committed to spending approximately £4.8bn on highway infrastructure projects during the same period. This is a 9:1 spend on highway schemes compared to LSTF schemes (DIT, 2012d, 2011d, 2011e, 2010a, 2010b, Highways Agency, 2012, Mersey Gateway, 2012, HM Treasury, 2011). Table 1 provides a breakdown on spend per region for both LSTF schemes and highway infrastructure schemes.

The East of England has the largest variation in spending on LSTF and highway schemes with £22 being spent on highway infrastructure for every £1 of LSTF funding. In this context, road building can be seen as significantly reinforcing current travel practices i.e. driving, by predominantly providing highway infrastructure as the new materials to travel by within the transportation network. Such a ratio suggests that the overall, high carbon travel practices will be sustained, rather than reduced, and will be made more resilient to change as the new infrastructure provides people with the opportunity to travel by car to access areas opened to
development by these schemes. Such a large investment in one type of transport infrastructure instils the *meaning* that high carbon travel is the most logical means of travel locking-in the unsustainable travel practices in the long-term.

*Table 1 – Government Funding for LSTF Schemes and Highway Schemes by Region*

<table>
<thead>
<tr>
<th>Region</th>
<th>Population* (m)</th>
<th>LSTF Spend (£m)</th>
<th>Highway Schemes Spend (£m)</th>
<th>LSTF Spend / Head (£)</th>
<th>Highway Schemes Spend /Head (£)</th>
<th>Spend Ratio LSTF: Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLAND minus LONDON</td>
<td>44.8</td>
<td>543.07</td>
<td>4,769.06</td>
<td>12.11</td>
<td>106.36</td>
<td>1:9</td>
</tr>
<tr>
<td>NORTH EAST</td>
<td>2.6</td>
<td>26.29</td>
<td>115.84</td>
<td>10.12</td>
<td>44.61</td>
<td>1:4</td>
</tr>
<tr>
<td>NORTH WEST</td>
<td>7.0</td>
<td>95.47</td>
<td>1,098.92</td>
<td>13.54</td>
<td>155.83</td>
<td>1:12</td>
</tr>
<tr>
<td>YORKSHIRE AND THE HUMBER</td>
<td>5.3</td>
<td>50.30</td>
<td>664.81</td>
<td>9.52</td>
<td>125.82</td>
<td>1:13</td>
</tr>
<tr>
<td>EAST MIDLANDS</td>
<td>4.5</td>
<td>37.50</td>
<td>510.90</td>
<td>8.27</td>
<td>112.70</td>
<td>1:14</td>
</tr>
<tr>
<td>WEST MIDLANDS</td>
<td>5.6</td>
<td>92.44</td>
<td>505.81</td>
<td>16.50</td>
<td>90.29</td>
<td>1:5</td>
</tr>
<tr>
<td>EAST</td>
<td>5.8</td>
<td>41.56</td>
<td>936.36</td>
<td>7.11</td>
<td>160.14</td>
<td>1:22</td>
</tr>
<tr>
<td>SOUTH EAST</td>
<td>8.6</td>
<td>111.43</td>
<td>670.86</td>
<td>12.90</td>
<td>77.69</td>
<td>1:6</td>
</tr>
<tr>
<td>SOUTH WEST</td>
<td>5.3</td>
<td>88.08</td>
<td>265.57</td>
<td>16.65</td>
<td>50.21</td>
<td>1:3</td>
</tr>
</tbody>
</table>

* Population data from the Office for National Statistics licensed under the Open Government Licence v.1.0.*

By comparison, the South West has by far the best ratio of LSTF funding to highway infrastructure funding at £1 being spent on LSTF funding to every £3 on highway schemes. The South West LTAs were awarded a mix of SP and LP funding, which will provide improvements for communities across the region. In comparison to other regions, this area does not have any significant highway infrastructure schemes, which may affect the difference in spending. For example, the North West’s highway infrastructure funding is raised by the government’s long term investment in the Mersey Gateway Project, which includes a £86m initial grant and an annual revenue grant of £14.55m for 26.5 years (Mersey Gateway, 2011). This means that the government have committed £589m to this scheme for the duration of the project.

The extensive investment in new highway capacity provision follows the previous thirteen years under the Labour government where spending on new road schemes was significantly reduced and highway budgeting policy focused on improving the performance of existing transport networks (Parkhurst and Dudley, 2011). The current coalition government’s approach to funding transport schemes shows the polar opposite approach is being taken with the aim of improving the UK economy through the funding of transport schemes focusing on both large and small scale interventions. In 2011 Chancellor George Osborne announced in the Autumn Statement that “we can today give the go ahead around the country to 35 new road and rail schemes that support economic development” (Osborne, 2011).

Like the various highway infrastructure programmes, the LSTF is also designed to support economic development in the UK, albeit at a local scale and, as the name suggests, through sustainable means. The significant funding of large-scale highway projects offers a confusing message to the public: if people are to travel sustainably now and in the future, why is the government funding so many road schemes, which by their very nature promote high carbon travel, which by its nature is unsustainable? The discrepancy in the funding of LSTF
schemes and highway schemes calls into question whether there is a desire within central government to promote sustainability or whether transport is solely a means of growing the economy through means that will enable high carbon travel practices to persist.

**LSTF SP Tranche 1 Bids – Policy Goals**
The results from Tranche 1 of the SP bids were announced in May 2011, with 39 LTAs being awarded funding for schemes totalling £155.4m. Of these bids, 11 were classified as KC bids which were designed to precede the subsequent LP bids. Another 13 LTAs were offered the opportunity to resubmit a new revised case as part of Tranche 2, with 21 LTAs being informed that their bids had been refused funding.

In the most part the funded bids made clear reference to the DfT policy goals within the project objectives and how the scheme would be delivered. All 39 bids stated that the scheme was designed to support the local economy and that this would be achieved through: reducing congestion (38 bids) and enhancing access to employment (32 bids). Journey time reliability was less prevalent as a means of supporting the economy, with ‘reliability’ mentioned 18 times and ‘predictability’ 11 times. Merseyside was the only funded bid to not explicitly mention reducing carbon emissions as an objective of the bid, although it did refer to this indirectly with an objective to provide and promote clean/low-emission transport. Only three bids did not contain walking schemes, with just one not including a cycling scheme. Plymouth’s Smart Ticketing bid obviously had no reference to these modes, whilst Birmingham and Southampton included no specific walking schemes, other than as part of general travel planning initiatives.

For the bids that were invited to resubmit, all 13 referred to helping the local economy, but only 11 to reducing carbon emissions as an objective. The biggest differences in the bids invited for resubmission compared to the funded bids was that only nine bids out of 13 highlighted reducing congestion as a means of supporting the local economy. All 13 bids referenced improving safety as a key goal of the scheme, but less than half referenced improving air quality.

For the unsuccessful bids two did not explicitly set out ‘supporting the local economy’ as an objective. Overall, where it was included there were fewer examples of how this would be achieved, with just 15 out of 21 bids referencing reducing congestion, and 14 stating that enhancing access to employment was a key target. Improving air quality also featured relatively few times, with just eight bids stating this as an objective.

**LSTF SP Tranche 1 Bids – Delivery**
The overview of how the LSTF policy goals were referred to within the bid documents provided some insight into the importance of explicitly highlighting the local economy and carbon emissions as main factors in the bids. The next step is to see what delivery methods were preferred in funded bids, compared to the resubmitted and rejected bids. The most popular approach was through marketing and communications initiatives including: marketing campaigns, events and web-based information. Improvements to the walking and cycling infrastructure were the next most frequently deployed type of intervention, with 31 successful bids referring to how the scheme was designed to improve links to employment sites, stations and schools. The Chi Square Test results in Table 2 indicate four types of intervention that may have been a contributing factor in the success or failure of being awarded funding. A P-value below 0.05 indicates a relationship between the frequency of an intervention and whether the bid received funding. Travel planning had the most significant relationship (p. 0.01033), as 35 successful bids included this type of intervention. Travel planning interventions included measures such as personalised travel planning and school travel plans.

Providing interventions that enabled people to travel to new jobs such as: travel passes, journey planning and travel assistance training were also statistically significant (p.0.04207), featuring with greater frequency in bids that were invited to re-submit or were rejected. Both bus infrastructure and bus service improvements also were significant, but were very close of 0.5, which suggests the influence of these factors was probably negligible. This indicates
that ‘soft’ travel planning measures rather than infrastructure schemes were important in determining whether SP bids received funding in Tranche 1. Relatively few bids included schemes that were designed to reduce the need to travel.

Table 2 – Breakdown of the type of improvements bid for as part of the SP Tranche 1 Bid Funding

<table>
<thead>
<tr>
<th>Schemes included in Tranche 1 Bids</th>
<th>Funded Bids (39)</th>
<th>Resubmit Bids (13)</th>
<th>Refused Bids (21)</th>
<th>Significance (P Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing and communications</td>
<td>38</td>
<td>13</td>
<td>20</td>
<td>0.71088</td>
</tr>
<tr>
<td>Walking and cycling infrastructure improvements</td>
<td>37</td>
<td>13</td>
<td>16</td>
<td>0.53936</td>
</tr>
<tr>
<td>Travel planning</td>
<td>35</td>
<td>12</td>
<td>14</td>
<td><strong>0.01033</strong></td>
</tr>
<tr>
<td>Bus information / marketing improvements</td>
<td>31</td>
<td>10</td>
<td>11</td>
<td>0.10698</td>
</tr>
<tr>
<td>Workplace engagement</td>
<td>29</td>
<td>11</td>
<td>11</td>
<td>0.11712</td>
</tr>
<tr>
<td>Route planning and mapping</td>
<td>27</td>
<td>8</td>
<td>18</td>
<td>0.34124</td>
</tr>
<tr>
<td>Bus infrastructure improvements</td>
<td>26</td>
<td>10</td>
<td>7</td>
<td><strong>0.04809</strong></td>
</tr>
<tr>
<td>Vehicle-based initiatives</td>
<td>25</td>
<td>8</td>
<td>13</td>
<td>0.72685</td>
</tr>
<tr>
<td>Skills training</td>
<td>24</td>
<td>8</td>
<td>15</td>
<td>0.84296</td>
</tr>
<tr>
<td>Bus service improvements</td>
<td>23</td>
<td>7</td>
<td>7</td>
<td><strong>0.04983</strong></td>
</tr>
<tr>
<td>Access to cycles</td>
<td>23</td>
<td>9</td>
<td>8</td>
<td>0.70476</td>
</tr>
<tr>
<td>Schools active travel</td>
<td>22</td>
<td>5</td>
<td>8</td>
<td>0.41717</td>
</tr>
<tr>
<td>On road improvements</td>
<td>22</td>
<td>9</td>
<td>9</td>
<td>0.57444</td>
</tr>
<tr>
<td>Rail improvements</td>
<td>19</td>
<td>5</td>
<td>8</td>
<td>0.72493</td>
</tr>
<tr>
<td>Workplace active travel</td>
<td>17</td>
<td>5</td>
<td>5</td>
<td>0.52147</td>
</tr>
<tr>
<td>Reducing the need to travel</td>
<td>10</td>
<td>1</td>
<td>5</td>
<td>0.32973</td>
</tr>
<tr>
<td>Access to work</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td><strong>0.04207</strong></td>
</tr>
</tbody>
</table>

LSTF Small Bids – Tranche 1 – Disruption

The majority of schemes proposed within the bids were designed to enable movement through the network rather than reducing/removing trips that could be deemed ‘non-essential’. Removal of ‘non-essential’ trips can be seen as a means of freeing up capacity on the existing network thereby reducing the requirement for further highway capacity improvements and enable the funding to be spent on other sustainable travel initiatives. From a practice perspective, the meaning of what constitutes an essential and non-essential journey is complex, with different people having differing interpretations of the same journey through their own norms and values.

Elements of travel reduction are included in some of the bids which include work hubs in rural areas, high speed broadband and teleworking opportunities, which offer the materials to change travel practice provided people have the competences and agreement from management (meaning) to use these options. Southampton City Council also plans to promote home deliveries of large objects, which will alter the meaning and materials required to travel into the city centre. However, the majority of schemes are designed to enable or encourage travel by sustainable modes, by providing new materials to aid more sustainable travel modes, such as new walking, cycling and public transport infrastructure. Many LTAs are also using the LSTF funding to provide enhanced competences e.g. skills training to enable travel. Other skills training is also being offered, including bicycle maintenance to enable people to gain the competence of fixing their own vehicle so that they feel more in control of their transport mode and are able to travel sustainably in the longer term. Of the funded bids, 22 out of 39 include measures that enable people to continue to travel by car (but in a potentially more sustainable way), through on-road improvements such as junction improvements, traffic and parking management and Urban Traffic Management Systems. Interestingly, those bids that were refused had fewer on-road improvements than the funded bids, with just nine out of 21 of these bids including measures that enabled travel to continue by car.

This paper is produced and circulated privately and its inclusion in the conference does not constitute publication.
The LSTF schemes have a focus on incentivising sustainable travel by providing training, competitions and personalised travel planning designed to encourage people to change their behaviour. The majority of these incentives are non-financial, however but are focused on giving people the skills to travel sustainably. Only nine of the successful bids have schemes that could be termed as disruptive to car travel. These include 20mph zones, which will slow rather than completely disrupt car travel, bus gates and corridors, removal of parking spaces and camera cars operating around schools in Tyne and Wear to deter illegal parking. Hertfordshire County Council’s plans to close the town centre of St Albans to cars during the hours of 0700-1900 is the only truly disruptive measure identified in all reviewed bid documents, as it creates an outright ban on the existing practice of driving within the town centre. This disruption changes: the materials available for travel e.g. removal of road space for cars and the creation of a pedestrianised area of the town: the meanings, where people can drive and where they can walk and cycle, where they will get fined for driving illegally; and competences, where to travel through and around the town by car and by foot.

In terms of the funded bids, overall there appears to be very little disruption to the practice of driving, but rather a focus on encouraging or incentivising the use of alternative modes.

LSTF Large Project Bids – Policy Goals

Nineteen large bids were submitted by LTAs for LSTF funding, with thirteen bids being successful in receiving funding, three authorities invited to resubmit bids and three bids being refused. The thirteen successful schemes have been awarded a combined £230.4m, which local authorities will match in delivering the schemes.

Nottingham City Council’s bid was the only one out of all nineteen submitted not to explicitly include the policy goal of supporting the local economy in the scheme objectives. The means of improving the economy put forward in the other bids were primarily through reducing congestion, improving journey time reliability and enhancing access to employment. Two funded bids, South Hampshire and Surrey, did not specifically cite reducing carbon emissions as a desired outcome from the LSTF as a scheme objective. All thirteen funded bids involved some aspect designed to enable people to walk or cycle as a means of reducing carbon emissions. Of all the nineteen bids, Devon County Council’s (invited to resubmit) bid was the only one not to include on road improvements.

Improving accessibility, safety and air quality, along with promoting healthy living also featured highly in all bid documents as a means of fulfilling the policy goals of the LSTF. In general there does not appear to be much difference between the funded bids, the bids that were invited to resubmit and the refused bids in their design to meet the policy goals.

LSTF Large Project Bids – Delivery

Table 3 highlights that there was little difference in approach adopted by local authorities in identifying delivery tools for the LTSF. The LP bids are all principally infrastructure focussed, with on highway improvement, bus infrastructure improvements and walking and cycling improvements all featuring heavily in the successful bids as well as the three rejected bids. The Chi Square test does not identify that any particular type of intervention significantly influenced the success or failure of an LP bid in receiving funding.

<table>
<thead>
<tr>
<th>Schemes included in Tranche 1 Bids</th>
<th>Funded Bids (13)</th>
<th>Resubmit Bids (3)</th>
<th>Refused Bids (3)</th>
<th>Significance (P Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On road improvements</td>
<td>13</td>
<td>2</td>
<td>3</td>
<td>0.05992</td>
</tr>
<tr>
<td>Bus infrastructure improvements</td>
<td>12</td>
<td>2</td>
<td>3</td>
<td>0.34634</td>
</tr>
<tr>
<td>Marketing and communications</td>
<td>12</td>
<td>3</td>
<td>3</td>
<td>0.78381</td>
</tr>
<tr>
<td>Walking and cycling infrastructure improvements</td>
<td>11</td>
<td>3</td>
<td>2</td>
<td>0.53298</td>
</tr>
<tr>
<td>Vehicle-based initiatives</td>
<td>11</td>
<td>3</td>
<td>3</td>
<td>0.59700</td>
</tr>
<tr>
<td>Bus information / marketing improvements</td>
<td>10</td>
<td>2</td>
<td>3</td>
<td>0.57572</td>
</tr>
<tr>
<td>Rail improvements</td>
<td>10</td>
<td>1</td>
<td>3</td>
<td>0.16035</td>
</tr>
<tr>
<td>Workplace engagement</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>0.18710</td>
</tr>
</tbody>
</table>
As with the Small Bids in Tranche 1, there is very little evidence of an intention to reduce the overall need to travel, but the mode of travel, with just a third of schemes identifying measures clearly targeted towards a reduction. Only six schemes designed to reduce the need to travel have been included in all 13 funded bids and these are:

- Improving access to high speed broadband (in one bid);
- Helping employers reduce business-related travel (in three bids);
- Home working marketing and promotion (in one bid); and
- Home deliveries promotions (in one bid).

The fact that none of the large bid submissions seek to establish work hubs in rural areas and market towns is a reflection of the fact that successful LP bids were predominantly awarded to urban LTAs, with 11 out of 13 being awarded to urban unitary LTAs or groups of unitary LTAs.

Despite the general similarity between the bids, there was one noteworthy bid amongst the funded LP projects. This was the award of £6.1m to Telford and Wrekin Council. Whilst the majority of bids generally offer a variety of different ‘soft measures’ and infrastructure provision designed to encourage low carbon travel, Telford and Wrekin propose what is essentially a road network enhancement scheme. The bid identifies a vague provision for sustainable travel by walking and cycling through “Junction, pedestrian and cyclist movement improvements”, however the bulk of the scheme is designed around road network improvements such as junction redesign, integrated traffic management and ‘urban realm’ improvements. In reality this appears to be an alternative, and successful, attempt to fund a road scheme that will continue to support the practice of driving within Telford. The Telford scheme has been designed to benefit the local economy through a reduction in congestion, but does not provide any specific long-term sustainable benefits to the area in relation to alternative modes of travel.

**LSTF Large Bids – Disruption**

Seven of the thirteen successful bids include elements that could be considered as disruptive to travel by car. These include reviewing the existing Traffic Regulation Orders regarding parking, loading and the movement of traffic. Bournemouth Borough Council will enforce these changes through a mobile camera vehicle. Other initiatives include introducing 20mph zones, general traffic management changes, and providing enhanced public transport to support the Work Place Parking Levy in Nottingham. Arguably such schemes are attempts to disincentivise travel by car, without completely disrupting car use practices.

In general the LSTF LP bids are designed to enable the movement of people through the network, primarily by improving bus, walking and cycling infrastructure and assistance to the public through non-financial incentives such as smartcard ticketing to make it easier to travel between modes, personalised travel planning and the provision of information through various formats such as the internet and mobile phone apps.

Ten of the funded LP bids included schemes that retain travel by car as part of the local sustainable transport network. These schemes include electric charging points for cars, car sharing, car clubs, and economical driver training schemes. Reading Borough Council’s
funded bid includes the construction of a new park and ride site on the outskirts of the town. This scheme will alter where people should be driving to in Reading, (acceptable on the outskirts, but not in the centre) changes the meaning of driving within the town, yet continues to lock in the practice of driving by the creation of materials (new infrastructure) that is designed to enable of driving for part of the journey.

Conclusions and Discussion
The current funding levels of the LSTF are dwarfed by the funding for highway infrastructure during the same period. The decision to fund so many highway projects is at odds with the findings of research such as Sloman et al. 2010 (funded by the DfT), who found that the number of trips and the distance travelled reduced during the intervention period of the Sustainable Travel Towns and Cities Project and produced an average of 49.7kg saving per car in CO₂ emissions across the three towns (pp.608). If similar results to the Sustainable Travel Towns and Cities project were to be achieved by the LSTF then this would help reduce carbon emissions and improve air quality at the local level. Unfortunately the development of new highway infrastructure in the same period is likely to more than negate any benefits of carbon reduction achieved through the LSTF process. The evidence of a 22:1 spend on highway schemes in the East of England region is likely to lock-in high carbon travel practices in the region in the long-term as the new materials being provided in this region are predominantly new highway infrastructure. In England the average of £9 being spent on road building for every £1 on sustainable schemes sends a contradictory message and the meaning of travel will remain closely linked to the car under this spending regime. As yet, it is unclear whether there is a particular reason for there being such a discrepancy between the regions. It could be due to political, the quality of bid writing in various regions or another unaccounted for factor.

The message on sustainable travel is possibly confusing for the public: when and where is it ok to drive? Nearly all long distance trips start and end within a ‘local’ networks, so where does the distinction lie? The benefits of the LSTF project in terms of materials and competences will be lost if the meanings are not reinforced throughout society and the messages supplied by government and the media.

In general the majority of funded schemes adhere to the overarching goals of the LSTF, by explicitly identifying them as objectives of the bids and identifying the means by which these goals will be achieved. The Chi Square results for small bids indicate that implementing travel planning initiatives through the bid were a significant factor in deciding which schemes were funded, with this type of intervention appearing in the majority of funded bids.

Overall there is little focus in the bids on reducing the need to travel, and thereby increasing capacity on the network created by people not having to travel. The LSTF is designed to enable travel, reinforcing the meanings and expectations that currently exist within society about peoples’ right to travel where, when and how they wish. This is an accepted freedom of democratic society, but in England (as with most other modern western societies) has led to high carbon practices remaining dominant, as driving provides the most logical mode of travel for the fragmented practices such as work, retail, social and leisure, undertaken across the course of a day.

Few schemes in the LSTF can be seen as actually being disruptive to travel, focusing instead on incentivising low carbon alternatives. St Albans stands out as the only scheme that actively disrupts car travel for a significant area of the network, whilst monitoring camera schemes will disrupt socially unacceptable practices such as parking illegally outside schools. Travelling by car appears to feature heavily, particularly in the LP bids, where the implementation of an electric vehicle charging network is the objective of many major cities bidding for funding. This may reflect the urban nature of the majority of funded LPs, where centrally located sites will provide more people with the opportunity to charge their vehicle. The success of Telford and Wrekin’s bid further supports the assertion that the meaning of where and when we can drive is not being tackled as a central part of the LSTF process. Other measures such as car clubs and park and ride sites may create a marginal shift in
driving habits (Parkhurst et al., 2012), but they do not act to significantly reduce levels of driving.

The LSTF is a positive move by the UK Government towards a more sustainable transport network, but it is just the first step on the journey. However the significantly greater amount of funding being given to highway infrastructure expansion/development schemes over a similar timeframe equates to pound for pound nine steps back. Disruption can change and reduce traffic levels, as Cairns et al. 2002, found and may provide a low cost solution to reducing carbon emissions. Greater understanding of how disruptive opportunities can be utilised is required within government, both centrally and locally, and this is being undertaken as another part of this project (Williams et al., 2012). If we are to meet the challenging UK carbon reduction targets and provide a transport network that is able to meet the demands of increasing disruption through environmental and fiscal pressures facing the transport network in the 21st century, it will be necessary to promote sustainable travel through materials, competences and meanings.

References


