

Light Rail & the City Regions Inquiry

Final Report February 2010



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1. Introduction

Since the Transport Select Committee's report on Light Rail in 2005¹, there has been an improvement in the prospects for light rail in the UK. The government, to its credit, has invested significant sums of money in certain schemes – over one billion pounds since 2005. However, the light rail industry and its supporters have continued to voice their concerns about how much progress has really been made since 2005 in reducing costs and improving the delivery rate of tram schemes. There is also a general frustration that light rail is not given fair treatment by those in charge of the decisions and funding, particularly when compared to other modes of transport.

The APPLRG, working with *pteg*², decided in the autumn of 2009 to review the situation and to see if these concerns were valid, and if so, what might be done about them. A select committee style inquiry was held, with a general call for written evidence and hearings in the Houses of Parliament, to bring together the evidence and inform the Inquiry panel of MPs and Peers³. This report is the output of that Inquiry.

We conducted the Inquiry like a Select Committee as we wanted both to maximise the input in terms of evidence but also to try and be objective about the prospects for light rail. Whilst we are advocates, we also recognise that we need to be objective and rational in our thinking. We think the Inquiry has helped us develop our arguments as well as help us recognise and be clear on the limitations of light rail, and particularly the funding available to deliver it.

This report makes reference to the written and oral evidence. Written evidence submissions have been numbered 1 to 37 and are referred to in the report as D, followed by the corresponding number of the written submission. For example, the Campaign for Better Transport is written evidence submission number 23 and so is referred to in the text as D23. Each question asked during the oral evidence sessions has also been numbered, referred to in the text as Q, followed by the corresponding question number. The reports from the oral hearings can be found at the Inquiry webhub at: <http://www.pteg.net/PolicyCentre/LightRail/LRInquiry.htm>. Copies of the written evidence can be obtained by contacting *pteg* via the Inquiry webhub.

The APPLRG would like to thank all of those who took part in the Inquiry, either by supplying written evidence or by appearing at one of the three sessions at Westminster. We received thirty-six written submissions and heard from twenty-four witnesses, from right across the light rail industry and from senior officials from the Department for Transport (DfT).

¹ Transport Select Committee (2005) Integrated Transport: the Future of Light Rail and Modern Trams in the UK

² The Inquiry Panel was made up from MPs and Peers associated with the All Party Parliamentary Light Rail Group, and *pteg* provided the secretariat for the inquiry

³ The Inquiry Panel consisted of Paul Rowen MP (as Chair), Clive Betts MP, Graham Stringer MP, Tom Harris MP, Earl John Attlee and Baroness Hanham



2. Recommendations

We remain positive about the future for modern trams in the UK. Whilst challenging, we believe that there is no reason why we cannot have more tram schemes operational. We accept that this is a long term goal, particularly in the current economic climate. However, the pause in funding availability gives all of us a real opportunity to set right some of the inconsistencies in the development processes, gives us time to think strategically about urban light rail and to begin planning properly now for future schemes. If we miss this opportunity, there is a good chance that we will be returning to the same debates in a few years time.

There are three key audiences for our recommendations – national government in its role as the strategic body for urban transport; local transport authorities as those responsible for delivering tram schemes; and the light rail sector as a whole – the promoters, operators, constructors and supply side.

National Government

Our recommendations for government are:

1. To develop a clear and concise framework that articulates:
 - the role of light rail in urban transportation, including its contribution to carbon reduction, urban regeneration, health and place making;
 - the ‘right’ circumstances where it is applicable (and the criteria government will use to test this); and
 - the role that government will play in supporting light rail development.

We see this framework being developed jointly with industry, i.e. UKTram.

2. To set aside a dedicated funding stream at a national level for the development of light rail which assist promoters and the industry in bringing schemes forward and creating greater certainty.
3. To identify a champion in government for light rail and create a space within DfT for light rail expertise to be developed and fostered; and to develop appropriate standards and procedures for light rail, working with UKTram (as the representative industry body).
4. To work across government to develop a wider range of tools that will fund local infrastructure development including light rail schemes.

5. To remove the differential treatment of light rail compared to other transport modes in terms of local contributions and utilities betterment; and to undertake and publish work to demonstrate how the current appraisal system treats light rail when compared to other transport modes.
6. To review current appraisal and assessment processes to reduce timescales and make criteria more transparent.
7. To work in partnership UKTram, as the representative body for the UK light rail industry, to address the utilities issues highlighted in this report; and to develop the ways and means of driving costs down, including helping foster innovation in light rail
8. To use its role as sponsor of the Tram Train trial to press for early release of the lessons learnt; and to clarify that the core objective of Tram Train is a light rail operation interfacing with the heavy rail network.

Furthermore, we believe that the utilities issue is an area where scrutiny by the Transport Select Committee can provide the necessary impetus for utilities to engage with government and the light rail sector, and we will be making a request to the Transport Select Committee that they undertake a formal review of the utilities issues raised in this report, including holding the utilities companies to account more clearly.

Local Transport Authorities

Our recommendations for local transport authorities are:

9. To set out long term integrated transport strategies which:
 - have clear priorities in relation not just to transport but wider economic, regeneration, place-making and environmental goals;
 - detail the relevant funding and procurement mechanisms, including better ways of sharing costs and risks; and
 - build on solutions that best fit local circumstances.
10. To explore the benefits of integration through the tools available in the Local Transport Act 2008.

Light Rail Sector

Our recommendations for the light rail sector are:

11. To encourage all the partners in UK Tram to raise their game to become a more coordinated, effective and visible trade body for the light rail sector, focusing on:
 - A single voice for the industry
 - Establishing standards and cost reduction
 - Building capacity with UK industry
 - Sustaining a UK based light rail industry
12. To develop a work programme with DfT to address the key tasks that flow out of the Inquiry:
 - A national framework for light rail
 - A review of utilities costs
 - Advice on procurement models
 - Fostering innovation
 - Developing accepted standards and driving standardisation



3. Context

Benefits of modern trams

Trams have a high capital outlay, connected with the fixed track infrastructure required and street works. The Transport Select Committee (TSC) stated that light rail 'is best suited to heavily used urban corridors, where flows are over 2,000 people per hour'⁴ and where their speed, reliability and capacity can be fully exploited.

Furthermore, evidence suggests that modern tram systems are very successful in attracting motorists out of their cars. According to research conducted on behalf of **pteg**⁵:

- Typically, at least one in five peak-hour travellers on trams in the UK formerly commuted by car.
- At weekends, as many as half of UK tram users previously used a car to make the same journey.
- This translates to at least 13 million car journeys taken off our roads every year.

In summary, the benefits of modern trams⁶ are:

- Transforming perceptions
- Supporting regeneration
- Getting people out of their cars (modal shift) and reducing congestion
- Improving the urban environment
- Improving safety
- Providing access for all

Current light rail systems in the UK

The TSC Inquiry reported a year after the opening of the Nottingham Express Transit (NET) system – the most recent tram system to open in the UK. It joined the four other modern tram systems currently in operation in the UK, namely Manchester Metrolink, Sheffield Supertram, Midland Metro and Croydon Tramlink. Further details on each of these are provided in the table below.

Figure 1 UK Modern tram systems⁷

Description	Approved	Tendering period	Construction period	Opened	Lines	Length (km) ⁸	Initial construction cost	Passenger journeys (millions) ⁹
Manchester Metrolink Connects Bury, Altrincham and Eccles to Manchester City Centre. Work on four new lines to Oldham and Rochdale, Draylson, Chorlton and MediaCityUK (Salford Quays) is underway.	1987	Not available	1990-1992	1992	3	42	£145m ¹⁰	21.1
Sheffield Supertram Links Sheffield city centre to Meadowhall, Middlewood and Halfway.	1989	Not available	1991-1995	1994	3	29	£240m ¹¹	15.0
Midland Metro Links Wolverhampton and Birmingham via the Black Country, mostly using a former rail alignment.	1989	(Interrupted) 1992-1994	1995-1999	1999	1	20	£144.8m ¹²	4.7
Croydon Tramlink Links Beckenham, New Addington and Wimbledon to central Croydon.	1994	1995-1996	1996-2000	2000	3	28	£200m ¹³	27.2
Nottingham NET Links the area north of the city with the city centre.	Provisional funding awarded 1998	1996-2000	2000-2004	2004	1	14	£220m ¹⁴	9.8

4 Transport Select Committee (2005) Integrated Transport: the Future of Light Rail and Modern Trams in the UK
 5 Steer Davies Gleave (2005) What light rail can do for cities – a review of the evidence
 6 **pteg** / TfL (2006) What Modern Trams can do for Cities
 7 Evidence provided by PTEs unless otherwise stated.
 8 DfT (2009) Public Transport Statistics Bulletin GB: 2009 Edition
 9 DfT (2009) Public Transport Statistics Bulletin GB: 2009 Edition
 10 GMPTF (2003) Metrolink: a network for the twenty-first century, available from http://www.metrolink.co.uk/pdf/metrolink_brochure_p3.pdf
 11 <http://www.railway-technology.com/projects/>
 12 <http://www.railway-technology.com/projects/>
 13 <http://www.railway-technology.com/projects/>
 14 <http://www.railway-technology.com/projects/>

All of these systems can be described as tram systems as they use on street running for at least part of their route. One further tram system in operation is the Blackpool Tramway, running from Blackpool to Fleetwood on the Fylde Coast. It is the only surviving 'first generation' tram system in the UK and opened in 1885. It consists of one line of 18km and carried 2.3 million passengers in 2008/09¹⁵.

The Docklands Light Railway and Tyne and Wear Metro also fall into the light rail category but unlike the systems listed above, these are 'metro'-like systems with none of the on street running that characterises trams. This Inquiry has primarily focused on modern tram systems.

As can be seen from the chart below, modern tram systems are well used. Patronage on many of the systems has followed a general pattern of year on year patronage growth. All but one system experienced significantly higher numbers of passenger journeys in 2008/09 compared to 2004/05, for example.

In 2004, three major schemes were effectively cancelled – Leeds, Liverpool and South Hampshire. The Manchester Metrolink scheme was reinstated after intensive lobbying. It was the cancellation of these schemes that prompted the Transport Select Committee's inquiry into light rail.

Government decisions on trams since 2005

Since the TSC reported on light rail in early 2005, the Government have made a number of decisions relating to the development of existing tram systems. These are as follows:

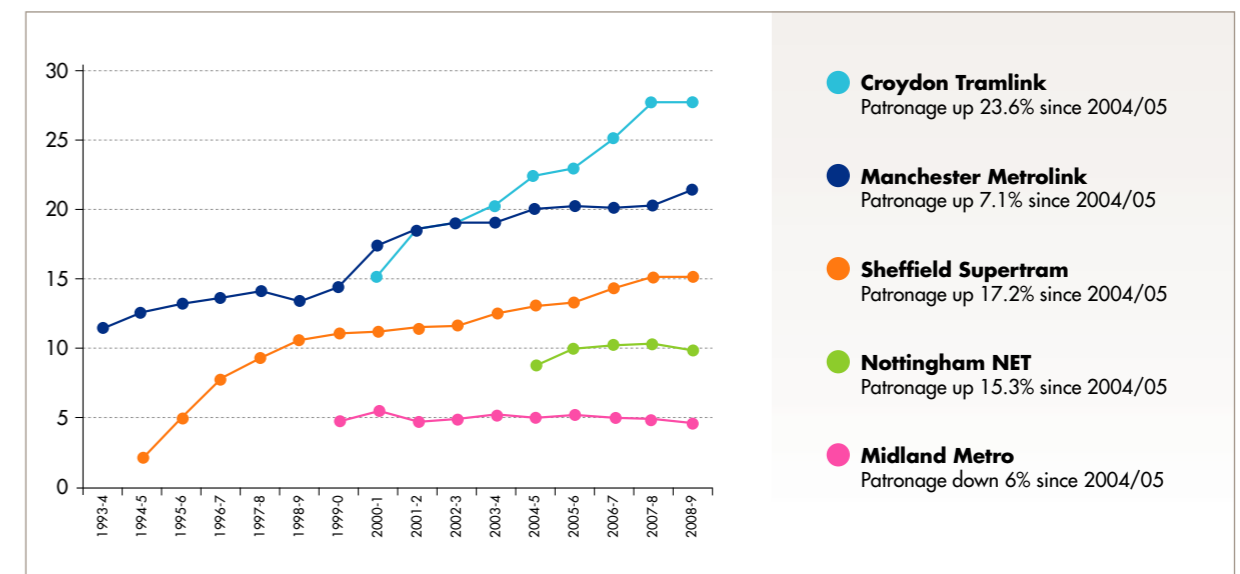
- Final funding approval to extend Manchester Metrolink to Oldham, Rochdale and Chorlton (2008).
- Final funding approval to refurbish the Blackpool and Fleetwood Tram System (2009).
- Conditional approval for two extensions to Nottingham NET which are currently in procurement (2009).

The Government are also in the process of considering proposals to extend Manchester Metrolink to East Didsbury and Ashton and extension of Midland Metro.

Over the period, there have been no approvals for entirely new tram systems in England; however, during this time the Scottish Parliament approved the reintroduction of trams into Edinburgh. Construction of Line One of the new system got underway in mid 2007.

Lord Adonis, the Secretary of State for Transport has been quoted as saying: "The demise of the tram was a serious mistake in post-war transport policy. None of the European countries which kept their trams regret doing so, and trams and light rail vehicles are undergoing a renaissance worldwide."¹⁷ We agree, and our inquiry has been an attempt to find out why we haven't made as much progress as we'd like in the UK and what we can do to move things forward.

Figure 2 Passenger journeys on UK modern tram systems¹⁶



15 DfT (2009) Public Transport Statistics Bulletin GB: 2009 Edition
 16 DfT (2009) Public Transport Statistics Bulletin GB: 2009 Edition
 17 Adonis, A (2009) 'The tram now arriving at Watford', Rail Magazine, Nov 18-Dec 1 2009.



4. Review of current progress of light rail in the UK

Findings

There is a **'lack of coherent policies and consistent direction'**¹⁸, i.e. a strategy, for light rail which is **creating uncertainty** in the industry and **stifling its development** in the UK.

The procedures and processes in place for developing light rail schemes are **too dependent on heavy rail expertise**; and, despite recent changes, still **need to be improved to become more transparent, equitable and faster**.

Our first aim was to review where we have got to with current light rail schemes in the UK. We heard from a number of promoters of existing schemes¹⁹ as well as from those who have aspired to develop light rail systems²⁰.

As we have already noted, the levels of investment since 2005 have been significant. There was recognition that processes had improved, as one witness noted '... inroads have been made in terms of the time scales for turnaround on key projects in DfT... that's to be welcomed.'²¹ However out of these only one new scheme has been brought forward (Edinburgh) whilst the rest are extensions to existing schemes. The point was made that it is without doubt much easier to make a case for investing in extending existing schemes than it is for a new scheme²². The business cases for extensions are stronger because of the large amount of up-front work, overheads and sunk costs, as an official from DfT summarises, '... extensions are probably going to be easier to justify than whole new lines from scratch because of the overhead effects.'²³

Out of the evidence we heard, we identified a number of barriers to implementation and clear messages from those aspiring to develop light rail schemes:

- As a consequence of decisions made earlier in the decade²⁴ there is a general lack of confidence in the decision-making by the Department for Transport which means that if a city decides to develop a tram scheme, at every stage there is a fear that the scheme will either be knocked-back or pressure exerted to reconsider light rail in favour of bus alternatives²⁵, or the strategic arguments over why light rail has been chosen have to be replayed several times throughout the appraisal and approval process – one witness describes '...a constant cycle of going back and looking at more things in more detail, doing more modelling.'²⁶ In the view of one witness '... government's got to give much more weight to some of the factors that have led local authorities to propose trams in the first place'²⁷ – e.g.

providing a better quality service and enabling urban transformation as well as mass transit. The Department's officials argued that the Regional Funding Allocation (RFA) process is part of the answer to this question²⁸, but this was challenged by the evidence from promoters²⁹.

- The process for developing schemes, despite changes, still takes a long time – we were told that in the time taken to introduce NET Line 1 and develop phase 2, Nottingham's twin city of Karlsruhe introduced 14 further extensions to its existing network³⁰. Delay only adds to uncertainty and costs.
- Development costs are considerable – the cancelled Cross River Tram project in London is estimated to have cost £20M in development work³¹ – with the majority of the risk being borne by the promoter.
- There is no definition of 'the right circumstances'³² in which light rail is considered an appropriate solution; and there is 'a lack of a clear and consistent national consensus on the value of light rail'³³, including a general lack of appreciation for the benefits of light rail in government policy – including, for example, the DfT's Carbon Strategy 2009³⁴ and the Cabinet Office's Analysis of Urban Transport 2009³⁵.
- There is a perceived over-reliance on expertise and procedures from the heavy rail industry, leading to sometimes inappropriate application on light rail, as one witness put it, '...we've handed over the light rail industry to the heavy rail engineers, and they've taken us down the road where we're building...train-sets in the street.'³⁶ In contrast, it appears that the expertise built up elsewhere in Europe is not being fully exploited.
- The light rail industry in the UK is 'sub-mature'³⁷, characterised by the 'stop-start' nature of the flow of work to the industry, which reduces the availability of suitable expertise³⁸ and increases costs through higher risk premiums.

- Appraisal processes are seen as complex, described in one written submission as '... extremely difficult and expensive (and in some cases contradictory)',³⁹; and perceived to disadvantage light rail⁴⁰.
- A differentiated approach exists to some elements of costs which appear to be biased against light rail. One written submission, for example, calls for cost overruns on local authority major schemes to be treated equally noting that '... in the past, tram schemes have been dropped on the basis of cost overruns, but road schemes have not.'⁴¹
- On a more positive note, we heard how the business case and appraisal processes have been improved to some extent, and that DfT has improved both the processes leading up to bid submission (through continuing dialogue with promoters) and in turning round decisions⁴². Working with promoters has saved time (on the Manchester Metrolink extension 3A)⁴³ and money (on the Blackpool tram scheme)⁴⁴. We also heard that light rail is succeeding in modal shift (between 20% and 30% of its passengers switching from car)⁴⁵, and in the case of Manchester Metrolink, reduced traffic volumes by around 10%⁴⁶. Businesses value light rail and support its development, believing it has a positive impact on investment decisions. As one business leader put it, '... there is a definite attraction there and a way of leveraging extra investment...which is good for the broader business community...'⁴⁷.

We also received evidence of the issues around cycling and trams⁴⁸; and on the impact of the National Concessionary Travel Scheme⁴⁹. We did not have time to consider these issues fully and have not made specific recommendations, but urge promoters and operators to consider the evidence available.

18	Q68	29	D22, Q68	38	Q17, Q228
19	Centro (West Midlands PTE), South Yorkshire PTE, Greater Manchester PTE, Nottingham City Council, Transport for London	30	Q68	39	D25
20	Metro (West Yorkshire PTE), Merseytravel	31	D1	40	Q106
21	Q91	32	Reference to response by Chris Mole MP, Minister for Transport to joint letter by CBT and pteg	41	D23
22	Q233	33	Q68	42	D25, Q91
23	Q233	34	DfT (2009) Low Carbon Transport: A Greener Future – A Carbon Reduction Strategy for Transport	43	Q272
24	Referring to the decision to cancel the Leeds, Liverpool and South Hampshire tram schemes	35	Cabinet Office (2009) An analysis of urban transport –available from http://www.cabinetoffice.gov.uk/strategy/work_areas/urban-transport.aspx	44	Q270
25	Q185	36	Q30, see also Q16, Q43.	45	D15
26	Q92, see also Q69	37	Q68	46	D15
27	Q103			47	Q165
28	Q273			48	D35, D37
				49	D36, Q66



5. Comparing the UK experience with Europe

Findings

The European experience is characterised by relatively **faster delivery** resulting in **more schemes**; supported by **an established light rail industry**, with **cheaper development costs** and a regular **flow of work**.

There is a **clearer political consensus over the wider value** of trams systems around **urban transformation and quality of place** arguments.

Critically, the availability of **local fundraising powers** is a major element of a city's ability to build trams. **Simply put with the right tools and powers, cities choose to build tram systems and are trusted to deliver schemes.**

We look with envy at the rate and scale of development of light rail in continental Europe (see table below) and were concerned that we, as a nation, are not learning from our partners in Europe. We made this an objective for our Inquiry.

Figure 3 LRT networks in operation 2004⁵⁰

Country	Number of systems	Number of lines	Total track km
Austria	6	47	313
Belgium	5	33	332
France	11	20	202
Germany	56	231	2768
Italy	7	37	209
Netherlands	5	34	280
Spain	4	5	206
Sweden	3	14	186
UK	7	10	156

We did not receive a great deal of evidence on the details of how things are progressed in Europe, with the notable exception of the Le Mans scheme provided by Keolis⁵¹. However, we noted that most of the major companies in the light rail industry are international firms, with experience of working in many countries across Europe and the world. There were many references to the fact that relatively small cities, particularly in France, have light rail systems⁵² and therefore our goal as a nation should be to emulate the scale of development. However, we believe that whilst scale is one element of the argument for trams in cities, it is not an over-riding argument.

We did hear that there were considerable benefits to tram development from having an established industry with a regular and significant flow of work, and that this was something that the UK lacked. In broad terms, there are significantly faster approval processes (3 to 6 new lines or extensions per annum in

France⁵³), which no doubt help reduce costs overall, eg. Le Mans scheme took nine years from start of feasibility studies to operation⁵⁴. Conversely we heard how one small city (Galway in the Republic of Ireland) was working with the private sector to deliver a relatively low-cost tram scheme which may have significant impacts on industry costs when operational⁵⁵.

Trams are seen as part of the wider efforts by cities to regenerate their built environment and improve the quality of place, quite often by removing traffic from streets⁵⁶, trams are seen as an integral part of a city's attempts to transform the urban realm. One witness, for example described the situation in France where '...the emphasis is very much on transformation of cities, not just as transport projects, but as whole urban corridor, urban renewal projects.'⁵⁷. There appears to be a greater willingness to support tram schemes on this basis, which points to a considerable level of political consensus over the decision to have a tram. The ability to integrate trams with other public transport and transport planning further strengthens light rail's contribution to key goals around modal shift and reducing congestion. It was pointed out that integration means a seamless set of connections that are taken for granted⁵⁸. Integration of light rail and bus in France has led to an overall rise in public transport use in those cities, particularly on radial routes, where buses feed light rail⁵⁹.

However, the most powerful point about the experience in France and elsewhere is that more often than not, those cities that develop tram systems are able to make their own decisions, supported by the national government, and, crucially, raise a significant proportion of the funding through some form of hypothecated local tax (e.g. on sales or employment)⁶⁰. Local contributions for light rail are often supported by the electorate and local businesses⁶¹.

50 ERRAC (2004) Light Rail and Metro Systems in Europe
 51 D10
 52 D10
 53 D25
 54 D10
 55 Q143
 56 D10
 57 Q72, see also D10, Q4
 58 Q12
 59 D25
 60 D10, Q127
 61 Q1

6. Current UK government policy towards light rail

Findings

There is **no strategy for light rail** and **no specific definition of its role** in urban transport or in carbon reduction.

There are a number of apparent **inconsistencies**, which mean that trams **are not treated in the same way** as other modes.

The **DfT plays a significant role in decision-making** processes. Whilst this has improved over recent years, the views of promoters are that the Department is still **too heavy handed** and has a tendency to **micro-manage** from the centre.

We were interested to hear people's views on current government policies for light rail and what the challenges were likely to be on future policy.

Since the Government's ten year plan for transport, published in 2000, which envisaged 25 new tram schemes⁶², we have not been made aware of any significant policy document that addresses light rail specifically and none were brought to our attention as part of the Inquiry. Indeed the DfT official offered that there was no strategy on light rail just as there was no strategy on bus⁶³. However, DfT do have a 'bus' division within their structure, and have made specific policy and legislative changes designed largely to improve bus services, for example the Local Transport Act 2008. Yet in referring to the apparent bias against light rail, the Minister referred to light rail being appropriate in the 'right circumstances'⁶⁴, which infers that some thought has been given by government as to what those circumstances are. We did not find any strategic view of light rail and its role in addressing urban transport problems and note that light rail is missing from the urban transport analysis carried out by the Cabinet Office⁶⁴, even though it appears to meet many of the objectives contained within this report.

Many witnesses pointed to the differential approach and conditions that are applied to light rail schemes: the higher local contribution level for light rail compared to other transport schemes (25% compared to 10%)⁶⁶; and the lower rate of discount for utilities betterment (7.5% compared to 18%)⁶⁷. Perversely the higher local contribution penalises transport authorities and promoters further as they have limited means of raising local finance. We found no strong reasons why these differences exist and conclude that going forwards, government needs to be consistent in how these conditions are applied to all transport schemes.

Whilst there is no strategic framework specifically related to light rail, we were presented with evidence that suggests that the Department for Transport plays a significant role in the decision-making processes that lead up to developing business cases for trams and throughout the process⁶⁸.

We are concerned that in the absence of any framework to guide promoters in deciding on the appropriate transport solution (whether that is a tram or not) and the process for developing and approving tram schemes, the Department has a tendency to 'micro-manage' the process and effectively steer promoters down a particular course⁶⁹.

We think that in an increasingly devolved environment, the Department must concentrate on giving promoters the right framework to operate in and focus its attention on supporting promoters through the process. As noted in the next chapter, draft guidance for would-be light rail promoters, worked on by the industry and the Department was never finished⁷⁰, although a version has been published by **pteg**⁷¹.

We note the significant investment committed to tram schemes by the current government and welcome the boost to the industry after a period of real uncertainty following the cancellation of a number of significant projects. We did not consider these schemes in detail, but note that these projects are still expensive and our concern is that more effort needs to be made on behalf of all partners to drive down costs on light rail further.

62 DETR (2000) Transport 2010: The ten year plan
 63 Q257
 64 Reference to response by Chris Male MP, Minister for Transport, to joint letter by CBT and **pteg**
 65 Cabinet Office (2009) An analysis of urban transport - available from http://www.cabinetoffice.gov.uk/strategy/work_areas/urban-transport.aspx
 66 D25
 67 D15
 68 D6, D22, D25
 69 Q231
 70 D31
 71 **pteg** (2009) Advice note for promoters considering a light rail scheme



7. The Transport Select Committee Report of 2005

Findings

There has been **mixed performance by the Department** since 2005. On the **positive** side, DfT has **worked to support UKTram**; **some stability and clarity over timescales** has emerged; and the **Local Transport Act** gives transport authorities more potential powers to integrate modes.

On the **negative** side, DfT have **little in-house expertise** on light rail; **have not explicitly recognised where light rail is appropriate**; or **issued clear guidance to promoters** on this issue. In addition, we found that the **position on utilities is unchanged**.

On funding, it was **questionable whether any new powers or devolution of decision-making has been made which will address the requirements of light rail** (and other, major urban infrastructure).

As part of the Inquiry, it was our intention to review progress on the key recommendations of the Transport Select Committee's 2005 Inquiry into Light Rail⁷², as summarised in the box opposite.

Progress has been mixed in meeting these recommendations. On the positive side, we found that the Department has supported the work of UKTram, which in turn has provided some useful outputs to the industry⁷³. We heard that the Department has made progress in being clear on the timelines for appraisal and approval, and to date that there were no more reversals of funding decisions taken, as a DfT official noted, '...once the hard decisions are taken by the region, in terms of prioritising the finite pot of money...and deciding which schemes should be included in their priority list, then the Department will work with the promoter on the...prioritised schemes, to make them happen, if at all possible...I think that's changed behaviours and quite markedly. And given more certainty to invest preparatory costs in the development of schemes.'⁷⁴.

The Local Transport Act 2008 was a welcome piece of legislation which gave transport authorities more potential powers over bus and to integrate modes, although these have not yet been fully tested.

It was less clear to us what progress had been made on building expertise within the Department on light rail, with responsibility sitting effectively between two divisions (Cities and Regions, and Rail), with some witnesses arguing quite strongly that there isn't the capability in the Department to understand light rail⁷⁵. A lack of in-house expertise coupled with an irregular flow of work has reinforced a tendency to draw on expertise from elsewhere – notably heavy rail; and also from consultancy advice. This pushes up costs both directly (as external advice must be paid for) and

indirectly (as standards 'imported' from elsewhere may not always be appropriate).

Of greater concern, we found that the Department has not yet explicitly recognised where light rail is appropriate or issued clear guidance to promoters on this issue. References to 'the right circumstances'⁷⁶ have been made, with a DfT official, for example, pointing to a '...general mantra about the right scheme in the right place.'⁷⁷ within the Department, but never clearly defined. In addition, it is disappointing to note that draft guidance for promoters worked on by the industry and the Department was never completed⁷⁸, although a version has been issued by *pteg*⁷⁹.

We are also concerned that the position on utilities is unchanged since 2005. Given the significant costs involved in this area alone, this should be a priority for all parties involved to resolve. We have addressed utilities issues in the section on risk.

We are also not convinced that the current suite of powers to raise funding locally or prioritise existing funding streams are sufficient⁸⁰. More widely, government has begun to experiment with additional funding streams for local authorities – for example, Supplementary Business Rates – and look at other models, such as Accelerated Development Zones. These are welcome, but are unlikely to be sufficient to meet the infrastructure needs of our city regions. The Regional Funding Allocation (RFA) process has brought a measure of devolution to parts of the national funding streams for transport, housing and economic development. At the Inquiry, a DfT official argued strongly that RFA 'gives bidders, sponsors considerable clarity about what money there will be available, what time scale. And much more certainty that the prep cost will actually turn into a scheme'⁸¹.

However, we also heard how the RFA process was over-subscribed and unlikely to be the route which delivers more light rail schemes. One written submission, for example, reported that the all of the Yorkshire and Humber RFA has been allocated through to 2019 arguing that 'Any light rail scheme would require a significant proportion of the overall regional funding pot in order to deliver a meaningful project...[and]... would potentially compromise a large number of smaller regional projects...The scope for any Regional Transport Board to gain the necessary degree of political consensus for a single project to swallow up so much of any potential budget is therefore slim.'⁸².

The key recommendations made in 2005 were that the DfT should:

- Build up expertise on light rail
- Engage with UKTram
- Offer clear guidance on the circumstances in which it is prepared to consider light rail
- Provide clear timelines and stable funding decisions
- Reconsider utilities contribution
- Give local authorities more powers over bus
- Longer term, consider giving local authorities more powers to raise funding locally for transport

72 Transport Select Committee (2005) Integrated Transport: the Future of Light Rail and Modern Trams in the UK
73 D31, Q219
74 Q233
75 Q187
76 Reference to response by Chris Mole MP, Minister for Transport to joint letter by CBT and *pteg*

77 Q233
78 D31
79 *pteg* (2009) Advice note for promoters considering a light rail scheme.
80 D22
81 Q273
82 D22, see also Q68.



8. Changes since the 2005 Transport Select Committee Report

Findings

The concern over carbon emissions means that the **need to decarbonise urban transport** will make electric vehicles, such as trams, more attractive to develop.

The **air quality** in our urban areas needs to be addressed and the **direct and indirect health impacts** taken into account as part of assessing transport proposals.

The **recession** will mean that **funding is even scarcer** for trams. However, the hiatus in funding **gives us time to plan properly and address the issues** that have been affecting the industry.

City regions are pressing for **greater devolution of funding and powers. More clarity over national government's role** through creating the framework in which local decisions can be taken, and to support local authorities in implementing decisions in keeping with the framework is required.

The context for transport has changed markedly since 2005. We have the growing clamour over climate change and the introduction of stretching carbon reduction targets; an economic recession, the effects of which are still being worked through, but will result in an extremely constrained public sector spending environment; and renewed efforts on the part of all political parties to develop localism and devolution.

On the related issues of climate change, carbon reduction and peak oil⁸³, we were presented with evidence that pointed to the serious challenges we face collectively as a society. The latest authoritative report from the UK Energy Research Centre says that there is a significant risk of reaching peak oil before 2020 (i.e. in the next 10 years)⁸⁴ and there is a growing consensus on this timescale⁸⁵. A move to electric vehicles would bring about significant improvements in emissions, even on the current mix of energy generation⁸⁶ and trams could potentially be a significant part of that move, as one expert witness on peak oil put it, '... one would assume that the benefits of light rail will be that much greater than those of private vehicles because in addition to the cleaning up the emissions instantly, you've got all the benefits of modal shift.'⁸⁷ Trams are currently missing from the DfT's Carbon Strategy⁸⁸, although this strategy refers to the need to 'decarbonise' transport and the need for 'a fundamentally different transport system in our country'⁸⁹. The Carbon Strategy also acknowledges that 'putting transport on a new low carbon trajectory is a long term undertaking'⁹⁰. Security of energy supply and fossil fuel supply will be key issues for national government to address – but should also impact on the choices made locally for mass transit systems.

It was argued that peak oil is likely to be a significant factor in future economic volatility and will result in further economic turbulence caused by the rapid changes in the price of oil⁹¹. As oil and petrol prices rise, public transport is likely to see increased demand, and furthermore increase the volumes of usage which, in turn, may make light rail a more attractive option. What we draw from this is that light rail has to be part of the long term plan to decarbonise road transport which puts in place the radically different transport system the DfT's own strategy aspires to. A witness from the DfT highlighted that we are currently 'some way from having a hundred per cent renewable electricity' and that 'If what you're doing is you're having a, one, two per cent reduction in car traffic and yet you are having to consume a lot more energy having a tram system that previously wasn't there, then you could be producing more CO2 emissions.'⁹² The DfT witness did not, however, identify specific light rail schemes where only a one or two per cent reduction in car traffic had been achieved. The evidence from Manchester put traffic reduction at a much higher level, in the region of 10 per cent⁹³, and given the general efficiency of electric transport combined with ever improving carbon emissions at source (via renewable energy) and the potential of local renewable power generation, we did not find DfT's line of argument convincing. We firmly believe that developing electrified mass transit in our major urban areas can make a valuable contribution to addressing the carbon emissions from transport, particularly over the long term.

We also note the government's commitment to electrification on the mainline railways and the

significant investment being made. We hope that the arguments being used to justify this investment, particularly on carbon emissions, will be equally applicable to trams.

Despite significant improvements to tailpipe emissions, our country is still at risk of breaches of EU air quality legislation and evidence presented to us illustrated the costs and impacts to society of such pollution⁹⁴. For example, it was stated that between 25-40% of deaths from respiratory illnesses were due to tailpipe emissions⁹⁵; and the Cabinet Office report on urban transport estimates the costs of poor air quality nationally are between £4.5bn and £10.6bn⁹⁶. On heavily congested routes we believe that the tram can make a significant contribution to reducing emissions, both in terms of carbon but also reducing noxious pollutants, which may in turn lead to significant health benefits. There is a growing body of evidence to suggest that such benefits should be factored into appraisal and we believe this will happen over time as the issues become more pressing.

Potentially the most significant contextual factor that will govern the development (or not) of new tramways in the short term is the impact of the recession and reductions in public spending likely as a result. We were told by DfT officials that there is no new money for schemes, other than what can be secured through RFA or PFI: 'I can't stress too strongly that there's only two games in town – PFI and not all schemes are suitable for PFI...Or to be prioritised in RFA. And that is the only two games in town. There are no other sources of money.'⁹⁷ We see these options as being curtailed in the future. Our main conclusion is that we are fully cognisant of the impact of the recession and spending cuts, but that these are not reasons for doing nothing. Planning and developing light rail schemes, particularly in the UK, take time and, subject to development costs being met, we think it sensible for promoters to work up schemes on the basis that the economy will improve and that, subject to our other recommendations being met, it would not be unrealistic to plan ahead. Indeed the hiatus that the recession offers will give the industry and government a chance to address some of the concerns raised by the Inquiry and put in place the mechanisms for future light rail development. As one witness representing business put it, 'any sort of transport infrastructure improvement has definite economic benefits and this is not going to happen overnight...I think what is clouding people's judgement a little bit...is current economic circumstances we're in. Well actually now is the time we should...be looking at doing things like this because by the time we've gone through the planning

process, we'll be on the upturn again and when you... need to start those construction works, the money will be there to actually put it in place.'⁹⁸

Lastly in terms of context, there is a continued pressure for greater devolution away from central government down to local authorities. The forerunner city regions of Leeds and Manchester are leading the way in thinking about the future planning and funding of transport. We were impressed by the work undertaken for the Manchester Transport Fund and the thinking behind the prioritisation done at a city region level⁹⁹. We think this demonstrates that local areas can effectively manage these types of processes to good effect. We heard from witnesses who believe that local decision-making is undermined by interference from the centre¹⁰⁰ and would strongly advocate that national government's role should be to create the framework in which local decisions can be taken and then to support local authorities in implementing those decisions that are in keeping with the framework.

83 Peak oil refers to the end of the growth in oil supply because of geological constraints.
84 D5
85 Q19
86 Q19
87 Q19
88 Q256
89 DfT (2009) Low Carbon Transport: A Greener Future

90 – A Carbon Reduction Strategy for Transport, p16
DfT (2009) Low Carbon Transport: A Greener Future
– A Carbon Reduction Strategy for Transport, p30
91 Q19
92 Q261
93 D15
94 D2, Q32, Q35
95 Q32

96 Cabinet Office (2009) An analysis of urban transport –available from http://www.cabinetoffice.gov.uk/strategy/work_areas/urban-transport.aspx
97 Q270
98 Q173
99 Q114
100 D22, Q219



9. Risks

Findings

Promoters and the light rail industry perceive a **high degree of risk and uncertainty**, particularly when it comes to decision-making processes, which **adds to costs**.

The **models of procurement** that promoters have been encouraged to use **do not adequately understand where risk lies**, which has resulted in risks being passed to the private sector which need not be, and for which a high price is charged. **Earlier, structured engagement with the private sector can help** reduce risks and, therefore, costs.

The **diversion of utilities poses significant challenges** to light rail schemes, but it is not fully understood why promoters must bear a larger proportion of costs than other highways schemes, or whether there are other approaches which can help contain costs in this area such as happens in France.

We asked for views on risks in developing light rail systems and how these might be addressed.

Time and again, the biggest overall risks were associated with the uncertainty of decision-making in the UK which has effectively destabilised the market for light rail and produced 'significant disincentives' to working in the UK¹⁰¹. Private investors and companies are unwilling to bear the costs of bids, which are seen as much higher than elsewhere, in such an uncertain market or build the risk into the price, further inflating costs¹⁰². The lack of certainty of a funding stream was highlighted as a risk which deterred promoters and investors¹⁰³, and impacted on the skills and experience available to the industry, further pushing up costs¹⁰⁴.

Within the current processes and contracting arrangements, there is an apparent lack of understanding of how best to share risk, resulting in 'multiple and cross-risk pricing'¹⁰⁵, with the Design, Build and Operate (DBO) consortium model seen as too likely to add costs, as companies are effectively asked to price for risks they do not fully understand¹⁰⁶. As one witness stated: 'moving unmanageable risk onto the private sector inevitably results in significant increases in cost'¹⁰⁷. These factors drive up costs significantly: 'Trying to pass fare box risk onto the private sector inflates cost. That added to... the inevitable delays we seem to have in the UK, are the things that drive the thirty to fifty per cent cost premium vis a vis what you would get for a similar system in France or Germany'¹⁰⁸.

However, the Department for Transport is moving away from 'one-size fits all' models, leading to more promoter determined approaches¹⁰⁹. We did not get a clear view of what the most appropriate model for sharing risk is, and maybe this is because there are a

range of options in this area. We do, however, believe that this needs further work and investigation by government and the industry working together.

The view of the contractors and supply side of the industry was that there needed to be greater involvement of the industry much earlier in the planning of such developments¹¹⁰. This could, it was argued, make the process much more integrated and therefore improve the outcomes for all parties, in the words of one witness from the industry, 'So it's not a case of 'here are all the risks, here's a contract, go and take it on and do it.' It's a shared contract... It builds an integrated team and keeps everybody's goals aligned.'¹¹¹. With appropriate safeguards, such as those adopted elsewhere in the construction industry¹¹², we see this as beneficial.

The issue of utilities diversion and costs was raised with the Inquiry by numerous witnesses. Utilities companies benefit from a lower rate of contribution to their betterment than for other highways schemes. There is some debate about whether utilities are required to be moved, but the answer to that question is sometimes dependent on the assessment of risk, particularly for the operating concession¹¹³. There is evidence to suggest that there is a poor understanding of what lies beneath the ground (which in turn leads to increased costs of surveying or liability for damage during construction) and there has been no concerted effort to standardise approaches to underground surveying – which increases costs further, for example, one written submission reports that 'No accredited training programme or qualifications exist for the staff who undertake utility mapping surveys.'¹¹⁴. Current regulations¹¹⁵ are either not being adhered to or are not sufficient in this regard. Clearly it is a significant

area of expenditure for light rail schemes – estimated to be 15-20% of construction costs by CPT¹¹⁶. In Edinburgh, utilities diversions accounted for 12.7% of the initial costs estimates^{117/118}. We are disappointed that the National Joint Utilities Group chose not to attend the hearings and enter into a discussion with us about how the utilities issues, including their concerns, can be better dealt with. There is clearly a desire from the light rail sector to find a better way of addressing utilities diversions. We heard from the Department for Transport who told us that there is no requirement to move utilities as part of a tram scheme¹¹⁹, but also from others who pointed to the contractual arrangements where operators bear all the revenue risk as a significant issue that led to utilities being moved¹²⁰. We also heard that some approaches, in Nottingham, for example, had been making progress in reducing disruption caused by moving the utilities¹²¹. In France, we heard that the cost of utilities diversion is met by the utilities companies as they are deemed to have benefited from free use of the highway¹²². We are not aware whether this argument applies in the UK, but would like to see further investigation of this argument and its application to the UK, and of how we can achieve a better balance between who pays for improvements.

We see this as a significant area for further work and clarification, both in terms of examination of the issues and in terms of technical solutions to reducing costs in this area.

101 Q178
102 Q139, Q178
103 Q182
104 Q68
105 Q68
106 Q57
107 Q178
108 Q191

109 Q222, Q225
110 Q131, Q178
111 Q178
112 D14, D20
113 Q87, Q194
114 D3, see also D18
115 New Roads and Street Works Act 1991
116 Q66

117 £70 million of £550 million initial cost
118 D30
119 Q242
120 Q194
121 Q88, Q67
122 Q87



10. Opportunities

Findings

Trams can help with **carbon reduction and air quality improvements** to urban areas, but these **arguments need to be further developed and incorporated into appraisal processes**. Similarly the **value of light rail as part of urban regeneration and transformation efforts has not been fully appreciated by DfT**; nor captured meaningfully in its appraisal processes.

Further **devolution**, accompanied by a **realistic assessment of transport needs and funding at a city region level**, need to be encouraged. Alongside which, **more options for local funding** of infrastructure are required.

There is a **lack of space for innovation** in the current industry, and a lack of thorough assessment of new ideas which can help reduce costs.

The **potential for Tram Train is currently under-exploited** in the UK; and there is a danger that the benefits of light rail **will be lost if Tram Train becomes treated as a heavy rail operation**.

The good **work on standards and standardisation carried out so far by UKTram needs to be accelerated** alongside efforts to **stabilise the market and provide greater certainty**.

We also asked about the opportunities that light rail offers. We were particularly keen to test the arguments for light rail and find any new threads to strengthen the arguments for its development. The future prospects for light rail may appear bleak in the short term, given the recession and anticipated cutbacks in public expenditure¹²³. However we believe there are a number of opportunities that will serve to brighten up its prospects and need due consideration in terms of how we move forward.

Over the coming years we must reduce our reliance on fossil fuels, which means that ground vehicles are likely to move towards electrification, which is a positive in terms of mass transit systems like trams¹²⁴. Electric cars however will not solve the congestion problem and other modes of public transport will be required to reduce congestion and our reliance on fossil fuels. There is no reason to believe that such a transition is not possible, although it is likely to require government intervention to develop more quickly and to manage supply and demand effectively¹²⁵. The technology to assist in moving to electric vehicles, like trams, largely exists¹²⁶. Linking local renewable energy generation to tram schemes can make a significant contribution to the energy demands of light rail – there are examples in Canada and Germany where 50% or more of the power needed for local light rail is generated from locally sourced renewables¹²⁷. A long term look at how projects are appraised and their contribution to carbon reduction is also required that takes account of the increasing importance of carbon reductions¹²⁸, given the long term commitments to carbon reduction in the UK – 34% cuts in emissions on 1990 levels by 2020; and 80% cuts by 2050¹²⁹.

The lessons from France and other places highlight the importance of light rail not just as a public transport mode, but also in terms of its ability to attract property and inward investment, assist regeneration efforts and act as catalyst for improvements to the quality of place. As one written submission notes: ‘...as the French, Swiss, Dutch, Germans, Belgians and Spanish have discovered the real prize is a wholesale transformation in the fabric of the urban environment and the urban quality of life using LRT as the backbone of an integrated and sustainable mobility and urban development solution.’¹³⁰. One written evidence submission claims that residential property prices in Croydon have increased by 14 per cent more in those areas close to the tram¹³¹. The same submission also points to £2 billion of inward investment encouraged by the tram, including major retail schemes and an arena. The Department for Transport do not factor these issues into their analysis and we would agree that at a national level, it would not be easy to do so. However, the issue of regeneration and place making does become a significant factor in more locally determined processes, as we have seen with the example of the Manchester Transport Fund which prioritised schemes according to their job creation potential¹³².

The Manchester Transport Fund is an excellent example of what can happen when local areas are able to determine their own priorities, focusing on economic gains (rather than costs) and broadening the scope of investment to consider other funds¹³³. We were impressed by the scale of vision offered and

degree to which, in a highly centralised system, Greater Manchester had exerted a degree of autonomy. City regions offer a real opportunity for local areas to set out their priorities and to bring power and responsibilities down to a sub-regional level. We are encouraged by the government’s support of the city region pilots and would urge both government and city regions to continue this work. We are particularly keen to see the development of proper city region transport strategies that set priorities and identify local funding mechanisms, for which there must be more options on the table, for example municipal bonds, increased business contributions, use of private venture capital or devolved taxation powers. We see this as crucial to the development of urban transport systems, including light rail.

We heard from business representatives¹³⁴ who all said that businesses are prepared to contribute to the costs of light rail (and other transport infrastructure) because of its significant benefits and, in the case of light rail, its sense of permanence and attractiveness to investors¹³⁵. Such support could be gathered through a ‘fair, open, and transparent’ process, which was hypothecated for transport use¹³⁶. The more businesses and residents are involved in the decision-making processes, the stronger the eventual case for the solution will be¹³⁷, which echoes the experience in France and other countries¹³⁸. We heard how, in France, for example, the funding system means that ‘local business becomes immediately involved in discussions about funding a fixed track transport scheme and knows it’s going to be paying a significant proportion of the cost. And if the mayor... is getting business on his side, it will have support, even to the point where they’re quite willing to pay those funds.’¹³⁹.

Given the current high costs of light rail schemes and the impasse that appears to be reached in terms of choosing tram over other modes, we believe that the scope for innovation is currently under exploited. We received a number of submissions and heard from several witnesses who were involved with and promoting alternatives to the modern tram, such as ultra light rail¹⁴⁰. These point to potentially significant cost reductions in construction and operations¹⁴¹ and potentially open up light rail systems to a much wider group of smaller towns and cities, and at much reduced cost. One witness claimed, for example, that with an ultra light system ‘you could have a small town tramway for under twenty million pounds, whereas everybody thinks in terms of ...three hundred, four hundred, five hundred million pounds.’¹⁴². Whilst we would not advocate any

particular system as this is not our role, we would be keen to see more innovation of the kind demonstrated to us by these promoters in the UK, for example, by using the cost controlled models in Europe and America. We heard about the extraordinary length of time to move from feasibility to operation (16 years in regard to the Parry People Mover)¹⁴³; about how difficult it is to break into the supply market without a substantial trading record or significant construction run¹⁴⁴; and the lack of general support or willingness to take on risk by DfT or local authorities to such schemes. One light rail developer described the situation as ‘a Catch Twenty-two. Everyone wants proven products, but how can you get proven products unless someone is willing to buy the product?’¹⁴⁵. We do not have the answer to how innovation might best be encouraged, but we do think it important enough, given the significant benefits claimed in terms of costs, to warrant further work and investment by government and the industry.

A key future development for light rail will be the development of Tram Trains in the UK¹⁴⁶. There is a good deal of demand for this type of system which is not currently being realised¹⁴⁷ and uncertainty over when and how it will be introduced, with one witness emphasising that ‘Encouragement is urgently required for promoters to be able to justify investing a significant development cost for tram train in the face of a general lack of direction from central government.’¹⁴⁸. We heard from the current Sheffield-Rotherham trial and the issues arising from the interface between light and heavy rail systems¹⁴⁹. There appear to be a good number of important lessons coming out of the trial¹⁵⁰ which we urge the trial sponsors to release as soon as possible. There were a number of concerns around the timescales for the current trial, with the sobering suggestion that if development work on new Tram Train schemes were not started until the current trial had finished and been evaluated, it would be another eight years before any new schemes come into being¹⁵¹. We were struck by the complexity that appeared to be introduced into the process and the caution that the sponsors were exercising. It was stated that a standard product was being looked at¹⁵², but that the current approach was to seek to add UK specific vehicles to an existing, larger order elsewhere in Europe, which would help absorb development costs, but restrict the scope of any adaptations¹⁵³. We concur with the view that Tram Train is a fundamentally proven concept and that its should and must be seen as a light rail type operation, with its attendant costs and processes, interfacing with heavy rail¹⁵⁴. To treat it as a heavy rail operation, as has been suggested, undermines the

123 Q85	132 Q114	138 Q128	147 D25
124 D5	133 Q118	139 Q1	148 Q68
125 Q27	134 Chambers of Commerce from Greater Manchester, Leeds, York & North Yorkshire, and Derbyshire and Nottinghamshire.	140 D9, D12, D13, D17	149 D21, Q196
126 Q29		141 D9, D12, D13, D17	150 Q196
127 D2		142 Q34, see also Q43.	151 Q203
128 Q39		143 D9	152 Q205
129 The Climate Change Act 2008	135 Q165	144 Q45, Q143	153 Q196
130 D25, D10	136 Q173	145 Q149	154 Q219
131 D2	137 Q1	146 D21, D25	



value of Tram Train. We would urge the DfT to be clear on its objectives (and revise them if necessary) and to offer confidence and encouragement for other promoters in the face of a deal of uncertainty and the potentially lengthy timescales.

A consequence of the over-reliance in heavy rail expertise, procedures and operations; the use of consultants and the under-developed state of the UK market, is that there has been too much unique specification and a tendency to 'reinvent the wheel' each time a new system is developed¹⁵⁵. This has led to increased costs including the higher pricing of risk. UKTram has made a start on developing standards and standardisation, but much more needs to be made of it, including the resources to deliver¹⁵⁶. We see that there is a key opportunity going forward to drive common standards across the industry and move to ever greater standardisation, particularly if this is accompanied by a clearer expression by government of the role of light rail. However, we recognise that standardisation is only justified when accompanied by a steady flow of work, which in turn strengthens and adds to the maturity of the UK market as elsewhere 'they know what they're doing, they do it all the time'¹⁵⁷.

11. A fairer, more effective and efficient framework for modern trams

Findings

Light rail is **disadvantaged by the current appraisal system** compared to other modes. Appraisal processes which **fail to take into account the full range of benefits** trams have to offer, including carbon reduction, regeneration impacts, health benefits and potential to promote modal shift.

Trams also experience **differential treatment in the levels of local contribution and utilities betterment** required as compared to other modes.

We would like to see **action to address these differential approaches** to ensure fair treatment for trams.

More generally, a **stronger partnership is needed between DfT and UKTram**, with firmer commitment on both sides to tackle the issues raised by this Inquiry.

Our last aim in the Inquiry was to explore how all partners could work together to develop a fairer, more effective and efficient framework for modern trams.

There was a strong feeling amongst witnesses that the current appraisal system¹⁵⁸ does not take into account the benefits of light rail (such as reduced carbon emissions, improved environmental benefits and regeneration impact)¹⁵⁹ or the direct benefits in terms of modal shift¹⁶⁰. We uncovered concerns that trams were not appraised in the same ways as buses or other modes¹⁶¹, particularly in regard to the amount of subsidy buses receive or, for example, in the additional costs of urban realm improvements included in tram schemes as a requirement. Despite the assurances of officials who claim that economic appraisal of bus versus tram, for example, would 'in both cases ... come down to what's a value for all those benefits, what's the value of all those costs, what's the value for money' and would be handled in 'exactly the same way'¹⁶², we think that there needs to be a more thorough examination of the comparison between investment over the longer term in modes to show more clearly how these issues are addressed and that 'like for like' comparisons are being made. We welcome the clarification and changes to appraisal over the negative impacts of public transport on fuel duty.

We found a degree of inconsistency in the way that trams are treated by the Department for Transport, with differential rates for local contributions¹⁶³ and utilities betterment¹⁶⁴. At present DfT policy is that local communities should fund 25% of the costs of a light rail scheme from local sources, whereas non-light rail schemes are only required to find a 10% local contribution. Light rail schemes attract a lower rate of utilities betterment (i.e. the contribution that utilities companies have to make towards utilities diversion) than other highways schemes – 7.5% compared to 18%.

The DfT do not see these as barriers to developing light rail, citing the number of schemes that have come forward¹⁶⁵ and the difference between schemes¹⁶⁶. However this view is not shared by promoters, with one witness, for example, describing the requirement for a 25% local contributions as 'a particular challenge to deliver'¹⁶⁷. These factors are significant in their own right, but also give further credence to the suspicion that the Department is somehow biased against light rail. We do not believe that this is an explicit policy, but would like to see action to redress these apparent differential approaches. Furthermore, there is a growing gap between the 'haves and have nots', as previously noted, extensions become easier to justify than new schemes.

158 NATA – New Approach to Transport Appraisal
159 D23
160 Q186
161 Q106
162 Q240

163 D25
164 D23
165 Q235
166 Q238
167 Q68, see also Q219



Light rail is part of the suite of urban transport solutions that exist alongside bus and other modes – it should be seen as ‘a funny kind of bus running on rails rather than a funny kind of train running on the streets’¹⁶⁸. This would help clarify the position with regard to highways authorities, which are not often seen as part of the equation¹⁶⁹ and as such come under construction use type legislation rather than the more onerous heavy rail legislation. We are greatly concerned that in its analysis of urban transport, the Cabinet Office did not include reference to light rail or other mass rapid transit as part of the analysis¹⁷⁰.

The process for developing and approving tram schemes is too long. Witnesses have commented on the length of time to decide on schemes and added uncertainty (and cost) that delay brings¹⁷¹. We understand that the Department for Transport has improved its processes markedly since 2005¹⁷², but further clarity over what can be expected by when is required.

Funding for trams will always be a significant challenge, particularly if we wish to emulate the more devolved systems of local fundraising seen elsewhere in Europe. The RFA processes have been the main source of funding and gives promoters more certainty once a scheme is included¹⁷³, but we heard how these were over-subscribed¹⁷⁴. The costs of developing schemes are also borne at risk and not-counted as contributing to the local contribution rate¹⁷⁵.

We heard from the Department and from UKTram, the industry body charged with reducing costs and producing standards for light rail. We see the way forward as a stronger partnership between the Department and UKTram, with a firmer commitment on both sides to tackle the issues raised in this report.

12. Conclusions and recommendations

This section sets out our conclusions, building on what we were told and the evidence presented to us, and our understanding of the situation built up from the previous sections.

National Government

The Inquiry heard much evidence about the role that the Department for Transport plays in the planning and delivery of light rail systems. It is recognised that on a day-to-day basis the advice and support officials have given to promoters has generally been of value and welcomed. The government’s recent spending commitments are also to be welcomed. However, there remain a number of significant challenges which only national government can address:

- There is no framework or specific policy for light rail as an urban transport solution. The lack of strategy means that the Department for Transport is too reactive to situations and lacks a clear framework in which to provide support on light rail. Ministers and the Department for Transport need to provide leadership for the future development of light rail.
- In setting out what government’s role should be in supporting light rail development, DfT needs to be much clearer on its advice to promoters, accepting that it has a role to challenge options at the right stage; provide greater assistance to promoters in the appraisal process, including explaining how appraisal works; and providing deadlines for its own work and decision making.
- At present there is no ‘home’ in government for light rail. We firmly believe that light rail is a distinct mode. It shares common characteristics with both bus and heavy rail (and other fixed track modes), but needs to be seen as a mode in its own right. We know from the experience of France and Germany in particular that this will create and retain more expertise and build greater confidence that light rail’s needs are being addressed.
- Part of the uncertainty that exists is over funding availability and the ‘at risk’ nature of project development. Committing a relatively small amount of funding annually to developing light rail nationally will instil a much greater level of certainty in the industry and begin to provide a flow of work that can help build UK-based tram expertise, helping to reduce costs in the future. This is not about meeting the whole cost of schemes, but about providing a flow of funding to keep development work sustained, and thereby helping foster a UK based tram industry. This would also help secure the benefits of a more mature market, including an increased skills base and the proper assessment of risk.
- The range of funding opportunities for light rail is not sufficient to meet the scale of investment required. Government has made efforts to increase the range of local funding available to authorities for infrastructure, like the Supplementary Business Rates, but further options will be required if we are to see the impacts of devolution that have been witnessed elsewhere in Europe.
- There is a perception that the processes differentiate against light rail and make its development more challenging – e.g. in local contributions, utilities betterment and in the perception of appraisal against other modes.
- Utilities are a significant element of capital costs for trams, yet there is no clear understanding of whether they need to be moved or whether there are alternative models to minimise the risk to operations. For example, clearer regulation and standards for mapping of on-street utilities would reduce the element of risk and cost.
- Innovation in the sector is being stifled. There is currently no obvious route by which innovations that may reduce costs or improve performance can be tested or accessed by promoters. The current systems tend to exclude options that are not tried and tested.
- There is a real risk that the opportunities to exploit Tram Train to lower industry costs are being held up by the lack of information; and will not be fully realised if, as seems likely, heavy rail standards are applied.

168 Q59
169 Q59
170 Cabinet Office (2009) An analysis of urban transport –available from http://www.cabinetoffice.gov.uk/strategy/work_areas/urban-transport.aspx
171 D31

172 Q233
173 Q233
174 D22
175 Q97



Our recommendations for government are

1. To develop a clear and concise framework that articulates:
 - the role of light rail in urban transportation, including its contribution to carbon reduction, urban regeneration, health and place making;
 - the ‘right’ circumstances where it is applicable (and the criteria government will use to test this); and
 - the role that government will play in supporting light rail development.

We see this framework being developed jointly with industry, i.e. UKTram.

2. To set aside a dedicated funding stream at a national level for the development of light rail which assist promoters and the industry in bringing schemes forward and creating greater certainty.
3. To identify a champion in government for light rail and create a space within DfT for light rail expertise to be developed and fostered; and to develop appropriate standards and procedures for light rail, working with UKTram (as the representative industry body).
4. To work across government to develop a wider range of tools that will fund local infrastructure development including light rail schemes.
5.
 - o remove the differential treatment of light rail compared to other transport modes in terms of local contributions and utilities betterment; and to undertake and publish work to demonstrate how the current appraisal system treats light rail when compared to other transport modes.
6. To review current appraisal and assessment processes to reduce timescales and make criteria more transparent.
7. To work in partnership UKTram, as the representative body for the UK light rail industry, to address the utilities issues highlighted in this report; and to develop the ways and means of driving costs down, including helping foster innovation in light rail
8. To use its role as sponsor of the Tram Train trial to press for early release of the lessons learnt; and to clarify that the core objective of Tram Train is a light rail operation interfacing with the heavy rail network.

Furthermore, we believe that the utilities issue is an area where scrutiny by the Transport Select Committee can provide the necessary impetus for utilities to engage with government and the light rail sector, and we will be making a request to the Transport Select Committee that they undertake a formal review of the utilities issues raised in this report, including holding the utilities companies to account more clearly.

Local Transport Authorities

Our recommendations for local transport authorities are:

9. To set out long term integrated transport strategies which:
 - have clear priorities in relation not just to transport but wider economic, regeneration, place-making and environmental goals;
 - detail the relevant funding and procurement mechanisms, including better ways of sharing costs and risks; and
 - build on solutions that best fit local circumstances.
10. To explore the benefits of integration through the tools available in the Local Transport Act 2008.

Light Rail Sector

Our recommendations for the light rail sector are:

11. To encourage all the partners in UK Tram to raise their game to become a more coordinated, effective and visible trade body for the light rail sector, focusing on:
 - A single voice for the industry
 - Establishing standards and cost reduction
 - Building capacity with UK industry
 - Sustaining a UK based light rail industry
12. To develop a work programme with DfT to address the key tasks that flow out of the Inquiry:
 - A national framework for light rail
 - A review of utilities costs
 - Advice on procurement models
 - Fostering innovation
 - Developing accepted standards and driving standardisation

Annexes

1. List of evidence
2. List of witnesses
3. Terms of Reference

Annex 1 - Evidence submitted to the Light Rail Inquiry

- | | |
|---|--|
| 1. Evolution Quarter Residents' Association | 20. Railway Industry Association |
| 2. Light Rail UK | 21. Network Rail |
| 3. Martin Prosser | 22. Metro |
| 4. NECTAR | 23. Campaign for Better Transport |
| 5. Oil Depletion Analysis Centre | 24. Martin Cook |
| 6. Merseytravel | 25. pteg |
| 7. SYPTE | 26. Transport for London |
| 8. UK Tram | 27. Arthur Percival |
| 9. Parry Associates | 28. Stockport Council |
| 10. Keolis | 29. Correspondence between Norman Baker MP and Sadiq Khan MP |
| 11. Sustraco | 30. National Joint Utilities Group |
| 12. Lightweight Community Transport | 31. LRTF |
| 13. Tram power | 32. GMPTE |
| 14. Carillion plc | 33. Bill Vigress |
| 15. CPT | 34. Frank Chambers |
| 16. LRTA | 35. Spokes |
| 17. Ben Hughes | 36. Graham Jellet |
| 18. Subtechnics | 37. CTC Tyneside |
| 19. David Rumney | |



Annex 2 – Witnesses (in order of appearance)

Andrew Braddock
Light Rail Transit Association

James Harkins
Light Rail UK

David Strahan
Oil Depletion Analysis Centre

John Parry
Parry Associates

Bob Chard
Sustraco

David Walmsley
Confederation of Passenger Transport

Geoffrey Claydon
Confederation of Passenger Transport

Dave Haskins
Metro

Luke Albanese
Mott Macdonald

Chris Deas
Nottingham City Council

Stephen Joseph
Campaign for Better Transport

Lewis Atter
KPMG

Roger Harrison
Keolis

Lewis Lesley
Trampower

Chris Fletcher,
Greater Manchester Chamber of Commerce

George Cowcher,
Derbyshire and Nottinghamshire Chamber of Commerce

Ian Williams,
Leeds, York and North Yorkshire Chamber of Commerce

Scott McIntosh
Light Rapid Transit Forum

Bill Free
Carillion

Simon Coulthard
Network Rail

Tim Kendell
Department for Transport

Phil Hewitt
Transport for London / UKTram

Geoff Inskip
Centro / **pteg**

John Dowie
Department for Transport

Paul O'Sullivan
Department for Transport

Annex 3 - Terms of Reference



Terms of Reference and Call for Evidence

The All-Party Parliamentary Light Rail Group (APPLRG) and **pteg** are setting up an inquiry to consider progress in developing modern trams in the UK and to examine how barriers to tram scheme development and implementation can be tackled.

It is five years since the Transport Select Committee carried out an inquiry into why tram systems in the UK cost so much more than on the continent. Whilst the government has approved several new schemes and invested in trams in the intervening period, it remains a fact that tram systems in the UK take longer and cost much more to implement. As the Select Committee revealed, the reasons are complex and inter-related.

With the impending General Election in mind, the All-Party Parliamentary Light Rail Group, with **pteg**, has decided to carry out their own investigation. The aim of the Inquiry will be to refresh the evidence for modern trams and help identify what are the practical actions that can be taken to move tram systems forwards.

The Inquiry's remit will be:

- (a) To review current progress with light rail schemes in the UK
 - i) What has been the experience in delivering light rail schemes in the UK?
 - ii) What have been the issues which have helped progress schemes or acted as barriers to their development?
- (b) To compare the UK experience with progress on light rail schemes on the continent
 - i) What has been the experience in delivering light rail schemes on the continent?
 - ii) What are the common issues and barriers, and how have these been addressed?
 - iii) What are the key lessons from Europe in progressing light rail?
- (c) To examine current UK government policy towards light rail
 - i) Where have we got to on government light rail policy?
 - ii) What are challenges for light rail in the current and future policy context?
 - iii) What has changed since the Transport Select Committee Report of 2004?
 - iv) What might we expect of future governments?
- (d) To consider the opportunities and risks in developing light rail systems in the UK
 - i) What are the risks involved in developing light rail in the UK?
 - ii) How are these currently addressed? Are there better ways of addressing risk?
 - iii) What are opportunities that light rail offers?
- (e) To examine how a fairer, more effective and efficient framework could be established for the appraisal, development and implementation of modern tram schemes in the UK.
 - i) What can be done to take forward modern tram schemes?
 - ii) How can government, promoters and industry work better together?

The focus is primarily on modern trams rather than ultra light rail, LRT systems (like the DLR or Tyne and Wear) or tram train – though by its nature, the Inquiry will no doubt touch on these systems.

Interested parties should submit evidence by **7th October 2009** to matt.brunt@pteg.net, clearly marking submissions 'APPLRG Inquiry' in the subject heading.

