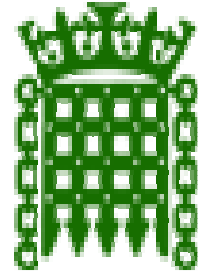


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



All Party Parliamentary Light Rail Group (APPLRG)

Report of a meeting held at the House of Commons on Tuesday 2nd December 2014 at 17:00

Chairman: John Leech MP (Chairman APPLRG)

Speakers:

Lilian Greenwood MP Nottingham South, Shadow Rail Minister
Peter Cushing, Chief Executive, Manchester Metrolink
James Hammett, General Manager, UKTram

James Hammett

[This was accompanied by a PowerPoint presentation available on the APPLRG website at <http://www.applrguk.co.uk/Presentations>]

Low impact light rail – I am sure most of you will be aware that, along with the Technology Strategy Board (TSB) and Innovate UK, UKTram have launched a competition with £3m of funding - Innovation in the Light Rail Industry - to act as an unblocker to a lot of the ideas which could save cost in the industry. There are a lot of good ideas which can get to market and this is to facilitate that. The competition was launched earlier in the year. Initially there were 48 provisional applications which eventually resulted in 24 actual applications. With only £3m funding we shall not be able to take all 24 forward, so for Stage 1 a panel of industry experts scored all the applications and 15 were shortlisted, Stage 1 being the development of the product. Stage 2 goes on to the actual manufacture of the product which is then put on a test site.

So, where we are at the moment? All contracts for the Stage 1 applicants were signed by the end of August, with a view to completing Stage 1 by the end of the financial year. By Christmas all Stage 1 applicants will be reviewed to see who goes on to Stage 2. The number going through will depend on the costs of the individual schemes.

Because of the limited funding, we had to focus on key areas. The key areas that we highlighted were overhead, track form and energy. The Stage 1 successful applicants for those categories were as follows.

Digitising the Innovation Ecosystem, primarily looking at Overhead.

Utilises a software system to map the process for design and implementation of the overhead line and identifies key areas for cost reduction and refinement of design. It will be applied to real system application during the feasibility stage to determine benefits. Other overhead line projects to be used to test effectiveness

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

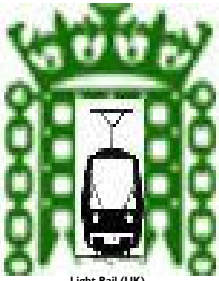
Mr Jim Harkins FCILT
www.applrguk.co.uk
Email appls@appls@aol.com
www.lightrailuk.com

RSVP to applrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

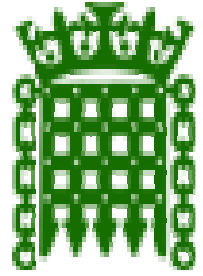


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



A Composite Structure. This is being developed at the moment and will hopefully reduce the weight of Overhead Line equipment.

Utilises lightweight composite structures to replace steel supporting masts for overhead line.

Uses novel lightweight clip mechanism to reduce the number of parts and to reduce the weight of equipment.

Clip together system reduces costs and time to construct

Trackform. Optimum Rail Wear Limits.

Development of a methodology and toolkit that will allow operators and maintainers to make

decision on the condition of rails and thus allow longer use of rails maximising the time between rail replacements

Could be used in conjunction with the Rail Restore application

Trackform. Weld Restore

Allows repair of the rail insitu in order to extend life and prevent the need to breakout and replace road surfacing and rail

There are several applications on improving slab track. We do not expect that all of them will make Stage 2 but they are all good and we have to give them all a chance to go through.

Trackform. Integrated Modular Light Rail Construction System

Trough based modular construction system

Standardised parts to deal with common radii etc

Can be installed through excavating double slots in the highway

Tie bars to maintain gauge

Utilises existing precast technologies in new ways

Provides maximum access for utility works/minimises diversions

Trackform. Ultralite Track

Modular Trackform

Allows guided bus operation without need for separate track

Suitable for use off-street and in central reservation

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

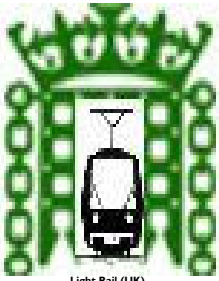
Mr Jim Harkins FCILT
www.apprguk.co.uk
Email apprguk@aol.com
www.lightrailuk.com

RSVP to apprguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

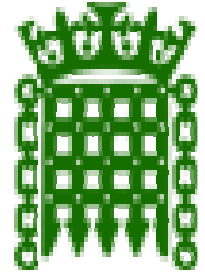


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Trackform. PCAT (Pre-cast Advanced Track)

Preformed track-slab

Includes built in ducts

Uses unique curved tensioning ducts and connectors to provide tension

Allows track units to be removed for access to utilities

Has potential crossover potential into heavy rail – tunnels etc requiring low profile slab

Suitable for street running applications, tunnels and subject to cost instead of ballasted track

The next one is improving weld inspecting, especially on embedded track.

Trackform. Rapid Reliable Weld Inspect

Ultrasonic weld inspection package designed specifically for light rail applications

Allows faster and immediate inspection of welds hence removing lag from the programme and removing significant overall time to construct

Will also allow greater number of welds to be inspected giving a greater confidence and improved quality of welds reducing future maintenance

Another overhead application using traditional design but lightening everything

Overhead. Low Impact Power Supply

Lightweight OHL design utilising proprietary equipment and removing heavy rail over design elements

A couple of applications on energy supply:

Energy. Fuel Cells to Power Light Rail

Proposes a lineside mounted fuel cell to power overhead

Utilises gas connection to generate power removing the need for sub-stations which are often difficult to provide in city centre locations

Energy WITT Energy Supply

Utilises vibration either on vehicle or lineside to provide energy to power on vehicle energy supply to essential systems or power to lineside equipment where other supplies are expensive or impractical

More reliable than solar or wind power because of the reliability of the energy input

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 017721378223

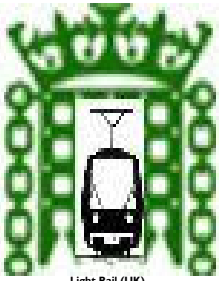
Mr Jim Harkins FCILT
www.aplrguk.co.uk
Email aplguk@aol.com
www.lightrailuk.com

RSVP to aplrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

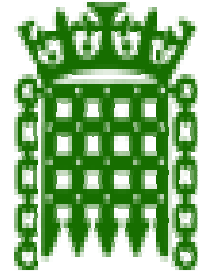


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Not an physical product but a program to optimise energy usage.

Energy. More Energy Efficient Trams

Software system to improve tram energy usage

Utilises journey specific information to provide specific driving information to optimise usage

Can be applied to any system and has potential global market

Could be extended to heavy rail usage with adaptation of the system

Another track inspection system.

Trackform. MARVIN / MEMS

Provides a specialist track inspection system for light rail systems including embedded trackforms

The solution will provide a much more cost effective means of inspection than either visual inspection (subject to poor quality) or current heavy rail systems

Utilises visual recording to provide additional detail of problem areas – could be used in tandem with Wear Measurement and Management

Finally a vehicle-mounted system for scanning wear on both track and overhead.

Trackform / Overhead. Wear Measurement and Management (Rail and Overhead)

Measurement system to monitor condition of overhead line and track

Designed specifically for light rail systems

Utilises cheaper technology than systems currently utilised on heavy rail to make it affordable to use on smaller systems

Transmits data to the cloud to reduce operational burden and allows direct access for maintenance providers

I cannot answer detailed questions about the individual applications but I will deal with any questions about the competition itself.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 017721378223

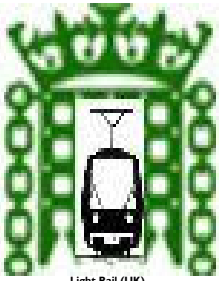
Mr Jim Harkins FCILT
www.apprguk.co.uk
Email apprguk@aol.com
www.lightrailuk.com

RSVP to apprguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

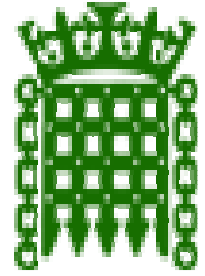


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Questions

John Leech. Are the various track systems designed for both on- and off-street running?

James Hammett. Some are designed for on-street, some for both. The main interest is in on-street, as that is where the biggest expense is. Some can be used off-street without infill in place of ballasted track.

Lewis Lesley (TramPower). How do we get these products to market and to meet the necessary procurement requirements including demonstrating three previous contracts?

James Hammett. We will ensure that anything that gets to Stage 2 will be tested in a proper environment. We will have a test site and vehicles available. We will be able to prove to a promoter that the product has been successfully tested on a test site and we can ask for it then to be installed on a live system. We have got a commitment for some promoters that they will trial products at Stage 3, which is the point at which we get products to market. The promoters will avoid the three previous contracts requirement by being involved in the testing procedure.

Nicholas Falk (URBED). There was nothing about doing away with overhead. Were there applications that were not chosen?

James Hammett. We did have some but they were either too costly or did not score well enough in the selection system. We hope that, if the competition is successful, we shall be able to do another round.

David Halliday (STRAIL (UK)). I have come across people wanting to look at infill on street track and surface quality. Is there a possibility of entering into a dialogue with the promoters of the track systems on their specifications?

James Hammett. We are keen, with the different trackforms, to strike up partnerships and get people working together in order to get an improved product.

Mary Bonner (LRTF). Has any of the £3m been used for the first stage and, if so, what will be left for the actual testing?

James Hammett. Yes it has. I have no figures because this is a matter for TSB.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

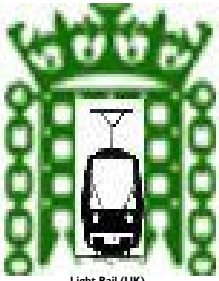
Mr Jim Harkins FCILT
www.applrguk.co.uk
Email appls@uk@aol.com
www.lightrailuk.com

RSVP to applrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

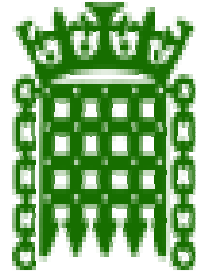


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Mary Bonner. How is a decision going to be made between, say, one really promising but expensive application and several less-promising but cheaper proposals?

James Hammett. We have been pushing hard for additional funding, including from DfT, so that, even if good proposals cannot be progressed through this competition, it may be possible still to make progress outside.

John Leech. What is the response from DfT?

James Hammett. They are keen to be involved.

Ray Chalmers (Interfaces consultancy). Have you taken into account in selecting applications whether the project is being explored elsewhere? Have you looked at possible barriers in this country to procurement of innovative ideas?

James Hammett. The whole focus is on unlocking potential innovations within the UK and we would include projects new to this country even if developed abroad, although as far as I am aware none of the shortlisted projects fall into this category.

John Leech. What is the split between overseas and UK entrants?

James Hammett. All the entrants are substantially UK driven.

Jim Harkins. Is this a one-off or could it become a regular event?

James Hammett. At present it is a one-off. We need to prove that the money is well-spent on bringing innovative projects forward and that the light rail industry is open to new ideas. If we can prove this then money may well be available for future competitions.

Jim Harkins. A question was raised in the Cross-Party Rail Group of the Scottish Parliament as to whether UKTram has relevance to Scotland.

James Hammett. We very much want to see this going forward as a permanent fixture with input from as many sources as possible.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

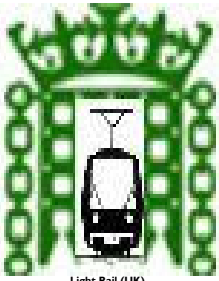
Mr Jim Harkins FCILT
www.apprguk.co.uk
Email apprguk@aol.com
www.lightrailuk.com

RSVP to apprguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

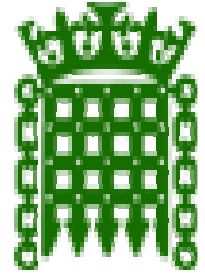


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Lewis Lesley. £3M will not go far in Stage 2, maybe one or two projects. Is this going to be a lottery?

James Hammett. It will be scored by industry experts. It is at this stage that we would go to DfT, if extra funding is required, to get promising projects taken forward. This on the basis that "Green light for light rail" called for cost-cutting and that is what most of these project would be achieving.

Question. Some mistakes were made in constructing this country's second-generation tramways, which have required remedial work. How carefully will you be vetting the track systems in particular?

James Hammett. We intend to carry out very exhaustive testing to avoid problems.

Chris Bell (Chairman Conservative Transport Group). Can you give any estimate of the money that is going to be saved by these projects?

James Hammett. These projects are at an early stage of development and without examining each one individually it would be difficult to come up with even a vey rough figure. It is something that Innovate UK will be looking at later in the procedure as they will have to justify the £3m spend.

Lewis Lesley. There is 20 miles of track at Long Marston on which the overhead systems could be tested, the track and overhead projects do not have to be tested together.

James Hammett. There is a great deal of space at Long Marston and we intend to install all possible track configurations to allow testing under all conditions, including driving heavy road vehicles over the track.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 017721378223

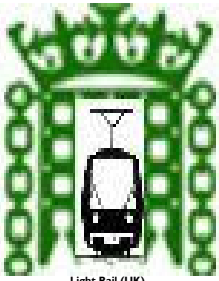
Mr Jim Harkins FCILT
www.aplrguk.co.uk
Email aplrugs@aol.com
www.lightrailuk.com

RSVP to aplrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

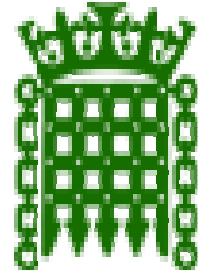


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Lilian Greenwood.

Thanks John, it is a pleasure to be back at the All Party Light Rail Group. I was elected the MP for Nottingham South in 2010 and I became involved in transport policy partly as a result of the great work that has been done in my city to promote public transport. Unusually for the Shadow transport team, I have managed to hang around for a whole three years now.

I want to talk today about Nottingham's Phase 2 extensions to Clifton and Chilwell and possible future routes. We have had some good news just this afternoon that the final section of track has been completed. I also want to say a few words about devolution as transport and light rail is at the heart of that debate. The identification of devolution with light rail has a long history. When Barbara Castle was setting up the Passenger Transport Executives in the 1960s, she funded a study into building a new light rail system in Manchester. Of course, it took a little bit longer to deliver Metrolink and for those who promoted light rail it must have seemed at times a lonely course. It was not so long ago that light rail was seen as an obsolete technology and in the UK only Blackpool's tramway struggled heroically on. From the 1980s onwards, Tyne and Wear Metro, the Docklands Light Railway and Manchester Metrolink proved that light rail was an essential part of the future for urban transport, but, of course, there was a much wider development in Continental Europe.

Today in Nottingham we are combining old and new, Victorian alignments and infrastructure now carry new tracks and even the old Great Central railway bridge over Nottingham Midland station has been recreated as the stunning Karlsruhe Friendship Bridge. Light rail carried 227 million passengers in 2013-14 including 8 million in Nottingham and, whilst much of that national growth has been driven by the Docklands Light Railway, I think that light rail is now valued as part of many of our towns and cities from Sheffield to Manchester, Newcastle to Sunderland and now at last Edinburgh. But it was not an easy journey. I remember before NET opened in 2004 when many people feared that their local bus LTD services would suffer, but bus passenger numbers have continued to rise against the trend outside London. I think the key message is that when people have genuine choices that match the speed and comfort of the private car you can grow the overall demand for public transport. Both light and heavy rail clearly have a role to play in achieving that goal but I think that light rail operators can take real pride in their punctuality and passenger satisfaction ratings that would be the envy of any of the heavy rail operators. It is still true that, before Phase I was built, many people in Nottingham questioned how the tram would benefit them or their communities and I still hear similar complaints from many of my constituents in Clifton, Lenton and other areas affected by the construction. Given the scale of those construction works and the level of disruption, and it is painful, particularly now we have delays to the project, I do think the industry can do more to answer those questions and engage with individuals and communities

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 017721378223

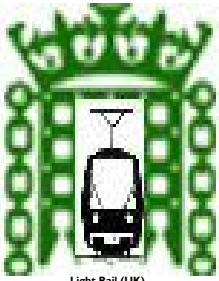
Mr Jim Harkins FCILT
www.aplrguk.co.uk
Email aplrguk@aol.com
www.lightrailuk.com

RSVP to aplrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

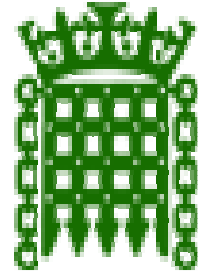


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



To give one example, and you hear this complaint again and again, that workers are standing around with no obvious purpose or job at hand. There will be times when there is a reasonable explanation, such as a delay in delivering construction material, but there have been problems and one is turnover in the project's workforce which has been far too high. At maximum there were a thousand people employed on the tram project but overall there have been 9,000 employed to work on the NET extensions which gives an idea of the number who have come and gone. Given the number of unemployed people in my constituency, some of them highly skilled, it would surely have been better to run a programme to train and employ local people on the project. I think that is one really important lesson for future extensions to the Nottingham tram and I think the Crossrail model is really important in promoting jobs and skill and apprenticeships, which maybe the wider rail industry can emulate when it comes to major projects.

The extensions in Nottingham were originally due to be completed in mid-December and unfortunately that has been replaced with a vague commitment to have Phase 2 up and running somewhere between January and June next year (but I do not think it will be January). I am reluctant to place all the blame on the contractor because I know that some of the delays have been down to the unexpected discovery of utilities, archaeology and all sorts. The response of the utility companies has not been good enough and I would be interested to learn how some of those obstacles are tackled in other countries. We need to address these issues because I am really looking forward to Phase 2 opening and one day other extensions beyond the city. That might mean adapting existing rail structures. As you know, in many cities in mainland Europe local tram systems are connected effectively with suburban and inter-city rail networks and that is something that we would like to see taken further in government

Light rail is set to play a major role in connecting HS2 to our current transport networks. I visited Birmingham earlier this year to see the plans that Centro and Birmingham City council are putting in place. New routes could provide a direct link between Coventry and Birmingham and spearhead the development of Digbeth. I think anyone would be struck by the scale of Birmingham's ambition and their strategic vision for the role of light rail. The South Yorkshire Passenger transport Executive has outlined its proposals for tramlines to connect better with high speed rail. In Nottingham the tram's Chilwell extension is due to terminate less than a mile from the previously proposed East Midlands HS2 station at Toton. There is a lively debate to be had on how that line can be extended, although if it has to go to Beaston, which is the other possible site for the station, which might be a bit more of a challenge. But they are all examples of how HS2 can act as a spur to growth and investment. We cannot assume that investment will just fall into place. New light rail systems must have a clear economic case, especially as national budgets are under intense pressure. There will be cuts of just over £9 billion to the transport budget in this Parliament and it is clear that the collapse of rail franchising has thrown the Department for Transport way off kilter. They are now losing about £294 million a year in premium payments according to one of the rail publications.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by

Transport & Training Service UK Group
www.transporttrainingservices.com
Tel - 01925 243500

TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

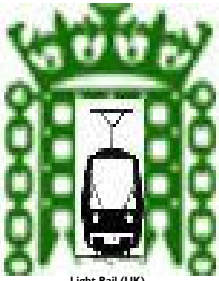
Mr Jim Harkins FCILT
www.apprguk.co.uk
Email: gph@prguk@aol.com
www.lightrailuk.com

RSVP to apprguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

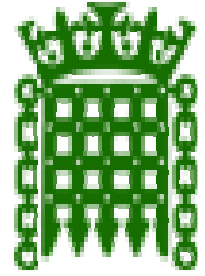


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



We cannot ignore the fact that the delays in Edinburgh and Nottingham have damaged the light rail sector's image. Promoters of new schemes can expect to hear these words again and again: downgraded, over budget, over time. The industry does need to demonstrate that the costs can be kept under control and realistic deadlines reached and we have heard in the previous presentation about some of the ways in which costs might be brought down. Equally local transport groups feel that often they have to work against Whitehall when it comes to developing proposals for new light rail systems. It is no accident that many networks are established by local initiative and perseverance not control from Whitehall and changes to central government priorities can add new layers of cost and complexity to locally-developed schemes. In Nottingham, planning for a light rapid transit system started in the late 1980s but it took the best part of twenty years to realise that vision. There was a private Act of Parliament passed in 1994, but Pat Armstrong, who has been one of the leading lights behind the project, later said that it was the next five years that were the most difficult, maintaining local commitment and enthusiasm while having to persuade successive transport ministers of the scheme's worth. Obviously the turnover in transport ministers does not help. On many occasions in that period people said that we would not succeed.

I am sure that there are plenty of local authorities who are trying to develop schemes to extend their existing networks who will be as frustrated as Pat was by the difficulties of developing light rail schemes in the current environment. That is one of the reasons that Ed Milliband and Labour made it clear that we would transfer more power to local transport authorities and promote growth based around city regions. City regions are vital because tram networks have a habit of not conforming to local boundaries. Our Growth Commission, which is led by Andrew Adonis, has already identified a lack of investment in transport infrastructure as a key barrier to growth. We need an economic recovery that lifts the whole country and light rail has already proved that it can be a really powerful catalyst for urban development. Building a light rail system is a really clear signal for investors. It helps attract money to areas that would otherwise be passed over and I certainly hope that the more deprived areas of my constituency like Clifton and The Meadows will derive additional benefits once those new lines are open.

To conclude, I am convinced about the economic and environmental benefits of trams and light rail. The industry and transport planners need to continue to develop proposals for new systems, for integrating light rail with the conventional rail network and for linking to HS2. For our part in the Labour Party, if we win in May, we will devolve powers and funding to make it easier for communities to develop light rail projects. Hopefully the first passengers will be riding on the Nottingham tram extensions before that.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 017721378223

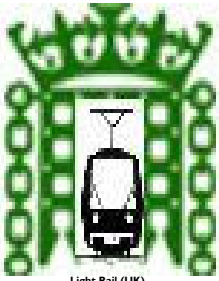
Mr Jim Harkins FCILT
www.aplrguk.co.uk
Email: applrguk@aol.com
www.lightrailuk.com

RSVP to aplrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

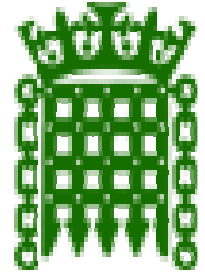


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Questions

John Leech. I think we can all agree that devolving power to local communities to make decisions on their transport is a good thing in principle. Places like Nottingham and Manchester have been very successful in getting government money to fund their schemes. If we have a devolved system where all the regions are getting a chunk of the money is there not a danger that places like Nottingham and Manchester may actually end up with less cash than they have done under the current arrangements? Unless there is more money, of course.

Lilian Greenwood. One of the issues has got to be how we ensure more money and how we can ensure that there is a good local contribution. In Nottingham, the City Council have chosen to fund the local contribution through a Workplace Parking Levy and there is the opportunity to look at localised business rates being retained and expanded as a result of economic growth. The answer is: we cannot sit in Whitehall and make those decisions for cities and regions. It is for cities and regions to decide what are their priorities and to make those choices. It is not about being protective of my city, which has done incredibly well out of transport investment, it is about wanting to share that to ensure that we are seeing the opportunities for economic growth derived from transport infrastructure investment across the country. One of the big issues is about rebalancing the economy. We have seen huge investment going into London and the Southeast, understandably, because that is where lots of jobs and growth are. But, if we are going to be serious about rebalancing, we need to look at how we have a fairer regional distribution of funding but coupled with the opportunity for cities and regions to make their own decisions about priorities for investment .

Nicholas Falk. Land use is critical to the growth of light rail systems and one of the main benefits of light rail is in the uplift of land values. The most extreme examples are in London Docklands. What consideration is being given to tapping into land value uplift, particularly as beyond the urban areas it opens up opportunities in the surrounding area?

Lilian Greenwood. I think that that has to be part of our look at how local transport authorities can raise future funds by looking at the potential for future increase in land value. In London we have seen a good example in the way that Crossrail has been able to pull in private investment and maybe that needs to be part of the future for light rail as well.

John Leech. It is quite interesting that when people are complaining about construction work for Metrolink or the Nottingham tram, no doubt Lilian will have had exactly the same comments that I have had about how it has negatively affected the price of their house which of course it never does

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

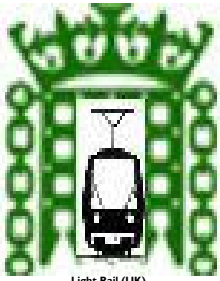
Mr Jim Harkins FCILT
www.aplrguk.co.uk
Email aplrguk@aol.com
www.lightrailuk.com

RSVP to aplrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

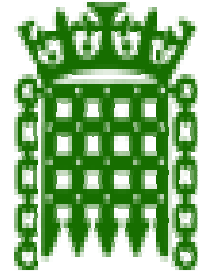


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Lewis Lesley. A tale of two countries: France did exactly the same as we did: scrapped its tram routes. It opened the first new one in Nantes in 1985, ours was 1981 in Newcastle. Subsequently the French have opened 25 tramways and we have opened 5 and for us to catch up with green Germany at that rate would take 150 years. But there is a political calculation here – one new tramway equates to two or three new general hospitals. How do you make the justification?

Lilian Greenwood. Part of that justification is the conversation you need to have with the public, explaining why it is that investment in capital infrastructure like new rail lines or new tram lines helps to build economic growth, which in turn can pay for other services that people want. We are not very good, politicians and industry, at explaining how much these things cost and why we are doing it. There is a huge amount of evidence of the way which transport infrastructure drives jobs and growth and can be part of that argument about rebalancing the economy, but we are not getting it out there. The best example of this is HS2, the argument for which has been so poorly made. There is a real challenge in demonstrating that. You can make that argument with people if they understand the place that transport infrastructure can play in generating economic wealth and generating tax revenues which then pay for some of the other public services that people very much value.

Chris Bell. On the whole question of economics of urban agglomeration, which is the growth of the urban metropolis around cities, there is some very important research done by Professor Geoffrey West in the States, a physicist specialising in scaling the laws of nature who has moved his thinking to cities and businesses and cities. There is a 1.5 relationship. One point on the straight line graph is, if you double the urban population in a metropolis you will get 50% greater GDP per capita in that urban population. The connectivity within the urban metropolis is measurable by this. If you add, say, 25% over 20 years by investment in interconnectivity inside the commuter area you can calculate what the GDP growth is and the correlation is very widely proven. That explains the success of London, because London has had so much more investment inside its commuter area and in London you can go to most places by public transport. The objective ought to be for all our big cities to be as London-like as possible. My colleagues in the Conservative Transport Group have done some serious research on this and nobody has said it is wrong. The mechanism is all to do with innovation – you have probably heard about Matt Ridley's book *The rational optimist*. He essentially says that the process of urban growth and innovation is two sides of the same coin because what happens is: the bigger the city the more random connections of people happen, the more frequent it is and, as he puts in his book, "Ideas meet ideas, have sex and beget innovation". A lot of people have done work on this and there is no doubt that this random meeting of people happens more frequently the bigger the city. The 15% rule applies to crime and even to the speed at which people walk. In New York people walk 15% faster than in cities half the size. It is a very strong calculation. I cannot understand why, with such a good theoretical grounding, proactive transportation investment cannot be justified. More connectivity; be as London-like as possible.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom W42 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

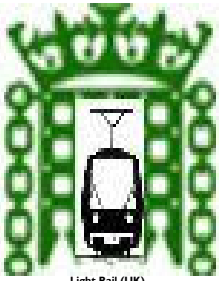
Mr Jim Harkins FCILT
www.aplrguk.co.uk
Email aplrguk@aol.com
www.lightrailuk.com

RSVP to aplrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

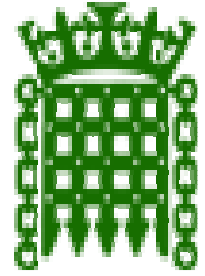


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Lilian Greenwood. I think it is really interesting that you raise the issue of being as London-like as possible because, of course, in lots of ways London is completely different to everywhere else in terms of the integration that is facilitated there and other cities are crying out for London-style powers so that they can have that same level of integration. We have seen this locally between bus and light rail with a single ticket that allows you to move seamlessly between the different forms and smart ticketing and Oyster has obviously been absolutely revolutionary in London. But the deregulation of buses back in the 1980s has made that incredibly difficult even in cities with transport authorities that are very committed to trying to make that happen. That is precisely why one of the things we have said in the Labour Party is to strengthen the powers that allow other cities to get that same level of integration by regulating their buses more. It was amazing to me that the Chancellor, when he talked about giving extra powers to Manchester actually talked about them being given the power to franchise buses because that seems to be the complete opposite to Conservative Party policy for more than twenty years but it is welcome.

Chris Bell. In all the cities except London, something like 85-90% of all journeys are still by car and that is self-defeating, whereas in London it is a much reduced percentage.

Tim Finch (Invent). How is the devolvement of power to local authorities for transportation schemes going to square with the proposed Infrastructure Commission being developed by Sir John Armitt? How are those two ideas going to interplay?

Lilian Greenwood. The simple answer is: there is national strategic infrastructure. Armitt's commission is looking at what the country needs in terms of national strategic infrastructure and to take some of the party politics out of it and make it easier for politicians to make those difficult decisions, decisions which we have seen many times have been just kicked into the long grass, and then to monitor government's progress against delivering those national infrastructure projects. But that does not mean you cannot have local and regional priorities and decisions rather than be constantly bidding into Whitehall and convincing one minister and then convincing another minister. That is incredibly time-consuming when everybody in the region knows what the priority should be and that they can make those decisions closer to the people. I agree that there can be a tension just as there can be a tension between our national rail network and our regional rail networks but I do not think the two are incompatible and I think we can make them work.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

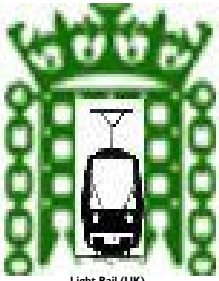
Mr Jim Harkins FCILT
www.apprguk.co.uk
Email apprguk@aol.com
www.lightrailuk.com

RSVP to apprguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

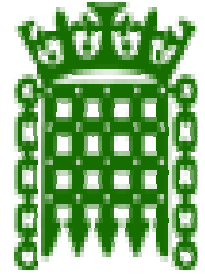


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Question. ? First a compliment to Nottingham, because you have the Citycard, buses, cycle hire, it should soon be car sharing. You are well on the way. In Phase I of the tram system we spent a lot of time with the railways to get that right and it has, surprisingly, held up very well. You cannot keep coercing people to change modes of transport. The only way people are going to change modes is when it becomes so obvious that using the other mode is the right way to go. We have seen this in Manchester where trams have arrived and people have decided: we can sell our cars we can get the tram.

We have seen it in Bristol with the commuter coach service; people have started catching the commuter coach, they do not need a second car any more. That is the way it is made attractive. I feel that a lot of policy in transport is pulling the rug from under the feet of people who are trying to develop and promote tram systems, busways etc. because, just as soon as they get some money, another wedge goes to ease congestion on the roads, so it becomes equally attractive to be able to drive. The thing that has driven a lot of the tram systems in urban centres where they have developed, is that it has become much easier and more convenient to catch the tram to town and people will use it and it will cut down on driving. So we have to be sure we do not pull the rug out.

Lilian Greenwood. To deal with Citycards. As you rightly say, Nottingham is very committed to developing a multi-operator smart card. At the moment there is a multi-operator ticket but you pay a big premium to use it. When we first had the tram system in Nottingham, and NCT, the local municipal bus company was involved, there was one price. I think it was Easyrider then, and you could use it on the trams and the buses and that facilitated people being able to get the bus to a major tram stop and then get in fast. The loss of Easyrider has been a big problem for us and the Citycard, we are going to get it but you are still paying a premium for being able to use multiple modes and that is a problem that we have that London does not.

I think you are absolutely right that it is not about coercion it is about making the public transport offer so good that why would you bother to get in your car. It is nicer to travel on the tram, you can read a book, you can chat to people, you do not have to concentrate on driving, you do not have to sit in traffic. I think that is the real prize, to make public transport the thing that people want to choose. It is not just about the tram it is having a whole plan for your city, it is about bus lanes so that when you get on the bus you can zoom in to the city centre rather than sitting in the congested traffic. Having said that, it does not mean that you never want to invest in our road network because some people will have to use the car and buses travel on the roads as well. The number of potholes we have got as a result of failure to fix local roads is a really big issue for public as well as private transport and, of course, it is important for freight to get in and out of our cities. There is always a balance to be struck between the two but I think that if public transport is good enough then people will choose to use it as they are doing in Manchester and Nottingham. It is a question of making it as good as it can be. We also need to be aware of the environmental impact of surface transport if we are serious about being green we cannot afford to ignore that impact.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

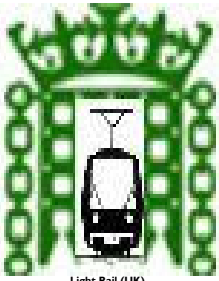
Mr Jim Harkins FCILT
www.aplrguk.co.uk
Email: applrguk@aol.com
www.lightrailuk.com

RSVP to aplrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

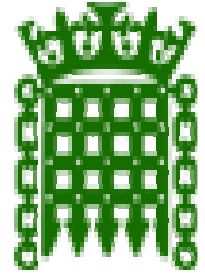


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Charles Carter (LRTA) I have heard that there is a possibility of extending the Nottingham tram to Derby. The difficulty with schemes like that if you have to go across several authorities. In Bristol there was a scheme which fell through because the authorities could not agree on the route or how to finance it and share costs. There have been similar problems in Switzerland in the Berne and Basel areas and in the Ruhr. Is there a possibility of taking the Nottingham tram over to Derby? How do you coordinate the different authorities and funding resources so that the scheme will happen and not get derailed because one side wants it and the other side does not

Lilian Greenwood. I have not heard Derby. I think that the next most obvious phase is to Kimberly. Some people talk about East Midland Airport, which requires quite a long extension through an area where there is nobody living, so I am not sure how the economics of that would work out. There is certainly a desire on the East of the city, which does not have any tram lines, to see further development around Carlton and Colwick and that is where there is a rail line which is not heavily used. There is potential for TramTrain to be a part of Nottingham's mix, our twin city is Karlsruhe where TramTrain is an important part of the mix already. There are a number of places where there is a potential for future extensions but getting Phase 2 up and running is the priority and people seeing the benefit of that will make the case for other extensions. Certainly Kimberley makes a lot of sense because it would enable people to get on tram the other side of the M1. For traffic coming off the M1 the park & ride sites have been absolutely key and have proved immensely popular. The opportunity for another P&R on the other side of the M1 would be a high priority.

John Leech. There is a major challenge. Places like Manchester got all-party support from all local authorities which is why the Greater Manchester schemes have been so well developed. Compare that to Liverpool where they were not able to get all-party support across the whole of Merseyside. That is the key where you go from one transport authority are to another or from one council to another you are always going to have problems if you cannot get that political will on both sides of the boundary.

Lilian Greenwood. The lesson from Manchester is having the combined authority with a clear shared vision. Our own experience in Nottingham when the County Council changed to be Conservative led and anti-tram it did create huge difficulties in terms of having a joint approach to Nottingham's transport. Having that consensus and building that political agreement is absolutely key because otherwise you do face enormous difficulties.

John Leech If you then have the transport authority having more control over bus services in areas that are not going to benefit from the tram you can ensure that they benefit from changes in bus services. I was going to mention this before Mark Hunter left the room because Stockport did not benefit at all as a result of the tram extensions but Stockport and all political parties in Stockport bought into the whole idea of the tram and that made a huge difference.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom W42 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

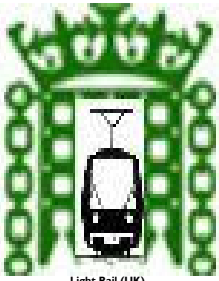
Mr Jim Harkins FCILT
www.applrguk.co.uk
Email appls@uk@aol.com
www.lightrailuk.com

RSVP to applrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

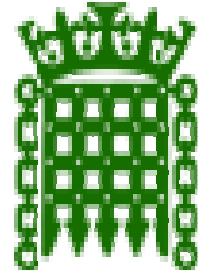


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Andrew Jenkins (TALIS). We have been under contract to Metrolink since 2009 and at times we have had between 100 and 120 people just working on the tram management system. Many of our staff have themselves benefited for Metrolink instead of spending an hour on the bus from Manchester they spend twelve minutes on the tram. It has transformed their lives because they have gained another hour to an hour-and-a-half a day.

Lilian Greenwood. Not long ago I went to see the development of the tram in Wythenshawe and it is clearly transformative.

Question. Belfast also has a regulated transport system but unfortunately the figures are exactly opposite to London, they are in decline. Partly this is because London is of course very heavily subsidised, much more than any other city in Britain. Belfast is trying to promote busways, maybe they should be promoting light rail how would we get that message across?

Lilian Greenwood. That is a question for them about how they want to spend their money. It would be wrong of me to say I am in favour of devolution and then tell people in Belfast that they should have trams rather than busways. I know that in places where they have developed busways there is always a large group of people who say I wish we had had a tram instead. They can have their places about making those decisions locally it is about what works best for your city.

Jim Harkins. One thing that concerns me about devolution to the regions is that, at the end of the day, you still have the Treasury there and the Treasury rules. Living in the Manchester area, I have seen that there is a significant step change in talk about capturing the land benefit. But light rail also brings a significant change in air quality which brings health benefits. We in the LRTA have tackled DfT and Treasury on expanding the cost-benefit ratio to take in the soft benefits. We were successful the last time we were there, we managed to convince them that extraction from the car into the tram was not a detriment. With the amount of information we have about the cost to the health service from tail-pipe emissions, the answer they seem to come up with is the hybrid. But they take no notice of the Oslo report about dangers from particles from the wearing of road surfaces, tyres and brake linings, which accumulate up to about ten feet and are more toxic than tail-pipe gases. Why are we allowing politicians to peddle this soft death? It is not difficult to calculate from the figures for the cost to the health service the saving that would come from the modal switch following the opening of a tram system. This should be brought into to cost-benefit ratio. At the moment the Treasury are fighting this.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 017721378223

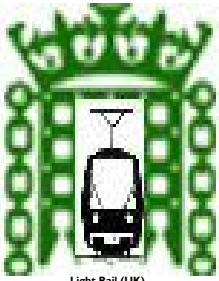
Mr Jim Harkins FCILT
www.applrguk.co.uk
Email appls@uk@aol.com
www.lightrailuk.com

RSVP to applrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

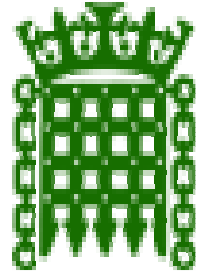


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Lilian Greenwood. There are two parts to this. First, how do we measure what schemes should get the go-ahead and there is definitely a feeling that the current system for doing that in DfT is not fit for purpose because it does not take in wider economic benefits nor also, as you say, the wider health benefits. There is a wider point which is about not thinking in silos; so DfT might have a roads person, a rail person, even a light rail person but do not think about transport as a whole. But transport is inextricably linked to where we build houses and to health issues. Users of public transport tend to be more active just from having to walk to the bus or tram stop and public transport also has impacts on air quality. We need more joined up thinking about how choices that we make in transport impact on other areas of spending whether in the health service or elsewhere. We need to think about the wider picture in our communities, cities and regions

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by

Transport & Training Service UK Group 

www.transporttrainingservices.com

Tel - 01925 243500

TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

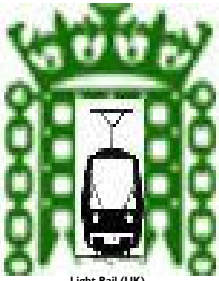
Mr Jim Harkins FCILT
www.aplrguk.co.uk
Email aplrguk@aol.com
www.lightrailuk.com

RSVP to aplrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

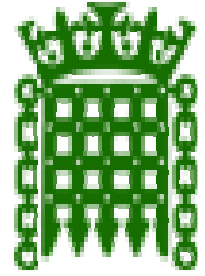


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Peter Cushing

[Accompanied by a PowerPoint presentation, see <http://www.applrguk.co.uk/media/files/LR-Applrg-Metrolink-Update-Presentation-2nd-Dec-2014.pdf>]

Interesting questions and interesting comments from the Shadow Minister and I think the answers she gave were very good. I am familiar with Nottingham, we work very closely together, and I chair a promoter group on UK Tram across six cities that are implementing light rail systems in the UK. One of the points we have made to all of them is that you do not necessarily need to generate money externally; you do not necessarily need to be looking for great subsidies. Lilian has identified how they funded some of the Nottingham extensions by the parking levy. In Manchester we fund directly from the fare box. We are fortunate in having the population density but also the number of special events that we operate, well over 300 in 2013. That requires us to generate a different timetable for either an evening or a weekend event. It requires us to implement much more capacity on to the system for a very short space of time. But what we do get is a load of revenue. So the revenue, the fare box, in Manchester pays for the operating costs and pays for the borrowing for the extensions, so entirely self-funded in terms of being non-subsidy driven. So it is not always the case that you have to be looking for someone to subsidise, it can be done in other ways. In terms of land appreciation we have in terms of some of the extensions in Manchester been able to get third party funding from people that have benefited from the tram, though not the general public who have benefited really well to the tune of about 10% on house values.

What I was asked to do tonight was give a quick "where we came from, how we have done it and what we have done". We started in 1992 with Bury and Altrincham connected to the city centre with a small spur to Piccadilly. That gave us a network of 37 stops and 37 km of track and a fleet of 32 T68s. The T68s are now completely gone from Manchester with the exception of two that are waiting to go to a museum. Some years ago the combined authority decided to establish the Greater Manchester Transport Fund and we have a one and a half billion pound investment to expand the system. Not just new lines, and the latest one we opened was to the Airport, but also stock improvements and the city centre was entirely renewed. We bought a new fleet of trams, 120 of them. We currently have 91 and should get the rest of the fleet by next year. A new ticketing system and a new passenger information system driven by the signalling to great extent in terms of the TMS system. We have also put a lot of money into accessibility. It is one of the most accessible systems not just in this country but in Europe. It is 100% DDA compliant and 100% accessible on every stop across the entire network. The whole of the fleet is RVAR compliant and then some, so we have future-proofed the fleet in terms of accessibility. As a result of that and as a result of all the other investments we now carry 30 million people and we will be getting to 31 million by the end of December and it is now the largest light rail system in the UK. In terms of numbers, by the end of 2015 we will have 120 M5000s.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 017721378223

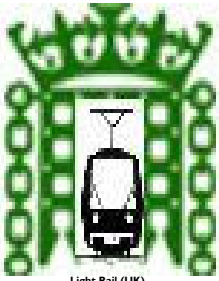
Mr Jim Harkins FCILT
www.applrguk.co.uk
Email applrguk@aol.com
www.lightrailuk.com

RSVP to applrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of



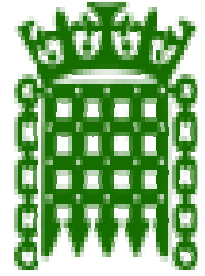
Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"

Trams – Catalysts for Jobs, Renewal & Regeneration



Six years ago we ran 3 double trams per hour in the peak between Bury and Altrincham, that expanded to about 7 or 8 in the last couple of years and now we run 16 per hour in the daily peak across the system and we put out as many as 22 for special events. From 37 stops in 2008 we now have 92, 37km of track has gone to 96km, journeys per annum from 20 million to 30 million plus. We have become one of the biggest car park operators in Manchester with 3300 plus spaces across the city and where we employed 100 tram drivers we now employ 330. The other thing we have done in addition to the expansion, which is not always apparent, we have spent a lot of time improving the existing system. The M5000 trams have helped us to do this; the M5000 is the most reliable fleet of its type in Europe and trams average over 30,000 miles between services. That has enabled us to drive other improvements in terms of service quality and drive down the number of complaints from one in 1200 journeys to one in over 4500.

Where we are currently. We are going through the city with the Second City Crossing along Cross Street. That has brought its own problems. Lilian alluded to utilities issues; we have had hundreds of utilities issues in Manchester city centre, not least collapsed sewers. We also had a cemetery to move with 140 bodies and there are a lot of listed buildings for which we have had to get listed building consents for overhead line attachments. The Second City Crossing also includes the upgrade of Victoria and that is looking to complete early next year. St Peter's Square is being completely redeveloped, currently a two platform stop, that is going to be three platforms with five platform faces. At Deansgate Castlefield a second platform has gone in giving three platform faces and a passing loop. So a lot of work has been done to enable the Second City Crossing to work in the manner that we want it to work and to be allowed put through the capacity that we need through the city

The next project, that we have just received funding for, is an extension through Trafford Park to the Trafford Centre. That is not the limit, we want to take it through to Port Salford and we are currently working on how we get there. The Trafford Park line is subject to statutory powers. On 11 November we put in the application for a TWO, we are maybe looking to a public enquiry next summer and then to begin by the back end of next year. That will lead in to the Trafford Centre being open by 2020. We already have powers for the first part of it from Pomona to what is going to be the Wharfedale stop, the closest to Old Trafford, so we can start that straight away.

We are keeping an eye very much on what is happening over in Sheffield in terms of the TramTrain project. We are different in Manchester in that we already have a high-floor system so it will lend itself much more easily to TramTrain also a tram has been converted in Europe for TramTrain use, so potentially we could be up and running in relatively short order. We should not forget that HS2 will bring a lot more development in Manchester. Piccadilly will get redeveloped, which will impact on Metrolink, and we are looking at a Western loop at the Airport to tie in to the HS2 station, so where the Airport line currently finishes we will just go through the wall at the end and out the other side, not quite that simple but pretty much what it is.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



Transport & Training Service UK Group
www.transporttrainingservices.com
Tel - 01925 243500

TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

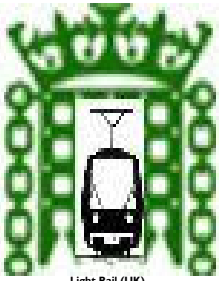
Mr Jim Harkins FCILT
www.aplrguk.co.uk
Email gphark@bt.com
www.lightrailuk.com

RSVP to aplrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

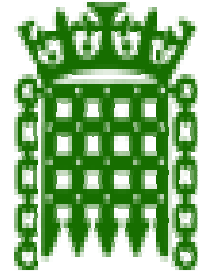


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Manchester special events. Manchester has become an events city. As I said, in 2013 we ran over 300 events. There are two big football stadiums, Old Trafford and the Etihad, with purpose built stops that have queuing systems built in. We have done a lot of work with special events organisers not just on the football but concerts. At Heaton Park "Park Life" over a weekend last year brought over a hundred thousand people into the city. We have done customer announcements in multiple languages: Spanish, Catalan, German, French, and we tailor the service to each event depending on where the event is, what we can do, what time of day, what time of year. We will tailor a timetable to suit the event with staff and customer service people that we bring in from outside. Very important to the system and very important to the city.

[Here was shown a short video of the Airport line]

This video was made by ourselves specifically for everybody that worked on the project. It has been shown at various staff forums etc. We are really proud of what was achieved by what was a big group of people and as it said on the video twelve months early, way below budget and entirely funded by Manchester.

Questions

Question ?. Is reserved, off-street track part of your success? Where you have gone on street, you have presumably thought it through very carefully. In Edinburgh in the past six months we have managed to hit four buses and coaches.

Peter Cushing. It is a combination. People in Greater Manchester are used to seeing trams on the street and tend to be more aware. We have had a few incidents on the Airport line where people have driven down the tram track. We do have it occasionally across the rest of the network, an RTA with a bus or a tax or whatever. It is almost unavoidable when you are running in the street, but, the more people get used to that environment and used to seeing that mixed usage, the fewer those accidents become. A lot of it is work we do in terms of the traffic signals. On the Airport line we have over twenty signalled junctions so there is a lot of interface with traffic

Question ?. We have had a lot of problems with the integration of the signalling of the trams with the signalling of the motor traffic and in particular we have had two identical crashes where the bus lane is overlaid on the tram track and the management of the segregation has obviously not quite worked

Peter Cushing. We have been running on Eccles New Road, for example, since 2000. We share the carriageway with traffic but we have had very few problems. It is a case of people getting used to it as much as anything.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

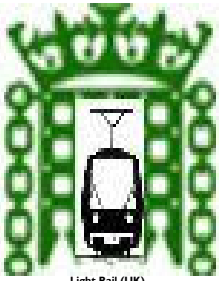
Mr Jim Harkins FCILT
www.applrguk.co.uk
Email applrguk@aol.com
www.lightrailuk.com

RSVP to applrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

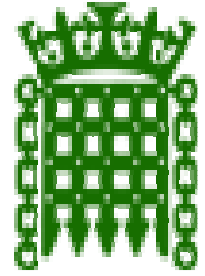


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Lewis Lesley. How are you getting on with the commercial bus operators?

Peter Cushing. There is always going to be some tension because we are competing for similar markets. It is very easy for commercial bus operators to flex fares more quickly than we can. If we were to flex fares in the way that the bus operators do, we would be accused of using public money to price out private competition. So we tend not to get dragged into that and we cannot do that anyway, because our revenue line drives the Transport Fund, so it is very difficult for us to price against the bus. So we take the brickbats that they hand out when they do special fares, between Bury and the city for example while we are restricted through Victoria Station. We accept that we are going to suffer some revenue loss but that will come back when we reopen the station.

John Leech. Is there any evidence with the new extensions that they are actually trying to key in routes to Metrolink?

Peter Cushing. We compete directly on some of the routes, East Manchester to Ashton for example directly competes against one or two bus companies.

John Leech. I meant do they see it as a way of feeding passengers into Metrolink?

Peter Cushing. In some areas they do, particularly out to the Airport. It is very difficult to get people into the city for example from Wythenshawe in the morning peak, it takes over an hour. We can do it into the city in forty minutes. It makes sense for the bus operators to feed the tram network rather than clog up the main arteries into the city.

John Leech. Are there any discussions between you and the bus companies?

Peter Cushing. Yes we do discuss with them on a regular basis, but that does not stop them pricing against us on some routes.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

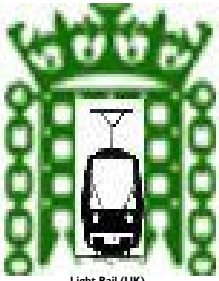
Mr Jim Harkins FCILT
www.aplrguk.co.uk
Email aplguk@aol.com
www.lightrailuk.com

RSVP to aplrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

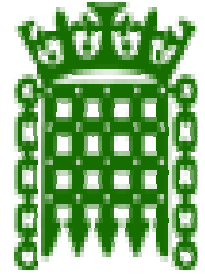


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Matt Taylor (Viaduct). You talk of how events have benefited the city is there any evidence of the events getting better as a result of Metrolink?

Peter Cushing. Yes I think so. If you speak to Manchester City since we put the line in from East Manchester to Ashton. It has become very important for them on match days to get people out of the stadium as quickly as possible and back into the city. Very important from GMP's point of view as well, because they like to segregate fans, if they wish to, by different modes. What they tend to do, depending on the game, depending on the fans, they tend to walk longer and put another group on the trams. So there have been some benefits. That is one of the reasons why Manchester City are expanding the stadium, it is so much easier for people to access the stadium and it is much easier for them to sell the stadium as an event point, so there are a lot of concerts etc.

John Leech. I will certainly vouch for that, as a City fan. There are thousands of people getting on the trams now, the majority of them were walking from the city centre before the trams started but it is quite a long walk. I suspect the taxi businesses are not doing as well as they were

Matt Taylor. So events can now be classed as a wider benefit?

Peter Cushing. Yes.

Jim Harkins. As a frequent user of Metrolink, I think in the last month I can count on my hand the number of times I have had my ticket checked. As part of my day job I have a high-vis on and I noticed when I get on, especially at the Eccles line park and ride, an awful lot of folks decide to get off at the next stop. That tells me that there is a significant number of non-payers.

Peter Cushing. You are absolutely right. Revenue protection is quite difficult when you run an open system as we do. That is the same across quite a few systems that I have visited in Europe and I am surprised at the level of ticketless travel that they are prepared to admit to, up to 15% and higher than that on some occasions. We run currently at about 10.5% and we have just had a couple of months when we were dealing with 8%. We are doing quite a lot of the work for GMP where we run station blocks, where we run blocks that are moving from tram to tram. As much as possible, what you are trying to do is inconvenience people who are deliberately looking not to pay. So, when we run a station block on St Peter's Square, we also put people on at Market Street, then people on at Shudehill and then people on at Queens Road, so that we send them right up the Bury line before they can get off and come back in. By that time they may as well have paid £3.50 because it has cost them a couple of hours work. There is a lot of intelligence used to be able to generate that sort of work.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 017721378223

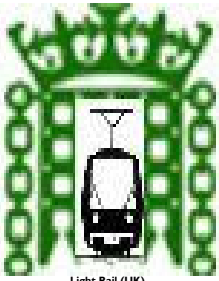
Mr Jim Harkins FCILT
www.aplrguk.co.uk
Email: applrguk@aol.com
www.lightrailuk.com

RSVP to aplrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

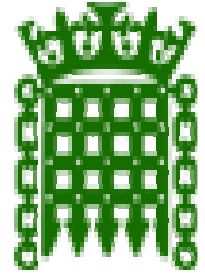


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



John Leech. How many people have you got on revenues protection?

Peter Cushing. About 130.

John Leech. How many people on average get caught in a day?

Peter Cushing. I could not give you a daily number, but I know we have a big issue with the 16-18 year age group who make up about 20% of ticketless travel and we have just put a bunch of those through court. People have been 19 times caught before we put them through court.

Jim Harkins. One of the things that is significant is that on my high-vis, it says "Examiner" because I examine Tachographs at the side of the road and examine drivers. It occurred to me that you have a number of keen supporters and it would be a low-cost scheme to issue them with high-vis jackets that say "Examiner" and send them out at tactical times.

Peter Cushing. I think what we would rather do is get people to buy a ticket.

Jim Harkins. But this would encourage them. I hold my hand up, there have been times on other systems when I have not been able to get a ticket but where I have jumped on the tram just to go two or three stops and my heart is in my mouth in case I get caught but I was taking a calculated risk that I was not going to get caught.

Peter Cushing. You would be amazed at how many letters I get from people who always paid for a tram ticket before and who have never not paid and then they got on a tram once, went two stops and got caught. It is a problem and it is one we spend a lot of time on There is only so much you can spend because you get to a point when the return becomes not worth it.

John Leech. In Budapest people just assume they will get stopped so they buy tickets. Before I went there, people said: whatever you do, do not get on the tram without a ticket because you will get caught. Surely it is about raising people's expectation that they are going to get caught.

Peter Cushing. It is about being able to publicly talk about it and publicise on stops the amount of success we have had through the courts.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

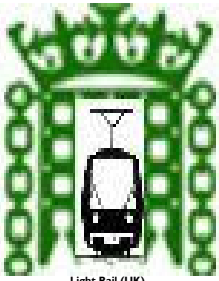
Mr Jim Harkins FCILT
www.apprguk.co.uk
Email apprguk@aol.com
www.lightrailuk.com

RSVP to apprguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

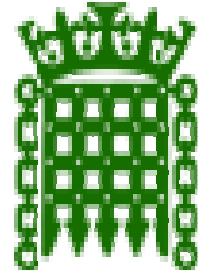


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



John Leech. Have you considered a naming and shaming process?

Peter Cushing. We have on a couple of occasions but it is something we are reluctant to do for various reasons. I personally think that it would not be a bad idea.

Jim Harkins. One of the things that is good in Budapest is that you get what looks like an ordinary guy on the tram but as soon as the doors shut he puts on his armband and he bites them there and then. I thought that was very effective.

Peter Cushing. We do plain clothes operations with the police which is quite interesting. Unfortunately, and it is the same across the country and across Europe, revenue protection people have no powers to detain people as the police do and cannot hold somebody against their will until a policeman arrives. What we do is plain clothes operations with plain clothes police and as people push past the CSRs to walk off the stop, the policeman gets his warrant card out and detains them. It is effective and you try to do it so that as many people as possible see it happen.

Andy Jenkins. Two years ago at the Light Rail Conference in Manchester we had some guys come over from Paris to talk about Twitter and I think that since then there has been a real proactive approach in TfGM and I think it has been a really good thing.

Peter Cushing. I started doing that about two years ago. I go on Twitter and do a two hour session every three weeks or so. I try to change the times, sometimes evening, sometimes early morning, lunch time, etc. There has been a big change in the way that is received. Initially I was taking something like 200 or 300 tweets and I had about three people answering them with me telling them what to write. We are getting better at it and there is a big change in what people are asking about. More are asking: when is this going to happen, when is that going to happen, what is going to happen with fare this year, why have you not done something about revenue protection, when can we see the passenger information displays up to Bury etc. etc. There is a lot more interaction from people who want more information as opposed to wanting to give you a hard time.

John Leech. What about making up some fake Twitter names to complain about being caught on the system.

Peter Cushing. We do have a fake me.

Question. Are you not also trying a more subtle approach? One of things with offenders when they are on a train is to let them stay there and let them think they are getting away with it and phone ahead to catch them further on.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 017721378223

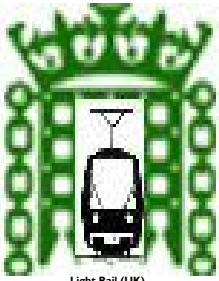
Mr Jim Harkins FCILT
www.apprguk.co.uk
Email: apprguk@aol.com
www.lightrailuk.com

RSVP to apprguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

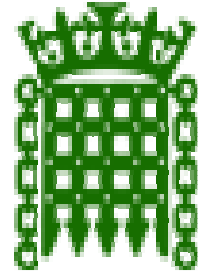


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



Peter Cushing. We do all sorts of work with GMP and other bodies. You do as much as you can but with a completely open system but it is not easy.

Jim Harkins. You were talking earlier about the success in London and connectivity. Now that we are having a city region and a regional mayor, how do we get the powers that be to come out of their city council-type silos and take it west as far as Chester to siphon off a lot of the motorway traffic, the Wirral and the North Wales traffic?

Peter Cushing. I think you are right. The distance to Chester is going to be more appropriate to TramTrain than to pure tram and there are opportunities there.

Jim Harkins. Within the context of what they have been pushing in the last two or three weeks with One North, Metrolink is our London Underground equivalent, but we do not seem to be grasping that, so that we need TramTrain as part of the infill for the local connectivity.

Peter Cushing. I am very much in favour of expanding Metrolink but Metrolink is not necessarily the answer to all ills. The busway out to Leigh is going to provide much quicker journeys into the city, so there are other modes that we can promote and do things with, without saying light rail is the only thing to do. Light rail is hugely important but it is about the integrated transport system. I hear what you are saying about the road network but in Transport for Greater Manchester we are improving the M60 which will improve air quality, it will improve traffic flow and you get other benefits: more people going to park and ride sites and using Metrolink. It has to be an integrated approach you cannot be that much one-focused that you forget everything else

Jim Harkins. I agree.

Hazel Phillips. (Passenger Focus). Do you do analysis on what complaints are about?

Peter Cushing. Yes but I have not got it with me. They tend to change; you get a big spike in complaints when you get a big network problem, for instance, but overall they tend to be service related complaints - time of journey or gap between trams. There used to be a lot of complaints about ticket vending machines but they have virtually disappeared now. So the profile of the complaints has changed quite considerably over the last few years.

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 01721378223

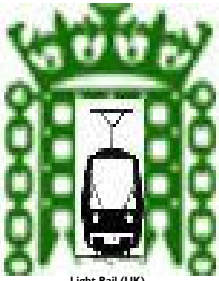
Mr Jim Harkins FCILT
www.apprguk.co.uk
Email apprguk@aol.com
www.lightrailuk.com

RSVP to apprguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of

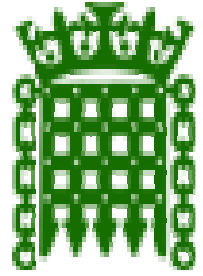


Light Rail (UK)

All Party Parliamentary Light Rail Group

House of Commons London SW1A 0AA

"The past we inherit, the future we build"
Trams – Catalysts for Jobs, Renewal & Regeneration



John Leech. There is a fair bit of frustration about the lines that do not have the double trams.

Peter Cushing. That is something we are addressing. We have increased to 16 doubles, we are looking to get 17 in the next month or so and when we are back open through Victoria we can increase the numbers. Until then it is difficult to get more double trams through the city.

John Leech thanked the speakers and closed the meeting.

Jim Harkins FCILT MTPS
Secretariat
Mike Wilsher LRTA
Scribe

All Party Parliamentary Light Rail Group
c/o Light Rail (UK)
Transport & Training Services Ltd
Warrington Business Park
Long Lane, Warrington, Cheshire
England, Cheshire,
United Kingdom.
WA2 8TX www.applrguk.co.uk
applrguk@aol.com

01925 243500
07721378223

This meeting by invitation only, where MPs, Stakeholders etc., within the Light Rail industry and invited members of the Public will have a chance to discuss debate and raise questions concerning Light Rail & Trams.

Supported by



TRANSPORT & TRAINING SERVICES LTD
has generously sponsored this event.

Secretariat provided by
Light Rail (UK),
Transport & Training Services Ltd
Warrington, Cheshire, England,
United Kingdom WA2 8TX
Tel 01925 243500, Fax 01925 243000
, 07721378223

Mr Jim Harkins FCILT
www.applrguk.co.uk
Email applrguk@aol.com
www.lightrailuk.com

RSVP to applrguk@aol.com

Supported by
The Light Rail Transit Association



The Light Rail Transit Association supports this meeting with volunteers and complimentary copies of