## ADEPT Engineering Board

## 10am Friday 8<sup>th</sup> April 2022 Virtual meeting MINUTES



Present:	Name	Initials	Representing
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Mark Stevens [Chair] MS London Borough of Haringey

Kathryn Moreton [Minuets] KM Walsall MB Council

Andrew Tatt AT Rutland County Council

Carl Skelton CS East Riding Council

Adam Goodall AG Leicestershire County Council

Karl Rands KR Norfolk County Council

Andrew Loosemore AL Kent County Council

James Bailey JB Staffordshire County Counil

Tim Lawton TL Hampshire

David Laux DL Northumberland

Mark McPeak MMP Infrastructure Northern Ireland

Andrew Warrington AW Arcadis

Keith Harwood KH Hertfordshire County Council

Paul Fermer PF Oxfordshire County Council

Keith Tovee KT Essex Highways

Jane Young JY Surrey County Council

Mark Macgarty MM Department for Transport

Simon Jeffrey SJ Local Government Association

David Boyer DB Warrington Council

Dean Sargeant DS Telford & Wrekin Council

Keith Sacre Barcham Trees

Carol Valentine Kent County Council
Richard Webster Suffolk County Council

		ACTION
1	Welcome and apologies	
	MS welcomed everyone to the meeting and lead introductions.	
2	Value of Trees	
	Adam Goodall summarised the aims of the project which seeks to look at developing an approach that re-establishes trees and hedges on the highway in the context of policy changes that need to be addressed. The project also looks at the range of benefits that trees provide and tries to define a financial value against that. The project aims to deliver a design guide in respect to trees both on the highway and more widely in development.	

Keith explained that the project has looked at:

- 350 tree species, cultivars and varieties and have assessed against a number of metrics including environmental characteristics and appropriateness for a range of circumstances. Have also looked at 7 hedgerow species.
- Whole life costing and cost benefit have been evaluated to provide some evidence base for the value of trees.
- A review of international, national and Leicestershire County Council policy has been carried out in respect to trees has generated discussion around the development of a county tree charter.
- The appropriateness of species mixes and solutions for the management of trees on the highway has been reviewed.

A draft report is expected later in the month and will be shared widely.

MS noted that trees can be quite problematic whether that is the impact of roots, overhanging branches, crown development etc. Authorities reach a point where they have to balance the value of the tree and the cost of addressing the impact of the tree. As engineers we need to understand the environmental benefits of trees but our overriding concern is about maintenance and planting the right trees in the right places.

Keith reflected that the focus needs to be on tree types, outcomes and potential issues rather than just numbers of trees. There is a need to develop a wider understanding of the potential issues in respect to highways and work collaboratively to overcome them. The Value of Trees project is a step towards doing this.

PF noted in the chat that Oxfordshire are taking a new Tree Policy which promotes the right tree in the right place and positions the need for trees taking greater importance than other highway considerations such as street lighting for example. They are also undertaking pilots for community led tree planting schemes on highway within villages.

MS noted the challenges presented by utilities in verges and the conflict arising due to risk of damage to services.

Keith explained that a solution is at the development state where services are placed in dedicated conduits. He advised that root barriers can be affect but there can be a conflict as the root barrier can reduce the longevity of the tree and cause the roots to come back to the surface seeking oxygen. Species selection can be very important in these instances and understanding the constraints of the site.

AL noted in that chat that Kent have been charging CAVAT value of street trees killed by utilities or being removed by developers. This has been successful and makes third parties think twice. TL confirmed a similar approach is being taken in Hampshire

MMcP advised that in Northern Ireland the risk to drivers presented by rural trees during high winds is a particular concern at the moment and ensuring we have a sufficient inspection regime in place to ensure as reasonably practicable that the network is safe.

		ACTION
	Keith noted that there is a lot of risk that can be mitigated by maintenance and structural work on the crown at an early stage.	
	MMcP noted that the scale of the problem is significant and makes management an even greater challenge.	
	Adam explained that Leicestershire are looking at a whole raft of tools to ensure they have a robust approach in respect to trees.	
	AL noted that Kent have a rigorous tree safety audit for street trees in addition routine highway safety inspections.	
	CS noted that there is a link between trees and commuted sums and there may be an opportunity to incentivise the choice of "good trees".	
	AW noted that the principals will be looked at as part of the commuted sums work.	
	Agreed – Adam and Keith will be invited back in July to share the report findings	
3	Tanker weight increases	
	MS explained that the potential electrification/ hybrid conversion of HGVs which could result in a 2 tonne increase in vehicle weights. If the 44T weight limit was simply increased this could have significant implications. DfT indicated that if there was an increase in the weight of the vehicle would result in a reduction in the load weight.	
	If the payload of tankers is temporarily increased to 46T for a few weeks, a couple of times a year, the issue would need to be dealt with as an abnormal load.	
	DfT are expected to go out to consultation on this at some point in the future. MS believes that they need to look at where the tankers would need to travel to and from and the sections of the road network that would be likely impacted.	
	KT noted that there are some technical and analytical matters that need to be considered such as axel loading and configuration that would inform this piece of work.	
4	National Infrastructure Commission Asset Management Workshop	
	MS has spoken to the NIC who are looking at asset management and are looking to understand what we do in the highways sector about asset management.	
	NIC have asked what they can do to support the situation in respect to highway asset management. The key response was that we have a good understanding of the asset but the challenge is the replacement rate. It is hoped therefore that this piece of work will help to continue to make the case for greater investment to address this.	
	Information from the workshop is still to be shared.	
	JB queried whether we should change the narrative to focus on the funding model rather than the lack of funding and get road user charging and other such mechanisms back on the table.	
5	Live Labs: the programme outcomes	
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**ACTION** 

MM provided a summary of Live Labs 1 and outputs are available on the Live Labs website - <a href="https://www.adeptnet.org.uk/livelabs">https://www.adeptnet.org.uk/livelabs</a>

DfTs challenge to the highways sector is "how will you ensure that the findings from the programme, the things that have worked and have not worked, are shared throughout the sector?"

Richard Webster – Smarter Suffolk – a range of sensors were deployed in street lights, roads, drains, salt bins and bridges in urban, rural and coastal areas. Positive outcomes include energy savings arising from adaptive lighting, air quality monitoring capabilities; accurate data for winter maintenance and drainage; positive public feedback on solar solutions although the return on investment wasn't very good so looking at more cost effective solutions; a knowledge share platform to share information and the creation of comprehensive business cases for the sensors deployed.

Richard explained how the sensor technology can be used in the home and this is something that is been explored further by Suffolk Adult Social Care.

Carol Valentine – Creating a sustainable innovation catalyst – the project used data science, intelligent materials and remote defect detection. Gully sensors; risk based drainage cleansing; remote pothole detection; remote traffic monitoring; digital customer

Carol provided an overview of the digital platform that Kent have developed including heat maps of incoming workload; performance data and network risk maps visualising average speed data and collision history which have informed prioritisation and enabled customer friendly presentation of data to members and parishes.

Carol noted that the biggest lessons learned by Kent related to the importance of effective engagement; strong partnerships and collaboration; the need for agile working and the importance of the administrative side of the project.

The Live Labs Programme Review & Final Project Evaluations is available on the ADEPT website - <a href="https://www.adeptnet.org.uk/documents/live-labs-programme-review-final-project-evaluations">https://www.adeptnet.org.uk/documents/live-labs-programme-review-final-project-evaluations</a>

MM concluded by noting that Live Labs 2 funding has now been confirmed. A £30m completion with a focus on decarbonisation and making the construction, maintenance and running of UK roads more sustainable and resilience. There will be a sharp focus on scalable proposals and sharing of learning.

Live Labs 2 will be open to authorities across the UK. It is expected that successful proposals will be announced by the end of 2022.

MM will be taking a lead from a DfT perspective, replacing Mark Egglington who fulfilled this role for Live Labs 1.

MS noted it would be good to understand how Route Reports compare with Vaisala.

Carol advised that a three month side by side trial was planned to enable a comparison.

MS emphasised the importance of information and knowledge sharing and the need to a central repository to do this.

Carol and Richard confirmed that they were happy to be contacted directly with questions or requests for further information:

Carol Valentine – <a href="mailto:Carol.Valentine@Kent.gov.uk">Carol.Valentine@Kent.gov.uk</a>
Richard Webster – <a href="mailto:Richard.Webster@Suffolk.gov.uk">Richard.Webster@Suffolk.gov.uk</a>

ACTION

MS noted that it would be interesting for the board to hear more detail about the other Live Labs projects and the outcomes.

RW noted that the knowledge share platform was being opened up. MM added that other portals were being updated and information is being shared on the ADEPT website. However, a central repository for all information is something still to be progressed.

## 6 Dft Update

MM offered thanks for a first class winter response from local highway authorities and acknowledged that this was made more complex by the impact of the OMICRON variant of Covid-19.

MM confirmed a three year funding settlement for Local Highway Authorities [5 years for those with CRSTS] with funding levels maintained at 2021/22 levels which was a good result given the funding pressures across the board.

Asset Management continues to be the supported approach despite rising costs and inflation and DfT are keen to continue to understand the impacts.

Priorities for 2022/23 include the following:

- Renewed focus on holistic asset management
- Publication of further evidence for increased, sustained funding for highway maintenance and investment
- Ensure highway maintenance ties in seamlessly with LTPs
- Greater focus on decarbonisation and sustainability
- Assessing the effectiveness of a risk based approach
- Progressing the data standard for road condition monitoring an advisory board will be established and LHA views will be welcomed

From a transport perspective there will focus on funding reform comprise the following components:

- Local Transport Plan Guidance due to be published in 2022/23
- Capacity and capability constraints will be removed
- Regional centres of excellence to be established in 2023/24
- Innovation including Live Labs 2 and sharing learning from Live Labs 2
- Incentivisation focusing on areas such as carbon reduction
- Improved funding allocation processes

MS emphasised the need to reflect on the benefit for investment in highways in greater detail, the impact of different assets and how this is evidenced to HM Treasury.

TL noted that whilst maintaining funding levels is welcomed, it doesn't take account of risking prices and inflation.

		ACTION
	MM noted that DfT understand the pressures and want more evidence of the impact but in reality the inflationary pressures are being felt across the board so it's not just an issue for highways and transport. DfT are therefore keen to understand what non-financial support they can offer and will continue to promote asset management techniques.	
	MS advised that he did raise this at the latest ADEPT meeting with DfT and emphasized the concern that is felt. There was a recognition that inflation will be an issue and an email has gone to Place Directors asking for more information about the impact of price increases, fuel prices, the conflict in Ukraine. This information will help to continue to make the case to DfT and HM Treasury.	
	JY highlighted the knock on effect on Baxter indices and inflationary adjustments on contracts.	
	MS appealed to all members to ensure their authorities fed back in the survey of directors.	
7	Innovation Update	
	MS noted that for the ADEPT Sping Conference, there have been calls for submissions for the innovation awards. Submissions have been low in number and therefore the deadline has been extended for 500 word nominations.	
	A reminder has gone out in the last week to authorities.	
	If the awards are not supported, future sponsorship may be threatened so please do consider submissions you might be able to make.	
8	Commuted Sums	
	AW that drafts are expected to be completed at the end of June with a redraft ready for circulation ahead of the October meeting.	
	AW to be added to the agenda for the October meeting	KM/AW
9	National Bridge Working Group updates	
	The group met in March and have had a number of recent presentation on low carbon solutions including polymer ground reinforcement which has significant carbon benefits over concrete; building new arches and the uses of compressed tyre bails for embankment fill.	
	KH will be representing ADEPT at Heritage Railways Estate Forum with focus on the Great Musgrave case. KH will be feeding back to the National Bridges Working Group and Engineering Board as required. The main issue is the infilling at Great Musgrave which has prompted a requirement for ministerial approval for bridge infill by the Heritage Railways Estate.	
	LAs have concerns that the "heavy grid" abnormal load routes aren't working and are imposing serious pressure on local authorities. It's something that we should have but it's not maintained and there is a query about who to escalate concerns to.	
	MS suggested the Office of Road and Rail and as part of the consultation response on tanker weight increase.	

		ACTION
	KH will also raise at National Bridges Board which is attended by National Highways and DfT.	
10	Soils and Materials Design & Specification Group updates	
	No updates	
11	Street Lighting Group updates	
	Last meeting included a presentation on solar lighting and energy savings. Due to existing technology and the UK's position in respect to the sun, solar lighting isnt really appropriate but there are alternative solutions using solar power.	
	Street lighting industry is being impacted by steel prices, large energy increases expected to range from 20% to 70%, extended lead times of up to a year and prices being quoted for as little as 24hrs.	
	Lots of requests being received in respect to telecoms equipment.	
	Developers are having difficulty with n-pan agreements which is considered to be a commercial decision by the supplier.	
12	Future items for discussions	
	Tree-economics as per item 1 in July Active Travel England – October Moving Traffic Offences – discussion about role out – general discussion in July Flood Risk Management – someone from the FRM group – KM to ask Hannah B for a contact. Manual for Street 3 – general discussion in July	
13	Minutes of meeting of Friday 28th January 2022	
14	Future conferences  ADEPT Spring Conference – 26 <sup>th</sup> May 2022	
15	Future Meetings	
	8 <sup>th</sup> July 2022 14 <sup>th</sup> October 2022	
	UK Network Management Board	
	ADEPT/UK Asset Management Board	
	ADEPT Soils and Materials, Design & Specification Group	
	ADEPT Street Lighting Group	
	ADEPT National Bridges Group	