

## **Written Evidence submitted by Highways & Transportation, Leeds City Council (EVP0141)**

### Accelerating the Shift to Zero Emission Vehicles

#### **Uptake of Electric Vehicles**

A commonly cited concern in our engagement groups is the current above market rate excess cost associated with new vehicles. Typically, those with financial concerns are not purchasing new vehicles, but should the increased cost trickle down the second hand market chain it will generate additional pressures on those for whom finance is a concern. In practice increasing the financial threshold at which private car ownership is realistic.

Further, used EVs increasingly are starting to show reduced range performance compared to brand new vehicles, which in the future will generate range anxiety for those unable to purchase a new vehicle and have the additional effect of increasing the amount of time spent charging for those with older vehicles. This effect is currently seen in regards to behaviour towards high mileage vehicles and ongoing maintenance costs, it's will be a transition from one type of worry to another.

#### **Electric Vehicle Infrastructure**

LCC have successfully been involved with government backed funding to install a network of charging points across the district at public locations. Some are on LCC land, in partnership with local businesses with publicly available space, or stipulated through planning conditions on publicly accessible developments such as new supermarkets. Building on the success of this requires installing charging points in new locations beyond the reach of LCC and a public access requirement.

As a council with a high number of terraced properties, and a massive amount of footway which is now below minimum recommended width, how people are going to charge vehicles is of increasing concern to us and accessibility groups. Having the ability for people to charge outside their house is only going to be available to those with driveways and their own charge unit, or require large programmes of footway widening, or infrastructure suspended from lighting columns and as such prone to damage or anti-social behaviour.

As such, LCC would support measures that encourage charging at a destination, rather than on-street trickle charging outside a residential property. This would require promotion of dedicated rapid high capacity chargers over trickle chargers, for shorter term visits. Major supermarket chains are developing their own ambitions, most already having an interest in fuel stations. In addition to this support for large shopping centres, cinema chains etc would be prime targets in public accessible locations. Packages for workplaces and businesses who have parking facilities available for staff, whilst not publicly accessible would encourage charging away from home.

#### **Decarbonising Buses**

There is a slow transition already visible in the bus market in locations such as York and Harrogate where Electric Buses are already deployed. LCC has specified that where we are responsible for awarding franchising contracts such as P&R sites, that the operator use Electric Buses. Whilst there is no shortage of vehicles on the market, the challenges seem to

be around providing the charging infrastructure in the depots themselves and the demands this places on the local power grid supplying the depot. LCC has recently worked with a local bus operator to ensure delivery of new high capacity charging ports in the local bus depot, this did have limits on the number of vehicles they would be able to charge, and a breakdown of the unit could mean several vehicles would be unable to perform their daily tasks should there be an issue.

Hydrogen has not been considered locally over Electric vehicles due to supply issues.

## **Hydrogen**

Local generation and transportation of H<sub>2</sub> is a challenge.

LCC is developing plans for a local hydrogen filling station, however these are limited by considerations on sourcing a local high volume supply of hydrogen. The current idea is for a small electrolysis generator to generate fuel to supply a small number (<10) of refuse vehicles, although long term storage of H<sub>2</sub> is an issue making it difficult to refuel the whole fleet on a morning in one go.

## Road Pricing

### **Previous Experience**

LCC recognises that there are a number of avenues to implementing road user charging and investigated a number during development of the Leeds Clean Air Zone.

In the case of the now cancelled Clean Air Zone a cordon scheme was the most appropriate for discouraging vehicles from entering the area of concern, charging a fixed daily fee and a disincentive to not enter the zone. This installed a network of 250 ANPR cameras in two cordons around Leeds Inner and Outer Ring Roads. The network was installed in such a way that divides the city into 5 zones based on natural boundaries such as the River Aire, Meanwood ridge and the railway line to York. However one zone covering North East Leeds is of such size and with limited internal boundaries, it would have taken another 50 cameras to sub-divide further. Given these zones still cover quite large areas, they would fail to capture a number of internal movements to schools, supermarkets, etc. Short distance trips around the urban area. Estimates from traffic modelling indicate these short trips account for 10% of the annual mileage in the district.

The area of concern in Leeds district to the Air Quality Directive was focused on a section of the inner ring road. However having the cordon scheme only cover the city centre and inner ring road, once modelled illustrated a high degree of vehicles avoiding the charge area by rat running on local roads. In much the same way traffic avoids the M6 Toll road around Birmingham. As such the cordon had to be extended beyond the area of concern to push avoidant traffic onto the outer ring road.

The CAZ was only implemented with a strong package of support measures aimed at the vehicles caught under the new restrictions, and would not have been acceptable to residents or politicians without this support in place. This came in the form;

- of interest free loans backed by LCC to support Private Hire & Hackney Carriages
- Grants to HGV operators to support retrofit of vehicles, provided by the Clean Air Fund

Exemptions to a number of vehicles on criteria including;

- disabled access vehicles,

- vehicles recently purchased under finance agreements,
- vehicles with no alternative solution (e.g; minibuses)

As such LCC would not recommend implementing an ANPR camera based cordon system as a system for generalised road charging, due to the disruptive effect it would have on people avoiding the charging infrastructure.

Despite the CAZ only targeting Buses, HGVs and Taxis, and no press to indicate otherwise, LCC did receive a high number of response from private car drivers concerned about being charged to drive into the Leeds CAZ. It would indicate that the general driving public still retains significant concern in this area.

LCC did investigate Road User Charging in 2008 as supported by the Transport Investment Fund. However proposals were dropped following the strong negative feedback to the Manchester referendum. It is not something that has been proposed recently. The recent Transport Strategy only makes reference to more localised schemes such as a Workplace Parkin Levy or Congestion/Zero Carbon Zone.

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