

Authority to Procure for Fleet Replacement Programme 2022/23

Date: 4th October 2022

Report of: Chief Officer Civic Enterprise Leeds

Report to: Director of Resources

Will the decision be open for call in? Yes No

Does the report contain confidential or exempt information? Yes No

Brief summary

This report seeks authority to spend approval of £3.930m for the 2022/23 fleet replacement programme to ensure that the Council continues to replace vehicles with modern equivalents which produce less emissions and are more fuel efficient to contribute in tackling the climate emergency.

The approved TPPL (The Procurement Partnership Limited) framework will be used to both seek tenders for the required vehicle types and to place orders with the company providing the best tender.

Quantity	Vehicle Type	Replacement Type	Reason for Replacement	Estimated Cost
1	Refuse Collection Vehicle	Replace with Electric RCV	Rolled Over	£550,000
1	Refuse Collection Vehicle	Replace with Electric RCV	Fire Damage	£550,000
1	Refuse Collection Vehicle	Replace with Electric RCV	Uneconomical to repair	£550,000
16	Highway Tipper Gritters	Like for Like	Age, wear & tear	£1,920,000
2	Narrow Track RCV	Like for Like	Age, wear & tear	£360,000

Leeds City Council has a vehicle fleet of approx. 1400 vehicles, 40 trailers and 20 plant machines.

Recommendations

The Director of Resources is asked to:

- Approve spend of £3.930m for the 2022/23 essential fleet replacement programme.
- To approve the procurement of the vehicles using the TPPL framework.
- Approve the commencement of refuse collection fleet transition to zero-emission EV.

What is this report about?

- 1 The purpose of this report is to seek authority to spend of £3.930m for the 2022/23 approved fleet replacement programme.
- 2 This report also seeks authority to procure these vehicles by using the TPPL framework.
- 3 This report also details the commencement of the programme to replace refuse collection vehicles with EV alternatives.

What impact will this proposal have?

- 4 The main impact of the proposal will be to replace older, less reliable and expensive to maintain vehicles with their modern equivalents leading to a reduction in emissions, provide improved fuel efficiency, reduce the increasing cost of maintaining the existing, aging fleet as well as contribute to tackling the climate emergency and improving air quality.
- 5 The proposed spend of £3.930m reflects a reduced spend requirement following the review of the capital programme in 2020 by the Council in order to reduce the debt burden following the significant financial impact of the Covid-19 pandemic on the Council's finances.
- 6 The reduction in the fleet replacement programme has meant that the service has had to increase its focus on the condition of vehicles within the fleet so as not to adversely impact the revenue budget as a result of the increasing maintenance costs arising from keeping vehicles on fleet for longer periods. Whilst extending the life of vehicles can help offset capital spend for a period of time, this is not a permanent alternative option.
- 7 The increasing cost of maintaining an aging fleet as well as the cost of hire vehicles to cover increased time off the road of these vehicles will offset, and eventually outpace any debt cost savings.
- 8 The current fleet vehicles that provide gritting and tipping services are at a stage where their resilience is limited and the cost to maintain and keep operational is increasing. The requirement to ensure that service provision is maintained, especially in such vital service areas as gritting means that vehicles are likely to be needed to be brought in on hire to meet operational requirements in winter 22/23 through to summer 2023, with a clear need to have replaced with new fleet for winter 2023. This category of vehicle comes at significant cost to hire at c£2,800 per month per vehicle, as such the revenue costs of not replacing these vehicles becomes significant in addition to the costs to maintain the aging fleet.
- 9 The fleet service is contributing to the 2022 capital programme review on the basis that the extension of vehicle lives will only provide temporary reductions in debt financing costs since these vehicles will eventually need to be replaced unless we can reduce vehicle numbers. Eventual replacement also needs consider the Council's climate emergency ambitions, as well as best prepare the fleet through longer-term planning to comply with the Government's ban on the sale of new diesel and petrol vehicles from 2030.
- 10 Whilst reducing the size of the fleet would be advantageous financially, a well identified trend over the past few years has been that demand for vehicles is increasing reflecting the growing demographic pressures in many service areas and a growing city.
- 11 The 21 vehicles to be replaced consist of 3 EV refuse collection vehicles, 16 highway tipper gritters and 2 narrow track refuse collection vehicles. Other than the 3 EV refuse collection vehicles, the remaining vehicles will be purchased in compliance with the latest Euro emission standard engines. Work has been carried out to seek zero emission alternatives for all vehicles to be replaced, however in the larger vehicle categories there are limited alternative fuel models being brought to the marketplace. We have worked with the Energy Savings Trust as well as engaged with manufacturers to determine availability of zero emission alternatives, however the specialist vehicle market is not as developed as the larger scale car and van market and as

such progress is slower on alternative fuels. This is reflected in the government having a different date for the end of sale of conventional engine HGVs of 2035, rather than 2030 for cars and vans.

- 12 The age of the older vehicles on fleet that need to be replaced does however mean that emission benefits will still be secured with replacement to current diesel standards, with improved vehicle technology since 2014 when some of the vehicles to be replaced were registered meaning that both emission and fuel efficiency improvements can be realised in addition to significantly lower maintenance costs.
- 13 Where there is availability of viable electric alternatives is in the refuse collection sector, with the Energy Savings Trust has worked with the fleet to identify that these vehicles would be fit for purpose in the waste service and that they would deliver significant NOx, PM and CO2 savings, especially as the council moves to renewable energy consumption. In preparation for an increasing proportion of the Council's fleet becoming electric, investment of approximately £1.5m has been made in the EV charging infrastructure over the last few years, including preparing the new Waste Depot for EV refuse collection vehicles.
- 14 With manufacturers focusing on the volume sectors i.e. car and vans this may be a factor for some time. Challenging funding conditions mean that even first to market alternative fuel vehicles may not be sufficiently competitive in price to allow for total cost of ownership models to make transition affordable. As such the council, along with others have been lobbying government for support in developing this sector. As such replacement in this cycle with the cleanest diesel alternative when vehicles cannot reliably have their lifespan extended means that they will be able to be replaced in the next cycle by a zero emission alternative when the market will be better developed and more competitively priced.
- 15 Newer vehicles are usually equipped with more advanced safety technologies, such as forward collision warning and automatic emergency braking, that can protect drivers and reduce risk. Better fuel saving can be achieved due to newer vehicles having more efficient systems leading to better fuel consumption, meaning a long-term reduction in fleet's fuel expenditures. Updated regulations also allow for better aerodynamic design of HGV that further allow for improved fuel efficiency.
- 16 Procuring through the TPPL Framework will allow the opportunity to attract the best provider who understands the Council's statutory requirements and, therefore, demonstrate how their service can support the Council to meet those requirements and contribute to supporting the Council to achieve its Best Council plans. The TPPL framework carries suppliers of alternative fuel vehicles sufficient to meet the councils operational and strategic objectives. TPPL provide better value for money in terms of charges for suppliers for accessing the frameworks, which reflects in lower costs to Leeds City Council.
- 17 The number of suppliers on the TPPL frameworks is greater than the Council would be able to attract if it procured its own framework and will therefore give added value for money through increased competition at mini-competition stage.

How does this proposal impact the three pillars of the Best City Ambition?

Health and Wellbeing

Inclusive Growth

Zero Carbon

- 18 Approving this report will enable the replacement of older vehicles and contribute to the Leeds zero carbon ambition by 2030 through progressively reducing emissions, in particular through the initiation of the transfer of refuse fleet to EV. In addition, reducing harmful emissions from

older engines will improve the City's air quality and, therefore, having a positive impact on the health and wellbeing of the Leeds population.

What consultation and engagement has taken place?

Wards affected:

Have ward members been consulted? Yes No

- 19 Fleet Services have agreed with service managers within departments on the specifications of all the vehicles being purchased.
- 20 Consultation has also taken place with the Chief Officer CEL, colleagues attending the CEL Weekly Assurance meetings and procurement colleagues. Fleet Services and the Sustainable Energy and Air Quality team have also been consulted to ensure that the vehicles being purchased support the strategic work to reduce emissions.
- 21 Significant work has been undertaken to establish the financial business case for the replacement of diesel refuse collection vehicles with electric alternatives. Fleet Services and SEAQ have engaged with manufacturers, the Energy Savings Trust and other Local Authorities to establish a basis for establishing whole life cost comparison between replacing refuse vehicles with diesel, or the electric drive train alternative.
- 22 Highways have 18 tonne chassis vehicles that operate as tippers day to day and have interchangeable bodies which allows them to be turned into gritting vehicles when required. For winter maintenance there are currently 30 gritting routes. The routes are established in line with the recommendations in the good practice publication Well Maintained Highways. This is not a legal document but is seen by the Courts as the standard we should aim for. This advises what roads should comprise the Primary Network and in Leeds this means us treating 800miles of the network for each precautionary grit.
- 23 Highways did have 33 routes but rationalised them some years ago. They also had a company look at their efficiency and they reported back that they could not achieve anything better than highways had with the network we have. Additionally, the network continues to grow and has increased by around 250 miles in the last 5 years. Gritting is not just about distance but also the time it takes. Our routes are designed to allow their completion within 2 hours, which is seen as the optimum treatment time.
- 24 Although highways have 30 routes, they require a few more vehicles than that, to provide some resilience and allow us to cover for vehicles being off-road for routine servicing. Highway and fleet services do that by retaining those in best condition when the time comes to change the fleet and modifying those in to bulk gritters with permanently fixed gritter spreaders. Highways and fleet services also hire-in additional vehicles from a local supplier before the start of winter.
- 25 Through the summer there were regularly around 7 vehicles off the road each week and the number with difficult and/or lengthy fixes is increasing. As these vehicles get increasingly older, this situation is only going to compound and increase revenue costs, with replacement the best way to mitigate that impact.

What are the resource implications?

- 26 The procurement will be progressed in accordance with Contract Procedural Rules to ensure value for money is obtained and costs are restricted within the approved funding envelope of £3.930m. The 21 vehicles (consisting of 3 EV refuse collection vehicles, 16 highway tipper gritters and 2 narrow track refuse collection vehicles) will be procured by obtaining tenders using the TPPL framework.

- 27 The work to determine the comparison between replacement of refuse collection vehicles from diesel, to electric battery powered has established a very small estimated additional cost over a 7-year comparator period between diesel and EV. However, the whole life cost comparison has been based on the higher cost of energy in the current market environment as well as conservative estimates of the life span of a battery powered RCV and the residual value of the RCV.
- 28 The Energy Savings Trust and Manchester City Council have both estimated (based on active use of EV RCV's) a minimum lifespan of 10 years for the batteries at operational levels, as such there is the potential to run these vehicles (potentially with a refurb of the tipping elements) for well beyond the 7 year comparison period – therefore improving the return on investment.
- 29 Residual value of electric vehicles has been difficult to establish, especially for specialist vehicles as there is little historical market indicators. However wider EV category vehicles and their batteries are proving to be more durable, with batteries retaining their condition for longer than was originally anticipated. This presents both opportunities to either extend the life of vehicles or utilise 'second-life' utilisation of the batteries through secondary markets such as battery storage capabilities. This means that residual value of vehicles with significant battery capacity is likely to be enhanced, as such the cautious sell-on value estimates used in our whole life cost comparison can potentially be exceeded. This would provide a shift in the business case and provide additional savings after the 7-year period.
- 30 Energy costs and the generation of energy is a key area of work for the authority. This will be focused on delivering value as well as decarbonisation of the council's energy use and ultimately means that there will be a drive to reduce the kWh cost of energy for the business. A reduction in unit cost for energy will directly reduce the revenue cost to operate battery vehicles, particularly energy intensive vehicles such as RCV. As such any reduction in kWh costs for energy will improve the whole life cost of EV's RCV's and therefore present further opportunities to shift the comparison into one that delivers savings for the council.
- 31 Detailed cost assessment making the comparison between diesel and electric powered vehicles is as below, with an estimated £6,634 additional cost over the 7 years for the electric vehicle. However as stated above, this is may be offset with additional efficiencies realised from the EV over its lifespan. There are no cost savings applied with regard to the indirect health damage costs that would be incurred by the switch to EV and the associated reductions in emissions that would improve air quality and therefore improve health outcomes, as these savings would be realised outside of the Fleet replacement business case, but would nonetheless be significant in addition to the contribution EV will make towards the council's net zero ambitions.

34 Failure to ensure compliant vehicles would result in the loss of the Goods Vehicle Operators Licence and render all Fleet Services within Leeds City Council inoperable. The purchase of new vehicles is essential in maintaining fleet safety.

What are the legal implications?

35 This is a key decision and is subject to call in.

Options, timescales and measuring success

What other options were considered?

36 Wherever possible we have extended vehicle lives (beyond their normal replacement cycle) but the vehicles proposed for procurement need to be replaced so as to mitigate any excessive pressures arising from their excessive maintenance spend.

37 The option to not replace any vehicles but those identified are at greatest risk of causing service failure.

38 Where available alternative fuel options have been assessed, or sought in order to help meet Leeds commitment to 2030 Net Zero ambition and Air Quality targets, however at this stage there remains a lack of viable EV or Hydrogen alternatives in much of the HGV sector.

How will success be measured?

39 Through the successful purchase of the vehicles and delivery of reduced emissions from Fleet and Services.

What is the timetable and who will be responsible for implementation?

40 Given the current lead in times for the delivery of vehicles from the order point, we expect the vehicles to be delivered in 12 months from the point of all stages of the governance process for this procurement being complied with. The Head of Catering and Fleet Services will be responsible for implementation.

Appendices

- Appendix A - DPIA
- Appendix B - EDCI

Background papers

- N/A