

Committee Name and Date of Committee Meeting

Cabinet – 20 March 2023

Report Title

Fleet Replacement Plan

Is this a Key Decision and has it been included on the Forward Plan?

Yes

Strategic Director Approving Submission of the Report

Paul Woodcock, Strategic Director of Regeneration and Environment

Report Author(s)

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Ward(s) Affected

Borough-Wide

Report Summary

This report considers options to implement a long-term phased approach to the procurement, operation, maintenance, replacement, and disposal of Council fleet vehicles, which are essential tools in delivering services across the Borough.

The report details the current vehicle assets owned or leased by the Council and proposes a Fleet Replacement Plan to make best use of the available Capital funding, with a view to supporting the Council's commitment to net zero by 2030.

Recommendations

That Cabinet:

1. Approves the approach to fleet replacement, which refreshes 35% of the current fleet by 2025/26 that works towards the Council's strategic objective of achieving 'Net Zero' status by 2030, and Borough wide by 2040.

2. Notes the intention to strengthen centralised fleet management, including Council-wide requests for additional vehicles, acquisition, disposal, maintenance and redeployment of assets to ensure best utilisation and value.
3. Delegates authority to the Strategic Director of Regeneration and Environment, in consultation with the S.151 Officer, and Cabinet Member for Transport and the Environment to enter into the necessary procurement agreements to effect the delivery of the report objectives.

List of Appendices Included

- Appendix 1 Equalities Screening Assessment
Appendix 2 Carbon and Climate Change Assessment

Background Papers

RMBC Policy Statement – Responding to the Climate Emergency
[Responding to the Climate Emergency – Rotherham Metropolitan Borough Council](#)

Rotherham Transport Strategy
[Rotherham Transport Strategy – Rotherham Metropolitan Borough Council](#)

Consideration by any other Council Committee, Scrutiny or Advisory Panel

None

Council Approval Required

No

Exempt from the Press and Public

No

Fleet Replacement Plan

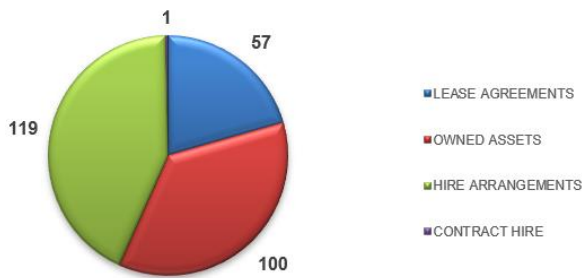
1. Background

- 1.1 The Council operates a diverse range of 337 vehicles and plant equipment across 22 departments. This includes around 60 large goods vehicles, such as refuse collection vehicles which are stipulated on a 'Goods Vehicle Operators Licence'. It is essential that all vehicles are well maintained, remaining safe and efficient to ensure the Council remains compliant with relevant obligations.
- 1.2 The 2020/21 Budget and Medium-Term Financial Strategy agreed to service capital borrowing in order to invest in the Council's fleet. A budget of £7.937m was approved, however the funding has not yet been drawn upon due largely to the response to the Covid-19 Pandemic.
- 1.3 On 30th October 2019, the Council agreed a motion to declare a climate emergency and published a policy statement in 2020 entitled, "Responding to the Climate Emergency". Within this, was a pledge to adopt the following targets:
- RMBC: Council's carbon emissions to be at net zero by 2030
 - Rotherham: Borough-wide carbon emissions to be at net zero by 2040
- 1.4 The introduction of a 'Climate action plan' saw a requirement to, "Develop a timeline for EV fleet conversion" and this is reflected in the "Year Ahead Plan 2022-23" to "Develop a fleet conversion programme to low carbon fuel"; "The term 'Net zero' means achieving a balance between the carbon emitted into the atmosphere, and the carbon removed from it. This balance, or 'net zero' – will happen when the amount of carbon we add to the atmosphere is no more than the amount removed". *
- *Energy Saving Trust*
- 1.5 Due to national and global climate objectives, the pace of change in automotive industry is rapid. Emerging technologies are resulting in a growing market of zero or ultra-low emission vehicle models from a wide range of manufacturers.
- 1.6 Whilst the Council operates some cars, most of the fleet consists of light commercial vehicles, heavy commercial vehicles, and items of 'road going plant', such as mechanical sweepers and ride on mowers and market development for these categories, has not progressed at the same pace.
- 1.7 Work towards the introduction of a Fleet Replacement Programme in 2019 stalled due to the Covid-19 pandemic, although at the time, zero or low carbon alternatives for light and heavy commercial vehicles were limited and it is these areas that need the most attention if the Council is to achieve the target of 'Net zero' by 2030.

2. Key Issues

2.1 The current fleet is a mixture of owned assets, lease agreements and hire arrangements. The lease agreements have either passed their end of term, or are approaching it in the next 12-24 months, and the hire arrangements in many cases due to their longevity, denote a requirement for a permanent fleet addition. Hire arrangements can often be costly, given that there is no commitment to term, and lease vehicles past their end of life can incur high-cost refurbishment charges, when returned to the lessor.

VEHICLES - BY ACQUISITION TYPE

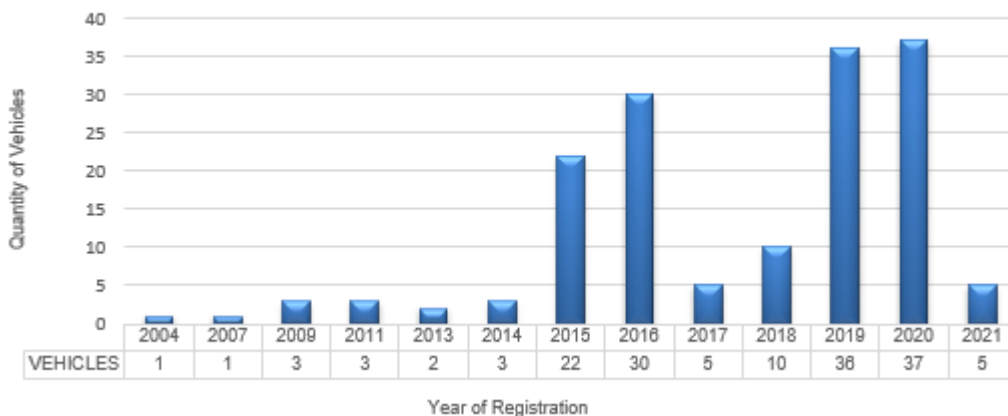


ROAD GOING PLANT - BY ACQUISITION TYPE

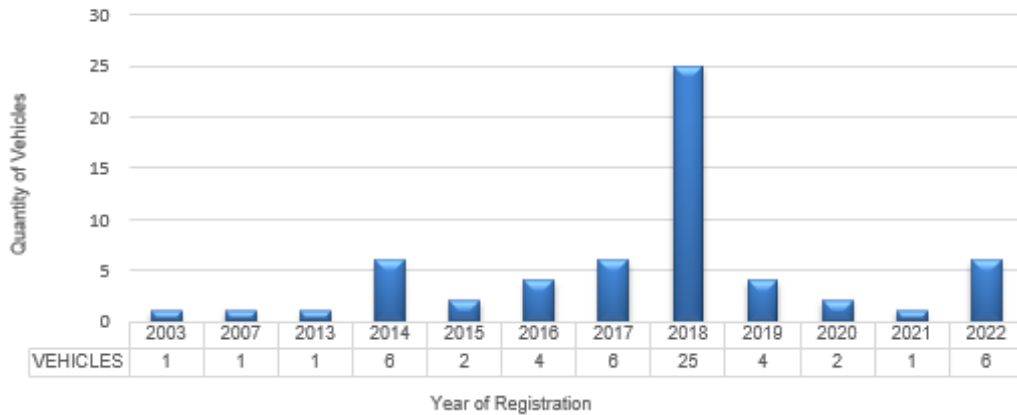


2.2 Excluding the hire arrangements which are largely vehicles registered within the last 3 years, the core fleet age profile demonstrates that there are 80 vehicles and road-going plant items that are greater than 5 years old. Current new vehicle delivery lead times from point of order, range from 12-24 months meaning that by the time replacements are ordered, these may be greater than 7 years old.

VEHICLE AGE PROFILE - VEHICLES



VEHICLE AGE PROFILE - ROAD GOING PLANT



2.3 The fuel types of the existing fleet are:

FUEL TYPE	CORE FLEET	HIRE VEHICLES	ROAD GOING PLANT	TOTALS
DIESEL	139	114	45	298
PETROL	19	2	13	34
ELECTRIC / ULEV	0	3	2	5
TOTALS	158	119	60	337

2.4 It is critical that the Council aims to operate vehicles to an optimum life which considers vehicle reliability with age, the associated maintenance costs and predicted residual values, with the aim of replacing vehicles before they increase financial liability through age, mileage, and depreciation. A modern fleet also has benefits for employees, safety, and the Council’s image.

2.5 Historically the UK market has enjoyed a healthy export pipeline, where medium and large commercial vehicles continue their lives in other countries for many years beyond the optimum life cycle.

2.6 Whilst there has been legislation in place since 1970, European wide emissions standards for vehicles were introduced in 1992 with the aim of reducing harmful exhaust gases entering the atmosphere.

2.7 Each iteration of Euro standard has delivered a gradual improvement in emissions as can be seen in the table below.

Euro Standard	Introduced on:	NOx	CO	PM	HC + NOx
1	31 st December 1992				
2	1 st January 1997				
3	1 st January 2001				
4	1 st January 2006				
5	1 st January 2011	0.18g/km	0.5g/km	0.005g/km	0.23g/km
6	1 st September 2015	0.08g/km	0.5g/km	0.005g/km	0.17g/km
7	Planned for 2025				

2.8 Diesel Particulate Filters (DPF) were introduced as part of the Euro 5 emissions standard. The particulate filters capture 99% of particulate matter and helps trucks and lorries to meet the lower total emissions. Engines that meet the standard, now emit the equivalent of one grain of sand per kilometre.

2.9 Euro 6 is the current standard for all new vehicle registrations, and for diesel trucks, the permitted emissions of NOx were reduced from 0.18g/km to 0.08g/km. All vehicles' emissions are considered as part of the annual MOT and any vehicle not meeting the required standards, are issued an instant failure, and are not considered roadworthy.

	EURO STATUS	VEHICLES
2.10 The Council's current vehicle fleet (not including road going plant) have the current Euro statuses:	4	7
	5	29
Hire vehicles are typically less than 3 years old, guaranteeing a Euro 6 standard.	6	122
	TOTAL	158

2.11 By having a fleet that is Euro 6, improved fuel efficiency can be achieved, which lowers overall consumption by improving 'miles per gallon'. The latest diesel engines are now so clean, that to determine environmental carbon impact, the actual fuel usage from the vehicle fleet must be calculated and converted into carbon tonnes.

2.12 The automotive industry is currently experiencing manufacturing and supply chain challenges, meaning product lines are reduced, raw materials and parts scarce and extended lead times for delivery of new models which are rising in cost. Battery manufacture is proving challenging, as firms struggle to survive due to high-cost component materials.

2.13 By planning fleet replacement, procurement requirements can be addressed early, with opportunities to engage with the local market and secure manufacturers 'build slots' well in advance of when delivery is required. This also brings value in large scale procurement exercises, to bring economies of scale and add social value.

2.14 When considering low carbon alternatives, there are a range of challenges in the heavy commercial markets in terms of electric vehicles such as:

- Mileage ranges
- Operation of rigs or other municipal equipment impacting battery life
- Cold weather impacting battery life
- Reliability
- Longevity
- Whole Life Costs
- Residual Values
- Maintenance skills

- 2.15 Whilst there are other alternative power sources for vehicles in development, such as hydrogen, hydrotreated vegetable oil and compressed/liquified natural gas, Battery Electric Vehicles (BEV) are leading the market with price points and vehicle delivery lead times becoming more accessible and attractive to meet climate objectives. There is no certainty around long term market predictions for a leading alternative fuel source, given the advances seen in the last 2 years alone, with 5 times more BEV models now available, than in 2021.
- 2.16 Infrastructure and rising energy costs are to be considered when structuring a fleet replacement programme. Supply of alternative fuels must be readily available and stored where possible, in addition to the existing bunkered supply of diesel at the current operational depots. If BEV are sourced, there must be means to have sufficient charging points and electricity through grid capacity at vehicle operating centres around the borough, including out bases where vehicles park whilst not in use.
- 2.17 Electricity infrastructure to support charging of a large number of vehicles needs to be thoroughly assessed in order to support future phases of fleet replacement. A partial transition may minimise any risks associated with day-to-day operations of electric fleet and allow the Council to develop its understanding of the implications.
- 2.18 Power interruptions could result in BEV fleet being grounded through charging failure and therefore unable to deliver operational services. This could present reputational and financial risks to the Council.

3. Options considered and recommended proposal

3.1 The recommendation is to seek to replace a total of 119 vehicles between 2023/24 – 2025/26 as ‘Phase 1’

3.2 The rationale for identifying the vehicles within this option for replacement is:

- Owned assets that do not comply with clean air zones and are less than Euro 6 emissions standard
- Leased or contract hired vehicles that have passed their contract end date and continue to incur annual rental charges
- Contract hired vehicles where the term is due to expire in 2023 (not the 16 x '16 plate RCV's)
- Hired vehicles that have been in service over 250 days where length of hire determines service requirement, and an annual revenue saving could be potentially achieved.

3.3 The table below shows a breakdown of the vehicle purchases between Battery Electric Vehicle (BEV) and Internal Combustion Engine (ICE) vehicles.

		BEV	64	£3,334,904	
		ICE	55	£4,265,000	
	TOTAL VEHICLES		119	£7,599,904	
				BEV	ICE
CAT 1	CAR	10	£320,000	£0	
CAT 2	MPV	3	£120,000	£0	
CAT 3	4x4	1	£0	£25,000	
CAT 4	MBUS	20	£0	£1,731,000	
CAT 5	LCV	74	£2,034,904	£836,000	
CAT 6	LGV	11	£860,000	£1,640,000	
	TOTAL INDICATIVE COST BY VEHICLE TYPE:		£3,334,904	£4,232,000	£7,566,904

3.4 This option would replace 35% of the fleet in the first phase and delivers 119 new vehicles within the current available budget of £7.9m. 64 of the 119 vehicles would be replaced by battery electric derivatives (representing 19% of the fleet) and the remainder would be internal combustion engine at Euro 6 standard. As can be noted, a range of different vehicle types will be replaced including minibuses, light commercial vehicles (these are small vans), multi-purpose vehicles (eg seven seater cars) and some refuse collection vehicles. The bulk of electric vehicles purchased will be small cars, such as Ford Fiesta type vehicles as well as a range of the smaller vans.

3.5 The acquisition methods of the existing 119 vehicles are:

HIRED	72	60.5%
OWNED ASSETS	8	6.7%
CONTRACT HIRE	1	0.8%
LEASED	38	31.9%

119

3.6 The current annual rental charges for vehicles that are hired, leased and contract hired which have been identified for replacement in this option, is £952k.

3.7 The remaining capital budget would be used to purchase the 16 x '16 plate RCV's at the end of their lease term in 2023. This is estimated to be a payment of c.£25k per vehicle, (current expected quotations) totalling £400k to translate them to RMBC ownership. The vehicles have had significant financial investment in repairs to elongate the life of the waste bodies, following an extension of the leases in 2021 from 5 years to 7 years. By purchasing these, the impact on revenue budgets will reduce by c.£325k per annum, however prudential borrowing charges would need to be written

down over the remainder of the vehicle's lifespan. It is anticipated that a further 2 years, would allow sufficient time for the RCV's to be replaced as "Phase 2" of the fleet replacement plan following seeking approval through a new capital bid. The vehicles would also have some residual value at the end of the additional 2 years extension to offset the initial investment.

3.8 The option recommended above represents a blend of priorities which includes the initial ambition tied to the budget allocation in relation to 'invest to save' as well as taking account of the Council's commitment to climate change ambitions. A range of different options were considered. Firstly, the option of increasing the amount of electric vehicles purchased was considered however, this is not possible within the current budget and may not be the best use of investment taking into account current emissions, charging infrastructure and age of some of the current fleet. It is acknowledged that key aspects of the fleet will need to be replaced in due course and as a result future capital bids will be forthcoming. In addition, the option to do nothing remains however this is not recommended due to the issues outlined above in relation to older vehicles and levels of emissions, as well as reliability and the opportunity to maximise use of resources by purchasing long-term hire vehicles to cater for business need.

3.9 In producing the fleet replacement plan the Council has also considered ongoing management and purchase of fleet as well as maintenance. In order to ensure that the Council's fleet is effectively managed, following the insourcing of the maintenance service, and aligns to strategic priorities, it is essential that centralised management is in place. The service will implement, as part of the fleet replacement plan, activity to identify improved corporate processes for purchase and maintenance of vehicles (and associated budgets) with a view to centralising the management and approval processes within the Corporate Transport Unit.

4. Consultation on proposal

4.1 There has been no specific external consultation carried out however in developing proposals the Council has explored the approach being taken elsewhere as well as acknowledging and reviewing information in relation to fuel types and new fuel developments. Each individual vehicle purchase will consider appropriate consultation as required.

5. Timetable and Accountability for Implementing this Decision

5.1 Subject to Cabinet approval the Plan will be implemented during 2023/24 and 2025/26. The timescale is largely driven by lead times on orders for vehicles however procurement activity will take place during 2023/24.

5.2 The Head of Fleet and Transport Services and the Assistant Director for Community Safety and Street Scene will be accountable for implementing the Plan and this will be coordinated through a project board who will oversee progress. This will be established immediately following the Cabinet decision.

6. Financial and Procurement Advice and Implications

- 6.1 The Fleet and Transport Service have worked in collaboration with the Procurement Team in researching market options and costs in order to develop the fleet replacement plan. All subsequent procurement activity will be progressed in line with the Public Contracts Regulations 2015 (as amended) and the Council's own Financial and Procurement Rules. It is likely that there will be a range of procurement strategies required dependent on the varying vehicle types.
- 6.2 The Council allocated £7.937m in the Capital Programme for Fleet Replacement which provides the approved funding to meet the chosen option. The approved net budget for the Corporate Transport Unit (excluding Home to School direct costs) is £0.4m. The capital and revenue modelling for the recommended option are validated estimates using latest data on the Council fleet assets. Whilst this does show significant potential for revenue savings (£0.9m), the Capital borrowing costs and increased maintenance costs must be considered and as a result the saving forecasted are moderate at this stage.
- 6.3 The cost modelling will continue to be reviewed to ensure future revenue savings are accurately identified and support future consideration of further capital borrowing. The revenue implications will need further appraising once actual costs are known with the impact reported into the Council's budget process. Also included in the appraisal will be the impact of further centralising of Fleet operations

7. Legal Advice and Implications

- 7.1 Each of the transactions referred to within the strategy will need to comply with the Public Contract Regulations 2015 (as amended) and the Council's FPPR. Appropriate terms and conditions will be required in respect of all of the contractual arrangements to be implemented to ensure that the Council is appropriately protected, and the objectives of the strategy are achieved
- 7.2 Section 9D of the Local Government Act 2000 requires that all functions of a local authority are the responsibility of the executive unless otherwise specified in regulations. The discharge of functions in relation to the issues set out in the report are not specified within regulations as to not be functions of the executive. Therefore, this is an executive power to be exercised by the Cabinet.

8. Human Resources Advice and Implications

- 8.1 Human resources implications are outlined within the report concerning the impacts on staffing resources, safety and morale/motivation.

9. Implications for Children and Young People and Vulnerable Adults

9.1 Children and young people as well as vulnerable adults are impacted by the Councils fleet through the delivery of a number of different services such as home to school or the provision of adult care services. Improvements to the fleet will have a positive impact on those who benefit from the Council's fleet. Close liaison between services will be essential to ensure individual purchases meet the needs of staff and service users.

10. Equalities and Human Rights Advice and Implications

10.1 There are no direct impacts as a result of the fleet replacement plan overall however individual purchases will need to ensure they reflect the needs of individual users and will therefore be subject to individual assessment.

11. Implications for CO2 Emissions and Climate Change

11.1 As noted within the Climate Impact Assessment and within the body of the report, the objectives in terms of replacing vehicles is to continue to reduce carbon emissions and therefore have a positive impact on the Council's commitments to net zero by 2030.

11.2 There are limitations and risks in moving to a fully electric fleet and again this is detailed within the body of the report. Not only is the technology not yet capable of supporting all of the Council's functions but the infrastructure also requires improvement. Decarbonising the fleet fully will require further investment in future years, alongside further technological advancement.

12. Implications for Partners

12.1. The provision of a well maintained and up to date fleet is critical in supporting the Councils general delivery, which has a significant impact on partners. Largely, the procurement and replacement of vehicles within the fleet will not impact the Councils partners.

13. Risks and Mitigation

13.1 There are a range of associated risks, some of which have been referenced within the body of the report. In particular there are risks associated with:

- Charging infrastructure
- Market Fluctuations
- Emerging Technologies
- Supply chain
- Maintenance and reliability of electric
- Increasing Energy Prices

The recommended option seeks to mitigate some of the risk identified above through a blended approach to fleet replacement as outline in section 3. In addition, a project board will be established to oversee the fleet replacement plan and associated issues. This will include a risk register and mitigating actions.

14. Accountable Officers

Karen Mudford, Head of Fleet & Transport Services
Sam Barstow, Assistant Director- Community Safety & Streetscene

Approvals obtained on behalf of Statutory Officers: -

	Named Officer	Date
Chief Executive	Sharon Kemp	06/03/23
Strategic Director of Finance & Customer Services (S.151 Officer)	Judith Badger	02/03/23
Assistant Director, Legal Services (Monitoring Officer)	Phillip Horsfield	02/03/23

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This report is published on the Council's [website](#).