

BARNSELY METROPOLITAN BOROUGH COUNCIL

This matter is a Key Decision within the Council's definition and has been included in the relevant Forward Plan

REPORT OF THE EXECUTIVE DIRECTOR PLACE TO CABINET

Vehicle Replacements 2019 to 2020

1 PURPOSE OF REPORT

- 1.1 To request support for the fleet vehicle replacement programme proposing the replacement of 149 vehicles and pieces of plant and equipment and the procurement of 5 additional vehicles for NPS in line with the Vehicle Replacement Strategy 2019 to 2025, approved by Cabinet on 20/02/2019 (Cab.20.2.2019/10). A total of 154 vehicles will be purchased. These include 22 vehicles originally approved for replacement in 2018/19 where purchase has slipped.
- 1.2 All vehicles procured will produce less carbon emissions than the vehicles they are replacing. The funding requested assumes that 25% (circa 38) of the vehicles purchased in this batch are Ultra Low Emission Vehicles (ULEVs), in support of the Government's 'Road to Zero' strategy.
- 1.3 The report also makes a request for funding to procure a minimum of 30 electric charging points to give the council the ability to charge the electric vehicles to be introduced into the fleet as a result of this report.
- 1.4 Using the best technology available to reduce our emissions is fundamental to the councils' current and future sustainability priorities. Across the world we are in the midst of a fundamental change to powering vehicles. Electric power plants in vehicles such as cars and vans is about to substantially increase, whilst heavier commercial vehicles such as waste collection and highway lorries is following closely behind. It is therefore imperative that the service considers carefully all decisions about replacing such vehicles to ensure there is a balance between life cycle costing, carbon emissions, dependable technology and service consistency for customers.

2 RECOMMENDATIONS

- 2.1 To authorise the replacement, in 2019/20, of up to £5.785m (to include the incremental cost of ULEVs as referred to at 2.2) worth of vehicles and plant by way of purchase followed by a sale and lease back arrangement as outlined in section 4.6.
- 2.2 To support the upgrading of 25% (circa 38) of the petrol and diesel vehicles highlighted for replacement in this report to ULEVs at an additional estimated expense of £250,000 (included in the total amount stated in 2.1).

- 2.3 To support the procurement of at least 30 electric charging points at a cost of £100,000 to be funded from the capital contingency budget. This will give the council the ability to start to introduce electric vehicles into its fleet, as referred to at section 3.4
- 2.4 To take into account the health benefits of lower and Zero carbon emission vehicles to local communities at the procurement stage by assigning a value to the carbon emissions in line with the government's carbon valuation methodology.
- 2.5 To continue to explore implementing solar panels and battery storage at Smithies Depot.

3 INTRODUCTION

- 3.1 The Vehicle Replacement Strategy 2019 – 2025 was approved by Cabinet on 20/02/2019 (Cab.20.2.2019/10). It was noted in this report that it would be followed by a capital plan in accordance with the strategy. This report will set out the capital request for financial year 2019/20 and the forecast requirement for 2020/21 to 2024/25.
- 3.2 The Council's fleet is made up of 433 vehicles and pieces of plant and equipment with a total capital value of approximately £14.3M and it is essential for front line services to deliver both statutory and income generating services.
- 3.3 Every vehicle has a lifespan based on the type of vehicle, the role it carries out and its usage profile. Once a vehicle reaches the end of this lifespan there is an increase in maintenance cost and vehicle downtime. Therefore, it is imperative that vehicles are replaced once they reach this point to ensure that excess downtime doesn't adversely affect the departments' ability to deliver their services and the council does not incur additional costs associated with maintenance on vehicles at the end of their lives. A Decision on whether the vehicles will be replaced at the end of their scheduled useful life will be made towards the end of the initial lease period. Appendix B shows vehicles that are considerably over their initial lease period. With such a diverse fleet with varied uses we cannot determine the exact life of a vehicle; it is dealt with on a case by case basis after the initial review period.
- 3.4 This report seeks approval to replace 154 vehicles, plant and equipment in the council's fleet – the vehicles will be utilised by 17 council departments and partners. At least 25% of the replacement vehicles will swap diesel or petrol vehicles for ULEVs.
- 3.5 A ULEV is defined as a vehicle that emits less than 75g of Carbon Dioxide (CO²) per kilometre travelled and is capable of at least 10 miles of zero emission driving between recharging. They include:
 - Fully Electric Vehicles (EVs) (this would be the preference for us at this point in time and additional capital would be used for this type of vehicle).
 - Plug-in Hybrid Electric Vehicles (PHEVs).
 - Extended-Range Electric Vehicles (E-REVs).

3.6 As a result of the Vehicle Replacement Strategy, we have set the following targets:

Table 1

Reduce CO2 emissions from fleet vehicles in the 2019/20 financial year by:	50 tonnes
Increase of ULEV vehicles in the fleet in the 2019/20 financial year by:	35

3.7 These figures are based on the expected reduction of replacing the vehicles set out in Appendix B.

3.8 The target for carbon reduction in the 2019/20 financial year is based on the fuel data we have from the 2018/19 financial year shown below in Table 2.

Table 2

		01 Apr 2018 To 30 Jun 2018	01 Jul 2018 To 30 Sep 2018	01 Oct 2018 To 31 Dec 2018	01 Jan 2019 To 31 Mar 2019	Total for year
Fuel used (litres)	Diesel	178,489	172,876	173,668	182,040	707,073
	Gas Oil	42,358	30,805	31,713	27,004	131,880
	Petrol	6,835	5,575	5,346	4,582	22,338
tonnes co²		584.54	536.34	540.26	547.21	2,208.35

4 PROPOSAL AND JUSTIFICATION

2019/20 requirements

4.1 A request for replacement vehicles was supported by cabinet in June 2018 (Cab.13.6.2018/14) to replace 77 vehicles with a value of £2.953M. From this request there has been a slippage of 22 vehicles worth £0.471m into the 2019/20 programme set out in Appendix B. The slippage has been caused by changes in requirement and difficulty generating specifications. Some of the vehicles detailed in the June 2018 request have higher estimated replacement costs than the original request. Table 3 details the changes in prices.

Table 3

Department	Number of vehicles outstanding	Original Capital Request	New Capital Request	Variance
Barnsley Norse	2	£28,000	£34,500	£6,500
Bereavement Services	5	£110,000	£110,000	£0
Depot	1	£25,000	£30,000	£5,000
Neighbourhood Services	14	£308,000	£378,000	£70,000
Total	22	£471,000	£552,500	£81,500

4.2 Vehicles to be replaced are set out below. These replacements will be made in line with the Vehicle Replacement Strategy and work towards the Councils Strategic Priorities.

Replacements outstanding from previous year: 22
 Vehicle replacements this year: 127
 New requirements: 5
 Total vehicles to be procured: 154

- 4.3 This report proposes to replace 82 vehicles utilised by council departments with a total value of £4.115m. These would see replacement of essential frontline service providers such as gritters and refuse collection vehicles and see ULEVS introduced into the council's fleet. Table 4a summarises the proposed replacements for internal vehicles.
- 4.4 The report also requests to replace 67 vehicles and procure an additional 5 vehicles for partner organisations with a total value of £1.420m; Table 4b summarises these vehicles.
- 4.5 The report requests an additional £250,000 to upgrade a minimum of 25% of these replacements to ULEVs.

Table 4a – replacements for council departments

User Department/ Customer	Number of vehicles (ULEV)	Average age (years)	Capital cost	Extra cost for ULEV	Total capital cost
Bereavement Services	10 (2)	9.2	£188,500	£16,000	£204,509
Commercial Services	3 (1)	8.6	£117,000	£6,000	£123,009
Dog Wardens	1	9.3	£25,000		£25,000
Depot	2	13.1	£105,000		£105,000
Highways	23	9	£2,430,000		£2,430,000
Independent Living at Home	4	5.8	£48,000		£48,000
Libraries	1	8.7	£20,000		£20,000
Neighbourhood Services	25	9.4	£678,500		£678,500
Parking Services	2 (2)	6.6	£25,000	£13,000	£38,000
Pest Control	3 (3)	6.5	£63,000	£15,000	£78,000
Safer Neighbourhood Service	6 (1)	7.5	£95,000	£5,000	£100,000
Waste Management	2	6.3	£320,000		£320,000
Unallocated	(27)*			£179,000	£179,000
Sub-total – council departments	82 (36)	8.3	£4,115,000	£234,000	£4,349,000

Table 4b – replacements for partner organisations

User Department/ Customer	Number of vehicles (ULEV)	Average age (years)	Capital cost	Extra cost for ULEV	Total capital cost
Barnsley Norse	3	5.8	£64,500		£64,500
Berneslai Homes (Construction)	55	5.4	£1,143,000		£1,143,000
NPS (replacements)	9(2)	5.5	£145,000	£16,000	£161,000
NPS (new)	5	N/A	£67,500		£67,500
Sub-total – partner organisations	72(2)	5.7	£1,420,000	£16,000	£1,436,000

Total	154 (38)	7.3	£5,535,000	£250,000	£5,785,000
--------------	-----------------	------------	-------------------	-----------------	-------------------

* Some of these ULEVs may be switched to partner organisations (see paragraph 4.9 below)

- 4.6 The figures above are based on current estimated purchase prices. The leasing cost will total approximately £0.906m per year revenue cost if all 154 vehicles are replaced. The leasing cost for the 149 replacement vehicles will be funded from existing leasing budget. The leasing cost for the 5 new additional vehicles for NPS will be funded from additional income via the SLA agreement.
- 4.7 Vehicle replacements will be scrutinised before any procurement takes place to ensure that the fleet is utilised as much as possible and unnecessary vehicles are not replaced.
- 4.8 As well as a reduction in maintenance costs, increased vehicle availability and lower emissions, new vehicles also bring the benefits of new safety technology to keep our employees and the public safe and increased suitability to roles that may have changed over time as technology has advanced.
- 4.9 Procurement of these vehicles will incorporate whole life cost analysis – purchases will not be made based solely on the initial price.
- 4.10 A final decision will be made on whether to replace the vehicles we have identified with ULEVs during the procurement process. The usage profile will be scrutinised and estimated fuel and maintenance cost reduction will be weighed up against the additional purchase price and leasing cost. The infrastructure available to charge the vehicles will also be taken into account. Appendix B shows that there are 101 vehicles which could, at first glance, be replaced by ULEVs.
- 4.11 Facilitating the take-up of ULEVs is an important action within the Council's Air Quality Action Plan (<https://www.barnsley.gov.uk/media/5738/barnsley-abc-air-quality-action-plan-2017.pdf>), along with a commitment to improving the Council's fleet. Procurement of ULEVs will demonstrate commitment to the Air Quality Action Plan and can act as an exemplar to other private and public fleet operators in the Borough of the environmental and operational benefits of such vehicles.

- 4.12 Based on industry data, a benefit of ULEVs, as well as their lower emissions, is that the day to day running costs are typically much lower than their diesel or petrol powered counterparts so it is likely that the whole life costs of them will be lower.
- 4.13 It is estimated that the fuel cost of using Full Electric Vehicles are around 30% of the price of Diesel equivalent vehicles – so a saving of 70% on fuel costs alone. The maintenance requirements of electric vehicles are also less than diesel vehicles meaning that servicing and maintenance costs are lower over the lifetime of the vehicle.
- 4.14 Whilst this is the Council's first major venture into ULEVs and it is still relatively unknown due to the newness of the technology, it is also possible that we will be able to extend the life of any EVs in the fleet by replacing the batteries rather than the whole vehicle, making further savings.
- 4.15 In order to implement Electric Vehicles into the fleet, the Council needs to build an internal infrastructure of charging points. The report requests a total of £100,000 to implement 30 x 7 kW AC chargers and a dual 22 kW AC rapid charger at Smithies Depot, and 2 x 7 kW AC chargers at both Westgate Plaza and Barnsley Crematorium.
- 4.16 Electric vehicle charge points (EVCP) need to match the requirement and specification of vehicles to ensure that charging infrastructure is capable of supporting the intended use and providing a seamless transition from diesel or petrol vehicles.
- 4.17 Electric vehicle charging speeds vary and are measured in kilowatts (kW) and battery capacity is measured in kilowatt hours (kWh).
- 4.18 As a point of reference a typical small van or car battery would have a capacity of 40 kWh and have a range of around 150 miles.
- 4.19 An EVCP can be either slow (3 kW), fast (7-22 kW) or rapid (43-150 kW), and the charging times for a 40 kWh vehicle vary from 13 hours for a slow charger to less than 30 minutes for a 150 kW rapid charger
- 4.20 Vehicles are generally parked overnight, and this is the ideal time to charge the battery; chargers must be adequately sized to deliver a full charge within the typical overnight park time, and the battery must be adequately sized to perform a full day's duties without requiring additional charging
- 4.21 Vehicles charge using alternating current (AC) from the grid, which is then stored as direct current (DC) in the vehicle battery; conversion of the charge from AC to DC occurs in the vehicles on-board charge management system and this system limits the maximum charging speed that a vehicle can accept
- 4.22 Typically new vehicles such as the Nissan E-NV200 have an on-board charger which limits charging over AC to 6.6 kW; this means that irrespective of the speed of the charger this vehicle is plugged into it will only charge at 6.6 kW over a AC connection, so a full charge in a 40 kWh battery will take around 6 hours

- 4.23 Some vehicles are also capable of accepted charge directly using DC, and this bypasses the on-board charge management enabling charging at higher speeds; DC chargers are usually fast (22 kW) or rapid (43 – 150+ kW) and are capable of charging a 40 kWh battery in 2 hours (22 kW) to 30 minutes (150 kW)
- 4.24 DC chargers are much more expensive than AC chargers; they require an inverter to convert the incoming current and also cooling systems, and the grid connection for the mains electricity is much more expensive
- 4.25 Although it may appear preferable to charge vehicles as quickly as possible in reality the most cost effective solution is to use mostly AC charging when the vehicle is not in use, typically overnight, with some fast or rapid DC chargers to provide quick top-up charging where necessary
- 4.26 7 kW AC chargers are recommended as the preferred option as these match well to the charging capability of most vehicles currently available with a dual 22 kW A DC rapid charger also included for situations where faster top-up charging is required
- 4.27 Not all vehicles may require charging every night, however the risk of under-providing chargers is significant so it is recommended that at this stage a charge point is procured for each vehicle
- 4.28 The majority of vehicles will be parked overnight at Smithies Depot with provision for two vehicles to charge at the Crematorium, and also for two vehicles to charge at Westgate Plaza
- 4.29 Costs have been modelled based on available information from suppliers, although actual installation costs will be subject to electrical survey and district network operator (DNO) application for supplies where determined to be necessary; for this reason a contingency of £20,000 has been included and this can be returned if not required or used to purchase additional chargers if required
- 4.30 Costs for 7 kW chargers include a mounting post, although savings may be made where it is possible to wall mount the charge point
- 4.31 Table 5 lists estimated costs for charge points and installation:

Table 5

Item	Cost	Number	Total
7 kW 32a AC charger	£ 1,000	35	£ 35,000
22 kW 32a dual DC charger	£ 5,000	1	£ 5,000
Installation 7 kW	£ 1,000	35	£ 35,000
Installation 22 kW	£ 5,000	1	£ 5,000
Contingency	£ 20,000	1	£ 20,000
Total			£ 100,000

Future funding requirements

4.32 The Vehicle Replacement Strategy 2019 - 2025 stated that the capital expenditure forecast and the revenue impact of this for the following five years would be presented as part of the annual capital requirement report to provide a longer term view of the capital funding requirement. These projections are generated from a spreadsheet model designed for this purpose. The requirements for years 2020/21 to 2024/25 are set out in Table 6. Unless there is a change in financing policy, future purchases will also be followed by sale and leaseback arrangements following the initial purchase.

Table 6

Financial Year	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	Total
Number of replacements							
BMBC services	82	48	0	18	27	44	219
Partners	72	59	40	14	28	67	280
Total number	154	107	40	32	55	111	345
Projected Capital Expenditure							
	£'m	£'m	£'m	£'m	£'m	£'m	£'m
BMBC services	4.349	2.521	0.427	0.017	2.198	1.016	10.528
Partners	1.436	0.626	0.198	0.578	1.367	1.283	5.488
Total spend	5.785	3.147	0.625	0.595	3.565	2.299	16.016
Impact on revenue (leasing cost budget)							
Opening leasing cost	1.332	1.496	1.583	1.601	1.601	1.707	
Increase due to new expenditure	0.341	0.109	0.024	0.011	0.172	0.108	
Vehicles not replaced	-0.023						
Increase in partner fees	-0.095	-0.021	-0.007	-0.011	-0.066	-0.060	
Savings for ULEVs	-0.059						
Closing leasing cost	1.496	1.584	1.601	1.601	1.707	1.755	
Leasing cost budget	1.656	1.656	1.656	1.656	1.656	1.656	
Under/ -overspend	0.160	0.072	0.055	0.055	-0.051	-0.099	

4.33 The figures in Table 6 include a replacement cost for the purchase of replacement vehicles procured within the time period shown that also reach the end of their life within the time period shown. For instance, if life of vehicle is 5 years, it will be included in 2019/20 and in 2024/25.

4.34 The financial projections in Table 6 assume like for like replacements and are calculated by adding inflation of 3% per year to the initial vehicle purchase price. The actual amount that will be requested will be based on current estimated purchase prices.

4.35 The figures also assume that vehicles will be replaced when they come to the end of their existing initial lease period/life of the vehicle. However this may not be the case. The need for the replacement will be evaluated towards the end of the lease period. If replacement is not deemed necessary at that point then the lease will be extended and this profile amended.

4.36 Table 6 shows that if the additional income from partners for the higher cost of the replacement vehicles is included in the calculations, then there is sufficient headroom in the Fleet revenue budget for the next four years (2019/20 to 2022/23)

to pay the higher leasing costs of the vehicles in the proposed vehicle replacement programme. Savings in other areas will need to be found in 2023/24 and 2024/25 should the profile of replacements be required as currently forecast. There are a number of risks (e.g. the actual cost of vehicles post Brexit, borrowing rates, the effect of residuals on leasing charges) and opportunities (e.g. lower repairs and maintenance costs when running a relatively newer fleet) which will impact on the capital and revenue budgets going forward. Therefore, the programme should be refreshed each year.

4.37 The projections in Table 6 (except those for 2019/200 do not include the additional capital cost that will be required for ULEV upgrades to the fleet for the following reasons:

- Due to the fast development of ULEVs we are unable to predict what suitable vehicles will be available to us in years to come.
- It is predicted that the cost of ULEVs will drop in the coming years – meaning that additional funding may not be required.

4.38 If we continue with the strategy adopted in 2019/20 to buy 25% of replacement vehicles as ULEVs and make the same assumptions about the incremental cost of ULEVs (that they will be on average £6,579 more expensive than the equivalent petrol or diesel versions), then £817,000 of additional capital expenditure will be required in the next 5 years as shown in Table 7.

Table 7

Financial Year	2020/21	2021/22	2022/23	2023/24	2024/25	Total
Total number	107	40	32	55	111	345
ULEVs	27	10	8	14	28	87
%	107	40	32	55	111	345
	£'m	£'m	£'m	£'m	£'m	£'m
Additional capital requirement	0.176	0.066	0.053	0.090	0.183	0.817
Leasing charge (over 5 years)	.029	0.011	0.009	0.015	0.030	0.134

4.39 Additional capital expenditure may also be required for more charging points to support these additional vehicles.

4.40 The leasing charge figures in Table 7 assume that we will be able to secure similar lease terms for ULEVs to those for petrol and diesel vehicles. If funders assume that ULEVs to be higher risk (e.g. uncertainty about demand and battery life) then the leasing charge could be higher.

4.41 Where the ULEVs are for Council services, there will be savings in fuel, road fund licence and maintenance costs. Where they are purchased for partner organisations, there will be an increase in the service level agreement income. Based on current estimates these should be at least equivalent to the additional lease charges and so there should be no increase in the overall revenue costs as a result of moving to more ULEVs.

4.42 During the procurement process, weight, through the scoring process, will be given to zero carbon emission options over the diesel or petrol equivalents to ensure that the higher purchase price does not rule these vehicles out.

- 4.43 Plans for the redevelopment of Smithies Depot are in early stages, these plans include solar panels that will provide power to the charging points, reducing the cost of fuelling vehicles even further.

5 CONSIDERATION OF ALTERNATIVE APPROACHES

- 5.1 Option 1: Retain the vehicles detailed in Appendix B and extend them beyond their useful life. This option is not recommended as it would lead to increases in maintenance costs, vehicle downtime and supplementary hire vehicles due to more complex repairs becoming necessary. This would adversely affect user departments' ability to provide front-line services and also prevent the council benefiting from newer safety technology, the number of ULEVs in the fleet will not increase and the council will be operating vehicles with older Euro rated engines that do not meet the same emission standards as newer equivalent vehicles.
- 5.2 Option 2: Replace the vehicles detailed in Appendix B but not procure ULEVs and not procure electric charging points. This option is not recommended as the council would not benefit from the lower/zero emission vehicles – which would provide a good public image for the council. It would also put the council behind the target of 30 alternative fuel vehicles set out in the Vehicle Replacement Strategy. Not introducing ULEVs into the fleet will also fail to show commitment to the Councils Air Quality Action Plan.

6 IMPLICATIONS FOR LOCAL PEOPLE/SERVICE USERS

- 6.1 Emissions from council vehicles will be lower with the increase in ULEVs and older, lower Euro rated vehicles being replaced by vehicles that meet the latest Euro emissions rating, thus improving air quality in Barnsley for local people. This will therefore assist in the Council meeting legal air quality standards for the Borough, and contribute to reducing exposure to road traffic emissions for local stakeholders.
- 6.2 Services users will benefit from increased vehicle availability for council departments due to newer vehicles which require less maintenance. Meaning front line services will be able to provide a reliable service.

7 FINANCIAL IMPLICATIONS

- 7.1 Consultations on the financial implications have taken place with representatives of the Service Director – Finance (S151 Officer)
- 7.2 It is proposed to purchase 154 vehicles and items of equipment over the next 12 months. This includes 22 vehicles approved for replacement as part of the 2018/19 replacement programme where procurement has slipped. The total capital cost is estimated to be in the region of £5.785m (Tables 4a and 4b)). At the time of replacement a detailed exercise will be undertaken to determine the best option to finance the procurement of the vehicles. As part of the review we will look at all financing options to provide assurance that we are achieving best value for money. So the exact capital requirement will depend on the type financing.

- 7.3 Physical delivery and therefore actual payment for some of the vehicles is likely to all in the 2020/21 financial year due to long lead times for some of the specialist highways vehicles.
- 7.4 Where we opt to go down the lease purchase route (most purchases in the past have been on this basis), following physical delivery, the vehicles will be financed over a period of between 4 and 8 years reflecting the useful life of the assets. It is estimated that the annual revenue leasing cost of financing the £5.785m expenditure above will be £0.906m. This assumes that we will be able to secure similar lease terms for ULEVs to those for petrol and diesel vehicles. If funders assume that ULEVs to be higher risk (e.g. uncertainty about demand and battery life) then the leasing charge for these vehicles could be higher.
- 7.5 £0.565m of annual leasing commitments will be released when the leases for the replaced vehicles are terminated so this batch of vehicle replacements will increase the revenue leasing cost by £0.341m per year. This will be offset by a saving of £0.023m for vehicles not replaced, expected savings in excise duty, maintenance and fuel for the electric vehicles (see paragraphs 7.6 and 7.7 below) of £0.059m and increases in SLA income from partner organisations of £0.095m. The net increase in revenue costs of £0.164m can be funded from the existing fleet leasing budget of £1.656m.
- 7.6 The 2019/20 replacement programme will replace circa 38 existing petrol/diesel cars and small/medium sized vans with ULEVs. Based on industry data, these have lower excise duty, maintenance and fuel costs but it is difficult to quantify until exact vehicles are known.
- 7.7 Excise duty and maintenance savings could be around £500 per year or higher (£235 for excise duty and £265 for maintenance). For 38 vehicles this will equate to £19,000 per year.
- 7.8 Fuel savings will depend on the performance of the vehicles purchased, the daily mileage and usage. Substitution of say 4 litres of diesel per day for a medium sized van at say £1 per litre over 52 weeks would save £1,040 per year. For 38 vehicles, this could equate to £39,520.
- 7.9 The above savings only just cover the incremental capital cost of ULEVs, which are typically £6,600 more than their petrol/diesel counterparts and residuals may be lower due to uncertainty about future demand and battery replacement costs but they do make a significant contribution to the council's corporate priorities as referred to in section 3.7.
- 7.10 The report also requests £0.100m capital expenditure for the installation of 30 electric charging points which are necessary to allow the introduction of electric vehicles. There is no capital budget for this expenditure and it is expected that this expenditure cannot be funded by sale and leaseback. Therefore, it will be necessary to reprioritise existing capital expenditure for 2019/20 to free up the £0.100m or to use the capital contingency budget included in the MTFS. This will reduce the contingency available for other requirements that may originate in the remaining financial year.

- 7.11 There is no capital budget for vehicles in the Council's capital programme for future years because all procurement of vehicles is usually followed by sale and leaseback in the same financial year thereby releasing any capital provided. Table 6 in paragraph 4.15 above provides indicative capital requirements for future years. The amounts are based on like for like replacement at the end of normal useful life at last purchase price plus inflation.
- 7.12 Full details are set out in Appendix A.
- 7.13 Table 6 above shows the impact on the revenue budget of the projected capital expenditure for the next five years. This shows that, if we are able to secure similar lease terms for ULEVs to those for petrol and diesel vehicles and we are able to continue to pass on the increases in leasing costs for partner organisations to them through the SLA arrangements, then there is sufficient revenue budget up to 2022/23. Savings in other areas of the Fleet budget, e.g. repairs and maintenance, will be required from 2023/24 to support the inflationary effects on the capital cost of replacement vehicles for council departments.
- 7.14 Table 7 shows the additional capital and revenue cost if 25% of the replacement vehicles in future years are ULEVs. The figures assume that ULEVs will cost, on average, £6,579 more than the equivalent petrol or diesel versions. The projections show that £0.817m of additional capital expenditure will be required in the next 5 years. This will mean £0.134m additional revenue expenditure (to figures in Table 6). This will be offset by savings in operating costs or additional income from partners. So there should be not additional pressure on the revenue budget.
- 7.15 Additional capital expenditure will also be needed in future years to increase the number of charging points for electric vehicles to support the increasing size of the electric fleet.
- 7.16 Due to uncertainties around the profile of replacements in general and the changing position on ULEVs an update report should be presented annually to support the vehicle replacement plans for that and future years.

8 EMPLOYEE IMPLICATIONS

- 8.1 Employees from user departments will be consulted along with management throughout the procurement process to assist in drawing up new vehicle specifications and assessing the suitability of vehicles. Demonstrator vehicles will be sourced to assist them where possible.
- 8.2 Training for new vehicles, specifically ULEVs will be requested as part of the tender process for operators and technicians. The new vehicles will have significantly different technology to those they are replacing and to ensure that employees feel confident using and maintaining them and can do it safely without putting themselves or others at risk, sufficient training will be provided.
- 8.3 Older vehicles increase the pressure on drivers as there are less driver safety aids and are more difficult to drive; this increases the chance of a collision. Collisions in council vehicles not only have an adverse effect on the drivers mental health as they are potentially subject to investigation and disciplinary action but also affects their personal vehicle insurance premiums as they have to, by law be declared.

The risk of injury in collisions also has an impact on the absence rate of our employees, in turn impacting on service delivery.

- 8.4 Newer vehicles and ULEVs produce less carbon and particulate emissions – meaning that there is a reduction in risk to the operative’s health.
- 8.5 Collisions can also have an adverse effect on the councils Goods Vehicle Operators Licence and the named Transport Managers on the licence risk prosecution in this event. Barnsley Council could also see action against their licence up to total revocation, meaning that the council would not be able to operate a large quantity of its fleet, impacting on the number of drivers that it would require. Therefore it is imperative our vehicles are as safe as possible and properly maintained.

9 LEGAL IMPLICATIONS

- 9.1 No Implications

10 CUSTOMER AND DIGITAL IMPLICATIONS

- 10.1 The council’s livery is very distinctive in Barnsley and the vehicles are visible all over the borough, some of these vehicles drive down every street in the borough at least once a week. Greater consideration should be afforded to using vehicle sides to market the council’s key messages and priorities. It will be recommended that council departments routinely use this opportunity to promote the wider work of the council. The space could also be used to promote electric vehicles.

11 COMMUNICATIONS IMPLICATIONS

- 11.1 Communications are aware of the Vehicle Replacement Strategy and this report and will communicate as required. The increase in ULEVs could be used as a positive marketing message for the council.

12 CONSULTATIONS

- 12.1 Table 8 below gives details of all contributors to the report.

Table 8

Name	Position	Section(s) contributed to
Lee Taylor	Procurement and Compliance Officer	4
Chris Shields	Technical Officer (Pollution Control)	4, 5, 6
Adrian Hunt	Risk Governance & Insurance Manager	18
Helen Weldon	HR Business Partner	8
Victoria Halsall	Communications and Marketing Manager	11
Maq Ahmed	Strategic Finance Manager	4, 7
Paul Castle	Service Director – Environment and Transport	All

Lee Blake	Transport and Depot Manager (Berneslai Homes)	App 2
Diane Lee	Head of Public Health	16
Janine Beardsall	Manager Technical Support (NPS)	App 2

13 THE CORPORATE PLAN AND THE COUNCIL'S PERFORMANCE MANAGEMENT FRAMEWORK

13.1 No implications

14 PROMOTING EQUALITY, DIVERSITY AND SOCIAL INCLUSION

14.1 No implications

15 TACKLING THE IMPACT OF POVERTY

15.1 No implications

16 TACKLING HEALTH INEQUALITIES

16.1 In its recently published Clean Air Strategy, the Government recognises that air pollution is the top environmental risk to human health in the UK, and the fourth greatest threat to public health after cancer, heart disease and obesity. Locally, in 2017, Public Health England estimated that 3.8% of all deaths in Barnsley in those aged 30+ were attributable to fine particulate air pollution.

16.2 Health can be affected both by short-term, high-pollution episodes and by long-term exposure to lower levels of pollution.

16.3 Emissions from road transport have been acknowledged as a significant source of poor air quality in the Borough. Improving air quality is therefore important in addressing local health inequalities, and replacement of older vehicles with newer less polluting ones will assist in reducing emissions.

17 REDUCTION OF CRIME AND DISORDER

17.1 No implications

18 RISK MANAGEMENT ISSUES

18.1 All new vehicles will be insured by the council on the existing fleet policy.

18.2 Features will be included in the specifications for the new vehicles where possible that will significantly reduce the chance of an avoidable collision, some of which are detailed in paragraph 19.2.

18.3 The new vehicles will also feature anti-theft technology such as immobilisers, alarms and drive lock systems.

- 18.4 New vehicles will also all be fitted with telematics devices with the ability to track the location of the vehicle when it is driving, recording the last location it was parked and detect movement when the vehicle is not turned on should it be removed on a recovery vehicle.
- 18.5 Issues regarding the management of the Councils Operators licence and broader fleet risks are logged in the Operational Risk Register for Business Unit 6. The approval of this report and the subsequent investment in improvement vehicles will act as a significant mitigation against these risks.

19 HEALTH, SAFETY AND EMERGENCY RESILIENCE ISSUES

- 19.1 New vehicles bring modern safety standards such as increased protection for occupants in the event of a collision and are designed to be friendlier for pedestrians in the event they are involved in an altercation with the vehicle. The current fleet of vehicles are of an age where they are not of the same safety standard as the replacement vehicles
- 19.2 The new vehicle specifications will include all relevant safety features. The following are examples of safety features that would be included and are intended to keep the council employees that will be the vehicles safe, prevent collisions and protect other people that encounter our vehicles:
- a) Visual and Audible seatbelt warning
 - b) White sound reversing alarm
 - c) Front radar detection systems with driver warning and auto braking
 - d) Lane Departure warning
 - e) Rear radar detection systems with driver warning and auto braking
 - f) Colour 360 degree cameras, with recording capability and driver monitor
 - g) Reversing sensors
 - h) Front and rear beacons
 - i) ABS
 - j) Traction control systems
 - k) Emergency stop buttons
 - l) Work area lights
 - m) On board weighing
 - n) Manual handling aids
 - o) Load securing devices
- 19.3 Before vehicles are procured the Fleet team will liaise with the user departments to establish their needs and ensure that the specification will fulfil them safely. Demonstrator vehicles will be sourced if possible before purchasing when required.

20 COMPATIBILITY WITH THE EUROPEAN CONVENTION ON HUMAN RIGHTS

- 20.1 No implications

21 CONSERVATION OF BIODIVERSITY

- 21.1 No implications

22 GLOSSARY

ABS	Anti-Lock Braking System
DVSA	Driver and Vehicle Standards Agency
E-REV	Electric-Range Extended Vehicle
EV	Electric Vehicle
PHEV	Plug-in Hybrid Electric Vehicle
ULEV	Ultra-Low Emissions Vehicle

Table 8

23 LIST OF APPENDICES

Appendix A: Financial Implications

Appendix B: List of vehicles to be replaced

Appendix C: EIA

24 BACKGROUND PAPERS

Fleet Vehicle Replacement Report (Cab.13.6.2018/14)

Vehicle Replacement Strategy (Cab.20.2.2019/10)

If you would like to inspect background papers for this report, please email governance@barnsley.gov.uk so that appropriate arrangements can be made

Report author: Jacob Finney