Report To:

EXECUTIVE CABINET

Date:

24 October 2018

Executive Member / Reporting Officer:

Councillor Allison Gwynne – Executive Member, Neighbourhoods Emma Varnam – Assistant Director, Operations and Neighbourhoods

Subject:

STRATEGIC TRANSPORT REVIEW - REPLACEMENT OF COUNCIL FLEET VEHICLES

Report Summary:

The Council currently operates a varied fleet of 164 vehicles of varying types from vans to refuse vehicles to provide its numerous services to the residents of the Borough.

Reports for the replacement of the fleet 2012, 2015 and 2016 (ratified at full council January 2017) have been approved. There are now 16 vehicles remaining that require replacing, these vehicles were kept on fleet for an additional 1-2 years past their original replacement due dates due to condition and mileage. Two of the vehicle are provided under contract hire arrangements due to expire during 2018

It is now essential to the continued operation of services that the remaining 16 vehicles are replaced.

This report sets out the business case for the replacement of these vehicles and identifies the requirement for the Council to have in place a Strategic Fleet Replacement Strategy to ensure that the Council can continue to deliver operational services directly

The report also recommends that 9 of the 16 vehicles are replaced with ULEV (Ultra Low Emission Vehicles), namely electric vehicles together with associated charging facilities

The options presented in this report represent the best value way of meeting the Council's needs and achieving a variety of options of savings available, whilst maintaining the operational efficiency of services.

Recommendations:

- (i) The authorisation for Transport Services to procure 14 of the 16 vehicles identified in the report via a competitive EU tendering process, replacing 9 diesel engine small vans with ULEV (Ultra Low Emission Vehicles) electric vans.
- (ii) The procurement of the necessary electric charging facilities as part of the fleet replacement exercise as set out in Section 4.5, Table 5 of this report.
- (iii) It is recommended that approval is granted for the purchase of the 14 vehicles detailed in the main body of the report to be purchased via an ear-marked reserve, and to tender for a new contract hire arrangement for the 2 vehicles remaining.
- (iv) A further report detailing a Medium Term Strategic Fleet Replacement Strategy is prepared for presentation to the Executive Cabinet.

Links to Community Strategy:

The purchase of the vehicles will enable the Council to continue to provide its services to the Citizens of the Borough

Policy Implications:

The purchase of the vehicles is an essential requirement for the Council to provide services to the community in a safe manner in line with its obligations as an operator of large goods vehicles.

Financial Implications:

(Authorised by the Section 151 Officer)

There is a financial appraisal of an electric vehicle versus a diesel vehicle, over a 5 year period, in **Table 1** of this report. The procurement of an electric vehicle is the favourable option in terms of value for money. The total cost of ownership comparison in the financial appraisal is:

- Electric vehicle £14,110
- Diesel vehicle £15,546

Cost to the Council

After factoring in the residual vehicle values into the financial assessment it is considered that the use of a Council ear-marked reserve represents best value, resulting in the total cost to the Council for replacing the 16 vehicles and charging points being:

- £240,834 capital cost for the purchase of 14 vehicles
- £19,280 capital cost for the purchase of the charging points.
- £56,000 revenue costs for the contract hire of 2 minibuses
- £316,114 total estimated cost to the Council as listed in Appendix 2

Cost to the Services

- The 16 vehicles listed in this report support the operations a listed in **Appendix 1**
- The 16 charging point locations are detailed in Table 3 of this report

The estimated annual cost to Services is £85,205; details are included in **Appendix 3**

Legal Implications:

(Authorised by the Borough Solicitor)

The purchase process will need to comply with the Council's Procurement Standing Orders and the Procurement Regulations and Local Government Transparency Code.

Risk Management:

Set out in the report - see Section 7.

Access to Information:

The background papers can be obtained from the authors of the report.

Alan Jackson, Head of Highways and Transport

Telephone: 0161 342 2818

e-mail: alan.jackson@tameside.gov.uk

Mark Ellison, Transport Services – Group Engineering Manager

Telephone: 0161 342 2758

e-mail: mark.ellison@tameside.gov.uk

1. BACKGROUND

Council Fleet

- 1.1 The Council operates a large and varied fleet of vehicles and equipment to enable it to provide core services to the citizens of the Borough. Through the works of the Strategic and Operational Transport Group, the Transport Fleet has reduced by 25.4% from 220 vehicles to 164 since 2011. The fleet is made up of vehicles of mixed ages and types, on an agreed programme of annual replacements.
- 1.2 Reports for the replacement of the fleet 2012, 2015, 2016 and 2017 have previously been approved. There are now 16 vehicles remaining that require replacing, these vehicles were kept on fleet for an additional 1-2 years past their original replacement due dates due to condition and mileage. Two of the vehicles are provided under contract hire arrangements due to expire July 2018
- 1.3 Of the 164 vehicles there are now 16 in urgent need of replacement after having their operational lives extended by a further two years, or their contract hire arrangement is due to expire.
- 1.4 This report details the business case for the replacement of the 16 fleet vehicles to support the delivery of Council services and in the future these will be included in the strategic overview identified below.
- 1.5 It is not practical or advisable to extend the period of ownership of these vehicles further due to increased maintenance cost, reliability issues (resulting in increased operational downtime and costs) and safety issues.

2 COUNCIL SERVICE PROVISION - STRATEGIC FLEET REPLACEMENT STRATEGY

- 2.1 In the identification of the Council's Fleet requirements consideration must be given to many factors. Fleet vehicles support the provision of both direct operational services to the public (for example refuse collection vehicles) and also support services (vans for IT support to out-stations).
- 2.2 Transport Services has discussed and continually challenges operational services managers to identify fleet savings. All of the vehicles listed for the replacement in this report have been identified by the managers of the service areas as essential for the operation of these services and equally as important, within funding envelopes to pay back the purchasing costs paid for via a Council ear-marked reserve.
- 2.3 Moving forward it is essential that the Council has a strategic framework for its continued fleet replacement programme.
- 2.4 As the final elements of the current replacement programme are now dealt with in this report, it is therefore recommended that a Strategic Fleet Replacement Strategy is prepared and submitted to Executive Cabinet for approval to ensure continued delivery of Council Services is supported.

3. COUNCIL FLEET, AIR QUALITY and ULEV (Ultra Low Emission Vehicles)

3.1 In light of the government's statement to ban the sale of diesel cars from 2040 and the current failings of UK cities to meet its air quality targets, it is prudent for the Council to consider this in its future fleet replacement programme.

3.2 The Greater Manchester Combined Authority (GMCA) together with the GM Mayor have produced an Air Quality Action Plan as part of the GM Strategy in order to meet Air Quality targets.

4. COUNCIL FLEET - ELECTRIC VEHCLES or DIESEL

4.1 In 2015 the Council purchased a fully electric Peugeot Partner Van in anticipation of this fleet replacement programme. The vehicle was trialled by all services that operate small commercial vans, all services tested the electric van and reported real benefits. However, it was only operationally viable for the following service areas

•	Operations and Neighbourhoods-Pest Control	3 vehicles
•	Operations and Neighbourhoods-Libraries	2 vehicles
•	Digital Tameside ICT	1 vehicle
•	Operations and Neighbourhoods- Engineering Operations	1 vehicle
•	Governance and Pensions – Distribution/Messenger Services	2 vehicles

- 4.2 All services agreed in principle to having the vehicle replaced with electric vehicles. However, the main reservation was the availability of charging points.
- 4.3 The table below outlines the financial business case for the procurement of electric vans compared with the diesel equivalent. As indicated in Table 1 there is a financial business case over 5 years for the purchase of electric vehicles however the main justification will be the environmental benefits to carbon reduction, air quality and noise emissions.

Table 1: - Electric Vehicle vs Diesel Financial Appraisal

	Electric Option Partner SE L1	Diesel Option Partner L1 BlueHDI 100 850kg
Basic Price	£22,550.00	£15,990.00
Total (Dealer) Discount:	15.5%	45.5%
Discounted price:	£19,054.75	£8,714.55
Plug-In Van Grant*	£4,573.14	* Not Available
Effective Purchase Price	£14,481.61	£8,714.55
Delivery & number plates	£507.50	£507.50
Vehicle Excise Duty	£0.00	£240.00
First Registration Fee	£55.00	£55.00
Total OTR Costs	£562.50	£802.50
Initial Capital Investment	£15,055.11	£9,517.05
Ongoing revenue Costs:		
Lifetime estimated fuel cost	£1,718.75	£6,492.07
Road Fund Licence (Years 2-5)	£0.00	£960.00
Maintenance (5 Years)	£1,346.88	£2,201.56
Total Revenue Costs	£3,065.63	£9,653.63
Cost of Ownership over 5 years	£18,109.74	£19,170.69
Residual Value 4 years	£4,000.00	£3,625.00
Total Cost of Ownership	£14,109.74	£15,545.69

- **Note** The business case above is indicative only, prices and costs will fluctuate with market forces, also vehicle usage, prices are quotations outside of tender, a possible reduction in purchase price may be achieved following competitive tendering process.
- 4.4 In addition, the private sector looks to local authorities to be setting the scene for how services can be delivered using alternative means of propulsion, e.g. electric and hybrids. Options available on the market currently are limited but consist of those detailed below in Table 2.

Table 2 – Vehicle Propulsion Options

Fuel Type	Benefits	Limitations/Disadvantages
Petrol	Cleaner than diesel but still a fossil fuel	Still contributes to CO ₂ and negative air quality. Not currently available in commercial vehicles of 3.5ton and above
Diesel	Better fuel efficiency / lower overall fuel costs due to increased MPG than petrol	Higher harmful emission content PM and NOX. Limited future availability. Government intention to cease sale by 2040 Higher maintenance costs. Generally higher road tax than petrol
LPG (Liquid Petroleum Gas) /Petrol Hybrid	Lower emission content CO ₂ / PM and NOX Lower fuel costs due to lower fuel duty Lower road tax Duel fuel capability.	Limited refuelling availability. Smaller fuel tanks so less miles per fill up Less fuel efficient. High conversion costs.
CNG (Compressed Natural Gas)	Lower fuel costs. Lower emission content than petrol/diesel or LPG Abundant availability of resources (but limited geographically) Hybrid availability Lower road tax	Inadequate refuelling infrastructure in place at present Fuel efficiency is poor - less MPG than petrol or diesel More expensive to convert.
Electric	Zero based road tax Zero emissions so zero harmful content Less noise emissions Quieter with better driver ride comfort Recharging can be done from any 240v outlet Fast charge capability from designated charging points Cheaper to operate or run	Higher initial costs Limited recharging infrastructure limited range Takers longer to refuel Charge 30 minutes to 8 hours Limited choice, not all commercial vehicle types available at present.

4.5 Based on the financial appraisal, analysis of the benefits and advantages/disadvantages of current fleet availability, it is therefore recommended that the Council procures electric vehicles to replace the current 9 diesel vans.

5. ELECTRIC CHARGING POINTS

5.1 An additional piece of work to identify requirements for the procurement and installation of required charging points is detailed below, with Table 3 below indicating numbers of points and locations required.

Table 3: Number of Charging Points Required

Service Area	Operational Location of Service	Charge points required
Operations & Neighbourhoods Pest Control	Dukinfield Cemetery/Crematorium	3
Operations & Neighbourhoods Libraries	Stalybridge Civic Hall	2
Digital Tameside ICT	To run operations from Tame Street	1
Operations & Neighbourhoods Engineering Operations	Tame Street Engineering DSO	2
Governance and Pensions Distribution/Messenger	To run operations from Tame Street	2
All Operations	All operations that require charging points may use proposed charging facilities at Transport Services-Tame Street	6

- 5.2 The intention to create charge points at Tame Street to support all services and future services that will operate the 9 electric vehicles for this replacement programme and to future proof for future replacement programmes.
- 5.3 It is envisaged that a total of 16 charging points will be required as a minimum.
- 5.4 It is recommended that 9 of the 16 vehicles, currently Peugeot Partner Vans (Small Car Derived vans) are replaced with 9 ULEV / fully electric vans.
- 5.5 The services operating the vehicles have been consulted and can operate their services using electric vans.
- 5.6 The Council has researched the availability of framework contracts and costs of electric charging points with TfGM and currently no framework is in existence.
- 5.7 The Council would require charging points to be installed at four locations, with numbers of individual chargers as specified in Table 3 above.
- 5.8 The basic requirements of a charging facility would include:
 - Fast Charging
 - Universal vehicle charging
 - Ability to limit access to charging
 - Identification of power usage per vehicle
 - Vehicle performance information for the Transport Manager
 - Built-in diagnostics to show any issues with charging
 - Intelligent charging to ensure supply is not undermined.
- 5.9 The basic requirement to introduce a charging facility is the availability of a three phase 22kW supply.
- 5.10 The estimated costs associated with the installation of 16 charging units at four locations are detailed in Table 4 below.

Table 4: Charging Point Installation Costs

Item	Cost per Item (£)	Number Required	Total Cost
Power Supply	2,000.00	4	8,000.00
Control Hub	660.00	4	2,640.00
Charging Units	840.00	16	13,440.00
Less Grant	- 300.00	16	- 4,800.00
		Total	19,280.00

- 5.11 These estimated costs are based on the Engineering Services Street Lighting team installing the electricity supplies and the purchase of the charging equipment with a three year parts and servicing warranty.
- 5.12 In addition a central government grant from the Office of Low Emission Vehicles (OLEV) is currently available for up to 20 charging units and this is reflected in the table above.
- 5.13 It is, therefore, recommended that given the lack of availability of a suitable framework contract, the Council should commit to the investment in these charging points.

6 FINANCIAL CONSIDERATIONS

Historical Perspective

- 6.1 Consideration in the past for the makeup of the Council's fleet has been based on the requirements of service areas.
- 6.2 The Council has recently moved away from the more expensive option of lease hire to direct purchase via Prudential borrowing, resulting in significant savings to the Council.

Estimated Replacement Costs for Identified Vehicles

- 6.3 To replace the vehicles identified in **Appendix 1**, it is expected to cost the authority as per the breakdown below
 - Purchase costs: 14 vehicles = £240,834
 - Two minibuses replaced via new contract hire arrangements
- 6.4 The purchase costs are taken from previous procurement 2017 and manufacturer quotations outside of a competitive tendering exercise.
- 6.5 It is anticipated that a reduction on these prices could be achieved through the tender process. However, the opposite must also be considered as manufacturing costs increase.
- 6.6 It is anticipated based on the prices above (as best as can be determined outside of a formal tender) that the actual cost to the Council will be as per **Appendix 2**.

Note:

The vehicles will have an operational life of 8 years with the exception of the ULEV Vans an anticipated life of 5 years has been applied to these vehicles. The borrowing / lease periods are designed to match operational lives of the vehicles and equipment.

6.7 The estimated cost of the installation of 16 charging points in locations detailed in Table 4 is £19,280.

Procurement

6.8 **Council Ear-marked Reserve** – The Council has a capital reserve available, which may be utilised for such purchases and the charges to service areas would include repayment to reserve either at cost or including a similar percentage to current borrowing rates.

Financial Summary - Costs to the Authority

- 6.9 After factoring in the residual vehicle values into the financial assessment it is considered that the use of a Council ear-marked reserve represents best value, resulting in the total cost to the Council for replacing the 16 vehicles and charging points being:
 - £240,834 capital cost for the purchase of 14 vehicles
 - £19,280 capital cost for the purchase of the charging points.
 - £56,000 revenue costs for the contract hire of 2 minibuses
 - £316,114 Total estimated cost to the Authority as listed in Appendix 2.
- 6.10 There is an expected residual value attached to the vehicles/equipment at the end of their operational lives of 4, 5 or 8 years. This value is anticipated to be circa £31,175. The receipts for the vehicles and equipment when sold will go to offset the purchase of future fleet replacements.

Cost to Services

- 6.11 The 16 vehicles listed in this report support the operations as listed in **Appendix 1.**
- 6.12 The 16 charging point locations are detailed in Table 3 of this report.
- 6.13 The estimated annual cost to Services is £85,205; details are included in **Appendix 3**.

7. Risk Management

The main risks associated with this decision are as follows:

Implications of Not Replacing Fleet Vehicles

- 7.1 Any extensions to the fleet age profile would put additional burden on maintenance provision; this would still result in increased vehicle down time.
- 7.2 As vehicle ages harmful emissions increase with engine wear further increasing air quality risks
- 7.3 Additional financial provision for short term replacement would be required.
- 7.4 Two of the vehicle on contract hire (adult services buses) will be out of contract and operating in contravention of Procurement Standing Orders.

Impact on Vehicle Availability and Maintenance

- 7.5 As vehicle lives are extended and worked harder, there will be an increase in breakdowns and additional off-road time for maintenance.
- 7.6 Vehicle down-time results in loss of productivity and efficiency of the workforce.
- 7.7 The increased vehicle downtime would inevitably lead to an increase in the use of short term rental vehicles to supplement the increase vehicle downtime this would come at a significant financial cost.
- 7.8 Although it is anticipated that improved prices will be achieved through the tender process it is not guaranteed and market forces may result in an increase purchase costs against the original quotes.

- 7.9 Further service reviews may identify a need to reduce overall their vehicle demand, and return one or more of the vehicles before the end of the borrowing /lease period. In this event, the service area may be subject to early return costs. These costs will be met by that service and will be calculated using the following process: The item returned early will be sold with the receipts of the sale going to offset the outstanding borrowing, the short fall (if any) will be recharged to the service returning the vehicle.
- 7.10 Residual values may not be realised as expected due to market conditions at the time of sale.
- 7.11 It is essential that a decision on this report is progressed quickly to allow build slots to be obtained as soon as possible as lead times for ULEV vehicles is high and if we are to continue to provide services the existing fleet cannot be relied up to support services indefinitely.
- 7.12 If authorisation to replace the 16 vehicles contained within this report is not given then
 - If the Council decides to extend vehicle usage, again this would be against the advice
 of Transport Services as resources to maintain a fleet of this age is not available and
 its performance in delivering services would be significantly reduced
 - As vehicles lives are extended and worked harder, there will be a significant increase in breakdowns and additional off-road time for maintenance.
 - As vehicles lives are extended and engines wear, there will be a significant increase in harmful emissions.
 - Vehicle down-time results in loss of productivity and efficiency of the workforce.
 - Additional financial provision for short term replacement vehicles would be required.
- 7.13 The Council needs to consider its current plans for the delivery of operational services. To protect the Council, should any services be provided by an external supplier, provision should be made with the supplier to utilise any Council owned fleet to deliver services.
- 7.13 A summary of the risks, impact and mitigating factors are included in **Table 8**, below, divided into two categories, replacing or not replacing the fleet.

Table 8 : Risk Summary

Risk	Impact	Mitigating Actions	Outcome
Replacing Fleet			
Price increases	Additional Costs	Procurement processes	Subject to market forces
Reduction in Services	Possible fleet surplus	New Fleet – higher residual value	Risk minimised
Stopping of Services	Possible fleet surplus	New Fleet – higher residual value	Risk minimised
Service Provided by third party	Possible fleet surplus	Include in arrangements with provider to utilise Council Fleet	Risk minimised
Residual values	Cost shortfall	Subject to market forces	Still provides Council with cost effective option for fleet replacement
Delivery Times	Service delivery / safety	Early decision	Urgent action required
Not Replacing Fleet	•		
Impact on Service Delivery	Downtime / inefficiencies	Replace fleet	New Fleet
Impact on Air Quality	Increase in harmful emissions	Replace engines/ or fleet item	New Fleet
All vehicles require replacement next year	Cost/ safety	Replace fleet	New Fleet
Compliance with	2 x vehicle out of	Replace under short	Temporary solution only
Procurement Standing	contract under hire	term hire framework	short term hire can be
orders	agreement	contract	used from 1 day to 1 year.
Increased costs	Increased costs	Replace fleet	New Fleet
Servicing / Repairs	Servicing / Repairs		
Downtime	Downtime		
Replacement hires	Replacement hires		
Staff time	Staff time		

8 ADDITIONAL CONSIDERATIONS

Environmental Issues

- 8.1 9 of the 16 vehicles can be replaced with ULEV vehicle with zero emissions and no negative air quality impact.
- 8.2 Current fleet has an average age of almost 8½ years and operates on Euro 3 and 4 type engines. (Current requirement is Euro 6)
- 8.3 A replacement fleet would operate on Euro 6 engines. These would provide both improved fuel efficiency and a reduction in harmful emissions and improved air quality.

9 RECOMMENDATIONS

9.1 As set out at the front of the report.

APPENDIX 1

Items of Fleet Reaching End of Operational Life 2018/19

	Numbers	Age	Optimum Operational	
Vehicle Type	Required	2018/19	Life	General Duties
Peugeot Boxer 12 Seat			N/A Contract	Learning Disabilities
Minibus	2	3	Hire	Transport
3.5T Luton Box Van T/L	1	8	8	Grounds Maintenance
Peugeot Partner SL1				
1.6HDI	3	8	5	Pest Control
Peugeot Partner SL1				
1.6HDI	2	8	5	Mail Delivery
Peugeot Partner SL1				
1.6HDI	1	8	5	IT Services
Peugeot Partner SL1				
1.6HDI	1	8	5	Site Supervision
Ford Transit 280 swb				House Bound Library
115ps	1	9	8	Provision
Peugeot Partner SL1				House Bound Library
1.6HDI	2	8	5	Provision
Ransome HR300T Out				
front 60/62inch rotary Ride				
on mower	3	4	4	Grounds Maintenance

APPENDIX 2

Cost Summary

Vehicle Type	Service Area	Est Costs	Borrowing	Total
3.5T Luton Box Van T/L	Operations and Neighbourhoods	£25,500.00		
Peugeot Partner SE L1	Operations and Neighbourhoods	£14,481.61		
Peugeot Partner SE L1	Operations and Neighbourhoods	£14,481.61		
Peugeot Partner SE L1	Operations and Neighbourhoods	£14,481.61		
Peugeot Partner SE L1	Messenger Services	£14,481.61		
Peugeot Partner SE L1	Messenger Services	£14,481.61		
Peugeot Partner SE L1	IT Services	£14,481.61		
Peugeot Partner SE L1	Operations and Neighbourhoods	£14,481.61		
Ford Transit 280 swb 115ps	Leisure Services	£22,000.00		
Peugeot Partner SE L1	Leisure Services	£14,481.61		
Peugeot Partner SE L1	Leisure Services	£14,481.61		
Ransome HR300T Out front 60/62inch rotary Ride on mower	Operations and Neighbourhoods	£21,000.00		
Ransome HR300T Out front 60/62inch rotary Ride on mower	Operations and Neighbourhoods	£21,000.00		
Ransome HR300T Out front 60/62inch rotary Ride on mower	Operations and Neighbourhoods	£21,000.00		
Total cost for 14 vehicles		£240.834.49		
Total cost for 16 Charging	Points	£19,280.00		
Total Capital Investment		£260,114.00		
Peugeot Boxer 12 Seat Minibus	Adult Services	£28,000.00		
Peugeot Boxer 12 Seat Minibus	Adult Services	£28,000.00		
	vehicles procured under a hire agreement	£56,000.00		
	Total	£316,114.90		

APPENDIX 3

Estimated Cost to Services

		New Annual Rental Costs
Vehicle Type	Service Area	2018
Peugeot Boxer 12 Seat Minibus	Adult Services	£11,853.29
Peugeot Boxer 12 Seat Minibus	Adult Services	£11,853.29
3.5T Luton Box Van T/L	Operations and Neighbourhoods	£5,800.66
Peugeot Partner SE L1	Operations and Neighbourhoods	£4,402.10
Peugeot Partner SE L1	Operations and Neighbourhoods	£4,402.10
Peugeot Partner SE L1	Operations and Neighbourhoods	£4,402.10
Peugeot Partner SE L1	Messenger Services	£3,021.44
Peugeot Partner SE L1	Messenger Services	£3,021.44
Peugeot Partner SE L1	IT Services	£4,402.10
Peugeot Partner SE L1	Operations and Neighbourhoods	£4,402.10
Ford Transit 280 swb 115ps	Leisure Services	£8,190.23
Peugeot Partner SE L1	Leisure Services	£4,402.10
Peugeot Partner SE L1	Leisure Services	£4,402.10
Ransome HR300T Out front		
60/62inch rotary Ride on mower	Operations and Neighbourhoods	£3,550.03
Ransome HR300T Out front		
60/62inch rotary Ride on mower	Operations and Neighbourhoods	£3,550.03
Ransome HR300T Out front		
60/62inch rotary Ride on mower	Operations and Neighbourhoods	£3,550.03
	Total	£85,205.15