

COMMUNITIES AND PLACE OVERVIEW AND SCRUTINY COMMITTEE

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OVERVIEW OF THE FLEET REPLACEMENT PROGRAMME IN 2020/2021

Report of: Interim Executive Director of Place and Regeneration, Rick O'Farrell

Cabinet Member: Councillor John Riddle, Local Services

Purpose of report

To provide an overview with the delivery of the Council's fleet replacement programme in 2020/2021 and an update on the progress made in current financial year 2021/2022.

Recommendations

To note the work undertaken to deliver a challenging fleet replacement programme during this period.

Link to Corporate Plan

The Fleet Replacement Programme is relevant to the following themes in the corporate plan:-

'Enjoying - We want you to love where you live'

'Connecting - We want you to have access to the things you need'

The allocation of capital funding to support a rolling fleet replacement programme is essential to ensure that key front-line services have reliable, cost effective and modern vehicles and equipment to enable them to deliver services to individuals and communities across the County. An effective, modern and well managed vehicle fleet also ensures that the council minimises the impact that its transport activities have on the environment, makes a positive contribution to tackling climate change and that it keeps pace with innovation and best practice.

Overview of 2020/2021 Programme

Key issues

1. It is essential that the Council delivers its fleet replacement programme in a timely manner that meets service requirements, whilst also ensuring that there is a robust challenge over service need, harmonising vehicle specifications and delivering value for money through effective procurement arrangements.

2. The process for undertaking the replacement of vehicles has been established for several years with clearly documented responsibilities assigned for each stage of the process and robust governance arrangements put in place to regularly monitor and review progress. The process ensures that services are robustly challenged over both the need for replacement vehicles and the specification of the vehicle (so that there is a greater degree of standardisation across the fleet).

3. When developing the programme, consideration is given to the service department's needs over the timing of replacement vehicles, the time required to undertake the procurement exercise and manufacturers' build times once orders are placed. This means that Fleet staff must look across both the current and future years replacement programmes so that service critical/long lead-in time vehicles are given priority.

4. There are always challenges in fulfilling the need to replace such a wide range of vehicles and plant due to transport industry changes, new legislation, and current new vehicle demand outstripping supply from manufacturers. These hurdles have always required careful consideration; however, the programme was impacted hugely by the pandemic and to a lesser degree the uncertainty with Brexit during 2020/21. These impacts can be summarised as follows:-
 - Vehicles expected to be delivered in the first quarter were delayed, with some taking a further 6-9 months to secure delivery due to the closure of body conversion companies and furloughed workforces.

- Commercial dealerships and associated supply chains closed or had reduced ability to advise on quotations.
 - Deliveries of vehicles ceased entirely during the full lockdown periods
 - Any conversions or adaptations to the base vehicle requiring involvement of the manufacturer and external body shops suffered delays, as not all decisions could be made remotely and some businesses were closed or had furloughed sales / technical staff.
 - Manufacturers were reluctant to confirm prices until the impact of Brexit was known. As some vehicles have over a 12-month lead and build time, purchase orders needed to be raised in 2019/2020 for vehicle requirements in 2020/2021. Fleet encountered delays with supplier quotations late in 2019 leading up to Brexit in Jan 2020.
5. The uncertainty of vehicle delivery times has reinforced the decision to finance vehicle purchases on the capital programme, with these financing arrangements being kept under regular review to ensure value for money is being secured. The alternative method of 3rd party Finance or Operating Leases would have resulted in renegotiation of extension rentals on the agreed return dates at potentially increased costs. The complete ownership and the flexibility to decide when to sell these assets has proven to be highly beneficial when responding to the difficulties being faced as a result of the Covid-19 pandemic and Brexit. Resale values have also achieved far more than estimated residual values, as the second-hand market is buoyant due to reduced new vehicle production, providing the council with extra income from auction sales.
 6. The council has committed to a 'net zero' target for carbon emissions by 2030 and has also pledged an earlier 50% reduction in emissions by 2025. Taking this policy into consideration, Fleet have acted now to adopt EV technology within the programme to assist and contribute towards achieving these climate change targets. We have engaged with the Energy Saving Trust to provide an independent Green Fleet Review (GFR) which has researched the feasibility of EV's and has now confirmed EV's as a viable fleet option for some of the council's fleet. This is due to advancements in EV technology, such as the distances that an EV is capable of travelling between recharges, thus negating any range anxiety. Additionally, these types of EV's are now perceived as being financially accessible as EV prices are lower than what they were in previous years and have added life cycle cost benefits, such as lower on-going maintenance, fuel (electricity) costs and savings on vehicle excise duty.
 7. The 2020/21 programme included the replacement of a substantial proportion of the total small van fleet. Manufacturers can now offer several options in this vehicle sector to move from diesel engines to an electric vehicle, payloads, journey history and overnight parking have been assessed during this process.

This identified 47 EV vans which were ordered, 7 are delivered and in service with the remaining 40 due in 2021/22. An electric charging infrastructure has been assessed and implemented at depots and sites where these vehicles park overnight to support the switch to fleet EV vehicles.

8. The delivery of the fleet replacement programme is always challenging but in 2020/21 this proved to be difficult. The high number of vehicles scheduled for replacement; the items carried forward from 2019/20 together with the Covid-19 restrictions resulted in vehicles worth ~£3m that were ordered with suppliers but remained undelivered by the 31st March 2021.
9. This year's fleet replacement programme also included a significant number of light commercial vehicles, such as Ford Transit size vehicles (166) with various body configurations (tippers, caged bodies and panel vans). Early assessment of these type of vehicles identified 18 service critical vehicles requiring prompt replacement. In response to this, Fleet secured stock and these were delivered and are now in service. In addition, the new Euro6 engines and heavier components required to meet the new standards has reduced the expected payload (the weight) this category of vehicle can carry. This reduced payload issue has been identified by the Fleet Team as a significant concern, as in some cases this may result in the vehicle being overloaded after essential tools and materials are carried. Further dialogue with service departments is being undertaken to ensure replacement vehicles are fit for purpose. Consideration on moving this size of vehicle to EV was another factor in delaying the purchases and this is detailed later in this report.
10. In order to allow service departments time to undertake a review of their requirements/working arrangements a decision has been taken to delay the replacement of the remaining 148 light commercial vehicles until a full review and an impact assessment has been carried out to identify the increased costs of training, maintenance, driver management and the potential to operate EV models, as some of these vehicles may also be suitable for replacement with electric or hybrid models. This review is currently on-going.
11. It is noted that all 'service critical' replacement vehicles were delivered with no affect to service delivery.
12. A budget summary for 2020-21 & 2021-22 is shown in table 1 below.

Table 1

Description	2020-2021 £	2021-2022 £
Approved within MTFP	6,191,750	7,931,853
Reprofiling from previous year	2,709,733	2,199,243

Total Available Budget	8,901,483	10,131,096
Mid-year Review reprofiling and reflected in 2021-22 MTFP	(1,500,000)	
Revised Budget	7,401,483	10,131,096
Actual Expenditure/Forecast Expenditure	5,202,240	8,000,000
Additional Reprofiling at 31st March 2021	(2,199,243)	
Forecast Reprofiling at 31st March 2022		(2,131,096)

Background

With lead and delivery times increasing year on year on all vehicle types causing a backlog of items carried over from 2019/20 period there were 380 items were originally listed on the programme to replace. This is 52% of the current fleet size of 723, in addition to this a further 29 vehicles at a cost of £664.6k were added to the programme. Service reviews and challenging the need for vehicles has resulted in 18 vehicles or items of plant being removed from the programme with a saving of ~£897k.

The final vehicle count was 391.

The additional items included:

- A new specialist Chipping Spreader Paving Machine (£187k) for road resurfacing to support the Highways Capital Programme reducing the requirement to hire externally at a much higher rate and thus offering an 'invest to save' opportunity.
- 4 x 4.7ton Caged Tippers (£117k) for Neighbourhood Services.
- Various agricultural and horticultural machinery.
- A Ford Custom Diesel Hybrid Van for Highways Network Inspectors. Start, stop and moving over short distances is ideal for use of battery powered vehicles.
- A track powered Wood Chipper to access rough terrain.

The Fleet Team have also had to prioritise work relating to some time critical replacement of vehicles identified on the 2021/22 replacement program and in particular Gully Emptiers, Gritters, Refuse Trucks and Traffic Management Vehicles. The procurement timescales and build times for this type of vehicle exceed 12 months and orders had to be placed early enough to ensure delivery timescales did not adversely affect front line services. Member forums and consultation with procurement frameworks such as NEPO and TPPL, together with suppliers and manufacturers, have taken place to stress the importance of transparent delivery times. This has resulted in the process for ordering vehicles starting up to 18mths before a desired delivery date.

The original capital budget for 2020-21 was £8,901,483. Following a mid-year review of the programme £1,500,000 was identified as being required to be reprofiled into 2021-22 resulting in a revised budget of £7,401,483 (summarised in Table 1).

Budget: £7,401,483

a) Actual Expenditure incurred (up to 31st March 2021): £5,202m

122 Vehicles have been delivered to fleet users. Service critical vehicles were prioritised on the programme to ensure there was no impact to front line delivery including:

- 10 Refuse Trucks
- 7 x Caged Tipper Vehicles
- 4 x 18ton Gritters with quick release tipper bodies for dual use (summer - highways maintenance; winter – salting)
- 13 Ride on Mowers
- 2 x Pavement Sweepers
- 12 x Tipper Vehicles for road maintenance and street cleansing

b) Vehicles Ordered with Suppliers: £3.053m

There were 83 vehicles ordered with suppliers that did not get delivered before 31st March 2021.

These vehicles include:

- 4 x 18ton Gully Emptiers
- 4 x Traffic Management Vehicles with crash cushions and low platform floors
- 4 x Refuse Trucks – delayed by 1 month but delivered in April 21
- 36 x various sized Tipper Vehicles
- 23 x Electric Vans - revised delivery in June 2021
- 3 x Ranger 4x4 vehicles
- Various grounds maintenance equipment

c) Vehicles with Procurement: ~ £0.591m

Items and specifications for 17 vehicles agreed with fleet users, the Procurement Team are in the process of procuring these from suppliers and awarding contracts.

- 12 x Nissan ev200 Electric Vans
- 2 x 26ton with 2 Quick Release Bodies for Winter Gritting and Bitumen Tankers for the summer Surface Dressing Programme in 2022

- 1 x 18ton Chassis with a Bitumen Hotbox for road maintenance
- 1 x Medium sized tractor and loader for Neighbourhood Services
- 1 x Panel van – possible EV or Hybrid for Waste Services

d) Vehicles In Progress: ~£2.0m

Fleet are finalising 53 vehicle specifications with service users, manufacturers and body convertors.

They include:

- Ride On Mowers for the commencement of grass cutting in March 2022.
- 15 x 3.5ton Tippers with various cab options
- 6 x Compact Pavement Sweepers

e) Rescheduled Replacements: ~£2.199m

This figure is the budget to replace 117 vehicles that could not be delivered before the 31st March 2021 due to:

- Electric Vehicle Review
- Weight capacity review
- Uncertainties within the service
- Utilisation reviews.
- The scheduled replacement date being moved forward to the next financial year following vehicle condition assessment.
- Manufacturer build and lead times resulting in delivery after 31st March 2021.

Progress/Key Issues with the current 2021/2022 Programme

Key Issues

- Delivery and lead times for all vehicles and plant are increasing due to the worldwide shortage of semi-conductors. A typical commercial vehicle can have up 1,000 electronic components and major manufacturers have had to reduce capacity in 2021, this is expected to continue well into 2022.
- The continued roll out of EV vehicles and depot EVCP infrastructure to support this has identified constraints around cost / availability / operational limitations of EV replacements for larger vehicles and barriers around upgrading depot electricity supply capacity for larger vehicle EVCP. All manufacturers of light commercial vehicles are expanding the choice and developing increased range capacity on larger Transit sized vans. Over the next 12-24mths it is expected suppliers will be better equipped to supply vehicles that match our requirements, so consideration is needed on charging infrastructure and an increase to the

Fleet Replacement Programme capital budget when setting the Council's MTFP in February 2022 in order to meet these needs.

The chart below provides by vehicle type an estimate of the current capital costs required to increase the number of EV's on the fleet over the MTFP and further. Comparisons are indicative only and the purchase price gap between diesel & EV is expected to reduce as technology improves and market demand increases. A more detailed review will be undertaken as part of the Council's budget setting process for February 2022, to include both the increase in capital costs for the fleet replacement programme as well as seeking to identify any reductions in revenue costs associated with the operation of EVs (savings on fuel, road fund licence and maintenance costs) and the contribution this capital investment would make towards reducing the Council's carbon footprint.

Table 2: Estimation of Additional Capital Cost for EV Fleet Replacements in 2022/23 and beyond.

	Electric £	Diesel £	+ Price Variance £	Number in Fleet	Estimated number of vehicles to move to EV	Indicative Cost Increase £
Small Van#	23,000	15,000	8,000	98	51	408,000
Panel Van*	60,000	24,000	36,000	147	90	3,240,000
Pickup*	70,000	30,000	40,000	106	35	1,400,000
Compact Sweeper	165,000	64,000	101,000	9	4	404,000
Refuse Truck ~	495,000	166,000	329,000	55	17	5,593,000
	Totals			415	197	11,045,000

47 of the 98 vans in the fleet already scheduled for replacement with EV

* Current size/capacity/height/towing ability poor or no options for full electric at this time although manufacturers are forecasting new models that will be available in the next 12 to 18mths.

~ RCV replacement program completed June 2021, forecast next replacement cycle is 2024/2025

Progress

There are 382 vehicles on this year's programme including the 117 items carried forward from the previous year. The total budget is £10,131,096 (see Table 1)

To date 39 vehicles have been delivered and in service since April at a cost of £1.4m.

- 3 x Refuse Trucks – this completes the renewal programme for this service with 54 refuse trucks replaced over 3yrs.
- 10 x 7ton Tippers for Highways Construction and Maintenance
- 4 x Electric Vans

There are 44 vehicles on order with suppliers from the previous year 2020/21 and further orders for 19 vehicles have been placed at a total cost of £4.119m. Fleet have ensured all service critical vehicle orders are placed and we have prioritised these with key suppliers including 9 gritting vehicles that were ordered in 2020 with a requested delivery date in September 2021. Suppliers are confident there will be no delays, but Fleet have reserved hire vehicles as a further assurance that the council will not be at risk.

Other examples of ongoing work with fleet users:

- Fleet and Neighbourhood Services are reviewing the use of compact pavement sweepers (6), journey and utilisation data is being checked to determine whether current specifications meet the service needs. New models and demonstrators have been tested with operators in several different areas of the county.
- The Council's housing service has a large fleet of 100 vehicles used by housing maintenance teams and the majority of these (87) are due for replacement. Fleet are working with Housing teams to standardise the specifications and orders for 47 vehicles with the highest mileages are due to be placed. Due to the extended lead times highlighted earlier in the report we are forecasting that delivery of the 47 vans will not be until early in the next financial year. Condition assessments on the other 40 vehicles has allowed us to split the replacement cycle on this group of vehicles and consider the new EV models available in 2022.
- Consultation with DAF Trucks, Econ Engineering (Gritter Bodies) and Acmar (Bitumen Tankers) in France to produce 2 x dual body vehicles for winter gritting & the surface dressing programme.

The Fleet team work closely with Finance and Procurement staff and review progress with delivery of the fleet replacement programme on a monthly basis and profiling of

spend against budget estimates, with this information feeding into the Council's budget monitoring and reporting arrangements.

Implications

Policy	Challenging services users over both need to replace and the specification of the vehicles and plant required helps to ensure that the Fleet Replacement Programme supports the Corporate Plan objectives of innovation to deliver improvements in service delivery and efficiencies.
Finance and value for money	The timely replacement of vehicles and plant as they reach the end of their economic life ensures value for money. The use of framework contracts and packaging of vehicle supply requirements to cover several years provides economies of scale, ensures that the most cost-effective means of obtaining new vehicles and plant are being used. Regularly obtaining quotes for the provision of vehicles through 'operating lease' arrangements also ensures that the Council uses the most cost-effective means of financing the provision of vehicles. The financial implications of the replacement programme are shown in Table 1. The current anticipated reprofiling of £2,131,096 will be included in the next budget monitoring report to Cabinet.
Legal	None
Procurement	Close working arrangements are in place between Procurement and Fleet Management to ensure the delivery of the programme
Human Resources	None
Property	None
Equalities (Impact Assessment attached) Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	None

Risk Assessment	The main risks associated with the fleet replacement programme are the delay in replacement of vehicles/plant that are critical to service delivery.
Crime & Disorder	All new vehicles are fitted as standard with GPS tracking device, speed limiters and where suitable in cab driver behaviour devices and cameras
Health and Wellbeing	Providing fit for purpose vehicles will impact positively on musculoskeletal health.
Customer Consideration	New vehicles are branded with the new NCC livery so that customers and the general public are aware that it is NCC staff/vehicles that are being used to provide services to them.
Carbon reduction	The Council's vehicle fleet uses ~£2m worth of fuel each year. Ensuring that the fleet is modern, well maintained and robustly managed is vital if the Council wishes to reduce its carbon impact from the provision of services to the minimum. Whilst the Council already utilises electric vehicles for pool cars within the fleet and have replaced or ordered the majority of the small diesel vans with full electric vehicles.
Wards	All

Background papers:

None

Report sign off.

Authors must ensure that officers and members have agreed the content of the report:

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