

Dudley Council

Fleet Strategy 2022-2032

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Foreword

I am pleased to introduce the Fleet Strategy for Dudley Council with its focus very firmly placed upon supporting our frontline operations in the most cost effective and environmentally considerate way.

Our fleet is a vital component in delivering frontline services to the residents of Dudley and for many, our fleet is the most immediate visual representation of the Council's services, and therefore must demonstrate quality and efficiency.

Safety is and will continue to be paramount. I firmly believe that safety, quality, and efficiency are complimentary and do lead to better utilisation and associated cost reductions. To achieve this, we need a programme of continuous improvement where vehicle optimisation, flexibility and reliability are underpinned by a high quality, right-first-time maintenance regime.

Environmentalists and transport practitioners are looking to the Council to take the bold steps necessary to reduce our dependence on carbon fuels, and through our fleet replacement programme we will be leading on realising these aims and working towards our net zero commitment.

Challenges in the forthcoming strategy period will be to embrace new technology within our fleet, to support what are likely to be changes to working practices across many of our operational areas which will make significant demands on how our fleet and staff require to operate.

The continuing pressures on local authority budgets will require that we remain competitive in any marketplace and therefore must keep our fleet profile under constant review to maximise utilisation during times of austerity.

Many of our heavy vehicles are operated under the Department of Transport's operators licencing conditions and with that comes significant responsibilities to ensure 100% compliance. I believe we should commit to being in the "best in class category" of fleet operators and I have agreed that Dudley Council will now commence a programme of improvements for staff to be Institute of Road Transport Engineering (IRTEC) compliant and our fleet to achieve DVSA's "Earned Recognition" accreditation, within a 3-year period.

The success of this new strategy will be dependent on the support and cooperation of all employees who make use of transport services.

Our fleet, vehicle maintenance and repair services, and operational processes, need to become more efficient, and given the Council's recent declaration of climate emergency, we must also act now to reduce our carbon footprint. I believe this Fleet Strategy has laid down the framework to achieve these goals.

Bob Bowdler

Transport Manager

Public Realm

Purpose of the Fleet Strategy

The purpose of the Fleet Strategy is to directly support front line and associated operations by providing a comprehensive vehicle fleet for all aspects of Council services in the most cost effective and environmentally responsible way

There are currently over 478 vehicles in Dudley Councils fleet across the council. This is made up of a diverse range of vehicles from small cars and car derived vans, light goods caged and tipper vans, tail-lift box vehicles, minibuses, roads and lighting maintenance vehicles (gritters and tippers), a range of bespoke refuse collection vehicles. In addition, we have a further item of heavy and handheld plant necessary to deliver our core services.

The Council's overall transport cost is in the region of £6 million, with fuel costs of £1.5 million per annum.

Although we operate a sizable fleet, the geography of Dudley is such that we are not a high mileage operator with the average annual mileage of 5,000 miles per annum.

The cost to replace the Fleet with Diesel is £29.5 million

The cost to replace the Fleet with low carbon alternatives fuels where feasible and Diesel is £51 million

Replacement cost of the Fleet that's due by age up to and including 2023-2024

Diesel £11.8 million

Low carbon alternative fuels/ Diesel/Electric £21.6 million

What we want the Fleet Strategy to achieve

We will be **successful** in delivering our fleet Strategy when ...

- We have Safe operation of our vehicles for employees, contractors, other road users and the public to meet our statutory commitments.

- We facilitate the procurement and modification of high-quality vehicles that meet operational demands whilst maintaining best value.
- We have processes in place to provide safe, cost effective, efficient, and reliable transport systems for Dudley Council whilst optimising fleet availability.
- We identify and implement a continuous improvement programme for increased efficiency through savings and income generation.
- We have a highly trained and qualified workforce capable of meeting the challenges of innovative and emerging technologies.
- We have alternative fuel solutions powering our fleet that support our operational objectives, significantly reduce our carbon footprint and advance the council's drive towards net zero emissions.

How will we achieve it?

Intelligent Client Solution:

Public Realm through its Transformation plan 2022-2023 has challenge Transport Services at Lister Road to produce a service plan which highlight's three areas of improvements

- Improvements in Transport Compliance
- Reductions in Costs
- Improved Customer Service

Transport services will coordinate and manage the wide range of vehicles, plant and equipment that require a fleet to deliver core services.

Budget oversight for all transport provision will be managed by this team as will the safety, maintenance, technical standards and regulatory compliance of all council fleet services. The outcomes anticipated are economies of scale, parts homologation, and a structured long-term procurement and fuel strategy that will see the Dudley fleet transformed and a fleet to be proud of.

Procurement and modification of high-quality vehicles that meet operational demands whilst achieving best value.

We will be able to select the majority of these vehicles from existing Crown Commercial Service, ESPO, and TTPL frameworks. Cars, vans, light goods and HGV chassis will be from mainstream global suppliers.

The evaluation of the most appropriate vehicles to select will include purchase costs, whole life running costs, spare parts and warranty provision, environmental credentials and the best match, **achieved through operational evaluation**, to meet the client department's specification and to ensure vehicles are fit for purpose.

This strategy will adopt an **outcome based**, rather than vehicle/technology-based specification e.g Our RCV's specification require that the vehicle can carry a maximum compacted payload, across the topography of the borough and in uninterrupted service with minimum downtime for ongoing maintenance, inherent with all recognised safety features and with simplicity and robustness of ancillary equipment.

The uniqueness of our front-line service vehicles is generally the ancillary equipment required for waste and road maintenance services. This will include refuse collection vehicle compactors, bin hoist and a range of specialist vehicles for roads and lighting maintenance including gritters, sweepers - both large and small. **The vehicle chassis will, where possible, be standard** to ensure parts homologation, ease of maintenance and competitive vehicle/parts pricing.

The base vehicle price alone will not be the determining factor during the procurement process, where **whole life costing will be given a greater proportion of the assessment**, prior to purchase. Where possible vehicles will be assessed, via demonstrators or with other fleet operators, to ensure technical specification compliance.

Across the range of vehicles required for delivering core Council services, continual developments of bespoke and specialist solutions, will be necessary.

Vehicle replacement parameters need to be maximised to achieve maximum service life from the vehicles. Due to the geography of the Council's operating area, our fleet does not operate to excessively high mileages, however many of the client service duty-cycles are onerous on

the ancillary equipment, particularly for waste management and also for roads maintenance vehicles.

The Fleet Strategy replacement programme will now provide for these vehicles to undergo a mid-life refurbishment, which will extend the life of the chassis and importantly retain the primary functional purpose of the specialist vehicle in front line, as new, condition.

To ensure we maintain the availability, reliability and quality of the new fleet, the replacement programme will now be structured to create a staggered programme to maximise front line availability, simplify the inspection regime and annual MOT test programme. This approach will eradicate the client department fleet age concern issues and avoid significant mass staff re-training and familiarisation requirements. As our fleet modernises, our frontline staff need to be proficient in maximising the use of the asset and to ensure that competence, we will adopt a perpetual programme of continual training and personal development ensuring our staff are familiar and confident in the use of our fleet vehicles.

How we use and maintain our vehicles is significantly more important than the age of each vehicle in determining the quality of the fleet, however with consideration to the age profile of certain vehicle types, i.e., waste and recycling it will be necessary to introduce a number of larger vehicle intakes to make a step-change in the age profile of our vehicles.

Following this, the procurement strategy should provide for an influx of new vehicles per month, on an ongoing basis, and ensure the contractual arrangements provide the flexibility to capture emerging technologies and incorporate these into the fleet.

Reliability and availability:

The reliability and availability of frontline vehicles needs to be high and as near to 100% as possible. Fleet spares are therefore necessary to support a regulatory inspection and maintenance regime.

Within Public Realm spare vehicles will no longer be retained by the client departments and the Transport Services function will be restructured to provide a “fully managed” service.

This will be equivalent to the high level of customer services normally experienced from fleet hire providers where any vehicle requiring

inspection or maintenance will be substituted with an equivalent vehicle to ensure front line services are not interrupted. This is a fundamental change to current working practices and will be far more transparent than the existing process.

Transport Services will now provide a turnkey service based on a Service Level Agreement with all client groups where regulatory compliance, inspections, maintenance, annual test and repairs will be provided as a one-stop shop and no client department will be required to engage with the fleet support aftermarket.

This revised process will place the responsibility for 100% availability upon the Council's Transport Services function who will manage all service, repairs and replacement budgets.

In a sophisticated smart Borough, significant benefits are generated from employing technology to locate and monitor the effectiveness of the resource and to be able to react "real-time" to changing daily network conditions. The Council policy will continue to be that all vehicles will be equipped with Telematics / GPS tracker solutions. The data generated will permit continual development of optimum fleet solutions, maximise the effectiveness of daily service, minimise running and abnormal repair costs, such as accident damage and the increasing claims culture, and assist our operational staff to be confident in the fleet vehicles and that full and timeous support service are on-hand.

To support a state-of-the-art fleet, we require facilities commensurate with best practice and design, currently in operation in many private sector fleet maintenance facilities. The Council requires to invest in the workshop and support facilities necessary to maintain the current fleet and new vehicles.

With the number and diverse nature of the vehicle and plant fleet within the Council it is becoming more difficult to inspect, service, maintain and repair (SMR) our entire fleet. Therefore, on replacing more specialist plant and equipment considerations will be made for SMR contracts or hire where value for money can be demonstrated.

The Council should be able to inspect, service, maintain and repair our core fleet, including our "O" licenced heavy fleet, which is of sufficient size to justify self-sufficiency and retrain and upskill our own maintenance staff.

Vehicle replacement criteria based on economic life.

Type of Vehicle	Expected Economic Life	Power source
Car	7 years	Hybrid/Electric
Gully Emptier	10 years	Diesel/Hybrid/Electric/Hydrogen
Civic Car	7 years	Hybrid/Electric
Comp. Sweep. (Light)	4 years	Diesel/Electric
Road Sweeper	6 years	Diesel/Hybrid/Electric/Hydrogen/HVO
Crane Lorry	10 years	Diesel/Hybrid/Electric/Hydrogen/HVO
Gritter	10 years/seasons	Diesel/Hybrid/Electric/Hydrogen/HVO
Gritter 4x4 Pick up	6 years/seasons	Diesel/Hybrid/HVO
4x4 pick up	6 years	Diesel/Hybrid/HVO
Loading Shovel	5 years	Diesel/Hybrid/Electric/Hydrogen/HVO
Highways Tipper (Light)	8 years	Diesel/Electric/HVO
Highways Tipper (Heavy)	10 years	Diesel/Hybrid/Electric/Hydrogen/HVO
Minibus (16-Seater)	8 years	Diesel/Hybrid/Electric/HVO
Panel Van (Large)	8 years	Diesel/Hybrid/Electric/HVO
Panel Van (Medium)	8 years	Electric
Panel Van (Small)	8 years	Electric
Plant Digger	5 years	Diesel/Hybrid/Electric/Hydrogen/HVO
Tractor	10 years	Diesel/Hybrid/Electric/Hydrogen/HVO
RCV	10 years	Diesel/Electric/HVO
Ride-on	5 years/seasons	Diesel/Electric/HVO
Ride-on Rotary	5 years/seasons	Diesel/Electric/HVO
Trailer	8 years	
Tower Lighting Vehicles	10 years	Diesel/Electric/HVO

Continual Improvement

Key to any successful business is the development of its employees, processes and its pursuit of customer satisfaction.

Employees will be encouraged to ensure continued competent in work roles by engaging in structured training and development programs.

We will continue on our journey to become best by adopting Quality Management systems eliminate waste and improving our process.

We will provide an operational logistics support role to all client departments to ensure the primary users are aware of innovations and new technology solutions which maximise use of the fleet, minimise operational costs and provide the right vehicle at the right time and place that ensures our customers can carry out their jobs in a safe, compliant, and efficient way.

Having accurate information to hand is paramount to maximise the efficiency and utilisation of frontline vehicles and sophisticated scheduling technologies will continue to be introduced to supplement the “real-time” reporting of key information when the fleet is in-operation. The purpose of our fleet is to support the Council’s primary and statutory commitments for cleansing, waste management, roads and lighting. Dudley Council is aiming to be in the “best in class” category of fleet operators with technology solutions to ensure our services are not only efficient, but primarily, they are also safe.

How will we become a Low Carbon Fleet?

The UK Government have given dates where the sale of new diesels will no longer be permitted.

- 2030 Phase out dates for new non-zero emission Light Goods Vehicles (LGVs) (under 3.5t)
- 2035 Phase out dates for new non-zero emission (HGVs) above 3.5t to 26 tons, date could change
- 2040 Phase out dates for new non-zero emission (HGVs) over 26 tons, date could change

The Council declared a climate emergency in 2020 with a commitment to reach net zero emissions by 2041 without compromising the excellent and efficient services we deliver daily to our residents.

The Council already works with other local authorities, associate partners, and agencies to ensure we continue to be aware of developments and implementation of new fuel technology solutions. This strategy establishes a framework for Dudley Council to achieve a ZERO EMISSIONS fleet within the timescale of the strategy period.

The Council, as a major user of vehicles, must take a leading role and determine its long-term alternative fuel strategy. The vehicle/van market is already producing competent battery electric cars, vans and refuse collection vehicles which are a significant vehicle type in the Council fleet and meet the needs of many of our duty cycles.

Avoid, Reduce & Substitute

The bar to acquiring vehicles new or hired in has been raised, no short-term hires are permitted without Head of Service and the Transport Managers authorisation.

Users are encouraged to assist other departments to work together to share resources and workshops are at the same time encourage to come up with operational improvements to avoid the requirement to hire in vehicles.

Transport Fleet services are analysing data from vehicle telematics to identify vehicles that can be substituted by Electric vehicles.

Further interrogation of the use of vehicles has identified low levels of utilisation, Transport will continue to work with users to increase utilisation by pooling of vehicles to increase use.

Where low utilisation is proved too be inefficient and costly, recommendations to reduce the Fleet will be made to the Head of Service.

Emerging plug-in Hybrid technology, with range extenders, will also be suitable to meet the more demanding distances or duty cycles, however the age and condition of the electrical infrastructure in our estate will require upgrading to support high-speed charging.

The development of new fuel technologies and a commensurate improved range of vehicle types operating on these solutions, continues to be dynamic.

The current cost of purchasing and operating Hydrogen vehicles and access to the volume supply needed, currently means that Hydrogen fleets are hugely expensive to operate.

However, adopting a long-term approach, currently, the only realistic and genuinely emissions free sustainable fuel solution is Electric.

Dudley Council has a unique advantage in that it has 6.2 MW electricity Waste to Power plant on its main operating site at Lister Road. Waste collected which then fuels the waste collection vehicles via a private wire links directly to the circular economy.

Truck vehicle manufacture confirm we are in the sweet spot for most of our vehicle fleet, low mileage, scheduled routes and return to base with the ability to charge overnight.

Electric refuse trucks are being manufactured in the UK by Dennis Eagle part of the Terberg Environmental Group, a world leader in the design and manufacture of refuse collection vehicles. Based in Warwick with a service centre close by in Walsall in the west Midlands.

As migration to a low/zero carbon operation is a protracted and complex process, the Council should determine, that emerging from this 10-year strategy period, all future vehicle procurement exercises should specify Electric as the preferred fuel source but keep scanning the horizon for developments of alternative low emissions fuels such as Hydrogen or biomethane sourced from anaerobic digesters.

What does success look like?

- An increase in the number of Battery Electric Vehicles (BEV) across the fleet.
- Reduction in the level of CO2 emissions from the council's fleet
- Intermediary bridging technologies are embraced in the case of difficult to treat vehicles, ie plugin hybrid electric vehicles (PHEVs)
- Telematics led to rationalisation of fleet where opportunities exist to reduce vehicle numbers without affecting service delivery.
- Telematics used to assess if vehicles are driven appropriately, and behaviour change incited where inefficient fuel use or unnecessary mileage are identified.

Assets, Challenges, and Opportunities

Assets

- Council owns a large number of sites, many of which will be suitable for electric charging stations with additional works
- Councils owns 478 vehicles

Challenges

- Council operates specialist type vehicles and plant for which no electric versions exist or may have prohibitive costs at present to purchase.
- Future technology, such as hydrogen, is still not mainstream
- Depot and Council wide electric infrastructure requires substantial investment
- Requires cross functional Teamwork

Opportunities

- Use of whole life costing can help justify a higher initial outlay on the basis of lower running costs
- Factoring the cost saving of CO2 emissions
- Energy from waste plant
- Waste Strategy close to completion
- Ready and engaged Transport Fleet Services

Transport Services will develop

- 10-year asset replacement plan (ARP) 2022-2032 to replace vehicles and plant with ULEVs.
- Identifying purchase cost of conventional diesel and ULEVs alongside whole life costing
- High-level feasibility study of quick win electrification schemes at Lister Road
- Joint working with Corporate Landlord services to provide electrical charging infrastructure across the council estate.
- Work within Public Realm to realise the benefits of a private wire to the Waste to Energy plant
- Keep scanning the horizon for alternative ULEV power source development i.e., Hydrogen

Key Milestones / Measures

Depot 2023

- Make Depot EV Ready, costings to be available first quarter 2023 for Council considerations.

Fleet Upgrade: 2023

- Refuse Collection Vehicles. 26/27-ton prepare Whole life costings for BEV and Diesel but expect Depot infrastructure/power supply will not be ready until early/mid 2024
- Cars/Small/Medium Vans. prepare Whole life costings for BEV and Diesel, but expect Depot infrastructure/power supply will not be ready until early/mid 2024
- Large vans. prepare Whole life costings for BEV and Diesel but expect Depot infrastructure/power supply will not be ready until early/mid 2024

Policy Development: 2023

- Transport Policy
- Drugs and Alcohol Policy
- Service Level Agreements – All Council activities

Fleet Availability: April 2023 onwards

- 100% target required
- Fully Managed Service
- 10% Operational and Maintenance Spare
- 100% Right-First-Time Compliance
- Vehicle Safety and servicing outside of core operational hours of operation

Staff Development: On going

- IRTEC accreditation for technical staff
- Vocational and Personal Development
- Upskilling for in-house self-sufficiency
- Pride in Dudley's Fleet

Fleet Use:

- Safety Focussed
- Significant productivity improvement, using fewer vehicles and maximising utilisation.
- Reduced incidents and accident
- Commercial Development Opportunities

Environmental Credentials:

- Net Zero Emissions Fleet. (By 31/12/2041)
- Reducing Fleet emissions year against miles travelled

Regulatory Compliance:

- Quality Management system ISO 2015 by 2024
- “Earned Recognition” Operator by 2025
- 98% First Time MOT pass